University of California, Davis

2008 COMPREHENSIVE ANNUAL WATER MONITORING REPORT

for the

LABORATORY FOR ENERGY-RELATED HEALTH RESEARCH
SOUTH CAMPUS DISPOSAL SITE
UNIVERSITY OF CALIFORNIA, DAVIS

Prepared for:

University of California, Davis
Office of Environmental Health & Safety

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July 2009

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TABLE OF CONTENTS

LIST OF FIGURES iii

LIST OF TABLES v

LIST OF APPENDICES vi

LIST OF ACRONYMS AND ABBREVIATIONS vii

EXECUTIVE SUMMARY ES-1

Groundwater ES-1

Density-Driven Convection System ES-3

Interim Removal Action System ES-3

Storm Water ES-4

Site Information Sources ES-4

1. INTRODUCTION 1-1

2. METHODS AND SCOPE 2-1

2.1 Groundwater 2-1

2.1.1 Scope 2-1

2.1.2 Methods 2-3

2.2 Density-Driven Convection System 2-4

2.3 Interim Removal Action System 2-5

2.4 Storm Water Monitoring 2-5

3. RESULTS 3-1

3.1 Laboratory Data Validation 3-1

3.2 Groundwater 3-2

3.2.1 Elevations and Flow Direction 3-2
3.2.2 Geochemical Suite Parameter Measurements and Sampling 3-5
3.2.3 Target Analyte Laboratory Results 3-5
3.3 Density-Driven Convection System 3-10
3.4 Interim Removal Action System 3-12
3.4.1 Groundwater Extraction 3-13
3.4.2 Chloroform Removal 3-13
3.5 Storm Water 3-13
4. RECOMMENDATIONS 4-1
5. REFERENCES 5-1

FIGURES

Figure 1 Site Vicinity Map

Figure 2 Well and Water Sampling Locations

Figure 3 Groundwater Elevations in HSU-1 Wells - February 2008

Figure 4 Groundwater Elevations in HSU-1 Wells - May 2008

Figure 5 Groundwater Elevations in HSU-1 Wells - October 2008

Figure 6 Groundwater Elevations in HSU-1 Wells - December 2008

Figure 7 Groundwater Elevations in HSU-2 Wells - February 2008

Figure 8 Groundwater Elevations in HSU-2 Wells - May 2008

Figure 9 Groundwater Elevations in HSU-2 Wells - October 2008

Figure 10 Groundwater Elevations in HSU-2 Wells - December 2008

Figure 11 Groundwater Elevations in HSU-4 Wells - February 2008

Figure 12 Groundwater Elevations in HSU-4 Wells - May 2008

Figure 13 Groundwater Elevations in HSU-4 Wells - October 2008

Figure 14 Groundwater Elevations in HSU-4 Wells - December 2008

Figure 15 Chloroform Concentrations in Groundwater from HSU-1 - October 2008

Figure 16 Chloroform Concentrations in Groundwater from HSU-2 - October 2008

Figure 17 Total Chromium Concentrations in Groundwater from HSU-1 - October 2008

Figure 18 Total Chromium Concentrations in Groundwater from HSU-2 - October 2008

Figure 19 Nitrate as N Concentrations in Groundwater from HSU-1 - October 2008

Figure 20 Nitrate as N Concentrations in Groundwater from HSU-2 - October 2008

Figure 21 Total Dissolved Solids Concentrations in Groundwater from HSU-1 - October 2008

Figure 22 Total Dissolved Solids Concentrations in Groundwater from HSU-2 - October 2008

Figure 23 Carbon-14 Activities in Groundwater from HSU-1 - October 2008

Figure 24 Carbon-14 Activities in Groundwater from HSU-2 - October 2008

Figure 25 Tritium Activities in Groundwater from HSU-1 - October 2008

Figure 26 Tritium Activities in Groundwater from HSU-2 - October 2008

Figure 27 1,4-Dioxane Concentrations in Groundwater from HSU-1 - December 2008

Figure 28 1,4-Dioxane Concentrations in Groundwater from HSU-2 - December 2008

Figure 29 Chloroform in Groundwater from Monitoring Wells Near DDC System

Figure 30 Chloroform in Groundwater from IRA Influent and Wells Downgradient of IRA Extraction Well

TABLES

Table 1. Dates of Field Measurements and Laboratory Analyses for 2008

Table 2. Methods for Field Measurements and Laboratory Analyses

Table 3. Well Construction Details

Table 4. Groundwater Elevation Data - First Half 2008

Table 5. Groundwater Elevation Data - Second Half 2008

Table 6. Effluent Discharge Limits for the Interim Removal Action

Table 7. 2008 Groundwater IRA Treatment System Operating Log

Table 8. Estimated Chloroform Removal for 2008 Density-Driven Convection System

Table 9. Data Validation Requirements for 2008 Laboratory Data

Table 10. Analytical Completeness by Method for Water Samples Collected in 2008

Table 11. Chloroform in Groundwater Monitoring Well Samples

Table 12. Total Chromium (filtered) in Groundwater Monitoring Well Samples

Table 13. Nitrate as N in Groundwater Monitoring Well Samples

Table 14. Total Dissolved Solids in Groundwater Monitoring Well Samples

Table 15. Carbon-14 in Groundwater Monitoring Well Samples

Table 16. Tritium in Groundwater Monitoring Well Samples

Table 17. 1,4-Dioxane in Groundwater Monitoring Well Samples

Table 18. Analytical Results for Storm Water Monitoring

APPENDICES

Appendix A	Survey Data
Appendix B	Groundwater Sampling Logs
Appendix C	Analytical Reports for Groundwater Monitoring and Density-Driven Convection Wells
Appendix D	Analytical Reports for Interim Removal Action System
Appendix E	Analytical Reports for Storm Water

LIST OF ACRONYMS AND ABBREVIATIONS

AOC	Administrative Order on Consent
BC	Brown and Caldwell
bgs	below ground surface
BMP	best management practice
Cal/EPA	California Environmental Protection Agency
CEL	Calscience Environmental Laboratories
CTR	California Toxics Rule
CWTP	UC Davis Campus Wastewater Treatment Plant
DDC	density-driven convection
DGWP	Data Gaps Work Plan
DOE	United States Department of Energy
EC	electrical conductivity
EW	Extraction Well
FSP	Field Sampling Plan
ft/ft	feet per foot
gpm	gallons per minute
HSU	hydrostratigraphic unit
IRA	interim removal action
IW	injection well
LEHR/SCDS	Laboratory for Energy-related Health Research/South Campus Disposal Site
LF-01	landfill No. 1 stormwater runoff monitoring point
LF-03	landfill No. 3 stormwater runoff monitoring point
LS-01	lift station No. 1 stormwater runoff monitoring point

LTPS	Land Treatment Pilot Study
MCL	maximum contaminant level
mg/L	milligrams per liter
N	nitrogen
PCB	polychlorinated biphenyl
pCi/L	picoCuries per liter
QAPP	Quality Assurance Project Plan
QC	quality control
RPD	relative percent differences
RPM	remedial project manager
RWQCB	Regional Water Quality Control Board
SOP	Standard Operating Procedure
SQL	Structured Query Language
SWPPP	Storm Water Pollution Prevention Plan
TDS	total dissolved solids
TOC	total organic carbon
TP	temporary piezometers
TSS	total suspended solids
UCD	University of California, Davis
UC Davis	University of California, Davis
USEPA	United States Environmental Protection Agency
VOC	volatile organic compound
Weiss	Weiss Associates
µg/L	micrograms per liter

EXECUTIVE SUMMARY

This report presents the results of water monitoring performed in 2008 at the former Laboratory for Energy-related Health Research/South Campus Disposal Site (LEHR/SCDS), located at the University of California, Davis (UC Davis) (Figure 1). Water monitoring results presented in this report include field measurements and laboratory results for samples collected from groundwater monitoring wells, the density-driven convection (DDC) remedial pilot test system, an interim removal action (IRA) system that consists of groundwater extraction and treatment, and storm water.

The monitoring was conducted in general accordance with the methods presented in the *Revised Field Sampling Plan* (FSP) (Dames & Moore, 1998a) and the *Revised Quality Assurance Project Plan* (QAPP) (Dames & Moore, 1998b). The laboratory data presented in this report were validated per the QAPP. The data validation indicated that these data are valid for their intended purpose. The monitoring scope generally followed recommendations presented in the *2007 Comprehensive Annual Water Monitoring Report* by Brown and Caldwell (BC) (BC, 2008) and the *Feasibility Study Data Gaps Work Plan* (DGWP) by Weiss Associates (Weiss) (Weiss, 2008). Figure 2 presents measurement and sample locations. Tables 1 and 2 present the dates of field measurements and sample collection, the field methods and the laboratory analyses. Laboratory reports and chain-of-custody forms for samples collected in 2008 are provided in electronic format on the compact disc that accompanies this report.

Groundwater

Groundwater monitoring included measuring field parameters and collecting samples for laboratory analysis from 61 groundwater monitoring wells (Figure 2), screened in three different hydrostratigraphic units (HSUs). Per the regular groundwater monitoring program, water levels were measured quarterly in accessible wells. Selected wells were sampled for target constituents in the winter and summer quarters, which included volatile organic compounds (VOCs), chromium, nitrate, carbon-14, tritium, and total dissolved solids (TDS) (Table 1). The DGWP proposed that certain pre-existing wells and eight new wells, which were installed in September/October 2008, be monitored and sampled for four consecutive quarters for numerous geochemical suite parameters and potential site contaminants. To satisfy Remedial Project Manager (RPM) requests and based on self-guided judgment, UC Davis also sampled certain wells for radium-226, 1,4-dioxane, and perchlorate. In May 2009, UC Davis re-surveyed the site groundwater monitoring wells for vertical control to verify well reference elevations. The survey data were used to determine some of the groundwater elevations for 2008.

Groundwater monitoring included quarterly water level measurements in most of the site wells and the sampling of 33 HSU-1 wells and 16 HSU-2 wells at least once during the year. No HSU-4 wells were sampled in 2008. Approximately 183 samples were collected from monitoring and remediation wells for laboratory analysis this year.

Measured groundwater depths and estimated flow directions in 2008 were consistent with previous years. Groundwater depths in the three HSUs ranged from approximately 30 feet to 60 feet during the year. The highest measured groundwater elevations were in February and the lowest measured elevations were in October for HSU-1 and HSU-2 and May for HSU-4. Groundwater elevations in HSU-1 and HSU-2 are highly influenced by regional agricultural pumping and seasonal infiltration (rainfall). Groundwater elevation data are presented in Tables 4 and 5.

Based on groundwater elevation data, the groundwater flow direction is generally to the east and northeast for the three HSUs. Calculated gradients in the direction of groundwater flow for the three HSUs during the four quarters ranged between 0.0001 and 0.003 feet per foot (ft/ft). Quarterly groundwater elevation contour maps are presented on Figures 3 through 14.

The analytical results for samples from the groundwater monitoring wells were similar to previously established chemical concentration trends. Tables 11 through 17 present the laboratory results for the target analytes, and Figures 15 through 28 present concentration maps for certain quarters. Monitoring results for this year indicate that:

- The highest concentrations of chloroform were detected in HSU-1 groundwater immediately north of the Eastern Trenches. This area has been identified as the primary source area for chloroform and is also the location of the DDC remediation system. Chloroform concentrations continued to decline in groundwater samples from HSU-2 wells, especially in wells near the IRA groundwater extraction well (EW).

- Total chromium was detected at concentrations ranging up to 490 micrograms per liter (µg/L), which is consistent with historical results. As in recent years, samples with the highest chromium concentrations were collected from the "anomalous chromium area," an area of HSU-1 around well UCD1-028 and located approximately 500 feet northeast of Landfill Unit No. 1. No chromium chemical use, storage or disposal has been documented in this area.

- Carbon-14 and tritium activities declined from previous years. The highest carbon-14 activity for 2008 was 335±17.5 picoCuries per liter (pCi/L), below the USEPA maximum contaminant level (MCL) for drinking water of 2,000 pCi/L. The maximum tritium activity was 1,960 ± 254 pCi/L, detected in the February sample from Eastern Trenches well UCD1-008. No tritium was detected above reporting limits in any samples from the October and December sample events.

- Samples were analyzed for radium-226 for the first time since 2006. The sampling objective was to assess whether detections in samples collected previous to 2008 represented a release to groundwater or were consistent with background conditions. No radium-226 was detected in any of the 2008 samples above reporting limits. Subsequently, the RPMs agreed that no further radium-226 sampling is necessary.

- In October, groundwater samples were analyzed for 1,4-dioxane and perchlorate for the first time. Samples from wells near the Eastern Trenches, Waste Burial Holes and Landfill Unit No. 2 contained up to 14 µg/L 1,4-dioxane. No perchlorate was detected in any samples above the reporting limit of 4 µg/L.

Based on the results of the Data Gaps Investigation, UC Davis will assess and request changes, as appropriate, to the current groundwater monitoring program. UC Davis will present the results of the assessment at an upcoming RPM meeting and document approved changes in the forthcoming 2009 Semiannual Water Monitoring Report.

Density-Driven Convection System

The expanded DDC groundwater treatment system began operation in December 2002. It consists of six nested DDC wells (Figure 2) that monitor three zones in HSU-1. Four HSU-1 monitoring wells and one HSU-2 well are located adjacent to the DDC wells, and results for these wells assist in assessing the effectiveness of the system. In 2008, the DDC wells were sampled only once, in February/March. The system was not sampled again because it was shut down in September due to low groundwater levels and the failure of the air compressor motor. After troubleshooting, the replacement of the motor and upgrade of other compressor components, the DDC system was restarted on February 11, 2009.

The system was maintained every two weeks and it operated continuously in 2008 until the September shutdown (Table 8). For the 2008 calendar year, the DDC system operated 75% of the time. Based on analytic data for samples from the DDC wells, an estimated 27 pounds of chloroform were removed between September 2007 (the end of the period for which chloroform removal was calculated in 2007) and September 2008 (system shutdown).

Monitoring results after system shutdown for adjacent HSU-1 wells and UCD2-048, an adjacent HSU-2 well, showed that chloroform concentrations in groundwater continued to decline or were consistent with pre-shutdown trends. The concentrations for monthly samples collected during system shutdown from well UCD2-048 ranged between 0.5 and 11 µg/L (September 2008 to March 2009). This stable and low concentration trend indicates that DDC operation is not necessary to prevent migration into HSU-2. Thus, UC Davis recommends ceasing the monthly sampling of well UCD2-048 during system shutdown periods as approved by the RPMs in the RPM Meeting on June 26, 2009 (RPM Meeting Minutes, 2009).

Interim Removal Action System

The IRA groundwater extraction and treatment system started operation in May 1998 to minimize off-site migration of chloroform in HSU-2. The IRA system currently consists of pumping water from extraction well EW2-01 (Figure 2), treating the water using an air stripper and discharging the treated water to the UC Davis Campus Wastewater Treatment Plant (CWTP) and for irrigation to horse pastures under the Land Treatment Pilot Study (LTPS).

The IRA system operated effectively in 2008. It operated 77% of the time, an increase from the 63% uptime reported for 2007 (Table 7). In 2008, the system pumped and treated approximately 26 million gallons of water from EW2-01 at an average rate of 66 gallons per minute (gpm). Discharge from the system was compliant with CWTP and LTPS standards.

Chloroform concentrations in influent samples varied from 6.7 µg/L (September) to 51 µg/L (April). These concentrations are less than the range detected in the 2007 influent samples, which

was 20 to 75.4 µg/L. During 2008, the IRA system has removed an estimated 5.3 pounds of chloroform from groundwater. Since 1998, approximately 135 pounds of chloroform has been extracted and treated by the IRA.

Storm Water

Storm water monitoring consists of sampling storm water at locations LF-01, LF-03, and LS-01 (Figure 2). Samples were collected from LF-01 on January 8, January 22, and February 24, 2008 and from LS-01 on December 15, 2008. Sample location LF-03 was not sampled because no storm water flow was observed. The analytical results are presented in Table 18.

Three constituents exceeded U.S. EPA benchmark values for storm water: total iron; total suspended solids (TSS); and nitrate as N. Two samples from LF-01 contained 0.14 and 0.25 µg/L mercury, above the California Toxics Rule (CTR) limit of 0.050 µg/L. In 2007, several constituents were detected in samples from LS-01 that were higher than previous results. The 2008 sample results for this location decreased from the concentrations detected in the 2007 samples to concentrations that are consistent with results for samples collected before 2007.

Prior to the 2008-09 rainy season, UC Davis installed new best management practices (BMPs) at the LF-01 and LF-03 locations and updated the Storm Water Pollution Prevention Plan (SWPPP). UC Davis will continue to maintain these BMPs and evaluate their effectiveness based on storm water sampling data for 2009. UC Davis recommends the following field parameters and laboratory analytes for storm water samples collected in the 2009-2010 rainy season: pH, electrical conductivity (EC), temperature, total iron, mercury (using a low-level detection method), hardness, TSS, total organic carbon (TOC), oil and grease, nitrate and nitrite as N.

Site Information Sources

The following representatives may be contacted for more information about site investigation and remediation activities.

Sue Fields – UC Davis	(530) 752-3044
Vijay Kothari – DOE LM Project Manager	(304) 285-4579

Documents relating to site investigation and restoration may be found at:

Yolo County Public Library, Davis Branch Reference Desk Davis, California (530) 756-2332	UC Davis Shields Library (530) 752-6561

Additional information is also available on the Internet at:

http://safetyservices.ucdavis.edu/environmental-health-safety/environmental/lehr-superfund-site/lehr

1. INTRODUCTION

This document presents the results for groundwater and storm water monitoring conducted in 2008 at the former Laboratory for Energy-related Health Research facility and South Campus Disposal Site (LEHR/SCDS) located on the University of California, Davis (UC Davis) campus (Figure 1). Monitoring data for the first half of the year was also presented in the *2008 Semi-Annual Water Monitoring Report* (Weiss, 2009). Monitoring has occurred regularly at the site since 1991. In 2008, water monitoring consisted of field measurements and sample collection from groundwater monitoring wells, the DDC remedial pilot test system, an IRA system that consists of groundwater extraction and treatment, and storm water.

The monitoring was performed in general accordance with the requirements of Administrative Order on Consent (AOC) #99-16, issued by the United States Environmental Protection Agency (USEPA) (USEPA, 1999). Subsequent approvals from the USEPA and other RPMs to modify the AOC monitoring and reporting requirements have been documented in UC Davis' 2005, 2006, and 2007 annual monitoring reports (BC, 2006a; BC, 2007a; & BC, 2008). Groundwater monitoring in 2008 was supplemented by requests made in 2008 RPM meetings and additional field measurements and sample collection that were proposed in the DGWP (Weiss, 2008). A report that presents the Data Gaps Investigation results is forthcoming.

This report is organized into five sections. Section 2 presents the methods and scope of the groundwater, DDC system, IRA system and storm water monitoring conducted in 2008. Section 3 presents the monitoring results, and Section 4 presents recommendations based on the results. References cited in this report are listed in Section 5. The appendices are provided in electronic format on the compact disc that accompanies this report. These appendices include the original survey data and water sampling sheets for the well sampling events and laboratory reports for groundwater, DDC, IRA and storm water sampling.

2. METHODS AND SCOPE

In 2008, UC Davis monitored groundwater, the DDC and IRA systems, and storm water. Field measurement, sampling, and analytical procedures were performed in general accordance with the following documents:

- *Revised Field Sampling Plan* (FSP) (Dames & Moore, 1998a)
- *Revised Quality Assurance Project Plan* (QAPP) (Dames & Moore, 1998b)
- *2002 Comprehensive Annual Water Monitoring Report* (BC, 2003)
- *Storm Water Pollution Prevention Plan* (UC Davis, 2004)
- *Feasibility Study Data Gaps Investigation Work Plan* (DGWP) (Weiss, 2008).

Details about the monitoring methods and scope for groundwater, the DDC and IRA systems, and storm water are presented below. Figure 2 presents measurement and sample locations. Tables 1 and 2 present the dates of field measurements and sample collection, the field methods, and the laboratory analyses.

2.1 Groundwater

Groundwater monitoring during 2008 included the measurement of field parameters and collection of samples for laboratory analysis from a network of 61 groundwater monitoring wells (Figure 2). The wells are designated with a “1”, “2”, or “4” corresponding to the HSU in which each well is screened. In descending order, these HSUs have been defined based on drilling and geophysical surveys completed at the site since 1987: HSU-1; HSU-2; HSU-3; HSU-4; and an unnamed aquitard. HSU-1 and HSU-2 form the upper and lower units of the Putah Creek Fan. HSU-3, HSU-4, and the unnamed aquitard form the upper, intermediate, and lower units, respectively, of the Tehama Formation. A detailed discussion of the site hydrogeology is presented in the Remedial Investigation Report (Geomatrix, 2004). Well construction details are summarized in Table 3.

2.1.1 Scope

Groundwater monitoring was performed to satisfy the scope described in two RPM-approved documents, the 2007 Annual Report (BC, 2008) and the DGWP. As shown in Table 15 of the 2007 Annual Report, water levels are to be measured quarterly in accessible wells, and selected wells are to be sampled for up to 6 target constituents in the winter and summer quarters only. These constituents include VOCs, chromium, nitrate, carbon-14, tritium, and TDS. Field monitoring for electric conductivity may substitute for TDS sampling.

Eight new wells were installed in 2008 as part of DGWP. Tables 9 and 10 of the DGWP proposed that selected pre-existing wells and eight new wells, which were installed in September/October 2008, be monitored and sampled for four consecutive quarters. The Data Gaps Investigation well sampling consisted of collecting various geochemical suite measurements and sample analysis to provide specific data for completion of the Feasibility Study. The data will be used to refine the site conceptual model regarding the presence and dispersion of hexavalent chromium, and to assess potential chemical impacts to groundwater from the site disposal units.

The groundwater monitoring scope increased based on requests made during two RPM meetings. On January 30, 2008, UC Davis agreed to resample four wells that were installed in October and November 2007 to establish baseline concentrations of chromium (RPM Meeting Minutes, 2008a). During the meeting of October 7, 2008, the RPMs requested sampling selected wells for radium-226 and 1,4-dioxane (RPM Meeting Minutes, 2008b). The radium-226 analyses were conducted because the United States Department of Energy (DOE) used radium-226 in onsite research activities (Dames and Moore, 1993) and it was detected above background in groundwater samples from site monitoring wells in 2006. No documentation of 1,4-dioxane use onsite could be found, but it has generally been used as an additive for scintillation cocktail, which may have been disposed in onsite landfill units. UC Davis opted to also sample selected wells for perchlorate. No documentation of site perchlorate use or disposal has been found either, but UC Davis opted to sample for it because it is an emerging contaminant and could have conceivably been disposed in the landfill units. Perchlorate has been commonly used in the production of certain medicines, rocket fuel, and explosives.

The resultant 2008 monitoring included four water level measurement events in most of the HSU-1, HSU-2, and HSU-4 monitoring wells and the sampling of 33 HSU-1 wells and 16 HSU-2 wells at least once during the year. No HSU-4 wells were sampled in 2008. Approximately 183 samples from monitoring and remediation wells were collected for laboratory analysis. The chronology below describes the specific groundwater monitoring events, and a listing of field measurements and laboratory analyses by date and well is provided in Table 1.

February 1: Wells UCD1-55, UCD1-58, UCD2-56, and UCD2-57 were sampled to establish baseline concentrations of chromium for these four wells. These wells were installed in October/November 2007 in response to a RPM request to further assess the extent of chromium in groundwater (RPM Meeting Minutes, 2007).

February 26 to March 7: This event comprised the winter 2008 sampling per the 2007 Annual Report. Water levels were measured in accessible site wells and selected wells were sampled for the 6 target constituents.

May 29 to 30: This event comprised the spring 2008 water level gauging. Water levels were measured in accessible wells. No water quality parameter measurements or groundwater samples were collected.

October 6 to 17: This “summer 2008” event was performed in October so that the routine groundwater gauging and sampling would coincide with the first quarter of groundwater monitoring proposed in the DGWP. Water levels were measured in accessible pre-existing wells and the eight wells that were installed in September/October 2008. Geochemical suite parameters were measured, and samples were collected from selected wells based on the 2007 Annual Report and DGWP.

Certain wells were also analyzed for radium-226, 1,4-dioxane and perchlorate. Weiss Associates coordinated Hunter Surveying of Orange, California to survey the top-of-casing, top-of-box and ground surface elevations as well as the horizontal coordinates of the eight new wells.

December 2 to 5: This event represents the fall 2008 well gauging per the 2007 Annual Report and the second consecutive quarter of well monitoring and sampling per the DGWP. Similarly to the October sampling, several wells were sampled for 1,4-dioxane.

UC Davis also gauged and sampled remediation and monitoring wells near the DDC system. These activities are described in Section 2.2.

In May 2009, UC Davis re-surveyed the site groundwater monitoring wells for vertical control. The survey was performed because groundwater elevations calculated for several wells based on pre-existing survey data did not appear consistent with historical site data. It was suspected that some 2008 depth-to-water measurements for certain wells were not measured from the previously surveyed reference points (i.e., in some cases, depth-to-water may have been measured from the top-of-well vault but the previously surveyed reference point was the top-of-casing). As a result, Weiss Associates subcontracted Hunter Surveying to survey the top-of-casing, top-of-vault and ground surface elevations for the site monitoring and remediation wells. Hunter also cut a V-notch into the top of each well casing and outer protective casing to permanently establish vertical benchmarks for future depth measurements. The survey data are included in Appendix A, and the new top-of-casing elevation data are presented in Table 3.

2.1.2 Methods

Groundwater monitoring and sample analysis was performed in general accordance with the FSP, QAPP and Data Gaps Investigation. This section details specific information about the well monitoring methods, specifically well purging techniques and shipment of samples to the analytical laboratories.

The FSP states that monitoring well sampling is primarily conducted by purging and sampling wells using dedicated pumps and tubing. However, not all site monitoring wells currently have working dedicated pumps. For these wells, a fully decontaminated portable pump was used. The use of a dedicated or portable pump was recorded on the well sampling sheets, which are included as Appendix B. Both the dedicated and portable systems consist of variable speed submersible Grundfos Redi-flo electric pumps. Purging and sampling procedures are described in standard operating procedure (SOP) 1.0 of the FSP and consist of purging each well until:

- Three to five casing volumes of water are removed from the well; and
- The field measurements of pH, temperature and EC of the purged water stabilize to within 10 percent of the previous reading.

Well casing volumes were calculated using the depth-to-water measurements and the well construction details as presented in Table 3. The calculated casing volumes and field instrument measurements collected during purging were recorded on the well sampling sheets. After purging each well, groundwater samples were collected directly from the sampling pumps into clean sample

containers provided by the laboratory and were submitted under chain-of-custody for analysis. Samples were collected following the procedures in SOP 1.0 and purge water handled according to SOP 4.0 of the FSP.

Water samples were refrigerated with ice and shipped under chain-of-custody to the appropriate laboratory. For the first half of 2008, samples were shipped to Calscience Environmental Laboratories (CEL) in Garden Grove, California. CEL subcontracted analyses for tritium to FGL Environmental, Inc. of Santa Paula, California and for carbon-14 to GEL Laboratories, LLC of Charleston, South Carolina. For the second half of 2008, the majority of water samples were shipped to Curtis & Tompkins in Berkeley, California or CEL. Samples for radiological analyses were shipped to TestAmerica in Earth City, Missouri. Chain-of-custody forms for groundwater samples are presented in Appendix C.

2.2 Density-Driven Convection System

In December 2000, an initial DDC pilot test system began operation to assess the effectiveness of this technology in removing the source of VOCs in shallow groundwater. The results for the initial phase of the pilot test are documented in the May 7, 2001 *Letter Report, Groundwater Source Removal Pilot Test* (URS, 2001). Based on these results, the system was expanded in 2002. The expanded DDC groundwater treatment system began operation on December 5, 2002.

The expanded DDC system currently consists of six nested DDC wells (Figure 2) that monitor three zones each (DDC-1A, DDC-1B, DDC-1C through DDC-6A, DDC-6B, DDC-6C) and five nested temporary piezometers (TP) monitoring three zones each (TP-1A, TP-1B, and TP-1C through TP-5A, TP-5B, and TP-5C). The zone designations “A”, “B”, and “C” correspond to the screen intervals of the DDC well and are not intended to represent different hydrogeologic sub-units of HSU-1. Four HSU-1 monitoring wells (UCD1-012, UCD1-049, UCD1-050, and UCD1-051), and one HSU-2 well (UCD2-048) are located adjacent to the DDC wells, and results for these wells assist in assessing the effectiveness of the system. A detailed description of the design, construction, and technology details for the DDC system are presented in the *DDC System Summary Report* (BC, 2005).

The 2007 Annual Report establishes that the DDC wells are to be sampled semiannually for VOCs and that HSU-2 well UCD2-048 is to be sampled monthly for VOCs when the system is down for a prolonged period. Samples from the DDC wells were collected by lowering a disposable bailer down each piezometer nested with the DDC wells while the system is operating. Because the samples are collected during system operation, water in the wells is not static and thus removing standard purge volumes before sampling is not necessary. Instead, ten bailer volumes are purged prior to sampling. Purging and field instrument measurements are recorded on the well sampling sheets in Appendix B.

In 2008, the DDC wells were sampled only once, from February 29 to March 7. The DDC system was shut down in September because groundwater levels were too low for the DDC to be effective. When the groundwater level is below the B-zone screens, the DDC can no longer effectively treat the groundwater, so the system may be turned off to conserve electricity and reduce costs. It was restarted in November once groundwater levels rose again. However, the air

compressor motor failed approximately three days later and needed to be replaced, so the system was inoperable until the motor was replaced in February 2009. Because the system was down, well UCD2-048 was sampled monthly between September 2008 and March 2009.

2.3 Interim Removal Action System

The IRA groundwater extraction and treatment system began full-scale operation on May 11, 1998. The primary objective of this system is to minimize the off-site migration of chloroform and other VOCs in HSU-2. The IRA system consists of pumping water from extraction well EW2-01 (Figure 2) and treating the water using an air stripper. Prior to 2005, the treated water was injected into injection well (IW) IW2-01. Due to concerns that the water injection may increase nitrate and TDS concentrations in groundwater, the injection was replaced with discharge to the CWTP. Since 2000, some of the treated water has been diverted for irrigating horse pastures under the LTPS.

The objectives of the IRA monitoring are to assess the efficacy of the system in controlling VOC migration in HSU-2 and to evaluate that the treated water satisfies the CWTP and LTPS discharge requirements (Table 6). Per the 2007 Annual Report, the 2008 IRA monitoring consisted of monthly monitoring and sampling of the treatment influent and effluent. The influent samples were analyzed for VOCs, TOC, carbon-14, and tritium. Effluent samples were analyzed for VOCs, metals, nitrate as nitrogen, alkalinity, chloride, sulfate, calcium, magnesium, sodium, potassium, and TDS.

2.4 Storm Water Monitoring

Storm water monitoring consists of sampling storm water at three site locations, designated LF-01, LF-03, and LS-01. Locations LF-01 and LF-03 represent discharges from UC Davis areas Landfill Unit No. 1 and Landfill Unit No. 3, respectively, and are monitored by UC Davis. The LS-01 location represents a sample collected at the influent point for a storm water lift station near Old Davis Road and is monitored by the DOE. Figure 2 shows the locations of these monitoring points, Table 1 presents the specific analytes tested from each location, and Table 2 lists the analytical parameters and associated methods used for monitoring.

The three sampling locations represent different portions of the site and drain areas of varying sizes and surface conditions. For example, most of the area that drains to LS-01 is paved with asphalt, while LF-01 and LF-03 represent mostly unpaved areas near the landfill units. Thus, a discharge can occur at each area at different times in the rainy season or during different storm events. Storm water monitoring is normally conducted twice during the rainy season (October-March) each year. Storm water samples were collected from LF-01 on January 8, January 22, and February 24, 2008. Storm water samples were collected from LS-01 on December 15, 2008. Sample location LF-03 was monitored for potential discharge during 2008, but no flow was observed.

3. RESULTS

This section presents the results of monitoring that occurred in 2008. A description of the laboratory data validation results and the field measurement and analytical results for each monitoring program are presented below.

3.1 Laboratory Data Validation

The laboratory data validation process is specified in the QAPP (Dames & Moore, 1998b). The process includes reviewing the results of field quality control (QC) samples, evaluating sampling handling and documentation procedures and assessing laboratory QC data. Validation was performed on the groundwater, DDC and IRA system, and storm water data collected in 2008.

Field QC samples, including trip blanks, equipment blanks, and field duplicates, were collected and analyzed as specified in the QAPP. Equipment blanks and field duplicates were collected at a minimum frequency of 10 percent of the total amount of samples collected for each sampling event. Trip blanks were included with each shipment containing samples for VOC analyses and were only analyzed for VOCs. Duplicate samples were submitted for the same analysis as the primary samples. Trip blanks were only analyzed for VOCs.

The quality assurance/quality control procedures conducted by the analytical laboratory for sample analysis are discussed in detail in the QAPP. The laboratory is required to submit laboratory reports in both electronic and hardcopy formats. The electronic format is consistent with the project's electronic data deliverable format. This format allows data to be uploaded into an automated data review tool. The electronic data is then loaded into a Microsoft Structured Query Language (SQL) Server database. Database verification reports are generated and compared to the laboratory hardcopy reports to confirm that results in the database match the printed laboratory report.

Analytical performance is assessed on a "batch QC" basis, that is, by evaluating the QC sample results for groups of samples that were prepared and analyzed together. The assessment steps include the following:

- Reviewing chain-of-custody documentation;
- Checking holding time compliance;
- Determining whether adequate or required batch QC samples were analyzed and reported according to method and project specifications (e.g., method blanks, laboratory control samples, and matrix spikes);
- Assessing laboratory control sample and laboratory control sample duplicate (LCSD) recoveries and relative percent differences (RPDs);
- Evaluating surrogate spike recoveries (for organic methods);

- Evaluating method blank contamination; and
- Assessing matrix spike recoveries and matrix spike duplicate recoveries and RPDs.

Influences from field conditions, cross-contamination, and assessment of matrix heterogeneity are evaluated using the trip and equipment blanks and field duplicates. These QC samples are associated with the field samples by sampling date, shipment cooler, sampling equipment, location, matrix, or other conditions related to sample collection and handling, as appropriate. As a final process, the reported concentrations were compared to the historical results of these constituents to assess potential discrepancies in the data.

The laboratories produced 6,026 results for samples collected in 2008. Thirty-three of these results were rejected during the data validation process. The rejected results, designated as "R", were for samples analyzed for carbon-14 and VOCs. The rejected results were reported as not detected but were not reportable due to laboratory instrument calibration problems. Twenty-nine results of the total results were estimated values due to laboratory QC deficiencies. Some results were qualified as not detected at an estimated detection limit, designated as "UJ", or as estimated due to blank contamination, holding time violations, high and low spike recoveries, and/or duplicate imprecision, designated as "J". Most qualifications are due to sporadic deficiencies. These differ from systematic deficiencies, which include suspected sample contamination in the laboratory with methylene chloride and acetone, and holding time violations for nitrate as nitrogen (N). Ninety-two results were estimated due to trace quantities. The components of data validation are presented in Table 9. Table 10 provides a summary of the number of results that were qualified by method.

Overall, the laboratory data are of good quality. Less than 0.5 percent of the total data are qualified as estimated, down from approximately 2% in 2007. Most methods had less than 5 percent of the results qualified as estimated due to QC issues. Only USEPA Methods E900.0(M) for gross alpha/beta, E906.0(M) for tritium and EERF C-01 for carbon-14 had greater than 5 percent of results qualified as estimated. Thus, the results of this validation indicate that the data are valid for their intended purpose.

3.2 Groundwater

The subsections below present the results of water depth measurements and laboratory analyses of samples collected from groundwater monitoring wells.

3.2.1 Elevations and Flow Direction

Depth-to-water was measured in accessible site wells on February 26, May 29-30, October 6 and December 2. Groundwater elevations from each quarter were calculated for each well and are presented in Tables 4 and 5. As explained in Section 2.1, the monitoring wells were resurveyed in May 2009 to confirm and update reference elevations. BC, UC Davis' previous sampling consultant, measured water depths in February and May from the top of each well box or stovepipe. Thus, Table 4 presents the calculated groundwater elevations based on these depths measurements and the top of well boxes and stovepipes as reference elevations established by land surveys conducted prior to 2008. Table 5 presents water depth measurements collected by Weiss Associates in October and

December from the top of each well casing. The groundwater elevations in this table are calculated from the top-of-casing elevations determined in the May 2009 survey.[1] Quarterly groundwater elevation contour maps are presented on Figures 3 through 14. A discussion of groundwater elevations and flow for each HSU as shown on these maps is presented below.

3.2.1.1 HSU-1

Groundwater depths and flow directions in 2008 were consistent with previous results. Based on the water depth data for 35 wells, the water table was highest in February and lowest in October. Groundwater depths in HSU-1 wells ranged between approximately 32 and 41 feet below ground surface (bgs) in February. In October, depths were between approximately 51 and 61 feet bgs, a decrease from February of about 18 feet. Agricultural well pumping in the region presumably ceased after October 6, and as a result, water levels rose about eight feet by December 2. In October 2008, five wells were measured as dry. In general, a season-to-season comparison of water levels for 2007 and 2008 show that HSU-1 groundwater elevations were approximately three to five feet lower in 2008 than in 2007.

Contours extrapolated from the groundwater elevation data indicate that in HSU-1, the groundwater flow direction is generally toward the east and northeast and that flow gradients vary during different seasons. A discussion of each water level measurement event is presented below.

February: The groundwater elevation data indicate that groundwater flowed north to east-northeast with an approximate gradient of 0.001 ft/ft (UCD1-18 to UCD1-51) beneath the western portion of the site (Figure 3). In the east, the data indicate a less certain northerly flow and a smaller gradient. The flow direction in the eastern portion of the site is more uncertain because the east has a sparser well network, and many wells in this portion of the site are new and thus have not produced a large set of historical water level data (e.g., UCD1-055 and UCD1-058). Well UCD1-058 may provide anomalous water depths because it is adjacent to an irrigation water ditch.

May: The contours suggest that, just north of the creek, groundwater flowed north to northeastward with a gradient of approximately 0.006 ft/ft (UCD1-034 to UCD1-011). Further to the north, groundwater appears to have generally flowed northeast to eastward with a smaller gradient (Figure 4).

October: The October data included water levels from 6 new HSU-1 wells that were installed in September/October, including well UCD1-063, located south of the creek (Figure 5). The elevation data suggest that groundwater generally flowed eastward with a gradient of approximately 0.0006 ft/ft (UCD1-054 to UCD1-053). The exception to this flow direction is along the creek, where groundwater is interpreted to flow north on the north side of the creek and south on the south side of the creek. This interpretation is consistent with the assumption that the creek is a losing stream and that infiltration from the creek mounds the water table beneath it (Geomatrix, 2004).

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[1] The May 2009 survey also determined a top-of-box or top-of-stovepipe elevation for each well. Based on these survey results, Weiss concluded that it was likely that the previously used reference elevations for wells UCD1-055, UCD1-058, UCD2-056, and UCD2-057 were top-of-casing elevations even though they were represented as top-of-box elevations in the project database. Therefore, the reference elevations shown in Table 4 for these wells are adjusted to the top-of-box elevations established by the May 2009 survey.

December: Groundwater elevations in all but five wells vary by less than one foot. The resulting contours, as presented on Figure 6, suggest that there was no predominant groundwater flow direction beneath the western and central portion of the site. The rapid water table rise during this period and the different screen intervals and lithology for some of the wells may contribute to differential well recharge, resulting in cases where groundwater elevations may differ in nearby wells. This may explain the measured water level measurements in wells UCD1-004, UCD1-009, UCD1-023, UCD1-061, and UCD1-063. Figure 6 indicates that the water levels for the former three wells are anomalous. This statement is supported by similar historical water level differences between these and surrounding wells. Wells UCD1-061 and UCD-063, however, are recently installed and not near other monitoring wells. Thus, it is less certain that the data for these wells is also anomalous. Assuming that these groundwater elevations for these two wells are valid, groundwater near well UCD1-061 is estimated to flow northward, and groundwater south of the creek near well UCD1-063 is estimated to flow southward.

3.2.1.2 HSU-2

Water levels were measured quarterly in 23 monitoring wells, one active extraction well (EW2-01) and one inactive IW, IW2-01. Similarly to HSU-1, the HSU-2 water levels were highest in February and lowest in October. Groundwater depths in the HSU-2 wells ranged between approximately 31 and 44 feet bgs in February, and dropped approximately 18 feet to depths ranging from 49 to 61 feet bgs in October. By December 2, water levels in these wells increased about 8 feet. Water levels in February 2008 were approximately 5 feet lower than levels in March 2007, levels in October 2008 were generally 2 to 3 feet lower than levels in September 2007 and levels in December 2008 were generally 4 feet lower than levels in December 2007.

The groundwater flow direction in HSU-2, as determined from the groundwater elevation data, was generally toward the east-northeast or east during the year.

February: Groundwater generally flowed eastward with a gradient of 0.0001 ft/ft (UCD2-48 to UCD2-40) to 0.0003 ft/ft (UCD2-16 to UCD2-32). The water level in well EW2-01 was approximately 0.15 feet lower than the water levels in adjacent wells UCD2-29, UCD2-30, and UCD2-031 (Figure 7).

May: The flow direction was generally toward the northeast, except for the northern portion of the site, where groundwater flowed east to southeast (Figure 8). The maximum gradient in the northeast direction was about 0.001 ft/ft (UCD2-37 to UCD2-40; UCD2-35 to UCD2-40; UCD2-35 to UCD2-46). The water level in well EW2-01 was approximately 0.2 feet lower than water levels in adjacent wells UCD2-29, UCD2-30, and UCD2-31.

October: As determined by the groundwater elevation contours shown on Figure 9, groundwater generally flowed eastward beneath the site as with a gradient of approximately 0.0005 ft/ft (UCD2-17 to UCD2-45).

December: The flow direction and gradient were similar to October. Groundwater generally flowed eastward (Figure 10) with a gradient of approximately 0.0004 ft/ft (UCD2-017 to UCD2-045).

3.2.1.3 HSU-4

Water levels were measured quarterly in the five HSU-4 monitoring wells. The shallowest water depths were measured in February and were between approximately 34 and 36 feet bgs. Unlike water levels for HSU-1 and HSU-2, the deepest water levels occurred in May and were between approximately 59 and 60 feet bgs. Between May and December, water levels rose approximately 14 feet.

Based on the groundwater elevation data, the calculated groundwater flow direction was generally to the northeast and east-northeast (Figures 11, 12 & 13). For these three measurement events, the minimum and maximum gradients in the direction of groundwater flow were 0.0003 ft/ft (February; UCD4-44 to UCD4-43), 0.003 ft/ft (May; UCD4-41 to UCD4-42), and 0.0007 ft/ft (October; UCD4-41 to UCD4-42), respectively. The December data do not indicate a predominant groundwater flow direction (Figure 14).

3.2.2 Geochemical Suite Parameter Measurements and Sampling

As proposed in the DGWP, numerous "geochemical suite" parameters were measured using field meters and analyzed in samples collected from site monitoring wells. These analyses included TDS, hardness, calcium, magnesium, potassium, boron, nickel, manganese, iron (total and ferrous), fluoride, chloride, manganese, oxygen-reduction potential, pH, electric conductivity, sulfate, phosphate, carbonate, bicarbonate, TOC, and dissolved oxygen. These results will be presented and discussed in the Data Gaps Investigation Report.

3.2.3 Target Analyte Laboratory Results

A discussion of the results for specific target analytes in groundwater is presented in this subsection. These analytes include chloroform, total chromium, nitrate, TDS, carbon-14, tritium, 1,4-dioxane, perchlorate, radium-226, other VOCs, and other potential disposal unit analytes.

3.2.3.1 Chloroform

Chloroform was analyzed in 46 primary groundwater samples from 22 monitoring wells during four sampling events. For most of the wells that were sampled for chloroform prior to 2008, this year's results are consistent with the overall declining trend in most HSU-1 and HSU-2 wells. Nine of the 22 wells were sampled for chloroform for the first time this year. The highest concentrations for samples from HSU-1 and HSU-2 wells were from wells UCD1-051 and UCD2-029, respectively. Well UCD1-051 produced samples with 460 µg/L on February 27 and 750 µg/L on October 9. The results for UCD2-029 were 61 µg/L and 8.3 µg/L on February 27 and October 9, respectively. No samples from HSU-4 wells were collected in 2008. The analytical results for chloroform are summarized in Table 11.

No samples collected this year contained chloroform above the maximum detected for each well prior to 2008. Results in 2008 were generally consistent with those from 2007, except for significant chloroform decreases in samples from UCD1-049, UCD2-029 and UCD2-031. HSU-1 well UCD1-049 is located immediately north of the suspected source area and the DDC system.

HSU-2 wells UCD2-029 and UCD2-031 are located near extraction well EW2-01. Both 2008 samples from UCD2-031 contained no chloroform above the reporting limit.

Based on these sampling results, the extent of chloroform in groundwater in 2008 above 1.1 µg/L, the California Environmental Protection Agency (Cal/EPA) determination for a 10^{-6} cancer risk from drinking water (Regional Water Quality Control Board [RWQCB], 2007a), is generally smaller when compared with historical results. [2]

Chloroform in HSU-1 emanates from near wells UCD1-050 and UCD1-051 and extends eastward an estimated distance of 600 feet (Figure 15). Because wells UCD1-005 and UCD1-021 were not sampled this year, no data were collected to assess chloroform concentrations upgradient of the suspected source area. Up to eight µg/L has been historically detected in groundwater samples from these HSU-1 wells.

The estimated extent of chloroform above one µg/L in HSU-2 based on the October sample results is shown on Figure 16. Chloroform appears to extend approximately 1,500 feet from well UCD2-048, located in the suspected source area, to east of well UCD2-040.

Well UCD2-48 was sampled for chloroform monthly between October 2008 and February 2009 because the DDC system was not operating during this period. A discussion of these results is presented in Section 3.3.

3.2.3.2 Total Chromium

Total chromium was analyzed in 71 primary groundwater samples from 32 monitoring wells during three sampling events. In 2008, eight wells were installed and sampled for total chromium for the first time. Groundwater samples were analyzed for total chromium because years of groundwater monitoring have established that dissolved chromium in site groundwater is comprised almost entirely of hexavalent chromium (Geomatrix, 2004). Except for some HSU-2 wells, chromium data for 2008 were consistent with stable to declining trends for most wells over the past several years.

Chromium results in 2008 for HSU-1 were consistent with previous results, and samples collected this year from all HSU-1 wells installed prior to 2007 yielded chromium concentrations below historical high concentrations. The highest concentration in the HSU-1 samples this year was from well UCD1-028, located approximately 500 feet northeast of Landfill Unit No. 1, an area referred to as the "anomalous chromium area" (Figure 17). Chromium in samples from this well ranged from 425 to 490 µg/L (Table 12). No known historical use, storage, or disposal of chromium occurred in this area of the site.

Four HSU-2 wells that have been sampled regularly since at least 2002 produced samples with chromium at historically high levels. These wells include UCD2-029, UCD2-030, and UCD2-31, located near IRA extraction well EW2-01, and UCD2-048, screened in HSU-2 below the DDC system (the DDC system operates in the overlying HSU-1). The October samples for these wells contained between 34 and 48 µg/L. As discussed in Section 3.4, chromium concentrations also increased during the year in water extracted from well EW2-01. The highest HSU-2 concentration in 2008 was 92.1 µg/L, detected in the December sample from well UCD2-056. The results for this

[2] The USEPA MCL for drinking water for total trihalomethanes, which includes chloroform, is 80 µg/L. Of the wells sampled in 2008, samples from only two wells contained chloroform above the MCL.

well may be anomalously high for HSU-2 because it is screened in the upper 15 feet of the unit, whereas most other HSU-2 wells are screened deeper (Table 3).

Chromium concentrations during the year may be due to fluctuating water levels. Of the 21 wells that were sampled in both the February/March and the October events, 20 produced samples with higher chromium in October than in February/March, and nine of these showed a concentration increase of more than 50%. These nine wells are not in one particular region of the site and are screened in both HSU-1 and HSU-2. The differences in concentrations between the October and December samplings were small in comparison.

Figures 17 and 18 show the spatial distribution of total chromium concentrations in HSU-1 and HSU-2 groundwater for October, respectively, and can be used to assess where chromium may exceed applicable regulatory limits. A numeric site cleanup goal for hexavalent chromium in groundwater has not been established. The California MCL for total chromium is 50 µg/L, and no state or federal MCL for hexavalent chromium exists. Total chromium above 50 µg/L was detected in 15 out of 20 sampled HSU-1 wells and in three out of 12 sampled HSU-2 wells in 2008. The highest chromium concentrations in HSU-1 are from the anomalous chromium area. In HSU-2, chromium concentrations in October samples that exceed the state MCL were from wells UCD2-046, UCD2-056, and UCD2-059, which are not located in one particular area.

3.2.3.3 Nitrate as Nitrogen

Nitrate as nitrogen was analyzed in 60 primary groundwater samples from 23 HSU-1 and 11 HSU-2 monitoring wells during three sampling events. The highest concentrations for samples from HSU-1 and HSU-2 wells were from wells UCD1-050 and UCD2-007. Concentrations in these wells ranged from 67 to 78 milligrams per liter (mg/L) and 13 to 16 mg/L, respectively. The analytical results are summarized in Table 13.

Of the 24 wells that have been sampled previously to 2008 for nitrate, 7 yielded samples in 2008 that exceeded the previous maximum concentration. The wells are UCD1-011, UCD1-052, UCD1-53, UCD1-054, UCD2-040, UCD2-046, and UCD2-048. Ten wells were sampled for nitrate in 2008 for the first time.

Between the February/March and October sampling events, nitrate increased in samples from 15 wells, decreased in samples from five wells and remained unchanged in samples from one well. Five wells were sampled in both the October and December samplings. The differences in concentrations between the October and December samplings are generally smaller than the differences between the February/March and October samplings.

Samples from 16 of 23 HSU-1 wells sampled in October contained over 10 mg/L nitrate as N, the federal and California MCL for drinking water. As shown on Figure 19, the highest nitrate concentrations in October HSU-1 samples were collected from wells in two areas, beneath the northern end of the Eastern Trenches and beneath the horse pastures. Samples with less than 10 mg/L were from six wells that are close to Putah Creek (UCD1-010, UCD1-013, UCD1-018, UCD1-063, UCD1-064 and UCD1-065) and the northernmost site well (UCD1-061). The HSU-2 wells that produced samples with the lowest and highest nitrate concentrations appear scattered across the investigated site area (Figure 20).

3.2.3.4 Total Dissolved Solids

TDS samples were analyzed from eight HSU-1 and six HSU-2 wells in October as stated in the DGWP. Although it is one of the six constituents proposed for further monitoring in the 2007 Annual Report, the report recommended that TDS sampling could be substituted by field measurements of EC. TDS concentrations for the October event are presented in Table 14 and Figures 21 and 22.

Samples from six of eight sampled HSU-1 wells and all six sampled HSU-2 wells exceeded the California secondary MCL for drinking water of 500 mg/L. Of the seven wells that were sampled prior to 2008, four wells sampled in October produced results that represent new historical high concentrations.

3.2.3.5 Carbon-14

Carbon-14 was analyzed in 28 primary groundwater samples from ten HSU-1 and four HSU-2 monitoring wells during three sampling events. Six of the sample results were rejected during the laboratory data validation due to laboratory deficiencies (Table 15). Eight of the 14 wells were sampled for carbon-14 for the first time in 2008. The highest activities in samples from HSU-1 and HSU-2 wells were from wells UCD1-013 and UCD2-014, both of which are located adjacent to the Eastern Trenches. No samples exhibited activity above the USEPA MCL for drinking water of 2,000 pCi/L. Figures 23 and 24 present the October carbon-14 activities on HSU-1 and HSU-2 well location maps, respectively.

3.2.3.6 Tritium

Tritium was analyzed in 26 primary groundwater samples from ten HSU-1 and four HSU-2 monitoring wells during three sampling events. Eight of the 14 wells were sampled for tritium for the first time in 2008 (Table 16). The only tritium results that were detected above laboratory reporting limit of 300 pCi/L were for samples collected from adjacent wells UCD1-008 and UCD1-013, located near the Eastern Trenches (Figure 25). The filter packs of these wells penetrate different depth zones of HSU-1: 39 to 53.5 feet depth for well UCD1-008; and 47 to 65 feet depth for well UCD1-013 (Table 3). The maximum activity of the three samples was 1,960 ± 254 pCi/L, detected in the March 3 sample from well UCD1-008. This maximum concentration is below the USEPA MCL for drinking water of 20,000 pCi/L.[3] As shown on Figure 26, no tritium activities were detected above the reporting limit in any HSU-2 samples collected in 2008.

3.2.3.7 1,4-Dioxane

1,4-dioxane was analyzed in 24 primary groundwater samples from 14 HSU-1 and four HSU-2 monitoring wells during the October and December sampling events. These samplings are the first time that site wells have been sampled for 1,4-dioxane (Table 17). Five samples contained 1,4-dioxane above the USEPA action level and California notification level of three µg/L. The maximum concentration detected in HSU-1 samples was 14 µg/L. This concentration was detected twice: 1) in the October sample from well UCD1-066, located east of the northern portion of the Eastern Trenches; and 2) in the December sample from well UCD1-065, located east of the Waste

[3] In 2006, the Cal/EPA Office of Environmental Health Hazard Assessment established a public health goal for tritium of 400 pCi/L.

Burial Holes and the southern portion of the Eastern Trenches. Four samples from HSU-2 were analyzed in the December sampling, but no 1,4-dioxane was detected above the reporting limit of 2 µg/L. Concentration maps that show the 1,4-dioxane results from the December sampling of HSU-1 and HSU-2 wells are provided as Figures 27 and 28, respectively.

3.2.3.8 Perchlorate

During the October sampling, groundwater samples from six HSU-1 wells (UCD1-011, UCD-012, UCD1-013, UCD1-018, UCD1-028 and UCD1-064) and two HSU-2 wells (UCD2-029 and UCD2-048) were analyzed for perchlorate. These wells were selected because they are located adjacent to or downgradient of the land disposal units, except for UCD1-028 which is upgradient of the units. No perchlorate was detected in any of the wells above the reporting limit of four µg/L. The California MCL is six µg/L.

3.2.3.9 Radium-226

Radium-226 was analyzed in 17 primary groundwater samples from eight HSU-1 monitoring wells and one HSU-2 monitoring well during the October and December sampling events. These sample events are the first time since May 2006 that site wells have been sampled for radium-226. Samples were collected in October from wells UCD1-013, UCD1-018, UCD1-021, UCD1-022, and UCD2-036 because activities between 0.701±2.65 and 11.1±150 pCi/L were detected in groundwater samples collected from these wells in May 2006. A sample from one of these wells, well UCD1-013, was above the USEPA MCL of five pCi/L.[4] The counting error values for the May 2006 results were high, indicating a high amount of uncertainty for these results. No radium-226 was detected in the October 2008 samples above reporting limits.

The October and December samples from newly installed wells UCD1-062, UCD1-064, UCD1-065, and UCD1-066 were collected to assess whether radium-226 is in groundwater adjacent to the site disposal units. No radium-226 was detected in these samples above reporting limits.

3.2.3.10 Other Volatile Organic Compounds

Groundwater samples analyzed for chloroform were also analyzed for the other VOCs that comprise the standard analyte list for USEPA Method 8260B. A summary of detections above reporting limits throughout the year in groundwater monitoring well and DDC well samples is provided below.

Carbon disulfide: 0.6 µg/L in the October sample from well UCD1-049

Chloroethane: 1.4 µg/L in the March sample from well DDC-3C

1,1-Dichloroethane: between 1.0 and 16 µg/L in samples from wells UCD1-050, UCD1-051, UCD1-066 and DDC-1C

1,2-Dichloroethane: between 0.55 and 9.0 µg/L in samples from wells UCD1-050, UCD1-051, DDC-1C, DDC-2C, DDC-3B, DDC-4A, DDC-4B and DDC-4C

[4] This USEPA MCL is for the sum of the radium-226 and radium-228 isotopes.

1,1-Dichloroethene: between 1.1 and 9.8 µg/L in samples from wells UCD1-050, UCD1-051, UCD1-066, DDC-1C and DDC-2C

1,2-Dichloropropane: 0.7 and 0.8 µg/L in two October samples from well UCD1-051

1,1,2-Trichloroethane: between 0.9 and 29 µg/L in samples from wells UCD1-012, UCD1-049, UCD1-050, UCD1-051, DDC-1C, DDC-2C, DDC-6A, DDC-6B and DDC-6C

1,2,3-Trichloropropane: 2.8 µg/L in the October sample from well UCD1-062

Tetrachloroethene: 0.8 to 2.0 µg/L in the October samples from wells UCD1-50 and UCD1-051

Trichloroethene: 1.4 and 2.2 µg/L in samples from wells DDC-1C and UCD1-050, respectively

3.2.3.11 Other Disposal Unit Analytes

As part of the Data Gaps Investigation, the newly installed "disposal unit" wells—UCD1-062, UCD1-064, UCD1-065 and UCD1-066—were sampled for four consecutive quarters to assess whether chemicals from waste in the disposal units may have impacted groundwater. The October and December samplings represent the first two quarters; the latter two quarterly samplings were performed in February and May 2009 and will be presented in the forthcoming Data Gaps Investigation Report. The sampling analyses included VOCs, pesticides, polychlorinated biphenyls (PCBs), nitrate, metals, and radionuclides. The results for some of these analytes are incorporated into the discussion presented in Sections 3.2.3.1 (chloroform), 3.2.3.10 (other VOCs), 3.2.3.3 (nitrate), 3.2.3.2 (chromium), 3.2.3.5 (carbon-14), 3.2.3.6 (tritium) and 3.2.3.9 (radium-226).

No pesticides or PCBs were detected in samples from the four disposal unit wells above reporting limits. Metals and radionuclides other than those referenced above were detected in some of the samples from these wells. A comparison of these results for the four consecutive quarters with background and other relevant water quality criteria will be included in the Data Gaps Investigation Report.

3.3 Density-Driven Convection System

This section presents a summary of the operation of the DDC system during 2008 and an evaluation of its effectiveness in removing chloroform from HSU-1 groundwater. The DDC system consists of the air injection into six DDC wells (Figure 2, inset), each of which is screened over three different depth zones of HSU-1. An air compressor blows air into the casing of each DDC well to strip water inside the casing of chloroform and effect movement of impacted water through the bottom well screen and stripped water out of the top well screen. The movement of water in and out of the well allows water to circulate in convection cells in the saturated formation surrounding the well.

The system was maintained every two weeks and it operated continuously in 2008 until September 26 (Table 8). On this date, the system was intentionally shut down because water levels in HSU-1 had declined to below the bottom of the middle screened interval in the DDC wells. If water is not present in the upper or intermediate screens of the DDC wells, then the injection of air

cannot move water upward through the wells. The water table rebounded, and on November 21, the system was restarted. The system operated for approximately three days before the air compressor motor failed. The compressor is a rotary screw compressor that had operated nearly continuously for almost five years. According to the manufacturer, the motor had lasted a reasonable length of time given its continuous operation. After troubleshooting, the replacement of the motor and upgrade of other compressor components, the DDC system was restarted on February 11, 2009. For the 2008 calendar year, the DDC system operated 75% of the time.

Since startup of the full-scale pilot test in December 2002, sample results for adjacent HSU-1 wells UCD1-012, UCD1-049, UCD1-050, UCD1-051 and HSU-2 well UCD2-048 and calculated mass removal rates for the DDC wells have been used to assess the effectiveness of the system. As required in the 2007 Annual Report, well UCD2-048 was sampled monthly from September 2008 to March 2009 because the DDC system was not operating from September 2008 to February 2009. Table 11 includes the sampling results of detected chloroform from these five wells during 2008, and Figure 29 presents time-versus-chloroform concentration graphs for these wells. The chloroform concentration(s) in the 2008 samples from:

- Wells UCD1-012 and UCD1-049 were consistent with the stable or declining, low-concentration trends that have been ongoing in samples from these wells for the past two to three years. The October samples for both wells were collected two weeks after the DDC system shutdown and did not contain higher chloroform results. Thus, it appears that the shutdown did not affect the chloroform concentrations in groundwater near these wells.
- Well UCD1-050 was also consistent with results over the past two years. Since 2006, chloroform concentrations have ranged up to 579 µg/L. The February and October 2008 concentrations were 160 and 440 µg/L, respectively. It is inconclusive if this concentration increase is due the DDC system shutdown in September or part of the same concentration trend observed since 2006.
- Well UCD1-051 continued an increasing concentration trend in 2008 that started in 2006. The February and October concentrations were 460 and 750 µg/L, respectively. The concentration increase may be due to the DDC system shutdown or the same phenomenon responsible for the increasing chloroform concentrations over the past two years.
- Well UCD2-048 ranged between 0.5 and 11 µg/L over the monthly sampling period of September 2008 to March 2009. This range is consistent with the February 2008 result of 1.3 µg/L, and generally with sample results for this well since it was installed in 2002. Thus, the system shutdown did not result a chloroform concentration increase in groundwater from this well.

Due to the shutdown in the latter part of 2008, the DDC wells were sampled only once, between February 29 and March 7. Table 8 presents calculations for the removal of chloroform during 2008 by the system based on water circulation estimates and averaged laboratory results for samples collected in September 2007, March 2008 and February 2009. An estimated 27 pounds of chloroform were removed between September 24, 2007 (the end of the period for which chloroform removal was calculated in the 2007 Annual Report) and September 26, 2008 (the date of system shutdown). Well DDC-1, located at the center of the system, removed approximately 24 pounds, and well DDC-5 removed approximately two pounds. Less than 0.5 pounds were removed by each of the other four DDC wells.

3.4 Interim Removal Action System

This section summarizes the results of influent and effluent monitoring of the IRA system, including a calculation of chloroform mass removal and a comparison of effluent water quality with discharge requirements. The IRA system consists of extracting groundwater from HSU-2 well EW2-01, treating the water using an above-ground air stripper and discharging the water to the sanitary sewer, which carries the water to the CWTP. During dry months, some of the air stripper effluent is used for irrigating horse pastures on UC Davis property. Samples were collected from the air stripper influent and effluent monthly from January to December and analyzed in accordance with Table 15 of the 2007 Annual Report. The analytical reports and chain-of-custody forms for these samples are presented in Appendix C. The effluent discharge standards for the IRA groundwater treatment system are included in Table 6.

A summary of the influent sample results is as follows:

- Chloroform was the primary VOC detected in the IRA influent. Chloroform concentrations in influent samples varied from 6.7 (September) to 51 µg/L (April). These concentrations are less than the range detected in the 2007 influent samples, which was 20 to 75.4 µg/L. The only other VOC detected at or above the reporting limit in the influent was acetone; the July sample contained two µg/L. However, the laboratory reported that acetone was also present in the laboratory blank for the July sample.
- TOC concentrations were detected in all influent samples for the year at concentrations ranging from 0.43 to 2.2 mg/L.
- Carbon-14 was detected above the reporting limit only in the sample collected in March with an activity of 20.1 pCi/L.
- No tritium was detected in any of the samples above reporting limits.

The analytical data for the effluent samples indicate that the IRA system discharge was compliant with the LTPS standards and CWTP limits. The results indicate that:

- No chloroform or other VOCs were detected above reporting limits in the monthly samples, with the following exceptions. The February sample contained 1.2 µg/L 1,2,3-trichlorobenzene, and the July sample contained 2.6 µg/L acetone. However, the laboratory reported that acetone was also present in the laboratory blank for the July sample.
- Chromium did not exceed the IRA effluent discharge standards for the LTPS or CWTP. Total chromium was detected at concentrations between 23.9 (January) and 43 µg/L (September), which is higher that the range of results for 2007 of 18.7 to 29.3 µg/L. This year's results are also consistent with a three-year trend of increasing chromium concentrations in water extracted from well EW2-01. The LTPS limit for total chromium is 44.6 µg/L and the CWTP discharge limit for hexavalent chromium is 59 µg/L (Table 6).
- Effluent samples met the irrigation discharge limits to the LTPS and CWTP for other metals and ions during 2008. The maximum concentrations of analytes with detections above reporting limits include: 2.58 µg/L arsenic; 220 µg/L barium; 578 µg/L boron; 23 mg/L chloride; 1.1 µg/L lead; 7.8 µg/L manganese

(laboratory indicated that manganese was in the laboratory blank for this sample); 2.09 µg/L molybdenum; 4.39 µg/L nickel; 10 mg/L nitrate as N; 3.3 µg/L selenium; 66 mg/L sulfate as SO_4; 11.3 µg/L vanadium and 24 µg/L zinc.

- TDS concentrations in the effluent ranged from 486 to 610 mg/L in 2008, which is higher than the 465 µg/L to 506 mg/L concentration range reported for 2007.

3.4.1 Groundwater Extraction

In 2008, the IRA pumped and treated approximately 26 million gallons of water from EW2-01 (Table 7). Approximately 94% of the treated effluent was discharged to the CWTP and the remaining 6%, approximately 1.5 million gallons, was discharged to the LTPS through the irrigation system. Generally, operational pumping rates ranged from 48 to 80 gpm and averaged at 66 gpm.

The system operated an average of 77% of the time, an increase from the average 63% uptime reported for 2007. Shutdowns occurred in 2008 for a variety of reasons, including power outages and planned maintenance of the IRA treatment equipment and CWTP infrastructure, and system malfunctions. The system was off-line for brief periods due to both high and low levels of water in the irrigation tank for the LTPS. The valve which controls the direction of the effluent water is manually operated and requires an operator to regulate the water level in the irrigation tank. If the tank fills up or empties completely, the system will shut down.

3.4.2 Chloroform Removal

During 2008, the IRA system has removed an estimated 5.3 pounds of chloroform from groundwater (Table 7). Except for 2001, this yearly total is the lowest since the IRA system began in 1998. The low total mass removed is due to the relatively low concentrations of chloroform in the 2008 system influent (Figure 30). Since startup, approximately 135 pounds of chloroform has been extracted and treated through by the IRA.

Figure 30 presents a graph of time versus chloroform concentration for the IRA influent and wells UCD2-30, UCD2-32, and UCD2-40. These wells have been used to assess the effectiveness of the IRA extraction system with respect to minimizing the offsite migration of chloroform. As seen on this figure, since startup of the IRA system in 1998, chloroform concentrations in all three wells have decreased. The highest chloroform concentration ever detected in the IRA influent was 168 µg/L, which was in a sample collected in July 2006.

3.5 Storm Water

Storm water samples were collected on four different dates during 2008: January 8, January 22, and February 24 at location LF-01; and December 15 at location LS-01. No flow was observed at location LF-03 in 2008. In fact, the last sample collected at this location was in December 2005. The samples were analyzed for the analytes presented in Table 1 and analyzed by the methods listed in Table 2. The analytical results are presented in Table 18, and the laboratory reports are included as Appendix E.

The following rainfall occurred during each sampling (UC Davis, 2008):

Sample Date	Sample Location	Rainfall on Sample Date (inches)	Estimated Storm Duration through Sample Date	Rainfall for Storm Duration (inches)
January 8	LF-01	0.00	January 4-7	3.18
January 22	LF-01	1.25	January 22	1.25
February 24	LF-01	0.80	February 22-24	1.18
December 15	LS-01	0.60	December 15	0.60

Three constituents exceeded USEPA benchmark values for storm water. Exceeding the benchmark values is not a permit or discharge violation, but it does require a discharger to review its BMPs to identify opportunities to reduce contaminant discharge (RWQCB, 2007b). The results were below the benchmark values, except for:

- Total iron in the LF-01 samples collected on January 8 and February 24 and the LS-01 sample collected on December 15. The sample results ranged from 760 to 15,400 µg/L. The benchmark value is 1,000 µg/L.
- TSS in the LF-01 sample collected on February 24. The sample contained 119 mg/L, above the benchmark value of 100 mg/L. The TSS result for the LS-01 sample was below the benchmark.
- Nitrate as N in the LF-01 sample collected on January 22 (0.738 mg/L) and the LS-01 sample collected on December 15 (0.691 mg/L). The benchmark value is 0.68 mg/L nitrate and nitrite as N.

Samples collected from LF-01 on January 8 and February 24 contained 0.25 and 0.14 µg/L, respectively. These concentrations are above the CTR limit of 0.050 µg/L. The CTR limit applies because Putah Creek is listed as an impaired water body for mercury per Section 303(d) of the Clean Water Act. The LS-01 sample collected on December 15 was also analyzed for mercury, and the result was below the CTR limit.

In the 2007 Annual Report, TDS, TOC, barium, copper, methyl ethyl ketone (2-butanone) and acetone were reported at concentrations in samples from LS-01 that were higher than samples collected at this location in previous years. Because no known release of these constituents to the lift station at LS-01 had occurred, the report recommended analyzing the 2008 samples for the same constituents to assess whether the high 2007 values were part of an increasing concentration trend. The 2008 results for these analytes decreased from the concentrations detected in the 2007 samples to concentrations that are consistent with results for samples collected before 2007. In addition, the sample and a field duplicate were submitted for a 96-hour, acute aquatic toxicity test. The survival rate of the target species, fathead minnow, was 90% and 100% for the two samples. The control sample had a 95% survival rate. Future sampling will assist in confirming whether the 2007 sample results were episodic or part of an increasing trend.

In late 2008 prior to the 2008-09 rainy season, UC Davis installed new BMPs at the LF-01 and LF-03 locations. At LF-01, the new BMPs included installing drain rock, sandbags and straw wattles around the inlet of the levee culvert to prevent the entry of suspended solids. At LF-03, sandbags were placed across the swale upslope from the culvert to the drainage channel to minimize flow into the culvert. The SWPPP was updated for these new BMP installations (UC Davis, 2009a).

Based on these sampling results, UC Davis recommends increasing the analyte list for storm water samples collected from LF-01, LF-03, and LS-01 in the 2009-2010 rainy season. This is the same list of analytes proposed in the 2007 Annual Report, except that nitrate and nitrite are added:

Parameter	Unit	Method
Electrical conductivity	µmhos/cm	FSP SOP using field meter
Hardness, as $CaCO_3$	mg/L	U.S. EPA Method 130.2
Iron, total	mg/L	U.S. EPA Method SW6020
Mercury	ng/L	U.S. EPA Method SW1631
Nitrate and nitrite, as nitrogen	mg/L	U.S. EPA Method 300.0
Oil and grease	mg/L	U.S. EPA Method 9070
Organic carbon, total	mg/L	SM5310C
pH	pH units	FSP SOP using field meter
Suspended solids, total	mg/L	U.S. EPA Method 160.2
Temperature	ºC	FSP SOP using field meter

Abbreviations:
µmhos/cm = micromhos per centimeter
mg/L = milligrams per liter
ng/L = nanograms per liter
ºC = degrees Celsius
FSP = *Revised Field Sampling Plan* (Dames and Moore, 1998a)
SOP = Standard operating procedure

4. RECOMMENDATIONS

Based on the results presented in this report, UC Davis has prepared the recommendations presented below.

Assess current sampling analytes and frequencies for the groundwater program. Based on the results of the Data Gaps Investigation, UC Davis will assess and request changes, as appropriate, to the current sampling program. For example, the DGWP proposed sampling several wells for potential disposal unit constituents quarterly for one year. Many constituents have not been detected during the past four quarters, and thus it may be warranted to discontinue sampling for these parameters. UC Davis will present the results of the assessment at an upcoming RPM meeting and document approved changes in the forthcoming 2009 Semiannual Water Monitoring Report.

Cease sampling of well UCD2-048 during periods when the DDC system is shutdown. As presented in Section 3.3, the DDC system was shut down for more than four months in late 2008 and early 2009. Well UCD2-048 was sampled for seven consecutive months during this time. The results indicate that the chloroform concentration did not increase in this HSU-2 well during the shutdown period, indicating that concentrations do not increase in the HSU-2 well when the DDC system is not operating. Thus, monthly monitoring of this well is not necessary. UC Davis recommends continuing to sample this well semi-annually. The RPMs approved this recommendation during the RPM meeting on June 26, 2009 (RPM Meeting Minutes, 2009).

Continue to maintain storm water BMPs and current analyte sampling. UC Davis will continue to maintain storm water BMPs and evaluate their effectiveness based on storm water sampling data for 2009. For the 2009-2010 rainy season, UC Davis recommends adding nitrate and nitrite as N to the analyte list presented in the 2007 Annual Report. The future sampling results will be reviewed to assess the effectiveness of the existing BMPs.

5. REFERENCES

BC, 2003. Final 2002 Comprehensive Annual Water Monitoring Report, LEHR/SCDS Environmental Restoration, December.

BC, 2005. Final 2003 Comprehensive Annual Water Monitoring Report, LEHR/SCDS Environmental Restoration, March.

BC, 2006a. Final 2005 Comprehensive Annual Water Monitoring Report, LEHR/SCDS Environmental Restoration, May.

BC, 2007a. Draft 2006 Comprehensive Annual Water Monitoring Report, LEHR/SCDS Environmental Restoration, March.

BC, 2008. 2007 Comprehensive Annual Water Monitoring Report, LEHR/SCDS Environmental Restoration, April.

Dames and Moore, 1993. Phase II Site Characterization Report for the LEHR Environmental Restoration, University of California, Davis, Volume I, February.

Dames & Moore, 1998a. Final Revised Field Sampling Plan, LEHR/SCDS Environmental Restoration, August.

Dames & Moore, 1998b. Final Revised Quality Assurance Project Plan, LEHR/SCDS Environmental Restoration.

Dames and Moore, 1999. Groundwater Source Evaluation for the LEHR Environmental Restoration, University of California, Davis.

Geomatrix, 2004. Final Remedial Investigation Report, LEHR/SCDS Environmental Restoration, December.

RPM Meeting Minutes, 2007. Draft Remedial Project Managers Meeting Summary for the Laboratory for Energy-Related Health Research/South Campus Disposal Site, University of California, Davis. Recorded by Amanda Withrow and Bob Devany, July 11.

RPM Meeting Minutes, 2008a. Draft Remedial Project Managers Meeting Summary for the Laboratory for Energy-Related Health Research/South Campus Disposal Site, University of California, Davis. Recorded by Amanda Withrow and Bob Devany, January 30.

RPM Meeting Minutes, 2008b. Draft Remedial Project Managers Meeting Summary for the Laboratory for Energy-Related Health Research/South Campus Disposal Site, University of California, Davis. Recorded by Mary Stallard and Sheila Higgins, October 7.

RPM Meeting Minutes, 2009. Draft Remedial Project Managers Meeting Summary for the Laboratory for Energy-Related Health Research/South Campus Disposal Site, University of California, Davis. Recorded by Christine Judal, June 26.

RWQCB, 2007a. Letter titled, "*Draft Screening of Alternatives for the Feasibility Study, Laboratory for Energy-related Health Research, University of California, Davis, Solano County,*" addressed to Ms. Susan Fields, UC Davis Environmental Health and Safety from Ms. Susan Timm, RWQCB Remedial Project Manager. Eight pages, February 22.

RWQCB, 2007b. Letter titled, "*Storm Water Sampling and Analysis Results,*" addressed to Mr. Brian Oatman, Office of Environmental Health and Safety from Mr. William J. Marshall, RWQCB Storm Water Section Chief. Two pages and one table, March 30.

UC Davis, 2004. *Storm Water Pollution Prevention Plan for the Inactive Landfill Cells #1 and #3*, prepared by the University of California, Davis, April.

UC Davis, 2008. Climatological Data for January, February and December 2008. http://atm.ucdavis.edu/wxauto/MonthlyClim/.

UC Davis, 2009a. Storm Water Pollution Prevention Plan for the University of California, Davis Inactive Landfill, Waste Discharge Identification 5S57I002687.

UC Davis, 2009b. UC Davis Local Limits - Numerical Local Limits, 4 pages.

URS, 2001. Letter Report, Groundwater Source Removal Pilot Test, LEHR/SCDS Superfund Site, May 7.

USEPA, 1999. Statement of Work for Removal Actions and Mitigation Repair, Administrative Order on Consent No. 99-16.

USEPA, 2001. Revision #2 to Statement of Work, Administrative Order on Consent #99-16, LEHR/SCDS Superfund Site. August 29.

Weiss Associates, 2008. Feasibility Study Data Gaps Work Plan at the Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis, prepared for University of California, Davis, August 26. Rev 0.

Weiss Associates, 2009. 2008 Semi-Annual Water Monitoring Report for the Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis, prepared for University of California, Davis, March 9. Rev 0.

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FIGURES

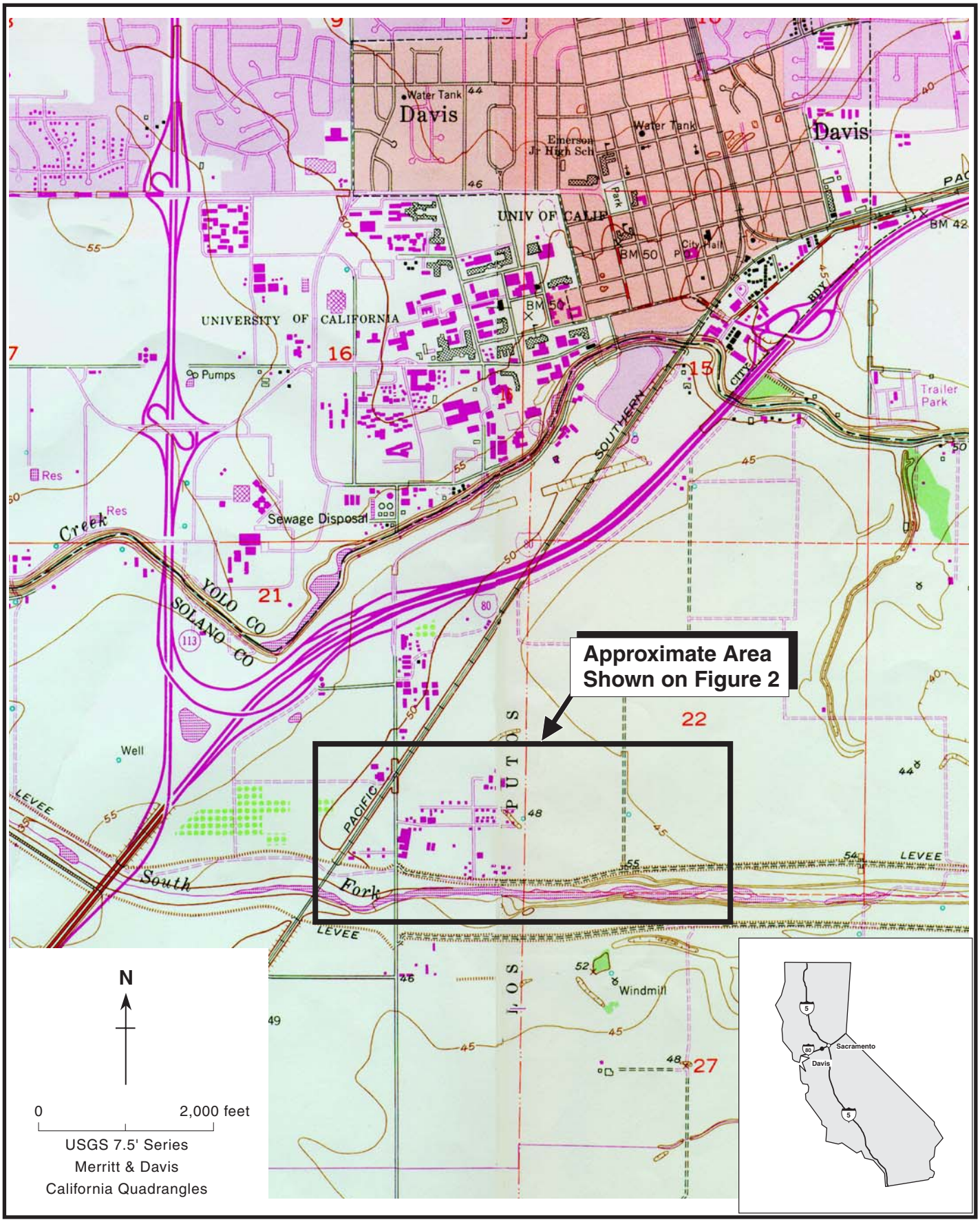


Figure 1. Site Vicinity Map - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

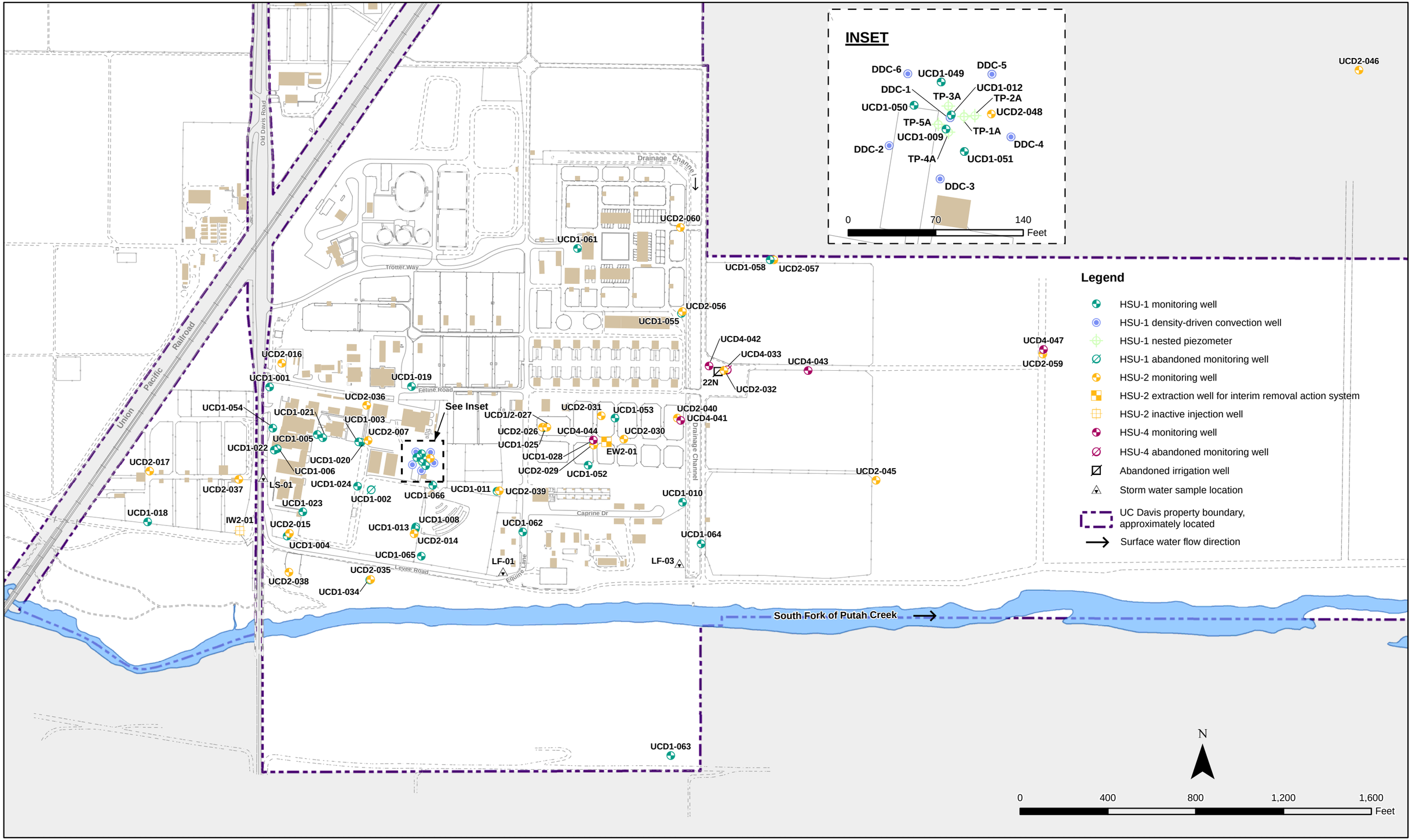


Figure 2. Well and Water Sampling Locations - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

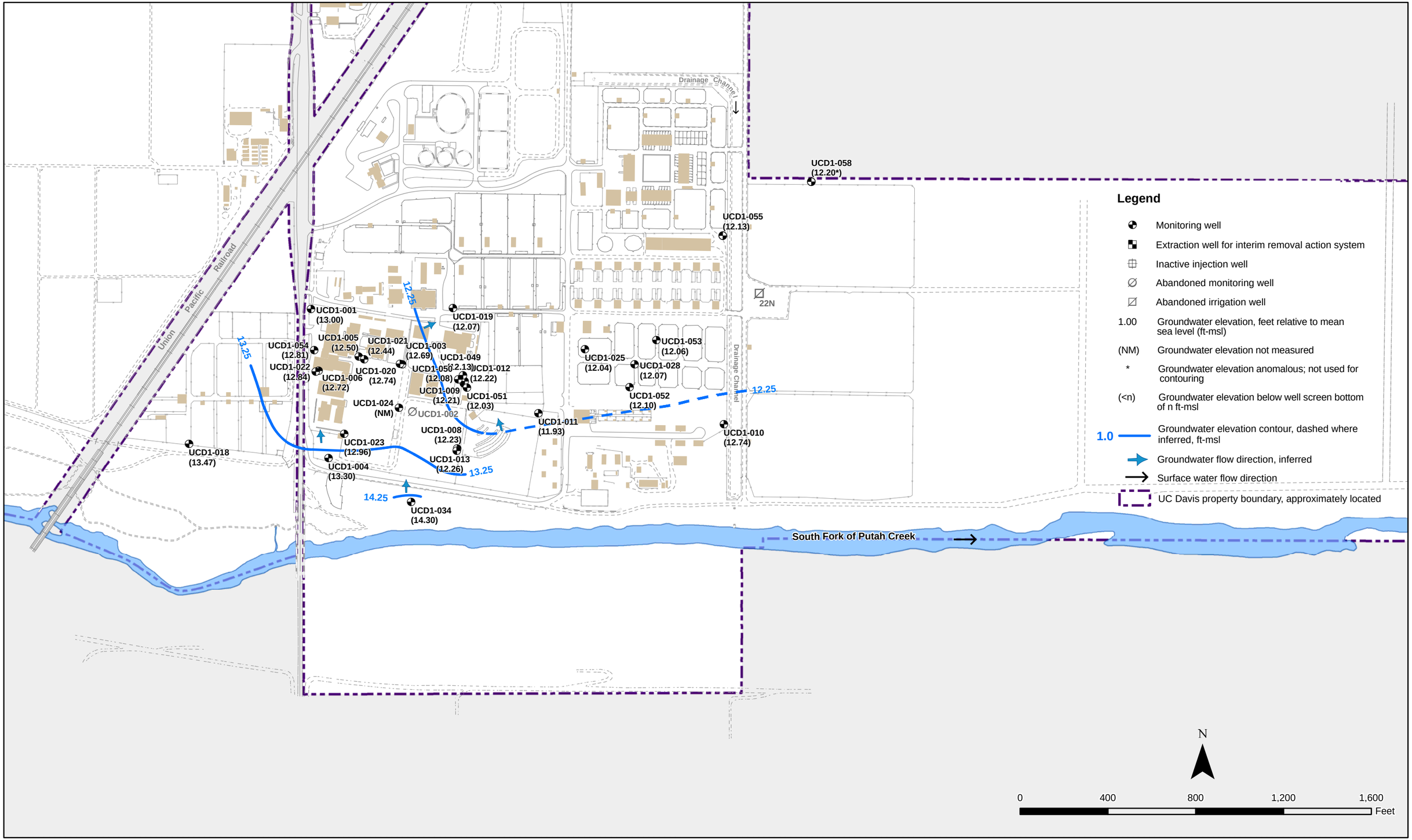


Figure 3. Groundwater Elevations in HSU-1 Wells - February 2008 - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

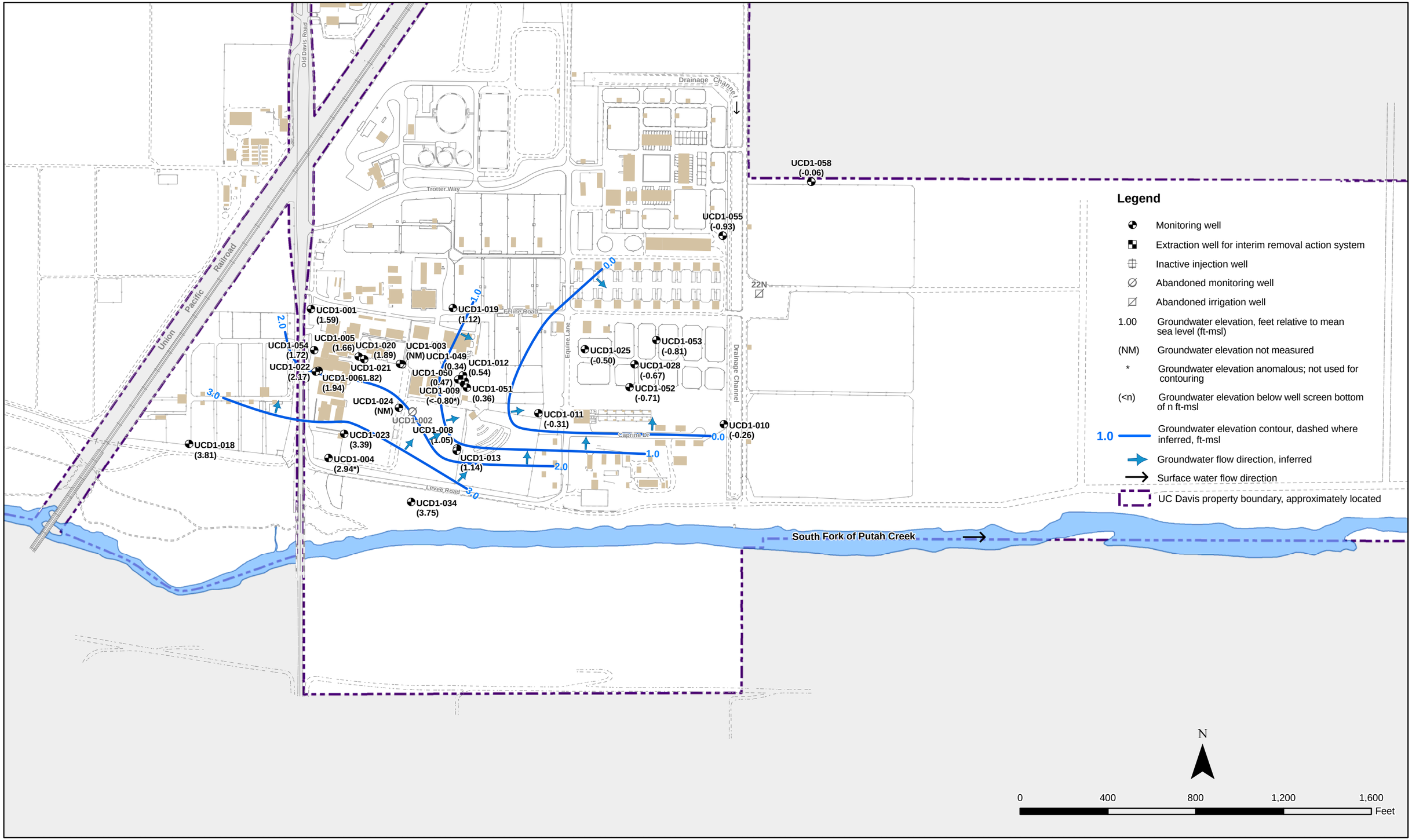


Figure 4. **Groundwater Elevations in HSU-1 Wells - May 2008 - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis**

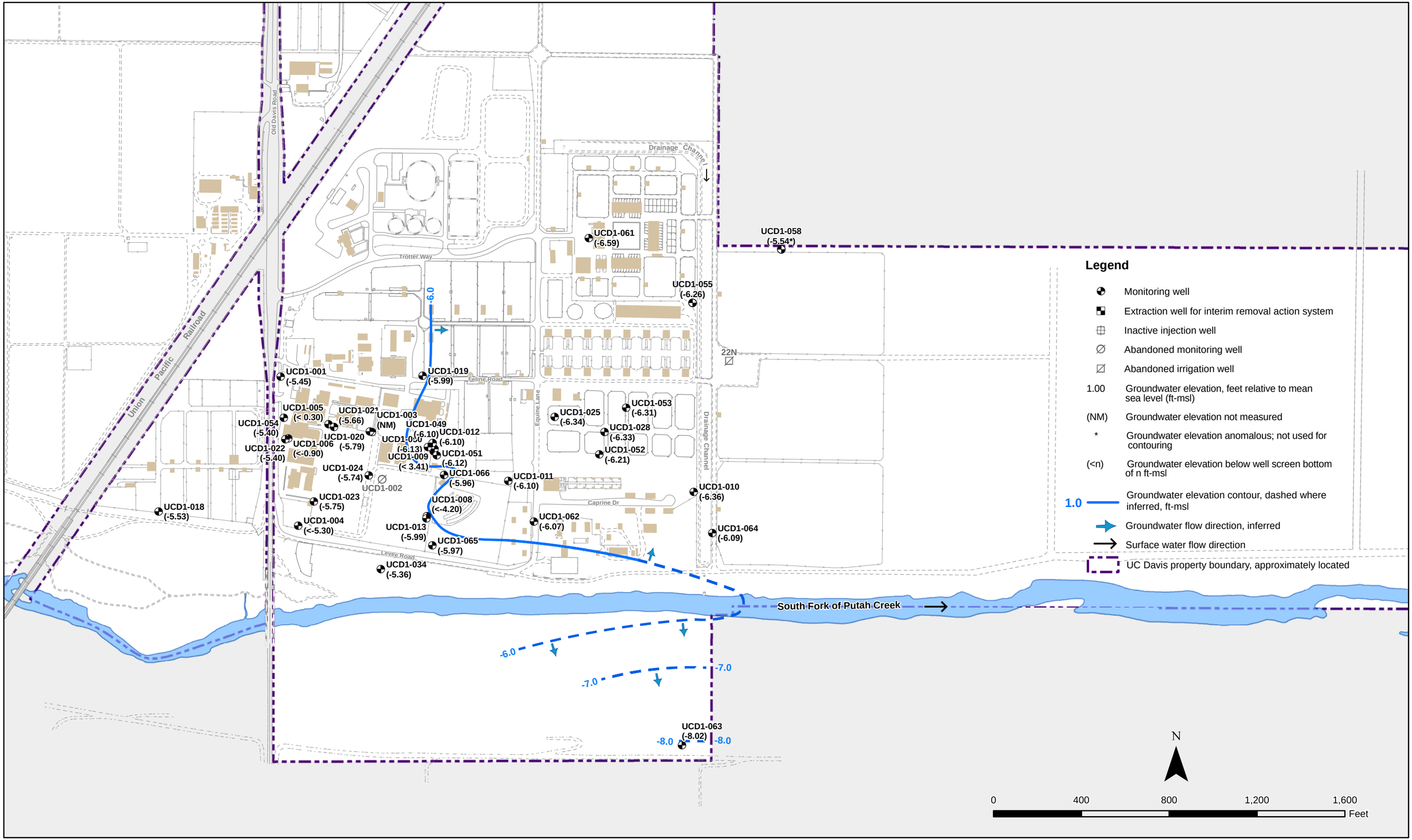


Figure 5. Groundwater Elevations in HSU-1 Wells - October 2008 - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

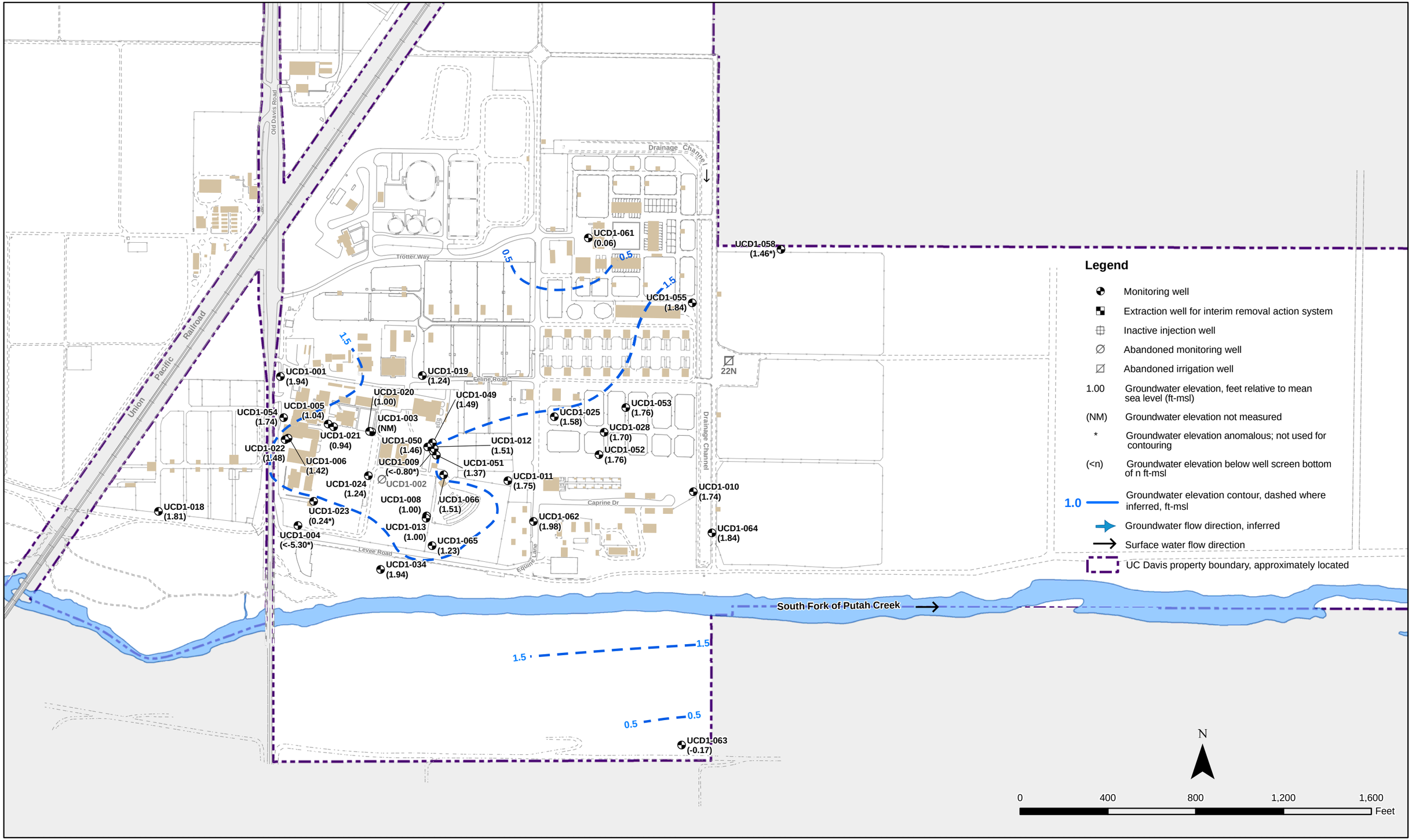


Figure 6. Groundwater Elevations in HSU-1 Wells - December 2008 - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

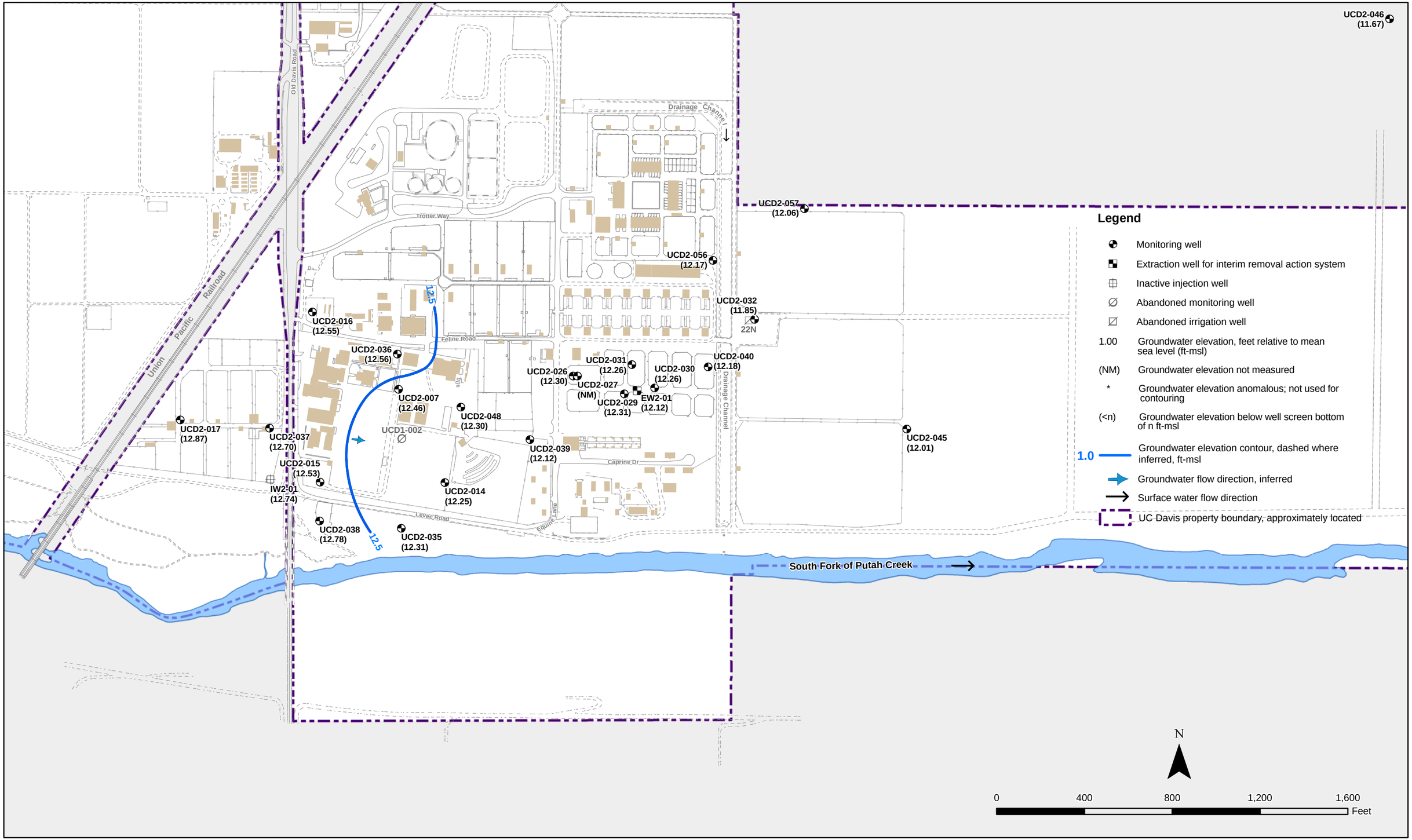


Figure 7. **Groundwater Elevations in HSU-2 Wells - February 2008 - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis**

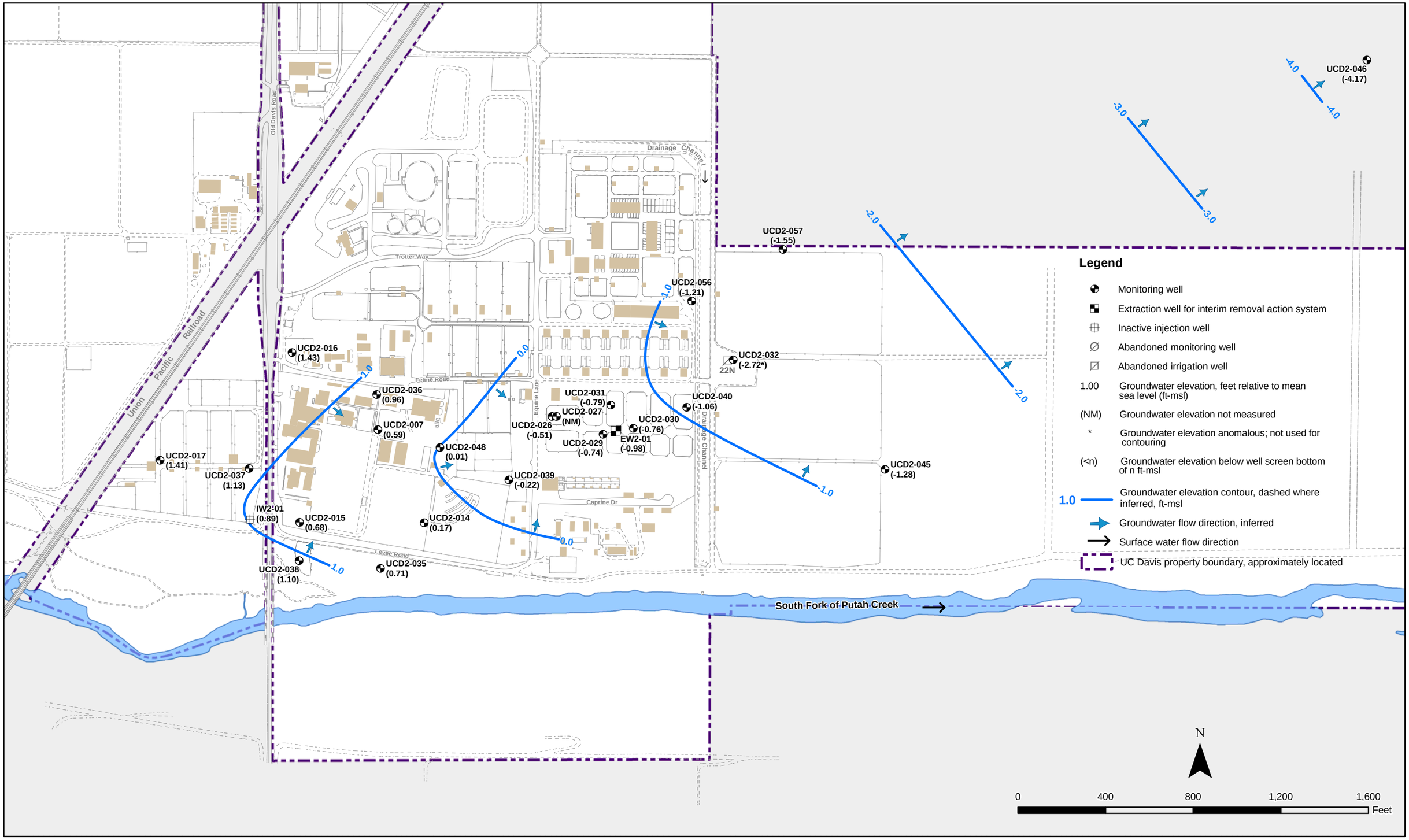


Figure 8. Groundwater Elevations in HSU-2 Wells - May 2008 - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

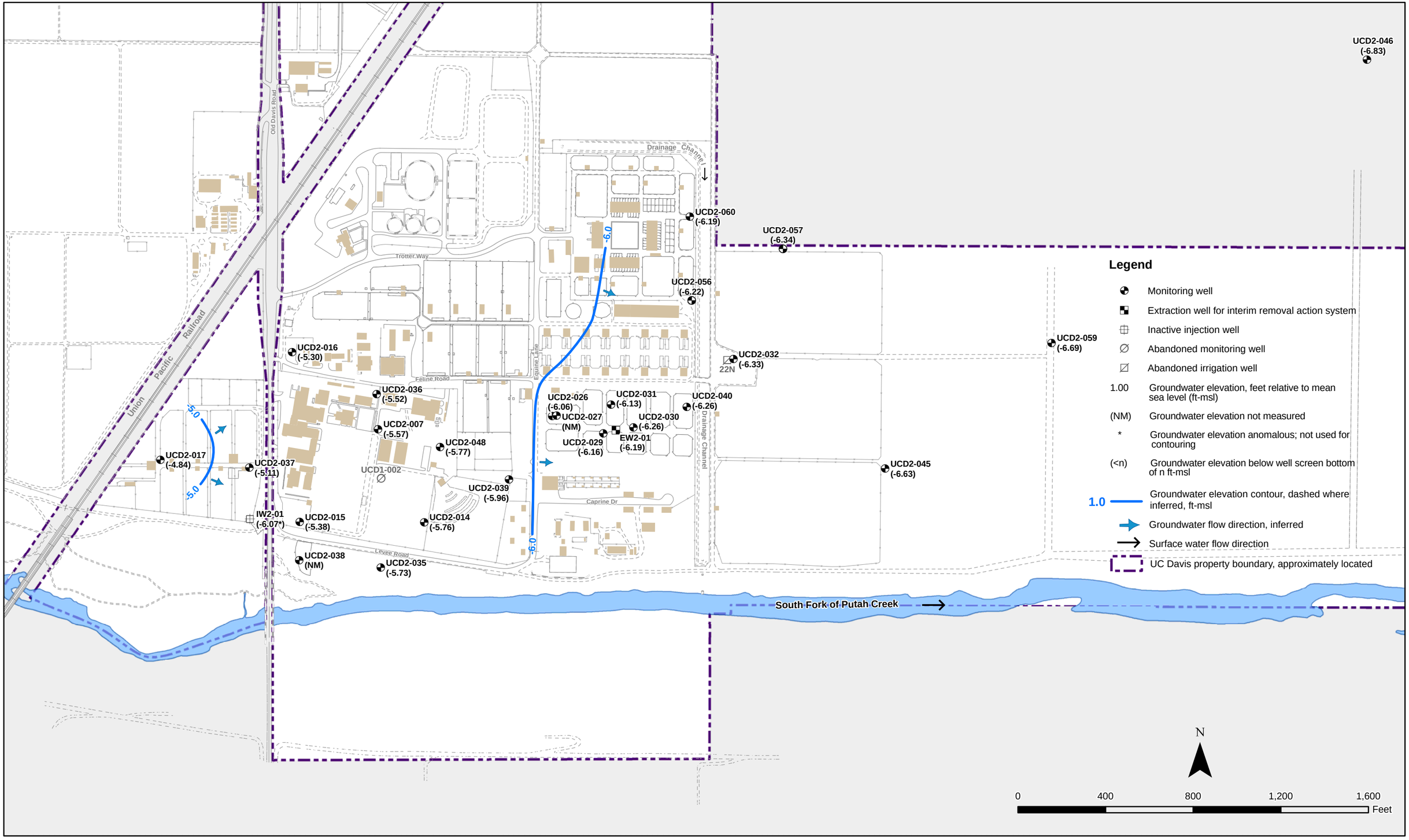


Figure 9. Groundwater Elevations in HSU-2 Wells - October 2008 - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

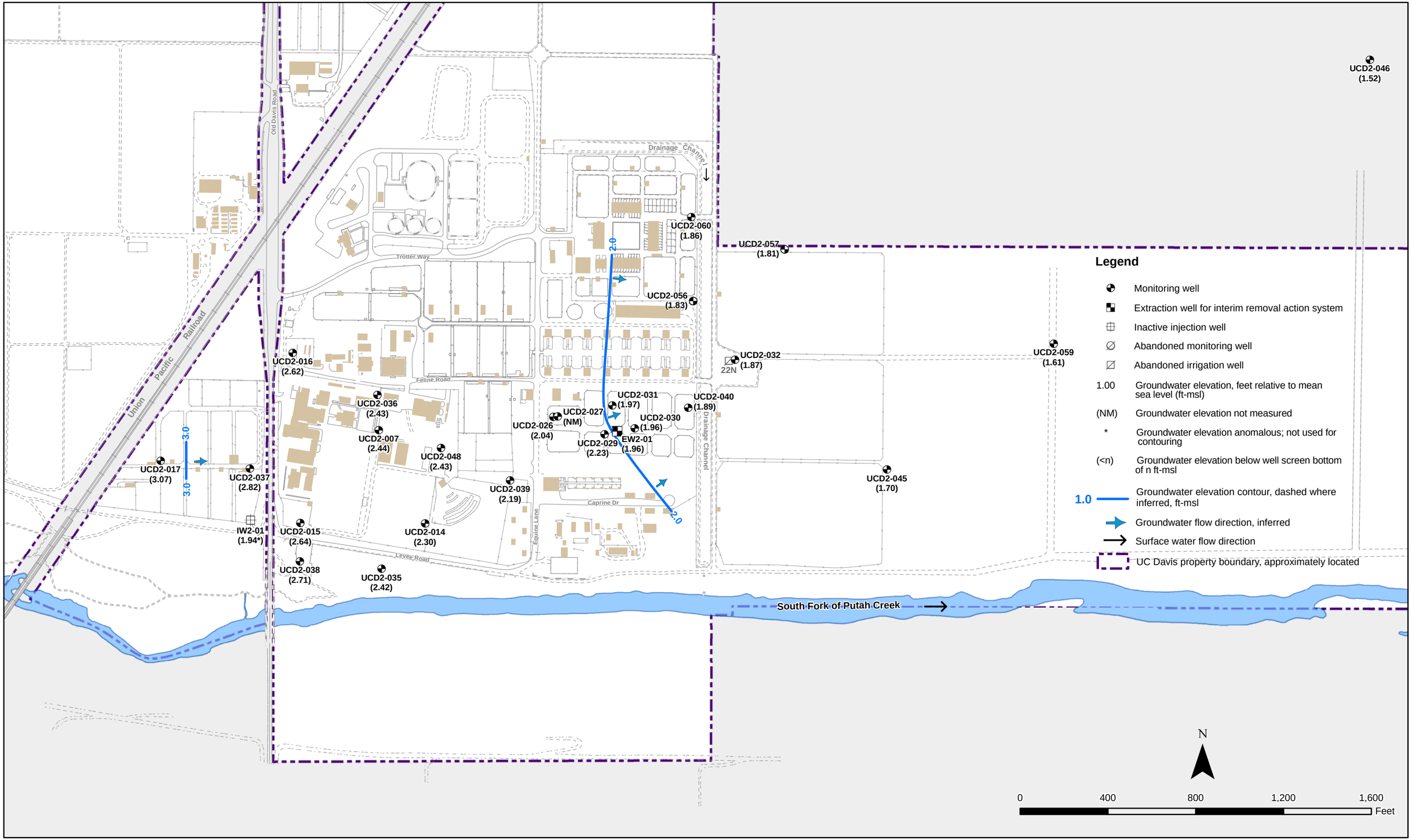


Figure 10. Groundwater Elevations in HSU-2 Wells - December 2008 - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

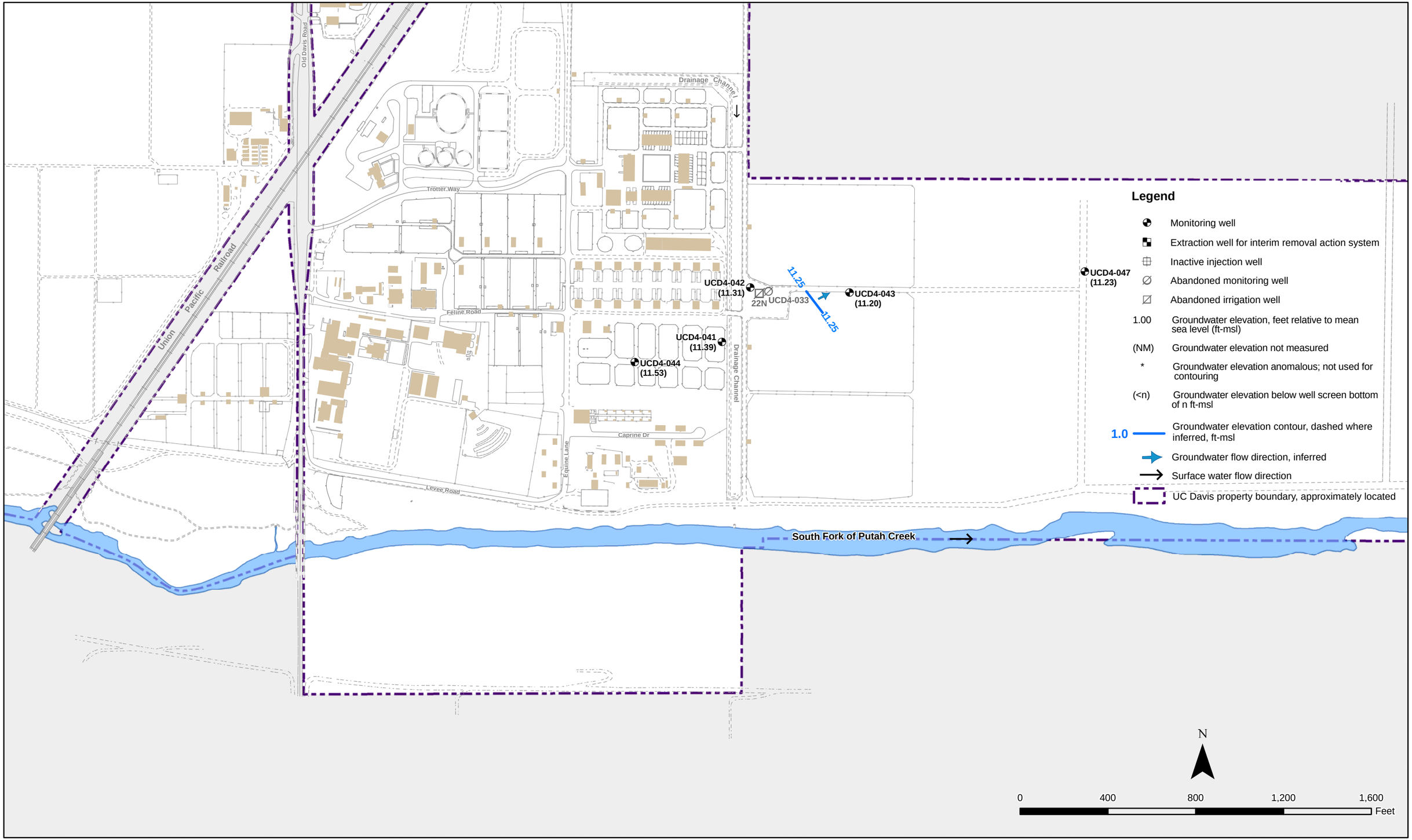


Figure 11. Groundwater Elevations in HSU-4 Wells - February 2008 - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

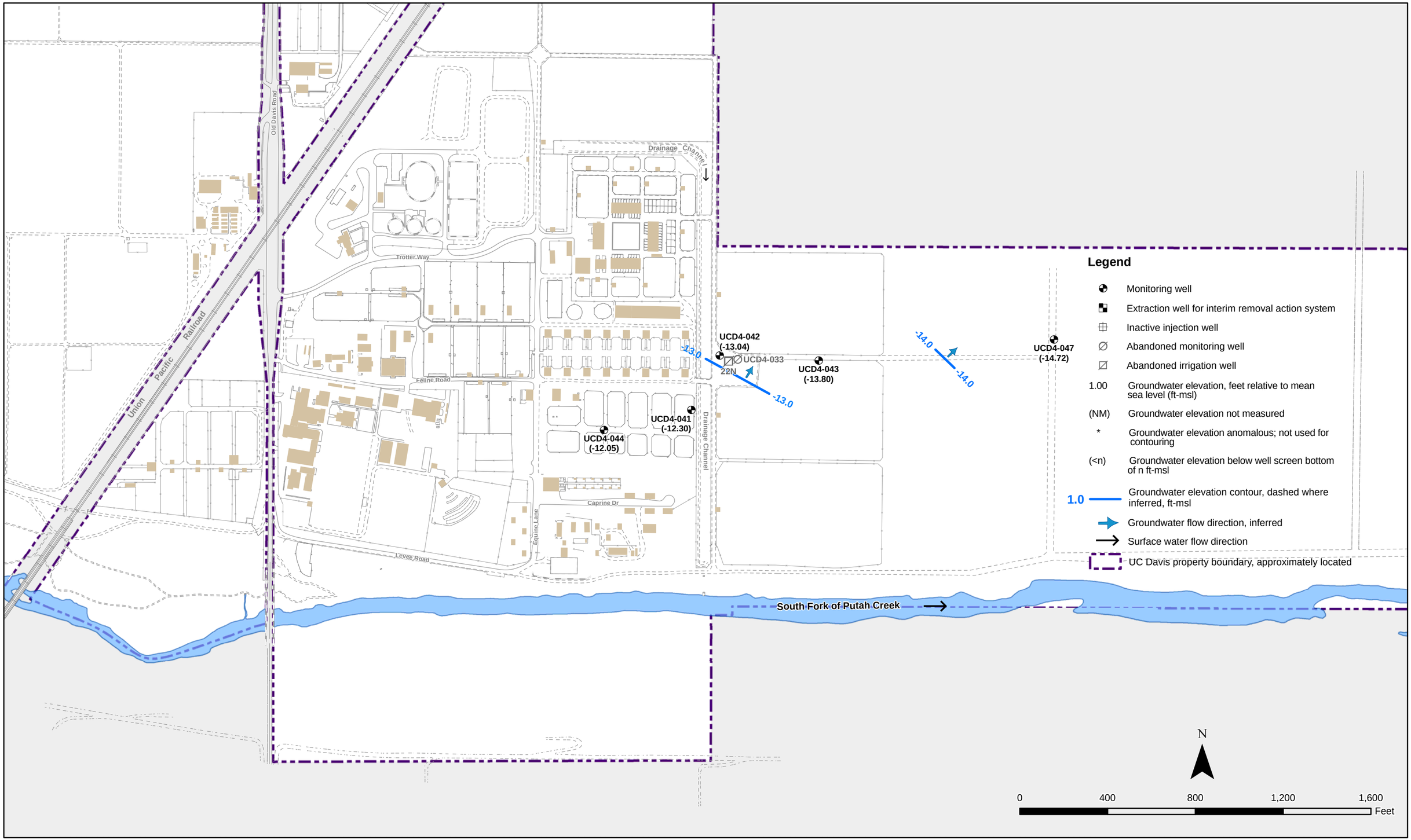


Figure 12. Groundwater Elevations in HSU-4 Wells - May 2008 - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

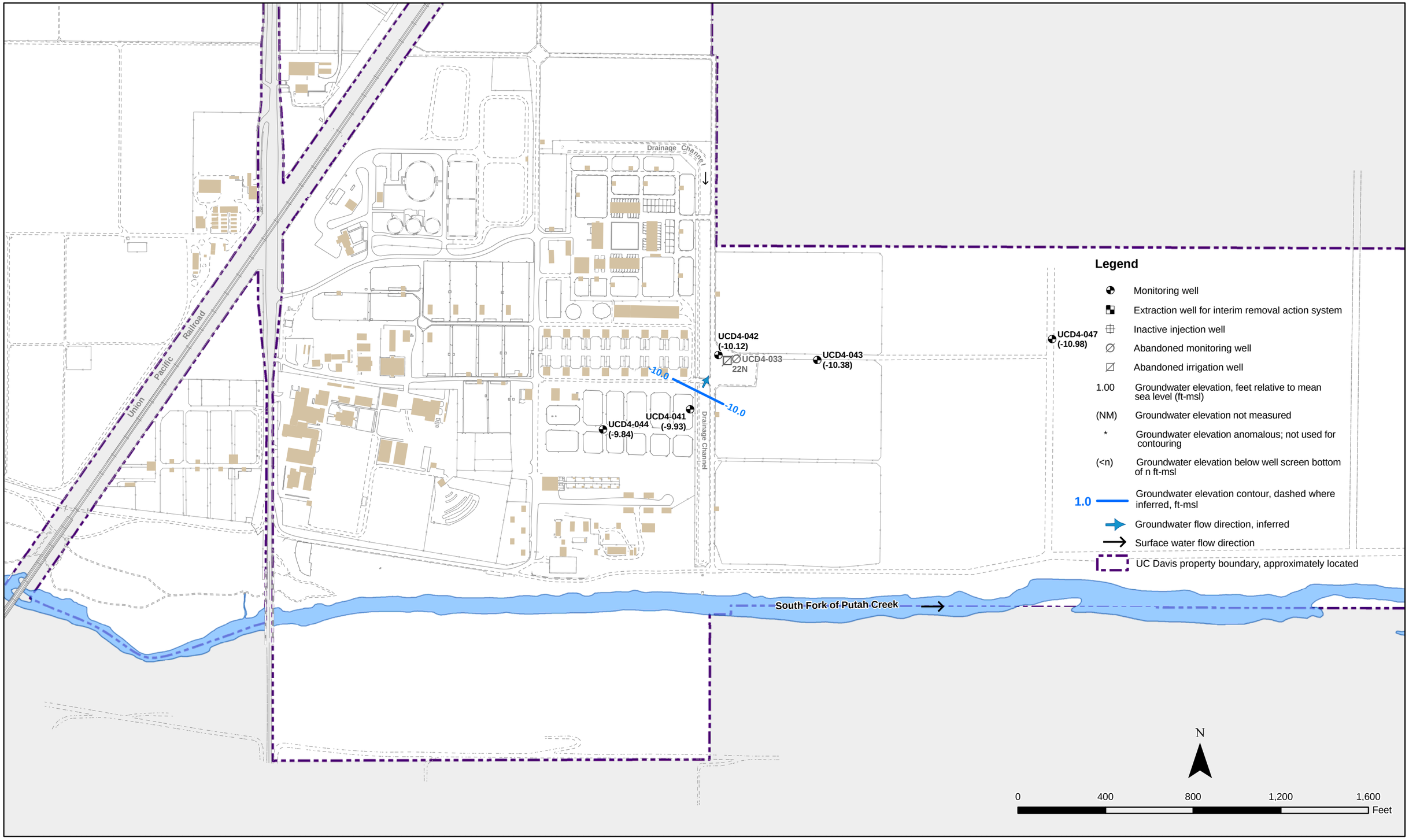


Figure 13. Groundwater Elevations in HSU-4 Wells - October 2008 - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

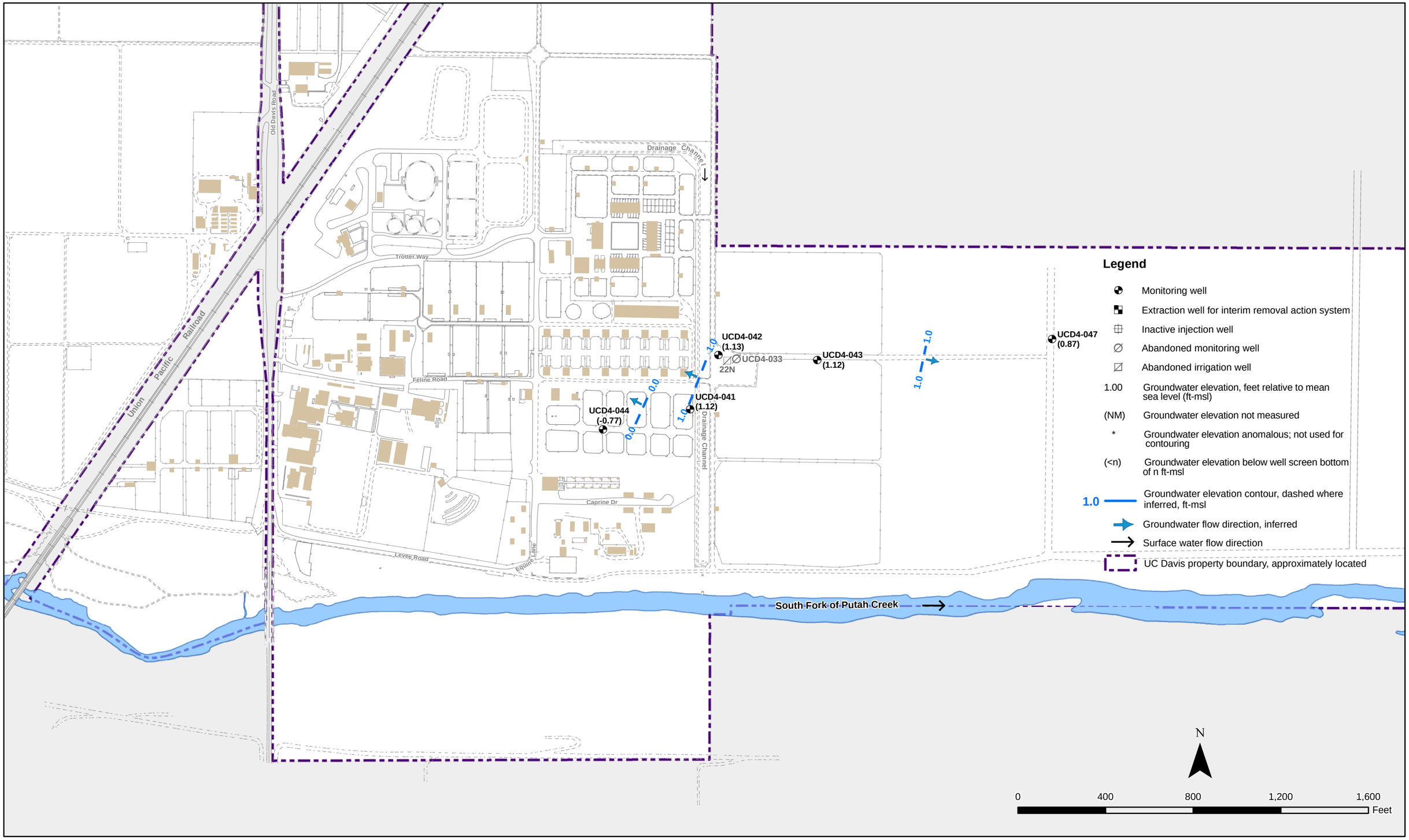


Figure 14. Groundwater Elevations in HSU-4 Wells - December 2008 - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

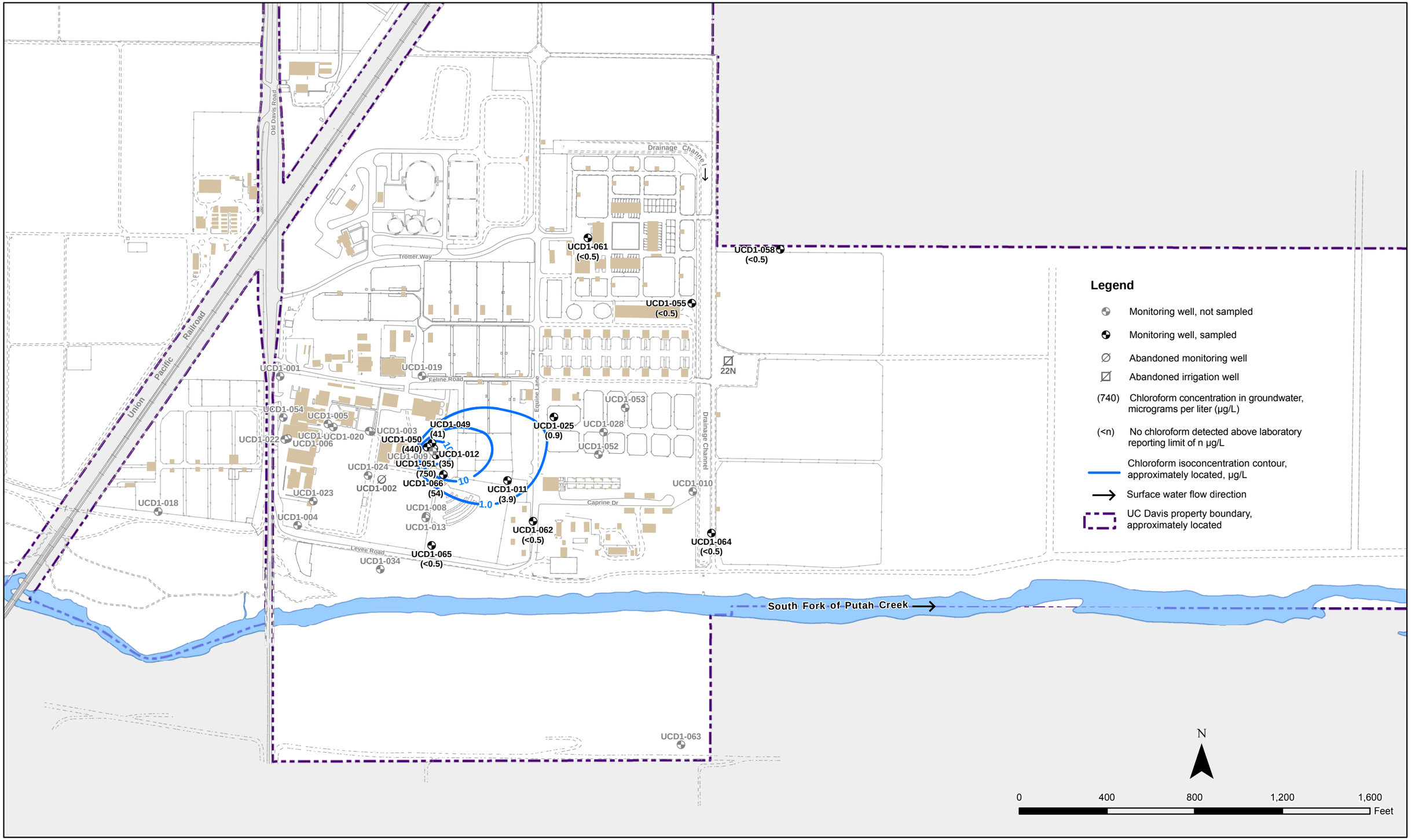


Figure 15. Chloroform Concentrations in Groundwater from HSU-1 - October 2008 - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

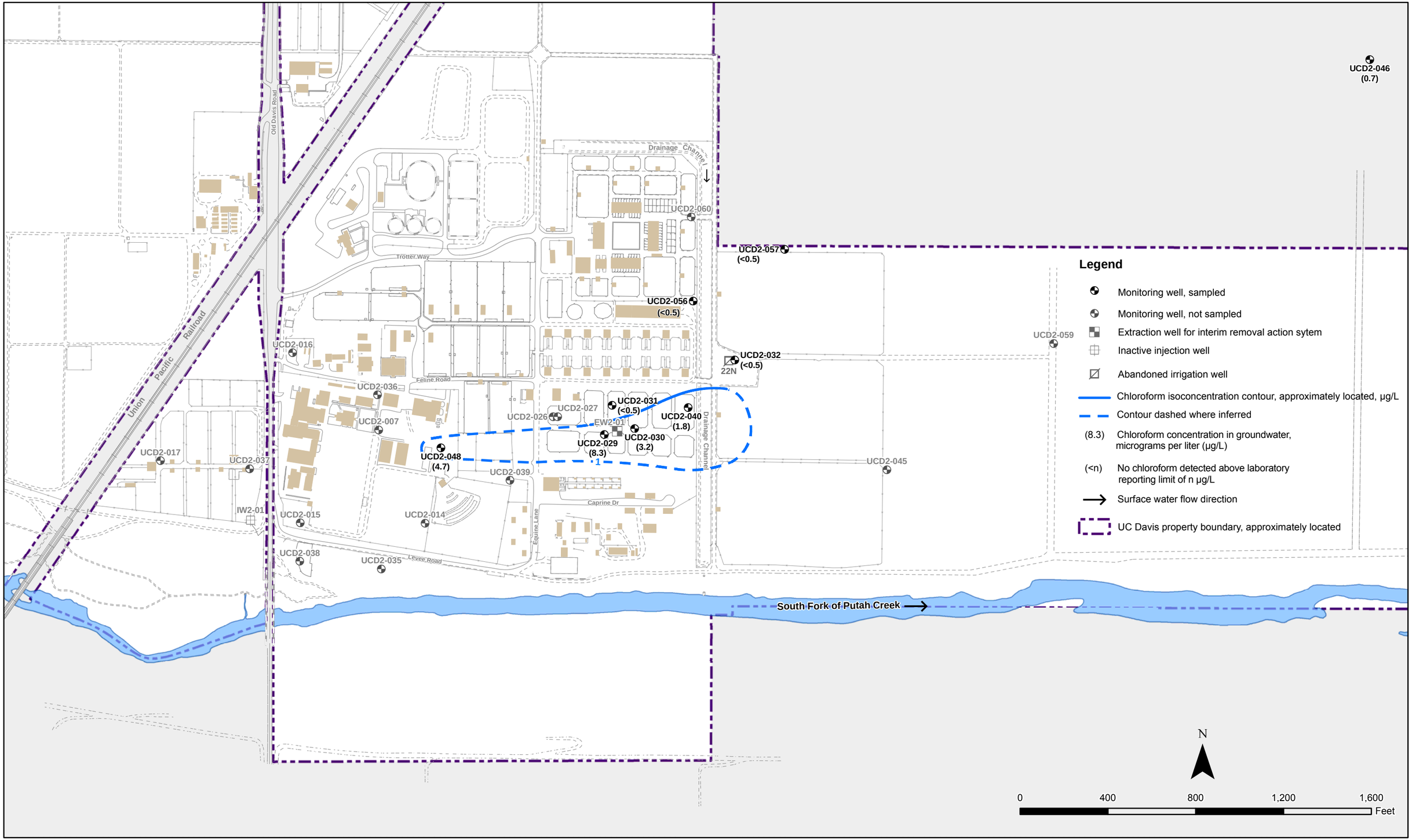


Figure 16. Chloroform Concentrations in Groundwater from HSU-2 - October 2008 - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

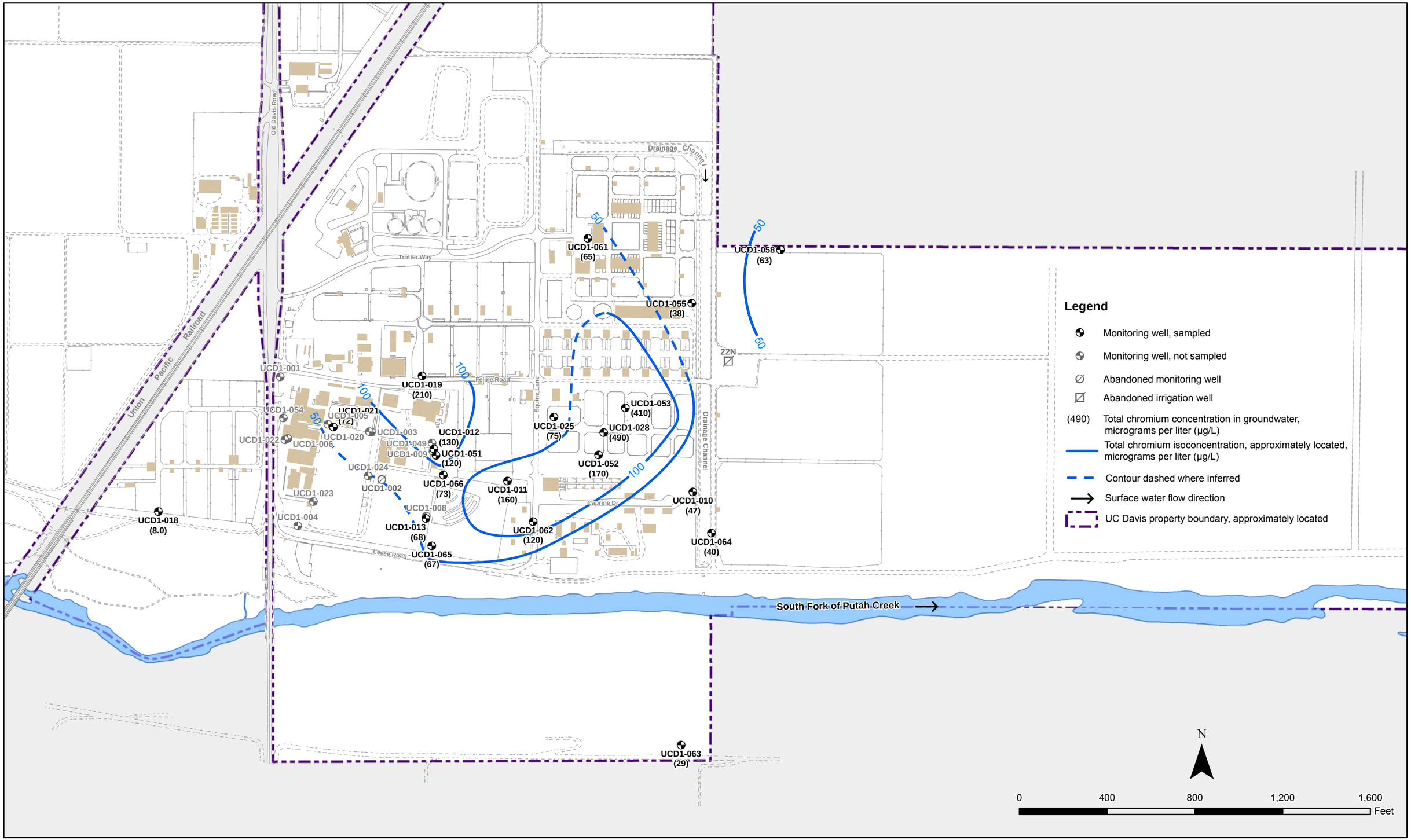


Figure 17. Total Chromium Concentrations in Groundwater from HSU-1 - October 2008 - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

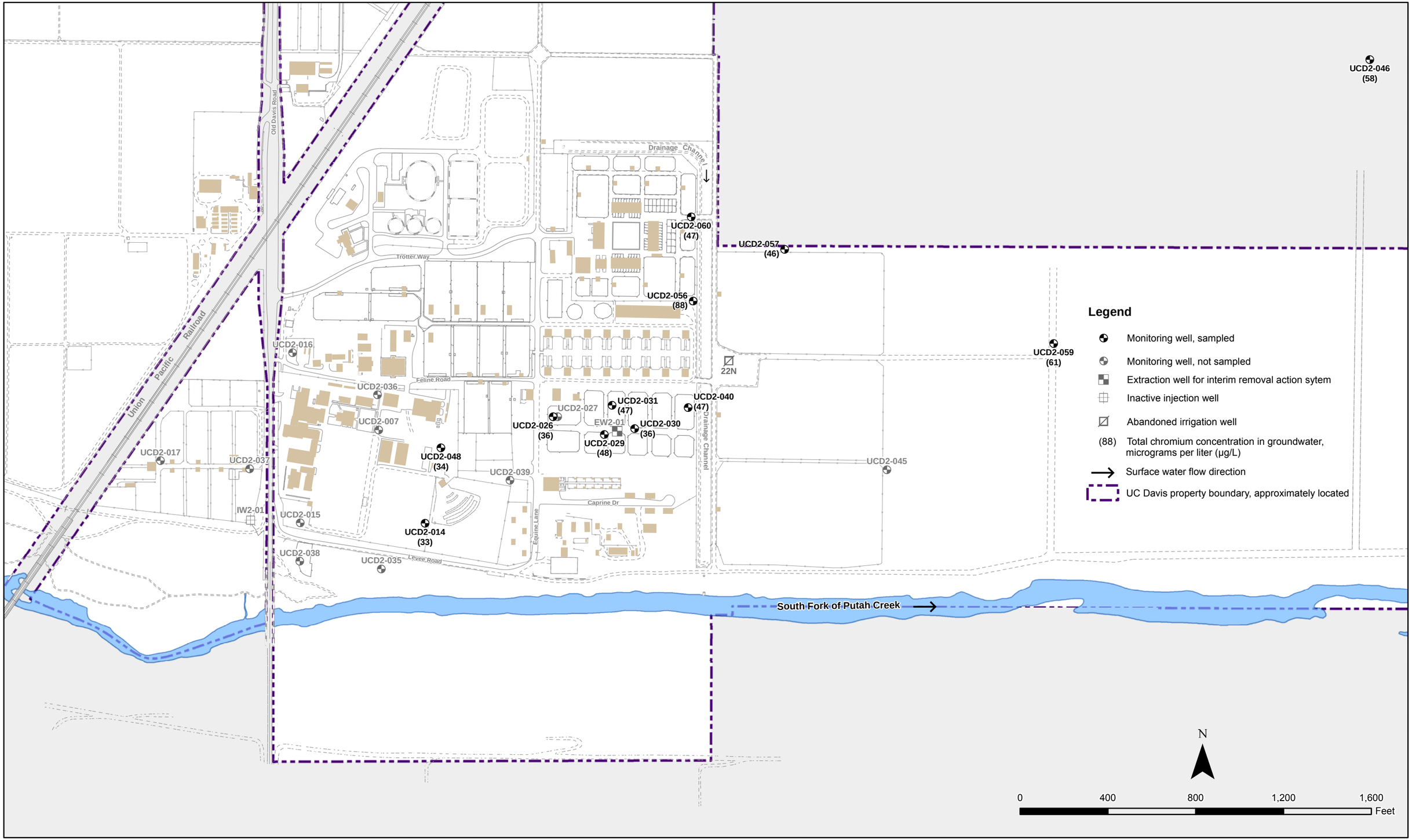


Figure 18. Total Chromium Concentrations in Groundwater from HSU-2 - October 2008 - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

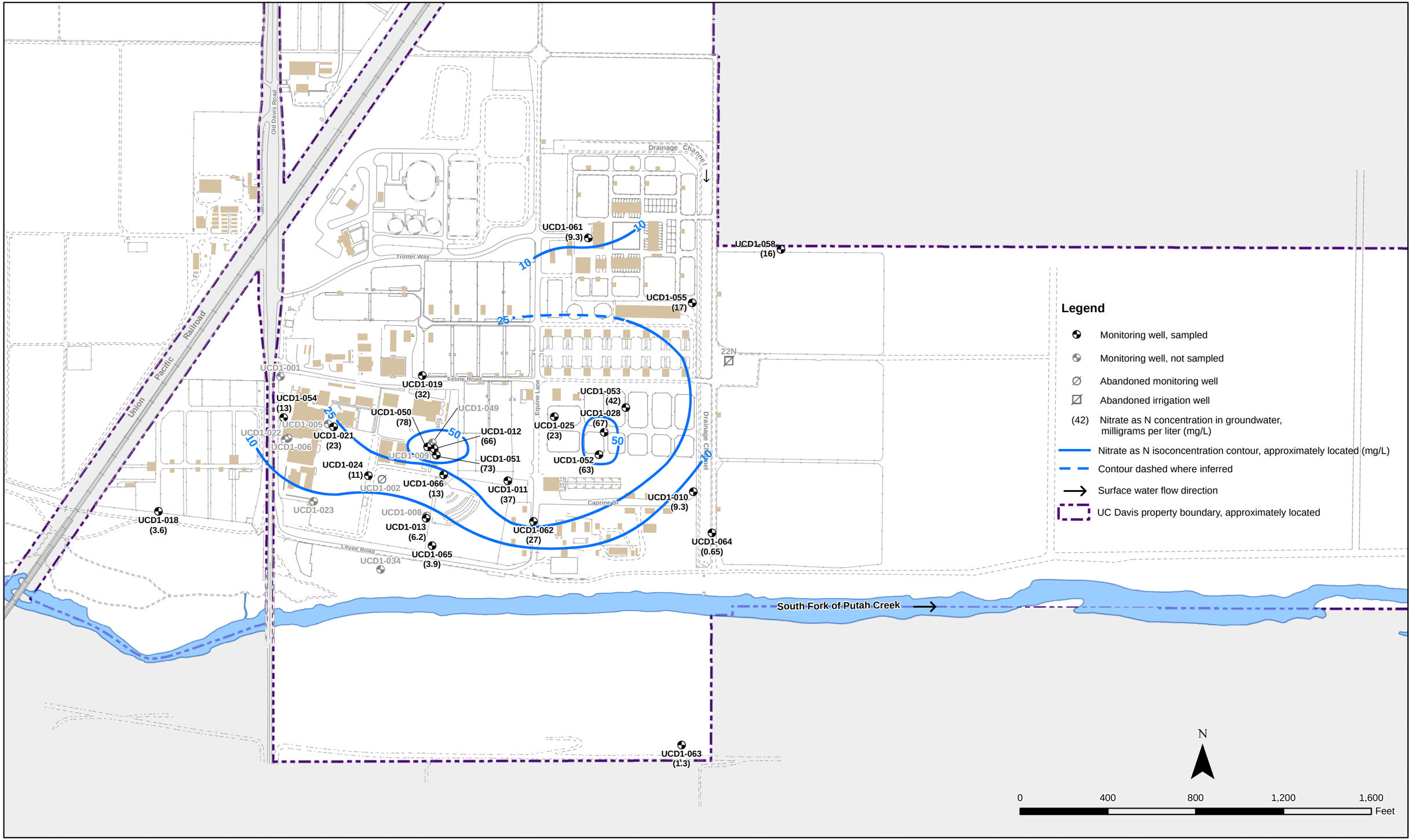


Figure 19. Nitrate as N Concentrations in Groundwater from HSU-1 - October 2008 - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

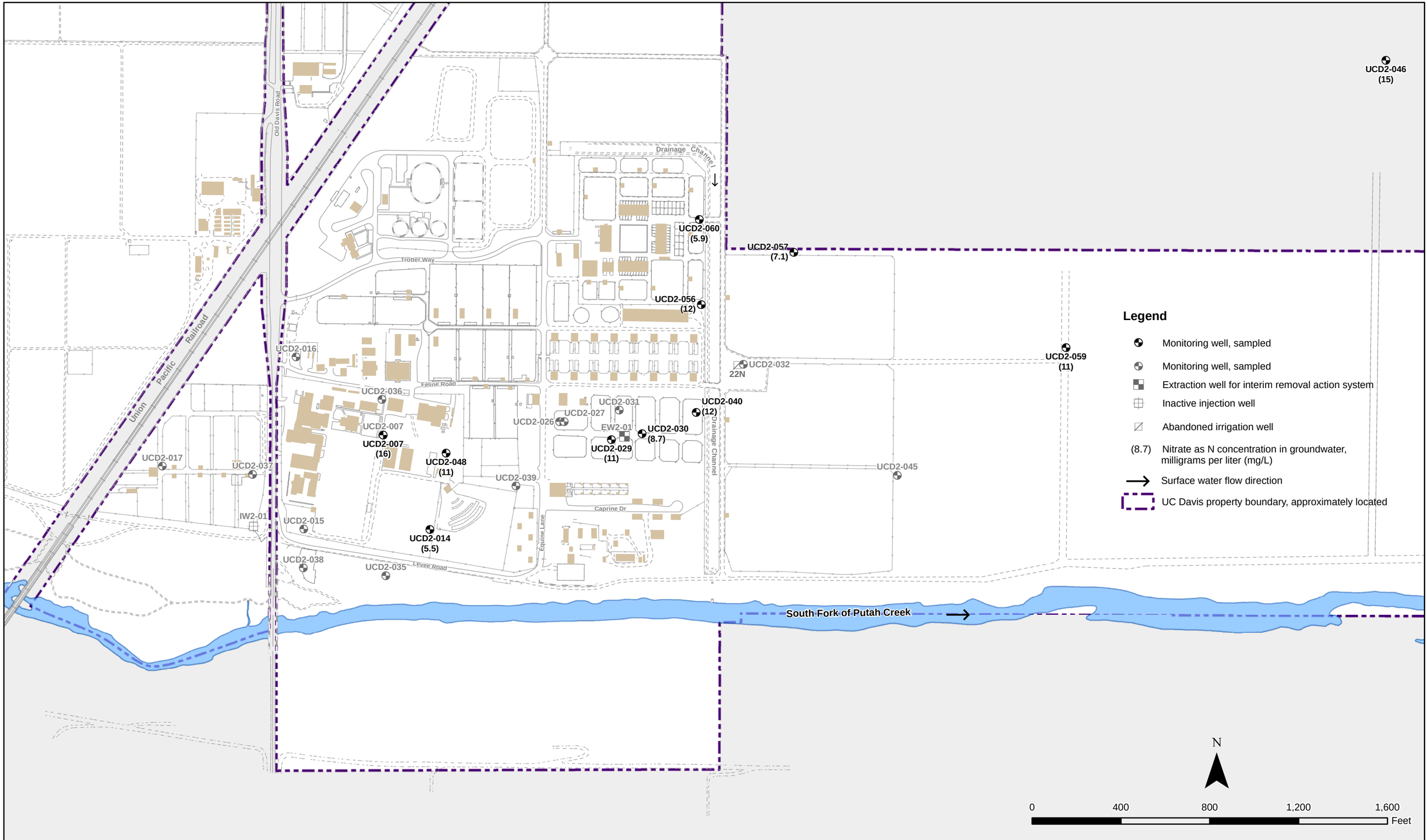


Figure 20. Nitrate as N Concentrations in Groundwater from HSU-2 - October 2008 - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

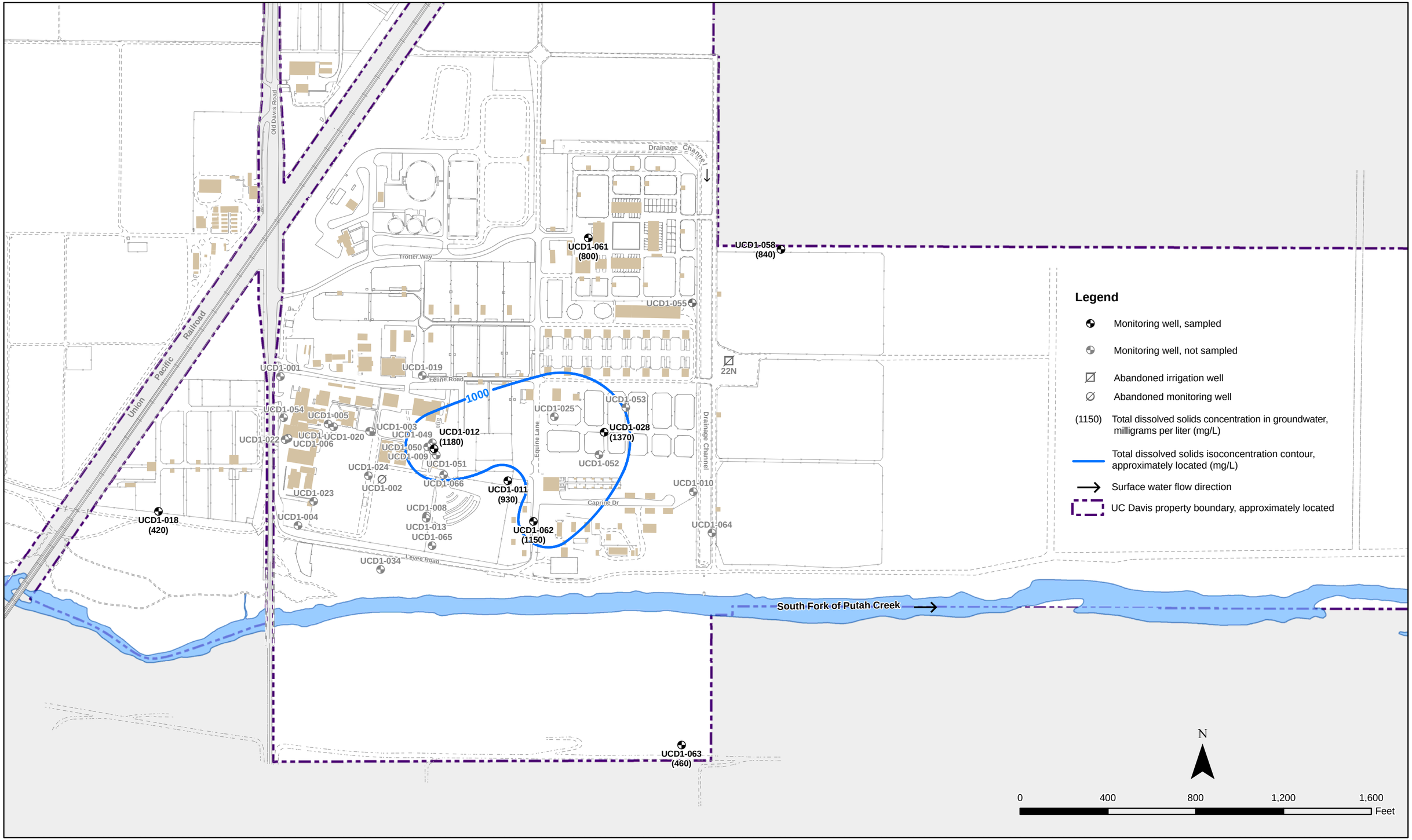


Figure 21. Total Dissolved Solids Concentrations in Groundwater from HSU-1 - October 2008 - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

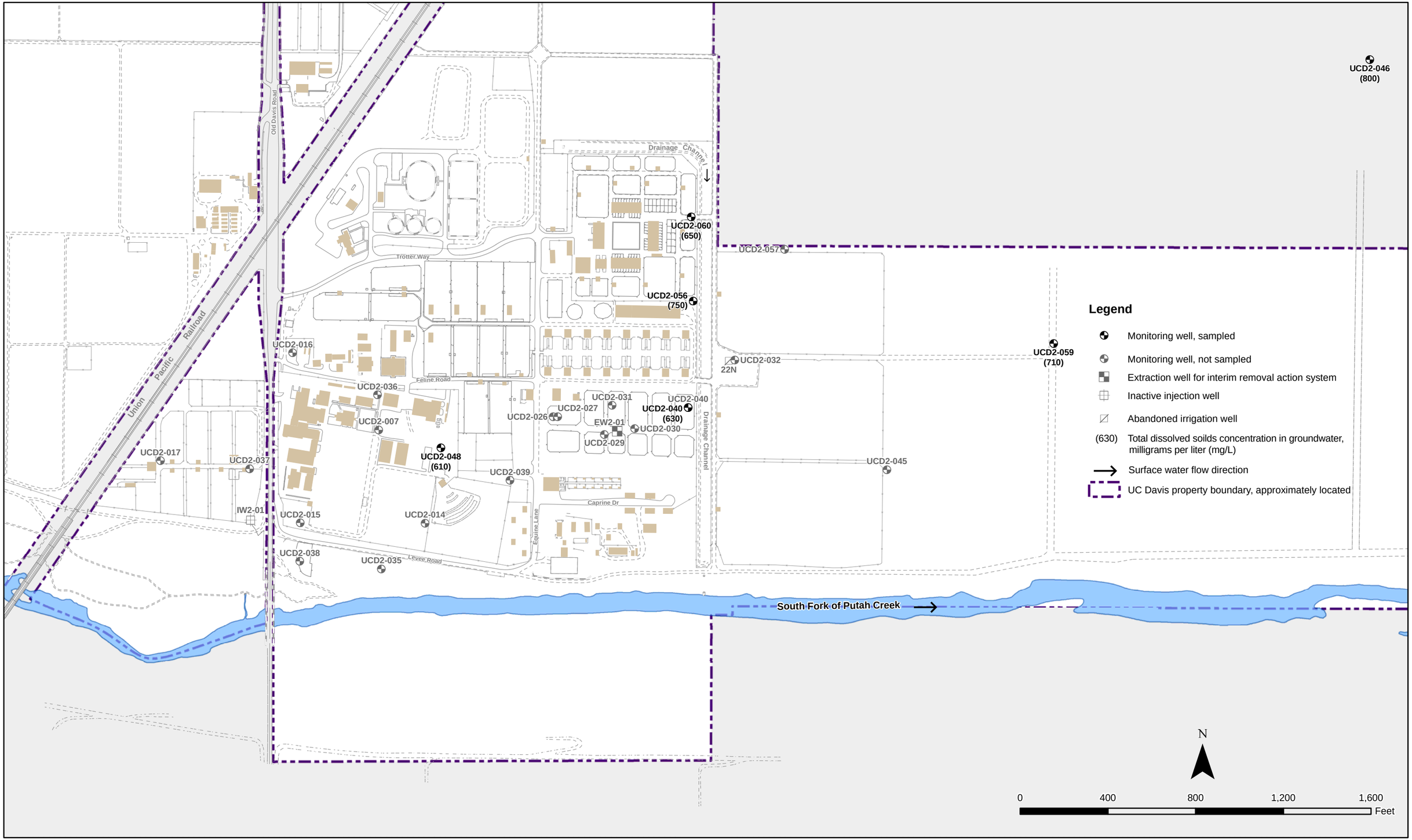


Figure 22. Total Dissolved Solids Concentrations in Groundwater from HSU-2 - October 2008 - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

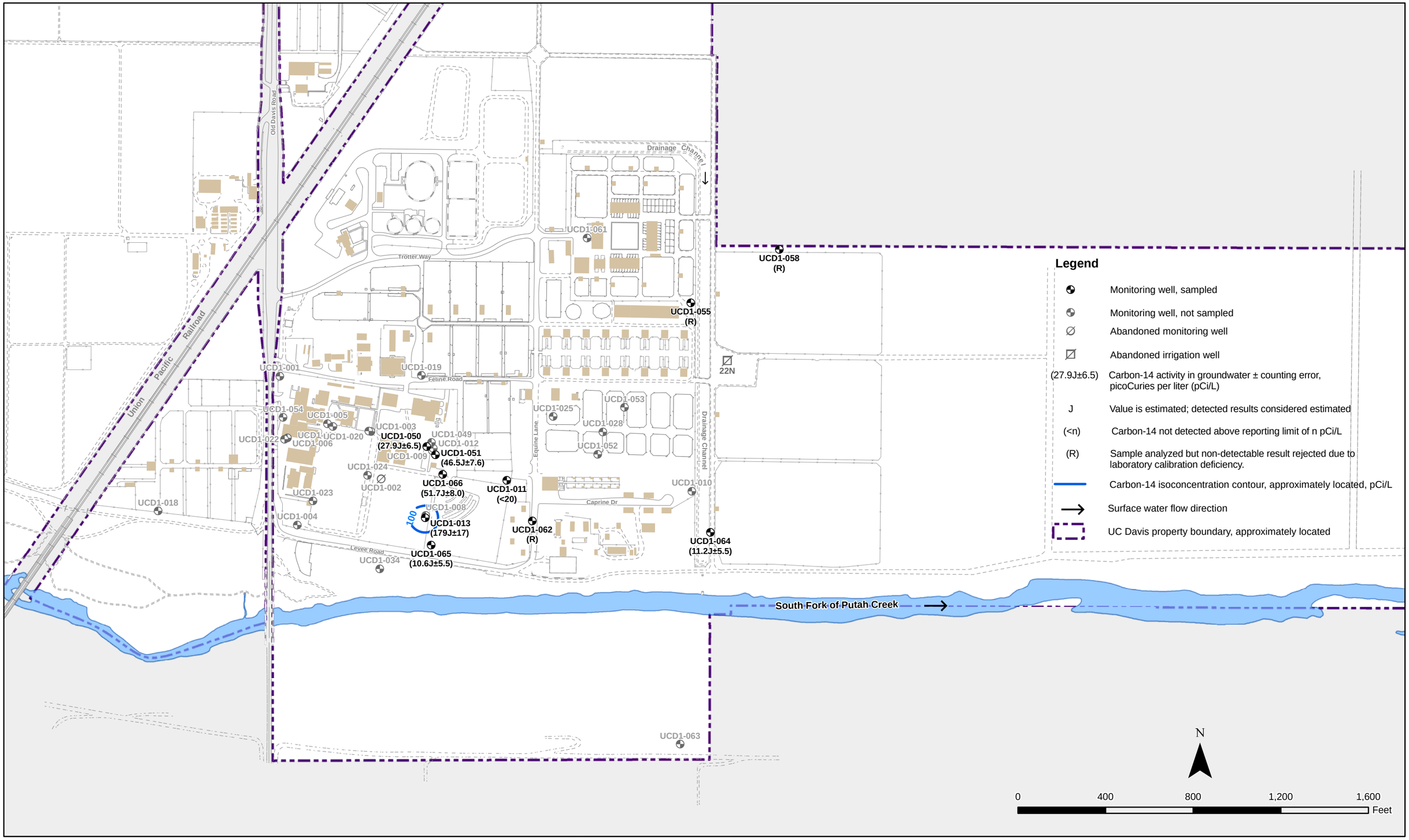


Figure 23. Carbon-14 Activities in Groundwater from HSU-1 - October 2008 - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

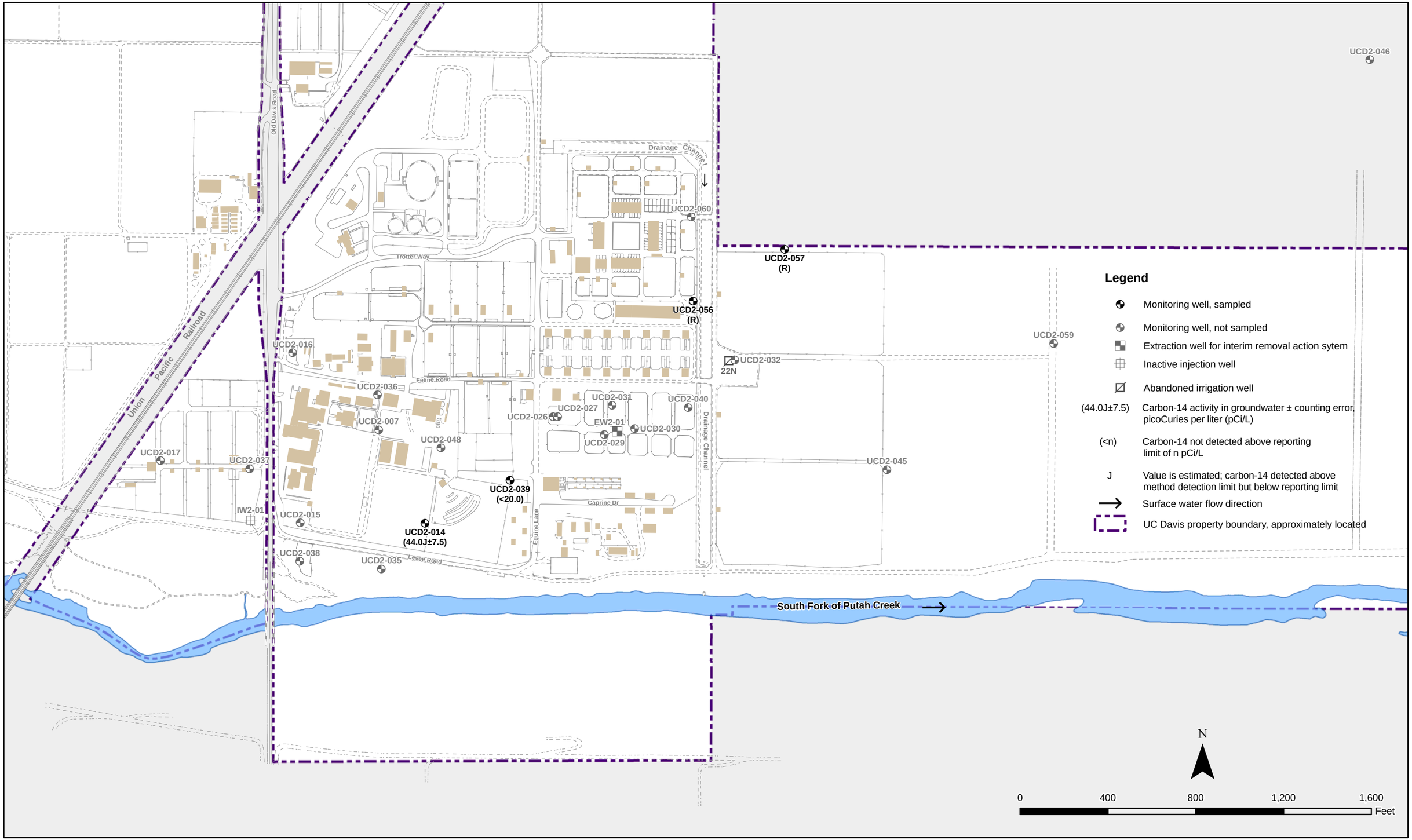


Figure 24. Carbon-14 Activities in Groundwater from HSU-2 - October 2008 - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

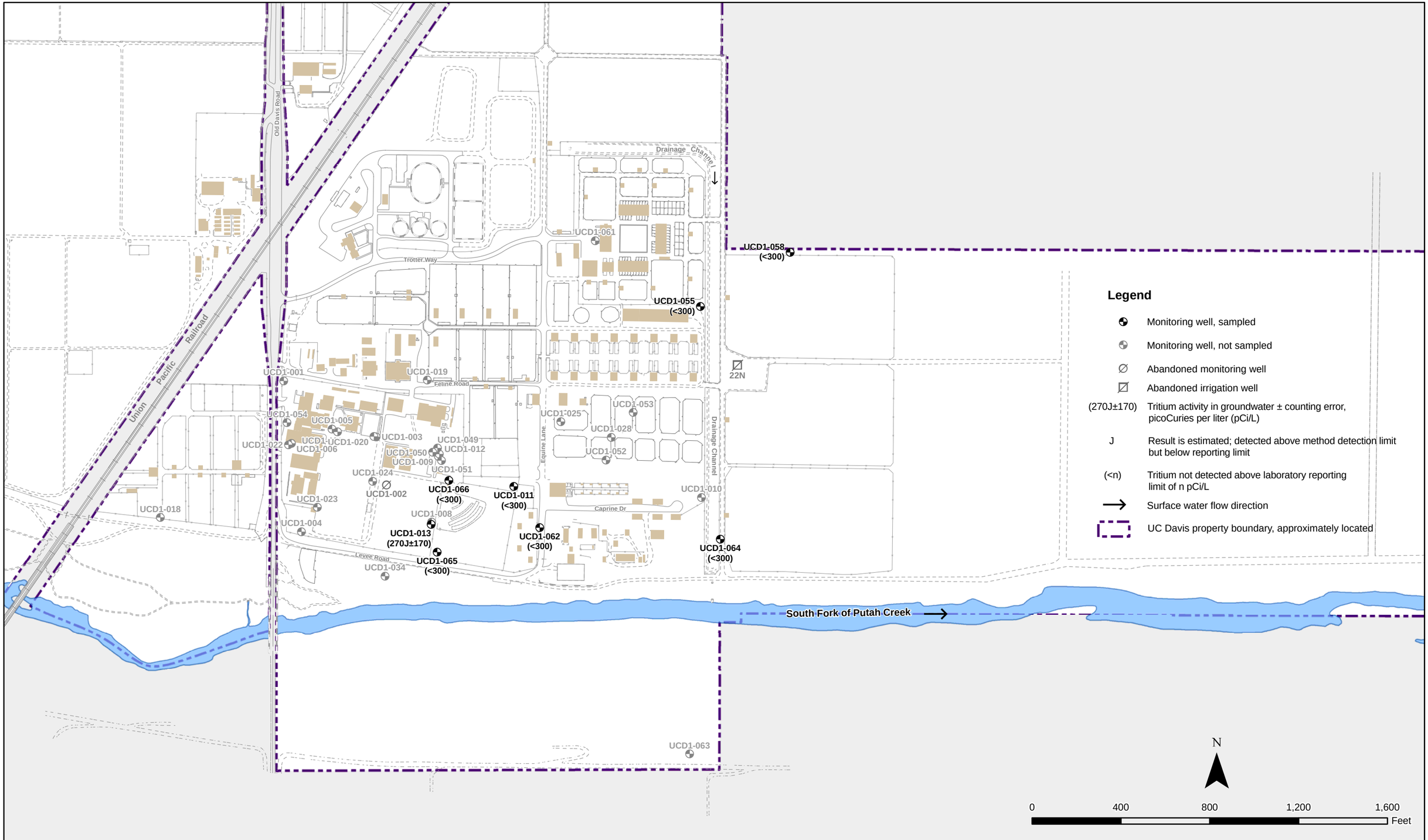


Figure 25. Tritium Activities in Groundwater Samples from HSU-1 - October 2008 - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

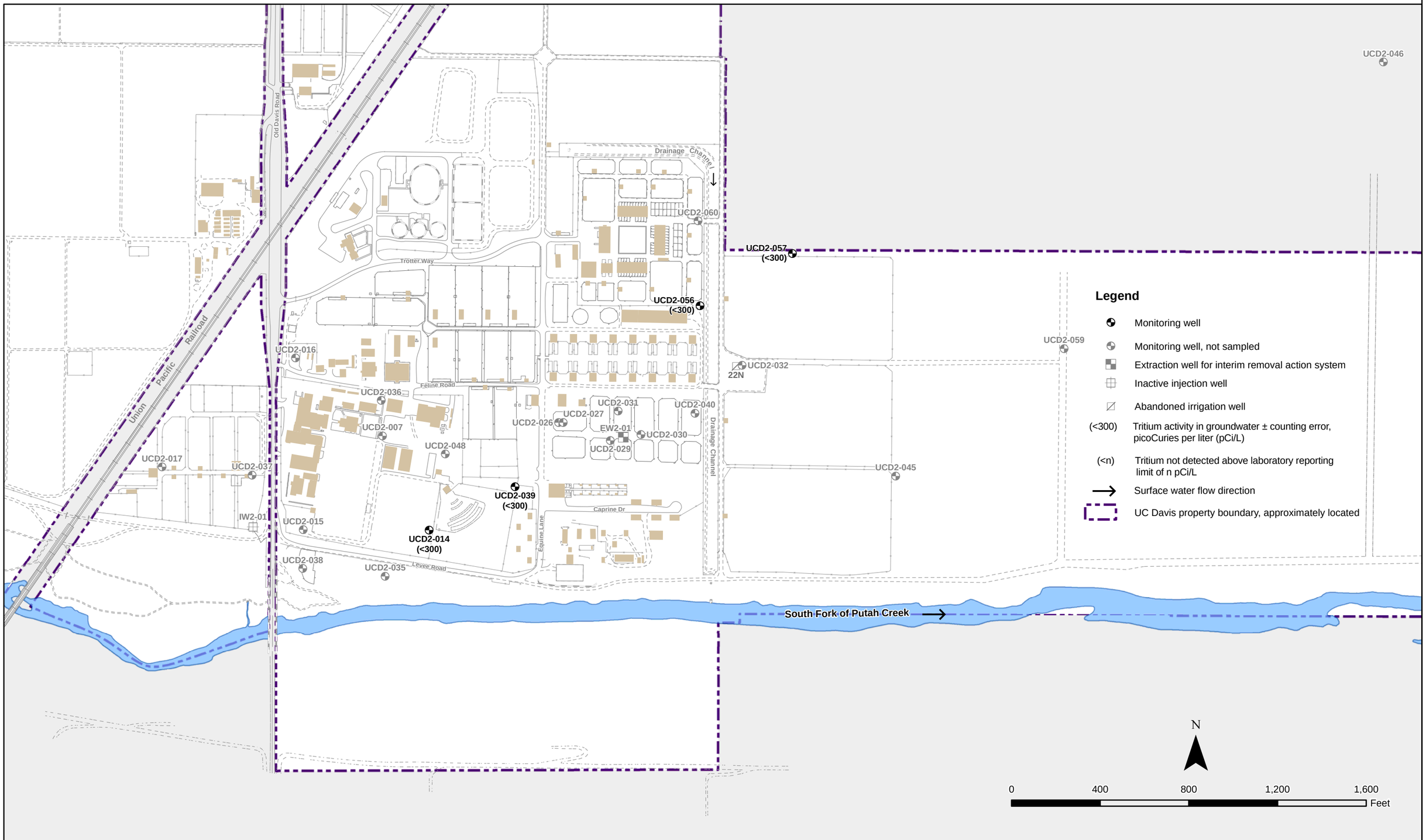


Figure 26. Tritium Activities in Groundwater Samples from HSU-2 - October 2008 - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

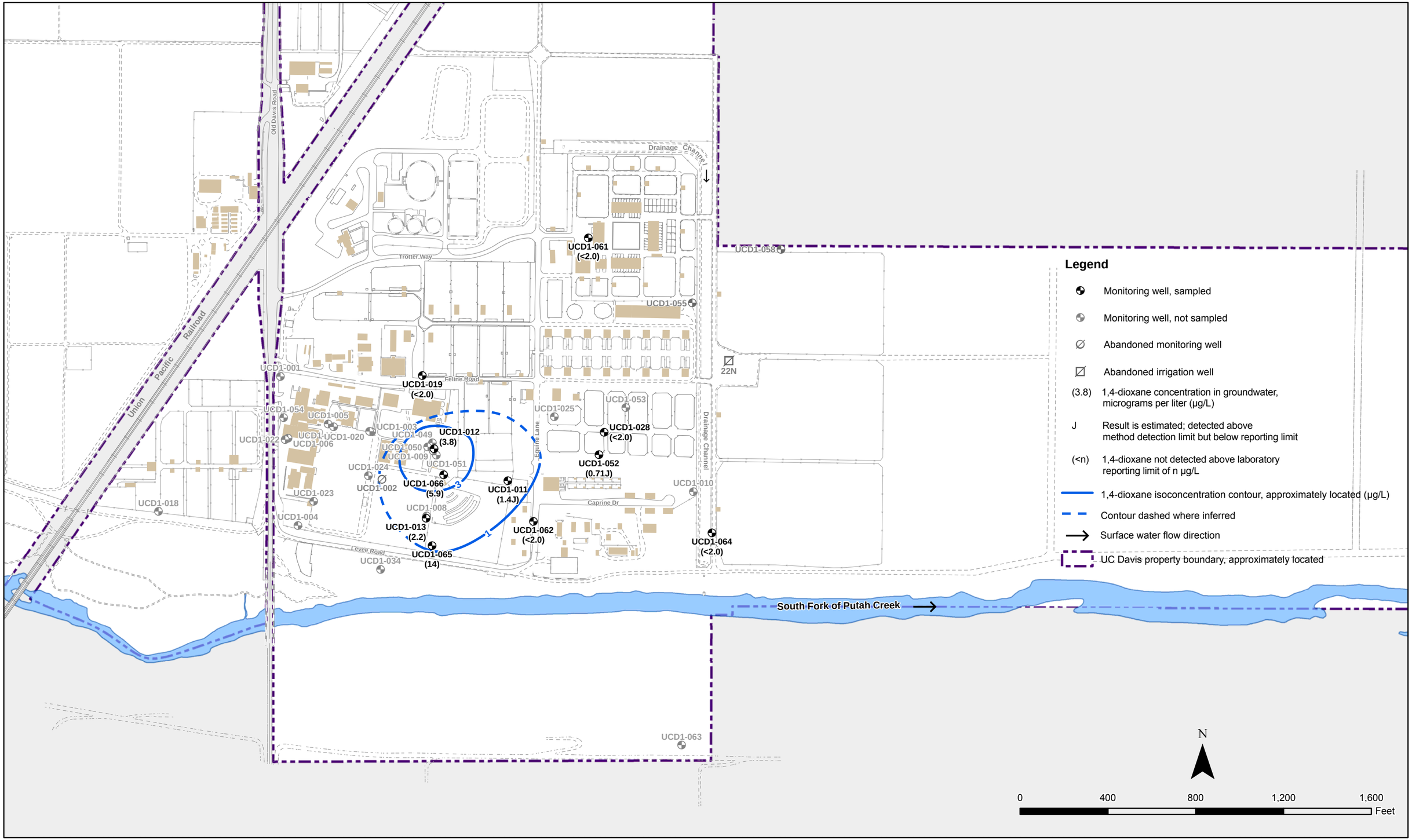


Figure 27. 1,4-Dioxane Concentrations in Groundwater from HSU-1 - December 2008 - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

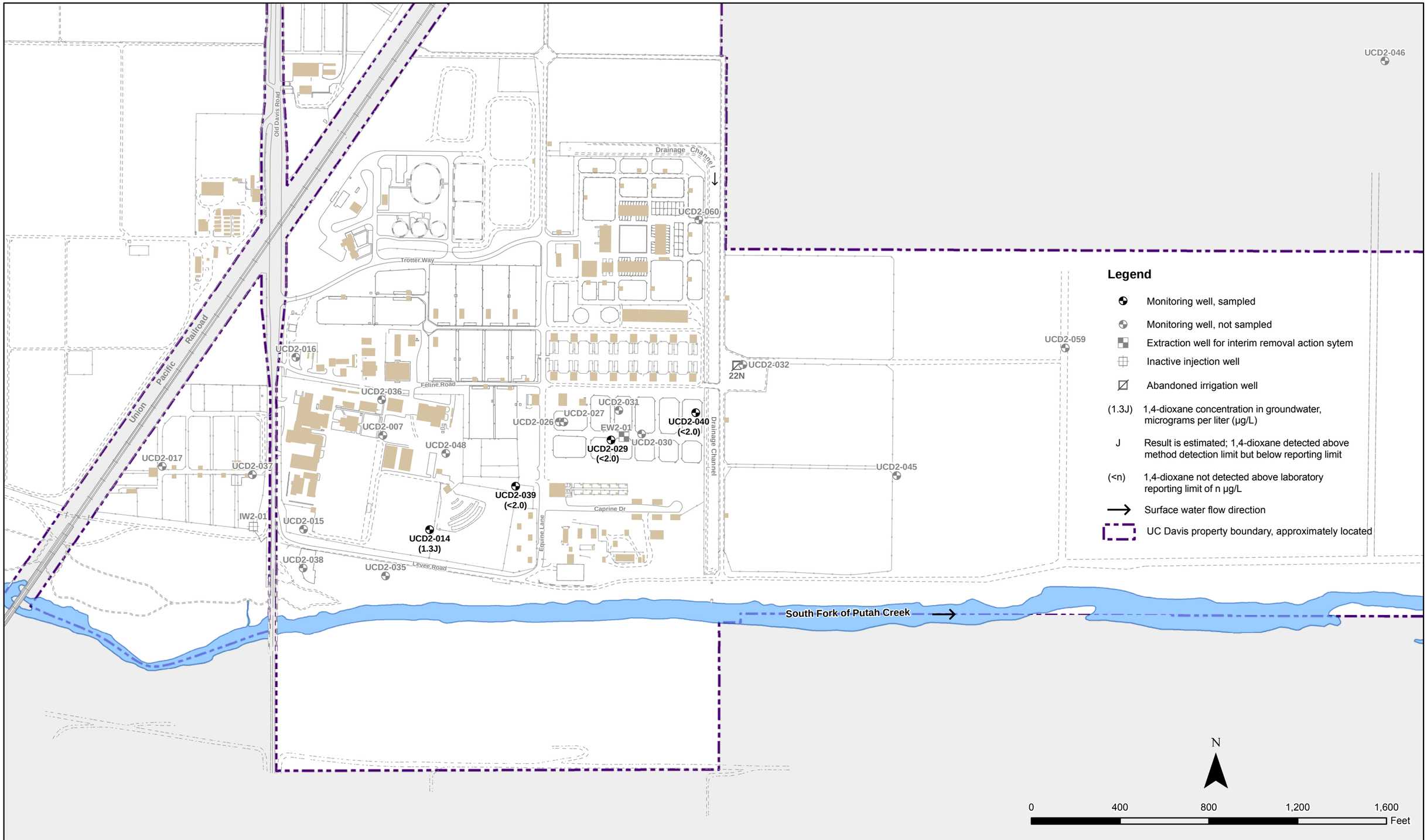
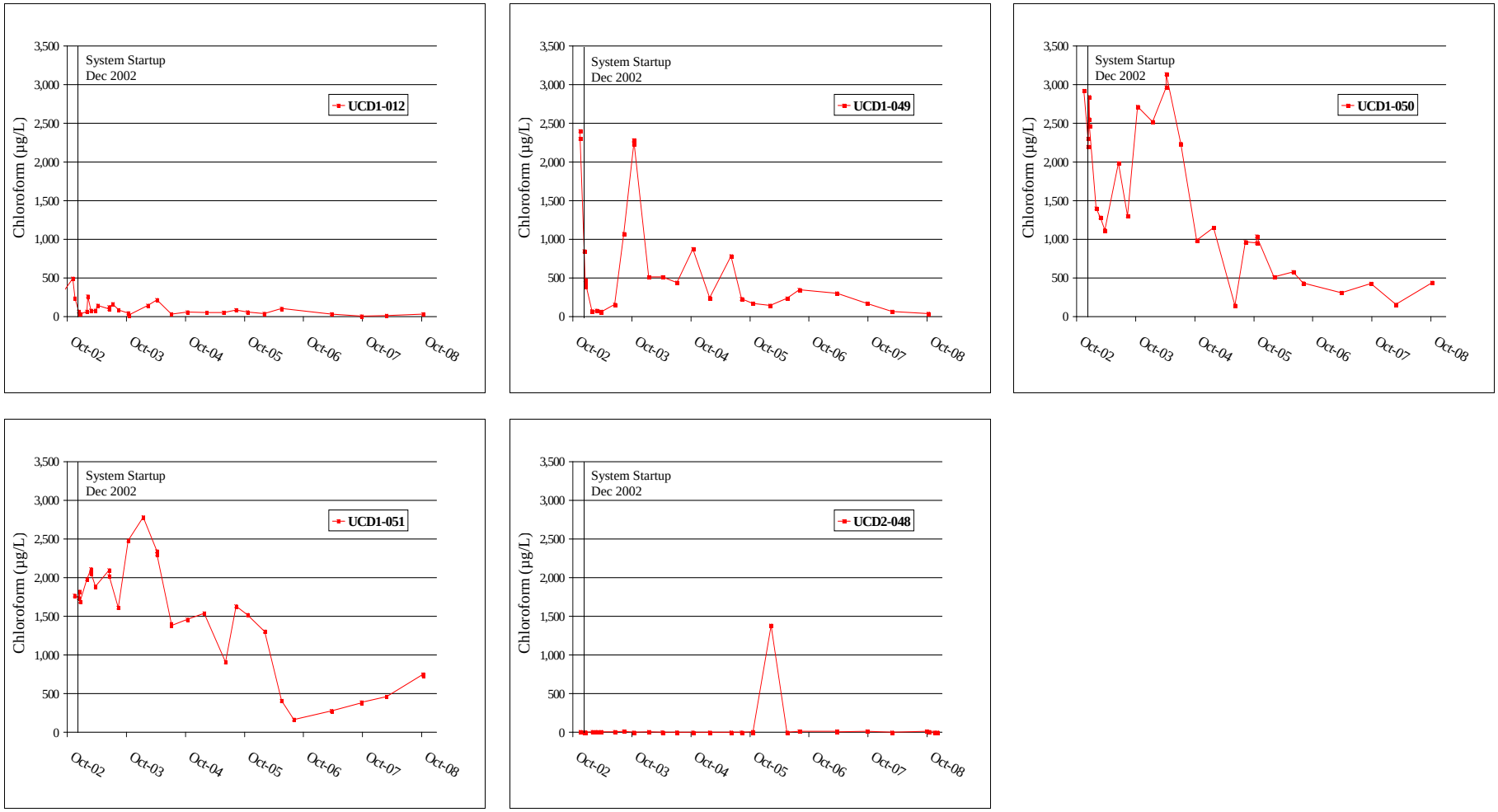
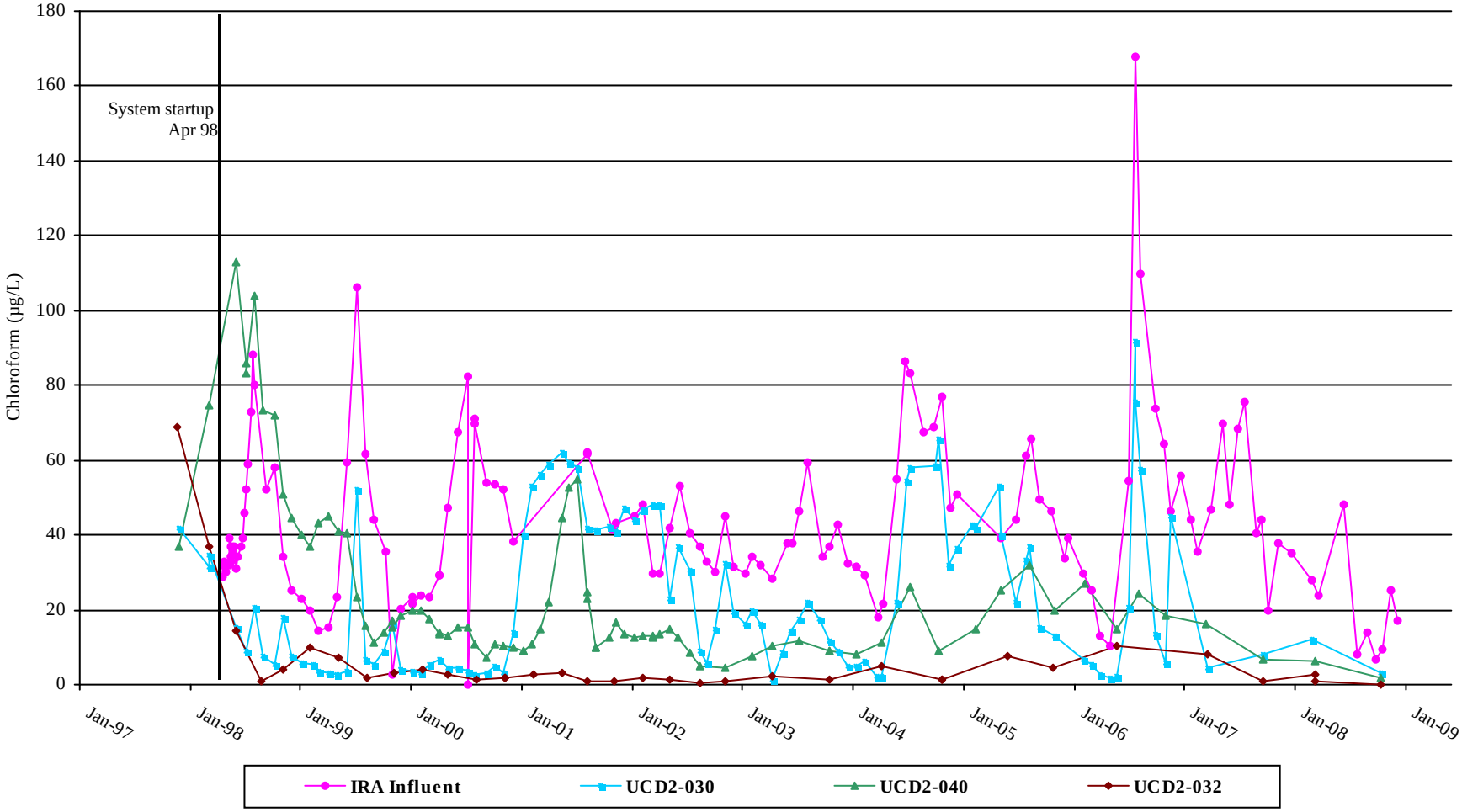


Figure 28. 1,4-Dioxane Concentrations in Groundwater from HSU-2 - December 2008 - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis



Note: DDC = Density-driven Convection

Figure 29. Chloroform in Groundwater from Monitoring Wells Near DDC System, Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis



Note: "IRA Influent" samples collected from IRA treatment system influent. Samples are untreated water pumped from extraction well EW2-01. IRA = Interim Removal Action

Figure 30. Chloroform in Groundwater from IRA Influent and Wells Downgradient of IRA Extraction Well, Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

TABLES

Table 1. Dates of Field Measurements and Laboratory Analyses for 2008--Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Sample Location	Monitoring Program	Depth to water	Other field measurements	Alkalinity as $CaCO_3$	Dissolved solids, total	Suspended solids, total	Hardness as $CaCO_3$	Organic carbon, total	Organic carbon, dissolved	Carbon dioxide	Chromium, total	Chromium, hexavalent (Cr +6)	Iron, total	Iron, ferrous (Fe +2)	Nitrate as N	Mercury	Mercury, low-level	Phosphorus, total	Phosphorous, orthophosphate (PO_4)	Uranium, total	Metals, other	Anions, other	Cations, other	1,4-Dioxane	Oil and grease	Perchlorate	Pesticides and polychorinated biphenyls	Volatile organic compounds	Carbon-14	Radium-226	Tritium	Other radionuclides	Aquatic toxicity
UCD1-001	GW	2/26 5/29 10/6 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UCD1-003	GW	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UCD1-004	GW, DG	2/26 5/30 10/6 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UCD1-005	GW	2/26 5/29 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UCD1-006	GW	2/26 5/29 10/6 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UCD1-008	GW	2/26 5/30 10/6 12/2	3/3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3/3	---	---
UCD1-009	GW	2/26 5/30 10/6 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UCD1-010	GW	2/26 5/30 10/6 12/2	3/3 10/15	---	---	---	---	---	---	---	3/3 10/15	---	---	---	3/3 10/15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UCD1-011	GW, DG	2/26 5/29 10/6 12/2	2/26 10/8 12/3	10/8	10/8	10/8	10/8	10/8	10/8	12/3	2/26 10/8 12/3	10/8	10/8 12/3	10/8	2/26 10/8	---	---	10/16	10/8	12/3	10/8 12/3	10/8	10/8	12/3	---	10/8	---	2/26 10/8	2/26 10/8 12/3	---	2/26 10/8	---	---
UCD1-012	GW, DG	2/26 5/30 10/6 12/2	2/27 10/9 12/3	10/9	10/9	10/9	10/9	10/9	10/9	12/3	2/27 10/9 12/3	10/9	10/9	10/9	10/9	---	---	10/16	10/9	12/3	10/9 12/3	10/9	10/9	10/9 12/3	---	10/9	---	2/27	---	---	---	---	---
UCD1-013	GW, DG	2/26 5/30 10/6 12/2	2/26 10/7 12/4	---	---	---	---	---	---	---	2/26 10/7	---	---	---	2/26 10/7	---	---	---	---	---	---	---	---	10/7 12/4	---	10/7	---	---	2/26 10/7	10/7	2/26 10/7	---	---
UCD1-018	GW, DG	2/26 5/29 10/6 12/2	10/8 12/5	10/8	10/8	10/8	10/8	10/8	10/8	12/5	10/8 12/5	10/8	10/8	10/8	10/8	---	---	10/16	10/8	12/5	10/8 12/5	10/8	10/8	10/8	---	---	---	---	---	10/8	---	---	---
UCD1-019	GW	2/26 5/29 10/6 12/2	2/26 10/9 12/5	---	---	---	---	---	---	---	2/26 10/9	---	---	---	2/26 10/9	---	---	---	---	---	---	---	---	12/5	---	---	---	---	---	---	---	---	---
UCD1-020	GW	2/26 5/29 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UCD1-021	GW	2/26 5/29 12/2	2/26 10/9	---	---	---	---	---	---	---	2/26 10/9	---	---	---	2/26 10/9	---	---	---	---	---	---	---	---	10/9	---	---	---	---	---	10/9	---	---	---
UCD1-022	GW	2/26 5/29 10/6 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	10/10	---	---	---
UCD1-023	GW	2/26 5/29 12/2	10/8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	10/8	---	---	---	---	---	---	---	---	---
UCD1-024	GW	12/2	---	---	---	---	---	---	---	---	---	---	---	---	10/8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UCD1-025	GW	2/26 5/29 10/6 12/2	2/27 10/9	---	---	---	---	---	---	---	2/27 10/9	---	---	---	2/27 10/9	---	---	---	---	---	---	---	---	---	---	---	---	2/27 10/9	---	---	---	---	---
UCD1-028	GW, DG	2/26 5/29 10/6 12/2	2/27 10/8 12/4	10/8	10/8	10/8	10/8	10/8	10/8	12/4	2/27 10/8 12/4	10/8	10/8	10/8	10/8 12/4	---	---	10/16	10/8	12/4	10/8 12/4	10/8 12/4	10/8	12/4	---	10/14	---	---	---	---	---	---	---
UCD1-034	GW	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		---		---
UCD1-049	GW	2/26 5/29 10/6 12/2	2/27 10/10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2/27 10/10	---	---	---	---	---
UCD1-050	GW	2/26 5/29 10/6 12/2	2/27 10/9	---	---	---	---	---	---	---	---	---	---	---	2/27 10/9	---	---	---	---	---	---	---	---	---	---	---	---	2/27 10/9	2/27 10/9	---	---	---	---
UCD1-051	GW	2/26 5/29 10/6 12/2	2/27 10/9	---	---	---	---	---	---	---	2/27 10/9	---	---	---	2/27 10/9	---	---	---	---	---	---	---	---	---	---	---	---	2/27 10/9	2/27 10/9	---	---	---	---
UCD1-052	GW	2/26 5/29 10/6 12/2	3/3 10/9 12/5	---	---	---	---	---	---	---	3/3 10/9	---	---	---	3/3 10/9	---	---	---	---	---	---	---	---	12/5	---	---	---	---	---	---	3/3	---	---
UCD1-053	GW	2/26 5/29 10/6 12/2	2/27 10/13	---	---	---	---	---	---	---	2/27 10/13	---	---	---	2/27 10/13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Table 1. Dates of Field Measurements and Laboratory Analyses for 2008--Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Sample Location	Monitoring Program	Depth to water	Other field measurements	Alkalinity as $CaCO_3$	Dissolved solids, total	Suspended solids, total	Hardness as $CaCO_3$	Organic carbon, total	Organic carbon, dissolved	Carbon dioxide	Chromium, total	Chromium, hexavalent (Cr +6)	Iron, total	Iron, ferrous (Fe +2)	Nitrate as N	Mercury	Mercury, low-level	Phosphorus, total	Phosphorous, orthophosphate (PO_4)	Uranium, total	Metals, other	Anions, other	Cations, other	1,4-Dioxane	Oil and grease	Perchlorate	Pesticides and polychorinated biphenyls	Volatile organic compounds	Carbon-14	Radium-226	Tritium	Other radionuclides	Aquatic toxicity
UCD1-054	GW	2/26 5/29 10/6 12/2	3/3 10/15	---	---	---	---	---	---	---	---	---	---	---	3/3 10/15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UCD1-055	GW	2/26 5/29 10/6 12/2	2/1 10/15 12/5	---	---	---	---	---	---	12/5	2/1 10/15 12/5	---	---	---	2/1 10/15	---	---	---	---	12/5	12/5	---	---	---	---	---	---	2/1 10/15	2/1 10/15	---	2/1 10/15	---	---
UCD1-058	GW, DG	2/26 5/29 10/6 12/2	2/1 10/15 12/4	10/15	10/15	10/15	10/15	10/15	10/15	12/4	2/1 10/15 12/4	10/15	10/15	10/15	2/1 10/15	---	---	10/15	10/15	12/4	10/15 12/4	10/15	10/15	---	---	10/15	---	2/1 10/15	2/1 10/15	---	2/1 10/15	---	---
UCD1-061	GW, DG	10/6 12/2	10/14 12/4	10/14 12/4	10/14	10/14	10/14	10/14	10/14	12/4	10/14 12/4	10/14	10/14	10/14	10/14 12/4	---	---	10/14	10/14	---	10/14 12/4	10/14	10/14	12/4	---	10/14	---	10/14 12/4					---
UCD1-062	GW, DG	10/6 12/2	10/16 12/3	10/16	10/16	10/16	---	10/16	10/16	12/3	10/16 12/3	10/16	10/16	10/16	10/16 12/3	10/16 12/3	---	10/16	10/16	12/3	10/16 12/3	10/16	10/16	10/16 12/3	---	10/16	10/16 12/3	10/16 12/3	10/16 12/3	10/16 12/3	10/16 12/3	10/16 12/3	---
UCD1-063	GW, DG	12/2	10/14 12/3	10/14 12/3	10/14	10/14	10/14	10/14	10/14	12/3	10/14 12/3	10/14	10/14	10/14	10/14	---	---	10/14	10/14	12/3	10/14 12/3	10/14	10/14	---	---	10/14	---	---	---	---	---	---	---
UCD1-064	GW, DG	10/6 12/2	10/16 12/3	12/3	---	---	---	---	---	12/3	10/16 12/3	---	---	---	10/16 12/3	10/16 12/3	---	---	---	12/3	10/16 12/3	---	---	10/16 12/3	---	10/16	10/16 12/3	10/16 12/3	10/16 12/3	10/16 12/3	10/16 12/3	10/16 12/3	---
UCD1-065	GW, DG	10/6 12/2	10/16 12/3	12/3	---	---	---	---	---	12/3	10/16 12/3	---	---	---	10/16 12/3	10/16 12/3	---	---	---	12/3	10/16 12/3	---	---	10/16 12/3	---	---	10/16 12/3	10/16 12/3	10/16 12/3	10/16 12/3	10/16 12/3	10/16 12/3	---
UCD1-066	GW, DG	10/6 12/2	10/16 12/4	12/4	---	---	---	---	---	12/4	10/16 12/4	---	---	---	10/16 12/4	10/16 12/4	---	---	---	12/4	10/16 12/4	---	---	10/16 12/4	---	---	10/16 12/4	10/16 12/4	10/16 12/4	10/16 12/4	10/16 12/4	10/16 12/4	---
UCD2-007	GW	2/26 5/29 12/2	2/27 10/9	---	---	---	---	---	---	---	---	---	---	---	2/27 10/9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UCD2-014	GW	2/26 5/30 10/6 12/2	2/26 10/16 12/4	---	---	---	---	---	---	---	2/26 10/16	---	---	---	2/26 10/16	---	---	---	---	---	---	---	---	12/4	---	---	---	---	2/26 10/16	---	2/26 10/16	---	---
UCD2-015	GW	2/26 5/30 10/6 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UCD2-016	GW	2/26 5/29 10/6 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UCD2-017	GW	2/26 5/29 10/6 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UCD2-026	GW	2/26 5/29 10/6 12/2	2/27 10/10	---	---	---	---	---	---	---	2/27 10/10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UCD2-027Z1	GW	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UCD2-027Z2	GW	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UCD2-027Z3	GW	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UCD2-027Z4	GW	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UCD2-027Z5	GW	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UCD2-027Z6	GW	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UCD2-027Z7	GW	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UCD2-029	GW	2/26 5/29 10/6 12/2	2/27 10/9 12/4	---	---	---	---	---	---	---	2/27 10/9	---	---	---	2/27 10/9	---	---	---	---	---	---	---	---	12/4	---	10/9	---	2/27 10/9	---	---	---	---	---
UCD2-030	GW	2/26 5/29 10/6 12/2	2/27 10/13	---	---	---	---	---	---	---	2/27 10/13	---	---	---	2/27 10/13	---	---	---	---	---	---	---	---		---	---	---	2/27 10/13	---	---	---	---	---
UCD2-031	GW	2/26 5/29 10/6 12/2	2/27 10/10	---	---	---	---	---	---	---	2/27 10/10	---	---	---	---	---	---	---	---	---	---	---	---		---	---	---	2/27 10/10	---	---	---	---	---
UCD2-032	GW, DG	2/26 5/29 10/6 12/2	3/7 8/28 10/10	---	---	---	---	---	---	---	8/28	---	---	---	---	---	---	---	---	---	---	---	---		---	---	---	3/7 10/10	---	---	---	---	---
UCD2-035	GW	2/26 5/29 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		---	---	---	---	---	---	---	---	---
UCD2-036	GW	2/26 5/29 10/6 12/2	10/10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		---	---	---	---	---	10/10	---	---	---
UCD2-037	GW	2/26 5/29 10/6 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		---	---	---	---	---	---	---	---	---

Table 1. Dates of Field Measurements and Laboratory Analyses for 2008--Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Sample Location	Monitoring Program	Depth to water	Other field measurements	Alkalinity as $CaCO_3$	Dissolved solids, total	Suspended solids, total	Hardness as $CaCO_3$	Organic carbon, total	Organic carbon, dissolved	Carbon dioxide	Chromium, total	Chromium, hexavalent (Cr +6)	Iron, total	Iron, ferrous (Fe +2)	Nitrate as N	Mercury	Mercury, low-level	Phosphorus, total	Phosphorous, orthophosphate (PO_4)	Uranium, total	Metals, other	Anions, other	Cations, other	1,4-Dioxane	Oil and grease	Perchlorate	Pesticides and polychorinated biphenyls	Volatile organic compounds	Carbon-14	Radium-226	Tritium	Other radionuclides	Aquatic toxicity
UCD2-038	GW	2/26 5/29 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		---	---	---	---	---	---	---	---	---
UCD2-039	GW	2/26 5/30 10/6 12/2	2/26 10/10 12/3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	12/3	---	---	---	---	2/26 10/10	---	2/26 10/10	---	---
UCD2-040	GW, DG	2/26 5/29 10/6 12/2	2/28 3/7 10/13 12/5	10/13	10/13	10/13	10/13	10/13	10/13	12/5	2/28 10/13 12/5	10/13	10/13	10/13	10/13	---	---	10/13	10/13	12/5	10/13 12/5	10/13	10/13	12/5	---	10/13	---	3/7 10/13	---	---	---	---	---
UCD2-045	GW	2/26 5/29 10/6 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UCD2-046	GW, DG	2/26 5/30 10/6	3/7 10/13 12/5	10/13	10/13	10/13	10/13	10/13	10/13	12/5	10/13 12/5	10/13	10/13	10/13	10/13	---	---	10/13	10/13	12/5	10/13 12/5	---	10/13	---	---	---	---	3/7 10/13	---	---	---	---	---
UCD2-048	GW, DG, DDC	2/26 5/29 10/6 12/2	2/27 9/26 10/14 11/13 12/5	10/14	10/14	10/14	10/14	10/14	---	12/5	10/14 12/5	10/14	10/14	10/14	2/27 10/14	---	---	10/14	10/14	12/5	10/14 12/5	10/14	10/14	---	---	10/14	---	2/27 9/26 10/14 11/13 12/5	---	---	---	---	---
UCD2-056	GW, DG	2/26 5/30 10/6 12/2	2/1 10/15 12/5	10/15	10/15	10/15	10/15	10/15	---	12/5	2/1 10/15 12/5	10/15	10/15	10/15	2/1 10/15	---	---	10/15	10/15	12/5	10/15 12/5	10/15	10/15	---	---	---	---	2/1 10/15	2/1 10/15	---	2/1 10/15	---	---
UCD2-057	GW, DG	2/26 5/30 10/6 12/2	2/1 10/15 12/5	12/5	---	---	---	---	---	12/5	2/1 10/15 12/5		---		2/1 10/15	---	---		---	12/5	12/5	---	---	---	---	---	---	2/1 10/15	2/1 10/15	---	2/1 10/15	---	---
UCD2-059	GW, DG	10/6 12/2	10/15 12/5	10/15 12/5	10/15	10/15	10/15	10/15	10/15	12/5	10/15 12/5	10/15	10/15	10/15	10/15	---	---	10/15	10/15	12/5	10/15 12/5	10/15	10/15	---	---	---	---	---	---	---	---	---	---
UCD2-060	GW, DG	10/6 12/2	10/15 12/4	10/15 12/4	10/15	10/15	10/15	10/15	10/15	12/4	10/15 12/4	10/15	10/15	10/15	10/15	---	---	10/15	10/15	12/4	10/15 12/4	10/15	10/15	---	---	---	---	---	---	---	---	---	---
UCD4-033	GW	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UCD4-041	GW	2/26 5/30 10/6 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UCD4-042	GW	2/26 5/29 10/6 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UCD4-043	GW	2/26 5/29 10/6 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UCD4-044	GW	2/26 5/29 10/6 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UCD4-047	GW	2/26 5/29 10/6 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
DDC-1A	DDC	2/26 5/29 10/6 12/2	2/1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2/1	---	---	---	---	---
DDC-1B	DDC	2/26 5/30 10/6 12/2	2/1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2/1	---	---	---	---	---
DDC-1C	DDC	2/26 5/30 10/6 12/2	3/7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3/7	---	---	---	---	---
DDC-2A	DDC	2/26 5/30 10/6 12/2	2/1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2/1	---	---	---	---	---
DDC-2B	DDC	2/26 5/30 10/6 12/2	2/1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2/1	---	---	---	---	---
DDC-2C	DDC	2/26 5/30 10/6 12/2	2/1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2/1	---	---	---	---	---
DDC-3A	DDC	2/26 5/30 10/6 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
DDC-3B	DDC	2/26 5/30 10/6 12/2	2/1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2/1	---	---	---	---	---

Table 1. Dates of Field Measurements and Laboratory Analyses for 2008--Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Sample Location	Monitoring Program	Depth to water	Other field measurements	Alkalinity as $CaCO_3$	Dissolved solids, total	Suspended solids, total	Hardness as $CaCO_3$	Organic carbon, total	Organic carbon, dissolved	Carbon dioxide	Chromium, total	Chromium, hexavalent (Cr +6)	Iron, total	Iron, ferrous (Fe +2)	Nitrate as N	Mercury	Mercury, low-level	Phosphorus, total	Phosphorous, orthophosphate (PO_4)	Uranium, total	Metals, other	Anions, other	Cations, other	1,4-Dioxane	Oil and grease	Perchlorate	Pesticides and polychorinated biphenyls	Volatile organic compounds	Carbon-14	Radium-226	Tritium	Other radionuclides	Aquatic toxicity
DDC-3C	DDC	2/26 5/30 10/6 12/2	3/3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3/3	---	---	---	---	---
DDC-4A	DDC	2/26 5/30 10/6 12/2	3/3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3/3	---	---	---	---	---
DDC-4B	DDC	2/26 5/30 10/6 12/2	3/3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3/3	---	---	---	---	---
DDC-4C	DDC	2/26 5/30 10/6 12/2	3/3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3/3	---	---	---	---	---
DDC-5A	DDC	2/26 5/30 10/6 12/2	3/3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3/3	---	---	---	---	---
DDC-5B	DDC	2/26 5/30 10/6 12/2	3/3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3/3	---	---	---	---	---
DDC-5C	DDC	2/26 5/30 10/6 12/2	3/3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3/3	---	---	---	---	---
DDC-6A	DDC	2/26 5/30 10/6 12/2	3/3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3/3	---	---	---	---	---
DDC-6B	DDC	2/26 5/30 10/6 12/2	3/3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3/3	---	---	---	---	---
DDC-6C	DDC	2/26 5/30 10/6 12/2	3/3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3/3	---	---	---	---	---
TP-1A	DDC	2/26 5/30 10/6 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TP-1B	DDC	2/26 5/30 10/6 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TP-1C	DDC	2/26 5/30 10/6 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TP-2A	DDC	2/26 5/30 10/6 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TP-2B	DDC	2/26 5/30 10/6 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TP-2C	DDC	2/26 5/30 10/6 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TP-3A	DDC	2/26 5/30 10/6 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TP-3B	DDC	2/26 5/30 10/6 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TP-3C	DDC	2/26 5/30 10/6 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TP-4A	DDC	2/26 5/30 10/6 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TP-4B	DDC	2/26 5/30 10/6 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TP-4C	DDC	2/26 5/30 10/6 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TP-5A	DDC	2/26 5/30 10/6 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TP-5B	DDC	2/26 5/30 10/6 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TP-5C	DDC	2/26 5/30 10/6 12/2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Table 1. Dates of Field Measurements and Laboratory Analyses for 2008--Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Sample Location	Monitoring Program	Depth to water	Other field measurements	Alkalinity as $CaCO_3$	Dissolved solids, total	Suspended solids, total	Hardness as $CaCO_3$	Organic carbon, total	Organic carbon, dissolved	Carbon dioxide	Chromium, total	Chromium, hexavalent (Cr +6)	Iron, total	Iron, ferrous (Fe +2)	Nitrate as N	Mercury	Mercury, low-level	Phosphorus, total	Phosphorous, orthophosphate (PO_4)	Uranium, total	Metals, other	Anions, other	Cations, other	1,4-Dioxane	Oil and grease	Perchlorate	Pesticides and polychorinated biphenyls	Volatile organic compounds	Carbon-14	Radium-226	Tritium	Other radionuclides	Aquatic toxicity
Treatment System Influent	IRA	---	---	7/25	7/25	---	---	1/24 2/28 3/20 4/21 5/15 6/11 7/25 8/29 9/26 10/16 11/13 12/4	---	---	---	---	7/25	---	---	---	---	---	---	---	---	---	7/25	---	---	---	---	1/24 2/28 3/20 4/21 5/15 6/11 7/25 8/29 9/26 10/16 11/13 12/4	1/24 2/28 3/20 4/21 5/15 6/11 7/25 8/29 9/26 10/16 11/13 12/4	---	1/24 2/28 3/20 4/21 5/15 6/11 7/25 8/29 9/26 10/16 11/13 12/4	---	---
Treatment System Effluent	IRA	---	---	1/24 2/28 3/20 4/21 5/15 6/11 7/25 8/29 9/26 10/16 11/13	1/24 2/28 3/20 4/21 5/15 6/11 7/25 8/29 9/26 10/16 11/13 12/4	---	---	7/25	---	---	1/24 2/28 3/20 4/21 5/15 6/11 7/25 8/29 9/26 10/16 11/13 12/4	---	1/24 2/28 3/20 4/21 5/15 6/11 7/25	---	1/24 2/28 3/20 4/21 5/15 6/11 7/25 8/29 9/26 10/16 11/13 12/4	1/24 2/28 3/20 4/21 5/15 6/11 8/29 9/26 10/16 11/13 12/4	---	---	---	---	---	1/24 2/28 3/20 4/21 5/15 6/11 7/25 8/29 9/26 10/16 11/13 12/4	1/24 2/28 3/20 4/21 5/15 6/11 7/25 8/29 9/26 10/16 11/13 12/4	12/4	---	---	---	1/24 2/28 3/20 4/21 5/15 6/11 7/25 8/29 9/26 10/16 11/13 12/4	---	---	---	---	---
LF-01	SW	---	---	---	1/22 2/24	1/22 2/24	1/8 2/24	1/8 2/24	---	---	---	---	1/8 2/24	---	1/22 2/24	---	1/8 2/24	---	---	---	---	---	---	---	1/8 2/24	---	---	---	---	---	---	---	---
LF-03	SW	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
LS-01	SW	---	---	---	12/15	12/15	12/15	12/15	---	---	12/15	---	---	---	12/15	---	12/15	---	---	---	12/15	---	---	---	12/15	---	12/15	12/15	12/15	12/15	12/15	12/15	12/15

Monitoring Programs:

GW = Groundwater
DG = Data gaps investigation
DDC = Density-driven convection
IRA = Interim removal action (groundwater extraction and treatment system)
SW = Storm water

Notes:

--- = Not measured or sampled
Field measurement and laboratory analysis methods are presented in Table 2

Table 2. Methods for Field Measurements and Laboratory Analyses – Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Measurement/Parameter	Units	Method(s)
Depth to water	Hundredths of foot	Field, SOP
Other field measurements		
Electrical conductivity	micromhos per centimeter	Field, SOP
pH	pH units	Field, SOP
Temperature	degrees Celsius	Field, SOP
Oxidization-reduction potential	milliVolts	Field, SOP
Alkalinity as $CaCO_3$	mg/L	A2320B
Dissolved solids, total (residue, filterable)	mg/L	A2540C
Suspended solids, total	mg/L	EPA 160.2
Hardness as $CaCO_3$	mg/L	EPA 130.2
Organic carbon, total	mg/L	A5310C
Organic carbon, dissolved	mg/L	EPA 415.2
Carbon dioxide	µg/L	RSK175
Chromium, total	µg/L	EPA SW6020
Chromium, hexavalent (Cr^{+6})	µg/L	EPA SW7199
Iron, total	mg/L	EPA SW6010B
Iron, ferrous (Fe^{+2})	mg/L	CALCFE2
Nitrate as N	mg/L	EPA 300.0
Mercury	mg/L	EPA SW7470A
Mercury, low-level	ng/L	EPA 1631
Phosphorus, total	mg/L	A4500PE
Phosphorus, orthophosphate (PO_4)	mg/L	EPA 365.2

Table 2. Methods for Field Measurements and Laboratory Analyses – Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Measurement/Parameter	Units	Method(s)
Uranium, total	mg/L	EPA 200.8
Metals, other		
Antimony	mg/L	EPA 6010B/6020
Arsenic	mg/L	EPA 6010B/6020
Barium	mg/L	EPA 6010B/6020
Beryllium	mg/L	EPA 6010B/6020
Cadmium	mg/L	EPA 6010B/6020
Cobalt	mg/L	EPA 6010B/6020
Copper	mg/L	EPA 6010B/6020
Lead	mg/L	EPA 6010B/6020
Molybdenum	mg/L	EPA 6010B/6020
Nickel	mg/L	EPA 6010B/6020
Selenium	mg/L	EPA 6010B/6020
Silicon	mg/L	EPA SW6010B
Silver	mg/L	EPA 6010B/6020
Thallium	mg/L	EPA 6010B/6020
Vanadium	mg/L	EPA 6010B/6020
Zinc	mg/L	EPA 6010B/6020
Anions,other		
Chloride (Cl^-)	mg/L	EPA 300.0
Fluoride (F^-)	mg/L	EPA 300.0
Sulfate (SO_4^{2-})	mg/L	EPA 300.0
Cations, other		
Calcium	mg/L	EPA 6010B/6020
Magnesium	mg/L	EPA 6010B/6020
Potassium	mg/L	EPA 6010B/6020
Sodium	mg/L	EPA 6010B/6020
1,4-Dioxane	µg/L	BNASIM & EPA 1625C (M)
Oil and grease	mg/L	SW9070
Perchlorate	µg/L	EPA 314.0
Pesticides		

Table 2. Methods for Field Measurements and Laboratory Analyses – Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Measurement/Parameter	Units	Method(s)
Alpha-BHC	µg/L	SW8081A
Gamma-BHC	µg/L	SW8081A
Beta-BHC	µg/L	SW8081A
Heptachlor	µg/L	SW8081A
Delta-BHC	µg/L	SW8081A
Aldrin	µg/L	SW8081A
Heptachlor epoxide	µg/L	SW8081A
Endosulfan I	µg/L	SW8081A
Dieldrin	µg/L	SW8081A
4,4'-DDE	µg/L	SW8081A
Endrin	µg/L	SW8081A
Endrin aldehyde	µg/L	SW8081A
4,4'-DDD	µg/L	SW8081A
Endosulfan II	µg/L	SW8081A
4,4'-DDT	µg/L	SW8081A
Endosulfan sulfate	µg/L	SW8081A
Chlordane	µg/L	SW8081A
Toxaphene	µg/L	SW8081A
Polychlorinated biphenyls (PCBs)		
Aroclor-1016	µg/L	SW8082
Aroclor-1221	µg/L	SW8082
Aroclor-1232	µg/L	SW8082
Aroclor-1242	µg/L	SW8082
Aroclor-1248	µg/L	SW8082
Aroclor-1254	µg/L	SW8082
Aroclor-1260	µg/L	SW8082
Volatile Organic Compounds (VOCs)		
1,1,1,2-Tetrachloroethane	µg/L	EPA SW8260B
1,1,1-Trichloroethane	µg/L	EPA SW8260B
1,1,2,2-Tetrachloroethane	µg/L	EPA SW8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/L	EPA SW8260B
1,1,2-Trichloroethane	µg/L	EPA SW8260B
1,1-Dichloroethane	µg/L	EPA SW8260B
1,1-Dichloroethene	µg/L	EPA SW8260B
1,1-Dichloropropene	µg/L	EPA SW8260B
1,2,3-Trichlorobenzene	µg/L	EPA SW8260B
1,2,3-Trichloropropane	µg/L	EPA SW8260B

Table 2. Methods for Field Measurements and Laboratory Analyses – Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Measurement/Parameter	Units	Method(s)
1,2,4-Trimethylbenzene	µg/L	EPA SW8260B
1,2-Dibromoethane (ethylene dibromide)	µg/L	EPA SW8260B
1,2-Dichlorobenzene	µg/L	EPA SW8260B
1,2-Dichloroethane	µg/L	EPA SW8260B
1,2-Dichloropropane	µg/L	EPA SW8260B
1,3,5-Trimethylbenzene (mesitylene)	µg/L	EPA SW8260B
1,3-Dichloropropane	µg/L	EPA SW8260B
1,4-Dichlorobenzene	µg/L	EPA SW8260B
2,2-Dichloropropane	µg/L	EPA SW8260B
2-Chlorotoluene	µg/L	EPA SW8260B
2-Hexanone	µg/L	EPA SW8260B
4-Chlorotoluene	µg/L	EPA SW8260B
Acetone	µg/L	EPA SW8260B
Benzene	µg/L	EPA SW8260B
Bromobenzene	µg/L	EPA SW8260B
Bromochloromethane	µg/L	EPA SW8260B
Bromodichloromethane	µg/L	EPA SW8260B
Bromoform	µg/L	EPA SW8260B
Bromomethane	µg/L	EPA SW8260B
Carbon disulfide	µg/L	EPA SW8260B
Carbon tetrachloride	µg/L	EPA SW8260B
Chlorobenzene	µg/L	EPA SW8260B
Chloroethane	µg/L	EPA SW8260B
Chloroform	µg/L	EPA SW8260B
Chloromethane	µg/L	EPA SW8260B
cis-1,2-dichloroethylene	µg/L	EPA SW8260B
cis-1,3-dichloropropene	µg/L	EPA SW8260B
Dibromochloromethane	µg/L	EPA SW8260B
Dibromomethane	µg/L	EPA SW8260B
Dichlorodifluoromethane	µg/L	EPA SW8260B
Ethylbenzene	µg/L	EPA SW8260B
Isopropylbenzene (cumene)	µg/L	EPA SW8260B
m,p-xylene (sum of isomers)	µg/L	EPA SW8260B
Methyl ethyl ketone (2-butanone)	µg/L	EPA SW8260B
Methyl isobutyl ketone (4-methyl-2-pentanone)	µg/L	EPA SW8260B
Methylene chloride	µg/L	EPA SW8260B
n-Butylbenzene	µg/L	EPA SW8260B
n-Propylbenzene	µg/L	EPA SW8260B
o-Xylene (1,2-dimethylbenzene)	µg/L	EPA SW8260B

Table 2. Methods for Field Measurements and Laboratory Analyses – Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Measurement/Parameter	Units	Method(s)
p-Cymene (p-isopropyltoluene)	µg/L	EPA SW8260B
sec-Butylbenzene	µg/L	EPA SW8260B
Styrene	µg/L	EPA SW8260B
t-Butylbenzene	µg/L	EPA SW8260B
tert-Butyl methyl ether	µg/L	EPA SW8260B
Tetrachloroethylene (PCE)	µg/L	EPA SW8260B
Toluene	µg/L	EPA SW8260B
trans-1,2-dichloroethene	µg/L	EPA SW8260B
trans-1,3-dichloropropene	µg/L	EPA SW8260B
Trichloroethylene (TCE)	µg/L	EPA SW8260B
Trichlorofluoromethane	µg/L	EPA SW8260B
Vinyl acetate	µg/L	EPA SW8260B
Vinyl chloride	µg/L	EPA SW8260B
1,2,4-Trichlorobenzene	µg/L	EPA SW8260B
1,3-Dichlorobenzene	µg/L	EPA SW8260B
Naphthalene	µg/L	EPA SW8260B
1,2-Dibromo-3-chloropropane	µg/L	EPA SW8260B
Carbon-14	pCi/L	EERF C-01 (M)
Radium-226	pCi/L	EPA 903.0 (M)
Tritium (hydrogen-3)	pCi/L	EPA 906.0 (M)
Other radionuclides		
Gross alpha/beta	pCi/L	EPA 900.0 (M)
Gamma spectroscopy	pCi/L	EPA 901.1 (M)
Strontium-90	pCi/L	EPA 905.0 (M)
Isotopic thorium and uranium	pCi/L	EML A-01-R (M)
Aquatic toxicity	percent	EPA 600/4-90/027F

Abbreviations:

SOP = standard operating procedure
µg/L = micrograms per liter
pCi/L = picocuries per liter
ng/L=nanograms per liter
mg/L=milligrams per liter

Table 3. Well Construction Details – Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Well	Date Installed	Total Boring Depth (ft bgs)	Well Diameter (inches)	Well Screen Type	Screen Interval (ft bgs)	Filter Pack (ft bgs)	Bentonite (ft bgs)	Cement (ft bgs)	Top-of-Casing Elevation (ft msl)	Ground Surface Elevation (ft msl)
	Groundwater Monitoring Wells									
UCD1-001	10/09/87	56.5	2	PVC	46.5-56.5	41-56.5	38-41	0-38	49.48	47.8
UCD1-002 [a]	10/09/87	60	2	PVC	44-59	39-59	36-59	0-36	-	-
UCD1-003	10/23/87	51.5	2	PVC	39-49	34-51.5	b	0-34	49.48	48.4
UCD1-004	10/14/87	56.5	2	PVC	45-55	40-56.5	37-40	0-37	51.18	49.7
UCD1-005	10/22/87	48.5	2	PVC	38-48	33-48	b	0-33	47.96	48.3
UCD1-006	10/21/87	52.5	2	PVC	40-50	35-50	b	0-35	50.55	49.1
UCD2-007	11/05/87	90	2	PVC	80-90	75-90	b	0-75	51.24	49.5
UCD1-008	11/03/87	56	2	PVC	43.5-53.5	39-53.5	b	0-39	51.02	49.3
UCD1-009	11/04/87	51.5	2	PVC	40-50	35-50	b	0-35	51.01	49.2
UCD1-010	10/11/89	70	4	PVC	54-69	52-70	49-52	0-49	49.34	47.6
UCD1-011	10/17/89	66.5	4	PVC	50-65	47-66.5	44-47	0-44	50.16	48.1
UCD1-012	10/19/89	65	4	PVC	49.5-64.5	47-65	44-47	0-44	51.45	48.9
UCD1-013	10/26/89	65	4	PVC	50-65	47-65	44.5-47	0-44.5	51.67	49.3
UCD2-014	11/15/89	86	4	PVC	75-85	69-86	64-69	0-64	51.28	49.1
UCD2-015	03/28/90	120.5	4	SS	91-116	86-120.5	65-86	0-65	51.01	49.9
UCD2-016	04/04/90	122	4	SS	92-117	86-122	71-86	0-71	49.21	48.3
UCD2-017	04/10/90	143	4	SS	88-113	81-113	78-81	0-78	51.57	49.8
UCD1-018	10/04/90	70	4	SS	54-69	51-70	48-51	0-48	47.81	46.7
UCD1-019	10/01/90	74.5	4	SS	56.5-71.5	53.5-72.5	50.5-53.5	0-50.5	50.49	49.5
UCD1-020	10/09/90	73.5	4	SS	57-72	54-73.5	51-54	0-51	48.83	48.4
UCD1-021	10/11/90	73.5	4	SS	57-72	54-73.5	51-54	0-51	48.05	48.7
UCD1-022	10/25/90	73	4	SS	57-72	54-73	51-54	0-51	48.41	49.1
UCD1-023	10/17/90	73	4	SS	56.5-71.5	53.5-73	50.5-53.5	0-50.5	48.63	49.3
UCD1-024	10/22/90	73	4	SS	57-72	54-73	51-54	0-51	48.23	48.9
UCD1-025	10/06/95	75	4	SS	60-75	56.9-75	52-56.9	0-52	47.33	47.9
UCD2-026	10/06/95	102	4	SS	87-102	84-102	79-84	0-79	47.44	47.9
UCD2-027Z1	10/06/95	136	5	SS	53-55	51.5-57.5	49-51.5	0-49	47.48	47.9
UCD2-027Z2	10/06/95	136	5	SS	63-65	61.5-66.5	57.5-61.5	0-49	47.48	47.9
UCD2-027Z3	10/06/95	136	5	SS	73-75	71.5-76.5	66.5-71.5	0-49	47.48	47.9

Table 3. Well Construction Details – Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Well	Date Installed	Total Boring Depth (ft bgs)	Well Diameter (inches)	Well Screen Type	Screen Interval (ft bgs)	Filter Pack (ft bgs)	Bentonite (ft bgs)	Cement (ft bgs)	Top-of-Casing Elevation (ft msl)	Ground Surface Elevation (ft msl)
UCD2-027Z4	10/06/95	136	5	SS	86-88	84.9-90	76.5-84.9	0-49	47.48	47.9
UCD2-027Z5	10/06/95	136	5	SS	96-98	94.5-100	90-94.5	0-49	47.48	47.9
UCD2-027Z6	10/06/95	136	5	SS	106-108	104.5-109.5	100-104.5	0-49	47.48	47.9
UCD2-027Z7	10/06/95	136	5	SS	116-118	114.5-119	109.5-114.5	0-49	47.48	47.9
UCD1-028	09/05/96	70	2	SS	53-68	51-70	47-51	0-47	47.41	47.9
UCD2-029	09/04/96	97	2	SS	80-95	76.7-97	72-76.7	0-72	47.48	47.8
UCD2-030	09/10/96	110	2	SS	95-110	91-110	89.5-91	0-89.5	47.21	47.5
UCD2-031	09/11/96	110	2	SS	94-109	91-110	87-91	0-87	47.17	47.5
UCD2-032	04/03/97	105	2	SS	83-103	81-105	77-81	0-77	44.77	46.5
UCD4-033 [a]					Abandoned in May 1997 and replaced by UCD4-42					
UCD1-034	10/06/95	80	4	SS	61-76	57-76	50-57	0-50	55.04	55.5
UCD2-035	10/06/95	130	4	SS	107-122	103-122	98-103	0-98	55.12	55.5
UCD2-036	11/06/97	105	2	SS	82-102	79-105	73-79	0-73	47.98	48.2
UCD2-037	10/20/97	118.5	2	SS	94-114	91-118.5	85-91	0-85	49.22	49.7
UCD2-038	10/23/97	119	2	SS	95-114	89-119	83-89	0-83	56.66	57.1
UCD2-039	10/30/97	112	2	SS	85-108	84-112	80-84	0-80	49.33	47.5
UCD2-040	11/07/97	108.5	2	SS	86-106	83-108.5	78-83	0-78	46.49	46.9
UCD4-041	10/10/97	295	4	SS	257-277	253-280	248.5-253	0-248.5	46.62	46.9
UCD4-042	11/03/97	272	4	SS	248.5-268.5	245-269	240-245	0-246	46.93	46.8
UCD4-043	10/02/97	295	4	SS	248-268	242.5-274	233-242.5	0-237	44.62	45.2
UCD4-044	04/07/99	295	4	SS	246.5-266.5	242-273	237-242	0-237	47.35	47.9
UCD2-045	11/30/99	114	2	SS	93-113	89.5-113.5	84.5-89.5	0-84.5	46.10	46.6
UCD2-046	05/05/00	106	2	SS	84.5-104.5	81.75-106	79-81.75	0-79	44.82	42.5
UCD4-047	05/20/00	299	4	SS	266-286	263.5-288.9	257-263	0-257	47.07	45.2
UCD2-048	08/28/02	104	4	SS	90-100	88.3-104	84-88.3	0-84	51.38	48.7
UCD1-049	08/14/02	69.5	4	SS	49.5-69.5	47-69.5	43-47	0-43	51.30	48.7
UCD1-050	08/13/02	69.5	4	SS	49.5-69.5	47.5-69.5	43.5-47.5	0-43.5	52.22	49.2
UCD1-051	08/12/02	70	4	SS	49.7-69.7	48-70	44-48	0-44	51.78	49.0
UCD1-052	02/12/04	70	2	PVC	53.5 - 68.5	51 - 70	50 - 51	0-50	46.91	47.3
UCD1-053	02/13/04	70	2	PVC	52.5 - 67.5	48 - 70	45 - 48	0 - 45	47.00	47.3

Table 3. Well Construction Details – Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Well	Date Installed	Total Boring Depth (ft bgs)	Well Diameter (inches)	Well Screen Type	Screen Interval (ft bgs)	Filter Pack (ft bgs)	Bentonite (ft bgs)	Cement (ft bgs)	Top-of-Casing Elevation (ft msl)	Ground Surface Elevation (ft msl)
UCD1-054	02/06/04	73	2	PVC	58 - 73	56 - 73	54 - 56	0 - 56	48.58	49.0
UCD1-055	10/24/07	62	2	SS	47 - 62	44 - 62	41 - 44	0 - 41	44.09	44.9
UCD2-056	11/05/07	89	4	PVC	78 - 88	76 - 89	73 - 76	0 - 73	44.68	44.9
UCD2-057	11/02/07	97	4	PVC	87 - 97	84 - 97	81 - 84	0 - 81	47.41	44.4
UCD1-058	11/02/07	71	2	PVC	55 - 70	52 - 71	48 - 52	0 - 48	47.81	44.5
UCD2-059 [c]	09/19/08	112	4	PVC	92 - 112	89 - 112	84 - 89	0 - 84	47.26	44.6
UCD2-060 [c]	09/24/08	112	4	PVC	92 - 112	89 - 112	83 - 89	0 - 83	44.96	45.5
UCD1-061 [c]	10/02/08	71	2	PVC	56 - 71	54 - 71	51 - 54	0 - 51	47.46	47.7
UCD1-062 [c]	10/01/08	71	2	PVC	56 - 71	54 - 71	51 - 54	0 - 51	49.28	49.5
UCD1-063 [c]	10/01/08	80	2	PVC	65 - 80	63 - 80	60 - 63	0 - 60	49.88	47.6
UCD1-064 [c]	10/01/08	70.5	2	PVC	55 - 70.5	53 - 70.5	50 - 53	0 - 53	47.04	47.4
UCD1-065 [c]	09/30/08	72	2	PVC	57 - 72	55 - 72	53 - 55	0 - 53	49.91	47.5
UCD1-066 [c]	10/02/08	72	2	PVC	57 - 71.5	54 - 72	51 - 54	0 - 51	48.09	48.3
	DDC Wells and Piezometers									
DDC-1	10/27/00	86	4	SS	20-35	19-35.5	17-19	0.5-17	52.00	49.0
					40-55	40-55.7	35.7-40			
					65-80	60-80.5	80.5-85			
DDC-1A	10/27/00	86	1.25	SS	32.5-35	19-35.5	17-19	0.5-17	51.48	49.0
DDC-1B	10/27/00	86	1.25	SS	50-52.5	40-55.7	35.7-40	0.5-17	51.38	49.0
DDC-1C	10/27/00	86	1.25	SS	70-75	60-80.5	80.5-85	0.5-17	51.31	49.0
DDC-2	09/16/02	80	4	SS	19.7-34.7	16-36	14.3-16	0-14.3	52.48	49.3
					39.7-54.7	38-56.5	36-38			
					64.7-79.7	62.3-80	56.5-62.3			
DDC-2A	09/16/02	80	1.25	SS	30-35	16-36	14.3-16	0-14.3	51.70	49.3
DDC-2B	09/16/02	80	1.25	SS	50-55	38-56.5	36-38	0-14.3	51.70	49.3
DDC-2C	09/16/02	80	1.25	SS	65-70	62.3-80	56.5-62.3	0-14.3	51.63	49.3
DDC-3	09/18/02	80	4	SS	19-34	16-35	14.3-16	0-14.3	52.41	48.7
					39-54	37-56.7	35-37			
					64-69.7	62-80	56.7-62			
DDC-3A	09/18/02	80	1.25	SS	28-34	16-35	14.3-16	0-14.3	51.92	48.7

Table 3. Well Construction Details – Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Well	Date Installed	Total Boring Depth (ft bgs)	Well Diameter (inches)	Well Screen Type	Screen Interval (ft bgs)	Filter Pack (ft bgs)	Bentonite (ft bgs)	Cement (ft bgs)	Top-of-Casing Elevation (ft msl)	Ground Surface Elevation (ft msl)
DDC-3B	09/18/02	80	1.25	SS	49-54	37-56.7	35-37	0-14.3	51.85	48.7
DDC-3C	09/18/02	80	1.25	SS	64-79.7	62-80	56.7-62	0-14.3	51.93	48.7
DDC-4	09/19/02	80	4	SS	19.5-34.5	16-35.5	14.3-16	0-14.3	51.89	48.7
					39.5-54.5	37-56.5	35.5-37			
				SS	64.5-79.5	62-80	56.5-62			
DDC-4A	09/19/02	80	1.25	SS	29.5-34.5	16-35.5	14.3-16	0-14.3	51.39	48.7
DDC-4B	09/19/02	80	1.25	SS	49.5-54.5	37-56.5	35.5-37	0-14.3	51.39	48.7
DDC-4C	09/19/02	80	1.25	SS	64.5-69.5	62-80	56.5-62	0-14.3	51.39	48.7
DDC-5	09/20/02	80	4	SS	18.5-33.5	16-34.5	14-16	0-14	51.34	48.3
					38.5-53.5	36.5-55.7	34.5-36.5			
					63.5-78.5	61-80	55.7-61			
DDC-5A	09/20/02	80	1.25	SS	28.5-33.5	16-34.5	14-16	0-14	51.17	48.3
DDC-5B	09/20/02	80	1.25	SS	48.5-53.5	36.5-55.7	34.5-36.5	0-14	51.16	48.3
DDC-5C	09/20/02	80	1.25	SS	73.5-78.5	61-80	55.7-61	0-14	51.16	48.3
DDC-6	09/13/02	80.3	4	SS	20-35	16-36	14.3-16	0-14.3	52.36	48.9
					40-55	38-56.5	36-38			
					65-80	62-80.3	56.5-62			
DDC-6A	09/13/02	80.3	1.25	SS	30-35	16-36	14.3-16	0-14.3	51.73	48.9
DDC-6B	09/13/02	80.3	1.25	SS	50-55	38-56.5	36-38	0-14.3	51.74	48.9
DDC-6C	09/13/02	80.3	1.25	SS	65-70	62-80.3	56.5-62	0-14.3	51.68	48.9
TP-1A	11/04/00	80	2	PVC	30-35	17-35.5	14-17	0.5-14	49.71	48.9
TP-1B	11/04/00	80	2	PVC	47-52	45-55	35.7-45	0.5-14	49.96	48.9
TP-1C	11/04/00	80	2	PVC	70-75	60-80.5	55-60	0.5-14	49.86	48.9
TP-2A	10/31/00	79	2	PVC	28-33	14-33	12-14	0.5-12	51.49	48.9
TP-2B	10/31/00	79	2	PVC	47.5-52.5	45-55	33-45	0.5-12	51.24	48.9
TP-2C	10/31/00	79	2	PVC	70-75	60-79	55-60	0.5-12	51.16	48.9
TP-3A	11/03/00	80.5	2	PVC	30-35	20-33.5	15-20	0.5-15	51.08	48.8
TP-3B	11/03/00	80.5	2	PVC	47.5-52.5	45-55	35.5-45	0.5-15	51.13	48.8
TP-3C	11/03/00	80.5	2	PVC	70-75	60-80.5	55-60	0.5-15	51.15	48.8
TP-4A	11/02/00	80.5	2	PVC	30-35	19-35	12-19	0.5-17	51.15	49.2

Table 3. Well Construction Details – Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Well	Date Installed	Total Boring Depth (ft bgs)	Well Diameter (inches)	Well Screen Type	Screen Interval (ft bgs)	Filter Pack (ft bgs)	Bentonite (ft bgs)	Cement (ft bgs)	Top-of-Casing Elevation (ft msl)	Ground Surface Elevation (ft msl)
TP-4B	11/02/00	80.5	2	PVC	47.5-52.5	45-55	35-45	0.5-17	51.13	49.2
TP-4C	11/02/00	80.5	2	PVC	70-75	60-80.5	55-60	0.5-17	51.25	49.2
TP-5A	10/26/00	80	2	PVC	30-35	20-35.5	15-20	0.5-15	51.99	49.3
TP-5B	10/26/00	80	2	PVC	47.5-52.5	45-55.3	35.5-45	0.5-15	51.93	49.3
TP-5C	10/26/00	80	2	PVC	74.5-79.5	60-80	55.3-60	0.5-15	51.86	49.3
	IRA Wells									
EW2-1	09/20/96	125.65	8	SS	79.4-119.4	74.4-125.65	68.4-74.4	0-68.4	49.22	47.8
IW2-1	10/17/97	126.5	10	SS	84.5-119.5	80-126.5	75-80	0-75	48.49	47.6

Notes:
a = Well abandoned
b = Well constructed with #60 sand seal and no bentonite
c = Well elevations surveyed in October 2008

Unless otherwise indicated, survey elevation data was collected in May 2009

Abbreviations:
DDC = density-driven convection
IRA = interim removal action groundwater extraction and treatment
EW = extraction well
IW = injection well
PVC = slotted polyvinyl chloride
SS = wire-wrapped stainless steel
ft bgs = feet below ground surface
ft msl = feet above mean sea level datum

Weiss Associates

Table 4. Groundwater Elevation Data - First Half 2008, Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Water Bearing Zone	Well	Well Installation Date	Measuring Point Elevation (feet above msl)	Lowest Level Prior to 2008			Highest Level Prior to 2008			First Quarter 2008			Second Quarter 2008		
				Date	DTW (feet)	GWE (feet above msl)	Date	DTW (feet)	GWE (feet above msl)	Date	DTW TOC (feet)	GWE (feet above msl)	Date	DTW TOC (feet)	GWE (feet above msl)
HSU-1	UCD1-001	10/09/87	50.09	6/17/1992	58.91	-8.86	03/19/98	17.06	32.99	02/26/08	37.09	13.00	05/29/08	48.50	1.59
	UCD1-003	10/23/87	50.10	---	DRY	<-0.60	03/19/98	17.16	32.89	02/26/08	37.41	12.69	---	---	---
	UCD1-004	10/14/87	51.69	---	DRY	<-5.30	01/22/04	14.23	37.46	02/26/08	38.39	13.30	05/30/08	48.75	2.94
	UCD1-005	10/22/87	48.44	---	DRY	<0.30	03/19/98	15.54	32.90	02/26/08	35.94	12.50	05/29/08	46.78	1.66
	UCD1-006	10/21/87	50.99	---	DRY	<-0.90	03/19/98	17.82	33.12	02/26/08	38.27	12.72	05/29/08	49.05	1.94
	UCD1-008	11/03/87	51.50	---	DRY	<-4.20	03/19/98	18.86	32.65	02/26/08	39.27	12.23	05/30/08	50.45	1.05
	UCD1-009	11/04/87	51.42	---	DRY	<-0.80	03/19/98	18.82	32.56	02/26/08	39.21	12.21	**05/30/08**	**DRY**	**<-0.80**
	UCD1-010	10/11/89	49.89	8/14/1991	72.41	-22.54	03/19/98	17.39	32.48	02/26/08	37.15	12.74	05/29/08	50.15	-0.26
	UCD1-011	10/17/89	50.69	7/20/1994	68.52	-17.85	03/19/98	18.38	32.29	02/26/08	38.76	11.93	05/29/08	51.00	-0.31
	UCD1-012	10/19/89	51.79	8/12/1992	67.57	-15.81	03/19/98	19.24	32.52	02/26/08	39.57	12.22	05/30/08	51.25	0.54
	UCD1-013	10/26/89	52.14	7/19/1991	67.61	-15.42	03/19/98	19.54	32.65	02/26/08	39.88	12.26	05/30/08	51.00	1.14
	UCD1-018	10/02/90	48.61	8/14/1991	64.83	-16.27	02/17/98	13.91	34.65	02/26/08	35.14	13.47	05/29/08	44.80	3.81
	UCD1-019	09/26/90	51.35	8/14/1991	70.93	-19.6	03/19/98	19.08	32.25	02/26/08	39.28	12.07	05/29/08	50.23	1.12
	UCD1-020	10/05/90	49.81	8/14/1991	68.9	-19.12	03/19/98	16.90	32.88	02/26/08	37.07	12.74	05/29/08	47.92	1.89
	UCD1-021	10/10/90	48.77	8/19/1994	67.43	-18.66	03/19/98	15.88	32.89	02/26/08	36.33	12.44	05/29/08	46.95	1.82
	UCD1-022	10/23/90	49.09	8/19/1994	67.78	-18.71	04/21/98	16.56	32.51	02/26/08	36.25	12.84	05/29/08	46.92	2.17
	UCD1-023	10/15/90	49.34	---	DRY	<-22.20	03/19/98	16.19	33.20	02/26/08	36.38	12.96	05/29/08	45.95	3.39
	UCD1-024	10/22/90	48.88	8/14/1991	68.46	-19.55	03/19/98	15.98	32.93	---	---	---	---	---	---
	UCD1-025	10/06/95	47.90	8/2/2002	57.65	-10.27	03/19/98	16.84	31.96	02/26/08	35.86	12.04	05/29/08	48.40	-0.50
	UCD1-028	09/05/96	47.93	8/2/2002	66.12	-18.64	03/19/98	18.13	32.32	02/26/08	35.86	12.07	05/29/08	48.60	-0.67
	UCD1-034	10/06/95	55.70	8/2/2002	63.01	-7.31	02/17/98	20.46	35.24	02/26/08	41.40	14.30	05/29/08	51.95	3.75
	UCD1-049	08/14/02	51.44	9/17/2007	55.15	-3.71	05/02/06	22.40	29.04	02/26/08	39.31	12.13	05/30/08	51.10	0.34
	UCD1-050	08/13/02	52.47	9/17/2007	56.19	-3.72	05/02/06	23.51	28.96	02/26/08	40.39	12.08	05/30/08	52.00	0.47
	UCD1-051	08/12/02	52.01	9/17/2007	55.76	-3.75	05/02/06	23.02	28.99	02/26/08	39.98	12.03	05/30/08	51.65	0.36
	UCD1-052	02/13/04	47.46	9/17/2007	51.25	-3.79	05/08/06	23.12	24.34	02/26/08	35.36	12.10	05/29/08	48.17	-0.71
	UCD1-053	02/13/04	47.49	9/17/2007	51.4	-3.91	05/08/06	21.67	25.82	02/26/08	35.43	12.06	05/29/08	48.30	-0.81
	UCD1-054	02/06/04	49.05	10/13/2005	56.51	-7.46	02/13/04	37.00	11.58	**02/26/08**	**36.24**	**12.81**	05/29/08	47.33	1.72
	UCD1-055	10/24/07	45.07 *	12/13/2007	39.36	5.71	12/13/07	39.36	5.71	**02/26/08**	**32.94**	**12.13**	**05/29/08**	**46.00**	**-0.93**

Table 4. Groundwater Elevation Data - First Half 2008, Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Water Bearing Zone	Well	Well Installation Date	Measuring Point Elevation (feet above msl)	Lowest Level Prior to 2008			Highest Level Prior to 2008			First Quarter 2008			Second Quarter 2008		
				Date	DTW (feet)	GWE (feet above msl)	Date	DTW (feet)	GWE (feet above msl)	Date	DTW TOC (feet)	GWE (feet above msl)	Date	DTW TOC (feet)	GWE (feet above msl)
HSU-1	UCD1-058	11/02/07	48.07 *	12/13/2007	42.11	5.96	12/13/07	42.11	5.96	**02/26/08**	**35.87**	**12.20**	**05/29/08**	**48.13**	**-0.06**
	UCD1-061	10/02/08	---	---	---	---	---	---	---	---	---	---	---	---	---
	UCD1-062	10/01/08	---	---	---	---	---	---	---	---	---	---	---	---	---
	UCD1-063	10/01/08	---	---	---	---	---	---	---	---	---	---	---	---	---
	UCD1-064	10/01/08	---	---	---	---	---	---	---	---	---	---	---	---	---
	UCD1-065	09/30/08	---	---	---	---	---	---	---	---	---	---	---	---	---
	UCD1-066	10/02/08	---	---	---	---	---	---	---	---	---	---	---	---	---
HSU-2	UCD2-007	11/05/87	51.68	8/14/1991	71.73	-20.08	03/19/98	19.12	32.53	02/26/08	39.22	12.46	05/29/08	51.09	0.59
	UCD2-014	11/15/89	51.67	8/14/1991	72.75	-21.03	03/19/98	19.31	32.41	02/26/08	39.42	12.25	05/30/08	51.50	0.17
	UCD2-015	03/28/90	51.53	8/14/1991	70.92	-19.43	03/19/98	18.70	32.79	02/26/08	39.00	12.53	05/30/08	50.85	0.68
	UCD2-016	04/03/90	49.93	8/14/1991	69.38	-19.43	03/19/98	17.34	32.61	02/26/08	37.38	12.55	05/29/08	48.80	1.13
	UCD2-017	04/10/90	51.91	7/19/1991	70.06	-18.23	03/19/98	18.79	33.04	02/26/08	39.04	12.87	05/29/08	50.50	1.41
	UCD2-026	10/06/95	47.89	8/2/2002	58.47	-10.99	03/19/98	16.76	32.03	02/26/08	35.59	12.30	05/29/08	48.40	-0.51
	UCD2-029	09/04/96	48.01	8/2/2002	58.95	-11.37	03/19/98	18.28	32.15	02/26/08	35.70	12.31	05/29/08	48.75	-0.74
	UCD2-030	09/09/96	47.64	8/2/2002	58.76	-11.56	03/19/98	17.79	32.15	02/26/08	35.38	12.26	05/29/08	48.40	-0.76
	UCD2-031	09/11/96	47.61	8/2/2002	58.6	-11.39	03/19/98	17.83	32.15	02/26/08	35.35	12.26	05/29/08	48.40	-0.79
	UCD2-032	04/02/97	45.08	8/2/2002	57.13	-11.72	03/19/98	13.99	31.43	02/26/08	33.23	11.85	05/29/08	47.80	-2.72
	UCD2-035	10/06/95	55.71	8/2/2002	65.41	-9.7	05/21/06	17.63	38.08	02/26/08	43.40	12.31	05/29/08	55.00	0.71
	UCD2-036	11/05/97	48.31	8/2/2002	57.66	-9.35	04/21/98	16.63	31.68	02/26/08	35.75	12.56	05/29/08	47.35	0.96
	UCD2-037	10/20/97	49.63	8/2/2002	58.35	-8.72	03/19/98	16.73	32.90	02/26/08	36.93	12.70	05/29/08	48.50	1.13
	UCD2-038	10/22/97	57.20	7/20/2001	78.32	-21.12	05/21/06	18.21	38.99	02/26/08	44.42	12.78	05/29/08	56.10	1.10
	UCD2-039	10/29/97	49.63	7/2/2002	62.72	-13.09	03/19/98	17.52	32.11	02/26/08	37.51	12.12	05/30/08	49.85	-0.22
	UCD2-040	11/07/97	46.94	8/2/2002	58.32	-11.83	04/06/98	17.52	31.44	02/26/08	34.76	12.18	05/29/08	48.00	-1.06
	UCD2-045	11/30/99	46.64	8/2/2002	59.61	-13.28	05/08/06	19.01	27.63	02/26/08	34.63	12.01	05/29/08	47.92	-1.28
	UCD2-046	05/05/00	44.73	8/2/2002	60.61	-18.82	05/08/06	18.68	26.05	02/26/08	33.06	11.67	05/29/08	48.90	-4.17
	UCD2-048	08/29/02	51.76	9/17/2007	55.38	-3.62	05/02/06	23.79	27.97	02/26/08	39.46	12.30	05/30/08	51.75	0.01
	UCD2-056	11/05/07	45.09 *	12/13/2007	39.36	5.41	12/13/07	39.36	5.41	**02/26/08**	**32.92**	**12.17**	**05/29/08**	**46.30**	**-1.21**

Table 4. Groundwater Elevation Data - First Half 2008, Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Water Bearing Zone	Well	Well Installation Date	Measuring Point Elevation (feet above msl)	Lowest Level Prior to 2008			Highest Level Prior to 2008			First Quarter 2008			Second Quarter 2008		
				Date	DTW (feet)	GWE (feet above msl)	Date	DTW (feet)	GWE (feet above msl)	Date	DTW TOC (feet)	GWE (feet above msl)	Date	DTW TOC (feet)	GWE (feet above msl)
HSU-2	UCD2-057	11/02/07	47.90 *	12/13/2007	41.79	5.62	12/13/07	41.79	5.62	**02/26/08**	**35.84**	**12.06**	**05/29/08**	**49.45**	**-1.55**
	UCD2-059	09/19/08	---	---	---	---	---	---	---	---	---	---	---	---	---
	UCD2-060	09/24/08	---	---	---	---	---	---	---	---	---	---	---	---	---
	EW2-01	09/20/96	49.17	8/2/2002	80.63	-31.46	02/17/98	19.49	30.79	02/26/08	37.05	12.12	05/29/08	50.15	-0.98
	IW2-01	10/16/97	49.39	8/17/2001	66.64	-17.25	06/12/03	5.09	44.30	02/26/08	36.65	12.74	05/30/08	48.50	0.89
HSU-4	UCD4-041	10/10/97	47.00	7/2/2002	73.97	-27.37	03/19/98	18.08	31.27	02/26/08	35.61	11.39	05/30/08	59.30	-12.30
	UCD4-042	11/03/97	47.24	6/2/2000	81.82	-34.6	04/06/98	16.44	30.80	02/26/08	35.93	11.31	05/29/08	60.28	-13.04
	UCD4-043	10/02/97	45.00	6/2/2000	80.27	-35.21	04/06/98	14.71	30.35	02/26/08	33.80	11.20	05/29/08	58.80	-13.80
	UCD4-044	04/07/99	47.95	7/2/2002	74.91	-27.48	05/08/06	27.23	20.72	02/26/08	36.42	11.53	05/29/08	60.00	-12.05
	UCD4-047	05/20/00	47.38	7/2/2002	78.58	-31.54	05/08/06	25.31	22.07	02/26/08	36.15	11.23	05/30/08	62.10	-14.72

Notes:

* = Well UCD1-055, UCD1-058, UCD2-056 and UCD2-57: depth to water was measured from the top of box (TOB) when measuring point elevation was top of casing (TOC). Therefore the measuring point presented was adjusted to the TOB from 2009 survey.

--- = not measured
Bold Text = groundwater level is outside the historical range for the well
DTW = depth to water
GWE = groundwater elevation
msl = mean sea level
TOB = top of box. Water levels recorded from top of steel (either standpipe or rim of surface completion)

Table 5. Groundwater Elevation Data - Second Half 2008, Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Water Bearing Zone	Well	Well Installation Date	Measuring Point Elevation (feet above msl)	Lowest Level Prior to 2008			Highest Level Prior to 2008			Third Quarter 2008			Fourth Quarter 2008		
				Date	DTW (feet)	GWE (feet above msl)	Date	DTW (feet)	GWE (feet above msl)	Date	DTW TOC (feet)	GWE (feet above msl)	Date	DTW TOC (feet)	GWE (feet above msl)
HSU-1	UCD1-001	10/09/87	49.48	6/17/1992	58.91	-8.86	03/19/98	17.06	32.99	10/06/08	54.93	-5.45	12/02/08	47.54	1.94
	UCD1-003	10/23/87	49.48	---	DRY	<-0.60	03/19/98	17.16	32.89	---	---	---	---	---	---
	UCD1-004	10/14/87	51.18	---	DRY	<-5.30	01/22/04	14.23	37.46	**10/06/08**	**DRY**	**<-5.30**	**12/02/08**	**DRY**	**<-5.30**
	UCD1-005	10/22/87	47.96	---	DRY	<0.30	03/19/98	15.54	32.90	**10/06/08**	**DRY**	**<0.30**	12/02/08	46.92	1.04
	UCD1-006	10/21/87	50.55	---	DRY	<-0.90	03/19/98	17.82	33.12	**10/06/08**	**DRY**	**<-0.90**	12/02/08	49.13	1.42
	UCD1-008	11/03/87	51.02	---	DRY	<-4.20	03/19/98	18.86	32.65	**10/06/08**	**DRY**	**<-4.20**	12/02/08	50.02	1.00
	UCD1-009	11/04/87	51.01	---	DRY	<-0.80	03/19/98	18.82	32.56	**10/06/08**	**DRY**	**<3.41**	**12/02/08**	**DRY**	**<-0.80**
	UCD1-010	10/11/89	49.34	8/14/1991	72.41	-22.54	03/19/98	17.39	32.48	10/06/08	55.70	-6.36	12/02/08	47.60	1.74
	UCD1-011	10/17/89	50.16	7/20/1994	68.52	-17.85	03/19/98	18.38	32.29	10/06/08	56.26	-6.10	12/02/08	48.41	1.75
	UCD1-012	10/19/89	51.45	8/12/1992	67.57	-15.81	03/19/98	19.24	32.52	10/06/08	57.55	-6.10	12/02/08	49.94	1.51
	UCD1-013	10/26/89	51.67	7/19/1991	67.61	-15.42	03/19/98	19.54	32.65	10/06/08	57.66	-5.99	12/02/08	50.67	1.00
	UCD1-018	10/02/90	47.81	8/14/1991	64.83	-16.27	02/17/98	13.91	34.65	10/06/08	53.34	-5.53	12/02/08	46.00	1.81
	UCD1-019	09/26/90	50.49	8/14/1991	70.93	-19.6	03/19/98	19.08	32.25	10/06/08	56.48	-5.99	12/02/08	49.25	1.24
	UCD1-020	10/05/90	48.83	8/14/1991	68.9	-19.12	03/19/98	16.90	32.88	10/06/08	54.62	-5.79	12/02/08	47.83	1.00
	UCD1-021	10/10/90	48.05	8/19/1994	67.43	-18.66	03/19/98	15.88	32.89	10/06/08	53.71	-5.66	12/02/08	47.11	0.94
	UCD1-022	10/23/90	48.41	8/19/1994	67.78	-18.71	04/21/98	16.56	32.51	10/06/08	53.81	-5.40	12/02/08	46.93	1.48
	UCD1-023	10/15/90	48.63	---	DRY	<-22.20	03/19/98	16.19	33.20	10/06/08	54.38	-5.75	12/02/08	48.39	0.24
	UCD1-024	10/22/90	48.23	8/14/1991	68.46	-19.55	03/19/98	15.98	32.93	10/06/08	53.97	-5.74	12/02/08	46.99	1.24
	UCD1-025	10/06/95	47.33	8/2/2002	57.65	-10.27	03/19/98	16.84	31.96	10/06/08	53.67	-6.34	12/02/08	45.75	1.58
	UCD1-028	09/05/96	47.41	8/2/2002	66.12	-18.64	03/19/98	18.13	32.32	10/06/08	53.74	-6.33	12/02/08	45.71	1.70
	UCD1-034	10/06/95	55.04	8/2/2002	63.01	-7.31	02/17/98	20.46	35.24	10/06/08	60.40	-5.36	12/02/08	53.10	1.94
	UCD1-049	08/14/02	51.30	9/17/2007	55.15	-3.71	05/02/06	22.40	29.04	**10/06/08**	**57.40**	**-6.10**	12/02/08	49.81	1.49
	UCD1-050	08/13/02	52.22	9/17/2007	56.19	-3.72	05/02/06	23.51	28.96	**10/06/08**	**58.35**	**-6.13**	12/02/08	50.76	1.46
	UCD1-051	08/12/02	51.78	9/17/2007	55.76	-3.75	05/02/06	23.02	28.99	**10/06/08**	**57.90**	**-6.12**	12/02/08	50.41	1.37
	UCD1-052	02/13/04	46.91	9/17/2007	51.25	-3.79	05/08/06	23.12	24.34	**10/06/08**	**53.12**	**-6.21**	12/02/08	45.15	1.76
	UCD1-053	02/13/04	47.00	9/17/2007	51.4	-3.91	05/08/06	21.67	25.82	**10/06/08**	**53.31**	**-6.31**	12/02/08	45.24	1.76
	UCD1-054	02/06/04	48.58	10/13/2005	56.51	-7.46	02/13/04	37.00	11.58	10/06/08	53.98	-5.40	12/02/08	46.84	1.74
	UCD1-055	10/24/07	44.09	12/13/2007	39.36	5.71	12/13/07	39.36	5.71	**10/06/08**	**50.35**	**-6.26**	**12/02/08**	**42.25**	**1.84**
	UCD1-058	11/02/07	47.81	12/13/2007	42.11	5.96	12/13/07	42.11	5.96	**10/06/08**	**53.35**	**-5.54**	**12/02/08**	**46.35**	**1.46**

Table 5. Groundwater Elevation Data - Second Half 2008, Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Water Bearing Zone	Well	Well Installation Date	Measuring Point Elevation (feet above msl)	Lowest Level Prior to 2008			Highest Level Prior to 2008			Third Quarter 2008			Fourth Quarter 2008		
				Date	DTW (feet)	GWE (feet above msl)	Date	DTW (feet)	GWE (feet above msl)	Date	DTW TOC (feet)	GWE (feet above msl)	Date	DTW TOC (feet)	GWE (feet above msl)
HSU-1	UCD1-061	10/02/08	47.46	---	---	---	---	---	---	**10/06/08**	**54.05**	**-6.59**	**12/02/08**	**47.40**	**0.06**
	UCD1-062	10/01/08	49.28	---	---	---	---	---	---	**10/06/08**	**55.35**	**-6.07**	**12/02/08**	**47.30**	**1.98**
	UCD1-063	10/01/08	49.88	---	---	---	---	---	---	**10/06/08**	**57.90**	**-8.02**	**12/02/08**	**50.05**	**-0.17**
	UCD1-064	10/01/08	47.04	---	---	---	---	---	---	**10/06/08**	**53.13**	**-6.09**	**12/02/08**	**45.20**	**1.84**
	UCD1-065	09/30/08	49.91	---	---	---	---	---	---	**10/06/08**	**55.88**	**-5.97**	**12/02/08**	**48.68**	**1.23**
	UCD1-066	10/02/08	48.09	---	---	---	---	---	---	**10/06/08**	**54.05**	**-5.96**	**12/02/08**	**46.58**	**1.51**
HSU-2	UCD2-007	11/05/87	51.24	8/14/1991	71.73	-20.08	03/19/98	19.12	32.53	10/06/08	56.81	-5.57	12/02/08	48.80	2.44
	UCD2-014	11/15/89	51.28	8/14/1991	72.75	-21.03	03/19/98	19.31	32.41	10/06/08	57.04	-5.76	12/02/08	48.98	2.30
	UCD2-015	03/28/90	51.01	8/14/1991	70.92	-19.43	03/19/98	18.70	32.79	10/06/08	56.39	-5.38	12/02/08	48.37	2.64
	UCD2-016	04/03/90	49.21	8/14/1991	69.38	-19.43	03/19/98	17.34	32.61	10/06/08	54.51	-5.30	12/02/08	46.59	2.62
	UCD2-017	04/10/90	51.57	7/19/1991	70.06	-18.23	03/19/98	18.79	33.04	10/06/08	56.41	-4.84	12/02/08	48.50	3.07
	UCD2-026	10/06/95	47.44	8/2/2002	58.47	-10.99	03/19/98	16.76	32.03	10/06/08	53.50	-6.06	12/02/08	45.40	2.04
	UCD2-029	09/04/96	47.48	8/2/2002	58.95	-11.37	03/19/98	18.28	32.15	10/06/08	53.64	-6.16	12/02/08	45.25	2.23
	UCD2-030	09/09/96	47.21	8/2/2002	58.76	-11.56	03/19/98	17.79	32.15	10/06/08	53.47	-6.26	12/02/08	45.25	1.96
	UCD2-031	09/11/96	47.17	8/2/2002	58.6	-11.39	03/19/98	17.83	32.15	10/06/08	53.30	-6.13	12/02/08	45.20	1.97
	UCD2-032	04/02/97	44.77	8/2/2002	57.13	-11.72	03/19/98	13.99	31.43	10/06/08	51.10	-6.33	12/02/08	42.90	1.87
	UCD2-035	10/06/95	55.12	8/2/2002	65.41	-9.7	05/21/06	17.63	38.08	10/06/08	60.85	-5.73	12/02/08	52.70	2.42
	UCD2-036	11/05/97	47.98	8/2/2002	57.66	-9.35	04/21/98	16.63	31.68	10/06/08	53.50	-5.52	12/02/08	45.55	2.43
	UCD2-037	10/20/97	49.22	8/2/2002	58.35	-8.72	03/19/98	16.73	32.90	10/06/08	54.33	-5.11	12/02/08	46.40	2.82
	UCD2-038	10/22/97	56.66	7/20/2001	78.32	-21.12	05/21/06	18.21	38.99	---	---	---	12/02/08	53.95	2.71
	UCD2-039	10/29/97	49.33	7/2/2002	62.72	-13.09	03/19/98	17.52	32.11	10/06/08	55.29	-5.96	12/02/08	47.14	2.19
	UCD2-040	11/07/97	46.49	8/2/2002	58.32	-11.83	04/06/98	17.52	31.44	10/06/08	52.75	-6.26	12/02/08	44.60	1.89
	UCD2-045	11/30/99	46.10	8/2/2002	59.61	-13.28	05/08/06	19.01	27.63	10/06/08	52.73	-6.63	12/02/08	44.40	1.70
	UCD2-046	05/05/00	44.82	8/2/2002	60.61	-18.82	05/08/06	18.68	26.05	10/06/08	51.65	-6.83	12/02/08	43.30	1.52
	UCD2-048	08/29/02	51.38	9/17/2007	55.38	-3.62	05/02/06	23.79	27.97	**10/06/08**	**57.15**	**-5.77**	12/02/08	48.95	2.43
	UCD2-056	11/05/07	44.68	12/13/2007	39.36	5.41	12/13/07	39.36	5.41	**10/06/08**	**50.90**	**-6.22**	**12/02/08**	**42.85**	**1.83**
	UCD2-057	11/02/07	47.41	12/13/2007	41.79	5.62	12/13/07	41.79	5.62	**10/06/08**	**53.75**	**-6.34**	**12/02/08**	**45.60**	**1.81**
	UCD2-059	09/19/08	47.26	---	---	---	---	---	---	**10/06/08**	**53.95**	**-6.69**	**12/02/08**	**45.65**	**1.61**

Table 5. Groundwater Elevation Data - Second Half 2008, Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Water Bearing Zone	Well	Well Installation Date	Measuring Point Elevation (feet above msl)	Lowest Level Prior to 2008			Highest Level Prior to 2008			Third Quarter 2008			Fourth Quarter 2008		
				Date	DTW (feet)	GWE (feet above msl)	Date	DTW (feet)	GWE (feet above msl)	Date	DTW TOC (feet)	GWE (feet above msl)	Date	DTW TOC (feet)	GWE (feet above msl)
HSU-2	UCD2-060	09/24/08	44.96	---	---	---	---	---	---	**10/06/08**	**51.15**	**-6.19**	**12/02/08**	**43.10**	**1.86**
	EW2-01	09/20/96	49.22	8/2/2002	80.63	-31.46	02/17/98	19.49	30.79	10/06/08	55.41	-6.19	12/02/08	47.26	1.96
	IW2-01	10/16/97	48.49	8/17/2001	66.64	-17.25	06/12/03	5.09	44.30	10/06/08	54.56	-6.07	12/02/08	46.55	1.94
HSU-4	UCD4-041	10/10/97	46.62	7/2/2002	73.97	-27.37	03/19/98	18.08	31.27	10/06/08	56.55	-9.93	12/02/08	45.50	1.12
	UCD4-042	11/03/97	46.93	6/2/2000	81.82	-34.6	04/06/98	16.44	30.80	10/06/08	57.05	-10.12	12/02/08	45.80	1.13
	UCD4-043	10/02/97	44.62	6/2/2000	80.27	-35.21	04/06/98	14.71	30.35	10/06/08	55.00	-10.38	12/02/08	43.50	1.12
	UCD4-044	04/07/99	47.35	7/2/2002	74.91	-27.48	05/08/06	27.23	20.72	10/06/08	57.19	-9.84	12/02/08	48.12	-0.77
	UCD4-047	05/20/00	47.07	7/2/2002	78.58	-31.54	05/08/06	25.31	22.07	10/06/08	58.05	-10.98	12/02/08	46.20	0.87

Notes:

--- = not measured
Bold Text = groundwater level is outside the historical range for the well
DTW = depth to water
GWE = groundwater elevation
msl = mean sea level
TOC = top of well casing

Table 6. Effluent Discharge Limits for the Interim Removal Action System – Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Analyte	CWTP	LTPS
Arsenic	8 µg/L	10 µg/L
Barium	700 µg/L	490 µg/L
Boron	---	791 µg/L
Cadmium	6 µg/L	1 µg/L
Carbon-14	---	50 pCi/L
Chloride	---	106 mg/L
Chloroform	420 µg/L	0.5 µg/L
Chromium, hexavalent	59 µg/L	---
Chromium, total	200 µg/L	44.6 µg/L
Lead	21 µg/L	2 µg/L
Manganese	---	50 µg/L
Mercury	prohibited	1.2 µg/L
Nickel	100 µg/L	100 µg/L
Nitrate as nitrogen	---	27.4 mg/L
Sulfate as SO_4	---	250 mg/L
Tritium	---	300 pCi/L
Zinc	470 µg/L	2,000 µg/L

Abbreviations:

CWTP = Limit at discharge point to the sanitary sewer of the campus wastewater treatment plant (UC Davis, 2009)
LTPS = Limit for irrigation use of water in the land treatment pilot study (USEPA, 2001)
µg/L = micrograms per liter
mg/L = milligrams per liter
pCi/L = picoCuries per liter
--- = No limit published

Table 7. 2008 Groundwater IRA Treatment System Operating Log – Laboratory for Energy-Related Health Research/South Campus Disposal Site, University of California, Davis

Date	Operation Time Since 1/2/08 (hours)	System Uptime Since Last Date	Operational Flow Rate from Well Since Last Date (gpm)	Volume Pumped Since 1/2/08 (gallons)	Treatment Effluent Discharged for Irrigation Since 1/2/08 (gallons)	Chloroform Concentration in Treatment Influent[a] (µg/L)	Estimated Chloroform Removal Since 1/2/08 (pounds)
1/2/08	-	-	-	-	-	--	-
1/7/08	41	34%	62	152,753	0	--	0.04
1/17/08	43	1%	0	152,753	0	--	0.04
1/24/08	--	--	--	--	--	25	--
2/22/08	693	75%	69	2,846,578	20	--	0.63
2/28/08	--	--	--	--	--	28	--
3/20/08	1,312	96%	68	5,380,605	--	24	1.18
4/21/08	1,743	56%	67	7,109,828	120,210	51	1.72
5/15/08	--	--	--	--	--	38	--
5/28/08	2,432	78%	73	10,135,481	431,540	--	2.81
6/11/08	2,652	66%	72	11,089,279	603,600	48	3.15
6/23/08	2,938	99%	73	12,340,698	788,770	--	3.45
6/30/08	3,106	100%	72	13,069,971	881,640	--	3.62
7/18/08	3,383	64%	50	13,900,915	1,050,780	--	3.81
7/25/08	3,416	20%	75	14,048,551	1,111,780	8	3.84
7/28/08	3,490	104%	78	14,397,106	1,170,780	--	3.88
8/1/08	3,562	75%	80	14,740,172	1,270,550	--	3.91
8/7/08	3,699	95%	75	15,353,630	1,271,464	--	3.96
8/14/08	3,872	103%	68	16,052,813	1,367,954	--	4.03
8/21/08	4,034	97%	71	16,748,294	1,386,780	--	4.09
8/29/08	--	--	--	--	--	14	--
9/2/08	4,416	132%	51	17,911,903	1,523,679	--	4.19
9/10/08	4,514	51%	131	18,680,152	1,541,414	--	4.26
9/18/08	4,684	89%	57	19,261,112	1,541,412	--	4.31
9/26/08	4,851	87%	48	19,739,428	1,541,780	7	4.35
10/10/08	5,054	60%	60	20,470,654	1,541,780	--	4.40
10/14/08	5,083	31%	65	20,585,925	1,541,414	--	4.41

Table 7. 2008 Groundwater IRA Treatment System Operating Log – Laboratory for Energy-Related Health Research/South Campus Disposal Site, University of California, Davis

10/6/08	--	--	--	--	--	9	--
10/23/08	5,286	94%	63	21,351,288	1,541,780	--	4.52
10/30/08	5,452	99%	67	22,022,858	1,541,780	--	4.61
11/5/08	5,599	102%	67	22,618,061	1,541,780	--	4.70
11/13/08	5,787	98%	67	23,371,738	1,541,160	25	4.81
11/21/08	5,980	100%	66	24,134,378	1,541,780	--	4.94
11/25/08	5,980	0%	51	24,134,984	1,541,413	--	4.94
12/4/08	--	--	--	--	--	17	--
12/19/08	6,450	82%	56	25,724,090	1,541,414	--	5.22
12/24/08	6,570	100%	62	26,172,649	1,542,410	--	5.30
Averages for 2008		**77%**	**66**				
					Total Since System Startup in May 1998:		**135.0**

Notes:
a = Chloroform concentration based on laboratory analysis by SW-846 Method 8260B.

Abbreviations:
- = Not applicable for this monitoring period
-- = Not recorded or collected on this date
gpm = gallons per minute
µg/L = micrograms per liter

Table 8. Estimated Chloroform Removal for 2008 Density-Driven Convection System – Laboratory for Energy-Related Health Research/South Campus Disposal Site, University of California, Davis

DDC Well	Date	C-Casing Chloroform Concentration (µg/L)	B-Casing Chloroform Concentration (µg/L)	Difference in Chloroform Concentrations Between B and C Casing Results Removed (µg/L)	Number of Days Operating[a]	Drawdown (ft)	Estimated Volume of Water Moved from C to B Depth Zones (liters)	Estimated Mass of Chloroform Removed (g)	Estimated Mass of Chloroform Removed (lbs)
DDC-1	9/24/2007	290	6.2	283.8		2.5	-	-	-
	2/26/2008	-	-	-	155	4.6	2,961,066	5,884	12.97
	3/7/2008[b]	3700	9.8	3690.2	-	-	-	-	-
	5/30/2008	-	-	-	94	2.5	1,818,798	3,568	7.87
	9/26/2008	-	-	-	119	-	823,719	1,616	3.56
	10/6/2008	-	-	-	0	0.5	-	-	-
	12/2/2008	-	-	-	0	0.3	-	-	-
	2/12/2009[e]	240	6.5	233.5	-	-	-	-	
								Total DDC-1:	**24.40**
DDC-2	9/24/2007	230	87	143.0		0.0	-	-	-
	2/26/2008	-	-	-	155	2.7	1,148,944	153	0.34
	2/29/2008	130	6.7	123.3	-	-	-	-	-
	5/30/2008	-	-	-	94	-0.1	658,354	61	0.14
	9/26/2008	-	-	-	119	-	(35,673)	(3)	-0.01
	10/6/2008	-	-	-	0	0.4	-	-	-
	12/2/2008	-	-	-	0	-0.1	-	-	-
	2/11/2009	77	14	63.0	-	-	-	-	
								Total DDC-2:	**0.47**
DDC-3	9/24/2007	18	13	5.0		0.6	-	-	-
	2/26/2008	-	-	-	155	0.6	489,991	3	0.01
	3/3/2008[b]	32	23	9.0	-	-	-	-	-
	5/30/2008	-	-	-	94	-0.2	89,659	1	0.00
	9/26/2008	-	-	-	119	-	(81,075)	(1)	0.00
	10/6/2008	-	-	-	0	0.2	-	-	-
	12/2/2008	-	-	-	0	0.0	-	-	-
	2/12/2009[c]	23	10.35	12.7	-	-	-	-	
								Total DDC-3:	**0.01**

Table 8. Estimated Chloroform Removal for 2008 Density-Driven Convection System – Laboratory for Energy-Related Health Research/South Campus Disposal Site, University of California, Davis

DDC Well	Date	C-Casing Chloroform Concentration (µg/L)	B-Casing Chloroform Concentration (µg/L)	Difference in Chloroform Concentrations Between B and C Casing Results Removed (µg/L)	Number of Days Operating[a]	Drawdown (ft)	Estimated Volume of Water Moved from C to B Depth Zones (liters)	Estimated Mass of Chloroform Removed (g)	Estimated Mass of Chloroform Removed (lbs)
DDC-4	9/24/2007	57	43	14.0		1.3	-	-	-
	2/26/2008	-	-	-	155	1.0	984,206	36	0.08
	3/3/2008[c]	140	81.5	58.5	-	-	-	-	-
	5/30/2008	-	-	-	94	0.6	425,240	15	0.03
	9/26/2008	-	-	-	119	-	201,065	7	0.02
	10/6/2008	-	-	-	0	0.1	-	-	-
	12/2/2008	-	-	-	0	0.2	-	-	-
	2/12/2009	27	16	11.0	-	-	-	-	
								Total DDC-4:	**0.13**
DDC-5	9/24/2007	72	1	71.0		4.7	-	-	-
	2/26/2008	-	-	-	155	11.2	6,690,911	477	1.05
	3/3/2008[d]	72	0.5	71.5	-	-	-	-	-
	5/30/2008	-	-	-	94	8.8	5,102,882	288	0.63
	9/26/2008	-	-	-	119	-	2,837,615	160	0.35
	10/6/2008	-	-	-	0	0.0	-	-	-
	12/2/2008	-	-	-	0	0.1	-	-	-
	2/12/2009	43	1.7	41.3	-	-	-	-	
								Total DDC-5:	**2.04**
DDC-6	9/24/2007	18	14	4.0		1.5	-	-	-
	2/26/2008	-	-	-	155	3.1	1,955,740	10	0.02
	3/3/2008	27	21	6.0	-	-	-	-	-
	5/30/2008	-	-	-	94	1.6	1,206,555	14	0.03
	9/26/2008	-	-	-	119	-	518,878	6	0.01
	10/6/2008	-	-	-	0	0.3	-	-	-
	12/2/2008	-	-	-	0	0.0	-	-	-
	2/12/2009	22	5.1	16.9	-	-	-	-	
								Total DDC-6:	**0.07**

Table 8. Estimated Chloroform Removal for 2008 Density-Driven Convection System – Laboratory for Energy-Related Health Research/South Campus Disposal Site, University of California, Davis

DDC Well	Date	C-Casing Chloroform Concentration (µg/L)	B-Casing Chloroform Concentration (µg/L)	Difference in Chloroform Concentrations Between B and C Casing Results Removed (µg/L)	Number of Days Operating[a]	Drawdown (ft)	Estimated Volume of Water Moved from C to B Depth Zones (liters)	Estimated Mass of Chloroform Removed (g)	Estimated Mass of Chloroform Removed (lbs)
								Total Estimated Mass Removed in the Expanded Phase DDC System September 2007 - December 2008:	**27.1**
								Estimated Total of Cumulative Mass Removed by the Expanded DDC System:	***315.3***

Notes:
a = Days operating reflects number of days that the system was running during the time period.
b = The "B" casing sample was collected on February 29, 2008.
c = Result shown for B casing is the average concentration of the primary and duplicate samples collected.
d = Result shown for B casing is half the laboratory reporting limit; no chloroform was detected above the reporting limit of 1 µg/L
e = The "B" casing sample was collected on February 11, 2009.
Abbreviations:
µg/L = micrograms per liter
lbs = pounds

Table 9. Data Validation Requirements for 2008 Laboratory Data—Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Review Item	Checked During Level III Data Validation	Checked During Level IV Data Validation
Case Narrative	X	X
Completeness	X	X
Chain-of-Custody Documentation	X	X
Summary of Results	X	X
Holding Times	X	X
Initial Calibration Data		X
Continuing Calibration Data	X	X
Analytical Sequence		X
Dilutions	X	X
Raw Instrument Data		X
Method Blank Analysis Results	X	X
Calibration Blank Analysis Results		X
Field/Trip Blank Analysis Results	X	X
Surrogate Standard %R	X	X
Laboratory Control Samples - %R	X	X
Matrix Spike – %R	X	X
LCS/LCS Duplicate - RPD	X	X
MS/MS Duplicate - RPD	X	X
Laboratory Replicate - RPD	X	X
Field Duplicate - RPD	X	X

Notes:

Level III data validation for groundwater, density-driven convection, interim removal action and storm water monitoring
Level IV data validation for data gaps investigation sampling per *Feasibility Study Data Gaps Work Plan* (Weiss, 2008)
%R = percent recoveries
RPD = relative percent difference

Table 10. Analytical Completeness by Method for Water Samples Collected in 2008--Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

				Number of Results				Completeness	
Method	Parameter	Samples Analyzed (N+FD)	Analytes per Sample	Total	Results Rejected due to QC Deficiencies	Results Estimated due to QC Deficiencies	Results Estimated due to Trace Quantities	Percent Usable	Percent Quantitative*
A2320B	Alkalinity	23+4	1-4	86	0	0	0	100%	100%
A2540C	Total Dissolved Solids	14+2	1	16	0	0	0	100%	100%
A4500PE	Phosphorus, total (as P)	14+2	1	16	0	0	0	100%	100%
A5310C	Total Organic Carbon	14+2	1	16	0	0	0	100%	100%
BNASIM	1,4-Dioxane	9+1	1	10	0	0	0	100%	100%
CALCFE2	Ferrous Iron (Fe^{+2})	14+2	1	16	0	0	0	100%	100%
EERF C-01	Carbon-14	28+3	1	31	7	9	5	77%	48%
EML A-01-R (M)	Thorium and Uranium	8+2	1-7	60	0	0	10	100%	100%
EPA 130.2	Hardness as $CaCO_3$	13+2	1	15	0	0	0	100%	100%
EPA 160.2	Total Suspended Solids	2	1	2	0	0	0	100%	100%
EPA 1625C (M)	1,4-Dioxane	15+2	1	17	0	0	0	100%	100%
EPA 1631	Low-Level Mercury	2	1	2	0	0	0	100%	100%
EPA 200.8	Uranium, Total	18+3	1	21	0	0	0	100%	100%
EPA 300.0	Anions & Nitrate as N	60+9	1-3	117	0	4	0	100%	97%
EPA 314.0	Perchlorate	8	1	8	0	0	0	100%	100%
EPA 365.2	Phosphorus, total (as PO_4)	14+2	1	16	0	0	0	100%	100%
EPA 415.2	Dissolved Organic Carbon	14+2	1	16	0	0	0	100%	100%
EPA 600.4	Aquatic Toxicity	2+2	1	4	0	0	0	100%	100%
EPA 900.0 (M)	Gross Alpha/Beta	8+2	2	20	0	6	7	100%	70%
EPA 901.1 (M)	Gamma Spectroscopy	8+2	1-14	130	0	2	35	100%	98%
EPA 903.0 (M)	Radium-226	13+2	1	15	0	0	6	100%	100%
EPA 905.0 (M)	Strontium-90	8+2	1	10	0	0	2	100%	100%
EPA 906.0 (M)	Tritium	26+3	1	29	0	2	4	100%	93%
EPA SW6010B	Metals by ICP/AES	78+10	1-25	290	0	0	0	100%	100%
EPA SW6020	Metals by ICP/MS	18+3	1-21	149	0	0	3	100%	100%
EPA SW7199	Chromium, hexavalent	14+2	1	16	0	0	0	100%	100%
EPA SW7470A	Mercury	8+2	1	10	0	0	0	100%	100%
EPA SW8081A	Pesticides	8+2	19	190	0	0	0	100%	100%
EPA SW8082	Polychlorinated Biphenyls	8+2	7	70	0	0	0	100%	100%
EPA SW8260B	Volatile Organic Compounds	64+8	41-81	4604	26	6	20	99%	99.9%
EPA SW9070	Oil and Grease	2	1	2	0	0	0	100%	100%
RSK175	Carbon Dioxide	19+3	1	22	0	0	0	100%	100%
			Total:	6026	33	29	92	99.5%	99.0%

Notes:
* Estimations due solely to results less than Reporting Limits do not affect the calculated completeness
Calculations do not include field or laboratory quality control samples, except field duplicates
FD = field duplicate samples
N = normal environmental samples

Table 11. Chloroform in Groundwater Monitoring Well Samples - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Water Bearing Zone	Well	Well Installation Date	Maximum Prior to 2008		First Quarter 2008		Third Quarter 2008		Fourth Quarter 2008	
			Date	Concentration (µg/L)	Date	Concentration (µg/L)	Date	Concentration (µg/L)	Date	Concentration (µg/L)
HSU-1	UCD1-001	10/09/87	05/26/93	1.6	---	---	---	---	---	---
	UCD1-003	10/23/87	03/15/07	ND	---	---	---	---	---	---
	UCD1-004	10/14/87	05/17/94	4.4	---	---	---	---	---	---
	UCD1-005	10/22/87	03/15/07	7.78	---	---	---	---	---	---
	UCD1-006	10/21/87	03/26/07	0.208	---	---	---	---	---	---
	UCD1-008	11/03/87	03/20/07	0.36	---	---	---	---	---	---
	UCD1-009	11/04/87	03/22/07	33.4	---	---	---	---	---	---
	UCD1-010	10/11/89	08/28/95	5.1	---	---	---	---	---	---
	UCD1-011	10/17/89	02/10/05	5.22	02/26/08	3.1	10/08/08	3.9	---	---
	UCD1-012	10/19/89	11/20/91	21,000	02/27/08	11	10/09/08	35	---	---
	UCD1-013	10/26/89	02/23/95	65	---	---	---	---	---	---
	UCD1-018	10/02/90	10/31/90	10.3	---	---	---	---	---	---
	UCD1-019	09/26/90	03/22/07	ND	---	---	---	---	---	---
	UCD1-020	10/05/90	03/15/07	ND	---	---	---	---	---	---
	UCD1-021	10/10/90	02/05/91	3.3	---	---	---	---	---	---
	UCD1-022	10/23/90	08/07/91	1.6	---	---	---	---	---	---
	UCD1-023	10/15/90	11/30/93	1	---	---	---	---	---	---
	UCD1-024	10/22/90	05/14/91	3.5	---	---	---	---	---	---
	UCD1-025	10/06/95	08/01/00	3.3	02/27/08	<1	10/09/08	0.9	---	---
	UCD1-027Z1	10/06/95	12/05/95	1.6	---	---	---	---	---	---
	UCD1-027Z2	10/06/95	12/06/95	5.6	---	---	---	---	---	---
	UCD1-027Z3	10/06/95	12/07/95	4.6	---	---	---	---	---	---
	UCD1-028	09/05/96	03/03/98	0.9	---	---	---	---	---	---
	UCD1-034	10/06/95	03/19/07	ND	---	---	---	---	---	---
	UCD1-049	08/14/02	08/28/02	2,970	02/27/08	67	10/10/08	41	---	---
	UCD1-050	08/13/02	04/08/04	3,140	02/27/08	160	10/09/08	440	---	---
	UCD1-051	08/12/02	01/13/04	2,780	02/27/08	460	10/09/08	750	---	---
	UCD1-052	02/13/04	05/02/05	3.7	---	---	---	---	---	---
	UCD1-053	02/13/04	06/02/06	0.155	---	---	---	---	---	---
	UCD1-054	02/06/04	06/02/06	0.281	---	---	---	---	---	---
	UCD1-055	10/24/07	---	---	**02/01/08**	**<1**	**10/15/08**	**<0.5**	---	---
	UCD1-058	11/02/07	---	---	**02/01/08**	**<1**	**10/15/08**	**<0.5**	---	---
	UCD1-061	10/02/08	---	---	---	---	**10/14/08**	**<0.5**	**12/04/08**	**0.25 J**
	UCD1-062	10/01/08	---	---	---	---	**10/16/08**	**<0.5**	**12/03/08**	**<0.50**
	UCD1-063	10/01/08	---	---	---	---	---	---	---	---
	UCD1-064	10/01/08	---	---	---	---	**10/16/08**	**<0.5**	**12/03/08**	**<0.50**
	UCD1-065	09/30/08	---	---	---	---	**10/16/08**	**<0.5**	**12/03/08**	**<0.50**
	UCD1-066	10/02/08	---	---	---	---	**10/16/08**	**54**	**12/04/08**	**48**
	DDC-1A	10/27/00	04/13/04	144	02/29/08	9	---	---	---	---
	DDC-1B	10/27/00	12/07/00	5,720	02/29/08	9.8	---	---	---	---
	DDC-1C	10/27/00	06/18/03	7,950	03/07/08	3,700	---	---	---	---
	DDC-2A	09/16/02	05/09/06	336	02/29/08	12	---	---	---	---
	DDC-2B	09/16/02	11/15/02	1,450	02/29/08	6.7	---	---	---	---
	DDC-2C	09/16/02	11/15/02	1,810	02/29/08	140	---	---	---	---
	DDC-3A	09/18/02	04/13/04	280	---	---	---	---	---	---
	DDC-3B	09/18/02	11/15/02	1,260	02/29/08	23	---	---	---	---
	DDC-3C	09/18/02	11/15/02	1,180	03/03/08	32	---	---	---	---
	DDC-4A	09/19/02	04/13/04	527	03/03/08	90	---	---	---	---
	DDC-4B	09/19/02	11/15/02	3,720	03/03/08	100 J	---	---	---	---
	DDC-4C	09/19/02	11/15/02	5,600	03/03/08	140	---	---	---	---

Table 11. Chloroform in Groundwater Monitoring Well Samples - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Water Bearing Zone	Well	Well Installation Date	Maximum Prior to 2008		First Quarter 2008		Third Quarter 2008		Fourth Quarter 2008	
			Date	Concentration (µg/L)	Date	Concentration (µg/L)	Date	Concentration (µg/L)	Date	Concentration (µg/L)
HSU-1	DDC-5A	09/20/02	04/13/04	8.4	03/03/08	<1	---	---	---	---
	DDC-5B	09/20/02	11/18/02	402	03/03/08	<1	---	---	---	---
	DDC-5C	09/20/02	08/10/05	2,900	03/03/08	72	---	---	---	---
	DDC-6A	09/13/02	04/13/04	213	03/03/08	19	---	---	---	---
	DDC-6B	09/13/02	11/15/02	556	03/03/08	21	---	---	---	---
	DDC-6C	09/13/02	11/15/02	1,250	03/03/08	27	---	---	---	---
HSU-2	UCD2-007	11/05/87	05/25/05	1.3	---	---	---	---	---	---
	UCD2-014	11/15/89	11/01/90	6	---	---	---	---	---	---
	UCD2-015	03/28/90	08/23/95	0.79	---	---	---	---	---	---
	UCD2-016	04/03/90	08/23/95	3.8	---	---	---	---	---	---
	UCD2-017	04/10/90	02/28/94	0.5	---	---	---	---	---	---
	UCD2-026	10/06/95	03/04/98	68.5	---	---	---	---	---	---
	UCD2-029	09/04/96	10/07/98	329	02/27/08	61	10/09/08	8.3	---	---
	UCD2-030	09/09/96	07/25/06	91.6	02/27/08	12	10/13/08	3.2	---	---
	UCD2-031	09/11/96	11/25/97	48	02/27/08	<1	10/10/08	<0.5	---	---
	UCD2-032	04/02/97	11/21/97	69	03/07/08	2.5 J	10/10/08	<0.5	---	---
	UCD2-035	10/06/95	02/22/96	3.8	---	---	---	---	---	---
	UCD2-036	11/05/97	10/05/98	0.5	---	---	---	---	---	---
	UCD2-037	10/20/97	11/04/98	0.3	---	---	---	---	---	---
	UCD2-038	10/22/97	12/05/01	0.72	---	---	---	---	---	---
	UCD2-039	10/29/97	08/04/98	4.2	---	---	---	---	---	---
	UCD2-040	11/07/97	06/01/98	113	03/07/08	6.5	10/13/08	1.8	---	---
	UCD2-045	11/30/99	08/13/02	6.8	---	---	---	---	---	---
	UCD2-046	05/05/00	04/09/03	2.2	03/07/08	<1	10/13/08	0.7	---	---
	UCD2-048	08/29/02	02/07/06	1,380	02/27/08	1.3	10/14/08	4.7*	12/05/08	0.71*
	UCD2-056	11/05/07	---	---	**02/01/08**	**<1**	**10/15/08**	**<0.5**	---	---
	UCD2-057	11/02/07	---	---	**02/01/08**	**<1**	**10/15/08**	**<0.5**	---	---
	UCD2-059	09/19/08	---	---	---	---	---	---	---	---
	UCD2-060	09/24/08	---	---	---	---	---	---	---	---
HSU-4	UCD4-041	10/10/97	06/01/98	33.3	---	---	---	---	---	---
	UCD4-042	11/03/97	03/05/98	58.9	---	---	---	---	---	---
	UCD4-043	10/02/97	06/02/98	35.5	---	---	---	---	---	---
	UCD4-044	04/07/99	03/16/07	ND	---	---	---	---	---	---
	UCD4-047	05/20/00	11/07/01	5.7	---	---	---	---	---	---

Notes:

2008 samples analyzed for Chloroform by US EPA Method 8260B.

* = Well UCD2-048 was also sampled on 9/26/08 and 11/13/08. The reported results for chloroform were 11 µg/L and 0.5 J µg/L respectively
--- = not sampled
<n = not detected at or above laboratory reporting limit of n µg/L
Bold Text = concentration exceeds historical maximum concentration or represents first sampling of the well
ND = not detected
J = the result is qualified as an estimated concentration or amount
µg/L = micrograms per liter

Table 12. Total Chromium (filtered) in Groundwater Monitoring Well Samples - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Water Bearing Zone	Well	Well Installation Date	Maximum Prior to 2008		First Quarter 2008		Third Quarter 2008		Fourth Quarter 2008	
			Date	Concentration (µg/L)	Date	Concentration (µg/L)	Date	Concentration (µg/L)	Date	Concentration (µg/L)
HSU-1	UCD1-001	10/09/87	02/24/92	80	---	---	---	---	---	---
	UCD1-003	10/23/87	03/15/07	25.3	---	---	---	---	---	---
	UCD1-004	10/14/87	09/01/93	50.6	---	---	---	---	---	---
	UCD1-005	10/22/87	03/15/07	50.9	---	---	---	---	---	---
	UCD1-006	10/21/87	03/26/07	38.8	---	---	---	---	---	---
	UCD1-008	11/03/87	03/20/07	73.1	---	---	---	---	---	---
	UCD1-009	11/04/87	03/22/07	113	---	---	---	---	---	---
	UCD1-010	10/11/89	05/24/93	150	03/03/08	35.9	10/15/08	47	---	---
	UCD1-011	10/17/89	05/20/93	450	02/26/08	94.8	10/08/08	160	12/03/08	150
	UCD1-012	10/19/89	05/24/93	280	02/27/08	117	10/09/08	130	12/03/08	139
	UCD1-013	10/26/89	05/20/93	170	02/26/08	13.9	10/07/08	68	---	---
	UCD1-018	10/02/90	08/03/92	50	---	---	10/08/08	8.0	12/05/08	7.01
	UCD1-019	09/26/90	02/20/92	300	02/26/08	137	10/09/08	210	---	---
	UCD1-020	10/05/90	11/18/91	110	---	---	---	---	---	---
	UCD1-021	10/10/90	08/10/92	130	02/26/08	<5	10/09/08	72	---	---
	UCD1-022	10/23/90	05/25/93	50	---	---	---	---	---	---
	UCD1-023	10/15/90	11/18/92	110	---	---	---	---	---	---
	UCD1-024	10/22/90	08/06/91	90	---	---	---	---	---	---
	UCD1-025	10/06/95	02/22/96	392	02/27/08	50.4	10/09/08	75	---	---
	UCD1-027Z1	10/06/95	05/22/06	40.8	---	---	---	---	---	---
	UCD1-027Z2	10/06/95	12/06/95	4.7	---	---	---	---	---	---
	UCD1-027Z3	10/06/95	02/28/97	5.1	---	---	---	---	---	---
	UCD1-028	09/05/96	01/04/00	613	02/27/08	452	10/08/08	490	12/04/08	425
	UCD1-034	10/06/95	02/12/97	7.3	---	---	---	---	---	---
	UCD1-049	08/14/02	10/14/03	144	---	---	---	---	---	---
	UCD1-050	08/13/02	10/14/03	156	---	---	---	---	---	---
	UCD1-051	08/12/02	10/14/03	138	02/27/08	87.9	10/09/08	120	---	---
	UCD1-052	02/13/04	09/19/07	205	03/03/08	188	10/09/08	170	---	---
	UCD1-053	02/13/04	10/28/05	448	02/27/08	394	10/13/08	410	---	---
	UCD1-054	02/06/04	06/15/06	13	---	---	---	---	---	---
	UCD1-055	10/24/07	12/03/07	29.9	**02/01/08**	**30.3**	**10/15/08**	**38**	**12/05/08**	**41.5**
	UCD1-058	11/02/07	12/03/07	29.8	02/01/08	22.1	**10/15/08**	**63**	**12/04/08**	**64.1**
	UCD1-061	10/02/08	---	---	---	---	**10/14/08**	**65**	---	---
	UCD1-062	10/01/08	---	---	---	---	**10/16/08**	**120**	**12/03/08**	**123**
	UCD1-063	10/01/08	---	---	---	---	**10/14/08**	**29**	**12/03/08**	**25.1**
	UCD1-064	10/01/08	---	---	---	---	**10/16/08**	**40**	**12/03/08**	**38.2**
	UCD1-065	09/30/08	---	---	---	---	**10/16/08**	**67**	**12/03/08**	**79.6**
	UCD1-066	10/02/08	---	---	---	---	**10/16/08**	**73**	**12/04/08**	**71.4**
	DDC-1A	10/27/00	03/21/01	139	---	---	---	---	---	---
	DDC-1B	10/27/00	03/21/01	138	---	---	---	---	---	---
	DDC-1C	10/27/00	03/21/01	138	---	---	---	---	---	---
	DDC-2A	09/16/02	---	---	---	---	---	---	---	---
	DDC-2B	09/16/02	---	---	---	---	---	---	---	---
	DDC-2C	09/16/02	---	---	---	---	---	---	---	---
	DDC-3A	09/18/02	---	---	---	---	---	---	---	---
	DDC-3B	09/18/02	---	---	---	---	---	---	---	---
	DDC-3C	09/18/02	---	---	---	---	---	---	---	---
	DDC-4A	09/19/02	---	---	---	---	---	---	---	---
	DDC-4B	09/19/02	---	---	---	---	---	---	---	---
	DDC-4C	09/19/02	---	---	---	---	---	---	---	---

Table 12. Total Chromium (filtered) in Groundwater Monitoring Well Samples - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Water Bearing Zone	Well	Well Installation Date	Maximum Prior to 2008		First Quarter 2008		Third Quarter 2008		Fourth Quarter 2008	
			Date	Concentration (µg/L)	Date	Concentration (µg/L)	Date	Concentration (µg/L)	Date	Concentration (µg/L)
HSU-1	DDC-5A	09/20/02	---	---	---	---	---	---	---	---
	DDC-5B	09/20/02	---	---	---	---	---	---	---	---
	DDC-5C	09/20/02	---	---	---	---	---	---	---	---
	DDC-6A	09/13/02	---	---	---	---	---	---	---	---
	DDC-6B	09/13/02	---	---	---	---	---	---	---	---
	DDC-6C	09/13/02	---	---	---	---	---	---	---	---
HSU-2	UCD2-007	11/05/87	05/24/93	120	---	---	---	---	---	---
	UCD2-014	11/15/89	05/20/93	110	02/26/08	<5	10/16/08	33	---	---
	UCD2-015	03/28/90	11/08/90	70	---	---	---	---	---	---
	UCD2-016	04/03/90	11/09/90	150	---	---	---	---	---	---
	UCD2-017	04/10/90	11/09/90	50	---	---	---	---	---	---
	UCD2-026	10/06/95	05/03/99	41.7	02/27/08	<5	10/10/08	36	---	---
	UCD2-029	09/04/96	08/01/00	38.3	02/27/08	34.1	**10/09/08**	**48**	---	---
	UCD2-030	09/09/96	04/07/03	29.1	02/27/08	22.7	**10/13/08**	**36**	---	---
	UCD2-031	09/11/96	09/19/07	31.3	02/27/08	31.1	**10/10/08**	**47**	---	---
	UCD2-032	04/02/97	08/12/02	58.9	---	---	---	---	---	---
	UCD2-035	10/06/95	05/04/00	21.2	---	---	---	---	---	---
	UCD2-036	11/05/97	10/18/01	40.1	---	---	---	---	---	---
	UCD2-037	10/20/97	05/15/01	40.3	---	---	---	---	---	---
	UCD2-038	10/22/97	01/05/00	27	---	---	---	---	---	---
	UCD2-039	10/29/97	09/07/00	30.5	---	---	---	---	---	---
	UCD2-040	11/07/97	08/01/00	54	02/28/08	45.1	10/13/08	47 *	12/05/08	46.7
	UCD2-045	11/30/99	04/09/03	61.2	---	---	---	---	---	---
	UCD2-046	05/05/00	03/19/07	72	---	---	10/13/08	58	12/05/08	63.1
	UCD2-048	08/29/02	04/08/04	22.7	---	---	**10/14/08**	**34**	**12/05/08**	**32.2**
	UCD2-056	11/05/07	12/03/07	77.5	02/01/08	73.2	**10/15/08**	**88**	**12/05/08**	**92.1**
	UCD2-057	11/02/07	12/03/07	46.9	02/01/08	44.6	10/15/08	46	12/05/08	45.7
	UCD2-059	09/19/08	---	---	---	---	**10/15/08**	**61**	**12/05/08**	**58.7**
	UCD2-060	09/24/08	---	---	---	---	**10/15/08**	**47**	**12/04/08**	**46.0**
HSU-4	UCD4-041	10/10/97	03/14/07	26.5	---	---	---	---	---	---
	UCD4-042	11/03/97	05/15/01	37.6	---	---	---	---	---	---
	UCD4-043	10/02/97	05/12/99	33.8	---	---	---	---	---	---
	UCD4-044	04/07/99	05/26/06	31.7	---	---	---	---	---	---
	UCD4-047	05/20/00	05/18/06	39.9	---	---	---	---	---	---

Notes:

Total chromium generally analyzed by US EPA Method 6010 and filtered before analysis.

* = Three samples were collected from well UCD2-04 on 8/27/08. The reported results for chromium in these additional samples were 33 µg/L, 31 µg/L and 26 µg/L.
--- = not sampled
<n = not detected at or above laboratory reporting limit of n µg/L
Bold Text = concentration exceeds historical maximum concentration or represents the first sampling of the well
µg/L = micrograms per liter

Table 13. Nitrate as Nitrogen in Groundwater Monitoring Well Samples - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Water Bearing Zone	Well	Well Installation Date	Maximum Prior to 2008		First Quarter 2008		Third Quarter 2008		Fourth Quarter 2008	
			Date	Concentration (mg/L)	Date	Concentration (mg/L)	Date	Concentration (mg/L)	Date	Concentration (mg/L)
HSU-1	UCD1-001	10/09/87	05/19/92	18.7	---	---	---	---	---	---
	UCD1-003	10/23/87	03/15/07	8.66	---	---	---	---	---	---
	UCD1-004	10/14/87	05/26/93	10.3	---	---	---	---	---	---
	UCD1-005	10/22/87	03/15/07	18.3	---	---	---	---	---	---
	UCD1-006	10/21/87	03/26/07	46.1	---	---	---	---	---	---
	UCD1-008	11/03/87	03/20/07	13.6	---	---	---	---	---	---
	UCD1-009	11/04/87	03/22/07	77.4	---	---	---	---	---	---
	UCD1-010	10/11/89	11/18/97	47.3	03/03/08	17	10/15/08	9.3	---	---
	UCD1-011	10/17/89	03/16/07	36.4	**02/26/08**	**37**	**10/08/08**	**37**	---	---
	UCD1-012	10/19/89	10/13/04	159	---	---	10/09/08	66	---	---
	UCD1-013	10/26/89	10/12/04	20.3	02/26/08	6.8	10/07/08	6.2	---	---
	UCD1-018	10/02/90	02/14/96	27	---	---	10/08/08	3.6	---	---
	UCD1-019	09/26/90	03/22/07	34.6	02/26/08	30	10/09/08	32	---	---
	UCD1-020	10/05/90	11/01/90	51.3	---	---	---	---	---	---
	UCD1-021	10/10/90	02/23/98	64	02/26/08	11	10/09/08	23	---	---
	UCD1-022	10/23/90	05/23/05	17.7	---	---	---	---	---	---
	UCD1-023	10/15/90	05/25/93	12.3	---	---	---	---	---	---
	UCD1-024	10/22/90	02/23/98	99.8	---	---	10/08/08	11	---	---
	UCD1-025	10/06/95	07/06/04	70	02/27/08	10	10/09/08	23	---	---
	UCD1-027Z1	10/06/95	08/04/06	28.6	---	---	---	---	---	---
	UCD1-027Z2	10/06/95	08/04/06	23.4	---	---	---	---	---	---
	UCD1-027Z3	10/06/95	05/03/05	8.74	---	---	---	---	---	---
	UCD1-028	09/05/96	08/09/05	67.2	02/27/08	60	10/14/08	67	---	---
	UCD1-034	10/06/95	03/19/07	1.91	---	---	---	---	---	---
	UCD1-049	08/14/02	10/19/05	75	---	---	---	---	---	---
	UCD1-050	08/13/02	10/13/04	186	02/27/08	67	10/09/08	78	---	---
	UCD1-051	08/12/02	10/13/04	159	02/27/08	54	10/09/08	73	---	---
	UCD1-052	02/13/04	06/01/06	57.5	**03/03/08**	**64**	**10/09/08**	**63**	---	---
	UCD1-053	02/13/04	09/19/07	39	02/27/08	39	**10/13/08**	**42**	---	---
	UCD1-054	02/06/04	09/20/07	21	**03/03/08**	**34**	10/15/08	13	---	---
	UCD1-055	10/24/07	---	---	**02/01/08**	**15**	**10/15/08**	**17**	---	---
	UCD1-058	11/02/07	---	---	**02/01/08**	**2.5**	**10/15/08**	**16**	---	---
	UCD1-061	10/02/08	---	---	---	---	**10/14/08**	**9.3**	**12/04/08**	**9.5 J**
	UCD1-062	10/01/08	---	---	---	---	**10/16/08**	**27**	**12/03/08**	**28 J**
	UCD1-063	10/01/08	---	---	---	---	**10/14/08**	**1.3**	---	---
	UCD1-064	10/01/08	---	---	---	---	**10/16/08**	**0.65**	**12/03/08**	**0.74**
	UCD1-065	09/30/08	---	---	---	---	**10/16/08**	**3.9**	**12/03/08**	**4.5**
	UCD1-066	10/02/08	---	---	---	---	**10/16/08**	**13**	**12/04/08**	**12 J**
	DDC-1A	10/27/00	12/27/00	87.5	---	---	---	---	---	---
	DDC-1B	10/27/00	12/20/00	120	---	---	---	---	---	---
	DDC-1C	10/27/00	12/27/00	85.6	---	---	---	---	---	---
	DDC-2A	09/16/02	---	---	---	---	---	---	---	---
	DDC-2B	09/16/02	---	---	---	---	---	---	---	---
	DDC-2C	09/16/02	---	---	---	---	---	---	---	---
	DDC-3A	09/18/02	---	---	---	---	---	---	---	---
	DDC-3B	09/18/02	---	---	---	---	---	---	---	---
	DDC-3C	09/18/02	---	---	---	---	---	---	---	---
	DDC-4A	09/19/02	---	---	---	---	---	---	---	---
	DDC-4B	09/19/02	---	---	---	---	---	---	---	---
	DDC-4C	09/19/02	---	---	---	---	---	---	---	---

Table 13. Nitrate as Nitrogen in Groundwater Monitoring Well Samples - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Water Bearing Zone	Well	Well Installation Date	Maximum Prior to 2008		First Quarter 2008		Third Quarter 2008		Fourth Quarter 2008	
			Date	Concentration (mg/L)	Date	Concentration (mg/L)	Date	Concentration (mg/L)	Date	Concentration (mg/L)
HSU-1	DDC-5A	09/20/02	---	---	---	---	---	---	---	---
	DDC-5B	09/20/02	---	---	---	---	---	---	---	---
	DDC-5C	09/20/02	---	---	---	---	---	---	---	---
	DDC-6A	09/13/02	---	---	---	---	---	---	---	---
	DDC-6B	09/13/02	---	---	---	---	---	---	---	---
	DDC-6C	09/13/02	---	---	---	---	---	---	---	---
HSU-2	UCD2-007	11/05/87	05/20/91	37.4	02/27/08	13	10/09/08	16	---	---
	UCD2-014	11/15/89	08/21/97	20.3	02/26/08	2.6	10/16/08	5.5	---	---
	UCD2-015	03/28/90	11/02/00	10	---	---	---	---	---	---
	UCD2-016	04/03/90	08/30/94	15	---	---	---	---	---	---
	UCD2-017	04/10/90	05/08/02	3.89	---	---	---	---	---	---
	UCD2-026	10/06/95	05/03/99	14.7	---	---	---	---	---	---
	UCD2-029	09/04/96	07/05/00	15.2	02/27/08	10	10/09/08	11	---	---
	UCD2-030	09/09/96	02/05/01	10.2	02/27/08	6.9	10/13/08	8.7	---	---
	UCD2-031	09/11/96	04/03/02	8.31	---	---	---	---	---	---
	UCD2-032	04/02/97	08/27/97	11.5	---	---	---	---	---	---
	UCD2-035	10/06/95	05/04/00	7.72	---	---	---	---	---	---
	UCD2-036	11/05/97	10/07/99	11	---	---	---	---	---	---
	UCD2-037	10/20/97	04/06/99	5.17	---	---	---	---	---	---
	UCD2-038	10/22/97	09/05/00	9.58	---	---	---	---	---	---
	UCD2-039	10/29/97	02/05/01	9.88	---	---	---	---	---	---
	UCD2-040	11/07/97	06/01/98	10.5	---	---	**10/13/08**	**12**	---	---
	UCD2-045	11/30/99	11/06/01	10.9	---	---	---	---	---	---
	UCD2-046	05/05/00	03/19/07	12.9	---	---	**10/13/08**	**15**	---	---
	UCD2-048	08/29/02	04/08/04	6.37	02/27/08	6.3	**10/14/08**	**11**	---	---
	UCD2-056	11/05/07	---	---	**02/01/08**	**11**	**10/15/08**	**12**	---	---
	UCD2-057	11/02/07	---	---	**02/01/08**	**7.6**	**10/15/08**	**7.1**	---	---
	UCD2-059	09/19/08	---	---	---	---	**10/15/08**	**11**	---	---
	UCD2-060	09/24/08	---	---	---	---	**10/15/08**	**5.9**	---	---
HSU-4	UCD4-041	10/10/97	08/27/98	5.2	---	---	---	---	---	---
	UCD4-042	11/03/97	03/05/98	7.02	---	---	---	---	---	---
	UCD4-043	10/02/97	06/02/98	5.31	---	---	---	---	---	---
	UCD4-044	04/07/99	05/26/06	2.84	---	---	---	---	---	---
	UCD4-047	05/20/00	05/18/06	9.19	---	---	---	---	---	---

Notes:

Nitrate generally analyzed by US EPA Method E300.
--- = not sampled
<n = not detected at or above laboratory reporting limit of n mg/L
Bold Text = concentration exceeds historical maximum concentration or represents the first sampling of the well
J = the result is qualified as an estimated concentration or amount
mg/L = milligrams per liter

Table 14. Total Dissolved Solids in Groundwater Monitoring Well Samples - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Water Bearing Zone	Well	Well Installation Date	Maximum Prior to 2008		First Quarter 2008		Third Quarter 2008		Fourth Quarter 2008	
			Date	Concentration (mg/L)	Date	Concentration (mg/L)	Date	Concentration (mg/L)	Date	Concentration (mg/L)
HSU-1	UCD1-001	10/09/87	05/19/92	906	---	---	---	---	---	---
	UCD1-003	10/23/87	03/15/07	394	---	---	---	---	---	---
	UCD1-004	10/14/87	05/15/91	792	---	---	---	---	---	---
	UCD1-005	10/22/87	03/15/07	724	---	---	---	---	---	---
	UCD1-006	10/21/87	03/26/07	756	---	---	---	---	---	---
	UCD1-008	11/03/87	03/20/07	1,110	---	---	---	---	---	---
	UCD1-009	11/04/87	03/22/07	1,150	---	---	---	---	---	---
	UCD1-010	10/11/89	11/18/97	1,550	---	---	---	---	---	---
	UCD1-011	10/17/89	05/21/91	9,190	---	---	10/08/08	930	---	---
	UCD1-012	10/19/89	05/13/92	2,451	---	---	10/09/08	1,180	---	---
	UCD1-013	10/26/89	08/30/95	1,200	---	---	---	---	---	---
	UCD1-018	10/02/90	09/07/00	2,450	---	---	10/08/08	420	---	---
	UCD1-019	09/26/90	05/04/05	1,150	---	---	---	---	---	---
	UCD1-020	10/05/90	11/01/90	920	---	---	---	---	---	---
	UCD1-021	10/10/90	02/23/98	1,090	---	---	---	---	---	---
	UCD1-022	10/23/90	08/24/98	894	---	---	---	---	---	---
	UCD1-023	10/15/90	05/24/95	690	---	---	---	---	---	---
	UCD1-024	10/22/90	05/24/95	1,100	---	---	---	---	---	---
	UCD1-025	10/06/95	02/22/96	910	---	---	---	---	---	---
	UCD1-027Z1	10/06/95	12/05/95	940	---	---	---	---	---	---
	UCD1-027Z2	10/06/95	08/04/06	774	---	---	---	---	---	---
	UCD1-027Z3	10/06/95	11/25/96	680	---	---	---	---	---	---
	UCD1-028	09/05/96	04/07/03	1,270	---	---	**10/08/08**	**1,370**	---	---
	UCD1-034	10/06/95	11/20/96	640	---	---	---	---	---	---
	UCD1-049	08/14/02	10/14/03	1,500	---	---	---	---	---	---
	UCD1-050	08/13/02	10/14/03	1,990	---	---	---	---	---	---
	UCD1-051	08/12/02	10/14/03	1,760	---	---	---	---	---	---
	UCD1-052	02/13/04	03/16/07	1,060	---	---	---	---	---	---
	UCD1-053	02/13/04	06/02/06	899	---	---	---	---	---	---
	UCD1-054	02/06/04	06/02/06	1,070	---	---	---	---	---	---
	UCD1-055	10/24/07	---	---	---	---	---	---	---	---
	UCD1-058	11/02/07	---	---	---	---	**10/15/08**	**840**	---	---
	UCD1-061	10/02/08	---	---	---	---	**10/14/08**	**800**	---	---
	UCD1-062	10/01/08	---	---	---	---	**10/16/08**	**1,150**	---	---
	UCD1-063	10/01/08	---	---	---	---	**10/14/08**	**460**	---	---
	UCD1-064	10/01/08	---	---	---	---	---	---	---	---
	UCD1-065	09/30/08	---	---	---	---	---	---	---	---
	UCD1-066	10/02/08	---	---	---	---	---	---	---	---
	DDC-1A	10/27/00	---	---	---	---	---	---	---	---
	DDC-1B	10/27/00	---	---	---	---	---	---	---	---
	DDC-1C	10/27/00	---	---	---	---	---	---	---	---
	DDC-2A	09/16/02	---	---	---	---	---	---	---	---
	DDC-2B	09/16/02	---	---	---	---	---	---	---	---
	DDC-2C	09/16/02	---	---	---	---	---	---	---	---
	DDC-3A	09/18/02	---	---	---	---	---	---	---	---
	DDC-3B	09/18/02	---	---	---	---	---	---	---	---
	DDC-3C	09/18/02	---	---	---	---	---	---	---	---

Table 14. Total Dissolved Solids in Groundwater Monitoring Well Samples - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Water Bearing Zone	Well	Well Installation Date	Maximum Prior to 2008		First Quarter 2008		Third Quarter 2008		Fourth Quarter 2008	
			Date	Concentration (mg/L)	Date	Concentration (mg/L)	Date	Concentration (mg/L)	Date	Concentration (mg/L)
HSU-1	DDC-4A	09/19/02	---	---	---	---	---	---	---	---
	DDC-4B	09/19/02	---	---	---	---	---	---	---	---
	DDC-4C	09/19/02	---	---	---	---	---	---	---	---
	DDC-5A	09/20/02	---	---	---	---	---	---	---	---
	DDC-5B	09/20/02	---	---	---	---	---	---	---	---
	DDC-5C	09/20/02	---	---	---	---	---	---	---	---
	DDC-6A	09/13/02	---	---	---	---	---	---	---	---
	DDC-6B	09/13/02	---	---	---	---	---	---	---	---
	DDC-6C	09/13/02	---	---	---	---	---	---	---	---
HSU-2	UCD2-007	11/05/87	05/13/92	786	---	---	---	---	---	---
	UCD2-014	11/15/89	05/23/05	936	---	---	---	---	---	---
	UCD2-015	03/28/90	05/13/92	631	---	---	---	---	---	---
	UCD2-016	04/03/90	05/20/96	700	---	---	---	---	---	---
	UCD2-017	04/10/90	08/05/91	6,730	---	---	---	---	---	---
	UCD2-026	10/06/95	09/05/00	639	---	---	---	---	---	---
	UCD2-029	09/04/96	10/03/00	639	---	---	---	---	---	---
	UCD2-030	09/09/96	05/14/01	554	---	---	---	---	---	---
	UCD2-031	09/11/96	04/03/02	547	---	---	---	---	---	---
	UCD2-032	04/02/97	08/12/02	614	---	---	---	---	---	---
	UCD2-035	10/06/95	09/11/96	710	---	---	---	---	---	---
	UCD2-036	11/05/97	09/05/01	609	---	---	---	---	---	---
	UCD2-037	10/20/97	07/10/02	1,020	---	---	---	---	---	---
	UCD2-038	10/22/97	09/05/00	532	---	---	---	---	---	---
	UCD2-039	10/29/97	10/04/00	536	---	---	---	---	---	---
	UCD2-040	11/07/97	07/02/01	574	---	---	**10/13/08**	**630**	---	---
	UCD2-045	11/30/99	04/09/03	688	---	---	---	---	---	---
	UCD2-046	05/05/00	05/09/02	747	---	---	**10/13/08**	**800**	---	---
	UCD2-048	08/29/02	10/19/05	480	---	---	**10/14/08**	**610**	---	---
	UCD2-056	11/05/07	---	---	---	---	**10/15/08**	**750**	---	---
	UCD2-057	11/02/07	---	---	---	---	---	---	---	---
	UCD2-059	09/19/08	---	---	---	---	**10/15/08**	**710**	---	---
	UCD2-060	09/24/08	---	---	---	---	**10/15/08**	**650**	---	---
HSU-4	UCD4-041	10/10/97	08/27/98	477	---	---	---	---	---	---
	UCD4-042	11/03/97	05/02/00	530	---	---	---	---	---	---
	UCD4-043	10/02/97	08/10/99	510	---	---	---	---	---	---
	UCD4-044	04/07/99	05/26/06	451	---	---	---	---	---	---
	UCD4-047	05/20/00	05/18/06	574	---	---	---	---	---	---

Notes:

Total Dissolved Solids (TDS) generally analyzed by US EPA A2540C or E160.1.
--- = not sampled
<n = not detected at or above laboratory reporting limit of n mg/L
Bold Text = concentration exceeds historical maximum concentration or represents the first sampling of the well
mg/L = milligrams per liter

Table 15. Carbon-14 in Groundwater Monitoring Well Samples - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Water Bearing Zone	Well	Well Installation Date	Maximum Prior to 2008		First Quarter 2008			Third Quarter 2008			Fourth Quarter 2008		
			Date	Concentration (pCi/L)	Date	Conc. (pCi/L)	Uncer. (pCi/L)	Date	Conc. (pCi/L)	Uncer. (pCi/L)	Date	Conc. (pCi/L)	Uncer. (pCi/L)
HSU-1	UCD1-001	10/09/87	12/02/93	72	---	---	---	---	---	---	---	---	---
	UCD1-003	10/23/87	03/15/07	ND	---	---	---	---	---	---	---	---	---
	UCD1-004	10/14/87	09/01/93	57	---	---	---	---	---	---	---	---	---
	UCD1-005	10/22/87	03/15/07	ND	---	---	---	---	---	---	---	---	---
	UCD1-006	10/21/87	03/26/07	ND	---	---	---	---	---	---	---	---	---
	UCD1-008	11/03/87	03/20/07	597	---	---	---	---	---	---	---	---	---
	UCD1-009	11/04/87	03/22/07	54	---	---	---	---	---	---	---	---	---
	UCD1-010	10/11/89	03/26/07	ND	---	---	---	---	---	---	---	---	---
	UCD1-011	10/17/89	08/31/93	195	02/26/08	<20		10/08/08	<20.0 UJ		---	---	---
	UCD1-012	10/19/89	05/11/99	385	---	---	---	---	---	---	---	---	---
	UCD1-013	10/26/89	09/16/96	7,180	02/26/08	335	17.5	10/07/08	179 J	17	---	---	---
	UCD1-018	10/02/90	05/08/02	24.8	---	---	---	---	---	---	---	---	---
	UCD1-019	09/26/90	08/25/93	88	---	---	---	---	---	---	---	---	---
	UCD1-020	10/05/90	02/24/97	117	---	---	---	---	---	---	---	---	---
	UCD1-021	10/10/90	02/24/97	177	---	---	---	---	---	---	---	---	---
	UCD1-022	10/23/90	08/30/93	92	---	---	---	---	---	---	---	---	---
	UCD1-023	10/15/90	08/24/95	370	---	---	---	---	---	---	---	---	---
	UCD1-024	10/22/90	05/27/98	7.27	---	---	---	---	---	---	---	---	---
	UCD1-025	10/06/95	05/19/97	230	---	---	---	---	---	---	---	---	---
	UCD1-027Z1	10/06/95	10/16/03	8.41	---	---	---	---	---	---	---	---	---
	UCD1-027Z2	10/06/95	10/16/03	8.25	---	---	---	---	---	---	---	---	---
	UCD1-027Z3	10/06/95	05/20/97	96	---	---	---	---	---	---	---	---	---
	UCD1-028	09/05/96	01/09/02	12	---	---	---	---	---	---	---	---	---
	UCD1-034	10/06/95	02/12/97	74	---	---	---	---	---	---	---	---	---
	UCD1-049	08/14/02	05/17/06	23.8	---	---	---	---	---	---	---	---	---
	UCD1-050	08/13/02	09/26/07	95.3	02/27/08	41.5	10.2	10/09/08	27.9 J	6.5	---	---	---
	UCD1-051	08/12/02	10/19/05	84.6	02/27/08	64.9	10.8	10/09/08	46.5 J	7.6	---	---	---
	UCD1-052	02/13/04	03/16/07	ND	---	---	---	---	---	---	---	---	---
	UCD1-053	02/13/04	03/16/07	ND	---	---	---	---	---	---	---	---	---
	UCD1-054	02/06/04	03/23/07	ND	---	---	---	---	---	---	---	---	---
	UCD1-055	10/24/07	---	---	**02/01/08**	**<20**		**10/15/08**	**<20.0 R**		---	---	---
	UCD1-058	11/02/07	---	---	**02/01/08**	**<20**		**10/15/08**	**<20.0 R**		---	---	---
	UCD1-061	10/02/08	---	---	---	---	---	---	---	---	---	---	---
	UCD1-062	10/01/08	---	---	---	---	---	**10/16/08**	**<20.0 R**		**12/03/08**	**<20.0 R**	
	UCD1-063	10/01/08	---	---	---	---	---	---	---	---	---	---	---
	UCD1-064	10/01/08	---	---	---	---	---	**10/16/08**	**11.2 J**	**5.5**	**12/03/08**	**10.8 J**	**5.4**
	UCD1-065	09/30/08	---	---	---	---	---	**10/16/08**	**10.6 J**	**5.5**	**12/03/08**	**32.0 J**	**6.7**
	UCD1-066	10/02/08	---	---	---	---	---	**10/16/08**	**51.7 J**	**8.0**	**12/04/08**	**50.9 J**	**7.8**
	DDC-1A	10/27/00	---	---	---	---	---	---	---	---	---	---	---
	DDC-1B	10/27/00	---	---	---	---	---	---	---	---	---	---	---
	DDC-1C	10/27/00	---	---	---	---	---	---	---	---	---	---	---
	DDC-2A	09/16/02	---	---	---	---	---	---	---	---	---	---	---
	DDC-2B	09/16/02	---	---	---	---	---	---	---	---	---	---	---
	DDC-2C	09/16/02	---	---	---	---	---	---	---	---	---	---	---
	DDC-3A	09/18/02	---	---	---	---	---	---	---	---	---	---	---
	DDC-3B	09/18/02	---	---	---	---	---	---	---	---	---	---	---
	DDC-3C	09/18/02	---	---	---	---	---	---	---	---	---	---	---
	DDC-4A	09/19/02	---	---	---	---	---	---	---	---	---	---	---
	DDC-4B	09/19/02	---	---	---	---	---	---	---	---	---	---	---
	DDC-4C	09/19/02	---	---	---	---	---	---	---	---	---	---	---

Table 15. Carbon-14 in Groundwater Monitoring Well Samples - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Water Bearing Zone	Well	Well Installation Date	Maximum Prior to 2008		First Quarter 2008			Third Quarter 2008			Fourth Quarter 2008		
			Date	Concentration (pCi/L)	Date	Conc. (pCi/L)	Uncer. (pCi/L)	Date	Conc. (pCi/L)	Uncer. (pCi/L)	Date	Conc. (pCi/L)	Uncer. (pCi/L)
HSU-1	DDC-5A	09/20/02	---	---	---	---	---	---	---	---	---	---	---
	DDC-5B	09/20/02	---	---	---	---	---	---	---	---	---	---	---
	DDC-5C	09/20/02	---	---	---	---	---	---	---	---	---	---	---
	DDC-6A	09/13/02	---	---	---	---	---	---	---	---	---	---	---
	DDC-6B	09/13/02	---	---	---	---	---	---	---	---	---	---	---
	DDC-6C	09/13/02	---	---	---	---	---	---	---	---	---	---	---
HSU-2	UCD2-007	11/05/87	02/24/97	102	---	---	---	---	---	---	---	---	---
	UCD2-014	11/15/89	09/16/96	2,030	02/26/08	60	11.3	10/16/08	44.0 J	7.5	---	---	---
	UCD2-015	03/28/90	11/02/00	18.4	---	---	---	---	---	---	---	---	---
	UCD2-016	04/03/90	03/20/07	ND	---	---	---	---	---	---	---	---	---
	UCD2-017	04/10/90	11/29/93	145	---	---	---	---	---	---	---	---	---
	UCD2-026	10/06/95	02/13/97	69	---	---	---	---	---	---	---	---	---
	UCD2-029	09/04/96	03/01/00	26.3	---	---	---	---	---	---	---	---	---
	UCD2-030	09/09/96	10/13/03	102	---	---	---	---	---	---	---	---	---
	UCD2-031	09/11/96	10/13/03	77.7	---	---	---	---	---	---	---	---	---
	UCD2-032	04/02/97	03/03/98	11.7	---	---	---	---	---	---	---	---	---
	UCD2-035	10/06/95	05/19/06	30	---	---	---	---	---	---	---	---	---
	UCD2-036	11/05/97	08/03/99	254	---	---	---	---	---	---	---	---	---
	UCD2-037	10/20/97	07/05/00	11.5	---	---	---	---	---	---	---	---	---
	UCD2-038	10/22/97	10/18/04	20.9	---	---	---	---	---	---	---	---	---
	UCD2-039	10/29/97	10/13/03	74.7	02/26/08	<20		10/10/08	<20.0 UJ		---	---	---
	UCD2-040	11/07/97	09/01/99	22.2	---	---	---	---	---	---	---	---	---
	UCD2-045	11/30/99	02/07/00	17.9	---	---	---	---	---	---	---	---	---
	UCD2-046	05/05/00	04/09/03	14.2	---	---	---	---	---	---	---	---	---
	UCD2-048	08/29/02	03/22/07	ND	---	---	---	---	---	---	---	---	---
	UCD2-056	11/05/07	---	---	**02/01/08**	**<20**		**10/15/08**	**<20.0 R**		---	---	---
	UCD2-057	11/02/07	---	---	**02/01/08**	**<20**		**10/15/08**	**<20.0 R**		---	---	---
	UCD2-059	09/19/08	---	---	---	---	---	---	---	---	---	---	---
	UCD2-060	09/24/08	---	---	---	---	---	---	---	---	---	---	---
HSU-4	UCD4-041	10/10/97	05/12/99	32.8	---	---	---	---	---	---	---	---	---
	UCD4-042	11/03/97	02/07/00	44.1	---	---	---	---	---	---	---	---	---
	UCD4-043	10/02/97	02/07/00	19.2	---	---	---	---	---	---	---	---	---
	UCD4-044	04/07/99	11/06/02	11.1	---	---	---	---	---	---	---	---	---
	UCD4-047	05/20/00	10/15/03	11	---	---	---	---	---	---	---	---	---

Notes:

Carbon-14 analyzed by Method EERF C-01
--- = not sampled
<n = not detected at or above laboratory reporting limit of n pCi/L
Bold Text = concentration exceeds historical maximum concentration or represents first sampling of well
Conc. = concentration
J = the result is qualified as an estimated concentration or amount
ND = not detected historically above laboratory reporting limits
pCi/L = picoCuries per liter
R = non-detectable results rejected due to laboratory deficiencies
UJ = not detected, reporting limit considered estimated
Uncer. = uncertainty

Table 16. Tritium in Groundwater Monitoring Well Samples - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Water Bearing Zone	Well	Well Installation Date	Maximum Prior to 2008		First Quarter 2008			Third Quarter 2008			Fourth Quarter 2008		
			Date	Concentration (pCi/L)	Date	Conc. (pCi/L)	Uncer. (pCi/L)	Date	Conc. (pCi/L)	Uncer. (pCi/L)	Date	Conc. (pCi/L)	Uncer. (pCi/L)
HSU-1	UCD1-001	10/09/87	05/26/93	2,211	---	---	---	---	---	---	---	---	---
	UCD1-003	10/23/87	03/15/07	ND	---	---	---	---	---	---	---	---	---
	UCD1-004	10/14/87	05/26/93	2,022	---	---	---	---	---	---	---	---	---
	UCD1-005	10/22/87	03/15/07	ND	---	---	---	---	---	---	---	---	---
	UCD1-006	10/21/87	03/26/07	ND	---	---	---	---	---	---	---	---	---
	UCD1-008	11/03/87	03/20/07	3,130	03/03/08	1,960	254	---	---	---	---	---	---
	UCD1-009	11/04/87	03/22/07	ND	---	---	---	---	---	---	---	---	---
	UCD1-010	10/11/89	03/26/07	ND	---	---	---	---	---	---	---	---	---
	UCD1-011	10/17/89	11/05/90	1,382	02/26/08	<400		10/08/08	<300		---	---	---
	UCD1-012	10/19/89	10/31/90	1,172	---	---	---	---	---	---	---	---	---
	UCD1-013	10/26/89	11/24/92	29,838	02/26/08	647	218	10/07/08	270 J	170	---	---	---
	UCD1-018	10/02/90	10/31/90	1,618	---	---	---	---	---	---	---	---	---
	UCD1-019	09/26/90	02/24/93	1,640	---	---	---	---	---	---	---	---	---
	UCD1-020	10/05/90	11/01/90	1,573	---	---	---	---	---	---	---	---	---
	UCD1-021	10/10/90	11/18/91	9,752	---	---	---	---	---	---	---	---	---
	UCD1-022	10/23/90	02/25/97	430	---	---	---	---	---	---	---	---	---
	UCD1-023	10/15/90	05/14/92	2,081	---	---	---	---	---	---	---	---	---
	UCD1-024	10/22/90	11/06/90	1,305	---	---	---	---	---	---	---	---	---
	UCD1-025	10/06/95	03/26/07	ND	---	---	---	---	---	---	---	---	---
	UCD1-027Z1	10/06/95	01/13/05	2,880	---	---	---	---	---	---	---	---	---
	UCD1-027Z2	10/06/95	03/27/07	ND	---	---	---	---	---	---	---	---	---
	UCD1-027Z3	10/06/95	02/28/97	320	---	---	---	---	---	---	---	---	---
	UCD1-028	09/05/96	03/16/07	ND	---	---	---	---	---	---	---	---	---
	UCD1-034	10/06/95	11/20/96	460	---	---	---	---	---	---	---	---	---
	UCD1-049	08/14/02	03/22/07	ND	---	---	---	---	---	---	---	---	---
	UCD1-050	08/13/02	09/26/07	ND	---	---	---	---	---	---	---	---	---
	UCD1-051	08/12/02	09/26/07	ND	---	---	---	---	---	---	---	---	---
	UCD1-052	02/13/04	06/01/06	1,730	03/03/08	<420		---	---	---	---	---	---
	UCD1-053	02/13/04	03/16/07	ND	---	---	---	---	---	---	---	---	---
	UCD1-054	02/06/04	03/23/07	ND	---	---	---	---	---	---	---	---	---
	UCD1-055	10/24/07	---	---	**02/01/08**	**<400**		**10/15/08**	**<300**		**---**	**---**	**---**
	UCD1-058	11/02/07	---	---	**02/01/08**	**<400**		**10/15/08**	**<300**		**---**	**---**	**---**
	UCD1-061	10/02/08	---	---	---	---	---	---	---	---	---	---	---
	UCD1-062	10/01/08	---	---	---	---	---	**10/16/08**	**<300**		**12/03/08**	**<300 UJ**	
	UCD1-063	10/01/08	---	---	---	---	---	---	---	---	---	---	---
	UCD1-064	10/01/08	---	---	---	---	---	**10/16/08**	**<300**		**12/03/08**	**<300 UJ**	
	UCD1-065	09/30/08	---	---	---	---	---	**10/16/08**	**<300**		**12/03/08**	**250 J**	**160**
	UCD1-066	10/02/08	---	---	---	---	---	**10/16/08**	**<300 UJ**		**12/04/08**	**300 J**	**170**
	DDC-1A	10/27/00	---	---	---	---	---	---	---	---	---	---	---
	DDC-1B	10/27/00	---	---	---	---	---	---	---	---	---	---	---
	DDC-1C	10/27/00	---	---	---	---	---	---	---	---	---	---	---
	DDC-2A	09/16/02	---	---	---	---	---	---	---	---	---	---	---
	DDC-2B	09/16/02	---	---	---	---	---	---	---	---	---	---	---
	DDC-2C	09/16/02	---	---	---	---	---	---	---	---	---	---	---
	DDC-3A	09/18/02	---	---	---	---	---	---	---	---	---	---	---
	DDC-3B	09/18/02	---	---	---	---	---	---	---	---	---	---	---
	DDC-3C	09/18/02	---	---	---	---	---	---	---	---	---	---	---
	DDC-4A	09/19/02	---	---	---	---	---	---	---	---	---	---	---
	DDC-4B	09/19/02	---	---	---	---	---	---	---	---	---	---	---
	DDC-4C	09/19/02	---	---	---	---	---	---	---	---	---	---	---

Table 16. Tritium in Groundwater Monitoring Well Samples - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Water Bearing Zone	Well	Well Installation Date	Maximum Prior to 2008		First Quarter 2008			Third Quarter 2008			Fourth Quarter 2008		
			Date	Concentration (pCi/L)	Date	Conc. (pCi/L)	Uncer. (pCi/L)	Date	Conc. (pCi/L)	Uncer. (pCi/L)	Date	Conc. (pCi/L)	Uncer. (pCi/L)
HSU-1	DDC-5A	09/20/02	---	---	---	---	---	---	---	---	---	---	---
	DDC-5B	09/20/02	---	---	---	---	---	---	---	---	---	---	---
	DDC-5C	09/20/02	---	---	---	---	---	---	---	---	---	---	---
	DDC-6A	09/13/02	---	---	---	---	---	---	---	---	---	---	---
	DDC-6B	09/13/02	---	---	---	---	---	---	---	---	---	---	---
	DDC-6C	09/13/02	---	---	---	---	---	---	---	---	---	---	---
HSU-2	UCD2-007	11/05/87	08/04/92	691	---	---	---	---	---	---	---	---	---
	UCD2-014	11/15/89	09/16/96	9,550	02/26/08	<400		10/16/08	<300		---	---	---
	UCD2-015	03/28/90	05/13/92	5,302	---	---	---	---	---	---	---	---	---
	UCD2-016	04/03/90	11/16/92	1,200	---	---	---	---	---	---	---	---	---
	UCD2-017	04/10/90	08/07/01	270	---	---	---	---	---	---	---	---	---
	UCD2-026	10/06/95	03/16/07	ND	---	---	---	---	---	---	---	---	---
	UCD2-029	09/04/96	07/05/00	357	---	---	---	---	---	---	---	---	---
	UCD2-030	09/09/96	09/02/99	261	---	---	---	---	---	---	---	---	---
	UCD2-031	09/11/96	07/05/00	724	---	---	---	---	---	---	---	---	---
	UCD2-032	04/02/97	08/07/01	216	---	---	---	---	---	---	---	---	---
	UCD2-035	10/06/95	11/20/96	1,620	---	---	---	---	---	---	---	---	---
	UCD2-036	11/05/97	03/20/07	ND	---	---	---	---	---	---	---	---	---
	UCD2-037	10/20/97	10/15/03	197	---	---	---	---	---	---	---	---	---
	UCD2-038	10/22/97	05/19/06	393	---	---	---	---	---	---	---	---	---
	UCD2-039	10/29/97	09/01/99	290	02/26/08	<400		10/10/08	<300		---	---	---
	UCD2-040	11/07/97	11/25/97	250	---	---	---	---	---	---	---	---	---
	UCD2-045	11/30/99	02/07/00	394	---	---	---	---	---	---	---	---	---
	UCD2-046	05/05/00	08/08/01	211	---	---	---	---	---	---	---	---	---
	UCD2-048	08/29/02	03/22/07	ND	---	---	---	---	---	---	---	---	---
	UCD2-056	11/05/07	---	---	**02/01/08**	**<400**		**10/15/08**	**<300**		---	---	---
	UCD2-057	11/02/07	---	---	**02/01/08**	**<400**		**10/15/08**	**<300**		---	---	---
	UCD2-059	09/19/08	---	---	---	---	---	---	---	---	---	---	---
	UCD2-060	09/24/08	---	---	---	---	---	---	---	---	---	---	---
HSU-4	UCD4-041	10/10/97	03/14/07	ND	---	---	---	---	---	---	---	---	---
	UCD4-042	11/03/97	08/07/01	221	---	---	---	---	---	---	---	---	---
	UCD4-043	10/02/97	08/07/01	226	---	---	---	---	---	---	---	---	---
	UCD4-044	04/07/99	08/06/01	201	---	---	---	---	---	---	---	---	---
	UCD4-047	05/20/00	07/06/00	287	---	---	---	---	---	---	---	---	---

Notes:

Tritium generally analyzed by US EPA Method E906.0.
--- = not sampled
<n = not detected at or above laboratory reporting limit of n pCi/L
Bold Text = concentration exceeds historical maximum concentration or represents first sampling of well
Conc. = concentration
J = trace level analyte, poor quantitation
ND = not detected historically above laboratory reporting limits
pCi/L = picoCuries per liter
UJ = not detected, reporting limit considered estimated
Uncer. = uncertainty

Table 17. 1,4-Dioxane in Groundwater Monitoring Well Samples - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Water Bearing Zone	Well	Well Installation Date	Maximum Prior to 2008		First Quarter 2008		Third Quarter 2008		Fourth Quarter 2008	
			Date	Concentration (µg/L)	Date	Concentration (µg/L)	Date	Concentration (µg/L)	Date	Concentration (µg/L)
HSU-1	UCD1-001	10/09/87	---	---	---	---	---	---	---	---
	UCD1-003	10/23/87	---	---	---	---	---	---	---	---
	UCD1-004	10/14/87	---	---	---	---	---	---	---	---
	UCD1-005	10/22/87	---	---	---	---	---	---	---	---
	UCD1-006	10/21/87	---	---	---	---	---	---	---	---
	UCD1-008	11/03/87	---	---	---	---	---	---	---	---
	UCD1-009	11/04/87	---	---	---	---	---	---	---	---
	UCD1-010	10/11/89	---	---	---	---	---	---	---	---
	UCD1-011	10/17/89	---	---	---	---	---	---	**12/03/08**	**1.4 J**
	UCD1-012	10/19/89	---	---	---	---	**10/09/08**	**2.8**	**12/03/08**	**3.8**
	UCD1-013	10/26/89	---	---	---	---	**10/07/08**	**2.2**	**12/04/08**	**2.2**
	UCD1-018	10/02/90	---	---	---	---	**10/08/08**	**<0.95**	---	---
	UCD1-019	09/26/90	---	---	---	---	---	---	**12/05/08**	**<2.0**
	UCD1-020	10/05/90	---	---	---	---	---	---	---	---
	UCD1-021	10/10/90	---	---	---	---	**10/09/08**	**<0.94**	---	---
	UCD1-022	10/23/90	---	---	---	---	---	---	---	---
	UCD1-023	10/15/90	---	---	---	---	**10/08/08**	**<0.94**	---	---
	UCD1-024	10/22/90	---	---	---	---	---	---	---	---
	UCD1-025	10/06/95	---	---	---	---	---	---	---	---
	UCD1-027Z1	10/06/95	---	---	---	---	---	---	---	---
	UCD1-027Z2	10/06/95	---	---	---	---	---	---	---	---
	UCD1-027Z3	10/06/95	---	---	---	---	---	---	---	---
	UCD1-028	09/05/96	---	---	---	---	---	---	**12/04/08**	**<2.0**
	UCD1-034	10/06/95	---	---	---	---	---	---	---	---
	UCD1-049	08/14/02	---	---	---	---	---	---	---	---
	UCD1-050	08/13/02	---	---	---	---	---	---	---	---
	UCD1-051	08/12/02	---	---	---	---	---	---	---	---
	UCD1-052	02/13/04	---	---	---	---	---	---	**12/05/08**	**0.71 J**
	UCD1-053	02/13/04	---	---	---	---	---	---	---	---
	UCD1-054	02/06/04	---	---	---	---	---	---	---	---
	UCD1-055	10/24/07	---	---	---	---	---	---	---	---
	UCD1-058	11/02/07	---	---	---	---	---	---	---	---
	UCD1-061	10/02/08	---	---	---	---	---	---	**12/04/08**	**<2.0**
	UCD1-062	10/01/08	---	---	---	---	**10/16/08**	**<0.94**	**12/03/08**	**<2.0**
	UCD1-063	10/01/08	---	---	---	---	---	---	---	---
	UCD1-064	10/01/08	---	---	---	---	**10/16/08**	**<0.94**	**12/03/08**	**<2.0**
	UCD1-065	09/30/08	---	---	---	---	**10/16/08**	**7.6**	**12/03/08**	**14**
	UCD1-066	10/02/08	---	---	---	---	**10/16/08**	**14**	**12/04/08**	**5.9**
	DDC-1A	10/27/00	---	---	---	---	---	---	---	---
	DDC-1B	10/27/00	---	---	---	---	---	---	---	---
	DDC-1C	10/27/00	---	---	---	---	---	---	---	---
	DDC-2A	09/16/02	---	---	---	---	---	---	---	---
	DDC-2B	09/16/02	---	---	---	---	---	---	---	---
	DDC-2C	09/16/02	---	---	---	---	---	---	---	---
	DDC-3A	09/18/02	---	---	---	---	---	---	---	---
	DDC-3B	09/18/02	---	---	---	---	---	---	---	---
	DDC-3C	09/18/02	---	---	---	---	---	---	---	---
	DDC-4A	09/19/02	---	---	---	---	---	---	---	---

Table 17. 1,4-Dioxane in Groundwater Monitoring Well Samples - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Water Bearing Zone	Well	Well Installation Date	Maximum Prior to 2008		First Quarter 2008		Third Quarter 2008		Fourth Quarter 2008	
			Date	Concentration (µg/L)	Date	Concentration (µg/L)	Date	Concentration (µg/L)	Date	Concentration (µg/L)
HSU-1	DDC-4B	09/19/02	---	---	---	---	---	---	---	---
	DDC-4C	09/19/02	---	---	---	---	---	---	---	---
	DDC-5A	09/20/02	---	---	---	---	---	---	---	---
	DDC-5B	09/20/02	---	---	---	---	---	---	---	---
	DDC-5C	09/20/02	---	---	---	---	---	---	---	---
	DDC-6A	09/13/02	---	---	---	---	---	---	---	---
	DDC-6B	09/13/02	---	---	---	---	---	---	---	---
	DDC-6C	09/13/02	---	---	---	---	---	---	---	---
HSU-2	UCD2-007	11/05/87	---	---	---	---	---	---	---	---
	UCD2-014	11/15/89	---	---	---	---	---	---	**12/04/08**	**1.3 J**
	UCD2-015	03/28/90	---	---	---	---	---	---	---	---
	UCD2-016	04/03/90	---	---	---	---	---	---	---	---
	UCD2-017	04/10/90	---	---	---	---	---	---	---	---
	UCD2-026	10/06/95	---	---	---	---	---	---	---	---
	UCD2-029	09/04/96	---	---	---	---	---	---	**12/04/08**	**<2.0**
	UCD2-030	09/09/96	---	---	---	---	---	---	---	---
	UCD2-031	09/11/96	---	---	---	---	---	---	---	---
	UCD2-032	04/02/97	---	---	---	---	---	---	---	---
	UCD2-035	10/06/95	---	---	---	---	---	---	---	---
	UCD2-036	11/05/97	---	---	---	---	---	---	---	---
	UCD2-037	10/20/97	---	---	---	---	---	---	---	---
	UCD2-038	10/22/97	---	---	---	---	---	---	---	---
	UCD2-039	10/29/97	---	---	---	---	---	---	**12/03/08**	**<2.0**
	UCD2-040	11/07/97	---	---	---	---	---	---	**12/05/08**	**<2.0**
	UCD2-045	11/30/99	---	---	---	---	---	---	---	---
	UCD2-046	05/05/00	---	---	---	---	---	---	---	---
	UCD2-048	08/29/02	---	---	---	---	---	---	---	---
	UCD2-056	11/05/07	---	---	---	---	---	---	---	---
	UCD2-057	11/02/07	---	---	---	---	---	---	---	---
	UCD2-059	09/19/08	---	---	---	---	---	---	---	---
	UCD2-060	09/24/08	---	---	---	---	---	---	---	---
HSU-4	UCD4-041	10/10/97	---	---	---	---	---	---	---	---
	UCD4-042	11/03/97	---	---	---	---	---	---	---	---
	UCD4-043	10/02/97	---	---	---	---	---	---	---	---
	UCD4-044	04/07/99	---	---	---	---	---	---	---	---
	UCD4-047	05/20/00	---	---	---	---	---	---	---	---

Notes:

1,4-Dioxane generally analyzed by US EPA 8270SIM, E1625C, or BNASIM.
--- = not sampled
<n = not detected at or above laboratory reporting limit of n µg/L
Bold Text = concentration exceeds historical maximum concentration or represents first sampling of the well
J = trace level compound, poor quantitation
µg/L = micrograms per liter

Table 18. Analytical Results for Storm Water Monitoring - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Well ID	Sample Date/ Type	2-Butanone	Chloro-form	Acetone	Toluene	Carbon-14	Tritium	Arsenic	Antimony	Barium	Cobalt	Copper	Chromium, Total	Iron, Total	Lead	Nickel	Manganese	Mercury	Vanadium	TDS	TSS	TOC	Oil and Grease	Nitrate as N	Hardness
	Units:	µg/L	µg/L	µg/L	µg/L	pCi/L	pCi/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
LF-01	12/10/96	<5	<1	<5	<1	60	<240	6.9	<2	161	16.4	41.5	64	22,000	23.5	140	486	<0.2	41.9	160	---	---	<1	0.42	---
	11/14/97	<5	<1	5.5	<1	<97	<220	<10	4.2 B	9.7 B	<10	10.9	<10	<100	<2	<10	<15	<0.2	<10	36	---	3.93 N	<1	1.48	---
	02/19/98	1	<0.5	<1	<0.5	<10	<198	<5	<5	19.3 B	3.8 B	3.3 B	1.3 B	160	3.6	<20	17.2	<0.2	1.8 B	77	---	10.1	<2	0.234	25.9
	02/19/98 FD	<1	<0.5	<1	0.7	<9.55	282	<5	<5	23.1	0.77 B	<10	<10	<100	1.5 B	<20	41.2	<0.2	2 B	76	---	17.5	2.19	0.376	27.8
	01/31/99	0.62 J	<0.5	0.8 J	<0.5	<50	<300	1 B	0.31 B	14 B	1.9 B	4 B	2.5 B	576 E	0.63 B	7.4 BE	14.9 E	<0.2	<10	39	119	7.02	<2	1.78	---
	03/25/99	<1	<0.5	0.72 J	<0.5	<7.46	<240	0.88 B	<5	29.5	3.7 B	5.5 B	4.2 B	388	0.49 BE	9.9 B	34.1 E	<0.2	<10	54	41.8	8.95	---	2.15	---
	11/19/99	<1	<0.5	1.2 J	<0.5	<13.7	<160	1.1 B	<5	17.6 BE	0.82 B	5.7 BE	4.8 BE	621 E	0.42 B	9.3 BE	21.3 E	<0.2	3 BE	54	<5	7.74	2.45 J	---	---
	01/24/00	<1	<0.5	<5	<0.5	26.5	<287	<0.117	<0.683	12.1 B	0.919 B	3.44 B	9.84 B	1,250	1 B	9.6 B	27.1	<0.04	<0.1	25	4.2 J	4.41	2.11 J	0.392	---
	10/10/00	<1	<0.5	<5	<0.5	<11.5	<272	2.84 B	<0.683	320	5.66 E	15.9	19.2	5,090	5.1	37.8	207	<0.043	14.8	124	548	51	<5.26	1.48	---
	01/10/01	0.5 J	<0.5	<5	<0.5	<11.1	<256	<0.13	<0.153	14.9 B	0.637 BE	3.8 B	<0.053	877	1.04 B	8.16 BE	20.7	<0.048	<0.054	75	281	6.56	<5.38	1.38	---
	01/10/01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.3	---	---	---	---	---	---	---
	01/10/01 FD	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.246	---	---	---	---	---	---	---
	01/10/01 FD	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.247	---	---	---	---	---	---	---
	12/20/01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.281	---	---	---	---	---	---	---
	12/20/01	0.7 J	<0.5	2 J	<0.5	<10.9	<184	8.62 E	1.43 B	219	16.9 E	33 NE	73.7 E	24,900 E	31.6	133 NE	540 E	<0.064	55.5 E	90	430	6.42	3.11	1.47	---
	12/20/01 FD	0.78 J	<0.5	2.4 J	<0.5	<10.4	<182	8.02 E	1.01 B	206	18.8 E	37.2 NE	79.9 E	27,700 E	32.1	152 NE	595 E	<0.064	57.8 E	82	383	6.51	<5.38	1.45	---
	11/09/02	<1	0.48 J	5.8	<0.5	<7.62	<159	6.94	<0.022	194	20.8	37.8 J	64.9	21,500	31.1 J	129 J	637	0.549	53.9	91	---	10.3	---	0.716 J	---
	02/12/03	<1	0.36	6.7	<0.5	<15.3	<261	<0.838	<0.026	90.5	9.19	20.8	33.7	12,500	11.5	72	282	0.082	28.5	73	128	3.95	1.38	2.21 J	---
	02/12/03 FD	<1	0.37	7	<0.5	<15.6	<248	5.81	<0.026	79	8.5	19.5	36.3	11,800	11.2	67.9	251	0.082	27.7	85	125	3.85	<4.26	2.26 J	---
	12/23/03	<1	<0.5	<34 UJ	<0.5	<20	<300	2.5 J	<5 UJ	59.3	4.44	11.8 J	19.5	6,310	6.72	38.5	136	<0.2	11.4	87	193	8.43	<4.21	0.758	---
	12/23/03 FD	0.28 J	<0.5	<34 UJ	<0.5	<20	<300	1.82 J	<5 UJ	61.1	4.8	12.6 J	21.1	7,070	7.09	40.9	148	0.046 J	16.8	78	172	6.96	<4.35	0.786	---
	02/17/04	<1	<0.5	<88 UJ	<0.5	<20	<300	1.86 J	0.419 J	68.5	6.82 J	15.6 J	29.7	10,100	10.9	57.2 J	206	<0.2	17.6	72	94	4.71	2.08 J	0.791	---
	11/11/04	<1	<0.5	7.9	<0.5	<20	<300	5.1	<5 UJ	90.9 J	10.1	22.3	43.5	14,200	16.1	83	311	0.26	30.2	13.8 J	248	4.78	2.02 J	0.66 J	---
	01/11/05	<1	<0.5	2.4 J	<0.5	<20	<300	<10 UJ	0.688 J	105	8.61	21.4	41.6	12,700	14.9	73.9	242	0.224	33.4	62.8	148	4.51	<4.4	0.521	---
	12/28/05	<6.4 UJ	<0.5	<16.9 UJ	<0.5	<30	<300	4.87 J	0.645 J	97.6	10.4	21.2	54.2	15,200	16.7	83.7	315	0.249	32.6	85	207	2.87	3.3 J	0.509 J	---
	03/20/06	<10.2 UJ	<0.5	1.12 J	<0.5	<20	<300	9.05 J	1.23 J	225 J	22.1 J	45.4 J	97.8 J	32,300 J	23.2 J	190 J	685 J	0.521 J	75.1 J	123	192	6.12	2.2 J	3.52 J	---
	03/20/06	---	---	---	---	---	---	2.26 J	<5	38.2	2.85	9.87 J	12	3,710	3	23.4	86.5	<0.2	<30 UJ	---	---	---	---	---	---
	03/20/06 FD	<10.2 UJ	<0.5	0.421 J	<0.5	<20	<300	3.51 J	0.611 J	96.4 J	9.29 J	21.2 J	47.9 J	13,100 J	13 J	76.4 J	290 J	0.123 J	31.1 J	119	146	5.81	1.6 J	1.37 J	---
	11/02/06	---	---	---	---	<20	<300	6.57	0.926 J	162	16.7	35.2	90	22,000	28.4	161	512	0.37 J	46.6	<20	460	49.1	<4	---	---
	02/26/07	<1	<0.5	0.37 J	<0.5	<20	<300	<9.2 UJ	<9.6 UJ	150	13.6	26.4	60.9	17,900	22.2	101	399	0.225	44	52	301	6.54	<4	1.49	---
	01/08/08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.25	---	---	---	---	---	---	---
	01/08/08	---	---	---	---	---	---	---	---	---	---	---	---	15,400	---	---	---	---	---	---	---	7.2	7.12	---	19.3
	01/08/08 FD	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0014	---	---	---	---	---	---	---
	01/22/08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	55	99.3	---	---	0.738	---
	02/24/08	---	---	---	---	---	---	---	---	---	---	---	---	8,920	---	---	---	---	---	71	119	5.41	7.3	0.654 J	10.8
	02/24/08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.14	---	---	---	---	---	---	---
	02/24/08 FD	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0013	---	---	---	---	---	---	---
LF-03	12/10/96	<5	<1	<5	<1	64	<240	15.6	<2	293	25.8	74	115	39,000	12.4	247	570	0.79 *	73.5	350	---	---	<1.1	2	---
	05/23/97	3.3 J	<0.5	8.9	<1	<77	<240	<10	1.1 B	82	1.4 B	8.5 B	1.7 B	<100	<3	9.7 B	69.7	<0.2	<5	247	---	28.3	<1	0.645	158
	11/26/97	1 J	<1	<5	<1	<97	<220	3.1 B	<5	36.6	<10	15.6	<10	<100	<2	23.4	<15	<0.2	<10	167	---	11.9	---	---	55.6
	11/26/97	<5	<1	<5	<1	<97	<220	3.1 B	<5	40.9	<10	15.6	<10	910	<2	33.4	<15	<0.2	4.5 B	179	---	13	---	---	54.6
	02/19/98	1.9	<0.5	<1	<0.5	<9	<196	<5	<5	16.9 B	5 B	3.8 B	2.2 B	375	<3	14.2 B	56.9	<0.2	6.2 B	130	---	12.3	3.79	0.428	29.6
	01/31/99	0.61 J	<0.5	<5	<0.5	11 J	<300	9.7	0.63 B	18.2 B	4.3 B	6.5 B	18.2	2,490 E	1.2 B	19.7 B	48.3 E	<0.2	37.3	118	48.4	8.69	1.81 J	0.317	---
	03/25/99	0.51 J	<0.5	2.6 J	<0.5	<12.2	<240	5.6	<5	52.1	7.1 B	22.2	4.4 B	418	0.24 BE	34.3	22.3 E	<0.2	<10	302	80.7	76.6	---	5.09	---
	11/19/99	<1	<0.5	<5	<0.5	<8.23	<160	4.1	<5	9.9 BE	0.58 B	3.6 BE	20.8 E	322 E	<2	5.2 BE	8.5 BE	<0.2	21.1 E	87	<7.15	6.12	<5	---	---
	01/24/00	<1	<0.5	<5	<0.5	<14.6	<287	4.97	<0.683	38.2	4.13	12.1	9.42 B	1,630	0.551 B	27.3	41.6	<0.04	10.9	280	8.4 J	27.1	1.77 J	1.49	---
	10/10/00	<1	<0.5	<5	<0.5	<11.8	<273	3.76 B	<0.683	246	1.06 E	7.09 B	8.9 B	822	0.261 B	8.56 B	21.5	<0.043	11.4	89	41	26.4	<5.21	0.896	---
	01/10/01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.287	---	---	---	---	---	---	---
	01/10/01	<1	<0.5	<5	<0.5	<11.1	<260	2.15 B	<0.153	30.5	1.4 E	4.51 B	14.5	2,460	1.54 B	15.6 BE	39.5	<0.048	<0.054	75	227	11.7	1.86 J	0.258	---
	12/20/01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1.176	---	---	---	---	---	---	---
	12/20/01	<1	<0.5	1.8 J	<0.5	<8.87	<183	17.5 E	1.33 B	527	47.4 E	85.5 NE	211 E	71,900 E	26.8	415 NE	1,430 E	<0.064	151 E	194	1,090	6.71	3.47	2.02	---
	12/20/01 FD	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1.206	---	---	---	---	---	---	---
	U. S. EPA Benchmark:	NE	NE	NE	10,000	NE	NE	168.54	636	NE	NE	63.6H	NE	1,000	81.6H	1,417H	1,000	0.050#	NE	NE	100	100	15	0.68‡	NE

Table 18. Analytical Results for Storm Water Monitoring - Laboratory for Energy-related Health Research/South Campus Disposal Site, University of California, Davis

Well ID	Sample Date/ Type	2-Butanone	Chloro-form	Acetone	Toluene	Carbon-14	Tritium	Arsenic	Antimony	Barium	Cobalt	Copper	Chromium, Total	Iron, Total	Lead	Nickel	Manganese	Mercury	Vanadium	TDS	TSS	TOC	Oil and Grease	Nitrate as N	Hardness
	Units:	µg/L	µg/L	µg/L	µg/L	pCi/L	pCi/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
LF-03	12/28/05	<6.4 UJ	<0.5	<16.9 UJ	<0.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
LS-01	10/29/96	ND	ND	---	ND	---	---	ND	---	---	---	---	---	---	---	---	---	ND	---	---	---	---	---	---	---
	05/23/97	ND	ND	---	---	---	---	---	---	---	---	ND	ND	ND	---	---	---	ND	ND	---	---	---	ND	---	---
	05/23/97	ND	ND	---	ND	---	---	---	---	---	---	ND	ND	ND	---	---	---	ND	ND B	---	---	---	---	---	---
	11/14/97	---	---	---	---	---	---	ND	---	ND	ND	---	ND	---	---	---	---	ND	ND	---	---	---	---	---	---
	02/19/98	<1	<0.5	<1 UJ	<0.5	<9.55	<184	<5	13.6	3.4	<10	<10	<10	24.5 J	<3	1.7	---	<0.2	<10	12	---	3.99	13.9	0.129	6.58
	01/31/99	<10	<10	<10	0.19 J	<9.29	<448	<10	13.6 B	5.2 BE	<50	<25	<10	<100	<3	<40	---	<0.2	1.9 B	---	---	---	<2	0.44 J	---
	11/19/99	<1	<0.5	8.1	4.1	<50	<700	<10	12.6 B	53.6 B	1.5 B	2.5 B	7.3 B	2,450	3.5	15 B	2,220,000 B	<0.2	9.3 B	46	---	---	2.2 J	0.49	---
	01/24/00	2.16 J	<10	16.9 B	<10	<41.1	568 J	4.3 B	10.7	16.2 B	0.79 B	1 B	3.3 B	582	2 B	4.8 B	17	---	2.4 B	21	---	---	2.57 J	0.104	8.5
	10/10/00	1.9 J	<1	8.3	<1	<10.6	<192	4.42 B	22.6 B	213	2.16 B	11.6 B	10.2	3,630	3.1	17.7 B	86.5	<0.043	13.3 B	64	52	18.5	<4.9	0.89	---
	01/10/01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.103	---	---	---	---	---	---	---
	01/10/01 FD	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.11	---	---	---	---	---	---	---
	01/10/01 FD	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.264	---	---	---	---	---	---	---
	01/11/01	<5	<1	<5	16	<8.66	<517	3.4 B	35.9	36.4	<0.669	6.33	2.48 B	804	<2.25	7.34	55.3	<0.048	4.1 B	76	7.14 J	19.2	11.9	0.564	---
	11/12/01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.54	---	---	---	---	---	---	---
	11/12/01	<10	<10	<10	<10	<9.09	<172	10	11	182	14.5	34.3	62.6	22,400	14.6	121	490	0.069 B	48	78	---	9.96	0.05	0.555	---
	11/08/02	<5	<1	12.2	0.59 J	<6.17	---	4.01 J	42.6	146	10.8	33.1	2.37 J	4,700	8.43	40.3	411	<0.039	14.8	70	698	13.3	<1.27	0.523	---
	04/12/03	<5	<1	56.6	6	<16.4	<368	<4.1	148	41.3	<1.88	20.4	<1.37	1,060	<2.67	9.8	141	0.0485	<3.12	91	---	16.7	2.1 J	---	---
	04/25/03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.0341	---
	11/15/03	<10	<10	3.21	<10	<15.7	<282	<2.4	123	24	<1.1	14.1	3.4	1,820	3.7	9	64.5	<0.033	3.8	117	27	14.5	---	0.432 J	80.3
	03/08/04	<10	<10	16.9	20.4	<15.4	<213	<3.7	68.2	29.8	5.7	18.6	7.9	6,250	5.6	21.1	630	0.1	6.1	67	96.7	10.2	---	0.309	49.2
	10/26/04	<5 UJ	<1	3.4 J	<1	<12.5	<339	<3.9 R	18.1	27.3	2.7	14.2	9.2	2,810	5.8	20	<356	0.032	6.3	22	44.8	6.48	1.37	0.323	---
	03/22/05	<5	<1	6.3	<1	<17.6	<428	2.1 J	79	21	1.5	11	<3 UJ	8,000	2.3	4.1	310 J	0.0165	<30	148	20	15	<1.3	0.168	---
	03/22/05 FD	<5	<1	6.5	<1	<17.6	<432	<5	91	17	0.97 J	9.8	<3 UJ	3,600	1.9 J	4.3	170 J	0.0189	<30	70	12	15.2	2.78	0.289	---
	12/01/05	<5	<1	<30 UJ	<1 UJ	<20	<300	2.76 J	76.9	41.3	2.48	14.3	12.7	4,020	8.38	20.6	94.7	<0.2	<30 UJ	15 J	186 J	15.7	2.13 J	0.405	---
	12/01/05 FD	<5	<1	<30 UJ	<1 UJ	<20	<300	2.03 J	77.6	65.6	4.5	22.9	23.1	7,030	13.5	34.9	168	0.072 J	<30 UJ	49 J	351 J	15.1	3.3 J	0.386	---
	02/27/06	<5	<1	<10 UJ	<1	<13.5	<300	<5	42	10.7	0.47 J	3.6	3.01	685	2.18	3.82	23.4	<0.2	<30	17	15	4.88	<6.45 UJ	0.262	---
	02/27/06 FD	<5	<1	<10 UJ	<1	<13.4	<300	<5	42.3	10.4	0.43 J	3.46	2.8 J	587	2.23	3.73	22.9	<0.2	<30	22	16.4	4.83	5.96 J	0.268	---
	12/13/06	<5	<1	8.5	<1 UJ	<20	<1,000	2.46	55.6	32	2.22	9.72	12.4	3,490 J	3.32	19.6	67.3	<0.06	9.78	45	51	7	3.9 J	0.39	---
	12/13/06 FD	<5	<1	8.7	<1 UJ	<20	<1,000	2.16	56.2	33.4	2.36	10.3	12.2	3,450 J	3.92	20.8	71.9	<0.06	9.81	57	83	7.15	<4	0.382	---
	04/11/07	4.73 J	<1	211 J	16.1	<20	<600	5.9	120 J	250	9.9 J	62 J	45 J	14,500 J	26 J	83 J	380	0.12 J	41 J	324	12.3	64	3.8 J	<0.1	---
	04/11/07 FD	4.49 J	<1	224 J	16.7	<20	<600	3.8 J	86 J	130	3 J	22 J	7.1 J	1,900 J	3.2 J	18 J	200	<0.2	<30 UJ	380	12.6	65	2 J	<0.1	---
	12/07/07	<5.00	<1.00	<5.00	<1.00	<17.8	<252	5.6	3.9	120	9.7	23	53	16,900	7.1	85	290	0.074 J	46	132	142	9.27	<5.81 UJ	0.531 J	---
	12/07/07 FD	<5.00	<1.00	<5.00	<1.00	<18.2	<233	5.6	4.2	120	9.8	23	55	16,900	7.8	85	300	0.075 J	47	128	153	9.23	<5.62 UJ	4.63 J	---
	12/15/08	<5.00	<1.00	2.46 UJ	<1.00	<18.8	<472	<1.5	4.6 UJ	16	0.72	5.4	4.3	760	2.2	5.3	25	0.0154	3.5	48.0	22.3	8.44	3.20 UJ	0.691	---
	12/15/08 FD	<5.00	<1.00	2.18 UJ	<1.00	<18.8	<470.0	2.1	6.1 UJ	23	1.3	8.2	7.3	1,700	4.3	9.6	40	0.0157	5.5	53.0	21.2	8.60	4.06 UJ	0.675	---
U. S. EPA Benchmark		NE	NE	NE	10,000	NE	NE	168.54	636	NE	NE	63.6H	NE	1,000	81.6H	1,417H	1,000	0.050#	NE	NE	100	100	15	0.68‡	NE

Parameter Abbreviations:

TDS = total dissolved solids
TSS = total suspended solids
TOC = total organic carbon

Notes:

--- = not analyzed
<n = analyte was not detected at or above the reporting limit of n
* = old data, validator qualifier unknown
B = old data, validator qualifier unknown
E = old data, validator qualifier unknown
FD = blind duplicate field sample
J = the result is qualified as an estimated concentration or amount
mg/L = milligrams per liter
ND = analyte was not detected; reporting limit not available

Notes:

N = old data, validator qualifier unknown
µg/L = microgram per liter
pCi/L = picocuries per liter
U = analyte was not detected at or above the stated limit
UJ = not detected, reporting limit considered estimate
U.S. EPA Benchmark = Multi-sector permit benchmark (RWQCB, 2007b)
H = Benchmark is dependent on hardness of receiving water
# = Benchmark listed is the California Toxics Rule limit
‡ = Benchmark is for total nitrate and nitrite as nitrogen

HUNTER SURVEYING, INC.

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Fax: (916) 988-5688

02 June 2009

Weiss Associates
5801 Christie Avenue, Suite 600
Emeryville, CA 94608

Attn: Claudia Steadman

Re: **UC Davis South Campus Monitor Wells**

The following monitoring wells were surveyed on May 18-21, 2009. Horizontal positions recorded by GPS-RTK observations. Vertical elevations surveyed by digital level loops.

	NGVD29 Vertical Elevations				*CCS83 Zn2 Coordinates*	
PT ID	***PVC***	***PORT***	***RIM***	***GRND***	***NORTH***	***EAST***
DDC-1		52.00	52.01	49.0		
DDC-1 D NE	51.31		52.01	49.0		
DDC-1 I N	51.38		52.01	49.0		
DDC-1 S NW	51.48		52.01	49.0		
DDC-2		52.48	52.23	49.3		
DDC-2 D NE	51.63		52.23	49.3		
DDC-2 I SW	51.70		52.23	49.3		
DDC-2 S N	51.70		52.23	49.3		
DDC-3		52.41	52.08	48.7		
DDC-3 D W	51.93		52.08	48.7		
DDC-3 I N	51.85		52.08	48.7		
DDC-3 S E	51.92		52.08	48.7		
DDC-4		51.89	51.47	48.7		
DDC-4 D S	51.39		51.47	48.7		
DDC-4 I E	51.39		51.47	48.7		
DDC-4 S N	51.39		51.47	48.7		
DDC-5		51.34	51.46	48.3		
DDC-5 D W	51.16		51.46	48.3		
DDC-5 I E	51.16		51.46	48.3		
DDC-5 S N	51.17		51.46	48.3		
DDC-6		52.36	52.14	48.9		
DDC-6 D E	51.68		52.14	48.9		
DDC-6 I SE	51.74		52.14	48.9		
DDC-6 S N	51.73		52.14	48.9		
TP-1 A E	49.71		50.17	48.9		
TP-1 B N	49.96		50.17	48.9		
TP-1 C S	49.86		50.17	48.9		
TP-2 A W	51.49		51.87	48.9		
TP-2 B N	51.24		51.87	48.9		
TP-2 C E	51.16		51.87	48.9		

	NAVD88 Vertical Elevations				CCS83 Zn2 Coordinates	
PT ID	***PVC***	***PORT***	***RIM***	***GRND***	***NORTH***	***EAST***
TP-3 A W	51.08		51.94	48.8		
TP-3 B S	51.13		51.94	48.8		
TP-3 C E	51.15		51.94	48.8		
TP-4 A S	51.15		51.57	49.2		
TP-4 B E	51.13		51.57	49.2		
TP-4 C W	51.25		51.57	49.2		
TP-5 A S	51.99		53.04	49.3		
TP-5 B N	51.93		53.04	49.3		
TP-5 C W	51.86		53.04	49.3		
UCD1-001	49.48	49.51	50.06	47.8		
UCD1-003	49.48		50.10	48.4		
UCD1-004	51.18	51.22	51.86	49.7		
UCD1-005	47.96		48.42	48.3		
UCD1-006	50.55		51.00	49.1		
UCD2-007	51.24	51.27	51.68	49.5		
UCD1-008	51.02	51.05	51.54	49.3		
UCD1-009	51.01		51.51	49.2		
UCD1-010	49.34		49.92	47.6		
UCD1-011	50.16	50.20	50.71	48.1		
UCD1-012	51.45	51.52	51.86	48.9		
UCD1-013	51.67	51.73	52.23	49.3		
UCD2-014	51.28	51.34	51.75	49.1		
UCD2-015	51.01	51.08	51.58	49.9		
UCD2-016	49.21	49.27	49.97	48.3		
UCD2-017	51.57	51.62	51.92	49.8		
UCD1-018	47.81	47.87	48.63	46.7		
UCD1-019	50.49	50.54	51.35	49.5		
UCD1-020	48.83	48.88	49.83	48.4		
UCD1-021	48.05	48.11	48.81	48.7		
UCD1-022	48.41	48.47	49.10	49.1		
UCD1-023	48.63	48.69	49.43	49.3		
UCD1-024	48.23	48.30	48.93	48.9		
UCD1-025 STL	47.33	47.40	47.84	47.9		
UCD2-026 STL	47.44	47.50	47.84	47.9		
UCD2-027	47.48		47.92	47.9		
UCD1-028	47.41	47.45	47.82	47.9		
UCD2-029	47.48	47.52	47.89	47.8		
UCD2-030	47.21	47.25	47.46	47.5		
UCD2-031	47.17	47.19	47.56	47.5		
UCD2-032	44.77	44.80	45.47	46.5		
UCD1-034 STL	55.04	55.10	55.80	55.5	1950452.0	6631692.3
UCD2-035 STL	55.12	55.17	55.80	55.5	1950454.5	6631696.5
UCD2-036	47.98	48.02	48.32	48.2		
UCD2-037	49.22	49.25	49.63	49.7		
UCD2-038	56.66	56.68	57.12	57.1		
UCD2-039	49.33	49.38	49.70	47.5		
UCD2-040	46.49	46.53	46.94	46.9		
UCD4-041	46.62	46.68	46.97	46.9		
UCD4-042	46.93	47.00	47.34	46.8		

	NAVD88 Vertical Elevations				CCS83 Zn2 Coordinates	
PT ID	**PVC**	**PORT**	**RIM**	**GRND**	**NORTH**	**EAST**
UCD4-043	44.62	44.67	45.13	45.2		
UCD4-044	47.35	47.45	47.85	47.9		
UCD2-045	46.10	46.11	46.61	46.6		
UCD2-046	44.82		44.79	42.5		
UCD4-047	47.07	47.13	47.42	45.2		
UCD1-048	51.38	51.48	51.97	48.7		
UCD1-049	51.30	51.38	51.61	48.7		
UCD1-050	52.22	52.30	52.66	49.2		
UCD1-051	51.78	51.85	52.20	49.0		
UCD1-052	46.91	46.92	47.37	47.3		
UCD1-053	47.00	47.03	47.41	47.3		
UCD1-054	48.58		49.06	49.0	1951142.0	6631250.2
UCD1-055	44.09		45.07	44.9		
UCD2-056	44.68		45.09	44.9		
UCD2-057	47.41		47.90	44.4		
UCD1-058	47.81		48.07	44.5		
EW2-01 STL	49.22	49.27		47.8	1951080.4	6632771.5
IW2-01	48.49	48.59		47.6		
L-2	50.35		50.68	49.0		
L-3	51.20		51.56	49.7		
4" PVC PIPE	50.16			48.8		
CP-620	57.94				1950618.35	6631153.90

Basis of Coordinates and Elevations:

NAD83 Horizontal Feet Coordinates, *CCS83 Zone 2* (epoch date 1991.35), established by GPS-RTK observations based on *UC Davis Survey Control Network Stations* ***620*** **and** ***627***.

NGVD29 Vertical Feet Elevations established by digital leveling loops based *on UC Davis Survey Control Network Station* **620**, elev = 57.94'.

CP-620	1950618.35	6631153.90	57.94
CP-627	1950427.14	6632391.99	54.51

Note: Coordinates and elevations listed are based on prior UCD values, as utilized in numerous survey reports at UCD/LEHR. To keep datasets consistent for monitoring wells in the LEHR/UCD South Area, the data listed above is based on the prior historical control dataset. A revised elevation listing from UCD is immenent, and the above values can be can be incoorporated into the new elevation datum upon UCD data release.

James L. White
LS 7722

PROFESSIONAL LAND SURVEYOR
JAMES L. WHITE
Exp. 03-31-11
LS 7722
STATE OF CALIFORNIA

HUNTER SURVEYING, INC.

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03 November 2008

Weiss Associates
5801 Christie Avenue, Suite 600
Emeryville, CA 94608

Attn: Mary Stallard & Jerry Aarons

Re: **UC Davis South Campus Monitor Wells and Borings**

The following monitoring wells and borings were surveyed on October 14-16, 2008. Horizontal positions recorded by GPS-RTK observations. Vertical elevations surveyed by digital level loops.

	CCS83 Zn2 Coordinates		*NGVD29 Elevations*			
PT ID	***North***	***East***	***PVC***	***RIM***	***GRND***	***PORT***
UCD2-59	1951479.4	6634760.3	47.26	47.58	44.6	
UCD2-60	1952055.2	6633107.8	44.96	45.45	45.5	
UCD1-61	1951960.2	6632639.6	47.46	47.73	47.7	
UCD1-62	1950670.2	6632389.3	49.28	49.51	49.5	
UCD1-63	1949652.9	6633064.1	49.88	50.18	47.6	
UCD1-64	1950617.4	6633202.9	47.04	47.37	47.4	
UCD1-65	1950560.6	6631927.1	49.91	50.46	47.5	
UCD1-66	1950882.3	6631980.2	48.09	48.35	48.3	
UCD1-13			51.67	52.23	49.1	51.73
UCD1-20			48.83	49.83	48.2	48.87
UCD1-23			48.64	49.44	49.3	48.70
UCD1-24			48.23	48.93	48.9	48.30
UCD1-34 (steel casing)			55.05	55.81	55.6	55.10
BGCR-1	1949921.6	6629929.4			46.7	
ET-1	1950903.4	6631951.1			48.8	
ET-2	1950800.9	6631914.8			49.6	
HP-1	1951569.8	6632326.0			48.3	
HP-2	1951771.2	6632543.1			46.4	
HP-3	1951753.5	6632878.1			46.3	
HP-4	1950833.4	6632914.9			48.8	
HP-5	1950639.6	6632546.1			48.7	
HP-6	1950736.9	6632391.4			49.5	

PT ID	CCS83 Zn2 Coordinates North	East	NGVD29 Elevations PVC	RIM	GRND	PORT
HSCR-1	1950855.2	6632374.1			48.3	
HSCR-2	1950994.0	6632916.2			47.2	
LF1-2	1950557.6	6631996.5			47.1	
LF2-1	1950884.2	6631776.7			49.5	
LF2-2	1950727.3	6631838.3			49.6	
LF2-3	1950707.9	6631659.0			49.1	
LF2-4	1950643.9	6631746.9			48.4	
LF3-2	1950742.1	6633196.8			46.8	
ST-1	1950633.5	6631412.4			49.1	
ST-2	1950631.4	6631387.8			48.8	
WBH-2	1950577.3	6631800.2			49.8	
WBH-3	1950569.0	6631844.0			49.3	
WBH-4	1950560.3	6631922.3			47.1	

Basis of Coordinates and Elevations:

NAD83 Horizontal Feet Coordinates, *CCS83 Zone 2* (epoch date 1991.35), established by GPS-RTK observations based on *UC Davis Survey Control Network Stations* ***620*** **and** ***627***.

NGVD29 Vertical Feet Elevations established by digital leveling loops based *on UC Davis Survey Control Network Station* **620**, elev = 57.94'.

CP-620	1950618.35	6631153.90	57.94
CP-627	1950427.14	6632391.99	54.51

Note: Coordinates and elevations listed are based on prior UCD values, as utilized in numerous survey reports at UCD/LEHR. UCD surveyor provided HSI a new adjustment control listing on the first day of site work for this effort. To keep datasets consistent for monitoring wells in the LEHR/UCD South Area, the data listed above is based on the prior historical control dataset.

James L. White
LS 7722

PROFESSIONAL LAND SURVEYOR
JAMES L. WHITE
Exp. 03 31-09
LS 7722
STATE OF CALIFORNIA

Weiss Associates

MEMORANDUM

TO: Project File FROM: Claudia Steadman, 510-450-6156

RE: Survey Results Explanations and Corrections DATE: July 21, 2009

October 2008 Survey Results Explanations and Corrections

Point ID	Note
WBH-1	These coordinates were reported by Hunter as "WBH-2", but are actually for "WBH-1". This was confirmed by comparing the coordinates with those for WBH-3, which was located approximately 45 ft east of WBH-2, and for old boring SBL-32 with which WBH-2 was essentially co-located. The NAD 83 coordinates reported in the UC Davis database for SBL-32 are very similar: SBL0032, Northing: 1950581.00000, Easting: 6631796.00001, Waste Burial Holes
WBH-2	Because WBH-2 was apparently not surveyed, coordinates were estimated to be Northing: 1950569.4, Easting: 6631658.8, Ground Elevation: ~49.3 ft. by measuring the distances (parallel and perpendicular to the Site boundary) between the WBH-1 location stake and the WBH-2 location stake on 1/21/09. The distance parallel to the boundary fence was 143 ft, and WBH-2 was 8 ft closer to the boundary fence than WBH-1. The northing and easting values were calculated based on these distances and the orientation of the boundary fence (~8.5 degrees off east/west).

May 2009 Survey Results Explanations and Corrections

Hunter Point ID	Explanation or UC Davis Point ID
DDC-1 D NE	DDC-1C
DDC-1 I N	DDC-1B
DDC-1 S NW	DDC-1A
DDC-2 D NE	DDC-2C
DDC-2 I SW	DDC-2B
DDC-2 S N	DDC-2A
DDC-3 D W	DDC-3C
DDC-3 I N	DDC-3B
DDC-3 S E	DDC-3A

DDC-4 D S	DDC-4C
DDC-4 I E	DDC-4B
DDC-4 S N	DDC-4A
DDC-5 D W	DDC-5C
DDC-5 I E	DDC-5B
DDC-5 S N	DDC-5A
DDC-6 D E	DDC-6C
DDC-6 I SE	DDC-6B
DDC-6 S N	DDC-6A
TP-1 A E	TP-1 A
TP-1 B N	TP-1 B
TP-1 C S	TP-1 C
TP-2 A W	TP-2 A
TP-2 B N	TP-2 B
TP-2 C E	TP-2 C
TP-3 A W	TP-3 A
TP-3 B S	TP-3 B
TP-3 C E	TP-3 C
TP-4 A S	TP-4 A
TP-4 B E	TP-4 B
TP-4 C W	TP-4 C
TP-5 A S	TP-5 A
TP-5 B N	TP-5 B
TP-5 C W	TP-5 C
UCD1-048	UCD2-048
STL	Steel Casing (Other casings are PVC)

4" PVC Pipe	The 4" PVC Pipe is near UCD1-049 in the cluster area..
L-2	L-2 is near UCD1-012 in the cluster area.
L-3	L-3 is near UCD1-004.

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

WELL ID: UCD1-008

1. PROJECT INFORMATION

Project Number: 131261 Task Number: 300 Date: 3-3-08 Time: 1312

Client: UC Davis Personnel: Chuck Frey / J. Tomlin

Project Location: LEHR Weather: Clear @ 70

2. WELL DATA

Casing Diameter: 2 inches Type of Casing: PVC

Screen Diameter: 2 inches Type of Screen: PVC Screen Length : 10 feet

Total Depth of Well from TOC: 53.5 feet

Depth to Static Water from TOC: 39.27 feet

Depth to Product from TOC: N/A

Length of Water Column (h): 14.23 Calculated Casing Volume: 7.1 (3 Casing volumes)

Purge Volume Calculation (one casing volume = 0.667):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Equipment Model(s)

Purge Method: ~~2" Grundfos Redi-flo pump Dedicated~~ Disp. Bailer

Material: Pump ~~Stainless Steel/Teflon~~ Twine

Material: Tubing ~~Polyethylene~~

Was well purged dry? ☐ Yes ☒ No Pumping Rate: ——— gal/min

1. N/A
2.
3.

Time	Cum. Gallons Removed	pH	Temp (°C)	Spec. Cond. (~~µmhos/cm~~ mS/mS)	~~Eh (Units)~~ ORP mV	DO (Units) ppm	Turbidity (NTU)	Other:	Comments
1317	3	7.02	19.37	1940	89.1	4.89			
1324	4	7.38	22.13	1921	20.0	3.87			
1329	6	7.07	20.58	1926	85.3	3.95			
1333	7.5	7.08	20.76	1927	28.6	3.91			

4. SAMPLING DATA

Method(s): 2" Grundfos Redi-flo pump Dedicated

Material: Bailer Stainless Steel/Teflon

Material: Rope Polyethylene

Depth to Water at Time of Sampling: ——— Field Filtered? ☐ Yes ☐ No

Sample ID: GWGW2212 Sample Time: 1334 # of Containers: 1

Duplicate Sample Collected? ☐ Yes ☐ No ID:

Type of Containers: 1x500ml poly bottle

Analyses Requested:

Tritium

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-1 (Rev 7/31/01)

Signature

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

WELL ID: UCD1-10

1. PROJECT INFORMATION

Project Number: 131261 Task Number: 300 Date: 3-3-08 Time: 1500

Client: UC Davis Personnel: Chuck Frey / J. Tomlin

Project Location: LEHR Weather:

2. WELL DATA

Casing Diameter: 4 inches Type of Casing: PVC

Screen Diameter: 4 inches Type of Screen: PVC Screen Length : 15 feet

Total Depth of Well from TOC: 69 feet

Depth to Static Water from TOC: 37.15 feet

Depth to Product from TOC: N/A

Length of Water Column (h): 31.85 Calculated Casing Volume: 63.7 (3 Casing volumes)

Purge Volume Calculation (one casing volume = 0.667):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Purge Method: 2" Grundfos Redi-flo pump Dedicated

Material: Pump Stainless Steel/Teflon

Material: Tubing Polyethylene

Was well purged dry? ☐ Yes ☒ No Pumping Rate:_____ gal/min

Equipment Model(s)

1. N/A
2. —
3. —

Time	Cum. Gallons Removed	pH	Temp (°C)	Spec. Cond. ~~(umhos/cm)~~ mS/cm	ORP ~~Eh (Units)~~ mV	DO (Units) ppm	Turbidity (NTU)	Other:	Comments
1504	10	7.43	19.12	1319	44.6	3.41			
1508	20	7.36	19.09	1333	68.1	3.21			
1512	30	7.34	19.08	1328	75.1	3.03			
1516	40	7.30	19.08	1335	83.9	2.98			
1520	50	7.29	19.09	1331	91.2	2.98			
1524	60	7.29	19.08	1326	94.9	2.98			
1526	64	7.29	19.09	1324	96.2	3.00			

4. SAMPLING DATA

Method(s): 2" Grundfos Redi-flo pump Dedicated

Material: Bailer Stainless Steel/Teflon

Material: Rope Polyethylene

Depth to Water at Time of Sampling:_____ Field Filtered? ☐ Yes ☐ No

Sample ID: GWGW 2213 Sample Time: 1530 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☐ No ID:

Type of Containers: 2x 125 ml poly bottle

Analyses Requested:

Nitrate as N
Total Chromium

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

FORM GW-1 (Rev 7/31/01)

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

WELL ID: UCD1-11

1. PROJECT INFORMATION

Project Number: 131261 Task Number: 300 Date: 2/26/08 Time: 1430

Client: UC Davis Personnel: Chuck Frey

Project Location: LEHR Weather:

2. WELL DATA

Casing Diameter: 4 inches Type of Casing: PVC

Screen Diameter: 4 inches Type of Screen: PVC Screen Length : 15 feet

Total Depth of Well from TOC: 65 feet

Depth to Static Water from TOC: 38.76 feet

Depth to Product from TOC: N/A

Length of Water Column (h): 26.24 Calculated Casing Volume: 52.5 (3 Casing volumes)

Purge Volume Calculation (one casing volume = 0.667):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Equipment Model(s)

Purge Method: 2" Grundfos Redi-flo pump Dedicated

Material: Pump Stainless Steel/Teflon

Material: Tubing Polyethylene

Was well purged dry? ☐ Yes ☐ No Pumping Rate: _____ gal/min

1. N/A
2.
3.

Time	Cum. Gallons Removed	pH	Temp (°C)	Spec. Cond. (~~µmhos/cm~~) µS/cm	Eh (~~Units~~) ORP mV	DO (Units)	Turbidity (NTU)	Other: FEET	Comments
1437	15	7.82	19.11	1781	-49.6	3.48			
1445	30	7.63	18.68	1701	-45.3	3.54		40.12	
1450	40	7.59	18.47	1686	24.4	4.12		40.12	
1455	50	7.58	18.67	1710	31.9	4.16		40.14	
1457 ~~1500~~	55	7.59	18.70	1713	51.3	4.16			

4. SAMPLING DATA

Method(s): 2" Grundfos Redi-flo pump Dedicated

Material: Bailer Stainless Steel/Teflon

Material: Rope Polyethylene

Depth to Water at Time of Sampling: _____ Field Filtered? ☐ Yes ☑ No

Sample ID: GWGW 2214 Sample Time: 1505

Duplicate Sample Collected? ☐ Yes ☑ No ID:

# of Containers: 7

Type of Containers: 3x 40ml VOA Vials 2x500 ml poly and 2x250 ml poly

Analyses Requested:

VOCs (Chloroform)
Carbon-14, Tritium
Nitrate as N
Total Chromium

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

FORM GW-1 (Rev 7/31/01)

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

WELL ID: UCD1-12

1. PROJECT INFORMATION

Project Number: 13261 Task Number: 300 Date: 2/27/08 Time: 0940

Client: UCDAVIS Personnel: Chuck Frey

Project Location: LEHR Weather: clear sunny warm

2. WELL DATA

Casing Diameter: 4 inches Type of Casing: PVC

Screen Diameter: 4 inches (d) Type of Screen: PVC Screen Length: 15 ft

Total Depth of Well from TOC: 64.5 feet

Depth to Static Water from TOC: 39.57 feet 39.37

Depth to Product from TOC: NA feet

Length of Water Column (h): 24.93 feet Calculated Casing Volume: 49.9 gal (3 to 5 times one well volume)

Purge Volume Calculation (one casing volume = $0.041d^2h$):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Purge Method: 2" Grundfos Redi-flow pump dedicated

Materials: Pump/Bailer

Materials: Rope/Tubing

Was well purged dry? ☐ Yes ☑ No Pumping Rate: 2 gal/min

Equipment Model(s): 1. NA 2. 3.

Time	Cum. Gallons Removed	pH	Temp °C (~~Units~~)	Spec. Cond. µs/cm (~~Units~~)	~~Eh (Units)~~ ORP	DO (~~Units~~) ppm	Turbidity (NTU)	Other: depth	Comments
0947	5	8.01	17.64	1996	11.8	9.51		42.71	clear, odorless
0952	15	7.91	17.74	1978	29.7	9.70		43.09	
0957	25	7.85	17.76	1976	38.7	9.69		43.20	
1002	35	7.79	17.78	1959	50.8	9.59		43.29	
1007	45	7.81	17.80	1923	30.0	9.65		43.35	
1010	50	7.75	17.82	1935	45.9	9.59		43.39	

4. SAMPLING DATA

Method(s): 2" Grundfos

Materials: Pump/Bailer stainless steel / teflon

Materials: Tubing/Rope polyethylene

Depth to Water at Time of Sampling: 42.71 Field Filtered? ☐ Yes ☑ No

Sample ID: GWGW2215 Sample Time: 1015 # of Containers: 4

Duplicate Sample Collected? ☐ Yes ☑ No ID: 3 X 40ml - VOA 1 X 250ml - poly

Analyses Requested: VOC (Chloroform) Total Chromium

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

FORM GW-1 (Rev 7/31/01)

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

WELL ID: UCD1-13

1. PROJECT INFORMATION

Project Number: 131261 Task Number: 300 Date: 2/26/08 Time: 0844

Client: UC Davis Personnel: Chuck Frey /89

Project Location: LEHR Weather:

2. WELL DATA

Casing Diameter: 4 inches Type of Casing: PVC

Screen Diameter: 4 inches Type of Screen: PVC Screen Length : 15 feet

Total Depth of Well from TOC: 39.90 65 feet

Depth to Static Water from TOC: 39.88 feet

Depth to Product from TOC: N/A

Length of Water Column (h): 25.12 Calculated Casing Volume: 50.3 (3 Casing volumes)

Purge Volume Calculation (one casing volume = 0.667):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Purge Method: 2" Grundfos Redi-flo pump Dedicated

Material: Pump Stainless Steel/Teflon

Material: Tubing Polyethylene

Was well purged dry? ☐ Yes ☐ No Pumping Rate: 2 gal/min

Equipment Model(s)

1. N/A
2.
3.

Time	Cum. Gallons Removed	pH	Temp (°C)	Spec. Cond. (µmhos/cm)	~~Eh (Units)~~ ORP	DO (Units) ppm	Turbidity (NTU)	Other: ~~DEPTH~~	Comments
1353	15	7.52	19.48	1546	84.6	2.70		43.28	Clear, odorless
1400	30	7.33	19.54	1569	56.2	3.02		43.33	
1405	40	7.70	20.69	1537	-72.1	2.87		43.38	
1411	50	7.32	19.35	1580	20.6	2.65		42.73	
1415	55	7.70	19.19	1581	-60.1	2.55			

4. SAMPLING DATA

Method(s): 2" Grundfos Redi-flo pump Dedicated

Material: Bailer Stainless Steel/Teflon

Material: Rope Polyethylene

Depth to Water at Time of Sampling:

Field Filtered? ☐ Yes ☒ No

Sample ID: GWGW 2216 Sample Time: 1415 # of Containers: 4

Duplicate Sample Collected? ☐ Yes ☒ No ID:

Type of Containers: 2x500ml poly and 2x250ml poly bottles

Analyses Requested:

Carbon-14, Tritium
Nitrate as N
Total Chromium

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-1 (Rev 7/31/01)

Signature

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

WELL ID: UCD1-019

1. PROJECT INFORMATION

Project Number: 131261 Task Number: 300 Date: 2/26/08 Time: 1542

Client: UC Davis Personnel: Chuck Frey

Project Location: LEHR Weather: SLIGHTLY CLOUDY WARM

2. WELL DATA

Casing Diameter: 4 inches Type of Casing: PVC

Screen Diameter: 4 inches Type of Screen: PVC Screen Length : 15 feet

Total Depth of Well from TOC: ~~38.5~~ 38.95 71.5 feet

Depth to Static Water from TOC: 39.28 feet

Depth to Product from TOC: N/A

Length of Water Column (h): 32.22 Calculated Casing Volume: 64.5 (3 Casing volumes)

Purge Volume Calculation (one casing volume = 0.667):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Purge Method: 2" Grundfos Redi-flo pump Dedicated

Material: Pump Stainless Steel/Teflon

Material: Tubing Polyethylene

Was well purged dry? ☐ Yes ☒ No Pumping Rate: _____ gal/min

Equipment Model(s)

1. N/A
2. _____
3. _____

Time	Cum. Gallons Removed	pH	Temp (°C)	Spec. Cond. (µmhos/cm) µS/cm	DO ~~Eh (Units)~~ mg/L	ORP ~~DO (Units)~~ mV	~~Turbidity (NTU)~~	Other: DTW	Comments
1552	15	7.49	19.11	1.72 ↔ 1797	1.82			45.42	Clear &
1602	30	7.87	19.08	1837	1.57	71.8		45.70	
1613	45	7.86	19.13	1866	1.64	-100.2		46.20	odorless
1619	55	7.61	19.12	1878	1.53	-63.1		46.15	
1624	65	7.35	19.09	1885	1.48	-41.6		46.20	

4. SAMPLING DATA

Method(s): 2" Grundfos Redi-flo pump Dedicated

Material: Bailer Stainless Steel/Teflon

Material: Rope Polyethylene

Depth to Water at Time of Sampling: 46.20 Field Filtered? ☐ Yes ☒ No

Sample ID: GWGW2217 Sample Time: 1625 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: Type of Containers: 2x250ml poly bottles

Analyses Requested:

Nitrate as N

Total Chromium

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-1 (Rev 7/31/01)

Signature

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

WELL ID: UCD1-021

1. PROJECT INFORMATION

Project Number: 131261 Task Number: 300 Date: 2/26/08 Time: 1630

Client: UC Davis Personnel: Chuck Frey

Project Location: LEHR Weather: Slightly cloudy, warm

2. WELL DATA

Casing Diameter: 4 inches Type of Casing: PVC

Screen Diameter: 4 inches 36.91 Type of Screen: PVC Screen Length : 15 feet

Total Depth of Well from TOC: 72 feet

Depth to Static Water from TOC: 36.33 feet

Depth to Product from TOC: N/A

Length of Water Column (h): 35.67 Calculated Casing Volume: 71.4 (3 Casing volumes)

Purge Volume Calculation (one casing volume = 0.667):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Equipment Model(s)

Purge Method: 2" Grundfos Redi-flo pump Dedicated 1. N/A

Material: Pump Stainless Steel/Teflon 2.

Material: Tubing Polyethylene 3.

Was well purged dry? ☐ Yes ☐ No Pumping Rate: 2 gal/min

Time	Cum. Gallons Removed	pH	Temp (°C)	Spec. Cond. (µmhos/cm)	ORP ~~Eh (Units)~~	DO (Units) ppm	~~Turbidity (NTU)~~	Other: depth	Comments
1644	15	7.82	19.50	869	54.4	6.15		41.40	clear, odorless
1650	30	7.78	19.74	911	-8.2	6.37		41.42	
1657	45	7.81	19.49	909	-36.3	6.21		41.52	
1702	55	7.64	19.32	938	38.6	5.96		41.59	
1706	65	7.82	19.12	941	53.2	6.98		41.63	
1711	75	7.88	19.10	921	-5.5	6.82		41.65	

4. SAMPLING DATA

Method(s): 2" Grundfos Redi-flo pump Dedicated

Material: Bailer Stainless Steel/Teflon

Material: Rope Polyethylene

Depth to Water at Time of Sampling: Field Filtered? ☐ Yes ☐ No

Sample ID: GWGW2218 Sample Time: 1715 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☑ No ID: Type of Containers: 2x250ml poly bottles

Analyses Requested:

Nitrate as N

Total Chromium

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-1 (Rev 7/31/01) Signature

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

WELL ID: UCD1-25

1. PROJECT INFORMATION

Project Number: 131261 Task Number: 300 Date: 2/27/08 Time: 1600

Client: UC Davis Personnel: Chuck Frey

Project Location: LEHR Weather: Sunny, cooling off

2. WELL DATA

Casing Diameter: 4 inches Type of Casing: PVC

Screen Diameter: 4 inches Type of Screen: PVC Screen Length : 15 feet

Total Depth of Well from TOC: 35.65 75 feet

Depth to Static Water from TOC: 35.86 feet

Depth to Product from TOC: N/A

Length of Water Column (h): 39.14 Calculated Casing Volume: 78.3 (3 Casing volumes)

Purge Volume Calculation (one casing volume = 0.667):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Purge Method: 2" Grundfos Redi-flo pump Dedicated

Material: Pump Stainless Steel/Teflon

Material: Tubing Polyethylene

Was well purged dry? ☐ Yes ☐ No Pumping Rate:_____ gal/min

Equipment Model(s)

1. N/A
2. _____
3. _____

Time	Cum. Gallons Removed	pH	Temp (°C)	Spec. Cond. (µmhos/cm)	~~Eh (Units)~~ ORP	DO (~~Units~~) ppm	Turbidity (NTU)	Other: depth	Comments
1600	15	7.25	17.82	217	-93.2	0.93		44.12	murky/turbid
1610	30	7.06	17.84	401	-58.0	0.92		44.40	brown color
1615	45	7.14	17.86	595	-144.1	0.94		43.20	odorless
1620	60	7.26	17.86	727	-103.9	0.83		43.32	almost clear
1624	70	7.21	17.86	770	-71.5	0.79		43.30	clear, odorless
1629	80	7.17	17.86	798	-53.4	0.78		43.31	clear, odorless

4. SAMPLING DATA

Method(s): 2" Grundfos Redi-flo pump Dedicated

Material: Bailer Stainless Steel/Teflon

Material: Rope Polyethylene

Depth to Water at Time of Sampling:_____ Field Filtered? ☐ Yes ☒ No

Sample ID: GWGW ~~2160~~ 2220 Sample Time: 1635 # of Containers: 5

Duplicate Sample Collected? ☐ Yes ☒ No ID: Type of Containers: 3x 40ml VOA Vials and 2x250ml poly bottle

Analyses Requested:

VOCs (Chloroform)
Nitrate as N
Total Chromium

5. COMMENTS

~~MS/MSD~~ Not collected.

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-1 (Rev 7/31/01)

Signature

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

WELL ID: UCD1-28

1. PROJECT INFORMATION

Project Number: 131261 Task Number: 300 Date: _____ Time: 1225

Client: UC Davis Personnel: Chuck Frey

Project Location: LEHR Weather: _____

2. WELL DATA

Casing Diameter: 2 inches Type of Casing: PVC

Screen Diameter: 2 inches Type of Screen: PVC Screen Length : 15 feet

Total Depth of Well from TOC: ~~37.~~ 35.76 68 feet

Depth to Static Water from TOC: 35.86 feet

Depth to Product from TOC: N/A

Length of Water Column (h): 32.14 Calculated Casing Volume: 16.1 (3 Casing volumes)

Purge Volume Calculation (one casing volume = 0.167):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Equipment Model(s)

Purge Method: 2" Grundfos Redi-flo pump Dedicated 1. N/A

Material: Pump Stainless Steel/Teflon 2. _____

Material: Tubing Polyethylene 3. _____

Was well purged dry? ☐ Yes ☐ No Pumping Rate: _____ gal/min

Time	Cum. Gallons Removed	pH	Temp (°C)	Spec. Cond. (µmhos/cm)	~~Eh (Units)~~ ORP	~~DO (Units)~~ ppm	~~Turbidity (NTU)~~	Other: ~~depth~~	Comments
1234	5	7.02	18.86	1988	37.9	4.68		37.11	
1239	10	7.13	18.90	1959	19.9	4.56		37.29	clear,
1245	15	7.10	18.85	1949	17.0	4.27		37.31	
1249	20	7.20	18.88	1932	15.8	4.40		37.22	odorless

4. SAMPLING DATA

Method(s): 2" Grundfos Redi-flo pump Dedicated

Material: Bailer Stainless Steel/Teflon

Material: Rope Polyethylene

Depth to Water at Time of Sampling: 37.22 Field Filtered? ☐ Yes ☐ No

Sample ID: GWGW 2221 Sample Time: 1245 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☐ No ID: Type of Containers: 2x 250 ml poly bottle

Analyses Requested:

Nitrate as N

Total Chromium

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-1 (Rev 7/31/01) Signature

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

WELL ID: UCD1-49

1. PROJECT INFORMATION

Project Number: 131261 Task Number: 300 Date: 2/27/08 Time: 1017

Client: UC Davis Personnel: Chuck Frey

Project Location: LEHR Weather: Sunny, warm

2. WELL DATA

Casing Diameter: 4 inches Type of Casing: PVC

Screen Diameter: 4 inches Type of Screen: PVC Screen Length : 20 feet

Total Depth of Well from TOC: 69.5 feet

Depth to Static Water from TOC: 39.31 feet

Depth to Product from TOC: N/A

Length of Water Column (h): 30.19 Calculated Casing Volume: 60.4 (3 Casing volumes)

Purge Volume Calculation (one casing volume = 0.667):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Purge Method: 2" Grundfos Redi-flo pump Dedicated

Material: Pump Stainless Steel/Teflon

Material: Tubing Polyethylene

Was well purged dry? ☐ Yes ☑ No Pumping Rate: 2 gal/min

Equipment Model(s)

1. N/A
2.
3.

Time	Cum. Gallons Removed	pH	Temp (°C)	Spec. Cond. (µmhos/cm)	~~Eh (Units)~~ ORP	DO (Units)	Turbidity (NTU)	Other: ~~depth~~	Comments
1022	10	7.21	18.70	1924	10.1	6.98		43.57	clear, odorless
1027	20	7.24	18.68	1920	17.1	6.85		43.91	
1032	30	7.10	18.69	1920	36.9	6.93		43.92	
1037	40	7.12	18.68	1917	23.9	7.19		44.02	
1042	50	7.79	18.68	1906	-42.0	7.44		44.05	
1047	60	7.44	18.67	1897	-20.5	8.20		44.08	

4. SAMPLING DATA

Method(s): 2" Grundfos Redi-flo pump Dedicated

Material: Bailer Stainless Steel/Teflon

Material: Rope Polyethylene

Depth to Water at Time of Sampling: 43.49 Field Filtered? ☐ Yes ☐ No

Sample ID: GWGW 2222 Sample Time: 1050 # of Containers: 3

Duplicate Sample Collected? ☐ Yes ☑ No ID: Type of Containers: 3x 40ml VOA Vials

Analyses Requested:

VOCs (Chloroform)

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-1 (Rev 7/31/01)

Signature

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

1. PROJECT INFORMATION

WELL ID: UCD1-50

Project Number: 131261 Task Number: 300 Date: 2/27/08 Time: 1055

Client: UC Davis Personnel: Chuck Frey

Project Location: LEHR Weather: Sunny, warm

2. WELL DATA

Casing Diameter: 4 inches Type of Casing: PVC

Screen Diameter: 4 inches Type of Screen: PVC Screen Length : 20 feet

Total Depth of Well from TOC: 40.45 69.5 feet

Depth to Static Water from TOC: 40.39 feet

Depth to Product from TOC: N/A

Length of Water Column (h): 29.11 Calculated Casing Volume: 58.2 (3 Casing volumes)

Purge Volume Calculation (one casing volume = 0.667):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Purge Method: 2" Grundfos Redi-flo pump Dedicated

Material: Pump Stainless Steel/Teflon

Material: Tubing Polyethylene

Was well purged dry? ☐ Yes ☑ No Pumping Rate: 2 gal/min

Equipment Model(s)

1. N/A
2.
3.

Time	Cum. Gallons Removed	pH	Temp (°C)	Spec. Cond. (µmhos/cm)	ORP ~~Eh (Units)~~	ppm DO ~~(Units)~~	~~Turbidity~~ (NTU)	Other: depth	Comments
1058	10	6.99	18.68	1989	41.9	8.65		43.03	Clear,
1103	20	6.96	18.69	1981	49.9	8.78		43.11	odorless,
1108	30	6.97	18.70	1967	52.1	8.86		43.17	
1113	40	7.01	18.74	1952	56.0	8.88		43.19	
1118	50	7.03	18.76	1938	50.0	8.87		43.22	
1123	60	6.94	18.74	1912	64.7	8.39		43.20	

4. SAMPLING DATA

Method(s): 2" Grundfos Redi-flo pump Dedicated

Material: Bailer Stainless Steel/Teflon

Material: Rope Polyethylene

Depth to Water at Time of Sampling: 43.18

Sample ID: GWGW 2223 Sample Time: 1125

Duplicate Sample Collected? ☐ Yes ☑ No ID:

Field Filtered? ☐ Yes ☐ No

# of Containers: 15

Type of Containers: 9x 40ml VOA vials, 3x500ml poly, and 3x250ml poly bottles

Analyses Requested:

VOCs (Chloroform)
C-14
Nitrate as N

5. COMMENTS

MS/MSD

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-1 (Rev 7/31/01)

Signature

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

1. PROJECT INFORMATION

WELL ID: UCD1-51

Project Number: 131261 Task Number: 300

Client: UC Davis

Project Location: LEHR

Date: 2/27/08 Time: 0744

Personnel: Chuck Frey

Weather: Clear, sunny, cool

2. WELL DATA

Casing Diameter: 4 inches Type of Casing: PVC

Screen Diameter: 4 inches 39.77 Type of Screen: PVC Screen Length : 20 feet

Total Depth of Well from TOC: 69.7 feet

Depth to Static Water from TOC: 39.98 feet

Depth to Product from TOC: N/A

Length of Water Column (h): 29.72 Calculated Casing Volume: 59.5 (3 Casing volumes)

Purge Volume Calculation (one casing volume = 0.667):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Purge Method: 2" Grundfos Redi-flo pump Dedicated

Material: Pump Stainless Steel/Teflon

Material: Tubing Polyethylene

Was well purged dry? ☐ Yes ☐ No Pumping Rate: 2.2 gal/min

Equipment Model(s)

1. N/A
2.
3.

Time	Cum. Gallons Removed	pH	Temp (°C)	Spec. Cond. (µmhos/cm)	~~Eh (Units)~~ ORP	DO (Units)	Turbidity (NTU)	Other:	Comments
0806	5	7.03	18.61	1951	34.4	9.18		45.11	Clear, odorless
0813	20	6.98	18.56	1933	46.2	9.10		45.15	
0820	35	7.09	18.57	1807	29.5	9.05		45.17	
0827	50	6.97	18.57	1803	47.0	9.28		45.23	
0830	60	6.93	18.56	~~1949~~ 1797	57.9	9.05		45.24	

4. SAMPLING DATA

Method(s): 2" Grundfos Redi-flo pump Dedicated

Material: Bailer Stainless Steel/Teflon

Material: Rope Polyethylene

Depth to Water at Time of Sampling:

Sample ID: GWGW 2224 Sample Time: 0835

Duplicate Sample Collected? ☐ Yes ☑ No ID:

Field Filtered? ☐ Yes ☐ No

# of Containers: 6

Type of Containers: 3x 40ml VOA vials, 1x500ml poly and 2x 250 mL poly bottles

Analyses Requested:

C-14
VOCs (Chloroform)
Total Chromium
Nitrates

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-1 (Rev 7/31/01)

Signature

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

WELL ID: UCD1-52

1. PROJECT INFORMATION

Project Number: 131261 Task Number: 300 Date: 3-3-08 Time: 1346

Client: UC Davis Personnel: Chuck Frey / J. Tamin

Project Location: LEHR Weather: Clear @ 170

2. WELL DATA

Casing Diameter: 2 inches Type of Casing: PVC

Screen Diameter: 2 inches Type of Screen: PVC Screen Length : 15 feet

Total Depth of Well from TOC: 68.5 feet

Depth to Static Water from TOC: 35.36 feet

Depth to Product from TOC: N/A

Length of Water Column (h): 33.14 Calculated Casing Volume: 16.6 (3 Casing volumes)

Purge Volume Calculation (one casing volume = 0.167):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Equipment Model(s)

Purge Method: 2" Grundfos Redi-flo pump Dedicated

Material: Pump Stainless Steel/Teflon

Material: Tubing Polyethylene

Was well purged dry? ☐ Yes ☒ No Pumping Rate: 1.66 gal/min

1. N/A
2.
3.

Time	Cum. Gallons Removed	pH	Temp (°C)	Spec. Cond. ~~(umhos/cm)~~ mS/cm	~~Eh (Units)~~ ORP mV	DO (Units) ppm	Turbidity (NTU)	Other:	Comments
1349	3	7.57	18.91	1845	104.7	3.94			
1352	6	7.44	18.95	1834	106.5	4.14			
1354	9	7.40	18.96	1830	109.9	4.11			
1357	12	7.34	18.99	1851	115.4	4.20			
1400	15	7.29	18.94	1835	132.2	4.18			
1402	17	7.28	18.98	1826	126.7	3.84			

4. SAMPLING DATA

Method(s): 2" Grundfos Redi-flo pump Dedicated

Material: Bailer Stainless Steel/Teflon

Material: Rope Polyethylene

Depth to Water at Time of Sampling: Field Filtered? ☐ Yes ☒ No

Sample ID: GWGW 2225 Sample Time: 1404 # of Containers: 3

Duplicate Sample Collected? ☐ Yes ☐ No ID: Type of Containers: 500ml poly and 2x250 ml bottle

Analyses Requested:
Tritium
Nitrate as N
Total Chromium

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-1 (Rev 7/31/01)

Signature

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

1. PROJECT INFORMATION

WELL ID: UCD1-53

Project Number: 131261 Task Number: 300 Date: 2/27/08 Time: 1410

Client: UC Davis Personnel: Chuck Frey

Project Location: LEHR Weather: sunny, warm

2. WELL DATA

Casing Diameter: 2 inches Type of Casing: PVC

Screen Diameter: 2 inches Type of Screen: PVC Screen Length : 15 feet

Total Depth of Well from TOC: 35.30 67.5 feet

Depth to Static Water from TOC: 35.43 feet

Depth to Product from TOC: N/A

Length of Water Column (h): 32.07 Calculated Casing Volume: 16.1 (3 Casing volumes)

Purge Volume Calculation (one casing volume = 0.167):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Purge Method: 2" Grundfos Redi-flo pump Dedicated

Material: Pump Stainless Steel/Teflon

Material: Tubing Polyethylene

Was well purged dry? ☐ Yes ☑ No Pumping Rate: _____ gal/min

Equipment Model(s)

1. N/A
2. _____
3. _____

Time	Cum. Gallons Removed	pH	Temp (°C)	Spec. Cond. (µmhos/cm)	~~Eh (Units)~~ ORP	DO (Units)	~~Turbidity (NTU)~~	Other: ~~depth~~	Comments
1415	5	7.38	18.41	1480	-22.3	5.33		40.00	clear,
1418	10	7.23	18.48	1487	10.1	5.34		40.10	odorless
1421	15	7.40	18.47	1474	-20.8	5.38		40.20	
1424	20	7.20	18.48	1462	12.9	5.35		40.28	

4. SAMPLING DATA

Method(s): 2" Grundfos Redi-flo pump Dedicated

Material: Bailer Stainless Steel/Teflon

Material: Rope Polyethylene

Depth to Water at Time of Sampling: 40.28 Field Filtered? ☐ Yes ☑ No

Sample ID: GWGW 2226 Sample Time: 1425 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☑ No ID: Type of Containers: 2x 250ml poly bottle

Analyses Requested:

Nitrate as N

Total Chromium

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-1 (Rev 7/31/01)

Signature

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

1. PROJECT INFORMATION

WELL ID: UCD1-054

Project Number: 131261 Task Number: 300 Date: 3-3-08 Time: 1420

Client: UC Davis Personnel: Chuck Frey / J. Tomlin

Project Location: LEHR Weather: Clear @ 70°

2. WELL DATA

Casing Diameter: 2 inches Type of Casing: PVC

Screen Diameter: 2 inches Type of Screen: PVC Screen Length : 15 feet

Total Depth of Well from TOC: 73 feet

Depth to Static Water from TOC: 36.24 feet

Depth to Product from TOC: N/A

Length of Water Column (h): 36.76 Calculated Casing Volume: 18.4 (3 Casing volumes)

Purge Volume Calculation (one casing volume = 0.667):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Equipment Model(s)

Purge Method: 2" Grundfos Redi-flo pump Dedicated 1. N/A

Material: Pump Stainless Steel/Teflon 2.

Material: Tubing Polyethylene 3.

Was well purged dry? ☐ Yes ☐ No Pumping Rate: _____ gal/min

Time	Cum. Gallons Removed	pH	Temp (°C)	Spec. Cond. ~~(µmhos/cm)~~ mS/mc	~~Eh (Units)~~ ORP mV	DO (Units) ppm	Turbidity (NTU)	Other:	Comments
1422	3	7.81	19.11	1724	-40.0	0.57			Cloudy (moderate)
1425	6	7.68	19.66	1747	-06.4	0.49			
1428	9	7.52	19.87	1789	23.6	0.56			
1430	12	7.30	19.95	1817	44.6	0.72			
1433	15	7.26	19.96	1816	50.5	0.77			
1435	18.5	7.23	20.01	1823	54.8	0.80			

4. SAMPLING DATA

Method(s): 2" Grundfos Redi-flo pump Dedicated

Material: Bailer Stainless Steel/Teflon

Material: Rope Polyethylene

Depth to Water at Time of Sampling: _____ Field Filtered? ☐ Yes ☐ No

Sample ID: GWGW2227 Sample Time: 1438 # of Containers: 1

Duplicate Sample Collected? ☐ Yes ☐ No ID: GWGW2228 Type of Containers: 1x250ml poly bottle

Analyses Requested:

Nitrate as N

5. COMMENTS

* Dup. 1440 ; Sample Time

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-1 (Rev 7/31/01)

Signature

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

WELL ID: UCD1-55

1. PROJECT INFORMATION

Project Number: 131261 Task Number: 300
Client: UC Davis
Project Location: LEHR

Date: 2-01-08 Time: 1450
Personnel: J. Tomlin / C. Fry
Weather: Cloudy @ 60°

2. WELL DATA

Casing Diameter: 2 inches Type of Casing: PVC
Screen Diameter: 2 inches Type of Screen: PVC Screen Length : feet
Total Depth of Well from TOC: 59.02 feet
Depth to Static Water from TOC: 33.43 feet
Depth to Product from TOC: N/A
Length of Water Column (h): 25.59 4.27 Calculated Casing Volume: 12.81 (3 Casing volumes)

Purge Volume Calculation (one casing volume = 0.667):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Purge Method: 12V SS submersible pump
Material: Pump Stainless Steel/Teflon
Material: Tubing Polyethylene
Was well purged dry? ☐ Yes ☒ No Pumping Rate: 2.5 gal/min

Equipment Model(s)
1. N/A
2. —
3. —

Time	Cum. Gallons Removed	pH	Temp (°C)	Spec. Cond. ~~(µmhos/cm)~~ mS/cm²	Eh (Units)	DO (Units)	Turbidity ~~(NTU)~~ VISUAL	Other: ODOR	Comments
1452	3	7.65	18.13	1.784			CLEAR	NONE	
1454	6	7.63	18.16	1.773			CLEAR	NONE	
1457	9	7.61	18.20	1.768			CLEAR	NONE	
1500	13	7.60	18.21	1.768			CLEAR	NONE	

4. SAMPLING DATA

Method(s): 2" disposable bailer
Material: Bailer Polyethylene
Material: Rope Polyethylene
Depth to Water at Time of Sampling: 35.17
Sample ID: GWGW 2262 Sample Time: 1501
Duplicate Sample Collected? ☐ Yes ☒ No ID:
Field Filtered? ☐ Yes ☒ No
# of Containers: 6
Type of Containers: 3x 40ml VOAs, 2x 1L polys, and 1x 250 mL poly

Analyses Requested:
VOCs (Chloroform)
Nitrate as N,
Tritium, C-14, Total Chromium

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

FORM GW-1 (Rev 7/31/01)

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

WELL ID: UCD1-58

1. PROJECT INFORMATION

Project Number: 131261 Task Number: 300 Date: 2-01-08 Time: 1150

Client: UC Davis Personnel: J. TOMLIN / C. FREY

Project Location: LEHR Weather: CLEAR @ 60°

2. WELL DATA

Casing Diameter: 2 inches Type of Casing: PVC

Screen Diameter: 2 inches Type of Screen: PVC Screen Length : feet

Total Depth of Well from TOC: 73.60 feet

Depth to Static Water from TOC: 36.70 feet

Depth to Product from TOC: N/A

Length of Water Column (h): 36.90 6.16 Calculated Casing Volume: 18.48 (3 Casing volumes)

Purge Volume Calculation (one casing volume = 0.667):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Equipment Model(s)

Purge Method: 12V SS submersible pump 1. N/A

Material: Pump Stainless Steel/Teflon 2. —

Material: Tubing Polyethylene 3. —

Was well purged dry? ☐ Yes ☒ No Pumping Rate: 1 gal/min

Time	Cum. Gallons Removed	pH	Temp (°C)	Spec. Cond. ~~(µmhos/cm)~~ mS/cm	Eh (Units)	DO (Units)	Turbidity ~~(NTU)~~ VISUAL	Other: ODOR	Comments
1155	5	8.83	17.80	1.082			CLEAR	NONE	
1200	10	8.14	18.27	1.167			" "	" "	
1205	15	7.88	18.22	1.187			" "	" "	
1208	19	7.84	18.17	1.193			" "	" "	

4. SAMPLING DATA

Method(s): 2" disposable bailer

Material: Bailer Polyethylene

Material: Rope Polyethylene

Depth to Water at Time of Sampling: 37.86 Field Filtered? ☐ Yes ☒ No

Sample ID: GWGW 2263 Sample Time: 1210 # of Containers: 6

Duplicate Sample Collected? ☐ Yes ☒ No ID: Type of Containers: 3x 40ml VOAs, 2x 1L polys, and 1x 250 mL poly

Analyses Requested:

VOCs (Chloroform)
Nitrate as N,
Tritium, C-14, Total Chromium

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

FORM GW-1 (Rev 7/31/01)

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

WELL ID: UCD2-7

1. PROJECT INFORMATION

Project Number: 131261 Task Number: 300
Client: UC Davis
Project Location: LEHR

Date: 2/27/08 Time: 1150
Personnel: Chuck Frey
Weather: sunny, warm

2. WELL DATA

Casing Diameter: 2 inches Type of Casing: PVC
Screen Diameter: 2 inches Type of Screen: PVC Screen Length : 10 feet
Total Depth of Well from TOC: 38.98 90 feet
Depth to Static Water from TOC: 39.22 feet
Depth to Product from TOC: N/A
Length of Water Column (h): 50.78 Calculated Casing Volume: 25.4 (3 Casing volumes)

Purge Volume Calculation (one casing volume = 0.167):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Purge Method: 2" Grundfos Redi-flo pump Dedicated
Material: Pump Stainless Steel/Teflon
Material: Tubing Polyethylene
Was well purged dry? ☐ Yes ☑ No Pumping Rate:_____ gal/min

Equipment Model(s)
1. N/A
2. _____
3. _____

Time	Cum. Gallons Removed	pH	Temp (°C)	Spec. Cond. (µmhos/cm)	ORP ~~Eh (Units)~~	DO (Units)	Turbidity (NTU)	Other: depth	Comments
1155	5	7.32	18.62	1063	49.8	4.35		39.07	clear, odorless
1159	10	7.26	18.57	1061	52.9	4.02		39.10	
1201	15	7.23	18.58	1057	56.7	3.69		39.10	
1205	20	7.29	18.59	1044	43.5	3.81		39.09	
1209	25	7.23	18.61	1042	52.5	3.87		39.10	

4. SAMPLING DATA

Method(s): 2" Grundfos Redi-flo pump Dedicated
Material: Bailer Stainless Steel/Teflon
Material: Rope Polyethylene
Depth to Water at Time of Sampling: 39.10 Field Filtered? ☐ Yes ☐ No
Sample ID: GWGW 2249 Sample Time: 1210 # of Containers: 1
Duplicate Sample Collected? ☐ Yes ☑ No ID: Type of Containers: 1x 250ml poly bottle

Analyses Requested:
Nitrate as N

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-1 (Rev 7/31/01)

Signature

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

1. PROJECT INFORMATION

WELL ID: UCD2-14

Project Number: 131261 Task Number: 300 Date: 2/26/08 Time: 1302

Client: UC Davis Personnel: Chuck Frey

Project Location: LEHR Weather:

2. WELL DATA

Casing Diameter: 4 inches Type of Casing: PVC

Screen Diameter: 4 inches Type of Screen: PVC Screen Length : 10 feet

Total Depth of Well from TOC: 85 feet

Depth to Static Water from TOC: 39.42 55.26 feet

Depth to Product from TOC: N/A

Length of Water Column (h): 29.74 Calculated Casing Volume: ~~59.5~~ 91.2 (3 Casing volumes)

Purge Volume Calculation (one casing volume = 0.667):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Purge Method: 2" Grundfos Redi-flo pump Dedicated

Material: Pump Stainless Steel/Teflon

Material: Tubing Polyethylene

Was well purged dry? ☐ Yes ☐ No Pumping Rate: 3 gal/min

Equipment Model(s)

1. N/A
2.
3.

Time	Cum. Gallons Removed	pH	Temp (°C)	Spec. Cond. (~~µmhos/cm~~ µS/cm)	Eh (Units) ORP mV	DO (Units) mg/L ppm	Turbidity (NTU)	Other:	Comments
1312	30	7.72	18.83	1186	~~-86~~ -25	1.86			CLEAR ODORLESS
1317	45	7.65	20.08	1144	34.9	1.65			
1322	60	7.44	18.94	1150	56.1	2.35			
1327	75	8.13	19.67	1106	-77.4	1.81			
1330	~~85~~ 84	7.86	19.13	1195	-101	1.95			
1334	~~95~~ 96	7.57	18.54	1198	-15.6	2.27			

4. SAMPLING DATA

Method(s): 2" Grundfos Redi-flo pump Dedicated

Material: Bailer Stainless Steel/Teflon

Material: Rope Polyethylene

Depth to Water at Time of Sampling: Field Filtered? ☐ Yes ☐ No

Sample ID: GWGW 2250 Sample Time: 1336 # of Containers: 4

Duplicate Sample Collected? ☐ Yes ☑ No ID: Type of Containers: 2x500ml poly and 2x250ml poly bottles

Analyses Requested:

Nitrate as N
Total Chromium
Carbon-14, Tritium

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-1 (Rev 7/31/01)

Signature

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

WELL ID: UCD2-26

1. PROJECT INFORMATION

Project Number: 131261 Task Number: 300 Date: 2/27/08 Time: 1530

Client: UC Davis Personnel: Chuck Frey

Project Location: LEHR Weather: sunny & cooling off

2. WELL DATA

Casing Diameter: 4 inches Type of Casing: PVC

Screen Diameter: 4 inches Type of Screen: PVC Screen Length : 15 feet

Total Depth of Well from TOC: 35.56 102 feet

Depth to Static Water from TOC: 35.59 feet

Depth to Product from TOC: N/A

Length of Water Column (h): 66.41 Calculated Casing Volume: 33.3 (3 Casing volumes)

Purge Volume Calculation (one casing volume = 0.667):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Purge Method: 2" Grundfos Redi-flo pump Dedicated

Material: Pump Stainless Steel/Teflon

Material: Tubing Polyethylene

Was well purged dry? ☐ Yes ☐ No Pumping Rate:_____ gal/min

Equipment Model(s)

1. N/A
2. _____
3. _____

Time	Cum. Gallons Removed	pH	Temp (°C)	Spec. Cond. (µmhos/cm)	~~Eh (Units)~~ ORP	DO (Units)	Turbidity (NTU)	Other: depth	Comments
1541	5	6.28	18.19	218	12.4	2.01		37.08	murky/turbid
1543	10	6.29	18.25	216	11.4	~~3~~0.44		37.02	brownish color
1545	~~20~~ 15	6.43	18.30	243	4.6	0.35		37.00	odorless
1549	~~30~~ 25	7.15	18.31	295	-169.5	0.29		36.98	less turbid
1553	35	6.63	18.32	371	-59.6	0.45		36.98	
1556	40	6.89	18.32	436	-103.9	0.52		36.97	more clear

4. SAMPLING DATA

Method(s): 2" Grundfos Redi-flo pump Dedicated

Material: Bailer Stainless Steel/Teflon

Material: Rope Polyethylene

Depth to Water at Time of Sampling:_____ Field Filtered? ☐ Yes ☒ No

Sample ID: GWGW 2251 Sample Time: 1600 # of Containers: 1

Duplicate Sample Collected? ☐ Yes ☒ No ID: Type of Containers: 1x 250ml poly bottle

Analyses Requested:

Total Chromium

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-1 (Rev 7/31/01)

Signature

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

1. PROJECT INFORMATION

WELL ID: UCD2-29

Project Number: 131261 Task Number: 300

Client: UC Davis

Project Location: LEHR

Date: 2/27/08 Time: 1255

Personnel: Chuck Frey

Weather: Sunny, warm

2. WELL DATA

Casing Diameter: 2 inches Type of Casing: PVC

Screen Diameter: 2 inches Type of Screen: PVC Screen Length : 15 feet

Total Depth of Well from TOC: 35.80 95 feet

Depth to Static Water from TOC: 35.7 feet

Depth to Product from TOC: N/A

Length of Water Column (h): 59.3 Calculated Casing Volume: 29.7 (3 Casing volumes)

Purge Volume Calculation (one casing volume = 0.167):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Purge Method: 2" Grundfos Redi-flo pump Dedicated

Material: Pump Stainless Steel/Teflon

Material: Tubing Polyethylene

Was well purged dry? ☐ Yes ☐ No Pumping Rate:_____ gal/min

Equipment Model(s)

1. N/A
2. _____
3. _____

Time	Cum. Gallons Removed	pH	Temp (°C)	Spec. Cond. (µmhos/cm)	ORP ~~Eh (Units)~~	ppm DO (~~Units~~)	~~Turbidity (NTU)~~	Other: depth	Comments
1259	5	7.33	18.48	945	9.5	3.39		35.82	clear, odorless
1303	10	7.25	18.51	937	30.6	3.25		35.83	
1307	15	7.37	18.52	910	14.8	3.24		35.83	
1311	20	7.25	18.52	903	32.8	3.18		35.83	
1315	25	7.30	18.52	884	10.1	3.20		35.78	
1320	30	7.25	18.53	892	34.8	3.21		35.79	

4. SAMPLING DATA

Method(s): 2" Grundfos Redi-flo pump Dedicated

Material: Bailer Stainless Steel/Teflon

Material: Rope Polyethylene

Depth to Water at Time of Sampling:_____ Field Filtered? ☐ Yes ☐ No

Sample ID: GWGW 2252 Sample Time: 1323 # of Containers: 5

Duplicate Sample Collected? ☑ Yes ☐ No ID: GWGW 2253 Type of Containers: 3x 40ml VOA Vials and 2x250 ml poly bottle

Analyses Requested:

VOCs (Chloroform)
Nitrate as N
Total Chromium

5. COMMENTS

GWGW 2253 1326

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-1 (Rev 7/31/01)

Signature

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

1. PROJECT INFORMATION

WELL ID: UCD2-30

Project Number: 131261 Task Number: 300 Date: 2/27/08 Time: 1430

Client: UC Davis Personnel: Chuck Frey

Project Location: LEHR Weather: Sunny, warm

2. WELL DATA

Casing Diameter: 2 inches 35.53 Type of Casing: PVC

Screen Diameter: 2 inches Type of Screen: PVC Screen Length : 15 feet

Total Depth of Well from TOC: 110 feet

Depth to Static Water from TOC: 35.38 feet

Depth to Product from TOC: N/A

Length of Water Column (h): 74.62 Calculated Casing Volume: 37.4 (3 Casing volumes)

Purge Volume Calculation (one casing volume = 0.167):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Purge Method: 2" Grundfos Redi-flo pump Dedicated

Material: Pump Stainless Steel/Teflon

Material: Tubing Polyethylene

Was well purged dry? ☐ Yes ☒ No Pumping Rate: _____ gal/min

Equipment Model(s)

1. N/A
2. _____
3. _____

Time	Cum. Gallons Removed	pH	Temp (°C)	Spec. Cond. (µmhos/cm)	~~Eh (Units)~~ ORP	DO (~~Units~~) ppm	Turbidity (NTU)	Other: depth	Comments
1439	10	7.73	18.51	892	-71.2	2.91		35.80	
1443	20	8.08	18.49	877	-91.8	2.91		35.80	clear,
1449	30	7.98	18.52	858	-61.4	2.91		35.81	odorless
1454	35	7.33	18.72	883	-5.6	3.00		35.82	
1457	40	7.66	18.53	872	-70.2	3.47		35.80	

4. SAMPLING DATA

Method(s): 2" Grundfos Redi-flo pump Dedicated

Material: Bailer Stainless Steel/Teflon

Material: Rope Polyethylene

Depth to Water at Time of Sampling: _____ Field Filtered? ☐ Yes ☒ No

Sample ID: GWGW 2254 Sample Time: 1458 # of Containers: 5

Duplicate Sample Collected? ☐ Yes ☒ No ID: Type of Containers: 3x 40ml VOA Vials and 2x250ml poly bottle

Analyses Requested:

VOCs (Chloroform)
Nitrate as N
Total Chromium

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-1 (Rev 7/31/01)

Signature

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

1. PROJECT INFORMATION

WELL ID: UCD2-31

Project Number: 131261 Task Number: 300 Date: 2/27/08 Time: 1335

Client: UC Davis Personnel: Chuck Frey

Project Location: LEHR Weather: Sunny warm

2. WELL DATA

Casing Diameter: 2 inches Type of Casing: PVC

Screen Diameter: 2 inches 35.47 Type of Screen: PVC Screen Length : 15 feet

Total Depth of Well from TOC: 109 feet

Depth to Static Water from TOC: 35.35 feet

Depth to Product from TOC: N/A

Length of Water Column (h): 73.65 Calculated Casing Volume: 36.9 (3 Casing volumes)

Purge Volume Calculation (one casing volume = 0.167):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Purge Method: 2" Grundfos Redi-flo pump Dedicated

Material: Pump Stainless Steel/Teflon

Material: Tubing Polyethylene

Was well purged dry? ☐ Yes ☒ No Pumping Rate:_____ gal/min

Equipment Model(s)

1. N/A
2. _____
3. _____

Time	Cum. Gallons Removed	pH	Temp (°C)	Spec. Cond. (µmhos/cm)	ORP ~~Eh (Units)~~	ppm ~~DO (Units)~~	Turbidity (NTU)	Other: ~~depth~~	Comments
1343	10	7.29	18.61	984	27.6	3.46		35.52	
1348	20	7.33	18.64	955	21.8	3.48		35.55	clear,
1354	30	7.33	18.64	943	6.9	3.38		35.54	odorless,
1400	35	7.25	18.50	947	34.0	3.25		35.53	
1403	40	7.24	18.50	946	40.1	3.32			

4. SAMPLING DATA

Method(s): 2" Grundfos Redi-flo pump Dedicated

Material: Bailer Stainless Steel/Teflon

Material: Rope Polyethylene

Depth to Water at Time of Sampling:_____

Sample ID: GWGW 2255 Sample Time: 1405

Duplicate Sample Collected? ☐ Yes ☒ No ID:

Field Filtered? ☐ Yes ☒ No

# of Containers: 4

Type of Containers: 3x 40ml VOA vials, 1x250ml poly bottle

Analyses Requested:

VOCs (Chloroform)
Total Chromium

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-1 (Rev 7/31/01)

Signature

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

1. PROJECT INFORMATION

WELL ID: UCD2-32

Project Number: 131261
Task Number: 300
Client: UC Davis
Project Location: LEHR

Date: 3/7/08
Time: 1159
Personnel: C FREY
Weather: CLEAR WARM 70°

2. WELL DATA

Casing Diameter: 2 inches
Type of Casing: PVC
Screen Diameter: 2 inches
Type of Screen: PVC
Screen Length : 20 feet
Total Depth of Well from TOC: 103 feet
Depth to Static Water from TOC: 32.73 49.47 feet
Depth to Product from TOC: N/A
Length of Water Column (h): 70.27 53.53
Calculated Casing Volume: 35.20 26.8 (3 Casing volumes)
Purge Volume Calculation (one casing volume = 0.167):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Purge Method: 2" Grundfos Redi-flo pump Dedicated
Material: Pump: Stainless Steel/Teflon
Material: Tubing: Polyethylene
Was well purged dry? ☐ Yes ☐ No
Pumping Rate: 2 gal/min

Equipment Model(s)
1. N/A
2.
3.

Time	Cum. Gallons Removed	pH	Temp (°C)	Spec. Cond. (~~µmhos/cm~~) mS/cm	DO ~~Elr (Units)~~ PPM	ORP ~~DO (Units)~~ MV	Turbidity (NTU)	Other:	Comments
1204	10	7.48	18.73	975	2.56	14.3			CLEAR ODORLESS
1209	20	7.46	18.84	967	2.69	29.1			
1214	30	7.45	18.77	962	2.82	36.1			
1217	35	7.46	18.89	959	2.86	39.7			
1220	40	7.46	18.84	958	2.91	42.1			

4. SAMPLING DATA

Method(s): 2" Grundfos Redi-flo pump Dedicated
Material: Bailer: Stainless Steel/Teflon
Material: Rope: Polyethylene
Depth to Water at Time of Sampling:
Sample ID: GWGW 2256
Sample Time: 1223
Field Filtered? ☐ Yes ☑ No
Duplicate Sample Collected? ☐ Yes ☐ No ID: GWGW2257
# of Containers: 3
Type of Containers: 3x 40ml VOA Vials

Analyses Requested:
VOCs (Chloroform)

5. COMMENTS

GWGW 2257 COLLECTED AT 1227

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-1 (Rev 7/31/01)

Signature

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

WELL ID: UCD2-39

1. PROJECT INFORMATION

Project Number: 131261 Task Number: 300 Date: 2/26/08 Time: 1502

Client: UC Davis Personnel: Chuck Frey

Project Location: LEHR Weather:

2. WELL DATA

Casing Diameter: 2 inches Type of Casing: PVC

Screen Diameter: 2 inches Type of Screen: PVC Screen Length : 20 feet

Total Depth of Well from TOC: 106 feet

Depth to Static Water from TOC: 37.51 feet

Depth to Product from TOC: N/A

Length of Water Column (h): 68.49 Calculated Casing Volume: 34.3 (3 Casing volumes)

Purge Volume Calculation (one casing volume = 0.167):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Equipment Model(s)

Purge Method: 2" Grundfos Redi-flo pump Dedicated 1. N/A

Material: Pump Stainless Steel/Teflon 2.

Material: Tubing Polyethylene 3.

Was well purged dry? ☐ Yes ☐ No Pumping Rate: gal/min

Time	Cum. Gallons Removed	pH	Temp (°C)	Spec. Cond. ~~(µmhos/cm)~~ µS/cm	ORP Eh (Units) mV	DO ~~(Units)~~ mg/L	~~Turbidity (NTU)~~	Other: DTW	Comments
1507	10	8.35	18.54	845	-101.5	2.77		37.31	
1512	15	7.76	18.52	843	-21.4	2.81		37.36	
1515	20	7.82	18.46	845	-23.5	3.16		37.36	
1518	25	7.81	18.42	847	5.5	2.73		37.36	
1520	30	7.68	18.46	846	21.5	2.86		37.36	
1523	35	7.86	18.39	841	-26.4	3.05			

4. SAMPLING DATA

Method(s): 2" Grundfos Redi-flo pump Dedicated

Material: Bailer Stainless Steel/Teflon

Material: Rope Polyethylene

Depth to Water at Time of Sampling: Field Filtered? ☐ Yes ☑ No

Sample ID: GWGW 2258 Sample Time: 1528 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☑ No ID: Type of Containers: ~~2x250ml~~ 500 poly bottles

Analyses Requested:

Carbon-14, Tritium

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-1 (Rev 7/31/01)

Signature

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

WELL ID: UCD2-040

1. PROJECT INFORMATION

Project Number: 131261 Task Number: 300 Date: 3/7/08 Time: 1241

Client: UC Davis Personnel: Chuck Frey

Project Location: LEHR Weather:

2. WELL DATA

Casing Diameter: 2 inches Type of Casing: PVC

Screen Diameter: 2 inches Type of Screen: PVC Screen Length : 15 feet

Total Depth of Well from TOC: 85.50 feet

Depth to Static Water from TOC: 54.27 ~~34.76~~ feet

Depth to Product from TOC: N/A

Length of Water Column (h): ~~-34.76~~ 25.66 Calculated Casing Volume: -17.4 (3 Casing volumes)

Purge Volume Calculation (one casing volume = 0.667):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Equipment Model(s)

Purge Method: 2" Grundfos Redi-flo pump Dedicated 1. N/A

Material: Pump Stainless Steel/Teflon 2.

Material: Tubing Polyethylene 3.

Was well purged dry? ☐ Yes ☐ No Pumping Rate: 2 gal/min

Time	Cum. Gallons Removed	pH	Temp (°C)	Spec. Cond. (µmhos/cm) µS/cm	ORP Eh (~~Units~~) mV	DO (~~Units~~) PPM	Turbidity (NTU)	Other:	Comments
1246	10	7.68	18.56	945	-1.4	2.65			
1249	15	7.63	18.59	948	5.8	2.88			
1251	20	7.60	18.56	949	16.2	2.97			
1254	25	7.59	18.58	962	24.7	3.37			
1256	30	7.58	18.52	956	28.3	3.28			

4. SAMPLING DATA

Method(s): 2" Grundfos Redi-flo pump Dedicated

Material: Bailer Stainless Steel/Teflon

Material: Rope Polyethylene

Depth to Water at Time of Sampling: 34.42 Field Filtered? ☐ Yes ☑ No

Sample ID: GWGW2266 Sample Time: 1258 # of Containers: 3

Duplicate Sample Collected? ☐ Yes ☑ No ID:

Type of Containers: 3x 40ml VOA vials

Analyses Requested:

VOCs (Chloroform)

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-1 (Rev 7/31/01)

Signature

C:\Documents and Settings\CFrey\Local Settings\Temporary Internet Files\OLK40D\LEHR GW Sampling Forms Feb 2008.xls

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

WELL ID: UCD2-040

1. PROJECT INFORMATION

Project Number: 131261 Task Number: 300 Date: 2/28/08 Time: 1432

Client: UC Davis Personnel: Chuck Frey

Project Location: LEHR Weather: CLEAR SUNNY 65°

2. WELL DATA

Casing Diameter: 2 inches Type of Casing: PVC

Screen Diameter: 2 inches Type of Screen: PVC Screen Length : 20 feet

Total Depth of Well from TOC: 106 feet

Depth to Static Water from TOC: 34.68 34.76 feet

Depth to Product from TOC: N/A

Length of Water Column (h): 71.24 Calculated Casing Volume: 35.7 (3 Casing volumes)

Purge Volume Calculation (one casing volume = 0.667):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Equipment Model(s)

Purge Method: 2" Grundfos Redi-flo pump Dedicated 1. N/A

Material: Pump Stainless Steel/Teflon 2.

Material: Tubing Polyethylene 3.

Was well purged dry? ☐ Yes ☐ No Pumping Rate: _____ gal/min

Time	Cum. Gallons Removed	pH	Temp (°C)	Spec. Cond. (~~µmhos/cm~~) µS/cm	~~Eh (Units)~~ ORP AV	DO (Units)	Turbidity (NTU)	Other: DTW	Comments
1440	10	7.36	18.48	974	-24.8	3.36		34.81	
1446	20	7.35	18.48	980	-14.3	3.26		34.82	
1449	25	7.28	18.50	980	-4.4	3.29		34.82	
1452	30	7.27	18.52	977	1.7	3.32		34.82	
1455	35	7.26	18.55	968	6.5	3.33		34.82	
1458	40	7.25	18.52	961	9.3	3.37		34.82	

4. SAMPLING DATA

Method(s): 2" Grundfos Redi-flo pump Dedicated

Material: Bailer Stainless Steel/Teflon

Material: Rope Polyethylene

Depth to Water at Time of Sampling: _____ Field Filtered? ☐ Yes ☑ No

Sample ID: GWGW2259 Sample Time: 1500 # of Containers: 4

Duplicate Sample Collected? ☐ Yes ☑ No ID:

Type of Containers: 3x 40ml VOA vials and 1x250ml poly bottle

Analyses Requested:

VOCs (Chloroform)
Total Chromium

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-1 (Rev 7/31/01) Signature

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

WELL ID: UCD2-46

1. PROJECT INFORMATION

Project Number: 131261 Task Number: 300 Date: 3/7/08 Time: ~~1132~~ 1122

Client: UC Davis Personnel: C FREY

Project Location: LEHR Weather: CLEAR WARM 70°

2. WELL DATA

Casing Diameter: 2 inches Type of Casing: PVC

Screen Diameter: 2 inches Type of Screen: PVC Screen Length : 20 feet

Total Depth of Well from TOC: 104.5 feet

Depth to Static Water from TOC: 32.44 49.73 feet

Depth to Product from TOC: N/A

Length of Water Column (h): 72.06 ~~54.77~~ Calculated Casing Volume: 361 27.4 (3 Casing volumes)

Purge Volume Calculation (one casing volume = 0.167):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Equipment Model(s)

Purge Method: 2" Grundfos Redi-flo pump Dedicated 1. N/A

Material: Pump Stainless Steel/Teflon 2.

Material: Tubing Polyethylene 3.

Was well purged dry? ☐ Yes ☐ No Pumping Rate: 2 gal/min

Time	Cum. Gallons Removed	pH	Temp (°C)	Spec. Cond. ~~(µmhos/cm)~~ µS/cm	ORP Eh ~~(Units)~~ mV	DO ~~(Units)~~ ppm	Turbidity (NTU)	Other: DTW	Comments
1127	10	7.48	17.97	1288	55.9	3.39		32.54	
1132	20	7.46	18.00	1291	59.5	3.46		32.55	
1135	25	7.45	17.93	1291	61.1	3.59		32.55	
1138	30	7.45	17.97	1291	62.2	3.57			

4. SAMPLING DATA

Method(s): 2" Grundfos Redi-flo pump Dedicated

Material: Bailer Stainless Steel/Teflon

Material: Rope Polyethylene

Depth to Water at Time of Sampling: Field Filtered? ☐ Yes ☑ No

Sample ID: GWGW 2260 Sample Time: 1140 # of Containers: 3

Duplicate Sample Collected? ☐ Yes ☑ No ID: Type of Containers: 3x 40ml VOA vials

Analyses Requested:

VOCs (Chloroform)

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-1 (Rev 7/31/01) Signature

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

WELL ID: UCD2-46

1. PROJECT INFORMATION

Project Number: 131261 Task Number: 300 Date: 2/28/08 Time: 1308

Client: UC Davis Personnel: Chuck Frey

Project Location: LEHR Weather:

2. WELL DATA

Casing Diameter: 2 inches Type of Casing: PVC

Screen Diameter: 2 inches Type of Screen: PVC Screen Length : 20 feet

Total Depth of Well from TOC: 104.5 feet

Depth to Static Water from TOC: 32.64 33.06 feet

Depth to Product from TOC: N/A

Length of Water Column (h): 71.44 Calculated Casing Volume: 35.8 (3 Casing volumes)

Purge Volume Calculation (one casing volume = 0.167):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Equipment Model(s)

Purge Method: 2" Grundfos Redi-flo pump Dedicated 1. N/A

Material: Pump Stainless Steel/Teflon 2.

Material: Tubing Polyethylene 3.

Was well purged dry? ☐ Yes ☑ No Pumping Rate: gal/min

Time	Cum. Gallons Removed	pH	Temp (°C)	Spec. Cond. (~~µmhos/cm~~) uS/cm	~~Eh (Units)~~ ORP mV	DO (Units) ppm	Turbidity (NTU)	Other: DTW	Comments
1315	10	7.39	17.92	1281	7.8	3.52		32.72	
1318	20	7.26	17.94	1288	-0.2	3.45		32.72	
1321	25	7.22	17.92	1285	5.7	3.51		32.72	
1324	30	7.21	17.94	1285	7.6	3.48		32.72	
1327	35	7.25	18.00	1280	7.7	3.70		32.72	
1330	40	7.19	17.97	1284	13.1	3.44		32.72	

4. SAMPLING DATA

Method(s): 2" Grundfos Redi-flo pump Dedicated

Material: Bailer Stainless Steel/Teflon

Material: Rope Polyethylene

Depth to Water at Time of Sampling: Field Filtered? ☐ Yes ☑ No

Sample ID: GWGW 2260 Sample Time: 1335 # of Containers: 3

Duplicate Sample Collected? ☐ Yes ☑ No ID: Type of Containers: 3x 40ml VOA vials

Analyses Requested:

VOCs (Chloroform)

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-1 (Rev 7/31/01) Signature

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

1. PROJECT INFORMATION

WELL ID: UCD2-48

Project Number: 131261 Task Number: 300

Client: UC Davis

Project Location: LEHR

Date: 2/27/08 Time: 0825

Personnel: Chuck Frey

Weather: clear / sunny, warming

2. WELL DATA

Casing Diameter: 4 inches Type of Casing: PVC

Screen Diameter: 4inches Type of Screen: PVC Screen Length : 10 feet

Total Depth of Well from TOC: 100 feet 39.39

Depth to Static Water from TOC: 39.46 feet

Depth to Product from TOC: N/A

Length of Water Column (h): 60.54 Calculated Casing Volume: 121.1 (3 Casing volumes)

Purge Volume Calculation (one casing volume = 0.667):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Purge Method: 2" Grundfos Redi-flo pump Dedicated

Material: Pump Stainless Steel/Teflon

Material: Tubing Polyethylene

Was well purged dry? ☐ Yes ☑ No Pumping Rate: 4 gal/min

Equipment Model(s)

1. N/A
2.
3.

Time	Cum. Gallons Removed	pH	Temp (°C)	Spec. Cond. (µmhos/cm)	~~Eh (Units)~~ ORP	DO (Units)	Turbidity (NTU)	~~Other:~~ Depth	Comments
0845	15	7.30	18.24	902	9.5	3.08		39.55	
0850	30	7.37	18.26	892	8.4	3.06		39.54	
0855	45	7.37	18.24	880	15.6	3.07		39.57	
0900	60	7.36	18.24	870	30.4	3.02		39.57	
0905	75	7.39	18.27	837	15.2	3.08		39.57	
0910	90	7.38	18.26	821	27.2	3.02		39.58	
0915	105	7.37	18.25	813	35.9	3.04		39.58	
0920	120	7.37	18.31	802	38.1	2.98		39.47	

4. SAMPLING DATA

Method(s): 2" Grundfos Redi-flo pump Dedicated

Material: Bailer Stainless Steel/Teflon

Material: Rope Polyethylene

Depth to Water at Time of Sampling: 39.47

Sample ID: GWGW 2261 Sample Time: 0925

Duplicate Sample Collected? ☐ Yes ☑ No ID:

Field Filtered? ☐ Yes ☑ No

# of Containers: 4

Type of Containers: 3x 40ml VOA vials and 1x 250 mL poly bottle

Analyses Requested:

VOCs (Chloroform)
Nitrate as N

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

FORM GW-1 (Rev 7/31/01)

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

WELL ID: UCD2-56

1. PROJECT INFORMATION

Project Number: 131261 Task Number: 300

Client: UC Davis

Project Location: LEHR

Date: 2-01-08 Time: 1350

Personnel: J Timlin / C Frey

Weather: Cloudy @ 60°

2. WELL DATA

Casing Diameter: 4 inches Type of Casing: PVC

Screen Diameter: 4 inches Type of Screen: PVC Screen Length : 3 feet

Total Depth of Well from TOC: 91.00 feet

Depth to Static Water from TOC: 34.01 feet

Depth to Product from TOC: N/A

Length of Water Column (h): 56.99 38.01 Calculated Casing Volume: 114.03 (3 Casing volumes)

Purge Volume Calculation (one casing volume = 0.667):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Purge Method: 12V SS submersible pump

Material: Pump Stainless Steel/Teflon

Material: Tubing Polyethylene

Was well purged dry? ☐ Yes ☒ No Pumping Rate: 2.5 gal/min

Equipment Model(s)

1. N/A
2. —
3. —

Time	Cum. Gallons Removed	pH	Temp (°C)	Spec. Cond. ~~(µmhos/cm)~~ mS/cm	Eh (Units)	DO (Units)	Turbidity ~~(NTU)~~ VISUAL	Other: ODOR	Comments
1403	30	7.76	18.06	1.710			CLEAR	NONE	
1415	60	7.62	18.20	1.682			" "	" "	
1427	90	7.60	18.05	1.680			" "	" "	
1439	110	7.60	18.05	1.673			" "	" "	
1443	115	7.60	18.07	1.678			" "	" "	

4. SAMPLING DATA

Method(s): 2" disposable bailer

Material: Bailer Polyethylene

Material: Rope Polyethylene

Depth to Water at Time of Sampling: 34.19

Sample ID: GWGW 2264 Sample Time: 1445

Duplicate Sample Collected? ☐ Yes ☒ No ID:

Field Filtered? ☐ Yes ☒ No

# of Containers: 6

Type of Containers: 3x 40ml VOAs, 2x 1L polys, and 1x 250 mL poly

Analyses Requested:

VOCs (Chloroform)
Nitrate as N,
Tritium, C-14, Total Chromium

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

FORM GW-1 (Rev 7/31/01)

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

WELL ID: UCD2-57

1. PROJECT INFORMATION

Project Number: 131261 Task Number: 300 Date: 02-01-08 Time: 1025

Client: UC Davis Personnel: J. Tomlin / CHUCK FREY

Project Location: LEHR Weather: CLEAR @ 60°

2. WELL DATA

Casing Diameter: 4 inches Type of Casing: PVC

Screen Diameter: 4 inches Type of Screen: PVC Screen Length : feet

Total Depth of Well from TOC: 100 feet

Depth to Static Water from TOC: 36.84 feet

Depth to Product from TOC: N/A

Length of Water Column (h): 53.16 Calculated Casing Volume: 126.4 (3 Casing volumes)

Purge Volume Calculation (one casing volume = 0.667):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Equipment Model(s)

Purge Method: 12V SS submersible pump 1. N/A

Material: Pump Stainless Steel/Teflon 2. —

Material: Tubing Polyethylene 3. —

Was well purged dry? ☐ Yes ☒ No Pumping Rate: 1.66 gal/min

Time	Cum. Gallons Removed	pH	Temp (°C)	Spec. Cond. (µmhos/cm) ~~mS/cm~~	~~Eh (Units)~~ ORP (mV)	DO (Units)	Turbidity ~~(NTU)~~ VISUAL	Other: ODOR	Comments
1045	30	8.61	18.30	1.491			CLEAR	NONE	
1102	60	8.30	17.87	1.498			" "	" "	
1118	90	8.13	18.09	1.519			" "	" "	
1131	110	7.96	18.00	1.528			" "	" "	
1140	127	7.94	17.98	1.526			" "	" "	

4. SAMPLING DATA

Method(s): 2" disposable bailer

Material: Bailer Polyethylene

Material: Rope Polyethylene

Depth to Water at Time of Sampling: 36.77 Field Filtered? ☐ Yes ☒ No

Sample ID: GWGW 2265 Sample Time: 1150 # of Containers: 6

Duplicate Sample Collected? ☐ Yes ☒ No ID: Type of Containers: 3x 40ml VOAs, 2x 1L polys, and 1x 250 mL poly

Analyses Requested:

VOCs (Chloroform)
Nitrate as N,
Tritium, C-14, Total Chromium

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

FORM GW-1 (Rev 7/31/01)

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

1. PROJECT INFORMATION

WELL ID: DDC-1A

Project Number: 131261 Task Number: 300 Date: 2/29/08 Time:

Client: UC Davis Personnel: C. Frey

Project Location: LEHR Weather: Clear warm

2. WELL DATA

Casing Diameter: 1.25 inches Type of Casing: PVC

Screen Diameter: 1.25 inches Type of Screen: PVC Screen Length : 2.5 feet

Total Depth of Well from TOC: 35 feet

Depth to Static Water from TOC:_____ feet

Depth to Product from TOC:_____ feet

Length of Water Column (h):_____ feet Calculated Casing Volume:_____ gal (3 to 5 times one well volume)

Purge Volume Calculation (one casing volume = 0.064):

Note: 2-inch well = 0.163 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Equipment Model(s)

Purge Method: 0.75" disposable weighted bailer 1. N/A

Material: Bailer Polyethylene 2. N/A

Material: Rope Nylon 3. _____

Was well purged dry? ☐ Yes ☐ No Pumping Rate: N/A gal/min

Time	~~Cum Gallons~~ BAILS Removed	pH	Temp (°C)	Spec. Cond. (µmhos/cm) mS/cm	~~Eh (Units)~~ ORP mV	DO (Units) PPM	Turbidity (NTU)	Other:	Comments
1150	2	8.60	18.06	1998	96.2	7.37			
1154	4	8.89	17.84	2011	-8.6	7.29			
1156	6	8.68	17.88	1993	31.3	7.39			
1158	8	8.80	18.02	1995	0.8	6.90			
1201	10	8.66	17.87	2003	25.3	7.49			

4. SAMPLING DATA

Method(s): 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Depth to Water at Time of Sampling:_____ Field Filtered? ☐ Yes ☑ No

Sample ID: GWGW~~2100~~ 2229 Sample Time: 1203 # of Containers: 3

Duplicate Sample Collected? ☐ Yes ☑ No ID: Type of Containers: 40 ml VOAs

Analyses Requested:

8260 for VOCs

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

FORM GW-1 (Rev 7/31/01)

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

1. PROJECT INFORMATION

WELL ID: DDC-1B

Project Number: 131261 Task Number: 300

Client: UC Davis

Project Location: LEHR

Date: 2/29/08 Time:

Personnel: C GREY

Weather: CLEAR WARM

2. WELL DATA

Casing Diameter: 1.25 inches Type of Casing: PVC

Screen Diameter: 1.25 inches Type of Screen: PVC Screen Length : 2.5 feet

Total Depth of Well from TOC: 52.5 feet

Depth to Static Water from TOC:_____ feet

Depth to Product from TOC:_____ feet

Length of Water Column (h):_____ feet Calculated Casing Volume:_____ gal (3 to 5 times one well volume)

Purge Volume Calculation (one casing volume = 0.064):

Note: 2-inch well = 0.163 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Purge Method: 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Was well purged dry? ☐ Yes ☐ No Pumping Rate: N/A gal/min

Equipment Model(s)

1. N/A
2. N/A
3. _____

Time	~~Cum. Gallons~~ BAILS Removed	pH	Temp (°C)	Spec. Cond. (µmhos/cm) µS/cm	~~Eh (Units)~~ ORP Eh MV	DO (Units) PPM	Turbidity (NTU)	Other:	Comments
1212	2	8.95	18.11	2014	-79.8	7.74			
1215	4	8.75	17.97	2022	-28.2	7.36			
1217	6	8.70	18.00	2010	-6.0	7.50			
1220	8	8.68	17.73	2026	7.9	7.71			
1222	10	8.78	17.97	2010	-47.2	7.47			

4. SAMPLING DATA

Method(s): 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Depth to Water at Time of Sampling:_____ Field Filtered? ☐ Yes ☐ No

Sample ID: GWGW~~2110~~ ~~2230~~ Sample Time: 1225 # of Containers: 3

Duplicate Sample Collected? ☐ Yes ☐ No ID:

Type of Containers: 3x 40ml VOA Vials

Analyses Requested:

8260 for VOCs

5. COMMENTS

SAMPLE ID 2230

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

FORM GW-1 (Rev 7/31/01)

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

1. PROJECT INFORMATION

WELL ID: DDC-1C

Project Number: 131261 Task Number: 300

Client: UC Davis

Project Location: LEHR

Date: 3/7/08 Time:

Personnel: C Frey

Weather: Clear warm 70°

2. WELL DATA

Casing Diameter: 1.25 inches Type of Casing: PVC

Screen Diameter: 1.25 inches Type of Screen: PVC Screen Length : 5 feet

Total Depth of Well from TOC: 75 feet

Depth to Static Water from TOC:_____ feet

Depth to Product from TOC:_____ feet

Length of Water Column (h):_____ feet Calculated Casing Volume:_____ gal (3 to 5 times one well volume)

Purge Volume Calculation (one casing volume = 0.064):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Equipment Model(s)

Purge Method: 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Was well purged dry? ☐ Yes ☐ No Pumping Rate: N/A gal/min

1. N/A
2. N/A
3.

Time	Bails	pH	Temp (°C)	Spec. Cond. (µmhos/cm) µS/cm	Eh (~~Units~~) ORP mV	DO (Units) PPM	Turbidity (NTU)	Other:	Comments
1320	2	7.26	18.08	3023	75.5	3.72			
1323	4	7.29	17.99	3027	75.0	3.50			
1326	6	7.24	17.77	3039	77.0	3.71			
1329	8	7.27	18.10	3015	77.0	4.02			
1332	10	7.24	17.87	3027	78.7	3.77			

4. SAMPLING DATA

Method(s): 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Depth to Water at Time of Sampling:_____ Field Filtered? ☐ Yes ☑ No

Sample ID: GWGW2231 Sample Time: 1335 # of Containers: 3

Duplicate Sample Collected? ☐ Yes ☑ No ID:

Type of Containers: 3x 40ml VOA Vials

Analyses Requested:

8260 for VOCs

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-1 (Rev 7/31/01)

Signature

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

1. PROJECT INFORMATION

WELL ID: DDC-1C

Project Number: 131261 Task Number: 300

Client: UC Davis

Project Location: LEHR

Date: 2/29/08 Time:

Personnel: C. FREI

Weather: CLEAR & WARM

2. WELL DATA

Casing Diameter: 1.25 inches Type of Casing: PVC

Screen Diameter: 1.25 inches Type of Screen: PVC Screen Length : 5 feet

Total Depth of Well from TOC: 75 feet

Depth to Static Water from TOC:_____ feet

Depth to Product from TOC:_____ feet

Length of Water Column (h):_____ feet Calculated Casing Volume:_____ gal (3 to 5 times one well volume)

Purge Volume Calculation (one casing volume = 0.064):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Purge Method: 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Was well purged dry? ☐ Yes ☐ No Pumping Rate: N/A gal/min

Equipment Model(s)

1. N/A
2. N/A
3.

Time	~~Cum. Gallons~~ BAILS Removed	pH	Temp (°C)	Spec. Cond. (µmhos/cm) µS/CM	~~Eh (Units)~~ ORP mV	~~DO (Units)~~ DO ppm	Turbidity (NTU)	Other:	Comments
1234	2	7.98	17.77	2900	-36.2	5.18			
1237	4	7.83	17.52	2926	-5.3	5.15			
1240	6	7.71	17.79	2940	15.5	4.28			
1243	8	7.75	17.72	2941	28.0	4.78			
1245	10	7.66	17.54	2944	35.7	4.67			

4. SAMPLING DATA

Method(s): 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Depth to Water at Time of Sampling:_____ Field Filtered? ☐ Yes ☐ No

Sample ID: GWGW~~2111~~ 2231 Sample Time: 1248 # of Containers: 3

Duplicate Sample Collected? ☐ Yes ☐ No ID:

Type of Containers: 3x 40ml VOA Vials

Analyses Requested:

8260 for VOCs

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

FORM GW-1 (Rev 7/31/01)

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

1. PROJECT INFORMATION

WELL ID: DDC-2A

Project Number: 131261 Task Number: 300

Client: UC Davis

Project Location: LEHR

Date: 2/29/08 Time:

Personnel: C Frey

Weather: CLEAR warm

2. WELL DATA

Casing Diameter: 1.25 inches Type of Casing: PVC

Screen Diameter: 1.25 inches Type of Screen: PVC Screen Length : 5 feet

Total Depth of Well from TOC: 35 feet

Depth to Static Water from TOC:_____ feet

Depth to Product from TOC:_____ feet

Length of Water Column (h):_____ feet Calculated Casing Volume:_____ gal (3 to 5 times one well volume)

Purge Volume Calculation (one casing volume = 0.064):

Note: 2-inch well = 0.163 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Purge Method: 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Was well purged dry? ☐ Yes ☐ No Pumping Rate: N/A gal/min

Equipment Model(s)

1. N/A
2. N/A
3. _____

Time	~~Cum. Gallons~~ BAILS Removed	pH	Temp (°C)	Spec. Cond. (µmhos/cm) MS/CM	Eh (Units)	DO (Units)	Turbidity (NTU)	Other:	Comments
1300	2	9.00	18.63	2331	-105.9	6.92			
1302	4	8.57	18.44	2378	-53.5	6.83			
1304	6	8.48	18.43	2362	-30.6	6.24			
1306	8	8.45	18.53	2355	-11.3	6.88			
1308	10	8.44	17.11	2319	0.6	6.68			

4. SAMPLING DATA

Method(s): 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Depth to Water at Time of Sampling:_____ Field Filtered? ☐ Yes ☐ No

Sample ID: GWGW~~2112~~ 2232 Sample Time:_____ # of Containers: 3

Duplicate Sample Collected? ☐ Yes ☐ No ID: ~~2233~~ Type of Containers: 40 ml VOAs

Analyses Requested:

8260 for VOCs

5. COMMENTS

GWGW 2233 ~~COLLECTED AT~~ NOT COLLECTED AS HAVE NOT ENOUGH WATER IN PIEZOMETER FOR 2232

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

FORM GW-1 (Rev 7/31/01)

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

1. PROJECT INFORMATION

WELL ID: DDC-2B

Project Number: 131261 Task Number: 300 Date: 2/29/08 Time:

Client: UC Davis Personnel: CHREY

Project Location: LEHR Weather: CLEAR WARM

2. WELL DATA

Casing Diameter: 1.25 inches Type of Casing: PVC

Screen Diameter: 1.25 inches Type of Screen: PVC Screen Length : 5 feet

Total Depth of Well from TOC: 55 feet

Depth to Static Water from TOC:_____ feet

Depth to Product from TOC:_____ feet

Length of Water Column (h):_____ feet Calculated Casing Volume:_____ gal (3 to 5 times one well volume)

Purge Volume Calculation (one casing volume = 0.064):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Equipment Model(s)

Purge Method: 0.75" disposable weighted bailer 1. N/A

Material: Bailer Polyethylene

Material: Rope Nylon 2. N/A

Was well purged dry? ☐ Yes ☐ No Pumping Rate: N/A gal/min 3.

Time	~~Cum. Gallons~~ BAILS Removed	pH	Temp (°C)	Spec. Cond. ~~(umhos/cm)~~ uS/cm	ORP Eh ~~(Units)~~ MV	DO (Units) PPM	Turbidity (NTU)	Other:	Comments
1330	2	6.75	18.83	2303	65.4	6.00			
1332	4	6.84	18.73	2270	67.3	6.35			
1334	6	6.99	18.71	2244	63.2	5.75			
1336	8	~~6.7.29~~	18.52	2212	55.3	6.44			
1339	10	7.74	18.59	2175	45.6	6.50			

4. SAMPLING DATA

Method(s): 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Depth to Water at Time of Sampling:_____ Field Filtered? ☐ Yes ☑ No

Sample ID: GWGW~~2113~~ 2234 Sample Time: 1342 # of Containers: 3

Duplicate Sample Collected? ☐ Yes ☑ No ID:

Type of Containers: 3x 40ml VOA Vials

Analyses Requested:

8260 for VOCs

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

FORM GW-1 (Rev 7/31/01)

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

1. PROJECT INFORMATION

WELL ID: DDC-2C

Project Number: 131261 Task Number: 300

Client: UC Davis

Project Location: LEHR

Date: 2/29/08 Time:

Personnel: CFREI

Weather: CLEAR WARM

2. WELL DATA

Casing Diameter: 1.25 inches Type of Casing: PVC

Screen Diameter: 1.25 inches Type of Screen: PVC Screen Length : 5 feet

Total Depth of Well from TOC: 70 feet

Depth to Static Water from TOC:_____ feet

Depth to Product from TOC:_____ feet

Length of Water Column (h):_____ feet Calculated Casing Volume:_____ gal (3 to 5 times one well volume)

Purge Volume Calculation (one casing volume = 0.064):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Purge Method: 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Was well purged dry? ☐ Yes ☐ No Pumping Rate: N/A gal/min

Equipment Model(s)

1. N/A
2. N/A
3.

Time	~~Cum. Gallons~~ BAILS Removed	pH	Temp (°C)	Spec. Cond. ~~(µmhos/cm)~~ mS/cm	ORP ~~Eh (Units)~~ mV	DO (Units)	Turbidity (NTU)	Other:	Comments
1400	2	7.81	18.90	2243	-23.8	4.98			
1404	4	7.74	18.99	2254	-10.5	4.05			
1407	6	7.70	18.77	2256	-3.6	5.13			
1410	8	7.68	18.63	2256	4.0	5.07			
1412	10	7.69	18.63	2254	12.3	4.45			

4. SAMPLING DATA

Method(s): 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Depth to Water at Time of Sampling:_____ Field Filtered? ☐ Yes ☑ No

Sample ID: GWGW~~2114~~ 2235 Sample Time: 1415 # of Containers: 3

Duplicate Sample Collected? ☑ Yes ☐ No ID: GWGW2233 Type of Containers: 3x 40ml VOA Vials

Analyses Requested:

8260 for VOCs

5. COMMENTS

GWGW COLLECTED AT 1420

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

FORM GW-1 (Rev 7/31/01)

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

1. PROJECT INFORMATION

WELL ID: DDC-3B

Project Number: 131261 Task Number: 300

Client: UC Davis

Project Location: LEHR

Date: 2/29/08 Time:

Personnel: C FREY

Weather: CLEAR WARM

2. WELL DATA

Casing Diameter: 1.25 inches Type of Casing: PVC

Screen Diameter: 1.25 inches Type of Screen: PVC Screen Length : 5 feet

Total Depth of Well from TOC: 54 feet

Depth to Static Water from TOC: _____ feet

Depth to Product from TOC: _____ feet

Length of Water Column (h): _____ feet Calculated Casing Volume: _____ gal (3 to 5 times one well volume)

Purge Volume Calculation (one casing volume = 0.064):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Purge Method: 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Was well purged dry? ☐ Yes ☐ No Pumping Rate: N/A gal/min

Equipment Model(s)

1. N/A
2. N/A
3.

Time	~~Cum. Gallons~~ BAILS Removed	pH	Temp (°C)	Spec. Cond. (µmhos/cm)	Eh (Units)	DO (Units)	Turbidity (NTU)	Other:	Comments
1441	2	2.28	19.52	6171	291.3	6.74			
1444	4	2.26	19.25	6128	357.8	7.05			
1446	6	2.25	19.21	6125	401.1	6.67			
1449	8	2.24	19.04	6130	425.0	6.95			
1451	10	2.23	18.99	6141	439.0	6.87			

4. SAMPLING DATA

Method(s): 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Depth to Water at Time of Sampling: _____ Field Filtered? ☐ Yes ☑ No

Sample ID: GWGW~~2110~~ 2237 Sample Time: 1454 # of Containers: 3

Duplicate Sample Collected? ☐ Yes ☑ No ID:

Type of Containers: 3x 40ml VOA Vials

Analyses Requested:

8260 for VOCs

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-1 (Rev 7/31/01)

Signature

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GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

1. PROJECT INFORMATION

WELL ID: DDC-3C

Project Number: 131261 Task Number: 300 Date: 3/3/08 Time:

Client: UC Davis Personnel: C FREY

Project Location: LEHR Weather: CLEAR WARM

2. WELL DATA

Casing Diameter: 1.25 inches Type of Casing: PVC

Screen Diameter: 1.25 inches Type of Screen: PVC Screen Length : 5 feet

Total Depth of Well from TOC: 80 feet

Depth to Static Water from TOC: _____ feet

Depth to Product from TOC: _____ feet

Length of Water Column (h): _____ feet Calculated Casing Volume: _____ gal (3 to 5 times one well volume)

Purge Volume Calculation (one casing volume = 0.064):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Purge Method: 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Was well purged dry? ☐ Yes ☐ No Pumping Rate: N/A gal/min

Equipment Model(s)

1. N/A
2. N/A
3.

Time	~~Gallons~~ BAILS Removed	pH	Temp (°C)	Spec. Cond. (µmhos/cm) ~~mS/cm~~	Eh (~~Units~~) ORP MV	DO (~~Units~~) ~~ORP~~ PPM	Turbidity (NTU)	Other:	Comments
~~1501~~	~~2~~	~~1.31~~	~~19.23~~	~~28.55~~	~~454.2~~	~~5.62~~			
0908	~~4~~ 2	1.40	17.49	19.48	307.2	7.15			
0910	~~6~~ 4	1.33	~~19.59~~	19.54	400.6	7.30			17.77°C
0912	~~8~~ 6	1.29	17.69	19.32	435.5	7.10			
0914	~~10~~ 8	1.25	17.66	19.25	448.2	6.60			
0916	10	1.24	17.63	19.06	450.4	7.25			

4. SAMPLING DATA

Method(s): 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Depth to Water at Time of Sampling: _____ Field Filtered? ☐ Yes ☑ No

Sample ID: GWGW~~2117~~ 2238 Sample Time: 0918 # of Containers: 3

Duplicate Sample Collected? ☐ Yes ☑ No ID:

Type of Containers: 3x 40ml VOA Vials

Analyses Requested:

8260 for VOCs

5. COMMENTS

SPECIFIC CONDUCTIVITY MILLI NOT MICRO

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-1 (Rev 7/31/01)

Signature

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

1. PROJECT INFORMATION

WELL ID: DDC-4A

Project Number: 131261 Task Number: 300

Client: UC Davis

Project Location: LEHR

Date: 3/3/08 Time:

Personnel: C. Kelly

Weather: Clear warm

2. WELL DATA

Casing Diameter: 1.25 inches Type of Casing: PVC

Screen Diameter: 1.25 inches Type of Screen: PVC Screen Length : 5 feet

Total Depth of Well from TOC: 34.5 feet

Depth to Static Water from TOC:_____ feet

Depth to Product from TOC:_____ feet

Length of Water Column (h):_____ feet Calculated Casing Volume:_____ gal (3 to 5 times one well volume)

Purge Volume Calculation (one casing volume = 0.064):

Note: 2-inch well = 0.163 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Equipment Model(s)

Purge Method: 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Was well purged dry? ☐ Yes ☐ No Pumping Rate: N/A gal/min

1. N/A
2. N/A
3. _____

Time	~~Cum. Gallons~~ BAILS Removed	pH	Temp (°C)	Spec. Cond. (µmhos/cm) µS/cm	~~Eh (Units)~~ ORP mV	DO (Units)	Turbidity (NTU)	Other:	Comments
0928	2	8.17	17.48	2007	172.6	7.29			
0930	4	8.17	17.55	2035	191.1	7.03			
0932	6	8.20	17.51	2022	195.5	7.58			
0935	8	8.21	17.70	2013	198.3	7.34			
0937	10	8.21	17.73	2016	199.6	7.75			

4. SAMPLING DATA

Method(s): 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Depth to Water at Time of Sampling:_____ Field Filtered? ☐ Yes ☑ No

Sample ID: GWGW~~2118~~ 2239 Sample Time: 0940 # of Containers: 3

Duplicate Sample Collected? ☐ Yes ☑ No ID: Type of Containers: 40 ml VOAs

Analyses Requested:

8260 for VOCs

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

FORM GW-1 (Rev 7/31/01)

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

WELL ID: DDC-4B

1. PROJECT INFORMATION

Project Number: 131261 Task Number: 300

Client: UC Davis

Project Location: LEHR

Date: 3/3/08 Time:

Personnel: C. FREY

Weather: CLEAR WARM

2. WELL DATA

Casing Diameter: 1.25 inches Type of Casing: PVC

Screen Diameter: 1.25 inches Type of Screen: PVC Screen Length : 5 feet

Total Depth of Well from TOC: 54.5 feet

Depth to Static Water from TOC:_____ feet

Depth to Product from TOC:_____ feet

Length of Water Column (h):_____ feet Calculated Casing Volume:_____ gal (3 to 5 times one well volume)

Purge Volume Calculation (one casing volume = 0.064):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Equipment Model(s)

Purge Method: 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Was well purged dry? ☐ Yes ☐ No Pumping Rate: N/A gal/min

1. N/A
2. N/A
3.

Time	~~Cum. Gallons~~ BAILS Removed	pH	Temp (°C)	Spec. Cond. (µmhos/cm) µS/CM	~~Eh (Units)~~ ORP mV	DO ~~(Units)~~ PPM	Turbidity (NTU)	Other:	Comments
0948	2	8.23	17.89	1974	169.4	7.44			
0950	4	8.22	17.56	1982	178.0	7.76			
0952	6	8.22	17.47	1992	183.2	8.12			
0955	8	8.21	17.81	1990	185.7	8.21			
0957	10	8.20	17.33	2007	188.5	8.68			

4. SAMPLING DATA

Method(s): 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Depth to Water at Time of Sampling:_____ Field Filtered? ☐ Yes ☑ No

Sample ID: GWGW~~2119~~ 2240 Sample Time: 1000 # of Containers: 3

Duplicate Sample Collected? ☑ Yes ☐ No ID: GWGW 2241 Type of Containers: 3x 40ml VOA Vials

Analyses Requested:

8260 for VOCs

5. COMMENTS

GWGW 2241 1003

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-1 (Rev 7/31/01)

Signature

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GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

WELL ID: DDC-4C

1. PROJECT INFORMATION

Project Number: 131261 Task Number: 300 Date: 3-08-08 Time: 1000

Client: UC Davis Personnel: J. Tinklin / C. Bay

Project Location: LEHR Weather:

2. WELL DATA

Casing Diameter: 1.25 inches Type of Casing: PVC

Screen Diameter: 1.25 inches Type of Screen: PVC Screen Length : 5 feet

Total Depth of Well from TOC: 69.5 feet

Depth to Static Water from TOC:_____ feet

Depth to Product from TOC:_____ feet

Length of Water Column (h):_____ feet Calculated Casing Volume:_____ gal (3 to 5 times one well volume)

Purge Volume Calculation (one casing volume = 0.064):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Equipment Model(s)

Purge Method: 0.75" disposable weighted bailer 1. N/A

Material: Bailer Polyethylene 2. N/A

Material: Rope Nylon 3.

Was well purged dry? ☐ Yes ☐ No Pumping Rate: N/A gal/min

Time	~~Cum. Gallons~~ BAILS Removed	pH	Temp (°C)	Spec. Cond. (~~µmhos/cm~~ µS/cm)	~~Eh (Units)~~ ORP mV	DO (Units) PPM	Turbidity (NTU)	Other:	Comments
1014	2	7.26	17.75	2063	152.2	7.87	Clear		
1017	4	7.25	18.78	2020	165.1	7.31			
1020	6	7.15	18.31	2040	177.3	7.73			
1023	8	7.13	18.31	2040	185.5	7.80			
1026	10	7.15	19.20	2040	173.5	7.67			

4. SAMPLING DATA

Method(s): 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Depth to Water at Time of Sampling:_____ Field Filtered? ☐ Yes ☑ No

Sample ID: GWGW~~2120~~ 2242 Sample Time: 1032 # of Containers: ~~3~~ 9

Duplicate Sample Collected? ☐ Yes ☑ No ID:

Type of Containers: ~~3~~ 9 x 40ml VOA Vials

Analyses Requested:

8260 for VOCs

MS/MSD

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

FORM GW-1 (Rev 7/31/01)

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

1. PROJECT INFORMATION

WELL ID: DDC-5A

Project Number: 131261 Task Number: 300

Client: UC Davis

Project Location: LEHR

Date: 3-3-08 Time: 1050

Personnel: J Tomlin / C. Frey

Weather: Clear @ 70°

2. WELL DATA

Casing Diameter: 1.25 inches Type of Casing: PVC

Screen Diameter: 1.25 inches Type of Screen: PVC Screen Length : 5 feet

Total Depth of Well from TOC: 33.5 feet

Depth to Static Water from TOC:_____ feet

Depth to Product from TOC:_____ feet

Length of Water Column (h):_____ feet Calculated Casing Volume:_____ gal (3 to 5 times one well volume)

Purge Volume Calculation (one casing volume = 0.064):

Note: 2-inch well = 0.163 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Purge Method: 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Was well purged dry? ☐ Yes ☐ No Pumping Rate: N/A gal/min

Equipment Model(s)

1. N/A
2. N/A
3. _____

Time	~~Gum. Gallons~~ BAILS Removed	pH	Temp (°C)	Spec. Cond. ~~(µmhos/cm)~~ mS/cm	ORP ~~Eh (Units)~~ mV	DO (Units) ppm	Turbidity (NTU)	Other:	Comments
1051	2	8.43	17.12	1620	74.4	7.98			
1053	4	7.71	16.48	1635	99.4	7.64			
1055	6	8.51	16.23	1615	67.5	8.04			
1057	8	8.41	16.41	1640	70.6	8.12			
1059	10	8.40	16.40	1646	96.5	8.09			

4. SAMPLING DATA

Method(s): 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Depth to Water at Time of Sampling:_____ Field Filtered? ☐ Yes ☑ No

Sample ID: GWGW~~2121~~ 2243 Sample Time: 1101

Duplicate Sample Collected? ☐ Yes ☑ No ID:

# of Containers: 3

Type of Containers: 40 ml VOAs

Analyses Requested:

8260 for VOCs

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature:

FORM GW-1 (Rev 7/31/01)

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

1. PROJECT INFORMATION

WELL ID: DDC-5B

Project Number: 131261 Task Number: 300

Client: UC Davis

Project Location: LEHR

Date: 3-3-08 Time: 1101

Personnel: S Tomlin / C Frey

Weather: Clear @ 70°

2. WELL DATA

Casing Diameter: 1.25 inches Type of Casing: PVC

Screen Diameter: 1.25 inches Type of Screen: PVC Screen Length : 5 feet

Total Depth of Well from TOC: 53.5 feet

Depth to Static Water from TOC:_____ feet

Depth to Product from TOC:_____ feet

Length of Water Column (h):_____ feet Calculated Casing Volume:_____ gal (3 to 5 times one well volume)

Purge Volume Calculation (one casing volume = 0.064):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Purge Method: 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Was well purged dry? ☐ Yes ☐ No Pumping Rate: N/A gal/min

Equipment Model(s)

1. N/A
2. N/A
3. _____

Time	~~Gam.~~ ~~Gallons~~ BAILS Removed	pH	Temp (°C)	Spec. Cond. (µmhos/cm) MC/MS	~~Eh (Units)~~ ORP mv	DO (Units) PPM	Turbidity (NTU)	Other:	Comments
1106	2	8.72	16.22	1632	20.6	8.14			
1108	4	8.64	16.20	1639	20.4	8.11			
1110	6	8.44	16.04	1633	80.6	9.49			
1112	8	8.41	15.91	1635	103.2	9.43			
1114	10	8.39	15.96	1624	117.3	9.25			

4. SAMPLING DATA

Method(s): 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Depth to Water at Time of Sampling:_____ Field Filtered? ☐ Yes ☐ No

Sample ID: GWGW~~2122~~ 2244 Sample Time: 1116 # of Containers: 3

Duplicate Sample Collected? ☐ Yes ☑ No ID:

Type of Containers: 3x 40ml VOA Vials

Analyses Requested:

8260 for VOCs

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-1 (Rev 7/31/01)

Signature

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

1. PROJECT INFORMATION

WELL ID: DDC-5C

Project Number: 131261 Task Number: 300 Date: 3-3-08 Time: 1101

Client: UC Davis Personnel: J. Tomlin / C. Frey

Project Location: LEHR Weather: Clear @ 70

2. WELL DATA

Casing Diameter: 1.25 inches Type of Casing: PVC

Screen Diameter: 1.25 inches Type of Screen: PVC Screen Length : 5 feet

Total Depth of Well from TOC: 78.5 feet

Depth to Static Water from TOC:_____ feet

Depth to Product from TOC:_____ feet

Length of Water Column (h):_____ feet Calculated Casing Volume:_____ gal (3 to 5 times one well volume)

Purge Volume Calculation (one casing volume = 0.064):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Purge Method: 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Was well purged dry? ☐ Yes ☐ No Pumping Rate: N/A gal/min

Equipment Model(s)

1. N/A
2. N/A
3. _____

Time	~~Cum. Gallons~~ BAILS Removed	pH	Temp (°C)	Spec. Cond. (~~µmhos~~/cm) mS/mS	~~Eh (Units)~~ ORP mV	DO (Units) ppm	Turbidity (NTU)	Other:	Comments
1121	2	7.84	16.61	1445	81.3	9.50			
1123	4	7.66	15.79	1475	91.2	9.48			
1125	6	7.59	16.11	1466	129.0	9.60			
1127	8	7.58	16.22	1457	138.8	8.42			
1129	10	7.56	16.23	1458	145.5	8.39			

4. SAMPLING DATA

Method(s): 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Depth to Water at Time of Sampling:_____ Field Filtered? ☐ Yes ☑ No

Sample ID: GWGW~~2123~~ 2245 Sample Time: 1131 # of Containers: 3

Duplicate Sample Collected? ☐ Yes ☑ No ID:

Type of Containers: 3x 40ml VOA Vials

Analyses Requested:

8260 for VOCs

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

FORM GW-1 (Rev 7/31/01)

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

WELL ID: DDC-6A

1. PROJECT INFORMATION

Project Number: 131261 Task Number: 300 Date: 3-3-08 Time: 1135

Client: UC Davis Personnel: J. Tomlin / C. Frey

Project Location: LEHR Weather: Clear @ 70°

2. WELL DATA

Casing Diameter: 1.25 inches Type of Casing: PVC

Screen Diameter: 1.25 inches Type of Screen: PVC Screen Length : 5 feet

Total Depth of Well from TOC: 35 feet

Depth to Static Water from TOC:_____ feet

Depth to Product from TOC:_____ feet

Length of Water Column (h):_____ feet Calculated Casing Volume:_____ gal (3 to 5 times one well volume)

Purge Volume Calculation (one casing volume = 0.064):

Note: 2-inch well = 0.163 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Equipment Model(s)

Purge Method: 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Was well purged dry? ☐ Yes ☐ No Pumping Rate: N/A gal/min

1. N/A
2. N/A
3. _____

Time	~~Cum. Gallons~~ BAILS Removed	pH	Temp (°C)	Spec. Cond. (~~µmhos/cm~~ mS/cm)	~~Eh (Units)~~ ORP mV	DO (Units) PPM	Turbidity (NTU)	Other: _____	Comments
1136	2	8.43	17.65	2058	45.3	8.35			
1138	4	8.30	17.61	2058	92.1	8.02			
1140	6	8.30	17.56	2057	107.8	8.49			
1142	8	8.27	18.40	2034	119.6	8.15			
1144	10	8.26	18.41	2033	129.4	8.06			

4. SAMPLING DATA

Method(s): 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Depth to Water at Time of Sampling:_____ Field Filtered? ☐ Yes ☑ No

Sample ID: GWGW~~2124~~ 2246 Sample Time: 1145 # of Containers: 3

Duplicate Sample Collected? ☐ Yes ☑ No ID: Type of Containers: 40 ml VOAs

Analyses Requested:

8260 for VOCs

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

FORM GW-1 (Rev 7/31/01)

GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

WELL ID: DDC-6B

1. PROJECT INFORMATION

Project Number: 131261 Task Number: 300

Client: UC Davis

Project Location: LEHR

Date: 3-3-08 Time: 1235

Personnel: J. Tomlin / C. Frey

Weather: Clear @ 70°

2. WELL DATA

Casing Diameter: 1.25 inches Type of Casing: PVC

Screen Diameter: 1.25 inches Type of Screen: PVC Screen Length : 5 feet

Total Depth of Well from TOC: 55 feet

Depth to Static Water from TOC:_____ feet

Depth to Product from TOC:_____ feet

Length of Water Column (h):_____ feet Calculated Casing Volume:_____ gal (3 to 5 times one well volume)

Purge Volume Calculation (one casing volume = 0.064):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Purge Method: 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Was well purged dry? ☐ Yes ☐ No Pumping Rate: N/A gal/min

Equipment Model(s)

1. N/A
2. N/A
3.

Time	~~Cum. Gallons~~ Gallons Removed	pH	Temp (°C)	Spec. Cond. ~~(umhos/cm)~~ mS/mc	ORP ~~Eh (Units)~~ mV	DO (Units) PPM	Turbidity (NTU)	Other:	Comments
1237	2	8.07	17.89	2062	68.5	9.01			
1239	4	8.10	17.99	2059	64.9	8.55			
1241	6	8.05	17.78	2058	79.5	8.91			
1243	8	8.05	18.02	2061	91.8	9.46			
1245	10	8.04	17.98	2075	103.7	9.64			

4. SAMPLING DATA

Method(s): 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Depth to Water at Time of Sampling: 124 Field Filtered? ☐ Yes ☑ No

Sample ID: GWGW~~2125~~ 1247 Sample Time: 1247 # of Containers: 3

Duplicate Sample Collected? ☐ Yes ☑ No ID:

Type of Containers: 3x 40ml VOA Vials

Analyses Requested:

8260 for VOCs

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

FORM GW-1 (Rev 7/31/01)

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GROUNDWATER PURGE AND SAMPLING FIELD DATA SHEET

1. PROJECT INFORMATION

WELL ID: DDC-6C

Project Number: 131261 Task Number: 300

Client: UC Davis

Project Location: LEHR

Date: 3-3-08 Time: 1249

Personnel: S. Tomlinson / C. Ferry

Weather: Clear @ 70

2. WELL DATA

Casing Diameter: 1.25 inches Type of Casing: PVC

Screen Diameter: 1.25 inches Type of Screen: PVC Screen Length : 5 feet

Total Depth of Well from TOC: 70 feet

Depth to Static Water from TOC: _____ feet

Depth to Product from TOC: _____ feet

Length of Water Column (h): _____ feet Calculated Casing Volume: _____ gal (3 to 5 times one well volume)

Purge Volume Calculation (one casing volume = 0.064):

Note: 2-inch well = 0.167 gal/ft 4-inch well = 0.667 gal/ft

3. PURGE DATA

Purge Method: 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Was well purged dry? ☐ Yes ☐ No Pumping Rate: N/A gal/min

Equipment Model(s)

1. N/A
2. N/A
3. _____

Time	~~Cum. Gallons~~ Bails Removed	pH	Temp (°C)	Spec. Cond. ~~(µmhos/cm)~~ mS/mc	~~Eh (Units)~~ ORP mV	DO (Units) ppm	Turbidity (NTU)	Other: _____	Comments
1251	2	7.86	17.78	2059	94.4	7.71			
1253	4	7.84	17.72	2060	104.1	8.20			
1255	6	7.84	17.73	2069	118.6	8.65			
1257	8	7.81	17.86	2058	123.4	9.42			
1259	10	7.93	17.90	2060	120.7	8.19			

4. SAMPLING DATA

Method(s): 0.75" disposable weighted bailer

Material: Bailer Polyethylene

Material: Rope Nylon

Depth to Water at Time of Sampling: _____ Field Filtered? ☐ Yes ☑ No

Sample ID: GWGW~~2126~~ 2248 Sample Time: 1301 # of Containers: 3

Duplicate Sample Collected? ☐ Yes ☑ No ID:

Type of Containers: 3x 40ml VOA Vials

Analyses Requested:

8260 for VOCs

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-1 (Rev 7/31/01)

Signature

WATER SAMPLING DATA SHEET

Weiss Associates

PROJECT NAME: UC Davis, LEHR Sample Location: UCD2-48 Sample ID: GWGW2303

PROJECT NO: 388 1806 2-11 Sampled By: DMB Sample Date: 9-20-03

Sample Time:

WEATHER	☑ Sunny	☐ Cloudy	☐ Rainy	☐ Foggy	☐ Windy	Temp:
SAMPLE TYPE	☑ Original	☐ Duplicate	☐ Trip Blank	☐ Equip. Blank	☐ Other:	
SAMPLE SOURCE	☑ Monitoring Well	☐ Extraction Well	☐ Piezometer	☐ System*	☐ Other:	

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	1115	110799	Orion	☑4 4.00	☑7 7.02	☑10 10.06
pH (final)						
Conductivity				1415 @	1409	
Turbidity						
Other:						

SAMPLE PORT* ☐ PVC ☑ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER					
Start:	32183.9 gal.	Rate:	gpm	Time:	1130
End:	32227.8 gal.	Rate:	3.06 gpm	Time:	1200

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	Turbidity NTU	Other: DTW
1130	Start	7.94	21.2	1229		59.81
1140	28.8	7.76	19.0	950		59.95
1150	57.6	7.77	18.9	954		59.98
1200	86.4	7.77	18.8	946		59.98
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	< 50 NTU	± 10%
Precision:		0.10	1.0 °C	10 µS/cm	0.1 NTU	

SAMPLE APPEARANCE

Color:	☑ Clear	☐ Grey	☐ Yellow	☐ Brown	☐ Tan	☐ Black
	☐ Cloudy	☐ Other:				
Odor:	☑ None	☐ Gasoline	☐ Diesel	☐ Solvent	☐ Sulfur	☐ Metallic
	☐ Other:					
Solids:	☑ None	☐ Trace	☐ Small Quantity	☐ Mod. Quantity	☐ Large Quantity	
	☐ Silt	☐ Sand	☐ Gravel	☐ Organic Material	☐ Other:	
	☐ Separate Phase Hydrocarbons		☐ Sheen	☐ Measurable Amount:		mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
GWGW2303	V	3	40	HCL	N	

Final Check: VOAs free of air bubbles? ☑ Yes ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

Weiss Associates

PROJECT NAME: UCDavis L&R | Sample Location: UCD2-48 | Sample ID: OW GW 2303

PROJECT NO: 3 88 1856 2 11 | Sampled By: DMB | Sample Date: 9-26-03

Sample Time:

SAMPLE SOURCE ☑ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements	Well Conditions	
Water Level Meter No.: 16078			locked?	Yes ☑ No ☐
Depth to Water	DTW	59.81 ft.	casing	OK ☑ Not OK ☐
Depth to Product	DTP	– ft.	plugs	OK ☑ Not OK ☐
Product Thickness	PT	– ft.	seal	OK ☑ Not OK ☐
Specified Well Depth	SWD	104 ft.	vault	OK ☑ Not OK ☐
Measured Well Depth	MWD	* ft.	Comments:	
Well Diameter	D	4 inches		

PURGE CALCULATIONS	Formula	Value	Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	44.19 ft.	91.9 gal
Well Casing Volume	WCV = SWH * V_D	28.85 gal.	
Well Casing Volumes to be Purged	N	3	
Total to be Purged	= WCV * N	86.56 gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT — Dedicated: ☑ Yes ☐ No

Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☑ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination — Decon: ☐ Yes ☐ No ☑ N/A

Method: ☐ Steam ☐ Alconox ☐ DI Water ☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☐ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT — Dedicated: ☑ Yes ☐ No

Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	~~☑ Teflon~~	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☑ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination — Decon: ☐ Yes ☐ No ☑ N/A

Method: ☐ Steam ☐ Alconox ☐ DI Water ☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* unable to measure w/D Guess that 100'

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) — 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

Weiss Associates

PROJECT NAME: UC Davis LEHR/SCDS **Sample Location:** UCD1-004 **Sample ID:** GWGW2304

PROJECT NO: 388-1856-1-16 **Sampled By:** JMD **Sample Date:** 10/8/08

Sample Time:

WEATHER	☒ Sunny	☐ Cloudy	☐ Rainy	☐ Foggy	☒ Windy	Temp: 70
SAMPLE TYPE	☒ Original	☐ Duplicate	☐ Trip Blank	☐ Equip. Blank	☐ Other:	
SAMPLE SOURCE	☒ Monitoring Well	☐ Extraction Well	☐ Piezometer	☐ System*	☐ Other:	

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0915	110797	Oakton	☒ 4.00	☒ 7.04	☒ 10.12
pH (final)						
Conductivity				1413		
Turbidity						
Other:						

SAMPLE PORT* ☐ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER	Start: 32295 gal.	Rate: gpm	Time:
	End: gal.	Rate: gpm	Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
— well Dry —						
— No Sample Taken —						
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color:	☐ Clear ☐ Cloudy	☐ Grey ☐ Other:	☐ Yellow	☐ Brown	☐ Tan	☐ Black
Odor:	☐ None ☐ Other:	☐ Gasoline	☐ Diesel	☐ Solvent	☐ Sulfur	☐ Metallic
Solids:	☐ None ☐ Silt ☐ Separate Phase Hydrocarbons	☐ Trace ☐ Sand	☐ Small Quantity ☐ Gravel ☐ Sheen	☐ Mod. Quantity ☐ Organic Material ☐ Measurable Amount:	☐ Large Quantity	☐ Other: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

Weiss Associates

PROJECT NAME:	UC Davis LEHR/SCDS	Sample Location:	Sample ID:
PROJECT NO:	388-1856-1-16	Sampled By:	Sample Date:
			Sample Time:

SAMPLE SOURCE ☐ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements	Well Conditions		
Water Level Meter No.:			locked?	Yes ☐	No ☐
Depth to Water	DTW	ft.	casing	OK ☐	Not OK ☐
Depth to Product	DTP	ft.	plugs	OK ☐	Not OK ☐
Product Thickness	PT	ft.	seal	OK ☐	Not OK ☐
Specified Well Depth	SWD	ft.	vault	OK ☐	Not OK ☐
Measured Well Depth	MWD	ft.	Comments:		
Well Diameter	D	inches			

PURGE CALCULATIONS	Formula	Value	Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	ft.	
Well Casing Volume	WCV = SWH * V_D	gal.	
Well Casing Volumes to be Purged	N		
Total to be Purged	= WCV * N	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT						
		Dedicated:	☐ Yes	☐ No		
Pump ID#:	☐ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass
Purge Equipment Decontamination		Decon:	☐ Yes	☐ No	☐ N/A	
Method:		☐ Steam	☐ Alconox	☐ DI Water	☐ Other	

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☐ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT						
		Dedicated:	☐ Yes	☐ No		
Pump ID#:	☐ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass
Sample Equipment Decontamination		Decon:	☐ Yes	☐ No	☐ N/A	
Method:		☐ Steam	☐ Alconox	☐ DI Water	☐ Other	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-008	**Sample ID:**	GWGW2305
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMD	**Sample Date:**	October 16, 2008
				Sample Time:	

WEATHER ☐ Sunny ☐ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp:

SAMPLE TYPE ☐ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)				☐ 4	☐ 7	☐ 10
pH (final)						
Conductivity						
Turbidity						
Other:						

SAMPLE PORT* ☐ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER	Start:	gal.	Rate:	gpm	Time:
	End:	gal.	Rate:	gpm	Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
— Well		Dry	—			
— No		Sample		Taken		
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☐ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black ☐ Cloudy ☐ Other:

Odor: ☐ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic ☐ Other:

Solids: ☐ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity ☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other: ☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-008	**Sample ID:**	GWGW2305
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMD	0 **Sample Date:**	October___, 2008
				Sample Time:	0

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements	Well Conditions		
Water Level Meter No.:			locked?	Yes ☐	No ☐
Depth to Water	DTW	ft.	casing	OK ☐	Not OK ☐
Depth to Product	DTP	ft.	plugs	OK ☐	Not OK ☐
Product Thickness	PT	ft.	seal	OK ☐	Not OK ☐
Specified Well Depth	SWD	ft.	vault	OK ☐	Not OK ☐
Measured Well Depth	MWD	ft.	Comments:		
Well Diameter	D	2 inches			

PURGE CALCULATIONS	Formula	Value	Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 ft.	
Well Casing Volume	WCV = SWH * V_D	0 gal.	
Well Casing Volumes to be Purged	N		
Total to be Purged	= WCV * N	0 gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☐ Yes	☐ No	
Pump ID#:	☐ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	☐ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☐ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☐ Yes	☐ No	
Pump ID#:	☐ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	☐ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:	Formulas/Conversions:
	cylinder volume = $\pi r^2 h$
	r = well radius (ft) 1 ft^3 = 7.48 gallons
	h = height of water column (ft)
	$V_{2\text{-inch casing}}$ = 0.163 gallons/ft
	$V_{3\text{-inch casing}}$ = 0.367 gallons/ft
	$V_{4\text{-inch casing}}$ = 0.653 gallons/ft
	$V_{6\text{-inch casing}}$ = 1.47 gallons/ft
	$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

Weiss Associates

PROJECT NAME: UC Davis LEHR/SCDS **Sample Location:** UCD1-10 **Sample ID:** GWGW-2306

PROJECT NO: 388-1856-1-16 **Sampled By:** JMO **Sample Date:** ~~10/8/08~~ 10/15/08

Sample Time: 1435

WEATHER	☒ Sunny	☐ Cloudy	☐ Rainy	☐ Foggy	☒ Windy	Temp: 70
SAMPLE TYPE	☒ Original	☐ Duplicate	☐ Trip Blank	☐ Equip. Blank	☐ Other:	
SAMPLE SOURCE	☒ Monitoring Well	☐ Extraction Well	☐ Piezometer	☐ System*	☐ Other:	

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0810	110797	Oakton	☒ 4.00	☒ 7.04	☒ 10.12
pH (final)						
Conductivity				1413		
Turbidity						
Other:						

SAMPLE PORT* ☐ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: ~~32915~~ 32893 gal. Rate: gpm Time:

End: 32925 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
1410	0	7.67	20.4	1161	56.23	
1416	10	7.58	20.0	1134	58.25	
1422	20	7.57	19.9	1141	59.29	
1427	29	7.54	19.9	1143	60.31	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☒ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black ☐ Cloudy ☐ Other:

Odor: ☒ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic ☐ Other:

Solids: ☒ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity ☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other: ☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS: Does not have a pump, will return

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

C:\DOCUME~1\[illegible]\LOCALS~1\Temp\[illegible]\Summer\Well Sampling Form

WATER SAMPLING DATA SHEET

Weiss Associates

PROJECT NAME: UC Davis LEHR/SCDS | Sample Location: VCDHO | Sample ID: GWGW2306

PROJECT NO: 388-1856-1-16 | Sampled By: JMM | Sample Date: 10/15/08

Sample Time: 1435

SAMPLE SOURCE ☐ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements	Well Conditions		
Water Level Meter No.:			locked?	Yes ☐	No ☐
Depth to Water	DTW	55.70 ft.	casing	OK ☐	Not OK ☐
Depth to Product	DTP	ft.	plugs	OK ☐	Not OK ☐
Product Thickness	PT	ft.	seal	OK ☐	Not OK ☐
Specified Well Depth	SWD	70 ft.	vault	OK ☐	Not OK ☐
Measured Well Depth	MWD	ft.	Comments:		
Well Diameter	D	4 inches			

PURGE CALCULATIONS	Formula	Value	Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	14.30 ft.	
Well Casing Volume	WCV = SWH * V_D	9.3 gal.	
Well Casing Volumes to be Purged	N	3	
Total to be Purged	= WCV * N	28.0 gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT							
			Dedicated:	☐ Yes	☒ No		
Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:		
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon	
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:		
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass	
Purge Equipment Decontamination			Decon:	☒ Yes	☐ No	☐ N/A	
Method:		☐ Steam	☒ Alconox	☒ DI Water	☐ Other		

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☒ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:		Total Purge Time:		

SAMPLE EQUIPMENT							
			Dedicated:	☐ Yes	☒ No		
Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:		
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon	
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:		
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass	
Sample Equipment Decontamination			Decon:	☒ Yes	☐ No	☐ N/A	
Method:		☐ Steam	☒ Alconox	☒ DI Water	☐ Other		

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-011	**Sample ID:**	GW/GW2307
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMD	**Sample Date:**	Oct. 8, 2008
				Sample Time:	1245

WEATHER ☑ Sunny ☐ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp: 70

SAMPLE TYPE ☑ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0800	137289	OAKTON	~~4~~	~~7~~	~~10~~
pH (final)						
Conductivity				1000=1000		
Turbidity						
Other:						

SAMPLE PORT* ☐ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 3505~~8.77~~ gal. Rate: gpm Time:

End: gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
1230	0	7.65	20.1	1142	57.10	
1232	6	7.61	19.3	1204	57.33	
1236	12	7.54	19.2	1203	57.55	
1239	17.5	7.55	19.1	1208	57.60	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☑ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black ☐ Cloudy ☐ Other:

Odor: ☑ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic ☐ Other:

Solids: ☑ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity ☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other: ☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-011	**Sample ID:**	GW/GW2307
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMD	**Sample Date:**	Oct. 5, 2008
				Sample Time:	1245

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS				Well Conditions	
Water Level Meter No.:		Measurements		locked?	Yes ☐ No ☐
Depth to Water	DTW	56.26	ft.	casing	OK ☐ Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐ Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐ Not OK ☐
Specified Well Depth	SWD	65	ft.	vault	OK ☐ Not OK ☐
Measured Well Depth	MWD		ft.	Comments:	
Well Diameter	D	4	inches		

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	8.74	ft.	
Well Casing Volume	WCV = SWH * V_D	5.7	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	17.12	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☐ Yes	☐ No	
Pump ID#:	☐ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	☐ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☐ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☐ Yes	☐ No	
Pump ID#:	☐ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	☐ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-012	**Sample ID:**	GWGW2308
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMD	**Sample Date:**	Oct. 9, 2008
				Sample Time:	0830

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS				Well Conditions		
Water Level Meter No.: 15656		Measurements		locked?	Yes ☒	No ☐
Depth to Water	DTW	57.55	ft.	casing	OK ☒	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☒	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☒	Not OK ☐
Specified Well Depth	SWD	64.5	ft.	vault	OK ☒	Not OK ☐
Measured Well Depth	MWD		ft.	Comments:		
Well Diameter	D	4	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 6.95	ft.	
Well Casing Volume	WCV = SWH * V_D	0 4.5	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	0 13.6	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☒ Yes	☐ No	
Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	☒ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☒ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☒ Yes	☐ No	
Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	☒ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) — 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-012	**Sample ID:**	GWGW2308
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMD	**Sample Date:**	Oct. 9, 2008
				Sample Time:	0830

WEATHER	☒ Sunny	☐ Cloudy	☐ Rainy	☐ Foggy	☒ Windy	Temp: 65
SAMPLE TYPE	☒ Original	☐ Duplicate	☐ Trip Blank	☐ Equip. Blank	☐ Other:	
SAMPLE SOURCE	X Monitoring Well	☐ Extraction Well	☐ Piezometer	☐ System*	☐ Other:	

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0830	110797	Oakton	☒ 4.00	☒ 7.04	☒ 10.12
pH (final)						
Conductivity				1413		
Turbidity						
Other:						

SAMPLE PORT*	☒ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

TOTALIZER	Start: 323748 gal.	Rate: gpm	Time:	
	End: 323917 gal.	Rate: gpm	Time:	

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
0800	0	8.16	17.7	1763	58.60	
0805	5	8.18	18.2	1766	60.21	
0815	10	8.17	18.7	1766	61.97	
0823	14	8.14	19.0	1769	62.42	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color:	☒ Clear ☐ Cloudy	☐ Grey ☐ Other:	☐ Yellow	☐ Brown	☐ Tan	☐ Black
Odor:	☒ None ☐ Other:	☐ Gasoline	☐ Diesel	☐ Solvent	☐ Sulfur	☐ Metallic
Solids:	☒ None ☐ Silt ☐ Separate Phase Hydrocarbons	☐ Trace ☐ Sand	☐ Small Quantity ☐ Gravel ☐ Sheen	☐ Mod. Quantity ☐ Organic Material ☐ Measurable Amount:	☐ Large Quantity	☐ Other: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
— See	Sampling	Protocol	—			
Final Check:		VOAs free of air bubbles?	☒ Yes	☐ No	☐ N/A	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS: slowed pump down to reduce drawdown. Temp rising due to pump heating up

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

1/2

WATER SAMPLING DATA SHEET

Weiss Associates

PROJECT NAME: UC Davis LEHR/SCDS **Sample Location:** UCD1-13 **Sample ID:** GW6W2309

PROJECT NO: 388-1856-1-16 **Sampled By:** JMY **Sample Date:** 10/7/08

Sample Time: 1500

WEATHER	☒ Sunny	☐ Cloudy	☐ Rainy	☐ Foggy	☒ Windy	Temp: 80
SAMPLE TYPE	☒ Original	☐ Duplicate	☐ Trip Blank	☐ Equip. Blank	☐ Other:	
SAMPLE SOURCE	☒ Monitoring Well	☐ Extraction Well	☐ Piezometer	☐ System*	☐ Other:	

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	1345	1	Oakton	☒ 4	☒ 7	☒ 10
pH (final)						
Conductivity						
Turbidity						
Other:						

SAMPLE PORT*	☒ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

TOTALIZER	Start: 32215 gal.	Rate: gpm	Time:
	End: gal.	Rate: gpm	Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
1430	0	7.10	20.3	1479	58.65	
1435	5	7.25	20.4	1438	59.71	
1440	10	7.21	20.3	1416	60.15	
1445		7.25	20.3	1393	60.35	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color:	☒ Clear	☐ Grey	☐ Yellow	☐ Brown	☐ Tan	☐ Black
	☐ Cloudy	☐ Other:				
Odor:	☒ None	☐ Gasoline	☐ Diesel	☐ Solvent	☐ Sulfur	☐ Metallic
	☐ Other:					
Solids:	☒ None	☐ Trace	☐ Small Quantity	☐ Mod. Quantity	☐ Large Quantity	
	☐ Silt	☐ Sand	☐ Gravel	☐ Organic Material		☐ Other:
	☐ Separate Phase Hydrocarbons		☐ Sheen	☐ Measurable Amount:		mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☒ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

GW GW 2309

Weiss Associates

PROJECT NAME: UC Davis LEHR/SCDS **Sample Location:** UCD1-13 **Sample ID:** [illegible]

PROJECT NO: 388-1856-1-16 **Sampled By:** JMD **Sample Date:** 10/7/08

Sample Time: 1500

SAMPLE SOURCE ☒ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements	Well Conditions	
Water Level Meter No.: 15656			locked?	Yes ☐ No ☐
Depth to Water	DTW	57.66 ft.	casing	OK ☐ Not OK ☐
Depth to Product	DTP	— ft.	plugs	OK ☐ Not OK ☐
Product Thickness	PT	— ft.	seal	OK ☐ Not OK ☐
Specified Well Depth	SWD	65' ft.	vault	OK ☐ Not OK ☐
Measured Well Depth	MWD	— ft.	Comments:	
Well Diameter	D	4 inches		

PURGE CALCULATIONS	Formula	Value	Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	7.34 ft.	15 Gals
Well Casing Volume	WCV = SWH * V_D	4.8 gal.	
Well Casing Volumes to be Purged	N	3	
Total to be Purged	= WCV * N	14.4 gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT						
			Dedicated:	☒ Yes	☐ No	
Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass
Purge Equipment Decontamination			Decon:	☐ Yes	☐ No	☒ N/A
Method:		☐ Steam	☐ Alconox	☐ DI Water	☐ Other	

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☒ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT						
			Dedicated:	☐ Yes	☐ No	
Pump ID#:	☐ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass
Sample Equipment Decontamination			Decon:	☐ Yes	☐ No	☐ N/A
Method:		☐ Steam	☐ Alconox	☐ DI Water	☐ Other	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

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WATER SAMPLING DATA SHEET

Weiss Associates

PROJECT NAME: UC Davis LEHR/SCDS **Sample Location:** UCD1-018 **Sample ID:** GWGW2310

PROJECT NO: 388-1856-1-16 **Sampled By:** LMA **Sample Date:** 10/8/08

Sample Time: 1055

WEATHER	☑ Sunny	☐ Cloudy	☐ Rainy	☐ Foggy	☑ Windy	Temp: 60
SAMPLE TYPE	☑ Original	☐ Duplicate	☐ Trip Blank	☐ Equip. Blank	☐ Other:	
SAMPLE SOURCE	☑ Monitoring Well	☐ Extraction Well	☐ Piezometer	☐ System*	☐ Other:	

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0800	131289	OAKTON	☑ 4	☑ 7	☑ 10
pH (final)						
Conductivity				1000=1000		
Turbidity						
Other:						

SAMPLE PORT* ☐ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER				
Start: 34974.0 gal.	Rate: gpm	Time:		
End: 35058.7 gal.	Rate: gpm	Time:		

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
1020	0	6.65	19.2	907	53.70	
1030	11	7.58	19.0	583	53.75	
1040	22	7.98	19.0	594	53.80	
1050	33	8.01	19.3	587	53.91	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color:	☑ Clear	☐ Grey	☐ Yellow	☐ Brown	☐ Tan	☐ Black
	☐ Cloudy	☐ Other:				
Odor:	☑ None	☐ Gasoline	☐ Diesel	☐ Solvent	☐ Sulfur	☐ Metallic
	☐ Other:					
Solids:	☑ None	☐ Trace	☐ Small Quantity	☐ Mod. Quantity	☐ Large Quantity	
	☐ Silt	☐ Sand	☐ Gravel	☐ Organic Material		☐ Other:
	☐ Separate Phase Hydrocarbons		☐ Sheen	☐ Measurable Amount:		mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
GWGW2310	1L AMBER	2	1000	NONE	N	
	AMBER	2	250	H2SO4	N	
	POLY	1	1000	HNO3	Y	
	POLY	2	500	NONE/HNO3	Y/Y	
	POLY	3	250	NONE/NONE/H2SO4	N	
	POLY	1	100	HCl	N	

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-019	**Sample ID:**	GWGW2311
PROJECT NO:	388-1856-1-16	**Sampled By:**	[illegible]	**Sample Date:**	Oct. 9, 2008
				Sample Time:	1919 (t)

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS				Well Conditions	
Water Level Meter No.:		Measurements		locked?	Yes ☐ No ☐
Depth to Water	DTW	56.48	ft.	casing	OK ☐ Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐ Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐ Not OK ☐
Specified Well Depth	SWD	71.5	ft.	vault	OK ☐ Not OK ☐
Measured Well Depth	MWD		ft.	Comments:	
Well Diameter	D	4	inches		

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	15.02	ft.	29.5
Well Casing Volume	WCV = SWH * V_D	9.80	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	29.40	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☐ Yes	☐ No	
Pump ID#:	☐ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass
Purge Equipment Decontamination			Decon:	☐ Yes	☐ No	☐ N/A
Method:		☐ Steam	☐ Alconox	☐ DI Water	☐ Other	

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☐ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☐ Yes	☐ No	
Pump ID#:	☐ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass
Sample Equipment Decontamination			Decon:	☐ Yes	☐ No	☐ N/A
Method:		☐ Steam	☐ Alconox	☐ DI Water	☐ Other	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME: UC Davis LEHR/SCDS | **Sample Location:** UCD1-021 | **Sample ID:** GWGW2312

PROJECT NO: 388-1856-1-16 | **Sampled By:** JMD | 0 **Sample Date:** Oct. 9, 2008

Sample Time: 1045 0

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions	
Water Level Meter No.: 15656				locked?	Yes ☐ No X
Depth to Water	DTW	53.71	ft.	casing	OK X Not OK ☐
Depth to Product	DTP		ft.	plugs	OK X Not OK ☐
Product Thickness	PT		ft.	seal	OK X Not OK ☐
Specified Well Depth	SWD	72	ft.	vault	OK X Not OK ☐
Measured Well Depth	MWD		ft.	Comments:	
Well Diameter	D	4	inches		

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 18.29	ft.	
Well Casing Volume	WCV = SWH * V_D	0 11.9	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	0 35.8	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT						
		Dedicated:	X Yes	~~X No~~		
Pump ID#:	☐ Bladder	X Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass
Purge Equipment Decontamination		Decon:	☐ Yes	☐ No	X N/A	
Method:		☐ Steam	☐ Alconox	☐ DI Water	☐ Other	

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	X No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT						
		Dedicated:	X Yes	☐ No		
Pump ID#:	☐ Bladder	X Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass
Sample Equipment Decontamination		Decon:	☐ Yes	☐ No	X N/A	
Method:		☐ Steam	☐ Alconox	☐ DI Water	☐ Other	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) — 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME: UC Davis LEHR/SCDS **Sample Location:** UCD1-021 **Sample ID:** GWGW2312

PROJECT NO: 388-1856-1-16 **Sampled By:** JMO **Sample Date:** Oct. 9, 2008

Sample Time: 1045

WEATHER ☒ Sunny ☐ Cloudy ☐ Rainy ☐ Foggy ☒ Windy Temp: 75

SAMPLE TYPE ☒ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0830	110797	Oakton	☒ 4.00	☒ 7.04	☒ 10.12
pH (final)						
Conductivity				1413		
Turbidity						
Other:						

SAMPLE PORT* ☐ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 32422 gal. Rate: gpm Time:

End: gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
1014	0	7.69	19.8	1165	54.25	
1022	12	7.68	19.9	1196	55.31	
1030	24	7.73	19.8	1187	55.47	
1038	36	7.70	19.8	1203	55.70	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☒ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black ☐ Cloudy ☐ Other:

Odor: ☒ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic ☐ Other:

Solids: ☒ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity ☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other: ☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
- See	Sampling	Protocol				

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☒ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-022	**Sample ID:**	GWGW2313
PROJECT NO:	388-1856-1-16	**Sampled By:**	[illegible]	**Sample Date:**	Oct. 10, 2008
				Sample Time:	0730

WEATHER ☐ Sunny ☐ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp: 50

SAMPLE TYPE ☐ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:
SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0730	131289	OAKTON	☐ 4	☐ 7	☐ 10
pH (final)						
Conductivity				1000=1000		
Turbidity						
Other:						

SAMPLE PORT* ☐ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 35 23 10 gal. Rate: gpm Time:
End: 35 26 6 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
0730	0	8.15	18.1	711	58.11	
0735	12.5	7.78	18.5	712	60.30	
0740	25	7.70	18.3	718	59.20	
0745	38	7.67	17.9	721	59.30	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☑ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black
☐ Cloudy ☐ Other:

Odor: ☑ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic
☐ Other:

Solids: ☑ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity
☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other:
☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-022	**Sample ID:**	GWGW2313
PROJECT NO:	388-1856-1-16	**Sampled By:**	KLK	**Sample Date:**	Oct. 11, 2008
				Sample Time:	0755

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions		
Water Level Meter No.:				locked?	Yes ☐	No ☐
Depth to Water	DTW	53.81	ft.	casing	OK ☐	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐	Not OK ☐
Specified Well Depth	SWD		ft.	vault	OK ☐	Not OK ☐
Measured Well Depth	MWD	73.00	ft.	Comments:		
Well Diameter	D	4	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	19.19	ft.	38
Well Casing Volume	WCV = SWH * V_D	12.53	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	37.59	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☐ Yes	☐ No	
Pump ID#:	☐ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	☐ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☐ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☐ Yes	☐ No	
Pump ID#:	☐ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	☐ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-023	**Sample ID:**	GWGW2314
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMD	**Sample Date:**	Oct. 8, 2008
				Sample Time:	1715

WEATHER	X Sunny	☐ Cloudy	☐ Rainy	☐ Foggy	X Windy	Temp: 75
SAMPLE TYPE	X Original	☐ Duplicate	☐ Trip Blank	☐ Equip. Blank	☐ Other:	
SAMPLE SOURCE	X Monitoring Well	☐ Extraction Well	☐ Piezometer	☐ System*	☐ Other:	

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0915	110797	Oakton	X 4.00	X 7.04	X 10.12
pH (final)						
Conductivity				1413		
Turbidity						
Other:						

SAMPLE PORT*	X PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

TOTALIZER	Start: 32331 gal.	Rate:	gpm	Time:	
	End: 32378 gal.	Rate:	gpm	Time:	

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
1655	0	7.56	19.2	782	56.25	
1659	14.5	7.64	19.1	765	56.10	
1704	29	7.78	19.2	760	56.08	
1710	43.5	7.78	19.2	762	56.15	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color:	X Clear	☐ Grey	☐ Yellow	☐ Brown	☐ Tan	☐ Black
	☐ Cloudy	☐ Other:				
Odor:	X None	☐ Gasoline	☐ Diesel	☐ Solvent	☐ Sulfur	☐ Metallic
	☐ Other:					
Solids:	X None	☐ Trace	☐ Small Quantity	☐ Mod. Quantity	☐ Large Quantity	
	☐ Silt	☐ Sand	☐ Gravel	☐ Organic Material		☐ Other:
	☐ Separate Phase Hydrocarbons		☐ Sheen	☐ Measurable Amount:		mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
GWGW2314	Amber	2	1,000	None	N	

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No X N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-023	**Sample ID:**	GWGW2314
PROJECT NO:	388-1856-1-16	**Sampled By:** JMD	0	**Sample Date:**	Oct. 8, 2008
				Sample Time:	1715 0

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions		
Water Level Meter No.: 15656				locked?	Yes ☐	No ☒
Depth to Water	DTW	54.38	ft.	casing	OK ☐	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐	Not OK ☐
Specified Well Depth	SWD	76.5	ft.	vault	OK ☐	Not OK ☐
Measured Well Depth	MWD		ft.	Comments:		
Well Diameter	D	4	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 22.12	ft.	
Well Casing Volume	WCV = SWH * V_D	0 14.4	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	0 43.3	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☒ Yes	☐ No	
Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass
Purge Equipment Decontamination			Decon:	☐ Yes	☐ No	☒ N/A
Method:		☐ Steam	☐ Alconox	☐ DI Water	☐ Other	

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☒ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%		Total Purge Volume:		Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☒ Yes	☐ No	
Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass
Sample Equipment Decontamination			Decon:	☐ Yes	☐ No	☒ N/A
Method:		☐ Steam	☐ Alconox	☐ DI Water	☐ Other	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-024	**Sample ID:**	GWGW2315
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMD	**Sample Date:**	Oct. 8, 2008
				Sample Time:	1615

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions	
Water Level Meter No.: 15656				locked?	Yes ☐ No ☒
Depth to Water	DTW	53.97	ft.	casing	OK ☐ Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐ Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐ Not OK ☐
Specified Well Depth	SWD		ft.	vault	~~OK ☐~~ Not OK ☒
Measured Well Depth	MWD	73	ft.	Comments: Lid broken	
Well Diameter	D	4	inches		

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 19.03	ft.	
Well Casing Volume	WCV = SWH * V_D	0 12.4	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	0 37.3	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☒ Yes	☐ No	
Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☒ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass
Purge Equipment Decontamination			Decon:	☐ Yes	☐ No	☒ N/A
Method:		☐ Steam	☐ Alconox	☐ DI Water	☐ Other	

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☒ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☒ Yes	☐ No	
Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass
Sample Equipment Decontamination			Decon:	☐ Yes	☐ No	☒ N/A
Method:		☐ Steam	☐ Alconox	☐ DI Water	☐ Other	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:	Formulas/Conversions:
	cylinder volume = $\pi r^2 h$
	r = well radius (ft) — 1 ft^3 = 7.48 gallons
	h = height of water column (ft)
	$V_{2\text{-inch casing}}$ = 0.163 gallons/ft
	$V_{3\text{-inch casing}}$ = 0.367 gallons/ft
	$V_{4\text{-inch casing}}$ = 0.653 gallons/ft
	$V_{6\text{-inch casing}}$ = 1.47 gallons/ft
	$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-024	**Sample ID:**	GWGW2315
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMD	**Sample Date:**	Oct. 8, 2008
				Sample Time:	1615

WEATHER ☒ Sunny ☐ Cloudy ☐ Rainy ☐ Foggy ☒ Windy Temp: 75

SAMPLE TYPE ☒ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0915	110797	Oakton	☒ 4.00	☒ 7.04	☒ 10.12
pH (final)						
Conductivity				1413		
Turbidity						
Other:						

SAMPLE PORT* ☒ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 32295 gal. Rate: gpm Time:

End: 32331 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
1555	0	7.46	20.5	1150	54.00	
1600	12.5	7.50	20.3	1131	56.32	
1605	25	7.50	20.2	1123	56.69	
1610	37.5	7.55	20.2	1125	56.91	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☒ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black ☐ Cloudy ☐ Other:

Odor: ☒ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic ☐ Other:

Solids: ☒ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity ☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other: ☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
GWGW2315	Poly	1	250	None	N	
Final Check:		VOAs free of air bubbles?	☐ Yes	☐ No	☒ N/A	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-025	**Sample ID:**	GWGW2316
PROJECT NO:	388-1856-1-16	**Sampled By:**	CMA	**Sample Date:**	Oct. 9, 2008
				Sample Time:	1130

WEATHER ☑ Sunny ☐ Cloudy ☐ Rainy ☐ Foggy ☑ Windy Temp: 70

SAMPLE TYPE ☑ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:
SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0830	131789	Orion	☑ 4	☑ 7	☑ 10
pH (final)						
Conductivity				1000 = 1000		
Turbidity						
Other:						

SAMPLE PORT* ☐ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 35174 gal. Rate: gpm Time:
End: 35227 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
1110	0	8.01	18.4	796	59.20	
1115	14	7.70	18.7	757	60.85	
1120	28	7.57	18.4	795	61.50	
1125	42	7.59	18.4	833	61.30	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☑ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black
☐ Cloudy ☐ Other:

Odor: ☑ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic
☐ Other:

Solids: ☑ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity
☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other:
☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-025	**Sample ID:**	GWGW2316
PROJECT NO:	388-1856-1-16	**Sampled By:**	KHA	**Sample Date:**	Oct. 9, 2008
				Sample Time:	1130

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS				Well Conditions		
Water Level Meter No.:		Measurements		locked?	Yes ☐	No ☐
Depth to Water	DTW	53.67	ft.	casing	OK ☐	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐	Not OK ☐
Specified Well Depth	SWD	75	ft.	vault	OK ☐	Not OK ☐
Measured Well Depth	MWD		ft.	Comments:		
Well Diameter	D	4	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	21.33	ft.	
Well Casing Volume	WCV = SWH * V_D	13.93	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	41.79	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☐ Yes	☐ No	
Pump ID#:	☐ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	☐ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☐ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☐ Yes	☐ No	
Pump ID#:	☐ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	☐ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-028	**Sample ID:**	GW~~G~~W2317
PROJECT NO:	388-1856-1-16	**Sampled By:**	KAA	**Sample Date:**	Oct. 8, 2008
				Sample Time:	1620

WEATHER ☑ Sunny ☐ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp: 75

SAMPLE TYPE ☑ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0800	B12289	OAKTON	☑ 4	☑ 7	☑ 10
pH (final)						
Conductivity				1000=1000		
Turbidity						
Other:						

SAMPLE PORT* ☐ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER					
Start:	35074 gal.	Rate:	gpm	Time:	
End:	35086 gal.	Rate:	gpm	Time:	

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
1600	0	6.90	20.2	1925	55.20	
1605	2.5	7.32	19.9	1549	56.80	
1610	5	7.38	19.6	1506	59.70	
1614	7.5	7.41	19.9	1515	60.25	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☑ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black ☐ Cloudy ☐ Other:

Odor: ☑ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic ☐ Other:

Solids: ☑ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity ☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other: ☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
Final Check:		VOAs free of air bubbles?	☐ Yes	☐ No	☐ N/A	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-028	**Sample ID:**	GWGW2317
PROJECT NO:	388-1856-1-16	**Sampled By:**	KHA	**Sample Date:**	Oct. 7, 2008
				Sample Time:	1627

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS				Well Conditions	
Water Level Meter No.:		Measurements		locked?	Yes ☐ No ☐
Depth to Water	DTW	53.74	ft.	casing	OK ☐ Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐ Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐ Not OK ☐
Specified Well Depth	SWD	68	ft.	vault	OK ☐ Not OK ☐
Measured Well Depth	MWD		ft.	Comments:	
Well Diameter	D	2	inches		

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 14.26	ft.	
Well Casing Volume	WCV = SWH * V_D	0 2.35	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	0 7.05	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☑ Yes	☐ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☑ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination		Decon:	☐ Yes	☐ No	☑ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other	

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☑ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☑ Yes	☐ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination		Decon:	☐ Yes	☐ No	☑ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:	Formulas/Conversions:
	cylinder volume = $\pi r^2 h$
	r = well radius (ft) 1 ft^3 = 7.48 gallons
	h = height of water column (ft)
	$V_{2\text{-inch casing}}$ = 0.163 gallons/ft
	$V_{3\text{-inch casing}}$ = 0.367 gallons/ft
	$V_{4\text{-inch casing}}$ = 0.653 gallons/ft
	$V_{6\text{-inch casing}}$ = 1.47 gallons/ft
	$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-049	**Sample ID:**	GWGW2318
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMD	**Sample Date:**	Oct. 10, 2008
				Sample Time:	0715

WEATHER ☐ Sunny ☐ Cloudy ☐ Rainy ☒ Dark ☐ Foggy ☒ Windy Temp: 50

SAMPLE TYPE ☒ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:
SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0630	110797	Oakton	☒ 4.00	☒ 7.04	☒ 10.12
pH (final)						
Conductivity				1413		
Turbidity						
Other:						

SAMPLE PORT* ☒ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 38517 gal. Rate: gpm Time:
End: 32542 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
0655	0	7.61	15.0	1807	61.50	
0658	8	7.61	15.0	1778	61.36	
1703	16	7.58	18.3	1804	61.5	
1710	24	7.58	18.1	1810	63.67	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color:	☒ Clear	☐ Grey	☐ Yellow	☐ Brown	☐ Tan	☐ Black
	☐ Cloudy	☐ Other:				
Odor:	☒ None	☐ Gasoline	☐ Diesel	☐ Solvent	☐ Sulfur	☐ Metallic
	☐ Other:					
Solids:	☒ None	☐ Trace	☐ Small Quantity	☐ Mod. Quantity	☐ Large Quantity	
	☐ Silt	☐ Sand	☐ Gravel	☐ Organic Material		☐ Other:
	☐ Separate Phase Hydrocarbons		☐ Sheen	☐ Measurable Amount:		mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
GWGW2318	VOA	3	40	HCl	N	
Final Check:	VOAs free of air bubbles?		☒ Yes	☐ No	☐ N/A	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS: slowed pump to limit drawdown

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-049	**Sample ID:**	GWGW2318
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMD	**Sample Date:**	Oct. 10 2008
				Sample Time:	

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions		
Water Level Meter No.: 15656				locked?	Yes ☐	No ☐
Depth to Water	DTW	57.40	ft.	casing	OK ☐	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐	Not OK ☐
Specified Well Depth	SWD	69.5	ft.	vault	OK ☐	Not OK ☐
Measured Well Depth	MWD		ft.	Comments:		
Well Diameter	D	4	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 12.10	ft.	
Well Casing Volume	WCV = SWH * V_D	0 7.9	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	0 23.7	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	X Yes	☐ No	
Pump ID#:	☐ Bladder	X Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	X N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	X No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	X Yes	☐ No	
Pump ID#:	☐ Bladder	X Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	X N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-050	**Sample ID:**	GWGW2319
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMD	**Sample Date:**	Oct. 9, 2008
				Sample Time:	1000

WEATHER ☒ Sunny ☐ Cloudy ☐ Rainy ☐ Foggy ☒ Windy Temp: 70

SAMPLE TYPE ☒ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:
SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0830	110797	Oakton	☒4.00	☒7.04	☒10.12
pH (final)						
Conductivity				1413		
Turbidity						
Other:						

SAMPLE PORT* ☐ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 32397 gal. Rate: gpm Time:
End: 32422 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
0933	0	7.54	19.0	2.63 mS	58.70	
0940	8	7.43	19.4	2.49 mS	60.36	
0948	15	7.47	19.1	2.50 mS	60.75	
0955	22	7.45	19.1	2.48 mS	61.03	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☒ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black
☐ Cloudy ☐ Other:

Odor: ☒ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic
☐ Other:

Solids: ☒ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity
☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other:
☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
GWGW2319	VOA	3	40	HCl	N	
	Poly	1	250	None	N	
	Poly	1	500	None	N	
Final Check:	VOAs free of air bubbles?		☒ Yes	☐ No	☐ N/A	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-050	**Sample ID:**	GWGW2319
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMD	**Sample Date:**	Oct. 9, 2008
				Sample Time:	1000

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS				Well Conditions		
Water Level Meter No.: 15656		Measurements		locked?	Yes ☐	No ☐
Depth to Water	DTW	58.35	ft.	casing	OK ☐	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐	Not OK ☐
Specified Well Depth	SWD	69.5	ft.	vault	OK ☐	Not OK ☐
Measured Well Depth	MWD		ft.	Comments:		
Well Diameter	D	4	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 11.15	ft.	
Well Casing Volume	WCV = SWH * V_D	0 7.3	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	0 21.8	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	X Yes	☐ No	
Pump ID#:	☐ Bladder	X Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	X N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	X No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	X Yes	☐ No	
Pump ID#:	☐ Bladder	X Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	X N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:	Formulas/Conversions:
	cylinder volume = $\pi r^2 h$
	r = well radius (ft) 1 ft^3 = 7.48 gallons
	h = height of water column (ft)
	$V_{2\text{-inch casing}}$ = 0.163 gallons/ft
	$V_{3\text{-inch casing}}$ = 0.367 gallons/ft
	$V_{4\text{-inch casing}}$ = 0.653 gallons/ft
	$V_{6\text{-inch casing}}$ = 1.47 gallons/ft
	$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-051	**Sample ID:**	GWGW2320
PROJECT NO:	388-1856-1-16	**Sampled By:**	[illegible] 0	**Sample Date:**	Oct. 9, 2008
				Sample Time:	1000 0

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions	
Water Level Meter No.:				locked?	Yes ☑ No ☐
Depth to Water	DTW	5.90	ft.	casing	OK ☑ Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☑ Not OK ☐
Product Thickness	PT		ft.	seal	OK ☑ Not OK ☐
Specified Well Depth	SWD	69.7	ft.	vault	OK ☐ Not OK ☐
Measured Well Depth	MWD		ft.	Comments:	
Well Diameter	D	4	inches		

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	~~0~~ 11.80	ft.	
Well Casing Volume	WCV = SWH * V_D	~~0~~ 7.71	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	~~0~~ 23.13	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☑ Yes	☐ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	☑ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☑ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☑ Yes	☐ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	☐ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:	Formulas/Conversions:
	cylinder volume = $\pi r^2 h$
	r = well radius (ft) 1 ft^3 = 7.48 gallons
	h = height of water column (ft)
	$V_{2\text{-inch casing}}$ = 0.163 gallons/ft
	$V_{3\text{-inch casing}}$ = 0.367 gallons/ft
	$V_{4\text{-inch casing}}$ = 0.653 gallons/ft
	$V_{6\text{-inch casing}}$ = 1.47 gallons/ft
	$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-051	**Sample ID:**	GWGW2320
PROJECT NO:	388-1856-1-16	**Sampled By:**	[illegible]	**Sample Date:**	Oct. 7, 2008
				Sample Time:	1000

WEATHER	☐ Sunny	☐ Cloudy	☐ Rainy	☐ Foggy	☑ Windy	Temp: 65
SAMPLE TYPE	☑ Original	☐ Duplicate	☐ Trip Blank	☐ Equip. Blank	☐ Other:	
SAMPLE SOURCE	X Monitoring Well	☐ Extraction Well	☐ Piezometer	☐ System*	☐ Other:	

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)		131285	[illegible]	☑ 4	☑ 7	☑ 10
pH (final)						
Conductivity				1000=1000		
Turbidity						
Other:						

SAMPLE PORT*	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

TOTALIZER	Start: 35179 gal.	Rate: gpm	Time:	
	End: 35174 gal.	Rate: gpm	Time:	

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
0940	0	7.96	18.0	1660		
0945	8	7.55	18.2	1610	62.60	
0950	16	7.47	18.4	1660	63.30	
0955	23.5	7.47	18.2	1671	63.90	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color:	☑ Clear	☐ Grey	☐ Yellow	☐ Brown	☐ Tan	☐ Black
	☐ Cloudy	☐ Other:				
Odor:	☑ None	☐ Gasoline	☐ Diesel	☐ Solvent	☐ Sulfur	☐ Metallic
	☐ Other:					
Solids:	☑ None	☐ Trace	☐ Small Quantity	☐ Mod. Quantity	☐ Large Quantity	
	☐ Silt	☐ Sand	☐ Gravel	☐ Organic Material		☐ Other:
	☐ Separate Phase Hydrocarbons		☐ Sheen	☐ Measurable Amount:		mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
Final Check:		VOAs free of air bubbles?	☐ Yes	☐ No	☐ N/A	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-052	**Sample ID:**	GWGW2321
PROJECT NO:	388-1856-1-16	**Sampled By:**	KHA	**Sample Date:**	Oct. 9, 2008
				Sample Time:	1335

WEATHER	☑ Sunny	☐ Cloudy	☐ Rainy	☐ Foggy	☑ Windy	Temp: 70
SAMPLE TYPE	☑ Original	☐ Duplicate	☐ Trip Blank	☐ Equip. Blank	☐ Other:	
SAMPLE SOURCE	X Monitoring Well	☐ Extraction Well	☐ Piezometer	☐ System*	☐ Other:	

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0830	1312589	Oakton	☐ 4	☑ 7	☑ 10
pH (final)						
Conductivity				1000-7000		
Turbidity						
Other:						

SAMPLE PORT* ☐ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER	Start: 35227 gal.	Rate: gpm	Time:		
	End: 35236 gal.	Rate: gpm	Time:		

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
1315	0	7.91	19.2	1231		
1320	~~3~~ 2.5	7.79	19.0	1280	57.00	
1325	~~6~~ 5.5	7.77	18.9	1310	57.00	
1330	8.0	7.62	19.1	1317	57.00	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color:	☑ Clear	☐ Grey	☐ Yellow	☐ Brown	☐ Tan	☐ Black
	☐ Cloudy	☐ Other:				
Odor:	☑ None	☐ Gasoline	☐ Diesel	☐ Solvent	☐ Sulfur	☐ Metallic
	☐ Other:					
Solids:	☑ None	☐ Trace	☐ Small Quantity	☐ Mod. Quantity	☐ Large Quantity	
	☐ Silt	☐ Sand	☐ Gravel	☐ Organic Material		☐ Other:
	☐ Separate Phase Hydrocarbons		☐ Sheen	☐ Measurable Amount:		mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
Final Check:		VOAs free of air bubbles?	☐ Yes	☐ No	☐ N/A	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-052	**Sample ID:**	GWGW2321
PROJECT NO:	388-1856-1-16	**Sampled By:**	RMA	**Sample Date:**	Oct. 9, 2008
				Sample Time:	1335

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS				Well Conditions		
Water Level Meter No.:		Measurements		locked?	Yes ☐	No ☐
Depth to Water	DTW	53.12	ft.	casing	OK ☐	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐	Not OK ☐
Specified Well Depth	SWD	68.5	ft.	vault	OK ☐	Not OK ☐
Measured Well Depth	MWD		ft.	Comments:		
Well Diameter	D	2	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	~~0~~ 15.38	ft.	9
Well Casing Volume	WCV = SWH * V_D	~~0~~ 2.51	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	~~0~~ 7.53	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☑ Yes	☐ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☑ No	~~☐ N/A~~
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☑ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☑ Yes	☐ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	~~☑ PVC~~ RMA	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☑ No	~~☐ N/A~~
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:	Formulas/Conversions:
	cylinder volume = $\pi r^2 h$
	r = well radius (ft) — 1 ft^3 = 7.48 gallons
	h = height of water column (ft)
	$V_{2\text{-inch casing}}$ = 0.163 gallons/ft
	$V_{3\text{-inch casing}}$ = 0.367 gallons/ft
	$V_{4\text{-inch casing}}$ = 0.653 gallons/ft
	$V_{6\text{-inch casing}}$ = 1.47 gallons/ft
	$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-053	**Sample ID:**	GWGW2322
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMD	**Sample Date:**	Oct. 13, 2008
				Sample Time:	1620

WEATHER	X Sunny	☐ Cloudy	☐ Rainy	☐ Foggy	X Windy	Temp: 75
SAMPLE TYPE	X Original	☐ Duplicate	☐ Trip Blank	☐ Equip. Blank	☐ Other:	
SAMPLE SOURCE	X Monitoring Well	☐ Extraction Well	☐ Piezometer	☐ System*	☐ Other:	

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	1500	110797	Oakton	X 4.00	X 7.02	X 10.10
pH (final)						
Conductivity						
Turbidity						
Other:						

SAMPLE PORT* ☐ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER	Start: 32710 gal.	Rate: gpm	Time:		
	End: 32719 gal.	Rate: gpm	Time:		

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
1604	0	7.63	19.2	1421	53.75	
1607	3	7.55	19.3	1382	53.97	
1609	5	7.52	19.4	1411	54.18	
1612	7	7.56	19.5	1385	54.35	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color:	X Clear	☐ Grey	☐ Yellow	☐ Brown	☐ Tan	☐ Black
	☐ Cloudy	☐ Other:				
Odor:	X None	☐ Gasoline	☐ Diesel	☐ Solvent	☐ Sulfur	☐ Metallic
	☐ Other:					
Solids:	X None	☐ Trace	☐ Small Quantity	☐ Mod. Quantity	☐ Large Quantity	
	☐ Silt	☐ Sand	☐ Gravel	☐ Organic Material		☐ Other:
	☐ Separate Phase Hydrocarbons		☐ Sheen	☐ Measurable Amount:		mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
Final Check:		VOAs free of air bubbles?	☐ Yes	☐ No	X N/A	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-053	**Sample ID:**	GWGW2322
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMD	**Sample Date:**	Oct. 13 2008
				Sample Time:	1620

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions		
Water Level Meter No.: 15656				locked?	Yes ☐	No X
Depth to Water	DTW	53.31	ft.	casing	OK X	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK X	Not OK ☐
Product Thickness	PT		ft.	seal	OK X	Not OK ☐
Specified Well Depth	SWD	67.5	ft.	vault	OK X	Not OK ☐
Measured Well Depth	MWD		ft.	Comments:		
Well Diameter	D	2	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 14.19	ft.	
Well Casing Volume	WCV = SWH * V_D	0 2.3	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	0 6.9	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	X Yes	☐ No	
Pump ID#:	☐ Bladder	X Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	X N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	X No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%		Total Purge Volume:		Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	X Yes	☐ No	
Pump ID#:	☐ Bladder	X Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	X N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-054	**Sample ID:**	GWGW2323
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMD	**Sample Date:**	Oct. 15 2008
				Sample Time:	0852

WEATHER ☒ Sunny ☐ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp: 65

SAMPLE TYPE ☒ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0800	110797	Oakton	☒ 4.00	☒ 7.01	☒ 10.12
pH (final)						
Conductivity				1413		
Turbidity						
Other:						

SAMPLE PORT* ☒ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 32772 gal. Rate: gpm Time:
End: 32784 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
0828	0	7.57	17.4	1392	57.40	
0832	4	7.49	19.4	1546	59.46	
0836	8	7.41	19.9	1542	63.08	
0845	11	7.42	20.3	1549	63.05	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☐ Clear ☐ Grey ☐ Yellow ☐ Brown ☒ Tan ☐ Black
☐ Cloudy ☐ Other:

Odor: ☒ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic
☐ Other:

Solids: ☐ None ☐ Trace ☐ Small Quantity ☒ Mod. Quantity ☐ Large Quantity
☒ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other:
☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☒ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS: slowed pump to limit drawdown
Temp rising due to pump heating up

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-054	**Sample ID:**	GWGW2323
PROJECT NO:	388-1856-1-16	**Sampled By:**	JM 0	**Sample Date:**	Oct. 15, 2008
				Sample Time:	0852

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS				Well Conditions	
Water Level Meter No.: 15656		Measurements		locked?	Yes ☐ No ☒
Depth to Water	DTW	52.21	ft.	casing	OK ☐ Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐ Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐ Not OK ☐
Specified Well Depth	SWD	73	ft.	vault	OK ☐ Not OK ☐
Measured Well Depth	MWD		ft.	Comments:	
Well Diameter	D	2	inches		

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 20.79	ft.	
Well Casing Volume	WCV = SWH * V_D	0 3.3	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	0 10.1	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT							Dedicated:	☐ Yes	☒ No
Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:				
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon			
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:				
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass			

Purge Equipment Decontamination	Decon:	☒ Yes	☐ No	☐ N/A
Method:	☐ Steam	☒ Alconox	☒ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☐ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH: 56.37	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT							Dedicated:	☐ Yes	☒ No
Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:				
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon			
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:				
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass			

Sample Equipment Decontamination	Decon:	☒ Yes	☐ No	☐ N/A
Method:	☐ Steam	☒ Alconox	☒ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-055	**Sample ID:**	GWGW2324
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMD	**Sample Date:**	Oct. 15, 2008
				Sample Time:	0940

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions		
Water Level Meter No.:				locked?	Yes ☐	No ☐
Depth to Water	DTW	30.35	ft.	casing	OK ☐	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐	Not OK ☐
Specified Well Depth	SWD	62	ft.	vault	OK ☐	Not OK ☐
Measured Well Depth	MWD		ft.	Comments:		
Well Diameter	D	2	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 11.65	ft.	
Well Casing Volume	WCV = SWH * V_D	0 1.9	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	0 5.7	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☐ Yes	X No	
Pump ID#:	☐ Bladder	X Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	X Yes	☐ No	☐ N/A
Method: ☐ Steam	X Alconox	X DI Water	☐ Other	

PURGE TIME AND WELL RECOVERY		1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry? ☐ No ☐ Yes	Start:				
DTW during Purging: ft.	Stop:				
SWH during Purging: ft.	Elapsed Time:				
MWD - 80%SWH: ft.	DTW:				
% Recovery at Sample Time: %		Total Purge Volume:		Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☐ Yes	X No	
Pump ID#:	☐ Bladder	X Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	☐ N/A
Method: ☐ Steam	X Alconox	X DI Water	☐ Other	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) — 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-Inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-Inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-Inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-Inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-Inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-858	**Sample ID:**	GWGW2325
PROJECT NO:	388-1856-1-16	**Sampled By:**	PAA	**Sample Date:**	Oct. 15, 2008
				Sample Time:	1135

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS				Well Conditions	
Water Level Meter No.:		Measurements		locked?	Yes ☐ No ☐
Depth to Water	DTW	51.50	ft.	casing	OK ☐ Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐ Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐ Not OK ☐
Specified Well Depth	SWD		ft.	vault	OK ☐ Not OK ☐
Measured Well Depth	MWD	71.00	ft.	Comments:	
Well Diameter	D	2	inches		

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	~~0~~ 19.10	ft.	
Well Casing Volume	WCV = SWH * V_D	~~0~~ 3.11	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	~~0~~ 9.33	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☐ Yes	☐ No	
Pump ID#:	☐ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	☐ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☐ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☐ Yes	☐ No	
Pump ID#:	☐ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	☐ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) — 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-061	**Sample ID:**	GWGW2326
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMN	**Sample Date:**	Oct. 14, 2008
				Sample Time:	1215

WEATHER ☒ Sunny ☐ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp: 75

SAMPLE TYPE ☒ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0930	110797	Oakton	☒4 00	☒7 04	☒10 12
pH (final)						
Conductivity				1413		
Turbidity						
Other:						

SAMPLE PORT* ☒ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 32718 gal. Rate: gpm Time:

End: 32765 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
1153	0	7.88	21.3	1124	54.11	
1157	4	7.75	20.1	1310	54.65	
1200	7	7.70	19.9	1307	54.74	
1203	10	7.66	19.9	1300	54.84	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☒ Clear ☐ Grey ☐ Yellow ☐ Brown ☒ Tan ☐ Black ☐ Cloudy ☐ Other:

Odor: ☒ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic ☐ Other:

Solids: ☒ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity ☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other: ☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☒ Yes ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-061	**Sample ID:**	GWGW2326
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMD	**Sample Date:**	Oct. 14, 2008
				Sample Time:	1215

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements	Well Conditions		
Water Level Meter No.: 15656			locked?	Yes ☐	No ☒
Depth to Water	DTW	51.92 ft.	casing	OK ☐	Not OK ☐
Depth to Product	DTP	ft.	plugs	OK ☐	Not OK ☐
Product Thickness	PT	ft.	seal	OK ☐	Not OK ☐
Specified Well Depth	SWD	71 ft.	vault	OK ☐	Not OK ☐
Measured Well Depth	MWD	ft.	Comments:		
Well Diameter	D	2 inches			

PURGE CALCULATIONS	Formula	Value	Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 19.08 ft.	
Well Casing Volume	WCV = SWH * V_D	0 3.1 gal.	
Well Casing Volumes to be Purged	N	3	
Total to be Purged	= WCV * N	0 9.3 gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☐ Yes	☒ No	
Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass
Purge Equipment Decontamination			Decon:	☒ Yes	☐ No	☐ N/A
Method:		☐ Steam	☒ Alconox	☒ DI Water	☐ Other	

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☒ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☐ Yes	☒ No	
Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass
Sample Equipment Decontamination			Decon:	☒ Yes	☐ No	☐ N/A
Method:		☐ Steam	☒ Alconox	☒ DI Water	☐ Other	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-062	**Sample ID:**	GWGW2327
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMP	**Sample Date:**	Oct. 16 2008
				Sample Time:	1355

WEATHER	X Sunny	☐ Cloudy	☐ Rainy	☐ Foggy	☐ Windy	Temp: 85
SAMPLE TYPE	X Original	☐ Duplicate	☐ Trip Blank	☐ Equip. Blank	☐ Other:	
SAMPLE SOURCE	X Monitoring Well	☐ Extraction Well	☐ Piezometer	☐ System*	☐ Other:	

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0730	110797	Oakton	X 4.01	X 7.06	X 10.12
pH (final)						
Conductivity				1413		
Turbidity						
Other:						

SAMPLE PORT*	X PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

TOTALIZER	Start: 32967 gal.	Rate: gpm	Time:		
	End: gal.	Rate: gpm	Time:		

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
1327	0	7.40	23.0	1838	53.99	
1332	3	7.35	21.7	1773	54.46	
1337	6	7.31	20.8	1718	54.53	
1341	8	7.29	20.6	1695	54.57	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color:	☐ Clear	☐ Grey	☐ Yellow	☐ Brown	X Tan	☐ Black
	☐ Cloudy	☐ Other:				
Odor:	X None	☐ Gasoline	☐ Diesel	☐ Solvent	☐ Sulfur	☐ Metallic
	☐ Other:					
Solids:	X None	☐ Trace	☐ Small Quantity	☐ Mod. Quantity	☐ Large Quantity	
	☐ Silt	☐ Sand	☐ Gravel	☐ Organic Material		☐ Other:
	☐ Separate Phase Hydrocarbons		☐ Sheen	☐ Measurable Amount:		mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
Final Check:		VOAs free of air bubbles?	X Yes	☐ No	☐ N/A	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-062	**Sample ID:**	GWGW2327
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMD	**Sample Date:**	Oct. 16, 2008
				Sample Time:	1355

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS				Well Conditions	
Water Level Meter No.: 15656		Measurements		locked?	Yes ☐ No X
Depth to Water	DTW	55.35	ft.	casing	OK X Not OK ☐
Depth to Product	DTP		ft.	plugs	OK X Not OK ☐
Product Thickness	PT		ft.	seal	OK X Not OK ☐
Specified Well Depth	SWD	71	ft.	vault	OK X Not OK ☐
Measured Well Depth	MWD		ft.	Comments:	
Well Diameter	D	2	inches		

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 15.65	ft.	
Well Casing Volume	WCV = SWH * V_D	0 2.5	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	0 7.6	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☐ Yes	X No	
Pump ID#:	☐ Bladder	X Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	X Yes	☐ No	☐ N/A
Method:	☐ Steam	X Alconox	X DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	X No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☐ Yes	X No	
Pump ID#:	☐ Bladder	X Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	X Yes	☐ No	☐ N/A
Method:	☐ Steam	X Alconox	X DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:	Formulas/Conversions:
	cylinder volume = $\pi r^2 h$
	r = well radius (ft) — 1 ft^3 = 7.48 gallons
	h = height of water column (ft)
	$V_{2\text{-inch casing}}$ = 0.163 gallons/ft
	$V_{3\text{-inch casing}}$ = 0.367 gallons/ft
	$V_{4\text{-inch casing}}$ = 0.653 gallons/ft
	$V_{6\text{-inch casing}}$ = 1.47 gallons/ft
	$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-063	**Sample ID:**	GWGW2328
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMD	**Sample Date:**	Oct. 14 2008
				Sample Time:	1035

WEATHER	☒ Sunny	☐ Cloudy	☐ Rainy	☐ Foggy	☐ Windy	Temp: 70
SAMPLE TYPE	☒ Original	☐ Duplicate	☐ Trip Blank	☐ Equip. Blank	☐ Other:	
SAMPLE SOURCE	X Monitoring Well	☐ Extraction Well	☐ Piezometer	☐ System*	☐ Other:	

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0930	110797	Oakton	☒ 4.00	☒ 7.04	☒ 10.12
pH (final)						
Conductivity				1413		
Turbidity						
Other:						

SAMPLE PORT*	☒ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

TOTALIZER	Start: 32719 gal.	Rate: gpm	Time:		
	End: gal.	Rate: gpm	Time:		

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
1005	0	8.05	17.2	746	55.88	
1008	4	7.99	17.8	735	57.21	
1012	8	7.98	17.4	728	57.39	
1016	11	7.97	17.5	726	57.54	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color:	☐ Clear	☐ Grey	☐ Yellow	☐ Brown	☒ Tan	☐ Black
	☐ Cloudy	☐ Other:				
Odor:	☒ None	☐ Gasoline	☐ Diesel	☐ Solvent	☐ Sulfur	☐ Metallic
	☐ Other:					
Solids:	☐ None	☒ Trace	☐ Small Quantity	☐ Mod. Quantity	☐ Large Quantity	
	☒ Silt	☐ Sand	☐ Gravel	☐ Organic Material		☐ Other:
	☐ Separate Phase Hydrocarbons		☐ Sheen	☐ Measurable Amount:		mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
Final Check:		VOAs free of air bubbles?	☐ Yes	☐ No	☒ N/A	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-063	**Sample ID:**	GWGW2328
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMD	**Sample Date:**	Oct. 14, 2008
				Sample Time:	1035

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions	
Water Level Meter No.: 15650				locked?	Yes ☐ No X
Depth to Water	DTW	57.90	ft.	casing	OK X Not OK ☐
Depth to Product	DTP		ft.	plugs	OK X Not OK ☐
Product Thickness	PT		ft.	seal	OK X Not OK ☐
Specified Well Depth	SWD	80	ft.	vault	OK X Not OK ☐
Measured Well Depth	MWD		ft.	Comments:	
Well Diameter	D	2	inches		

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 22.10	ft.	
Well Casing Volume	WCV = SWH * V_D	0 3.6	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	0 10.8	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☐ Yes	X No	
Pump ID#:	☐ Bladder	X Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		X PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	X Yes	☐ No	☐ N/A
Method:	☐ Steam	X Alconox	X DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☐ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☐ Yes	X No	
Pump ID#:	☐ Bladder	X Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	X Yes	☐ No	☐ N/A
Method:	☐ Steam	X Alconox	X DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) — 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-064	**Sample ID:**	GWGW2329
PROJECT NO:	388-1856-1-16	**Sampled By:**	KNA	**Sample Date:**	Oct. 16 2008
				Sample Time:	1400

WEATHER ☑ Sunny ☐ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp: 75

SAMPLE TYPE ☑ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0800	1312859	OMEGA	☐4	☐7	☐10
pH (final)						
Conductivity				1413=1413		
Turbidity						
Other:						

SAMPLE PORT* ☑ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 36040 gal. Rate: gpm Time:

End: 36077 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
1335	0	7.49	21.2	856	53.00	
1340	3	7.67	24.5	814		
1345	6	7.71	22.6	807		
1350	8.5	7.63	22.3	767		
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☑ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black
☑ Cloudy ☐ Other:

Odor: ☐ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic
☐ Other:

Solids: ☑ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity
☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other:
☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☑ Yes ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-064	**Sample ID:**	GWGW2329
PROJECT NO:	388-1856-1-16	**Sampled By:**	KJA	**Sample Date:**	Oct. 16, 2008
				Sample Time:	1400

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions		
Water Level Meter No.:				locked?	Yes ☐	No ☐
Depth to Water	DTW	53.13	ft.	casing	OK ☐	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐	Not OK ☐
Specified Well Depth	SWD		ft.	vault	OK ☐	Not OK ☐
Measured Well Depth	MWD	70.5	ft.	Comments:		
Well Diameter	D	2	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	17.37	ft.	
Well Casing Volume	WCV = SWH * V_D	2.83	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	8.49	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☐ Yes	☐ No	
Pump ID#:	☐ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	☐ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☐ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☐ Yes	☐ No	
Pump ID#:	☐ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	☐ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-065	**Sample ID:**	GWGW2330
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMD	**Sample Date:**	Oct. 16, 2008
				Sample Time:	1135

WEATHER	X Sunny	☐ Cloudy	☐ Rainy	☐ Foggy	☐ Windy	Temp: 75
SAMPLE TYPE	X Original	☐ Duplicate	☐ Trip Blank	☐ Equip. Blank	☐ Other:	
SAMPLE SOURCE	X Monitoring Well	☐ Extraction Well	☐ Piezometer	☐ System*	☐ Other:	

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0730	110797	Oakton	X 4.01	X 7.06	X 10.12
pH (final)						
Conductivity				1413		
Turbidity						
Other:						

SAMPLE PORT*	X PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

TOTALIZER	Start: 32936 gal.	Rate: gpm	Time:		
	End: 32954 gal.	Rate: gpm	Time:		

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
1107	0	7.59	19.4	1057	55.88	
1111	3	7.54	18.6	1089	56.60	
1114	6	7.45	18.7	1138	57.15	
1119	8	7.41	18.7	1169	57.24	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color:	☐ Clear	☐ Grey	☐ Yellow	☐ Brown	X Tan	☐ Black
	☐ Cloudy	☐ Other:				
Odor:	X None	☐ Gasoline	☐ Diesel	☐ Solvent	☐ Sulfur	☐ Metallic
	☐ Other:					
Solids:	☐ None	☐ Trace	☐ Small Quantity	X Mod. Quantity	☐ Large Quantity	
	X Silt	☐ Sand	☐ Gravel	☐ Organic Material		☐ Other:
	☐ Separate Phase Hydrocarbons		☐ Sheen	☐ Measurable Amount:		mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
Final Check:		VOAs free of air bubbles?	X Yes	☐ No	☐ N/A	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-065	**Sample ID:**	GWGW2330
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMD	**Sample Date:**	Oct. 16, 2008
				Sample Time	1135

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions		
Water Level Meter No.:	15656			locked?	Yes ☐	No ☒
Depth to Water	DTW	55.88	ft.	casing	OK ☒	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☒	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☒	Not OK ☐
Specified Well Depth	SWD	72	ft.	vault	OK ☒	Not OK ☐
Measured Well Depth	MWD		ft.	Comments:		
Well Diameter	D	2	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 16.12	ft.	
Well Casing Volume	WCV = SWH * V_D	0 2.6	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	0 7.8	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☐ Yes	☒ No	
Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass
Purge Equipment Decontamination			Decon:	☒ Yes	☐ No	☐ N/A
Method:		☐ Steam	☒ Alconox	☒ DI Water	☐ Other	

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☒ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☐ Yes	☒ No	
Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass
Sample Equipment Decontamination			Decon:	☒ Yes	☐ No	☐ N/A
Method:		☐ Steam	☒ Alconox	☒ DI Water	☐ Other	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-066	**Sample ID:**	GWGW2331
PROJECT NO:	388-1856-1-16	**Sampled By:**	KMT	**Sample Date:**	Oct. 16, 2008
				Sample Time:	0940

WEATHER ☑ Sunny ☐ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp: 65

SAMPLE TYPE ☑ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0800	1312589	OAKTON	☑ 4	☑ 7	☐ 10
pH (final)						
Conductivity						
Turbidity						
Other:						

SAMPLE PORT* ☐ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 35983 gal. Rate: gpm Time:

End: gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
0910	0	7.32	16.6	1184	53.30	
0915	3	7.41	17.3	1133	53.30	
0920	6	7.52	18.9	1137	53.30	
0925	9	7.44	19.5	1170	53.30	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☐ Clear ☐ Grey ☐ Yellow ☑ Brown ☐ Tan ☐ Black ☑ Cloudy ☐ Other:

Odor: ☑ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic ☐ Other:

Solids: ☑ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity ☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other: ☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☑ Yes ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-066	**Sample ID:**	GWGW2331
PROJECT NO:	388-1856-1-16	**Sampled By:**	WLA	**Sample Date:**	Oct. 16 2008
				Sample Time:	0940

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions		
Water Level Meter No.:				locked?	Yes ☐	No ☑
Depth to Water	DTW	54.05	ft.	casing	OK ☑	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☑	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☑	Not OK ☐
Specified Well Depth	SWD		ft.	vault	OK ☑	Not OK ☐
Measured Well Depth	MWD	72.00	ft.	Comments:		
Well Diameter	D	2	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	~~0~~ 17.95	ft.	
Well Casing Volume	WCV = SWH * V_D	~~0~~ 2.92	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	~~0~~ 8.76	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☐ Yes	☑ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☑ Yes	☐ No	☐ N/A
Method:	☐ Steam	☑ Alconox	☑ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☑ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☐ Yes	☑ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☑ Yes	☐ No	☐ N/A
Method:	☐ Steam	☑ Alconox	☑ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) — 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-007	**Sample ID:**	GWGW2350
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMD	**Sample Date:**	10/9/08
				Sample Time:	1255

WEATHER	☒ Sunny	☐ Cloudy	☐ Rainy	☐ Foggy	☒ Windy	Temp: 75
SAMPLE TYPE	☒ Original	☐ Duplicate	☐ Trip Blank	☐ Equip. Blank	☐ Other:	
SAMPLE SOURCE	X Monitoring Well	☐ Extraction Well	☐ Piezometer	☐ System*	☐ Other:	

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0830	110797	Oakton	☒ 4.00	☒ 7.04	☒ 10.12
pH (final)						
Conductivity				1413		
Turbidity						
Other:						

SAMPLE PORT*	☒ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

TOTALIZER	Start: 32467 gal.	Rate: gpm	Time:		
	End: 32486 gal.	Rate: gpm	Time:		

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
1243	0	8.10	19.8	988	56.40	
1246	5.5	7.90	18.9	987	56.40	
1248	11	7.84	18.9	985	56.40	
1251	16.5	7.83	19.0	980	56.40	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color:	☒ Clear	☐ Grey	☐ Yellow	☐ Brown	☐ Tan	☐ Black
	☐ Cloudy	☐ Other:				
Odor:	☒ None	☐ Gasoline	☐ Diesel	☐ Solvent	☐ Sulfur	☐ Metallic
	☐ Other:					
Solids:	☒ None	☐ Trace	☐ Small Quantity	☐ Mod. Quantity	☐ Large Quantity	
	☐ Silt	☐ Sand	☐ Gravel	☐ Organic Material		☐ Other:
	☐ Separate Phase Hydrocarbons		☐ Sheen	☐ Measurable Amount:		mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
GWGW2350	Poly	1	250	None	N	
Final Check:	VOAs free of air bubbles?	☐ Yes	☐ No	☒ N/A		

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-007	**Sample ID:**	GWGW2350
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMD	**Sample Date:**	10/9/08
				Sample Time:	1255

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions		
Water Level Meter No.: 15656				locked?	Yes ☐	No ☐
Depth to Water	DTW	56.81	ft.	casing	OK ☐	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐	Not OK ☐
Specified Well Depth	SWD	90	ft.	vault	OK ☐	Not OK ☐
Measured Well Depth	MWD		ft.	Comments:		
Well Diameter	D	2	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 33.19	ft.	
Well Casing Volume	WCV = SWH * V_D	0 5.4	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	0 16.2	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	X Yes	☐ No	
Pump ID#:	☐ Bladder	X Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	X N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	X No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	X Yes	☐ No	
Pump ID#:	☐ Bladder	X Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	X N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) — 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME: UC Davis LEHR/SCDS | **Sample Location:** MW2-14 | **Sample ID:** GWGW2357

PROJECT NO: 388-1856-1-16 | **Sampled By:** KLL | **Sample Date:** 10/16/08

Sample Time: 0850

WEATHER	☑ Sunny	☐ Cloudy	☐ Rainy	☐ Foggy	☐ Windy	Temp:
SAMPLE TYPE	☑ Original	☐ Duplicate	☐ Trip Blank	☐ Equip. Blank	☐ Other:	
SAMPLE SOURCE	☑ Monitoring Well	☐ Extraction Well	☐ Piezometer	☐ System*	☐ Other:	

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0800	131789	OAKTON	☑ 4	☑ 7	☑ 10
pH (final)						
Conductivity						
Turbidity						
Other:						

SAMPLE PORT* ☐ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER					
Start: 35918	gal.	Rate:	gpm	Time:	
End: 35983	gal.	Rate:	gpm	Time:	

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
0820	0	7.17	17.2	972	55.65	
0830	18.5	7.50	17.7	807	55.60	
0840	37	7.43	17.1	824	55.60	
0845	56	7.47	17.5	801		
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color:	☑ Clear	☐ Grey	☐ Yellow	☐ Brown	☐ Tan	☐ Black
	☑ Cloudy	☐ Other:				
Odor:	☑ None	☐ Gasoline	☐ Diesel	☐ Solvent	☐ Sulfur	☐ Metallic
	☑ Other:					
Solids:	☑ None	☐ Trace	☐ Small Quantity	☐ Mod. Quantity	☐ Large Quantity	
	☐ Silt	☐ Sand	☐ Gravel	☐ Organic Material		☐ Other:
	☐ Separate Phase Hydrocarbons		☐ Sheen	☐ Measurable Amount:		mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
Final Check:		VOAs free of air bubbles?	☐ Yes	☐ No	☑ N/A	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME: UC Davis LEHR/SCDS | **Sample Location:** MW2-14 | **Sample ID:** GWGW2357

PROJECT NO: 388-1856-1-16 | **Sampled By:** KWA | **Sample Date:** 10/16/08

Sample Time: 0850

SAMPLE SOURCE ☐ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions	
Water Level Meter No.:				locked?	Yes ☐ No ☐
Depth to Water	DTW	57.54	ft.	casing	OK ☐ Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐ Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐ Not OK ☐
Specified Well Depth	SWD		ft.	vault	OK ☐ Not OK ☐
Measured Well Depth	MWD	86	ft.	Comments:	
Well Diameter	D	4	inches		

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	28.46	ft.	
Well Casing Volume	WCV = SWH * V_D	18.58	gal.	
Well Casing Volumes to be Purged	N			
Total to be Purged	= WCV * N	55.74	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☑ Yes	☐ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	☑ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☑ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☑ Yes	☐ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	☑ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) — 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-026	**Sample ID:**	GWGW2352
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMD	**Sample Date:**	Oct. 10, 2008
				Sample Time:	1050

WEATHER ☒ Sunny ☐ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp: 70

SAMPLE TYPE ☒ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:
SAMPLE SOURCE ☒ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0830	110797	oakton	☒ 4.00	☒ 7.04	☒ 10.12
pH (final)						
Conductivity				1412		
Turbidity						
Other:						

SAMPLE PORT* ☒ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 32607 gal. Rate: gpm Time:
End: 32711 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
1012	0	7.80	18.3	868	54.20	
1023	32	7.52	18.9	909	54.51	
1034	64	7.64	18.8	916	54.45	
1045	96	7.58	18.9	918	54.45	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☒ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black
☒ Cloudy ☐ Other:

Odor: ☒ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic
☐ Other:

Solids: ☒ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity
☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other:
☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☒ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-026	**Sample ID:**	GWGW2352
PROJECT NO:	388-1856-1-16	**Sampled By:**	VMD	**Sample Date:**	Oct. 10, 2008
				Sample Time:	1050

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS				Well Conditions		
Water Level Meter No.: 15656		Measurements		locked?	Yes ☐	No ☒
Depth to Water	DTW	53.50	ft.	casing	OK ☒	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☒	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☒	Not OK ☐
Specified Well Depth	SWD	102	ft.	vault	OK ☒	Not OK ☐
Measured Well Depth	MWD		ft.	Comments:		
Well Diameter	D	4	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 48.5	ft.	
Well Casing Volume	WCV = SWH * V_D	0 31.6	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	0 95.0	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☒ Yes	☐ No	
Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass
Purge Equipment Decontamination			Decon:	☐ Yes	☐ No	☒ N/A
Method:		☐ Steam	☐ Alconox	☐ DI Water	☐ Other	

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☒ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☒ Yes	☐ No	
Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass
Sample Equipment Decontamination			Decon:	☐ Yes	☐ No	☒ N/A
Method:		☐ Steam	☐ Alconox	☐ DI Water	☐ Other	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME: UC Davis LEHR/SCDS | **Sample Location:** UCD2-029 | **Sample ID:** GWGW2353

PROJECT NO: 388-1856-1-16 | **Sampled By:** JMD | **Sample Date:** Oct. 9, 2008

Sample Time: 1340

WEATHER ☒ Sunny ☐ Cloudy ☐ Rainy ☐ Foggy ☒ Windy Temp: 80

SAMPLE TYPE ☒ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE ☒ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0830	110797	Oakton	☒ 4.00	☒ 7.04	☒ 10.12
pH (final)						
Conductivity				1413		
Turbidity						
Other:						

SAMPLE PORT* ☐ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 32486 gal. Rate: gpm Time:

End: gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
1321	0	7.80	18.5	957	53.25	
1324	7	7.80	18.5	950	53.25	
1327	14	7.79	18.7	955	53.25	
1331	21	7.83	18.7	951	53.25	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☒ Clear ☐ Cloudy ☐ Grey ☐ Other: ☐ Yellow ☐ Brown ☐ Tan ☐ Black

Odor: ☒ None ☐ Other: ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic

Solids: ☒ None ☐ Silt ☐ Trace ☐ Sand ☐ Separate Phase Hydrocarbons ☐ Small Quantity ☐ Gravel ☐ Sheen ☐ Mod. Quantity ☐ Organic Material ☐ Measurable Amount: mm ☐ Large Quantity ☐ Other:

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME: UC Davis LEHR/SCDS **Sample Location:** UCD2-029 **Sample ID:** GWGW2353

PROJECT NO: 388-1856-1-16 **Sampled By:** JMD 0 **Sample Date:** Oct. 9, 2008

Sample Time: 1340 0

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions		
Water Level Meter No.: 15656				locked?	Yes ☐	No ☒
Depth to Water	DTW	53.64	ft.	casing	OK ☐	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐	Not OK ☐
Specified Well Depth	SWD	95	ft.	vault	OK ☐	Not OK ☐
Measured Well Depth	MWD		ft.	Comments:		
Well Diameter	D	2	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 41.36	ft.	
Well Casing Volume	WCV = SWH * V_D	0 6.7	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	0 20.2	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT							Dedicated:	☒ Yes	~~☒ No~~
Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:				
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon			
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:				
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass			

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	☒ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☒ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT							Dedicated:	☒ Yes	☐ No
Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:				
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon			
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:				
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass			

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	☒ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-030	**Sample ID:**	GWGW2354
PROJECT NO:	388-1856-1-16	**Sampled By:**	KJVT	**Sample Date:**	Oct. 13, 2008
				Sample Time:	1615

WEATHER ☑ Sunny ☐ Cloudy ☐ Rainy ☐ Foggy ☑ Windy Temp: 70

SAMPLE TYPE ☑ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:
SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0900	131759	Oakton	☑ 4	☑ 7	☐ 10
pH (final)						
Conductivity				1000 = 1090		
Turbidity						
Other:						

SAMPLE PORT* ☑ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 35401 gal. Rate: gpm Time:
End: 35445 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
1555	0	7.46	19.1	882	52.28	
1600	9.5	7.80	18.6	769	52.50	
1605	19	7.71	18.6	766	52.45	
1610	28.5	7.73	18.4	775	52.45	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☑ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black
☑ Cloudy ☐ Other:

Odor: ☑ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic
☐ Other:

Solids: ☑ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity
☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other:
☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☑ Yes ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-030	**Sample ID:**	GWGW2354
PROJECT NO:	388-1856-1-16	**Sampled By:**	KLA	**Sample Date:**	Oct. 13, 2008
				Sample Time:	1015

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS				Well Conditions		
Water Level Meter No.:		Measurements		locked?	Yes ☐	No ☐
Depth to Water	DTW	51.98	ft.	casing	OK ☐	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐	Not OK ☐
Specified Well Depth	SWD	110	ft.	vault	OK ☐	Not OK ☐
Measured Well Depth	MWD		ft.	Comments:		
Well Diameter	D	2	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	58.02	ft.	
Well Casing Volume	WCV = SWH * V_D	9.48	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	28.38	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☐ Yes	☐ No	
Pump ID#:	☐ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass
Purge Equipment Decontamination			Decon:	☐ Yes	☐ No	☐ N/A
Method:		☐ Steam	☐ Alconox	☐ DI Water	☐ Other	

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☐ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☐ Yes	☐ No	
Pump ID#:	☐ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass
Sample Equipment Decontamination			Decon:	☐ Yes	☐ No	☐ N/A
Method:		☐ Steam	☐ Alconox	☐ DI Water	☐ Other	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME: UC Davis LEHR/SCDS | **Sample Location:** UCD2-031 | **Sample ID:** GWGW2355

PROJECT NO: 388-1856-1-16 | **Sampled By:** JMD | **Sample Date:** Oct. 10, 2008

Sample Time: 0935

WEATHER ☒ Sunny ☐ Cloudy ☐ Rainy ☐ Foggy ☒ Windy Temp: 65

SAMPLE TYPE ☒ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE ☒ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0630	110797	Oakton	☒ 4.00	☒ 7.04	☒ 10.12
pH (final)						
Conductivity				1413		
Turbidity						
Other:						

SAMPLE PORT* ☒ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 32567 gal. Rate: gpm Time:

End: 32607 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
0916	0	7.83	17.9	960	52.60	
0920	10	7.78	18.3	973	52.62	
0924	19	7.70	18.4	978	52.62	
0929	28	7.76	18.5	982	52.62	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☒ Clear ☐ Cloudy ☐ Grey ☐ Other: ☐ Yellow ☐ Brown ☐ Tan ☐ Black

Odor: ☒ None ☐ Other: ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic

Solids: ☒ None ☐ Silt ☐ Separate Phase Hydrocarbons ☐ Trace ☐ Sand ☐ Small Quantity ☐ Gravel ☐ Sheen ☐ Mod. Quantity ☐ Organic Material ☐ Measurable Amount: mm ☐ Large Quantity ☐ Other:

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☒ Yes ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-031	**Sample ID:**	GWGW2355
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMV	**Sample Date:**	Oct. 10, 2008
				Sample Time:	0935

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS				Well Conditions	
Water Level Meter No.: 15656		Measurements		locked?	Yes ☐ No ☒
Depth to Water	DTW	53.30	ft.	casing	OK ☐ Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐ Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐ Not OK ☐
Specified Well Depth	SWD	109	ft.	vault	OK ☐ Not OK ☐
Measured Well Depth	MWD		ft.	Comments:	
Well Diameter	D	2	inches		

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 55.70	ft.	
Well Casing Volume	WCV = SWH * V_D	0 9.1	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	0 27.2	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☒ Yes	☐ No	
Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	☒ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☒ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☒ Yes	☐ No	
Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	☒ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-032	**Sample ID:**	GWGW2356
PROJECT NO:	388-1856-1-16	**Sampled By:**	RAA	**Sample Date:**	Oct. 10, 2008
				Sample Time:	0900

WEATHER	☑ Sunny	☐ Cloudy	☐ Rainy	☐ Foggy	☑ Windy	Temp: 60
SAMPLE TYPE	☑ Original	☐ Duplicate	☐ Trip Blank	☐ Equip. Blank	☐ Other:	
SAMPLE SOURCE	X Monitoring Well	☐ Extraction Well	☐ Piezometer	☐ System*	☐ Other:	

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0930	1312589	OAKTON	☑ 4	☑ 7	☑ 10
pH (final)						
Conductivity				1000=1000		
Turbidity						
Other:						

SAMPLE PORT*	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

TOTALIZER	Start: 35260 gal.	Rate: gpm	Time:		
	End: 35290 gal.	Rate: gpm	Time:		

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
0840	0	7.88	17.5	843	52.00	
0845	8.5	7.78	17.5	861	52.05	
0850	17	7.78	17.5	859	52.05	
0855	25	7.78	17.7	857	52.05	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color:	☑ Clear	☐ Grey	☐ Yellow	☐ Brown	☐ Tan	☐ Black
	☑ Cloudy	☐ Other:				
Odor:	☑ None	☐ Gasoline	☐ Diesel	☐ Solvent	☐ Sulfur	☐ Metallic
	☐ Other:					
Solids:	☑ None	☐ Trace	☐ Small Quantity	☐ Mod. Quantity	☐ Large Quantity	
	☐ Silt	☐ Sand	☐ Gravel	☐ Organic Material		☐ Other:
	☐ Separate Phase Hydrocarbons		☐ Sheen	☐ Measurable Amount:		mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
Final Check:		VOAs free of air bubbles?	☐ Yes	☐ No	☐ N/A	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-032	**Sample ID:**	GWGW2356
PROJECT NO:	388-1856-1-16	**Sampled By:**	[illegible]	**Sample Date:**	Oct. 12, 2008
				Sample Time:	0900

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions	
Water Level Meter No.:				locked?	Yes ☐ No ☐
Depth to Water	DTW	52.80	ft.	casing	OK ☐ Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐ Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐ Not OK ☐
Specified Well Depth	SWD	103	ft.	vault	OK ☐ Not OK ☐
Measured Well Depth	MWD		ft.	Comments:	
Well Diameter	D	2	inches		

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	50.20	ft.	
Well Casing Volume	WCV = SWH * V_D	8.18	gal.	25
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	24.54	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☑ Yes	☐ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	☑ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☑ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☑ Yes	☐ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	☑ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-036	**Sample ID:**	GWGW2357
PROJECT NO:	388-1856-1-16	**Sampled By:**	CW	**Sample Date:**	Oct. 10, 2008
				Sample Time:	0945

WEATHER	☑ Sunny	☐ Cloudy	☐ Rainy	☐ Foggy	☑ Windy	Temp: 70
SAMPLE TYPE	☑ Original	☐ Duplicate	☐ Trip Blank	☐ Equip. Blank	☐ Other:	
SAMPLE SOURCE	X Monitoring Well	☐ Extraction Well	☐ Piezometer	☐ System*	☐ Other:	

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0930	1317859	Oakton	☑ 4	☑ 7	☑ 10
pH (final)						
Conductivity				1000=1000		
Turbidity						
Other:						

SAMPLE PORT* ☐ PVC ☑ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER	Start: 35290	gal.	Rate:	gpm	Time:
	End: 35327	gal.	Rate:	gpm	Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
0925	0	8.16	17.4	771	52.80	
0930	8.5	8.04	18.8	796	52.80	
0935	17	7.90	18.2	791	52.80	
0940	25.5	7.80	18.4	798		
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color:	☑ Clear	☐ Grey	☐ Yellow	☐ Brown	☐ Tan	☐ Black
	☑ Cloudy	☐ Other:				
Odor:	☑ None	☐ Gasoline	☐ Diesel	☐ Solvent	☐ Sulfur	☐ Metallic
	☑ Other:					
Solids:	☑ None	☐ Trace	☐ Small Quantity	☐ Mod. Quantity	☐ Large Quantity	
	☐ Silt	☐ Sand	☐ Gravel	☐ Organic Material		☐ Other:
	☐ Separate Phase Hydrocarbons		☐ Sheen	☐ Measurable Amount:		mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
Final Check:		VOAs free of air bubbles?	☐ Yes	☐ No	☐ N/A	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-036	**Sample ID:**	GWGW2357
PROJECT NO:	388-1856-1-16	**Sampled By:**	UUA	**Sample Date:**	Oct. 10, 2008
				Sample Time:	0950

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS				Well Conditions		
Water Level Meter No.:		Measurements		locked?	Yes ☐	No ☐
Depth to Water	DTW	53.50	ft.	casing	OK ☐	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐	Not OK ☐
Specified Well Depth	SWD		ft.	vault	OK ☐	Not OK ☐
Measured Well Depth	MWD	105	ft.	Comments:		
Well Diameter	D	2	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	~~0~~ 51.50	ft.	25.5
Well Casing Volume	WCV = SWH * V_D	~~0~~ 8.39	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	~~0~~ 25.17	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	~~☐ Yes~~	☐ No	
Pump ID#:	☐ Bladder	~~☐ Submersible~~	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	~~☐ Polyethylene~~	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	~~☐ Polyethylene~~	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	~~☐ N/A~~
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	~~☐ No~~ ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:		%	Total Purge Volume:		Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	~~☐ Yes~~	☐ No	
Pump ID#:	☐ Bladder	~~☐ Submersible~~	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	~~☐ Polyethylene~~	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	~~☐ Polyethylene~~	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	~~☐ N/A~~
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:	Formulas/Conversions:
	cylinder volume = $\pi r^2 h$
	r = well radius (ft) 1 ft^3 = 7.48 gallons
	h = height of water column (ft)
	$V_{2\text{-inch casing}}$ = 0.163 gallons/ft
	$V_{3\text{-inch casing}}$ = 0.367 gallons/ft
	$V_{4\text{-inch casing}}$ = 0.653 gallons/ft
	$V_{6\text{-inch casing}}$ = 1.47 gallons/ft
	$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-039	**Sample ID:**	GWGW2358
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMD	**Sample Date:**	Oct. 10 2008
				Sample Time:	0820

WEATHER ☒ Sunny ☐ Cloudy ☐ Rainy ☐ Foggy ☒ Windy Temp: 60

SAMPLE TYPE ☒ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0830	110797	Oakton	☒ 4.00	☒ 7.04	☒ 10.12
pH (final)						
Conductivity				1.413		
Turbidity						
Other:						

SAMPLE PORT* ☒ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 32542 gal. Rate: gpm Time:

End: 32567 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
0803	0	8.02	17.6	863	54.62	
0806	9	7.91	18.1	863	54.62	
0809	17	7.88	18.0	867	54.62	
0813	25	7.88	18.0	867	54.62	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☐ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black ☒ Cloudy ☐ Other:

Odor: ☒ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic ☐ Other:

Solids: ☒ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity ☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other: ☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
GWGW2358	POLY	2	500	None	N	

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☒ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-039	**Sample ID:**	GWGW2358
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMD	**Sample Date:**	Oct. 10 2008
				Sample Time:	0820

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions		
Water Level Meter No.: 15656				locked?	Yes ☐	No ☐
Depth to Water	DTW	55.29	ft.	casing	OK ☐	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐	Not OK ☐
Specified Well Depth	SWD	106	ft.	vault	OK ☐	Not OK ☐
Measured Well Depth	MWD		ft.	Comments:		
Well Diameter	D	2	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 50.71	ft.	
Well Casing Volume	WCV = SWH * V_D	0 8.2	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	0 24.8	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	X Yes	☐ No	
Pump ID#:	☐ Bladder	X Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	X N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	X No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	X Yes	☐ No	
Pump ID#:	☐ Bladder	X Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	X N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-040	**Sample ID:**	GWGW2359
PROJECT NO:	388-1856-1-16	**Sampled By:**	KMA	**Sample Date:**	Oct. 13, ~~2008~~
				Sample Time:	1350

WEATHER	☑ Sunny	☐ Cloudy	☐ Rainy	☐ Foggy	☑ Windy	Temp: 70
SAMPLE TYPE	☑ Original	☐ Duplicate	☐ Trip Blank	☐ Equip. Blank	☐ Other:	
SAMPLE SOURCE	X Monitoring Well	☐ Extraction Well	☐ Piezometer	☐ System*	☐ Other:	

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)		1312859	ORION	☑ 4	☑ 7	☑ 10
pH (final)						
Conductivity				1000=1000		
Turbidity						
Other:						

SAMPLE PORT* ☐ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER	Start: 35367 gal.	Rate: gpm	Time:		
	End: 35401 gal.	Rate: gpm	Time:		

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
1329	0	6.70	19.7	1003	51.46	
1335	9	7.54	19.5	834	51.49	
1340	18	7.65	19.37	821	51.50	
1345	27	7.66	19.8	818	51.50	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color:	☑ Clear	☐ Grey	☐ Yellow	☐ Brown	☐ Tan	☐ Black
	☐ Cloudy	☐ Other:				
Odor:	☑ None	☐ Gasoline	☐ Diesel	☐ Solvent	☐ Sulfur	☐ Metallic
	☐ Other:					
Solids:	☑ None	☐ Trace	☐ Small Quantity	☐ Mod. Quantity	☐ Large Quantity	
	☐ Silt	☐ Sand	☐ Gravel	☐ Organic Material		☐ Other:
	☐ Separate Phase Hydrocarbons		☐ Sheen	☐ Measurable Amount:		mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
Final Check:		VOAs free of air bubbles?	☐ Yes	☐ No	☐ N/A	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-040	**Sample ID:**	GWGW2359
PROJECT NO:	388-1856-1-16	**Sampled By:**	FWA	**Sample Date:**	Oct. 13, 2008
				Sample Time:	1350

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions	
Water Level Meter No.:				locked?	Yes ☐ ~~No~~ ☐
Depth to Water	DTW	51.30	ft.	casing	OK ☐ Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐ Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐ Not OK ☐
Specified Well Depth	SWD	106	ft.	vault	OK ☐ Not OK ☐
Measured Well Depth	MWD		ft.	Comments:	
Well Diameter	D	2	inches		

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	54.70	ft.	39
Well Casing Volume	WCV = SWH * V_D	6.91	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	20.73	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☑ Yes	☐ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	☑ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☑ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☑ Yes	☐ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☑ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	☑ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-046	**Sample ID:**	GWGW2360
PROJECT NO:	388-1856-1-16	**Sampled By:**	KKA	**Sample Date:**	Oct 13, 2008
				Sample Time:	1115

WEATHER ☑ Sunny ☐ Cloudy ☐ Rainy ☐ Foggy ☑ Windy Temp: 70

SAMPLE TYPE ☐ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:
SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0900	1312589	OAKTON	☑ 4	☑ 7	☑ 10
pH (final)						
Conductivity						
Turbidity						
Other:						

SAMPLE PORT* ☐ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 35327 gal. Rate: gpm Time:
End: 35362 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
1058	0	6.88	18.1	1340	50.29	
1102	9	7.52	18.1	1147	50.30	
1106	18	7.59	18.2	1033	50.30	
1110	27	7.64	18.1	1029	50.30	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☑ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black
☐ Cloudy ☐ Other:

Odor: ☑ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic
☐ Other:

Solids: ☑ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity
☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other:
☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-046	**Sample ID:**	GWGW2360
PROJECT NO:	388-1856-1-16	**Sampled By:**	CMA	**Sample Date:**	Oct. 15, 2008
				Sample Time:	1115

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS				Well Conditions		
Water Level Meter No.:		Measurements		locked?	Yes ☑	No ☐
Depth to Water	DTW	50.20	ft.	casing	OK ☐	Not OK ☑
Depth to Product	DTP		ft.	plugs	OK ☑	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☑	Not OK ☐
Specified Well Depth	SWD	106	ft.	vault	OK ☑	Not OK ☐
Measured Well Depth	MWD		ft.	Comments:		
Well Diameter	D	2	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	54.8	ft.	
Well Casing Volume	WCV = SWH * V_D	8.93	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	26.79	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☑ Yes	☐ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	☑ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☑ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☐ Yes	☐ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	☑ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) — 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-048	**Sample ID:**	GWGW2361
PROJECT NO:	388-1856-1-16	**Sampled By:**	KHA	**Sample Date:**	10/14/08
				Sample Time:	1120

WEATHER	☑ Sunny	☐ Cloudy	☐ Rainy	☐ Foggy	☐ Windy	Temp: 75
SAMPLE TYPE	☑ Original	☐ Duplicate	☐ Trip Blank	☐ Equip. Blank	☐ Other:	
SAMPLE SOURCE	☑ Monitoring Well	☐ Extraction Well	☐ Piezometer	☐ System*	☐ Other:	

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results
pH (initial)	1000	131789	OAKTON	~~4~~ 4.03 ~~7~~ 7.01 ~~10~~ 10.01
pH (final)				
Conductivity				1413=1413
Turbidity				
Other:				

SAMPLE PORT*	☑ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

TOTALIZER	Start: 35445 gal.	Rate: gpm	Time:		
	End: 35537 gal.	Rate: gpm	Time:		

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
1030	0	8.43	17.9	814	55.90	
1034	29	7.77	17.9	818	55.70	
1107	58	7.75	18.4	803	55.605	
1115	87	7.71	18.4	803	55.65	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color:	☑ Clear	☐ Grey	☐ Yellow	☐ Brown	☐ Tan	☐ Black
	☐ Cloudy	☐ Other:				
Odor:	☑ None	☐ Gasoline	☐ Diesel	☐ Solvent	☐ Sulfur	☐ Metallic
	☐ Other:					
Solids:	☑ None	☐ Trace	☐ Small Quantity	☐ Mod. Quantity	☐ Large Quantity	
	☐ Silt	☐ Sand	☐ Gravel	☐ Organic Material		☐ Other:
	☐ Separate Phase Hydrocarbons		☐ Sheen	☐ Measurable Amount:		mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
Final Check:		VOAs free of air bubbles?	☑ Yes	☐ No	☐ N/A	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-048	**Sample ID:**	GWGW2361
PROJECT NO:	388-1856-1-16	**Sampled By:**	KWA	**Sample Date:**	10/14/2008
				Sample Time:	1120

SAMPLE SOURCE ☑ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions		
Water Level Meter No.:				locked?	Yes ☑	No ☐
Depth to Water	DTW	55.60	ft.	casing	OK ☑	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☑	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☑	Not OK ☐
Specified Well Depth	SWD	100	ft.	vault	OK ☑	Not OK ☐
Measured Well Depth	MWD		ft.	Comments:		
Well Diameter	D	4	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	44.40	ft.	92 gals
Well Casing Volume	WCV = SWH * V_D	28.99	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	86.97	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☑ Yes	☐ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☑ PVC	☑ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	☑ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☑ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☑ Yes	☐ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☑ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	☑ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:	Formulas/Conversions:
	cylinder volume = $\pi r^2 h$
	r = well radius (ft) — 1 ft^3 = 7.48 gallons
	h = height of water column (ft)
	$V_{2\text{-inch casing}}$ = 0.163 gallons/ft
	$V_{3\text{-inch casing}}$ = 0.367 gallons/ft
	$V_{4\text{-inch casing}}$ = 0.653 gallons/ft
	$V_{6\text{-inch casing}}$ = 1.47 gallons/ft
	$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-056	**Sample ID:**	GWGW2362
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMD	**Sample Date:**	10/15/08
				Sample Time:	1050

WEATHER	☒ Sunny	☐ Cloudy	☐ Rainy	☐ Foggy	☐ Windy	Temp: 80
SAMPLE TYPE	☒ Original	☐ Duplicate	☐ Trip Blank	☐ Equip. Blank	☐ Other:	
SAMPLE SOURCE	☒ Monitoring Well	☐ Extraction Well	☐ Piezometer	☐ System*	☐ Other:	

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0830	110797	Oakton	☒ 4.00	☒ 7.04	☒ 10.12
pH (final)						
Conductivity				1415		
Turbidity						
Other:						

SAMPLE PORT*	☒ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

TOTALIZER	Start: 32804 gal.	Rate: gpm	Time:		
	End: 32881 gal.	Rate: gpm	Time:		

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
1020	0	7.68	19.0	1190	49.48	
1026	25	7.67	19.0	1195	49.48	
1032	50	7.73	18.9	1180	49.48	
1038	75	7.69	19.0	1182	49.48	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color:	☒ Clear	☐ Grey	☐ Yellow	☐ Brown	☐ Tan	☐ Black
	☐ Cloudy	☐ Other:				
Odor:	☒ None	☐ Gasoline	☐ Diesel	☐ Solvent	☐ Sulfur	☐ Metallic
	☐ Other:					
Solids:	☒ None	☐ Trace	☐ Small Quantity	☐ Mod. Quantity	☐ Large Quantity	
	☐ Silt	☐ Sand	☐ Gravel	☐ Organic Material		☐ Other:
	☐ Separate Phase Hydrocarbons		☐ Sheen	☐ Measurable Amount:		mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
Final Check:		VOAs free of air bubbles?	☒ Yes	☐ No	☐ N/A	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME: UC Davis LEHR/SCDS **Sample Location:** UCD2-056 **Sample ID:** GWGW2362
PROJECT NO: 388-1856-1-16 **Sampled By:** JMD **Sample Date:** 10/15/08
Sample Time: 1050

SAMPLE SOURCE ☒ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions		
Water Level Meter No.: 15656				locked?	Yes ☐	No ☒
Depth to Water	DTW	50.90	ft.	casing	OK ☒	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☒	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☒	Not OK ☐
Specified Well Depth	SWD	89	ft.	vault	OK ☒	Not OK ☐
Measured Well Depth	MWD		ft.	Comments:		
Well Diameter	D	4	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 38.10	ft.	
Well Casing Volume	WCV = SWH * V_D	0 24.8	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	0 74.6	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT						
		Dedicated:	☐ Yes	☒ No		
Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass
Purge Equipment Decontamination		Decon:	☒ Yes	☐ No	☐ N/A	
Method:		☐ Steam	☒ Alconox	☒ DI Water	☐ Other	

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☒ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT						
		Dedicated:	☐ Yes	☒ No		
Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass
Sample Equipment Decontamination		Decon:	☒ Yes	☐ No	☐ N/A	
Method:		☐ Steam	☒ Alconox	☒ DI Water	☐ Other	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-057	**Sample ID:**	GWGW2363
PROJECT NO:	388-1856-1-16	**Sampled By:**	KNA	**Sample Date:**	8/15/06
				Sample Time:	1040

WEATHER	☑ Sunny	☐ Cloudy	☐ Rainy	☐ Foggy	☐ Windy	Temp: 75
SAMPLE TYPE	☑ Original	☐ Duplicate	☐ Trip Blank	☐ Equip. Blank	☐ Other:	
SAMPLE SOURCE	☑ Monitoring Well	☐ Extraction Well	☐ Piezometer	☐ System*	☐ Other:	

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0930	1312809	OAKTON	☑ 4	☑ 7	☑ 10
pH (final)						
Conductivity				1413=1413		
Turbidity						
Other:						

SAMPLE PORT*	☑ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

TOTALIZER	Start: 35607.6 gal.	Rate: gpm	Time:	
	End: 35788 gal.	Rate: gpm	Time:	

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
0950	0	8.57	18.2	822	52.20	
1005	29.5	7.89	18.6	840	52.20	
1020	59	7.66	18.41	849	52.20	
1035	88.5	7.56	18.41	859	52.	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color:	☑ Clear	☐ Grey	☐ Yellow	☐ Brown	☐ Tan	☐ Black
	☑ Cloudy	☐ Other:				
Odor:	☑ None	☐ Gasoline	☐ Diesel	☐ Solvent	☐ Sulfur	☐ Metallic
	☑ Other:					
Solids:	☑ None	☐ Trace	☐ Small Quantity	☐ Mod. Quantity	☐ Large Quantity	
	☐ Silt	☐ Sand	☐ Gravel	☐ Organic Material		☐ Other:
	☐ Separate Phase Hydrocarbons		☐ Sheen	☐ Measurable Amount:		mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
Final Check:		VOAs free of air bubbles?	☑ Yes	☐ No	☐ N/A	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-057	**Sample ID:**	GWGW2363
PROJECT NO:	388-1856-1-16	**Sampled By:**	KHA	**Sample Date:**	10/15/08
				Sample Time:	1041

SAMPLE SOURCE ☑ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions		
Water Level Meter No.:				locked?	Yes ☑	No ☐
Depth to Water	DTW	52.00	ft.	casing	OK ☑	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☑	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☑	Not OK ☐
Specified Well Depth	SWD		ft.	vault	OK ☑	Not OK ☐
Measured Well Depth	MWD	97.00	ft.	Comments:		
Well Diameter	D	4	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	45.00	ft.	
Well Casing Volume	WCV = SWH * V_D	29.38	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	88.14	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☐ Yes	☑ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☑ Yes	☐ No	☐ N/A	
Method:	☐ Steam	☑ Alconox	☑ DI Water	☐ Other	

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☑ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☐ Yes	☑ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☑ Yes	☐ No	☐ N/A	
Method:	☐ Steam	☐ Alconox	☑ DI Water	☐ Other	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:	Formulas/Conversions:
	cylinder volume = $\pi r^2 h$
	r = well radius (ft) — 1 ft^3 = 7.48 gallons
	h = height of water column (ft)
	$V_{2\text{-inch casing}}$ = 0.163 gallons/ft
	$V_{3\text{-inch casing}}$ = 0.367 gallons/ft
	$V_{4\text{-inch casing}}$ = 0.653 gallons/ft
	$V_{6\text{-inch casing}}$ = 1.47 gallons/ft
	$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME: UC Davis LEHR/SCDS **Sample Location:** UCD2-059 **Sample ID:** GWGW2364

PROJECT NO: 388-1856-1-16 **Sampled By:** KLA **Sample Date:** 10/11/08

Sample Time: 0905

WEATHER ☑ Sunny ☐ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp: 65

SAMPLE TYPE ☑ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE* ☑ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results
pH (initial)	0830	131789	ORION	☑ 4 4.01 ☑ 7 7.00 ☑ 10 10.03
pH (final)				
Conductivity				1413=1413
Turbidity				
Other:				

SAMPLE PORT* ☑ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 35545 gal. Rate: gpm Time:

End: 35675 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
0840	0	7.20	18.7	1019	52.50	
0845	39	7.65	17.7	926	52.50	
0850	78	7.66	17.9	908	52.55	
0900	117.5	7.66	17.9	907	52.55	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☑ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black ☐ Cloudy ☐ Other:

Odor: ☑ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic ☐ Other:

Solids: ☑ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity ☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other: ☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☑ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME: UC Davis LEHR/SCDS **Sample Location:** UCD2-059 **Sample ID:** GWGW2364

PROJECT NO: 388-1856-1-16 **Sampled By:** [illegible] 0 **Sample Date:** 0 10/15/08

Sample Time: 0905 0

SAMPLE SOURCE ☑ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions		
Water Level Meter No.:				locked?	Yes ☐	No ☑
Depth to Water	DTW	52.25	ft.	casing	OK ☑	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☑	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☑	Not OK ☐
Specified Well Depth	SWD		ft.	vault	OK ☑	Not OK ☐
Measured Well Depth	MWD	112	ft.	Comments:		
Well Diameter	D	4	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	~~0~~ 59.75	ft.	130 gals
Well Casing Volume	WCV = SWH * V_D	~~0~~ 39.01	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	~~0~~ 117.03	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☐ Yes	☑ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☑ PVC	☐ Polyethylene	☑ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☑ Yes	☐ No	☐ N/A
Method:	☐ Steam	☑ Alconox	☑ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☑ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☑ Yes	☐ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☑ Yes	☐ No	☐ N/A
Method:	☐ Steam	☑ Alconox	☑ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-060	**Sample ID:**	GWGW2365
PROJECT NO:	388-1856-1-16	**Sampled By:**	[illegible]	**Sample Date:**	10/15/08
				Sample Time:	1435

SAMPLE SOURCE ☑ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS				Well Conditions		
Water Level Meter No.:		Measurements		locked?	Yes ☐	No ☑
Depth to Water	DTW	49.40	ft.	casing	OK ☑	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☑	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☑	Not OK ☐
Specified Well Depth	SWD		ft.	vault	OK ☑	Not OK ☐
Measured Well Depth	MWD	112	ft.	Comments:		
Well Diameter	D	4	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	62.60	ft.	
Well Casing Volume	WCV = SWH * V_D	40.87	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	122.61	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☐ Yes	☑ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☑ Yes	☐ No	☐ N/A
Method:	☐ Steam	☑ Alconox	☑ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☑ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☐ Yes	☐ No	
Pump ID#:	☐ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	☐ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) — 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-060	**Sample ID:**	GWGW2365
PROJECT NO:	388-1856-1-16	**Sampled By:**	[illegible]	**Sample Date:**	10/15/01
				Sample Time:	1435

WEATHER ☐ Sunny ☐ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp: 75

SAMPLE TYPE ☑ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:
SAMPLE SOURCE ☐ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0830	131189	[illegible]	☐ 4	☑ 7	☑ 10
pH (final)						
Conductivity						
Turbidity						
Other:						

SAMPLE PORT* ☐ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 350073 gal. Rate: gpm Time:
End: gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
1415	0	7.45	22.1	1140	49.66	
1420	41	7.85	19.8	871	49.66	
1425	82	7.69	19.6	867	49.66	
1430	123	7.70	19.2	863	49.66	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☐ Clear ☐ Grey ☐ Yellow ☑ Brown ☐ Tan ☐ Black
☐ Cloudy ☐ Other:

Odor: ☑ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic
☐ Other:

Solids: ☑ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity
☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other:
☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☑ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

SP-2 IRA TP1 N0363

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	[redacted]	**Sample ID:**	[redacted]
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMD	**Sample Date:**	Oct. 16 2008
				Sample Time:	0850

WEATHER	☒ Sunny	☐ Cloudy	☐ Rainy	☐ Foggy	☐ Windy	Temp: 75
SAMPLE TYPE	☒ Original	☐ Duplicate	☐ Trip Blank	☐ Equip. Blank	☐ Other:	
SAMPLE SOURCE	☐ Monitoring Well	☐ Extraction Well	☐ Piezometer	X System*	☐ Other:	

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0730	110797	Oakton	☒ 4.01	☒ 7.00	☒ 10.12
pH (final)						
Conductivity				1413		
Turbidity						
Other:						

SAMPLE PORT*	☒ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

TOTALIZER	Start:	gal.	Rate:	gpm	Time:
	End:	gal.	Rate:	gpm	Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
0850	0	7.71	18.3	902	—	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color:	☒ Clear	☐ Grey	☐ Yellow	☐ Brown	☐ Tan	☐ Black
	☐ Cloudy	☐ Other:				
Odor:	☒ None	☐ Gasoline	☐ Diesel	☐ Solvent	☐ Sulfur	☐ Metallic
	☐ Other:					
Solids:	☒ None	☐ Trace	☐ Small Quantity	☐ Mod. Quantity	☐ Large Quantity	
	☐ Silt	☐ Sand	☐ Gravel	☐ Organic Material		☐ Other:
	☐ Separate Phase Hydrocarbons		☐ Sheen	☐ Measurable Amount:		mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
Final Check:		VOAs free of air bubbles?	☒ Yes	☐ No	☐ N/A	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

SP-2 IRA TP1N0363

PROJECT NAME:	UC-Davis LEHR/SCDS	**Sample Location:**	[redacted]	**Sample ID:**	[redacted]
PROJECT NO:	388-1856-1-16	**Sampled By:**	JMD	**Sample Date:**	Oct. 16 2008
				Sample Time:	0550

SAMPLE SOURCE ☐ Monitoring Well ☐ Extraction Well ☐ Piezometer X System* ☐ Other:

WELL MEASUREMENTS		Measurements	Well Conditions		
Water Level Meter No.:			locked?	Yes ☐	No ☐
Depth to Water	DTW	ft.	casing	OK ☐	Not OK ☐
Depth to Product	DTP	ft.	plugs	OK ☐	Not OK ☐
Product Thickness	PT	ft.	seal	OK ☐	Not OK ☐
Specified Well Depth	SWD	ft.	vault	OK ☐	Not OK ☐
Measured Well Depth	MWD	ft.	Comments:		
Well Diameter	D	[redacted] inches			

PURGE CALCULATIONS	Formula	Value	Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 ft.	
Well Casing Volume	WCV = SWH * V_D	gal.	
Well Casing Volumes to be Purged	N	3	
Total to be Purged	= WCV * N	0 gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☐ Yes	☐ No	
Pump ID#:	☐ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	☐ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☐ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☐ Yes	☐ No	
Pump ID#:	☐ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	☐ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:	Formulas/Conversions:
	cylinder volume = $\pi r^2 h$
	r = well radius (ft) 1 ft^3 = 7.48 gallons
	h = height of water column (ft)
	$V_{2\text{-Inch casing}}$ = 0.163 gallons/ft
	$V_{3\text{-Inch casing}}$ = 0.367 gallons/ft
	$V_{4\text{-Inch casing}}$ = 0.653 gallons/ft
	$V_{6\text{-Inch casing}}$ = 1.47 gallons/ft
	$V_{8\text{-Inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME: UC Davis LEHR/SCDS **Sample Location:** SP-5 IRA **Sample ID:** TPEF0363

PROJECT NO: 388-1856-1-16 **Sampled By:** JMD **Sample Date:** 10/16/08

Sample Time: 0730

WEATHER	☒ Sunny	☐ Cloudy	☐ Rainy	☐ Foggy	☐ Windy	Temp: 70
SAMPLE TYPE	☐ Original	☐ Duplicate	☐ Trip Blank	☐ Equip. Blank	☐ Other:	
SAMPLE SOURCE	☐ Monitoring Well	☐ Extraction Well	☐ Piezometer	☒ System*	☐ Other:	

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0730	110797	Oakton	☒ 4 4.01	☒ 7 7.06	☒ 10 10.12
pH (final)						
Conductivity				1413		
Turbidity						
Other:						

SAMPLE PORT* ☒ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER	Start:	gal.	Rate:	gpm	Time:
	End:	gal.	Rate:	gpm	Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
0730	0	8.31	17.3	884	—	
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color:	☒ Clear ☐ Cloudy	☐ Grey ☐ Other:	☐ Yellow	☐ Brown	☐ Tan	☐ Black
Odor:	☒ None ☐ Other:	☐ Gasoline	☐ Diesel	☐ Solvent	☐ Sulfur	☐ Metallic
Solids:	☒ None ☐ Silt ☐ Separate Phase Hydrocarbons	☐ Trace ☐ Sand	☐ Small Quantity ☐ Gravel ☐ Sheen	☐ Mod. Quantity ☐ Organic Material ☐ Measurable Amount:	☐ Large Quantity	☐ Other: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
Final Check:		VOAs free of air bubbles?	☒ Yes	☐ No	☐ N/A	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

PROJECT NAME: UC Davis LEHR/SCDS | **Sample Location:** SP-5 | **Sample ID:** T8EF0363

PROJECT NO: 388-1856-1-16 | **Sampled By:** JMD | **Sample Date:** 10/16/08

Sample Time: 0830

SAMPLE SOURCE ☐ Monitoring Well ☐ Extraction Well ☐ Piezometer ☒ System* ☐ Other:

WELL MEASUREMENTS		Measurements	Well Conditions		
Water Level Meter No.:			locked?	Yes ☐	No ☐
Depth to Water	DTW	ft.	casing	OK ☐	Not OK ☐
Depth to Product	DTP	ft.	plugs	OK ☐	Not OK ☐
Product Thickness	PT	ft.	seal	OK ☐	Not OK ☐
Specified Well Depth	SWD	ft.	vault	OK ☐	Not OK ☐
Measured Well Depth	MWD	ft.	Comments:		
Well Diameter	D	inches			

PURGE CALCULATIONS	Formula	Value	Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 ft.	
Well Casing Volume	WCV = SWH * V_D	0 gal.	
Well Casing Volumes to be Purged	N		
Total to be Purged	= WCV * N	0 gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☐ Yes	☐ No	
Pump ID#:	☐ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	☐ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☐ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☐ Yes	☐ No	
Pump ID#:	☐ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	☐ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) — 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

Weiss Associates

PROJECT NAME: UCDAVIS LEAR **Sample Location:** UCD2-48 **Sample ID:** GWGW2366

PROJECT NO: 388185.2.11 **Sampled By:** DMB **Sample Date:** 11-13-03

Sample Time: 1233

WEATHER ☑ Sunny ☐ Cloudy ☐ Rainy ☐ Foggy ☑ Windy Temp: 70

SAMPLE TYPE ☑ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE ☑ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	830	110799	Oakton	☑4 4.00	☑7 7.09	☑10 10.12
pH (final)						
Conductivity				1413 @ 1410		
Turbidity						
Other:						

SAMPLE PORT* 32919.5 ☐ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: ~~32915.0~~ gal. Rate: gpm Time: 1200

End: 33026.5 gal. Rate: 3.27 gpm Time: 1233

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	Turbidity NTU	Other: DTW
1200	START	7.64	18.6	854		51.81
1207	34.5 gal	7.95	18.3	853		51.32
1215	69.0 gal	7.74	18.2	862		51.32
1230	109.5 gal	7.71	18.3	847		51.32
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	< 50 NTU	± 10%
Precision:		0.10	1.0 °C	10 µS/cm	0.1 NTU	

SAMPLE APPEARANCE

Color: ☑ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black ☐ Cloudy ☐ Other:

Odor: ☑ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic ☐ Other:

Solids: ~~☑ None~~ ~~☑ Trace~~ ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity ~~☑ Silt~~ ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other: ☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
GWGW2366	V	3	40	HCl	no	

Final Check: VOAs free of air bubbles? ☑ Yes ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET

Weiss Associates

PROJECT NAME: UC Davis LEAR **Sample Location:** UCD2-48 **Sample ID:** GWGW2366

PROJECT NO: 3 1818562-11 **Sampled By:** DM **Sample Date:** 11-13-08

Sample Time: 1233

SAMPLE SOURCE ☑ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements	Well Conditions	
Water Level Meter No.: 13176			locked?	Yes ☑ No ☐
Depth to Water	DTW	51.11 ft.	casing	OK ☑ Not OK ☐
Depth to Product	DTP	– ft.	plugs	OK ☑ Not OK ☐
Product Thickness	PT	– ft.	seal	OK ☑ Not OK ☐
Specified Well Depth	SWD	per ru 104' ft.	vault	OK ☑ Not OK ☐
Measured Well Depth	MWD	– ft.	Comments:	
Well Diameter	D	4 inches		

PURGE CALCULATIONS	Formula	Value	Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	52.89 ft.	108 gal
Well Casing Volume	WCV = SWH * V_D	34.53 gal.	
Well Casing Volumes to be Purged	N	3	
Total to be Purged	= WCV * N	103.61 gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT Dedicated: ☑ Yes ☐ No

Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☑ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination — Decon: ☐ Yes ☐ No ☑ N/A

Method: ☐ Steam ☐ Alconox ☐ DI Water ☐ Other

PURGE TIME AND WELL RECOVERY		1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry? ☐ No ☐ Yes	Start:				
DTW during Purging: ft.	Stop:				
SWH during Purging: ft.	Elapsed Time:				
MWD - 80%SWH: ft.	DTW:				
% Recovery at Sample Time: %	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT Dedicated: ☑ Yes ☐ No

Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☑ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination — Decon: ☐ Yes ☐ No ☑ N/A

Method: ☐ Steam ☐ Alconox ☐ DI Water ☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

DRY - Not Sampled (ALP)

Weiss Associates

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-004	**Sample ID:**	GWGW2367
PROJECT NO:	388-1856-2-16	**Sampled By:**		**Sample Date:**	Dec_____, 2008
				Sample Time:	

WEATHER ☐ Sunny ☐ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp:

SAMPLE TYPE ☐ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)				☐ 4	☐ 7	☐ 10
pH (final)						
Conductivity						
Turbidity						
Other:						

SAMPLE PORT* ☐ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: gal. Rate: gpm Time:

End: gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☐ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black
☐ Cloudy ☐ Other:

Odor: ☐ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic
☐ Other:

Solids: ☐ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity
☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other:
☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

Dry - Not Sampled (ALP)

WATER SAMPLING DATA SHEET (Page 2)

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-004	**Sample ID:**	GWGW2367
PROJECT NO:	388-1856-2-16	**Sampled By:**		**Sample Date:**	Dec_____, 2008
				Sample Time:	

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions	
Water Level Meter No.:				locked?	Yes ☐ No ☐
Depth to Water	DTW		ft.	casing	OK ☐ Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐ Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐ Not OK ☐
Specified Well Depth	SWD		ft.	vault	OK ☐ Not OK ☐
Measured Well Depth	MWD		ft.	Comments:	
Well Diameter	D	2	inches		

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0	ft.	
Well Casing Volume	WCV = SWH * V_D	0	gal.	
Well Casing Volumes to be Purged	N			
Total to be Purged	= WCV * N	0	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☐ Yes	☐ No	
Pump ID#:	☐ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination		Decon:	☐ Yes	☐ No	☐ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other	

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☐ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☐ Yes	☐ No	
Pump ID#:	☐ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination		Decon:	☐ Yes	☐ No	☐ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) — 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

Weiss Associates

WATER SAMPLING DATA SHEET

PROJECT NAME: UC Davis LEHR/SCDS **Sample Location:** UCD1-011 **Sample ID:** GWGW2368A/B

PROJECT NO: 388-1856-2-16 **Sampled By:** JMD **Sample Date:** Dec 3, 2008

Sample Time: 1675

WEATHER ☐ Sunny ☒ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp: 60

SAMPLE TYPE ☒ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0730	110782	Oakton	☒ 4.01	☒ 7.06	☒ 10.18
pH (final)						
Conductivity				1412		
Turbidity						
Other:						

SAMPLE PORT* ☒ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 360123.5 gal. Rate: gpm Time:

End: 361520 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other: DO	ORP
1550	Start	7.46	17.6	1269	48.23	2.69	732
1556	11	7.47	18.3	1306	50.15	2.06	727
1602	22	7.48	17.7	1310	50.23	2.01	726
1608	33	7.48	17.6	1310		2.02	726
1620	Post	7.50	17.6	1318	—	1.91	723
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%	
Precision:		0.10	1.0 °C	10 µS/cm			

SAMPLE APPEARANCE

Color: ☒ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black ☐ Cloudy ☐ Other:

Odor: ☒ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic ☐ Other:

Solids: ☒ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity ☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other: ☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☒ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET (Page 2)

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-011	**Sample ID:**	GWGW2368A/B
PROJECT NO:	388-1856-2-16	**Sampled By:**	JMD	**Sample Date:**	Dec 3, 2008
				Sample Time:	1615

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions	
Water Level Meter No.:				locked?	Yes ☐ No ☐
Depth to Water	DTW	48.23	ft.	casing	OK ☐ Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐ Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐ Not OK ☐
Specified Well Depth	SWD	65	ft.	vault	OK ☐ Not OK ☐
Measured Well Depth	MWD		ft.	Comments:	
Well Diameter	D	4	inches		

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 16.77	ft.	
Well Casing Volume	WCV = SWH * V_D	0 10.9	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	0 32.8	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	X Yes	☐ No	
Pump ID#:	☐ Bladder	X Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	X Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	X N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	X No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	X Yes	☐ No	
Pump ID#:	☐ Bladder	X Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	X Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	X N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

Weiss Associates

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-012	**Sample ID:**	GWGW2369
PROJECT NO:	388-1856-2-16	**Sampled By:**	JMD	**Sample Date:**	Dec 3, 2008
				Sample Time:	1130

WEATHER ☐ Sunny ☒ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp: 55

SAMPLE TYPE ☒ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0730	110782	Oakton	☒ 4 01	☒ 7 06	☒ 10 18
pH (final)						
Conductivity				1412		
Turbidity						
Other:						

SAMPLE PORT* ☒ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 36078.5 gal. Rate: gpm Time:

End: 36113.5 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other: DO	ORP
1025	0	8.23	16.9	1639	50.31	5.85	593
1045	10.5	8.21	17.8	1555	52.21	5.58	641
1105	19.5	8.15	17.7	1539	53.90	5.54	667
1120	28.5	8.05	17.8	1551	54.30	5.50	677
1140	Post	8.02	17.8	1551		5.64	688
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%	
Precision:		0.10	1.0 °C	10 µS/cm			

SAMPLE APPEARANCE

Color: ☒ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black
☐ Cloudy ☐ Other:

Odor: ☒ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic
☐ Other:

Solids: ☒ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity
☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other:
☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET (Page 2)

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-012	**Sample ID:**	GWGW2369
PROJECT NO:	388-1856-2-16	**Sampled By:**	JMD	**Sample Date:**	Dec 3, 2008
				Sample Time:	1130

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions		
Water Level Meter No.:				locked?	Yes ☐	No ☐
Depth to Water	DTW	50.00	ft.	casing	OK ☐	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐	Not OK ☐
Specified Well Depth	SWD	64.5	ft.	vault	OK ☐	Not OK ☐
Measured Well Depth	MWD		ft.	Comments:		
Well Diameter	D	4	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 14.5	ft.	
Well Casing Volume	WCV = SWH * V_D	0 9.47	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	0 28.4	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☒ Yes	☐ No	
Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☒ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass
Purge Equipment Decontamination			Decon:	☐ Yes	☐ No	☒ N/A
Method:		☐ Steam	☐ Alconox	☐ DI Water	☐ Other	

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☒ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☒ Yes	☐ No	
Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☒ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass
Sample Equipment Decontamination			Decon:	☐ Yes	☐ No	☒ N/A
Method:		☐ Steam	☐ Alconox	☐ DI Water	☐ Other	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

Weiss Associates

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-013	**Sample ID:**	GWGW2370
PROJECT NO:	388-1856-2-16	**Sampled By:**	JMD	**Sample Date:**	Dec 4, 2008
				Sample Time:	1545

WEATHER ~~☐ Sunny~~ ☒ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp: 60

SAMPLE TYPE ☒ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:
SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0730	110782	Oakton	☒ 4.00	☒ 7.04	☒ 10.12
pH (final)						
Conductivity				1413		
Turbidity						
Other:						

SAMPLE PORT* ☒ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 36230 gal. Rate: gpm Time:
End: 36264 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other: DO	ORP
1526	Start	7.19	17.5	1153	50.42	1.68	599
1531	10	7.20	17.0	1165	54.19	1.22	594
1536	19	7.21	16.7	1174	55.20	0.99	590
1541	28	7.21	16.6	1175	55.54	0.85	586
1550	Post	7.23	16.3	1175		0.96	591
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%	
Precision:		0.10	1.0 °C	10 µS/cm			

SAMPLE APPEARANCE

Color: ☒ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black
☐ Cloudy ☐ Other:

Odor: ☒ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic
☐ Other:

Solids: ☒ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity
☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other:
☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☒ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET (Page 2)

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-013	**Sample ID:**	GWGW2370
PROJECT NO:	388-1856-2-16	**Sampled By:**	JMD	**Sample Date:**	Dec 4, 2008
				Sample Time:	1545

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions		
Water Level Meter No.:				locked?	Yes ☐	No ☐
Depth to Water	DTW	50.42	ft.	casing	OK ☐	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐	Not OK ☐
Specified Well Depth	SWD	64.5	ft.	vault	OK ☐	Not OK ☐
Measured Well Depth	MWD		ft.	Comments:		
Well Diameter	D	4	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 14.08	ft.	
Well Casing Volume	WCV = SWH * V_D	0 9.1	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	0 27.6	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☒ Yes	☐ No	
Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☒ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	☒ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☒ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☒ Yes	☐ No	
Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☒ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	☒ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

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WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-018	**Sample ID:**	GWGW2371
PROJECT NO:	388-1856-2-16	**Sampled By:**	JMD	**Sample Date:**	Dec 25, 2008
				Sample Time:	1505

WEATHER ☐ Sunny ☒ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp: 65

SAMPLE TYPE ☒ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:
SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0830	10782	Oakton	☒ 4.00	☒ 7.00	☒ 10.20
pH (final)						
Conductivity				1413		
Turbidity						
Other:						

SAMPLE PORT* ☒ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 36602 gal. Rate: gpm Time:
End: gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other: DO	ORP
1440	Start	7.86	15.9	792	45.63	9.30	571
1450	16	7.65	17.2	620	47.23	8.23	553
1453	32	7.62	17.2	602	47.40	5.69	568
1500	48	7.61	17.2	600	47.60	6.36	568
1508	stop	7.66	17.4	596	—	6.23	551
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%	
Precision:		0.10	1.0 °C	10 µS/cm			

SAMPLE APPEARANCE

Color: ☒ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black
☐ Cloudy ☐ Other:

Odor: ☒ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic
☐ Other:

Solids: ☒ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity
☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other:
☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☒ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET (Page 2)

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-018	**Sample ID:**	GWGW2371
PROJECT NO:	388-1856-2-16	**Sampled By:**	JMO	**Sample Date:**	Dec 5, 2008
				Sample Time:	1505

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements	Well Conditions	
Water Level Meter No.:			locked?	Yes ☑ No ☐
Depth to Water	DTW	45.63 ft.	casing	OK ☑ Not OK ☐
Depth to Product	DTP	ft.	plugs	OK ☑ Not OK ☐
Product Thickness	PT	ft.	seal	OK ☑ Not OK ☐
Specified Well Depth	SWD	70 ft.	vault	OK ☑ Not OK ☐
Measured Well Depth	MWD	ft.	Comments:	
Well Diameter	D	4 inches		

PURGE CALCULATIONS	Formula	Value	Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 24.37 ft.	
Well Casing Volume	WCV = SWH * V_0	0 15.9 gal.	
Well Casing Volumes to be Purged	N	3	
Total to be Purged	= WCV * N	0 47.74 gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☒ Yes	☐ No	
Pump ID#:	☒ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☒ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	☒ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☒ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☒ Yes	☐ No	
Pump ID#:	☒ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☒ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	☒ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) — 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

Weiss Associates

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-019	**Sample ID:**	GWGW2372
PROJECT NO:	388-1856-2-16	**Sampled By:**	KMA	**Sample Date:**	Dec 5, 2008
				Sample Time:	1630

WEATHER	☑ Sunny	☐ Cloudy	☐ Rainy	☐ Foggy	☐ Windy	Temp:
SAMPLE TYPE	☑ Original	☐ Duplicate	☐ Trip Blank	☐ Equip. Blank	☐ Other:	
SAMPLE SOURCE	X Monitoring Well	☐ Extraction Well	☐ Piezometer	☐ System*	☐ Other:	

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results
pH (initial)	0800	131789	OAKTON	☑4 4.00 ☑7 7.00 ☑10 10.02
pH (final)				
Conductivity				1413 = 1413
Turbidity				
Other:				

SAMPLE PORT*	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

TOTALIZER	Start: 361923 gal.	Rate:	gpm	Time:	
	End: 362502 gal.	Rate:	gpm	Time:	

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other: DO / ORP
1535	0	8.02	18.5	1213	49.25	6.59 / 69.3 / 184
1555	20	8.01	18.5	1215	49.30	6.58 / 69.1 / 195
1615	40	8.00	18.5	1214	49.35	6.56 / 68.6 / 195
1625	50	7.95	18.5	1212	49.35	6.50 / 68.4 / 195
1630		7.93	18.5	1211	49.35	6.47 / 68.4 / 195
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color:	☑ Clear	☐ Grey	☐ Yellow	☐ Brown	☐ Tan	☐ Black
	☐ Cloudy	☐ Other:				
Odor:	☑ None	☐ Gasoline	☐ Diesel	☐ Solvent	☐ Sulfur	☐ Metallic
	☐ Other:					
Solids:	☑ None	☐ Trace	☐ Small Quantity	☐ Mod. Quantity	☐ Large Quantity	
	☐ Silt	☐ Sand	☐ Gravel	☐ Organic Material		☐ Other:
	☐ Separate Phase Hydrocarbons		☐ Sheen	☐ Measurable Amount:		mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
			SEE CL			

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☑ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET (Page 2)

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-019	**Sample ID:**	GWGW2372
PROJECT NO:	388-1856-2-16	**Sampled By:**	KNA	**Sample Date:**	Dec 5, 2008
				Sample Time:	1630

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions		
Water Level Meter No.: 15024				locked?	Yes ☑	No ☐
Depth to Water	DTW	49.25	ft.	casing	OK ☐	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐	Not OK ☐
Specified Well Depth	SWD		ft.	vault	OK ☐	Not OK ☐
Measured Well Depth	MWD	74.50	ft.	Comments:		
Well Diameter	D	4	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	~~0~~ 25.25	ft.	
Well Casing Volume	WCV = SWH * V_D	~~0~~ 16.48	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	~~0~~ 49.44	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☑ Yes	☐ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☑ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	☑ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☑ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☑ Yes	☐ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☑ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	☐ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

Weiss Associates

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-028	**Sample ID:**	GWGW2373
PROJECT NO:	388-1856-2-16	**Sampled By:**	JMD	**Sample Date:**	Dec 4, 2008
				Sample Time:	1015

WEATHER ☐ Sunny ☒ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp: 50

SAMPLE TYPE ☒ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE ☒ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0930	110792	Oakton	☒ 4.00	☒ 7.04	☒ 10.12
pH (final)						
Conductivity				1413		
Turbidity						
Other:						

SAMPLE PORT* ☒ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 36183 gal. Rate: gpm Time:

End: 36195 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other: DO	ORP
0950	Start	7.42	16.5	1591	45.39	3.03	633
1001	4	7.43	15.9	1585	47.65	2.71	634
1007	8	7.39	15.9	1603	47.76	2.68	635
1011	11	7.39	15.8	1618	47.82	2.63	634
1018	Post	7.39	16.0	1616		2.81	630
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%	
Precision:		0.10	1.0 °C	10 µS/cm			

SAMPLE APPEARANCE

Color: ☒ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black ☐ Cloudy ☐ Other:

Odor: ☒ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic ☐ Other:

Solids: ☒ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity ☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other: ☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☒ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET (Page 2)

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-028	**Sample ID:**	GWGW2373
PROJECT NO:	388-1856-2-16	**Sampled By:**	JMD	**Sample Date:**	Dec 4, 2008
				Sample Time:	1015

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions	
Water Level Meter No.:				locked?	Yes ☐ No ☐
Depth to Water	DTW	45.39	ft.	casing	OK ☐ Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐ Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐ Not OK ☐
Specified Well Depth	SWD	68	ft.	vault	OK ☐ Not OK ☐
Measured Well Depth	MWD		ft.	Comments:	
Well Diameter	D	2	inches		

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 22.61	ft.	
Well Casing Volume	WCV = SWH * V_D	0 3.68	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	0 11.0	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	X Yes	☐ No	
Pump ID#:	☐ Bladder	X Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	X Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	X N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	X No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	X Yes	☐ No	
Pump ID#:	☐ Bladder	X Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	X Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	X N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

Weiss Associates

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-052	**Sample ID:**	GWGW2374
PROJECT NO:	388-1856-2-16	**Sampled By:**	JMD	**Sample Date:**	Dec 5, 2008
				Sample Time:	1150

WEATHER ☒ Sunny ☐ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp: 60

SAMPLE TYPE ☒ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:
SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0830	110752	Oakton	☒ 4.00	☒ 7.09	☒ 10.20
pH (final)						
Conductivity				1413		
Turbidity						
Other:						

SAMPLE PORT* ☒ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 36541 gal. Rate: gpm Time:
End: 36556 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other: DO	ORP
1138	Start	7.48	16.9	1414	44.86	7.00	577
1141	5	7.41	17.6	1456	51.14	6.86	576
1145	9	7.48	17.6	1469	51.30	5.96	577
1149	13	7.53	17.6	1480	51.47	4.99	573
1155	Post	7.56	17.4	1488	—	4.81	571
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%	
Precision:		0.10	1.0 °C	10 µS/cm			

SAMPLE APPEARANCE

Color: ☐ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black
☒ Cloudy ☐ Other:

Odor: ☒ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic
☐ Other:

Solids: ☐ None ☒ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity
☒ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other:
☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☒ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET (Page 2)

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-052	**Sample ID:**	GWGW2374
PROJECT NO:	388-1856-2-16	**Sampled By:**	JMD	**Sample Date:**	Dec 5, 2008
				Sample Time:	1150

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS				Well Conditions	
Water Level Meter No.:		Measurements		locked?	Yes ☐ No ☐
Depth to Water	DTW	44.80	ft.	casing	OK ☐ Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐ Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐ Not OK ☐
Specified Well Depth	SWD	70	ft.	vault	OK ☐ Not OK ☐
Measured Well Depth	MWD		ft.	Comments:	
Well Diameter	D	2	inches		

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 25.14	ft.	
Well Casing Volume	WCV = SWH * V_D	0 4.1	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	0 12.3	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☒ Yes	☐ No	
Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☒ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	☒ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☒ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☒ Yes	☐ No	
Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☒ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	☒ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

Weiss Associates

WATER SAMPLING DATA SHEET

PROJECT NAME: UC Davis LEHR/SCDS **Sample Location:** UCD1-055 **Sample ID:** GWGW2375

PROJECT NO: 388-1856-2-16 **Sampled By:** KWA **Sample Date:** Dec 5, 2008

Sample Time: 0950

WEATHER ☐ Sunny ☐ Cloudy ☐ Rainy ☑ Foggy ☐ Windy Temp:

SAMPLE TYPE ☑ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0880	1312869	OAKTON	☑ 4 4.00	☑ 7 7.03	☑ 10 10.12
pH (final)						
Conductivity				1413=1413		
Turbidity						
Other:						

SAMPLE PORT* ☐ PVC ☑ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 3550358 gal. Rate: gpm Time:

End: 3551351 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other: DO / ORP
0930	0	8.15	14.8	1141	42.25	6.36/59.4/390
0933	3	7.88	17.3	1143	42.50	5.91/58.6/375
0936	6	7.86	17.7	1138	42.70	5.65/58.0/381
0940	10	7.82	17.8	1136	42.76	5.57/57.7/355
0950	—	7.81	17.9	1136	42.70	5.48/57.5/384
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☐ Clear ☐ Grey ☐ Yellow ☑ Brown ☐ Tan ☐ Black ☐ Cloudy ☐ Other:

Odor: ☑ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic ☐ Other:

Solids: ☑ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity ☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other: ☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
			SEE COC			

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☑ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET (Page 2)

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-055	**Sample ID:**	GWGW2375
PROJECT NO:	388-1856-2-16	**Sampled By:**	KHA	**Sample Date:**	Dec 5, 2008
				Sample Time:	0957

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions		
Water Level Meter No.: 150024				locked?	Yes ☐	No ☑
Depth to Water	DTW	42.25	ft.	casing	OK ☑	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☑	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☑	Not OK ☐
Specified Well Depth	SWD		ft.	vault	OK ☑	Not OK ☐
Measured Well Depth	MWD	62.00	ft.	Comments:		
Well Diameter	D	2	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	19.75	ft.	
Well Casing Volume	WCV = SWH * V_D	3.22	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	9.66	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☐ Yes	☑ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☑ PVC	☑ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☑ Yes	☐ No	☐ N/A
Method:	☐ Steam	☑ Alconox	☑ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☑ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☐ Yes	☑ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☑ PVC	☑ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☑ Yes	☐ No	☐ N/A
Method:	☐ Steam	☑ Alconox	☑ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

Weiss Associates

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-058	**Sample ID:**	GWGW2376
PROJECT NO:	388-1856-2-16	**Sampled By:**	KWA	**Sample Date:**	Dec 4, 2008
				Sample Time:	1625

WEATHER ☑ Sunny ☐ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp:

SAMPLE TYPE ☑ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0900	1312589	OAKTON	☑ 4 3.99	☑ 7 7.04	☑ 10 10.13
pH (final)						
Conductivity				1413 = 1413		
Turbidity						
Other:						

SAMPLE PORT* ☑ PVC ☑ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 345257 gal. Rate: gpm Time:

End: 345467 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other: DO / % / ORP
1600	0	8.02	16.2	1156	46.40	5.10/51.4/229
1605	4	7.92	17.9	1140	48.40	5.02/52.3/214
1610	8	7.88	18.2	1144	48.40	5.09/53.6/208
1615	12.05	7.86	18.4	1143	48.40	5.18/54.7/199
1625	—	7.86	18.4	1141	48.40	5.16/54.8/197
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☐ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black ☐ Cloudy ☐ Other:

Odor: ☐ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic ☐ Other:

Solids: ☐ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity ☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other: ☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
			SEE COC			

Final Check: VOAs free of air bubbles? ☑ Yes KWA ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET (Page 2)

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-058	**Sample ID:**	GWGW2376
PROJECT NO:	388-1856-2-16	**Sampled By:**	KLL	**Sample Date:**	Dec 4, 2008
				Sample Time:	1625

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements	Well Conditions		
Water Level Meter No.:	15024		locked?	Yes ☐	No ☐
Depth to Water	DTW	46.35 ft.	casing	OK ☐	Not OK ☐
Depth to Product	DTP	ft.	plugs	OK ☐	Not OK ☐
Product Thickness	PT	ft.	seal	OK ☐	Not OK ☐
Specified Well Depth	SWD	ft.	vault	OK ☐	Not OK ☐
Measured Well Depth	MWD	71.01 ft.	Comments:		
Well Diameter	D	2 inches			

PURGE CALCULATIONS	Formula	Value	Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	~~0~~ 24.65 ft.	
Well Casing Volume	WCV = SWH * V_D	~~0~~ 4.01 gal.	
Well Casing Volumes to be Purged	N	3	
Total to be Purged	= WCV * N	~~0~~ 12.03 gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☐ Yes	~~☐~~ No	
Pump ID#:	☐ Bladder	~~☐~~ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	~~☐~~ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		~~☐~~ PVC	~~☐~~ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	~~☐~~ Yes	☐ No	☐ N/A
Method:	☐ Steam	~~☐~~ Alconox	~~☐~~ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	~~☐~~ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☐ Yes	~~☐~~ No	
Pump ID#:	☐ Bladder	~~☐~~ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	~~☐~~ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		~~☐~~ PVC	~~☐~~ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	~~☐~~ Yes	☐ No	☐ N/A
Method:	☐ Steam	~~☐~~ Alconox	~~☐~~ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

Weiss Associates

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-061	**Sample ID:**	GWGW2377
PROJECT NO:	388-1856-2-16	**Sampled By:**	12/4	**Sample Date:**	Dec 4, 2008
				Sample Time:	1430

WEATHER ☑ Sunny ☐ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp:

SAMPLE TYPE ☑ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results
pH (initial)	0900	131289	OAKTON	☑ 4 3.99 ☑ 7 7.04 ☑ 10 10.13
pH (final)				
Conductivity				1413=1413
Turbidity				
Other:				

SAMPLE PORT* ☑ PVC ☑ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 345037 gal. Rate: gpm Time:
End: 345251 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other: DO/%/ORP
1405	0	7.99	17.2	1271	47.40	1.73/17.5/203
1410	4	7.80	17.7	1258	48.80	1.30/13.3/183
1415	8	7.73	18.3	1251	48.80	1.36/14.5/147
1420	12	7.70	18.9	1244	48.80	1.52/16.5/123
1430	—	7.69	19.0	1242	48.80	1.49/16.2/116
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☑ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black
☐ Cloudy ☐ Other:

Odor: ☑ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic
☐ Other:

Solids: ☑ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity
☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other:
☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☑ Yes ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET (Page 2)

PROJECT NAME: UC Davis LEHR/SCDS
PROJECT NO: 388-1856-2-16
Sample Location: UCD1-061
Sampled By: KMA
Sample ID: GWGW2377
Sample Date: Dec 4, 2008
Sample Time: 1430

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements	Well Conditions	
Water Level Meter No.: 18024			locked?	Yes ☐ No ☑
Depth to Water	DTW	47.40 ft.	casing	OK ☑ Not OK ☐
Depth to Product	DTP	ft.	plugs	OK ☑ Not OK ☐
Product Thickness	PT	ft.	seal	OK ☑ Not OK ☐
Specified Well Depth	SWD	ft.	vault	OK ☑ Not OK ☐
Measured Well Depth	MWD	71.00 ft.	Comments:	
Well Diameter	D	2 inches		

PURGE CALCULATIONS	Formula	Value	Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	23.60 ft.	
Well Casing Volume	WCV = SWH * V_D	3.85 gal.	
Well Casing Volumes to be Purged	N	3	
Total to be Purged	= WCV * N	11.55 gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT

Pump ID#:	☐ Bladder	☑ Submersible	Dedicated:	☐ Yes	☑ No	
Tubing:	☐ Disposable	☐ PVC	☐ Sump	☐ Peristaltic	☐ Other:	
Bailer ID#:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Sample Port:		☑ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
			☑ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination					
Method:	☐ Steam	Decon:	☑ Yes	☐ No	☐ N/A
		☑ Alconox	☑ DI Water	☐ Other	

PURGE TIME AND WELL RECOVERY

			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☑ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT

Pump ID#:	☐ Bladder	☑ Submersible	Dedicated:	☐ Yes	☑ No	
Tubing:	☐ Disposable	☐ PVC	☐ Sump	☐ Peristaltic	☐ Other:	
Bailer ID#:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Sample Port:		☑ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
			☑ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination					
Method:	☐ Steam	Decon:	☑ Yes	☐ No	☐ N/A
		☑ Alconox	☑ DI Water	☐ Other	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft)

h = height of water column (ft)

1 ft^3 = 7.48 gallons

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

Weiss Associates

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-062	**Sample ID:**	GWGW2378
PROJECT NO:	388-1856-2-16	**Sampled By:**	KHA	**Sample Date:**	Dec 3, 2008
				Sample Time:	1725

WEATHER ☐ Sunny ☑ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp:

SAMPLE TYPE ☑ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0930	1312789	OAKTON	☑4 3.99	☑7 7.03	☑10 10.12
pH (final)						
Conductivity				1413=1413		
Turbidity						
Other:						

SAMPLE PORT* ☐ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 3314589 gal. Rate: gpm Time:

End: 3315605 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other: DO / ORP
1700	0	7.66	16.8	1669	47.30	2.54/25.9/174
1705	4	7.55	17.7	1674	50.00	3.50/37/160
1710	8	7.55	16.2	1677	50.00	2.93/30.7/155
1715	12	7.57	16.7	1685	50.00	4.16/43.5/154
1725		7.59	15.9	1678	50.00	4.08/41.3/149
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☐ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black
☑ Cloudy ☐ Other:

Odor: ☑ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic
☐ Other:

Solids: ☑ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity
☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other:
☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET (Page 2)

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-062	**Sample ID:**	GWGW2378
PROJECT NO:	388-1856-2-16	**Sampled By:**	KHA	**Sample Date:**	Dec 3, 2008
				Sample Time:	1775

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions		
Water Level Meter No.: 180024				locked?	Yes ☐	No ☑
Depth to Water	DTW	47.30	ft.	casing	OK ☐	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐	Not OK ☐
Specified Well Depth	SWD		ft.	vault	OK ☐	Not OK ☐
Measured Well Depth	MWD	71.00	ft.	Comments:		
Well Diameter	D	2	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	23.70	ft.	
Well Casing Volume	WCV = SWH * V_D	3.86	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	11.58	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☐ Yes	☑ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☑ PVC	☑ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☑ Yes	☐ No	☐ N/A
Method:	☐ Steam	☑ Alconox	☑ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☑ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:		% Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☐ Yes	☑ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☑ PVC	☑ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☑ Yes	☐ No	☐ N/A
Method:	☐ Steam	☑ Alconox	☑ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

Weiss Associates

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-063	**Sample ID:**	GWGW2379A/B
PROJECT NO:	388-1856-2-16	**Sampled By:**	KHA	**Sample Date:**	Dec 3, 2008
				Sample Time:	1630

WEATHER ☑ Sunny ☐ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp:

SAMPLE TYPE ☑ Original ☑ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE ☒ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results
pH (initial)	0930	131289	OAKTON	☑ 4 3.99 ☑ 7 7.03 ☑ 10 10.12
pH (final)				
Conductivity				1413=1413
Turbidity				
Other:				

SAMPLE PORT* ☐ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 330817 gal. Rate: gpm Time:
End: 331489 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other: DO / % / ORP
1605	0	8.31	14.8	678	50.03	7.74/75.3/145
1610	5	8.10	15.8	665	54.25	7.08/71.6/133
1615	10	8.07	16.1	662	54.25	7.10/73.0/125
1620	15	8.07	16.1	659	54.25	7.26/74.6/125
1630	—	8.07	15.9	653	54.25	6.55/70.9/125
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☑ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black
☐ Cloudy ☐ Other:

Odor: ☑ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic
☐ Other:

Solids: ☑ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity
☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other:
☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
			GREE	COL		

Final Check: VOAs free of air bubbles? ☑ Yes ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET (Page 2)

PROJECT NAME: UC Davis LEHR/SCDS
PROJECT NO: 388-1856-2-16
Sample Location: UCD1-063
Sampled By: KMA
Sample ID: GWGW2379A/B
Sample Date: Dec 3, 2008
Sample Time: 1631

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS

Water Level Meter No.: 18024

		Measurements	Well Conditions		
Depth to Water	DTW	50.05 ft.	locked?	Yes ☑	No ☐
Depth to Product	DTP	ft.	casing	OK ☑	Not OK ☐
Product Thickness	PT	ft.	plugs	OK ☑	Not OK ☐
Specified Well Depth	SWD	ft.	seal	OK ☑	Not OK ☐
Measured Well Depth	MWD	80.00 ft.	vault	OK ☑	Not OK ☐
Well Diameter	D	2 inches	Comments:		

PURGE CALCULATIONS

	Formula	Value	Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	~~0~~ 29.95 ft.	
Well Casing Volume	WCV = SWH * V_D	~~0~~ 4.88 gal.	
Well Casing Volumes to be Purged	N	3	
Total to be Purged	= WCV * N	~~0~~ 14.65 gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT

Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☑ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Dedicated: ☐ Yes ☑ No

Purge Equipment Decontamination

Decon: ☑ Yes ☐ No ☐ N/A

Method: ☐ Steam ☑ Alconox ☑ DI Water ☐ Other

PURGE TIME AND WELL RECOVERY

			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☑ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT

Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☑ PVC	☑ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Dedicated: ☐ Yes ☑ No

Sample Equipment Decontamination

Decon: ☑ Yes ☐ No ☐ N/A

Method: ☐ Steam ☑ Alconox ☑ DI Water ☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft)

h = height of water column (ft)

1 ft^3 = 7.48 gallons

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

Weiss Associates

WATER SAMPLING DATA SHEET

PROJECT NAME: UC Davis LEHR/SCDS **Sample Location:** UCD1-064 **Sample ID:** GWGW2380

PROJECT NO: 388-1856-2-16 **Sampled By:** KHA **Sample Date:** Dec 3, 2008

Sample Time: 1110

WEATHER ☐ Sunny ☑ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp:

SAMPLE TYPE ☑ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0930	131289	OAKTON	☑ 4= 3.99	☑ 7=7.03	☑ 10= 10.12
pH (final)						
Conductivity				1413=1413		
Turbidity						
Other:						

SAMPLE PORT* ☑ PVC ☑ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 330368 gal. Rate: gpm Time:

End: 330528 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other DO / % / ORP
1050	0	7.90	16.5	1117	46.20	3.24 / 32.1 / 330
1054	4	7.87	17.9	1102	46.20	2.69 / 27.9 / 313
1058	8	7.85	18.1	1094	46.20	2.53 / 26.9 / 240
1102	12.5	7.83	18.2	1092	46.20	2.63 / 28.1 / 261
1115	—	7.85	18.2	1106	46.20	3.14 / 33.3 / 134
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☐ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black ☑ Cloudy ☐ Other:

Odor: ☑ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic ☐ Other:

Solids: ☑ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity ☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other: ☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
GWGW 2380	PLASTIC	5	1000	HNO3	Y	
	PLASTIC	2	250	HNO3	Y	
	~~AMBER~~ PL	~~2~~ 1	500	HNO3	Y	
	AMBER	3	1000	NAZS2O3	N	
	AMBER	2	500	NONE	N	
	AMBER	2	125	NONE	N	
Final Check:	VOAs free of air bubbles?	☐ Yes	☐ No	☐ N/A		
	PLASTIC	2	125	NONE	N	
	VOA	3	40	HCl	N	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET (Page 2)

PROJECT NAME: UC Davis LEHR/SCDS **Sample Location:** UCD1-064 **Sample ID:** GWGW2380

PROJECT NO: 388-1856-2-16 **Sampled By:** KWA **Sample Date:** Dec 3, 2008

Sample Time: 1110

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements	Well Conditions		
Water Level Meter No.: 18024			locked?	Yes ☐	No ☑
Depth to Water	DTW	45.20 ft.	casing	OK ☐	Not OK ☐
Depth to Product	DTP	ft.	plugs	OK ☐	Not OK ☐
Product Thickness	PT	ft.	seal	OK ☐	Not OK ☐
Specified Well Depth	SWD	ft.	vault	OK ☐	Not OK ☐
Measured Well Depth	MWD	70.5 ft.	Comments:		
Well Diameter	D	2 inches			

PURGE CALCULATIONS	Formula	Value	Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	~~0~~ 25.30 ft.	
Well Casing Volume	WCV = SWH * V_D	~~0~~ 4.12 gal.	
Well Casing Volumes to be Purged	N	3	
Total to be Purged	= WCV * N	~~0~~ 12.36 gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT						
			Dedicated:	☐ Yes	☑ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☑ PVC	☑ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination					
	Decon:	☑ Yes	☐ No	☐ N/A	
Method:	☐ Steam	☑ Alconox	☐ DI Water	☐ Other	

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☑ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:		Total Purge Time:		

SAMPLE EQUIPMENT						
			Dedicated:	☐ Yes	☑ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☑ PVC	☑ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination					
	Decon:	☑ Yes	☐ No	☐ N/A	
Method:	☐ Steam	☑ Alconox	☐ DI Water	☐ Other	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

Weiss Associates

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-065	**Sample ID:**	GWGW2381
PROJECT NO:	388-1856-2-16	**Sampled By:**	KHA	**Sample Date:**	Dec 3, 2008
				Sample Time:	1455

WEATHER ☐ Sunny ☑ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp:

SAMPLE TYPE ☑ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:
SAMPLE SOURCE ☒ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0930	1312589	OAKTON	☑ 4 = 3.99	☑ 7 = 7.03	☑ 10 = 10.12
pH (final)						
Conductivity				1413 = 1413		
Turbidity						
Other:						

SAMPLE PORT* ☑ PVC ☑ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 330528 gal. Rate: gpm Time:
End: 330817 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other: DO % ORP
1430	0	7.98	17.0	1082	49.00	2.59 / 26.5 / 199
1435	4	7.81	17.2	1079	51.35	.99 / 10.1 / 189
1440	8	7.77	17.6	1094	51.35	.88 / 9.2 / 172
1445	11.5	7.71	17.7	1099	51.35	.87 / 9.2 / 167
		7.74	17.7	1122	51.35	1.10 / 11.8 / 133
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☑ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black
☐ Cloudy ☐ Other:

Odor: ☑ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic
☐ Other:

Solids: ☑ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity
☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other:
☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
GWGW2381	PLASTIC	5	~~1000 ML~~			
			SEE	COC		

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET (Page 2)

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-065	**Sample ID:**	GWGW2381
PROJECT NO:	388-1856-2-16	**Sampled By:**	KHA	**Sample Date:**	Dec 3, 2008
				Sample Time:	1415

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS				**Well Conditions**		
Water Level Meter No.: 180024		Measurements		locked?	Yes ☑	No ☐
Depth to Water	DTW	48.68	ft.	casing	OK ☐	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐	Not OK ☐
Specified Well Depth	SWD		ft.	vault	OK ☐	Not OK ☐
Measured Well Depth	MWD	72.00	ft.	Comments:		
Well Diameter	D	2	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	23.32	ft.	
Well Casing Volume	WCV = SWH * V_D	3.80	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	11.40	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT								Dedicated:	☐ Yes	☐ No
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:					
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon				
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:					
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass				

Purge Equipment Decontamination				Decon:	☑ Yes	☐ No	☐ N/A
Method:	☐ Steam	☑ Alconox	☑ DI Water	☐ Other			

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☐ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT								Dedicated:	☐ Yes	☑ No
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:					
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon				
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:					
Sample Port:		☑ PVC	☑ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass				

Sample Equipment Decontamination				Decon:	☐ Yes	☐ No	☐ N/A
Method:	☐ Steam	☑ Alconox	☑ DI Water	☐ Other			

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

Weiss Associates

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-066	**Sample ID:**	GWGW2382A/B
PROJECT NO:	388-1856-2-16	**Sampled By:**	KMA	**Sample Date:**	Dec 4, 2008
				Sample Time:	1145

WEATHER ☐ Sunny ☑ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp:

SAMPLE TYPE ☑ Original ☑ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:
SAMPLE SOURCE ☒ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0900	1312859	Oakton	☑ 4 3.99	☑ 7 7.04	☐ 10 10.03
pH (final)						
Conductivity				1413=1413		
Turbidity						
Other:						

SAMPLE PORT* ☑ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 345598 gal. Rate: gpm Time:
End: 345037 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other: DO / ORP
1110	0	7.66	16.8	1450	46.58	4.29/42.9/169
1115	4	7.59	17.8	1464	47.90	3.99/42.5/148
1120	8	7.57	18.2	1464	47.90	4.03/43.2/142
1125	12.5	7.55	18.4	1479	47.90	4.05/43.7/137
	—	7.55	18.6	1475	47.90	4.11/44.1/136
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☐ Clear ☐ Grey ☐ Yellow ☑ Brown ☐ Tan ☐ Black
☑ Cloudy ☐ Other:

Odor: ☑ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic
☐ Other:

Solids: ☑ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity
☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other:
☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
			See	COC		

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET (Page 2)

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD1-066	**Sample ID:**	GWGW2382A/B
PROJECT NO:	388-1856-2-16	**Sampled By:**	KHA	**Sample Date:**	Dec 4, 2008
				Sample Time:	1145

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements	Well Conditions		
Water Level Meter No.:			locked?	Yes ☐	No ☑
Depth to Water	DTW	46.58 ft.	casing	OK ☐	Not OK ☐
Depth to Product	DTP	ft.	plugs	OK ☐	Not OK ☐
Product Thickness	PT	ft.	seal	OK ☐	Not OK ☐
Specified Well Depth	SWD	ft.	vault	OK ☐	Not OK ☐
Measured Well Depth	MWD	72.00 ft.	Comments:		
Well Diameter	D	2 inches			

PURGE CALCULATIONS	Formula	Value	Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	25.42 ft.	
Well Casing Volume	WCV = SWH * V_D	4.14 gal.	
Well Casing Volumes to be Purged	N	3	
Total to be Purged	= WCV * N	12.42 gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☐ Yes	☑ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☑ PVC	☑ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☑ Yes	☐ No	☐ N/A
Method:	☐ Steam	☑ Alconox	☑ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☑ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:		Total Purge Time:		

SAMPLE EQUIPMENT			Dedicated:	☐ Yes	☑ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☑ PVC	☑ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☑ Yes	☐ No	☐ N/A
Method:	☐ Steam	☑ Alconox	☑ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

Weiss Associates

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-039	**Sample ID:**	GWGW2383
PROJECT NO:	388-1856-2-16	**Sampled By:**	MD	**Sample Date:**	Dec 3, 2008
				Sample Time:	1650

WEATHER	☐ Sunny	☒ Cloudy	☐ Rainy	☐ Foggy	☐ Windy	Temp: 60
SAMPLE TYPE	☒ Original	☐ Duplicate	☐ Trip Blank	☐ Equip. Blank	☐ Other:	
SAMPLE SOURCE	X Monitoring Well	☐ Extraction Well	☐ Piezometer	☐ System*.	☐ Other:	

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0730	110732	Orion	☒ 4.01	☒ 7.06	☒ 10.18
pH (final)						
Conductivity				1412		
Turbidity						
Other:						

SAMPLE PORT*	☒ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

TOTALIZER	Start: ~~36123.5~~ 36152 gal.	Rate:	gpm	Time:	
	End: gal.	Rate:	gpm	Time:	

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other: DO	ORP
1625	start	7.71	17.0	821	47.01	1.07	722
1632	10	7.71	16.9	814	47.08	1.57	721
1638	20	7.72	16.7	815	47.08	1.57	722
1646	29	7.73	16.5	800	47.09	1.45	722
1655	Post	7.74	16.5	790	—	1.40	723
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%	
Precision:		0.10	1.0 °C	10 µS/cm			

SAMPLE APPEARANCE

Color:	☒ Clear	☐ Grey	☐ Yellow	☐ Brown	☐ Tan	☐ Black
	☐ Cloudy	☐ Other:				
Odor:	☒ None	☐ Gasoline	☐ Diesel	☐ Solvent	☐ Sulfur	☐ Metallic
	☐ Other:					
Solids:	☒ None	☐ Trace	☐ Small Quantity	☐ Mod. Quantity	☐ Large Quantity	
	☐ Silt	☐ Sand	☐ Gravel	☐ Organic Material		☐ Other:
	☐ Separate Phase Hydrocarbons		☐ Sheen	☐ Measurable Amount:		mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☒ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET (Page 2)

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-039	**Sample ID:**	GWGW2383
PROJECT NO:	388-1856-2-16	**Sampled By:**	JMD	**Sample Date:**	Dec 3, 2008
				Sample Time:	1:50

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions		
Water Level Meter No.:				locked?	Yes ☒	No ☐
Depth to Water	DTW	47.01	ft.	casing	OK ☒	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☒	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☒	Not OK ☐
Specified Well Depth	SWD	106	ft.	vault	OK ☒	Not OK ☐
Measured Well Depth	MWD		ft.	Comments:		
Well Diameter	D	2	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 58.99	ft.	
Well Casing Volume	WCV = SWH * V_D	0 9.6	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	0 28.8	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☒ Yes	☐ No	
Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☒ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	☒ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☒ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☒ Yes	☐ No	
Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☒ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	☒ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

Weiss Associates

WATER SAMPLING DATA SHEET

PROJECT NAME: UC Davis LEHR/SCDS **Sample Location:** UCD2-040 **Sample ID:** GWGW2384

PROJECT NO: 388-1856-2-16 **Sampled By:** MD **Sample Date:** Dec 5, 2008

Sample Time: 1115

WEATHER ☒ Sunny ☒ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp: 55

SAMPLE TYPE ☒ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE ☒ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0530	110752	Oakton	☒ 4.00	☒ 7.00	☒ 10.00
pH (final)						
Conductivity				1413		
Turbidity						
Other:						

SAMPLE PORT* ☒ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 36498 gal. Rate: gpm Time:

End: 36541 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other: DO	ORP
1056	Start	7.46	14.8	842	44.40	2.85	568
1103	11	7.51	15.5	866	44.60	2.20	566
1107	21	7.53	16.0	870	44.60	2.09	567
1111	31	7.56	16.2	875	44.60	2.04	568
1120	Post	7.53	16.1	876	—	2.00	570
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%	
Precision:		0.10	1.0 °C	10 µS/cm			

SAMPLE APPEARANCE

Color: ☒ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black ☐ Cloudy ☐ Other:

Odor: ☒ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic ☐ Other:

Solids: ☒ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity ☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other: ☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET (Page 2)

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-040	**Sample ID:**	GWGW2384
PROJECT NO:	388-1856-2-16	**Sampled By:**	JMB	**Sample Date:**	Dec 5, 2008
				Sample Time:	1115

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions		
Water Level Meter No.:				locked?	Yes ☒	No ☐
Depth to Water	DTW	44.40	ft.	casing	OK ☒	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☒	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☒	Not OK ☐
Specified Well Depth	SWD	106	ft.	vault	OK ☒	Not OK ☐
Measured Well Depth	MWD		ft.	Comments:		
Well Diameter	D	2	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 61.60	ft.	
Well Casing Volume	WCV = SWH * V_D	0 10.0	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	0 30.1	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☒ Yes	☐ No	
Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☒ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	☒ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☒ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☒ Yes	☐ No	
Pump ID#:	☒ Bladder	☒ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☒ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	☒ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

Weiss Associates

WATER SAMPLING DATA SHEET

PROJECT NAME: UC Davis LEHR/SCDS **Sample Location:** UCD2-046 **Sample ID:** GWGW2385

PROJECT NO: 388-1856-2-16 **Sampled By:** JMD **Sample Date:** Dec 5, 2008

Sample Time: 1335

WEATHER ☒ Sunny ☐ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp: 60

SAMPLE TYPE ☒ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0850	110782	Oakton	☒4.00	☒7.09	☒10.00
pH (final)						
Conductivity				1413		
Turbidity						
Other:						

SAMPLE PORT* ☒ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 36556 gal. Rate: gpm Time:

End: 36602 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:	ORP
1316	Start	7.61	17.4	1099	43.00	2.39	573
1320	11	7.60	17.3	1097	43.08	2.32	559
1325	21	7.57	17.3	1108	43.12	3.66	570
1330	31	7.55	17.2	1119	43.16	3.80	565
1338	Post	7.54	17.6	1123	—	2.30	573
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%	
Precision:		0.10	1.0 °C	10 µS/cm			

SAMPLE APPEARANCE

Color: ☒ Clear ☐ Cloudy ☐ Grey ☐ Other: ☐ Yellow ☐ Brown ☐ Tan ☐ Black

Odor: ☒ None ☐ Other: ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic

Solids: ☒ None ☐ Silt ☐ Trace ☐ Sand ☐ Separate Phase Hydrocarbons ☐ Small Quantity ☐ Gravel ☐ Sheen ☐ Mod. Quantity ☐ Organic Material ☐ Measurable Amount: mm ☐ Large Quantity ☐ Other:

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☒ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

SAMPLING DATA SHEET (Page 2)

PROJECT NAME: UC Davis LEHR/SCDS
PROJECT NO: 388-1856-2-16
Sample Location: UCD2-046
Sampled By: JMD
Sample ID: GWGW2385
Sample Date: Dec 5, 2008
Sample Time: 1355

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS

Water Level Meter No.:

		Measurements		Well Conditions		
Depth to Water	DTW	43.00	ft.	locked?	Yes ☐	No ☐
Depth to Product	DTP		ft.	casing	OK ☐	Not OK ☐
Product Thickness	PT		ft.	plugs	OK ☐	Not OK ☐
Specified Well Depth	SWD	106	ft.	seal	OK ☐	Not OK ☐
Measured Well Depth	MWD		ft.	vault	OK ☐	Not OK ☐
Well Diameter	D	2	inches	Comments:		

PURGE CALCULATIONS

	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 63.00	ft.	
Well Casing Volume	WCV = SWH * V_D	0 10.2	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	0 30.8	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT

Pump ID#:	☐ Bladder	X Submersible	Dedicated:	X Yes	☐ No	
Tubing:	☐ Disposable	☐ PVC	☐ Sump	☐ Peristaltic	☐ Other:	
Bailer ID#:	☐ Disposable	☐ PVC	X Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
			☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination

Method:	☐ Steam	Decon:	☐ Yes	☐ No	X N/A
		☐ Alconox	☐ DI Water	☐ Other	

PURGE TIME AND WELL RECOVERY

			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	X No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT

Pump ID#:	☐ Bladder	X Submersible	Dedicated:	X Yes	☐ No	
Tubing:	☐ Disposable	☐ PVC	☐ Sump	☐ Peristaltic	☐ Other:	
Bailer ID#:	☐ Disposable	☐ PVC	X Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
			☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination

Method:	☐ Steam	Decon:	☐ Yes	☐ No	X N/A
		☐ Alconox	☐ DI Water	☐ Other	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft)

h = height of water column (ft)

1 ft^3 = 7.48 gallons

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

Weiss Associates

WATER SAMPLING DATA SHEET

PROJECT NAME: UC Davis LEHR/SCDS **Sample Location:** UCD2-048 **Sample ID:** GWGW2386

PROJECT NO: 388-1856-2-16 **Sampled By:** JMD **Sample Date:** Dec 5, 2008

Sample Time: 0950

WEATHER ☐ Sunny ☒ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp 45

SAMPLE TYPE ☒ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE ☒ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0800	117732	Oakton	☒ 4.00	☒ 7.00	☒ 10.20
pH (final)						
Conductivity				1413		
Turbidity						
Other:						

SAMPLE PORT* ☒ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 36381 gal. Rate: gpm Time:

End: 36498 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other: DO	ORP
0916	Start	8.53	11.1	830	48.92	5.00	547
0926	34	8.27	11.2	830	49.10	3.47	484
0935	68	8.01	12.1	825	49.14	3.04	512
0945	101	7.86	12.5	826		2.48	510
0955	Post	7.69	12.3	827	—	2.20	501
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%	
Precision:		0.10	1.0 °C	10 µS/cm			

SAMPLE APPEARANCE

Color: ☒ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black ☐ Cloudy ☐ Other:

Odor: ☒ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic ☐ Other:

Solids: ☒ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity ☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other: ☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☒ Yes ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

...ING DATA SHEET (Page 2)

PROJECT NAME: UC Davis LEHR/SCDS
PROJECT NO: 388-1856-2-16

Sample Location: UCD2-048
Sampled By: JMD

Sample ID: GWGW2386
Sample Date: Dec 5, 2008
Sample Time: 0950

SAMPLE SOURCE ☒ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS

Water Level Meter No.:

		Measurements		Well Conditions		
Depth to Water	DTW	48.92	ft.	locked?	Yes ☐	No ☐
Depth to Product	DTP		ft.	casing	OK ☐	Not OK ☐
Product Thickness	PT		ft.	plugs	OK ☐	Not OK ☐
Specified Well Depth	SWD	100	ft.	seal	OK ☐	Not OK ☐
Measured Well Depth	MWD		ft.	vault	OK ☐	Not OK ☐
Well Diameter	D	4	inches	Comments:		

PURGE CALCULATIONS

	Formula	Value		
Standing Water Height	SWH = MWD - DTW	0 51.08	ft.	Actual gal. Purged:
Well Casing Volume	WCV = SWH * V_D	0 33.3	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	0 100.1	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT

Pump ID#:	☒ Bladder	☐ Submersible	☐ Sump	Dedicated: ☒ Yes	☐ No	
Tubing:	☐ Disposable	☐ PVC	☒ Polyethylene	☐ Peristaltic	☐ Other:	
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
			☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination

Method:	☐ Steam	☐ Alconox	☐ DI Water	Decon: ☐ Yes	☐ No ☒ N/A
			☐ Other		

PURGE TIME AND WELL RECOVERY

			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☒ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT

Pump ID#:	☐ Bladder	☒ Submersible	☐ Sump	Dedicated: ☒ Yes	☐ No	
Tubing:	☐ Disposable	☐ PVC	☒ Polyethylene	☐ Peristaltic	☐ Other:	
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
					☐ Stainless	☐ Brass

Sample Equipment Decontamination

Method:	☐ Steam	☐ Alconox	☐ DI Water	Decon: ☐ Yes	☐ No ☒ N/A
			☐ Other		

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft)

h = height of water column (ft)

1 ft^3 = 7.48 gallons

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

Weiss Associates

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-056	**Sample ID:**	GWGW2387
PROJECT NO:	388-1856-2-16	**Sampled By:**	KMA	**Sample Date:**	Dec 5, 2008
				Sample Time:	1130

WEATHER ☐ Sunny ☐ Cloudy ☐ Rainy ☑ Foggy ☐ Windy Temp:

SAMPLE TYPE ☑ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE ☑ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results
pH (initial)	0500	131289	DAKTON	☑ 4 4.00 ☑ 7 7.03 ☑ 10 10.17
pH (final)				
Conductivity				1413=1413
Turbidity				
Other:				

SAMPLE PORT* ☑ PVC ☑ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 358151 gal. Rate: gpm Time:
End: gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other: DO/T/ORP
1030	~~[illegible]~~ 0	7.80	17.1	1155	42.85	4.16/41.1/360
1045	~~[illegible]~~ 30	7.75	15.2	1157	43.00	3.35/35.6/360
1100	~~[illegible]~~ 60	7.75	15.3	1152	43.00	3.28/35.5/359
1120	90.5	7.75	15.2	1151	43.00	3.29/35.2/360
1130	—	7.75	15.3	1150	43.00	3.30/35.4/360
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☐ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black ☐ Cloudy ☐ Other:

Odor: ☐ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic ☐ Other:

Solids: ☐ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity ☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other: ☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
			SEE COC			

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET (Page 2)

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-056	**Sample ID:**	GWGW2387
PROJECT NO:	388-1856-2-16	**Sampled By:**	KNA	**Sample Date:**	Dec 5, 2008
				Sample Time:	1130

SAMPLE SOURCE ☑ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements	Well Conditions		
Water Level Meter No.: 18024			locked?	Yes ☐	No ☑
Depth to Water	DTW	42.85 ft.	casing	OK ☑	Not OK ☐
Depth to Product	DTP	ft.	plugs	OK ☑	Not OK ☐
Product Thickness	PT	ft.	seal	OK ☑	Not OK ☐
Specified Well Depth	SWD	ft.	vault	OK ☑	Not OK ☐
Measured Well Depth	MWD	89.00 ft.	Comments:		
Well Diameter	D	4 inches			

PURGE CALCULATIONS	Formula	Value	Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	46.15 ft.	
Well Casing Volume	WCV = SWH * V_D	30.13 gal.	
Well Casing Volumes to be Purged	N	3	
Total to be Purged	= WCV * N	90.39 gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☐ Yes	☑ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☑ PVC	☑ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☑ Yes	☐ No	☐ N/A
Method:	☐ Steam	☑ Alconox	☑ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☑ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☐ Yes	☑ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☑ PVC	☑ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☑ Yes	☐ No	☐ N/A
Method:	☐ Steam	☑ Alconox	☑ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

Weiss Associates

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-057	**Sample ID:**	GWGW2388
PROJECT NO:	388-1856-2-16	**Sampled By:**	KMA	**Sample Date:**	Dec 5, 2008
				Sample Time:	1412

WEATHER ☑ Sunny ☐ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp:

SAMPLE TYPE ☑ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE ☑ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0900	1312589	OAKTON	☑ 4 3.99	☑ 7 7.04	☑ 10 10.13
pH (final)						
Conductivity				1413=1413		
Turbidity						
Other:						

SAMPLE PORT* ☑ PVC ☑ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 3601778 gal. Rate: gpm Time:
End: 3601925 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other: DO / % / ORP
1420	0	7.91	17.8	1021	45.50	3.01/31.4/211
1428	35	7.82	18.7	1022	45.50	2.40/25.6/200
1436	70	7.82	17.8	1025	45.50	2.37/24.5/184
1444	105	7.84	17.9	1023	45.50	2.85/29.3/180
1450	—	7.84	17.9	1023	45.50	2.43/25.7/180
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☐ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black
☐ Cloudy ☐ Other:

Odor: ☐ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic
☐ Other:

Solids: ☐ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity
☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other:
☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
			SEE COC			

Final Check: VOAs free of air bubbles? ☑ Yes ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET (Page 2)

PROJECT NAME: UC Davis LEHR/SCDS
PROJECT NO: 388-1856-2-16

Sample Location: UCD2-057
Sampled By: KMA

Sample ID: GWGW2388
Sample Date: Dec 5, 2008
Sample Time: 1450

SAMPLE SOURCE ☑ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements	Well Conditions		
Water Level Meter No.: 18024			locked?	Yes ☐	No ☐
Depth to Water	DTW	45.60 ft.	casing	OK ☐	Not OK ☐
Depth to Product	DTP	ft.	plugs	OK ☐	Not OK ☐
Product Thickness	PT	ft.	seal	OK ☐	Not OK ☐
Specified Well Depth	SWD	ft.	vault	OK ☐	Not OK ☐
Measured Well Depth	MWD	97.01 ft.	Comments:		
Well Diameter	D	4 inches			

PURGE CALCULATIONS	Formula	Value	Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	51.40 ft.	
Well Casing Volume	WCV = SWH * V_D	33.56 gal.	
Well Casing Volumes to be Purged	N	3	
Total to be Purged	= WCV * N	100.68 gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT

Pump ID#:	☐ Bladder	☑ Submersible	Dedicated:	☐ Yes	☑ No	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Peristaltic	☐ Other:	
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Sample Port:		☑ PVC	☑ Polyethylene	☐ Teflon	☐ Other:	
					☐ Stainless	☐ Brass

Purge Equipment Decontamination					
Method:	☐ Steam	Decon:	☑ Yes	☐ No	☐ N/A
		☑ Alconox	☑ DI Water	☐ Other	

PURGE TIME AND WELL RECOVERY

			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☐ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT

Pump ID#:	☐ Bladder	☑ Submersible	Dedicated:	☐ Yes	☑ No	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Peristaltic	☐ Other:	
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Sample Port:		☑ PVC	☑ Polyethylene	☐ Teflon	☐ Other:	
					☐ Stainless	☐ Brass

Sample Equipment Decontamination					
Method:	☐ Steam	Decon:	☑ Yes	☐ No	☐ N/A
		☑ Alconox	☑ DI Water	☐ Other	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft)

h = height of water column (ft)

1 ft^3 = 7.48 gallons

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

Weiss Associates

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-059	**Sample ID:**	GWGW2389
PROJECT NO:	388-1856-2-16	**Sampled By:**	KMA	**Sample Date:**	Dec 5, 2008
				Sample Time:	1415

WEATHER ☑ Sunny ☐ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp:

SAMPLE TYPE ☑ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE ☑ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results
pH (initial)	0800	1312589	OAKTON	☑ 4 4.00 ☑ 7 7.03 ☑ 10 10.12
pH (final)				
Conductivity				1413=1413
Turbidity				
Other:				

SAMPLE PORT* ☑ PVC ☑ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 3592911 gal. Rate: gpm Time:

End: 3607778 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other: DO/ORP
1325	0	8.39	18.1	1086	45.65	7.75/78.0/360
1340	40	7.83	18.1	1105	45.65	5.15/54.9/266
1355	80	7.77	18.0	1100	45.65	5.08/60.3/216
1410	130	7.76	18.0	1099	45.65	6.11/65.4/196
1415	—	7.76	18.0	1092	45.65	6.31/67.5/190
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☐ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black ☐ Cloudy ☐ Other:

Odor: ☐ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic ☐ Other:

Solids: ☐ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity ☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other: ☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
			SEE COC			

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☑ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET (Page 2)

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-059	**Sample ID:**	GWGW2389
PROJECT NO:	388-1856-2-16	**Sampled By:**	KWA	**Sample Date:**	Dec 5, 2008
				Sample Time:	1415

SAMPLE SOURCE ☑ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements	Well Conditions		
Water Level Meter No.: 18024			locked?	Yes ☐	No ☐
Depth to Water	DTW	45.65 ft.	casing	OK ☐	Not OK ☐
Depth to Product	DTP	ft.	plugs	OK ☐	Not OK ☐
Product Thickness	PT	ft.	seal	OK ☐	Not OK ☐
Specified Well Depth	SWD	ft.	vault	OK ☐	Not OK ☐
Measured Well Depth	MWD	112.00 ft.	Comments:		
Well Diameter	D	4 inches			

PURGE CALCULATIONS	Formula	Value	Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	~~0~~ 66.35 ft.	
Well Casing Volume	WCV = SWH * V_D	~~0~~ 43.32 gal.	
Well Casing Volumes to be Purged	N	3	
Total to be Purged	= WCV * N	~~0~~ 129.96 gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☐ Yes	~~☐ No~~	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☑ PVC	☑ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☑ Yes	☐ No	☐ N/A
Method:	☐ Steam	☑ Alconox	☑ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☑ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:		Total Purge Time:		

SAMPLE EQUIPMENT			Dedicated:	☐ Yes	☑ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☑ PVC	☑ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☑ Yes	☐ No	☐ N/A
Method:	☐ Steam	☑ Alconox	☑ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

Weiss Associates

WATER SAMPLING DATA SHEET

PROJECT NAME: UC Davis LEHR/SCDS **Sample Location:** UCD2-060 **Sample ID:** GWGW2390

PROJECT NO: 388-1856-2-16 **Sampled By:** KHA **Sample Date:** Dec 4, 2008

Sample Time: 1035

WEATHER ☐ Sunny ☑ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp:

SAMPLE TYPE ☑ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE ☑ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0900	131289	OAKTON	☑ 4 3.99	☑ 7 7.04	☑ 10 10.13
pH (final)						
Conductivity				1413=1413		
Turbidity						
Other:						

SAMPLE PORT* ☑ PVC ☑ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 343162 gal. Rate: gpm Time:

End: 344598 gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other: DO / / ORP
0925	0	8.33	17.1	1055	43.10	3.51/33.1/101
0945	45	7.85	16.0	1043	43.10	2.93/30.9/134
1005	90	7.82	17.9	1042	43.10	2.84/29.9/117
1025	135	7.84	16.5	1040	43.10	2.76/27.8/117
1035	—	7.84	16.5	1040	43.10	2.80/28.2/116
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☐ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black ☐ Cloudy ☐ Other:

Odor: ☐ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic ☐ Other:

Solids: ☐ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity ☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other: ☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other
			SEE	COC		

Final Check: VOAs free of air bubbles? ☑ Yes ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET (Page 2)

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-060	**Sample ID:**	GWGW2390
PROJECT NO:	388-1856-2-16	**Sampled By:**	KNA	**Sample Date:**	Dec 4, 2008
				Sample Time:	

SAMPLE SOURCE ☑ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions		
Water Level Meter No.: 180024				locked?	Yes ☐	No ☑
Depth to Water	DTW	43.10	ft.	casing	OK ☐	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐	Not OK ☐
Specified Well Depth	SWD		ft.	vault	OK ☐	Not OK ☐
Measured Well Depth	MWD	112	ft.	Comments:		
Well Diameter	D	4	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	68.90	ft.	
Well Casing Volume	WCV = SWH * V_D	44.99	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	134.97	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☐ Yes	☑ No	
Pump ID#:	☐ Bladder	☑ Submersible	☑ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☑ PVC	☑ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☑ Yes	☐ No	☐ N/A	
Method:	☐ Steam	☑ Alconox	☑ DI Water	☐ Other	

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☑ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☐ Yes	☑ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☑ PVC	☑ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	☐ N/A	
Method:	☐ Steam	☑ Alconox	☑ DI Water	☐ Other	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

Weiss Associates

WATER SAMPLING DATA SHEET

PROJECT NAME: UC Davis LEHR/SCDS **Sample Location:** SP-2 IRA **Sample ID:** TPIN0365

PROJECT NO: **Sampled By:** JMD **Sample Date:** 12/4/08

Sample Time: 1410

WEATHER ☐ Sunny ☒ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp:

SAMPLE TYPE ☒ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE ☐ Monitoring Well ☐ Extraction Well ☐ Piezometer ☒ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)				☐ 4	☐ 7	☐ 10
pH (final)						
Conductivity						
Turbidity						
Other:						

SAMPLE PORT* ☐ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: gal. Rate: gpm Time:

End: gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
	Grab	Sample	Only			
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☒ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black ☐ Cloudy ☐ Other:

Odor: ☒ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic ☐ Other:

Solids: ☒ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity ☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other: ☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☒ Yes ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET (Page 2)

PROJECT NAME: UC Davis LEHR/SCDS | **Sample Location:** SP-2 IRA | **Sample ID:** TPIN0365

PROJECT NO: | **Sampled By:** JMY | **Sample Date:** 12/4/03

Sample Time: 1410

SAMPLE SOURCE ☐ Monitoring Well ☐ Extraction Well ☐ Piezometer ☒ System* ☐ Other:

WELL MEASUREMENTS		Measurements	Well Conditions		
Water Level Meter No.:			locked?	Yes ☐	No ☐
Depth to Water	DTW	ft.	casing	OK ☐	Not OK ☐
Depth to Product	DTP	ft.	plugs	OK ☐	Not OK ☐
Product Thickness	PT	ft.	seal	OK ☐	Not OK ☐
Specified Well Depth	SWD	ft.	vault	OK ☐	Not OK ☐
Measured Well Depth	MWD	ft.	Comments:		
Well Diameter	D	inches			

PURGE CALCULATIONS	Formula	Value	Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 ft.	
Well Casing Volume	WCV = SWH * V_D	0 gal.	
Well Casing Volumes to be Purged	N		
Total to be Purged	= WCV * N	0 gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☐ Yes	☐ No	
Pump ID#:	☐ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	☐ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☐ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☐ Yes	☐ No	
Pump ID#:	☐ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	☐ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) — 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

Weiss Associates

WATER SAMPLING DATA SHEET

PROJECT NAME: UC Davis LEHR/SCDS **Sample Location:** SP-5 IRA **Sample ID:** TPEF0365

PROJECT NO: **Sampled By:** JMD **Sample Date:** 12/4/08

Sample Time: 1350

WEATHER ☐ Sunny ☒ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp:

SAMPLE TYPE ☐ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE ☐ Monitoring Well ☐ Extraction Well ☐ Piezometer ☒ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)				☐ 4	☐ 7	☐ 10
pH (final)						
Conductivity						
Turbidity						
Other:						

SAMPLE PORT* ☐ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: gal. Rate: gpm Time:

End: gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
	Grab Sample only					
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☒ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black ☐ Cloudy ☐ Other:

Odor: ☒ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic ☐ Other:

Solids: ☒ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity ☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other: ☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☒ Yes ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET (Page 2)

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	SP-5 IRA	**Sample ID:**	TPEF0365
PROJECT NO:		**Sampled By:**	JMD	**Sample Date:**	12/4/08
				Sample Time:	1350

SAMPLE SOURCE ☐ Monitoring Well ☐ Extraction Well ☐ Piezometer ☒ System* ☐ Other:

WELL MEASUREMENTS			Well Conditions	
Water Level Meter No.:		Measurements	locked?	Yes ☐ No ☐
Depth to Water	DTW	ft.	casing	OK ☐ Not OK ☐
Depth to Product	DTP	ft.	plugs	OK ☐ Not OK ☐
Product Thickness	PT	ft.	seal	OK ☐ Not OK ☐
Specified Well Depth	SWD	ft.	vault	OK ☐ Not OK ☐
Measured Well Depth	MWD	ft.	Comments:	
Well Diameter	D	inches		

PURGE CALCULATIONS	Formula	Value	Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 ft.	
Well Casing Volume	WCV = SWH * V_D	0 gal.	
Well Casing Volumes to be Purged	N		
Total to be Purged	= WCV * N	0 gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☐ Yes	☐ No	
Pump ID#:	☐ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	☐ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY		1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry? ☐ No ☐ Yes	Start:				
DTW during Purging: ft.	Stop:				
SWH during Purging: ft.	Elapsed Time:				
MWD - 80%SWH: ft.	DTW:				
% Recovery at Sample Time: %	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☐ Yes	☐ No	
Pump ID#:	☐ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	☐ N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

NOT SAMPLED
OK 12/3/08

Weiss Associates

WATER SAMPLING DATA SHEET

PROJECT NAME: UC Davis LEHR/SCDS | **Sample Location: BT01** | **Sample ID:** CWGW0001
PROJECT NO: | **Sampled By:** | **Sample Date:**
Sample Time:

WEATHER ☐ Sunny ☐ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp:

SAMPLE TYPE ☐ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:
SAMPLE SOURCE ☐ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)				☐ 4	☐ 7	☐ 10
pH (final)						
Conductivity						
Turbidity						
Other:						

SAMPLE PORT* ☐ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: gal. Rate: gpm Time:
End: gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other:
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%
Precision:		0.10	1.0 °C	10 µS/cm		

SAMPLE APPEARANCE

Color: ☐ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black
☐ Cloudy ☐ Other:

Odor: ☐ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic
☐ Other:

Solids: ☐ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity
☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other:
☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET (Page 2) OK 12/3/08

PROJECT NAME: UC Davis LEHR/SCDS
PROJECT NO:
Sample Location: BT01
Sampled By:
Sample ID: CWGW0001
Sample Date:
Sample Time:

SAMPLE SOURCE ☐ Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS

Water Level Meter No.:

		Measurements	Well Conditions	
Depth to Water	DTW	ft.	locked?	Yes ☐ No ☐
Depth to Product	DTP	ft.	casing	OK ☐ Not OK ☐
Product Thickness	PT	ft.	plugs	OK ☐ Not OK ☐
Specified Well Depth	SWD	ft.	seal	OK ☐ Not OK ☐
Measured Well Depth	MWD	ft.	vault	OK ☐ Not OK ☐
Well Diameter	D	inches	Comments:	

PURGE CALCULATIONS

	Formula	Value	Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 ft.	
Well Casing Volume	WCV = SWH * V_D	0 gal.	
Well Casing Volumes to be Purged	N		
Total to be Purged	= WCV * N	0 gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT

Dedicated: ☐ Yes ☐ No

Pump ID#:	☐ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone ☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless ☐ Brass

Purge Equipment Decontamination

Decon: ☐ Yes ☐ No ☐ N/A

Method: ☐ Steam ☐ Alconox ☐ DI Water ☐ Other

PURGE TIME AND WELL RECOVERY

			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☐ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT

Dedicated: ☐ Yes ☐ No

Pump ID#:	☐ Bladder	☐ Submersible	☐ Sump	☐ Peristaltic	☐ Other:
Tubing:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Silicone ☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless ☐ Brass

Sample Equipment Decontamination

Decon: ☐ Yes ☐ No ☐ N/A

Method: ☐ Steam ☐ Alconox ☐ DI Water ☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft)

h = height of water column (ft)

1 ft^3 = 7.48 gallons

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

Weiss Associates

WATER SAMPLING DATA SHEET

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-014	**Sample ID:**	GWGW2403
PROJECT NO:	388-1856-2-16	**Sampled By:**	JMD	**Sample Date:**	Dec 4, 2008
				Sample Time:	1630

WEATHER ☐ Sunny ☒ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp: 55

SAMPLE TYPE ☒ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0730			☐ 4	☐ 7	☐ 10
pH (final)						
Conductivity						
Turbidity						
Other:						

SAMPLE PORT* ☐ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 36264 gal. Rate: gpm Time:
End: gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other: DO	ORP
1555	Start	7.64	17.7	765	48.75	1.14	583
1605	38	7.62	16.5	741	49.35	1.21	587
1617	76	7.64	16.7	734	49.35	0.94	591
1628	113	7.65	16.7	726	49.35	0.95	595
							5
1635	Post	7.67	16.9	735	—	0.89	584
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%	
Precision:		0.10	1.0 °C	10 µS/cm			

SAMPLE APPEARANCE

Color: ☒ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black
☐ Cloudy ☐ Other:

Odor: ☒ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic
☐ Other:

Solids: ☒ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity
☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other:
☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☐ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET (Page 2)

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-014	**Sample ID:**	GWGW2403
PROJECT NO:	388-1856-2-16	**Sampled By:**	JMO	**Sample Date:**	Dec 4, 2008
				Sample Time:	1630

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS		Measurements		Well Conditions		
Water Level Meter No.:				locked?	Yes ☑	No ☐
Depth to Water	DTW	48.75	ft.	casing	OK ☑	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☑	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☑	Not OK ☐
Specified Well Depth	SWD	106	ft.	vault	OK ☑	Not OK ☐
Measured Well Depth	MWD		ft.	Comments:		
Well Diameter	D	2	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 57.25	ft.	
Well Casing Volume	WCV = SWH * V_D	0 37.4	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	0 112.2	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	☑ Yes	☐ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	☑ N/A	
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other	

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	☑ No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	☑ Yes	☐ No	
Pump ID#:	☐ Bladder	☑ Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	☑ Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	☑ N/A	
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other	

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{5\text{-inch casing}}$ = 1.47 gallons/ft

$V_{6\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

Weiss Associates

WATER SAMPLING DATA SHEET

PROJECT NAME: UC Davis LEHR/SCDS **Sample Location:** UCD2-029 **Sample ID:** GWGW2404

PROJECT NO: 388-1856-2-16 **Sampled By:** JMD **Sample Date:** Dec 4, 2008

Sample Time: 1110

WEATHER ☐ Sunny ☒ Cloudy ☐ Rainy ☐ Foggy ☐ Windy Temp:

SAMPLE TYPE ☐ Original ☐ Duplicate ☐ Trip Blank ☐ Equip. Blank ☐ Other:

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

CALIBRATION

Meter Type	Time	ID Number	Manufacturer	Calibration Performed and Results		
pH (initial)	0730	110782	Oakton	☒ 4.00	☒ 7.04	☒ 10.12
pH (final)						
Conductivity						
Turbidity						
Other:						

SAMPLE PORT* ☑ PVC ☐ Polyethylene ☐ Teflon ☐ Stainless ☐ Brass

TOTALIZER Start: 367195 gal. Rate: gpm Time:

End: gal. Rate: gpm Time:

PURGE VOLUMES & WATER QUALITY PARAMETER MEASUREMENTS

Time	Volume Purged	pH	Temp. °C	Ec µS/cm	DTW ft bgs	Other: DO	ORP
1030	start	7.53	15.3	875	45.21	0.75	630
1042	10	7.65	16.5	850	45.21	1.87	626
1054	20	7.66	16.3	846	45.21	1.91	622
1100	30	7.67	16.2	842	45.21	1.85	626
1112	Post	7.68	16.2	839	—	1.83	625
Stabilization Goals:		± 0.2	± 0.3 °C	± 10%	± 10%	± 10%	
Precision:		0.10	1.0 °C	10 µS/cm			

SAMPLE APPEARANCE

Color: ☒ Clear ☐ Grey ☐ Yellow ☐ Brown ☐ Tan ☐ Black ☐ Cloudy ☐ Other:

Odor: ☒ None ☐ Gasoline ☐ Diesel ☐ Solvent ☐ Sulfur ☐ Metallic ☐ Other:

Solids: ☒ None ☐ Trace ☐ Small Quantity ☐ Mod. Quantity ☐ Large Quantity ☐ Silt ☐ Sand ☐ Gravel ☐ Organic Material ☐ Other: ☐ Separate Phase Hydrocarbons ☐ Sheen ☐ Measurable Amount: mm

SAMPLE LOG

Sample ID	Cont. Type	# of Containers	Volume (mL)	Preservative	Filtered (Y/N)	Other

Final Check: VOAs free of air bubbles? ☐ Yes ☐ No ☒ N/A

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

WATER SAMPLING DATA SHEET (Page 2)

PROJECT NAME:	UC Davis LEHR/SCDS	**Sample Location:**	UCD2-029	**Sample ID:**	GWGW2404
PROJECT NO:	388-1856-2-16	**Sampled By:**	JMO	**Sample Date:**	Dec 4, 2008
				Sample Time:	1110

SAMPLE SOURCE X Monitoring Well ☐ Extraction Well ☐ Piezometer ☐ System* ☐ Other:

WELL MEASUREMENTS				Well Conditions		
Water Level Meter No.:		Measurements		locked?	Yes ☐	No ☐
Depth to Water	DTW	45.21	ft.	casing	OK ☐	Not OK ☐
Depth to Product	DTP		ft.	plugs	OK ☐	Not OK ☐
Product Thickness	PT		ft.	seal	OK ☐	Not OK ☐
Specified Well Depth	SWD	106	ft.	vault	OK ☐	Not OK ☐
Measured Well Depth	MWD		ft.	Comments:		
Well Diameter	D	2	inches			

PURGE CALCULATIONS	Formula	Value		Actual gal. Purged:
Standing Water Height	SWH = MWD - DTW	0 60.79	ft.	
Well Casing Volume	WCV = SWH * V_d	0 9.9	gal.	
Well Casing Volumes to be Purged	N	3		
Total to be Purged	= WCV * N	0 29.7	gal.	☐ Low-flow/micro-purge method

PURGE EQUIPMENT			Dedicated:	X Yes	☐ No	
Pump ID#:	☐ Bladder	X Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	X Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Purge Equipment Decontamination	Decon:	☐ Yes	☐ No	X N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

PURGE TIME AND WELL RECOVERY			1st Purge	2nd Purge	3rd Purge	4th Purge
Purged Dry?	X No ☐ Yes	Start:				
DTW during Purging:	ft.	Stop:				
SWH during Purging:	ft.	Elapsed Time:				
MWD - 80%SWH:	ft.	DTW:				
% Recovery at Sample Time:	%	Total Purge Volume:			Total Purge Time:	

SAMPLE EQUIPMENT			Dedicated:	X Yes	☐ No	
Pump ID#:	☐ Bladder	X Submersible	☐ Sump	☐ Peristaltic	☐ Other:	
Tubing:	☐ Disposable	☐ PVC	X Polyethylene	☐ Teflon	☐ Silicone	☐ Tygon
Bailer ID#:	☐ Disposable	☐ PVC	☐ Polyethylene	☐ Teflon	☐ Other:	
Sample Port:		☐ PVC	☐ Polyethylene	☐ Teflon	☐ Stainless	☐ Brass

Sample Equipment Decontamination	Decon:	☐ Yes	☐ No	X N/A
Method:	☐ Steam	☐ Alconox	☐ DI Water	☐ Other

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Formulas/Conversions:

cylinder volume = $\pi r^2 h$

r = well radius (ft) 1 ft^3 = 7.48 gallons

h = height of water column (ft)

$V_{2\text{-inch casing}}$ = 0.163 gallons/ft

$V_{3\text{-inch casing}}$ = 0.367 gallons/ft

$V_{4\text{-inch casing}}$ = 0.653 gallons/ft

$V_{6\text{-inch casing}}$ = 1.47 gallons/ft

$V_{8\text{-inch casing}}$ = 2.61 gallons/ft

* If sample source is anything other than treatment system sample port, Page 2 of the Water Sampling Data Sheet must be completed.

Calscience Environmental Laboratories, Inc.

February 20, 2008

Joe Turner
Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Subject: **Calscience Work Order No.: 08-02-0099**
Client Reference: UC Davis - LEHR / 131261

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 2/2/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Virendra R Patel

Calscience Environmental
Laboratories, Inc.
Virendra Patel
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/02/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-0099
Rancho Cordova, CA 95670-7984		Preparation:	EPA 3010A Total
		Method:	EPA 6010B

Project: UC Davis - LEHR / 131261

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2262	**08-02-0099-1-A**	**02/01/08**	**Aqueous**	**ICP 5300**	**02/05/08**	**02/06/08 12:07**	**080205L01**

Parameter	Result	RL	DF	Qual	Units
Chromium	0.0303	0.00500	1		mg/L

GWGW2263	**08-02-0099-2-A**	**02/01/08**	**Aqueous**	**ICP 5300**	**02/05/08**	**02/06/08 12:15**	**080205L01**

Parameter	Result	RL	DF	Qual	Units
Chromium	0.0221	0.00500	1		mg/L

GWGW2264	**08-02-0099-3-A**	**02/01/08**	**Aqueous**	**ICP 5300**	**02/05/08**	**02/06/08 12:24**	**080205L01**

Parameter	Result	RL	DF	Qual	Units
Chromium	0.0732	0.00500	1		mg/L

GWGW2265	**08-02-0099-4-A**	**02/01/08**	**Aqueous**	**ICP 5300**	**02/05/08**	**02/06/08 12:27**	**080205L01**

Parameter	Result	RL	DF	Qual	Units
Chromium	0.0446	0.00500	1		mg/L

Method Blank	**097-01-003-7,989**	**N/A**	**Aqueous**	**ICP 5300**	**02/05/08**	**02/06/08 12:01**	**080205L01**

Parameter	Result	RL	DF	Qual	Units
Chromium	ND	0.00500	1		mg/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/02/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-0099
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 1 of 7

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2262	**08-02-0099-1-F**	**02/01/08**	**Aqueous**	**GC/MS CC**	**02/05/08**	**02/05/08 14:57**	**080205L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	112	74-140		1,2-Dichloroethane-d4	124	74-146	
Toluene-d8	101	88-112		1,4-Bromofluorobenzene	90	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/02/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-0099
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 2 of 7

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2263	**08-02-0099-2-F**	**02/01/08**	**Aqueous**	**GC/MS CC**	**02/05/08**	**02/05/08 16:23**	**080205L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	120	74-140		1,2-Dichloroethane-d4	133	74-146	
Toluene-d8	97	88-112		1,4-Bromofluorobenzene	89	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/02/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-0099
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 3 of 7

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2264	**08-02-0099-3-F**	**02/01/08**	**Aqueous**	**GC/MS CC**	**02/05/08**	**02/05/08 16:51**	**080205L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	123	74-140		1,2-Dichloroethane-d4	133	74-146	
Toluene-d8	102	88-112		1,4-Bromofluorobenzene	90	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/02/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-0099
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 4 of 7

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2265	**08-02-0099-4-F**	**02/01/08**	**Aqueous**	**GC/MS CC**	**02/05/08**	**02/05/08 17:20**	**080205L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	118	74-140		1,2-Dichloroethane-d4	134	74-146	
Toluene-d8	99	88-112		1,4-Bromofluorobenzene	92	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/02/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-0099
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 5 of 7

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TBGW0503	**08-02-0099-5-B**	**02/01/08**	**Aqueous**	**GC/MS CC**	**02/06/08**	**02/06/08 15:10**	**080206L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	115	74-140		1,2-Dichloroethane-d4	123	74-146	
Toluene-d8	98	88-112		1,4-Bromofluorobenzene	90	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/02/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-0099
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 6 of 7

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-24,335**	**N/A**	**Aqueous**	**GC/MS CC**	**02/05/08**	**02/05/08 13:02**	**080205L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	115	74-140		1,2-Dichloroethane-d4	124	74-146	
Toluene-d8	102	88-112		1,4-Bromofluorobenzene	88	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/02/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-0099
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 7 of 7

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-24,353**	**N/A**	**Aqueous**	**GC/MS CC**	**02/06/08**	**02/06/08 13:16**	**080206L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	114	74-140		1,2-Dichloroethane-d4	120	74-146	
Toluene-d8	102	88-112		1,4-Bromofluorobenzene	89	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: 02/02/08
Work Order No: 08-02-0099

Project: UC Davis - LEHR / 131261

Client Sample Number	Lab Sample Number	Date Collected	Matrix
GWGW2262	**08-02-0099-1**	**02/01/08**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrate (as N)	15	1.0	10		mg/L	N/A	02/02/08	EPA 300.0
Specific Conductance	1000	10	1		umhos/cm	N/A	02/02/08	SM 2510 B

GWGW2263	**08-02-0099-2**	**02/01/08**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrate (as N)	2.5	0.10	1		mg/L	N/A	02/02/08	EPA 300.0
Specific Conductance	710	1.0	1		umhos/cm	N/A	02/02/08	SM 2510 B

GWGW2264	**08-02-0099-3**	**02/01/08**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrate (as N)	11	1.0	10		mg/L	N/A	02/02/08	EPA 300.0
Specific Conductance	970	1.0	1		umhos/cm	N/A	02/02/08	SM 2510 B

GWGW2265	**08-02-0099-4**	**02/01/08**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrate (as N)	7.6	1.0	10		mg/L	N/A	02/02/08	EPA 300.0
Specific Conductance	890	1.0	1		umhos/cm	N/A	02/02/08	SM 2510 B

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: 02/02/08
Work Order No: 08-02-0099

Project: UC Davis - LEHR / 131261

Client Sample Number	Lab Sample Number	Date Collected	Matrix
Method Blank		**N/A**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrate (as N)	ND	0.10	1		mg/L	N/A	02/02/08	EPA 300.0

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	02/02/08
Work Order No:	08-02-0099
Preparation:	EPA 3010A Total
Method:	EPA 6010B

Project UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
GWGW2262	**Aqueous**	**ICP 5300**	**02/05/08**	**02/06/08**	**080205S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Chromium	98	102	86-122	4	0-8	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	02/02/08
Work Order No:	08-02-0099
Preparation:	EPA 5030B
Method:	EPA 8260B

Project UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-02-0095-1	**Aqueous**	**GC/MS CC**	**02/05/08**	**02/05/08**	**080205S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	106	106	88-118	0	0-7	
Carbon Tetrachloride	108	104	67-145	4	0-11	
Chlorobenzene	107	106	88-118	1	0-7	
1,2-Dibromoethane	111	110	70-130	2	0-30	
1,2-Dichlorobenzene	108	107	86-116	1	0-8	
1,1-Dichloroethene	98	91	70-130	7	0-25	
Ethylbenzene	112	109	70-130	3	0-30	
Toluene	112	111	87-123	1	0-8	
Trichloroethene	108	106	79-127	2	0-10	
Vinyl Chloride	93	92	69-129	1	0-13	
Methyl-t-Butyl Ether (MTBE)	111	108	71-131	3	0-13	
Tert-Butyl Alcohol (TBA)	126	103	36-168	21	0-45	
Diisopropyl Ether (DIPE)	100	99	81-123	0	0-9	
Ethyl-t-Butyl Ether (ETBE)	105	106	72-126	0	0-12	
Tert-Amyl-Methyl Ether (TAME)	106	107	72-126	1	0-12	
Ethanol	6	1	53-149	3	0-31	3

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	02/02/08
Work Order No:	08-02-0099
Preparation:	EPA 5030B
Method:	EPA 8260B

Project UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-02-0097-3	**Aqueous**	**GC/MS CC**	**02/06/08**	**02/06/08**	**080206S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	108	108	88-118	1	0-7	
Carbon Tetrachloride	111	108	67-145	2	0-11	
Chlorobenzene	111	110	88-118	1	0-7	
1,2-Dibromoethane	113	112	70-130	1	0-30	
1,2-Dichlorobenzene	108	112	86-116	4	0-8	
1,1-Dichloroethene	101	102	70-130	1	0-25	
Ethylbenzene	116	114	70-130	2	0-30	
Toluene	117	115	87-123	1	0-8	
Trichloroethene	108	109	79-127	0	0-10	
Vinyl Chloride	96	96	69-129	0	0-13	
Methyl-t-Butyl Ether (MTBE)	110	113	71-131	2	0-13	
Tert-Butyl Alcohol (TBA)	108	114	36-168	6	0-45	
Diisopropyl Ether (DIPE)	103	103	81-123	1	0-9	
Ethyl-t-Butyl Ether (ETBE)	108	111	72-126	2	0-12	
Tert-Amyl-Methyl Ether (TAME)	107	112	72-126	4	0-12	
Ethanol	103	106	53-149	3	0-31	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-02-0099

Project: UC Davis - LEHR / 131261

Matrix: Aqueous

Parameter	Method	Quality Control Sample ID	Date Analyzed	Date Extracted	MS% REC	MSD % REC	%REC CL	RPD	RPD CL	Qualifiers
Nitrate (as N)	EPA 300.0	GWGW2262	02/02/08	N/A	95	95	58-142	0	0-6	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-02-0099

Project: UC Davis - LEHR / 131261

Matrix: Aqueous

Parameter	Method	QC Sample ID	Date Analyzed	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Specific Conductance	SM 2510 B	GWGW2262	02/02/08	1000	1000	0	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Brown and Caldwell		Date Received:	N/A
10540 White Rock Road, Suite 180		Work Order No:	08-02-0099
Rancho Cordova, CA 95670-7984		Preparation:	EPA 3010A Total
		Method:	EPA 6010B

Project: UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
097-01-003-7,989	**Aqueous**	**ICP 5300**	**02/06/08**	**080205-I-01**	**080205L01**

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Chromium	0.500	0.543	109	80-120	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-02-0099
Preparation: EPA 5030B
Method: EPA 8260B

Project: UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-24,335	**Aqueous**	**GC/MS CC**	**02/05/08**	**02/05/08**	**080205L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	104	105	84-120	1	0-8	
Carbon Tetrachloride	106	106	63-147	0	0-10	
Chlorobenzene	106	105	89-119	1	0-7	
1,2-Dibromoethane	109	107	80-120	2	0-20	
1,2-Dichlorobenzene	106	106	89-119	1	0-9	
1,1-Dichloroethene	98	98	77-125	0	0-16	
Ethylbenzene	111	111	80-120	0	0-20	
Toluene	110	111	83-125	1	0-9	
Trichloroethene	104	106	89-119	3	0-8	
Vinyl Chloride	94	93	63-135	0	0-13	
Methyl-t-Butyl Ether (MTBE)	107	109	82-118	2	0-13	
Tert-Butyl Alcohol (TBA)	115	111	46-154	4	0-32	
Diisopropyl Ether (DIPE)	100	101	81-123	1	0-11	
Ethyl-t-Butyl Ether (ETBE)	105	106	74-122	1	0-12	
Tert-Amyl-Methyl Ether (TAME)	105	107	76-124	2	0-10	
Ethanol	106	97	60-138	9	0-32	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell		Date Received:	N/A
10540 White Rock Road, Suite 180		Work Order No:	08-02-0099
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project: UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-24,353	**Aqueous**	**GC/MS CC**	**02/06/08**	**02/06/08**	**080206L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	107	108	84-120	1	0-8	
Carbon Tetrachloride	109	109	63-147	0	0-10	
Chlorobenzene	107	108	89-119	1	0-7	
1,2-Dibromoethane	108	111	80-120	3	0-20	
1,2-Dichlorobenzene	111	112	89-119	0	0-9	
1,1-Dichloroethene	103	103	77-125	0	0-16	
Ethylbenzene	114	115	80-120	1	0-20	
Toluene	114	114	83-125	0	0-9	
Trichloroethene	108	108	89-119	0	0-8	
Vinyl Chloride	97	98	63-135	0	0-13	
Methyl-t-Butyl Ether (MTBE)	109	110	82-118	2	0-13	
Tert-Butyl Alcohol (TBA)	108	112	46-154	3	0-32	
Diisopropyl Ether (DIPE)	103	104	81-123	1	0-11	
Ethyl-t-Butyl Ether (ETBE)	110	110	74-122	0	0-12	
Tert-Amyl-Methyl Ether (TAME)	107	109	76-124	1	0-10	
Ethanol	104	102	60-138	2	0-32	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-02-0099

Project: UC Davis - LEHR / 131261

Matrix: Aqueous

Parameter	Method	Quality Control Sample ID	Date Extracted	Date Analyzed	LCS % REC	LCSD % REC	%REC CL	RPD	RPD CL	Qual
Nitrate (as N)	EPA 300.0	099-05-118-4,328	N/A	02/02/08	94	94	87-111	0	0-12	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-02-0099

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

BROWN AND CALDWELL

CHAIN OF CUSTODY RECORD 08-02-0099 COC No. _____

UCD0000273

❑ 10540 White Rock Rd, Ste. 180
Rancho Cordova, CA 95670
916-444-0123 / FAX 916-635-8805

❑ 9665 Chesapeake Dr. / Suite 201
San Diego, CA 92123
858-514-8822 / FAX 858-514-8833

❑ 201 N. Civic Dr. / Suite 115
Walnut Creek, CA 94596
925-937-9010 / FAX 925-937-9026

❑ 400 Exchange / Suite 100
Irvine, CA 92602
714-730-7600 / FAX 714-734-0940

PROJECT NAME: **UC Davis - LEHR**

PROJECT NUMBER: **131261**

LABORATORY NAME & ADDRESS: CalScience Environmental Laboratories, Inc. Garder CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
01	GWGW2262	2-01-08	1501	J.T	1	~~1L~~ 250 Plastic	NONE	W	Tritium, C-14	–	–	STD	SP	33.43 ---- 35.17	
02	GWGW2262	|	|	J.T.	3	40 mL VOA	HCl pH < 2	W	SW8260B	–	–	|	|	----	
03	GWGW2262	|	|	J.T.	1	~~1L~~ 500 Plastic	NONE	W	Nitrate (as N), EC	–	–	|	|	----	
04	GWGW2262	2-01-08	1501	J.T.	1	250 mL Plastic	HNO3 pH < 2	W	Total Chromium	–	–	|	|	----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

COLLECTED & RELEASED BY: Johnie Tomlin / JL & TL	DATE 2/01/08	TIME :	COOLER I.D.: #1			COMMENTS (see note on back):
RECEIVED BY: GSO	DATE 2/01/08	TIME 15:15	RELINQUISHED BY: JL & TL	DATE 2/01/08	TIME 15:15	
Michael Hall CEL	2-2-08	10:34				
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

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USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

BROWN AND CALDWELL

CHAIN OF CUSTODY RECORD 08-02-0099 COC No. _____

UCD0000274

❑ 10540 White Rock Rd, Ste. 180
Rancho Cordova, CA 95670
916-444-0123 / FAX 916-635-8805

❑ 9665 Chesapeake Dr. / Suite 201
San Diego, CA 92123
858-514-8822 / FAX 858-514-8833

❑ 201 N. Civic Dr. / Suite 115
Walnut Creek, CA 94596
925-937-9010 / FAX 925-937-9026

❑ 400 Exchange [illegible]
Irvine, CA 92602
714-730-7600 / FAX 714-734-0940

PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: ~~CalScience Environmental Laboratories, Inc. Garder~~ CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
01	GWGW2263	02-01-08	1210	J.T.	1	W ~~1L~~ Plastic 250	NONE	W	Tritium, C-14	–	–	STD	SP	36.70 ---- 37.86	–
02	GWGW2263			J.T.	3	40 mL VOA ~~1500~~	HCl pH < 2	W	SW8260B	–	–			----	–
03	GWGW2263			J.T.	1	~~1L~~ Plastic 500	NONE	W	Nitrate (as N), EC	–	–			----	–
04	GWGW2263	02-01-08	1210	J.T.	1	250 mL Plastic	HNO3 pH < 2	W	Total Chromium	–	–			----	–
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

COLLECTED & RELEASED BY: Johnie S. Tomlin / John S Tomlin	DATE 2/01/08	TIME :	COOLER I.D.: #1			COMMENTS (see note on back):
RECEIVED BY: GSO	DATE 2/01/08	TIME 15:15	RELINQUISHED BY: John S Tomlin	DATE 2/01/08	TIME 15:15	
Michael Hart CEL	2-2-08	10:34				
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

DISTRIBUTION: WHITE-LAB RECEIPT • CANARY-PROJECT FILE • PINK-DATA MANAGEMENT • GOLDENROD-FIELD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

BROWN AND CALDWELL

CHAIN OF CUSTODY RECORD 08-02-0099

COC No. _____

UCD0000275

❑ 10540 White Rock Rd, Ste. 180
Rancho Cordova, CA 95670
916-444-0123 / FAX 916-635-8805

❑ 9665 Chesapeake Dr. / Suite 201
San Diego, CA 92123
858-514-8822 / FAX 858-514-8833

❑ 201 N. Civic Dr. / Suite 115
Walnut Creek, CA 94596
925-937-9010 / FAX 925-937-9026

❑ 400 Exchange / Suite 100
Irvine, CA 92602
714-730-7600 / FAX 714-734-0940

PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: CalScience Environmental Laboratories, Inc. Garder CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
01	GWGW2264	2-01-08	1445	J.T.	1	~~1 L~~ Plastic 250	NONE	W	Tritium, C-14	–	–	STD	SP	34.01 ---- ~~34.19~~ 34.19	
02	GWGW2264	|	|	J.T.	3	40 mL VOA	HCl pH < 2	W	SW8260B	–	–	|	|	----	
03	GWGW2264	|	|	J.T.	1	~~1 L~~ Plastic 500	NONE	W	Nitrate (as N), EC	–	–	|	|	----	
04	GWGW2264	2-01-08	1445	J.T.	1	250 mL Plastic	HNO3 pH < 2	W	Total Chromium	–	✓	|	|	----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

3

COLLECTED & RELEASED BY: Johnie Gordon / [signature]	DATE 2/01/08	TIME :	COOLER I.D.: #1			COMMENTS (see note on back):
RECEIVED BY: GSO	DATE 2/01/08	TIME 15:15	RELINQUISHED BY: [signature]	DATE 2/01/08	TIME 15:15	
Michael Hult CEL	2/2/08	10 34				
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

DISTRIBUTION: WHITE-LAB RECEIPT • CANARY-PROJECT FILE • PINK-DATA MANAGEMENT • GOLDENROD-FIELD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

BROWN AND CALDWELL

CHAIN OF CUSTODY RECORD 08-02-0099 COC No. _____

UCD0000276

☑ 10540 White Rock Rd, Ste. 180
Rancho Cordova, CA 95670
916-444-0123 / FAX 916-635-8805

☐ 9665 Chesapeake Dr. / Suite 201
San Diego, CA 92123
858-514-8822 / FAX 858-514-8833

☐ 201 N. Civic Dr. / Suite 115
Walnut Creek, CA 94596
925-937-9010 / FAX 925-937-9026

☐ 400 Exchange / Suite 200
Irvine, CA 92602
714-730-7600 / FAX 714-734-0940

PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: CalScience Environmental Laboratories, Inc. Garder CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
01	GWGW2265	02-01-08	1140		1	~~1L~~ Plastic 500	NONE	W	Tritium, C-14	–	–	STD	SP	36.84 ---- 36.77	
02	GWGW2265				3	40 mL VOA	HCl pH < 2	W	SW8260B					----	
03	GWGW2265				1	~~1L~~ Plastic 250	NONE	W	Nitrate (as N), EC					----	
04	GWGW2265	02-01-08	1140		1	250 mL Plastic	HNO3 pH < 2	W	Total Chromium					----	
05	TBGW0503	2/1/08	NA	NA	2/3	40mL VOA	HCl	W	SW8260B				NA	----	
06														----	
07														----	
08														----	
09														----	
10														----	

COLLECTED & RELEASED BY: Johnie Tanlio / John S Tal	DATE 2/01/08	TIME :	COOLER I.D.: #1			COMMENTS (see note on back):
RECEIVED BY: G.50	DATE 2/01/08	TIME 15:15	RELINQUISHED BY: John S Tal	DATE 2/01/08	TIME 15:15	
Michael Abatt CEL	2-2-08	10:34				
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

DISTRIBUTION: WHITE-LAB RECEIPT • CANARY-PROJECT FILE • PINK-DATA MANAGEMENT • GOLDENROD-FIELD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 0 2 - 0 0 9 9

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: Brown and Caldwell DATE: 02-02-08

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature.

_____ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

_____ °C Temperature blank.
30 °C IR thermometer.
_____ Ambient temperature.

Initial: MH

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : X MH Not Present: /

Initial: MH

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	/		
Sampler's name indicated on COC	/		
Sample container label(s) consistent with custody papers	/		
Sample container(s) intact and good condition	/		
Correct containers and volume for analyses requested	/		
Proper preservation noted on sample label(s)	/		
VOA vial(s) free of headspace.	/		
Tedlar bag(s) free of condensation			

Initial: MH

COMMENTS:

GEL Laboratories LLC
a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178

www.gel.com

February 12, 2008

Mr. Virendra R. Patel
Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, California 92841-1427

Re: Carbon 14
Work Order: 202173

Dear Mr. Patel:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on February 05, 2008. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4297.

Sincerely,

Amanda Rasco
Project Manager

Purchase Order: 08-02-0099
Enclosures

Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

TO: GEL Laboratories, Inc.

202173

CHAIN OF CUSTODY RECORD

DATE:

PAGE: 1 OF 1

LABORATORY CLIENT: Calscience Environmental Laboratories, Inc.	CLIENT PROJECT NAME / NUMBER: 08-02-0099	P.O. NO.: 08-02-0099
ADDRESS: 7440 Lincoln Way	PROJECT CONTACT: Virendra Patel	QUOTE NO.:
CITY: Garden Grove, CA 92841-1427	SAMPLER(S): (PRINT)	LAB USE ONLY
TEL: (714) 895-5494 / E-MAIL: vpatel@calscience.com		

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☐ 7 DAYS [X] NORMAL

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY): ☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___/___/___

SPECIAL INSTRUCTIONS:
Ship to: GEL Laboratories, Inc
2040 Savage Rd
Charleston, SC 29407
Attention: Amanda Rasco 843-556-8171

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	Matrix	#Cont	Carbon -14 by EERF-C	Detection limit of 20 pCi/L		Send PDF via Email	Send Invoicewith Results
	GWGW2262	02/01/08	1501	GW	1	X	X		X	X
	GWGW2263	02/01/08	1210	GW	1	X	X		X	X
	GWGW2264	02/01/08	1445	GW	1	X	X		X	X
	GWGW2265	02/01/08	1140	GW	1	X	X		X	X

Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
(CALSCIENCE)	~~/GEL~~ RA 2/5	02/04/08	1146
Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
	/GEL	2/5/08	1000
Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: Cals	**SDG/ARCOC/Work Order:** 202173
Received By: Ricky Albee	**Date Received:** 2/5/08

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
COC/Samples marked as radioactive?		✓	Maximum Counts Observed*: 40 cpm
Classified Radioactive II by RSO?		✓	
COC/Samples marked containing PCBs?		✓	
Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		✓	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (4 +/- 2 C)?	✓			Preservation Method: blue ice dry ice none other (describe) ice bags 3°C
3	Chain of custody documents included with shipment?	✓			
4	Sample containers intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		✓		Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		✓		Sample ID's and containers affected:
7	Are Encore containers present?			✓	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	✓			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Sample ID's affected:
11	Number of containers received match number indicated on COC?	✓			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	✓			

Comments:
FedEx 9587 3400 1221

PM (or PMA) review: Initials AOM Date 2/5/08

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

CALS001 Calscience Environmental Laboratory, Inc.

Client SDG: 202173 GEL Work Order: 202173

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Amanda Rasco.

Amanda J Rasco

Reviewed by

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : Calscience Environmental Laboratories, Inc.
Address : 7440 Lincoln Way
Garden Grove, California 92841−−1427

Report Date: February 12, 2008

Contact: Mr. Virendra R. Patel
Project: **Carbon 14**

Client Sample ID:	GWGW2262	Project:	CALS00101
Sample ID:	202173001	Client ID:	CALS001
Matrix:	Ground Water		
Collect Date:	01−FEB−08 15:01		
Receive Date:	05−FEB−08		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Rad Liquid Scintillation Analysis											
Liquid Scint C14, Liquid											
Carbon−14	U	−0.266	+/−7.83	13.6	20.0	pCi/L		RXE1 02/08/08	2010	724694	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA EERF C−01 Modified	

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : Calscience Environmental Laboratories, Inc.
Address : 7440 Lincoln Way
Garden Grove, California 92841−−1427

Report Date: February 12, 2008

Contact: Mr. Virendra R. Patel
Project: **Carbon 14**

Client Sample ID:	GWGW2263	Project:	CALS00101
Sample ID:	202173002	Client ID:	CALS001
Matrix:	Ground Water		
Collect Date:	01−FEB−08 12:10		
Receive Date:	05−FEB−08		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Rad Liquid Scintillation Analysis											
Liquid Scint C14, Liquid											
Carbon−14	U	4.10	+/−7.98	13.6	20.0	pCi/L		RXE1 02/08/08	2053	724694	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA EERF C−01 Modified	

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : Calscience Environmental Laboratories, Inc.
Address : 7440 Lincoln Way
Garden Grove, California 92841−−1427

Report Date: February 12, 2008

Contact: Mr. Virendra R. Patel
Project: **Carbon 14**

Client Sample ID:	GWGW2264	Project:	CALS00101
Sample ID:	202173003	Client ID:	CALS001
Matrix:	Ground Water		
Collect Date:	01−FEB−08 14:45		
Receive Date:	05−FEB−08		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Rad Liquid Scintillation Analysis											
Liquid Scint C14, Liquid											
Carbon−14	U	2.93	+/−7.95	13.6	20.0	pCi/L		RXE1 02/08/08	2135	724694	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA EERF C−01 Modified	

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : Calscience Environmental Laboratories, Inc.
Address : 7440 Lincoln Way
Garden Grove, California 92841−−1427

Report Date: February 12, 2008

Contact: Mr. Virendra R. Patel
Project: **Carbon 14**

Client Sample ID:	GWGW2265	Project:	CALS00101
Sample ID:	202173004	Client ID:	CALS001
Matrix:	Ground Water		
Collect Date:	01−FEB−08 11:40		
Receive Date:	05−FEB−08		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Rad Liquid Scintillation Analysis											
Liquid Scint C14, Liquid											
Carbon−14	U	9.31	+/−8.13	13.5	20.0	pCi/L		RXE1 02/08/08	2218	724694	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA EERF C−01 Modified	

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: February 12, 2008
Page 1 of 2

Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, California

Contact: **Mr. Virendra R. Patel**

Workorder: **202173**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Liquid Scintillation											
Batch 724694											
QC1201510691 202173001 DUP											
Carbon-14		U	-0.266 +/-7.83	U	3.61 +/-7.95	pCi/L	0		N/A	RXE1	02/08/08 23:43
QC1201510693 LCS											
Carbon-14	523				492 +/-17.7	pCi/L		94	(75%-125%)		02/09/08 01:08
QC1201510690 MB											
Carbon-14				U	4.70 +/-8.02	pCi/L					02/08/08 23:00
QC1201510692 202173001 MS											
Carbon-14	523	U	-0.266 +/-7.83		482 +/-17.5	pCi/L		92	(75%-125%)		02/09/08 00:26

Notes:
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- M M if above MDC and less than LLD
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy--Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
- h Preparation or preservation holding time was exceeded

GEL LABORATORIES LLC
2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Workorder: **202173**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

List of current GEL Certifications as of 12 February 2008

State	Certification
Alaska	UST-062
Arizona	AZ0668
Arkansas	88-0651
CLIA	42D0904046
California	01151CA
Colorado	GenEngLabs
Connecticut	PH-0169
Dept. of Navy	NFESC 413
EPA	WG-15J
Florida/NELAP	E87156
Georgia	E87156 (FL/NELAP)
Hawaii	N/A
Idaho	N/A
Illinois	200029
Indiana	C-SC-01
Kansas	E-10332
Kentucky	90129
Louisiana	03046
Maryland	270
Massachusetts	M-SC012
Michigan	9903
Nevada	SC12
New Jersey	SC002
New Mexico	FL NELAP E87156
New York	11501
North Carolina	233
North Carolina Drinking W	45709
North Dakota	R-158
Oklahoma	9904
Pennsylvania	68-00485
South Carolina	10120001/10585001/10120002
Tennessee	02934
Texas NELAP	T104704235-07-TX
U.S. Dept. of Agriculture	S-52597
US Army Corps of Engineer	N/A
Utah	8037697376 GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

ENVIRONMENTAL

ANALYTICAL CHEMISTS

February 13, 2008

Lab ID : SP 801236
Customer : 2017756

Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Laboratory Report

Introduction: This report package contains total of 7 pages divided into three sections:

Case Narrative (2 Pages) : An overview of the work performed at FGL.
Chemical Results (4 Pages) : Results for each sample submitted.
Quality Control (1 Page) : Supporting Quality Control (QC) results.

This report package pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab Sample ID #	Matrix
GWGW2262	02/01/2008	02/05/2008	SP 801236-01	GW
GWGW2263	02/01/2008	02/05/2008	SP 801236-02	GW
GWGW2264	02/01/2008	02/05/2008	SP 801236-03	GW
GWGW2265	02/01/2008	02/05/2008	SP 801236-04	GW

Sampling and Receipt Information: All samples were received, prepared and analyzed within the method specified holding times. All samples arrived at 5 °C. All samples were checked for pH if acid or base preservation required (except for VOAs). For details of sample receipt information, please see the attached Chain of Custody and Condition Upon Receipt Forms.

Quality Control: All samples were prepared and analyzed according to the following tables:

Radio Chemistry QC

906.0	02/06/2008:A217 All preparation quality controls are within established criteria.
	02/06/2008:A - LS201 All analysis quality controls are within established criteria.

Case narrative continued on next page...

Corporate Offices & Laboratory
P.O. Box 272 / 853 Corporation Street
Santa Paula, CA 93061-0272
TEL: (805) 392-2000
FAX: (805) 525-4172
CA NELAP Certification No. 01110CA
CA ELAP Certification No. 1573

Office & Laboratory
2500 Stagecoach Road
Stockton, CA 95215
TEL: (209) 942-0182
FAX: (209) 942-0423
CA ELAP Certification No. 1563

Office & Laboratory
563 East Lindo Avenue
Chico, CA 95926
TEL: (530) 343-5818
FAX: (530) 343-3807

Field Office
Visalia, California
TEL: (559) 734-9473
FAX: (559) 734-8435
Mobile: (559) 737-2399

February 13, 2008

Lab ID : SP 801236
Customer : 2017756

Calscience Environmental Laboratories

Certification: I certify that this data package is in compliance with NELAC Standards, both technically and for completeness, except for any conditions listed above. Release of the data contained in this data package is authorized by the Laboratory Director or his designee, as verified by the following signature.

FGL ENVIRONMENTAL

Kelly A. Dunnahoo, B.S.
Laboratory Director

KAD:kdm

ENVIRONMENTAL

ANALYTICAL CHEMISTS

February 13, 2008

Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Description : GWGW2262
Project : 08-02-0099

Lab ID : SP 801236-01
Customer ID : 2-17756

Sampled On : February 1, 2008-15:01
Sampled By : Not Available
Received On : February 5, 2008-10:30
Matrix : Ground Water

Sample Results - Radio

Constituents	Result ± Error	MDA	Units	MCL	Preparation Method	Preparation Date/ID	Analysis Method	Analysis Date/ID
Radio Chemistry P:1 Tritium	0.000 ± 202	400	pCi/L	20,000	906.0	02/06/08:A217	906.0	02/06/2008:A01

MDA = Minimum Detectable Activity; Data utilized by the DHS to determine matrix interference. MCL = Maximium Contaminat Level.
Containers: (P) Plastic Preservatives: (1) Cool 4°C

CCR Section 64442: Compliance Note: If Gross Alpha (Result + (0.84 x error)) exceeds 5 pCi/L run Uranium. If Gross Alpha minus Uranium exceeds 5 pCi/L run Radium 226. Samples that exceed 5 pCi/L are held for 6 months at FGL.

Compliance:
Gross Alpha - Uranium ≤ 15 pCi/L
Uranium ≤ 20 pCi/L
Radium 226 + Radium 228 ≤ 5 pCi/L

Corporate Offices & Laboratory
P.O. Box 272 / 853 Corporation Street
Santa Paula, CA 93061-0272
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FAX: (805) 525-4172
CA NELAP Certification No. 01110CA
CA ELAP Certification No. 1573

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Field Office
Visalia, California
TEL: (559) 734-9473
FAX: (559) 734-8435
Mobile: (559) 737-2399

ENVIRONMENTAL

ANALYTICAL CHEMISTS

February 13, 2008

Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Description : GWGW2263
Project : 08-02-0099

Lab ID : SP 801236-02
Customer ID: 2-17756

Sampled On : February 1, 2008-12:10
Sampled By : Not Available
Received On: February 5, 2008-10:30
Matrix : Ground Water

Sample Results - Radio

Constituents	Result ± Error	MDA	Units	MCL	Preparation Method	Preparation Date/ID	Analysis Method	Analysis Date/ID
Radio Chemistry P:1								
Tritium	14.7 ± 203	400	pCi/L	20,000	906.0	02/06/08:A217	906.0	02/06/2008:A01

MDA = Minimum Detectable Activity; Data utilized by the DHS to determine matrix interference. MCL = Maximium Contaminat Level.
Containers: (P) Plastic Preservatives: (1) Cool 4°C

CCR Section 64442: Compliance Note: If Gross Alpha (Result + (0.84 x error)) exceeds 5 pCi/L run Uranium. If Gross Alpha minus Uranium exceeds 5 pCi/L run Radium 226. Samples that exceed 5 pCi/L are held for 6 months at FGL.

Compliance:
Gross Alpha - Uranium ≤ 15 pCi/L
Uranium ≤ 20 pCi/L
Radium 226 + Radium 228 ≤ 5 pCi/L

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ENVIRONMENTAL

ANALYTICAL CHEMISTS

February 13, 2008

Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Description : GWGW2264
Project : 08-02-0099

Lab ID : SP 801236-03
Customer ID: 2-17756

Sampled On : February 1, 2008-14:45
Sampled By : Not Available
Received On: February 5, 2008-10:30
Matrix : Ground Water

Sample Results - Radio

Constituents	Result ± Error	MDA	Units	MCL	Preparation Method	Preparation Date/ID	Analysis Method	Analysis Date/ID
Radio Chemistry P:1 Tritium	0.000 ± 200	400	pCi/L	20,000	906.0	02/06/08:A217	906.0	02/06/2008:A01

MDA = Minimum Detectable Activity; Data utilized by the DHS to determine matrix interference. MCL = Maximium Contaminat Level.
Containers: (P) Plastic Preservatives: (1) Cool 4°C

CCR Section 64442: Compliance Note: If Gross Alpha (Result + (0.84 x error)) exceeds 5 pCi/L run Uranium. If Gross Alpha minus Uranium exceeds 5 pCi/L run Radium 226. Samples that exceed 5 pCi/L are held for 6 months at FGL.

Compliance:
Gross Alpha - Uranium ≤ 15 pCi/L
Uranium ≤ 20 pCi/L
Radium 226 + Radium 228 ≤ 5 pCi/L

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ENVIRONMENTAL

ANALYTICAL CHEMISTS

February 13, 2008

Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Description : GWGW2265
Project : 08-02-0099

Lab ID : SP 801236-04
Customer ID : 2-17756

Sampled On : February 1, 2008-11:40
Sampled By : Not Available
Received On : February 5, 2008-10:30
Matrix : Ground Water

Sample Results - Radio

Constituents	Result ± Error	MDA	Units	MCL	Preparation Method	Preparation Date/ID	Analysis Method	Analysis Date/ID
Radio Chemistry P:1 Tritium	0.000 ± 199	400	pCi/L	20,000	906.0	02/06/08:A217	906.0	02/06/2008:A01

MDA = Minimum Detectable Activity; Data utilized by the DHS to determine matrix interference. MCL = Maximium Contaminat Level.
Containers: (P) Plastic Preservatives: (1) Cool 4°C

CCR Section 64442: Compliance Note: If Gross Alpha (Result + (0.84 x error)) exceeds 5 pCi/L run Uranium. If Gross Alpha minus Uranium exceeds 5 pCi/L run Radium 226. Samples that exceed 5 pCi/L are held for 6 months at FGL.

Compliance:
Gross Alpha - Uranium ≤ 15 pCi/L
Uranium ≤ 20 pCi/L
Radium 226 + Radium 228 ≤ 5 pCi/L

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ENVIRONMENTAL ANALYTICAL CHEMISTS

February 13, 2008

Calscience Environmental Laboratories

Lab ID : SP 801236
Customer : 2-17756

Quality Control - Radio

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Tritium	906.0	02/06/2008:A217	Blank	pCi/L		ND	<518	
			LCS	pCi/L	2388	108%	75-125	
			BS	pCi/L	2388	87.6%	75-125	
			BSD	pCi/L	2388	89.8%	75-125	
			BSRPD	pCi/L		2.4%	≤25	
	906.0	02/06/2008:A	00-CCB	cpm		11	12±1.7	
			00-CCV	cpm	1080	24.8%	25.5±4.5	

Definitions

Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.
BS/BSD : Blank Spikes - A blank is spiked with a known amount of analyte. It is prepared to verify that the preparation process is not affecting analyte recovery.
CCB : Continuing Calibration Blank - Analyzed to verify the instrument baseline is within criteria.
CCV : Continuing Calibration Verification - Analyzed to verify the instrument calibration is within criteria.
ND : Non-detect - Result was below the DQO listed for the analyte.
DQO : Data Quality Objective - This is the criteria against which the quality control data is compared.

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Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

TO: FGL

CHAIN OF CUSTODY RECORD

DATE: 02/04/08
PAGE: 1 OF 1

801236

LABORATORY CLIENT: Calscience Environmental Laboratories, Inc.
ADDRESS: 7440 Lincoln Way
CITY: Garden Grove, CA 92841-1427
TEL: (714) 895-5494
E-MAIL: vpatel@calscience.com

CLIENT PROJECT NAME / NUMBER: 08-02-0099
PROJECT CONTACT: Virendra Patel
SAMPLER(S): (PRINT)

P.O. NO.: 08-02-0099
QUOTE NO.:
LAB USE ONLY

TURNAROUND TIME
☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☐ 5 DAYS ☒ NORMAL

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___/___/___

SPECIAL INSTRUCTIONS
SUB. To: FGL
853 Corporation St.
Santa Paula , CA 93061-3005
(805)392-2000

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	Matrix	#Cont	Tritium EPA 906.0	Excel EDD
	GWGW2262	02/01/08	1501	GW	1	X	X
	GWGW2263	02/01/08	1210	GW	1	X	X
	GWGW2264	02/01/08	1445	GW	1	X	X
	GWGW2265	02/01/08	1140	GW	1	X	X

Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
(CALSCIENCE)		01/28/08	1140
Golden State		2/5/08	1080.

Santa Paula - Condition Upon Receipt (Attach to COC)

Sample Receipt:

1. Number of ice chests/packages received: 1
   Note as OTC if received over the counter unpackaged.
2. Were samples received in a chilled condition? Temps: 5 / ____ / ____ / ____ / ____
   Acceptable is 2° to 6° C. Also acceptable is received on ice (ROI) for the same day of sampling or received at room temperature (RRT) if sampled within one hour of receipt. Client contact for temperature failures must be documented below. If many packages are received at one time check for tests/H.T.'s/rushes/Bacti's to prioritize further review. Please notify Microbiology personnel immediately of bacti samples received.
3. Do the number of bottles received agree with the COC? Yes No N/A
4. Were samples received intact? (i.e. no broken bottles, leaks etc.) Yes No
5. Were sample custody seals intact? N/A Yes No

Sign and date the COC, obtain LIMS sample numbers, select methods/tests and print labels.

Sample Verification, Labeling and Distribution:

1. Were all requested analyses understood and acceptable? Yes No
2. Did bottle labels correspond with the client's ID's? Yes No
3. Were all bottles requiring sample preservation properly preserved? Yes No N/A FGL
4. VOAs checked for Headspace? Yes No N/A
5. Were all analyses within holding times at time of receipt? Yes No
6. Have rush or project due dates been checked and accepted? N/A Yes No

Attach labels to the containers and include a copy of the COC for lab delivery.

Sample Receipt, Login and Verification completed by (initials): Cle

Discrepancy Documentation:

Any items above which are "No" or do not meet specifications (i.e. temps) must be resolved.

1. Person Contacted:_____ Phone Number:_____
   Initiated By:_____ Date:_____
   Problem:

   Resolution:

2. Person Contacted:_____ Phone Number:_____
   Initiated By:_____ Date:_____
   Problem:

   Resolution:

(2-17756)
Calscience Environmental Laboratories
SP 0801236
IV-02/05/2008-10:33:23

Attach label with lab number here

Calscience Environmental Laboratories, Inc.

March 14, 2008

Joe Turner
Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Subject: **Calscience Work Order No.: 08-02-1974**
Client Reference: UC Davis - LEHR / 131261

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 2/27/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Virendra R Patel

Calscience Environmental
Laboratories, Inc.
Virendra Patel
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/27/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-1974
Rancho Cordova, CA 95670-7984		Preparation:	EPA 3010A Total
		Method:	EPA 6010B

Project: UC Davis - LEHR / 131261

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2214	**08-02-1974-1-D**	**02/26/08 15:05**	**Aqueous**	**ICP 5300**	**02/27/08**	**02/28/08 21:46**	**080227L08**

Parameter	Result	RL	DF	Qual	Units
Chromium	0.0948	0.00500	1		mg/L

GWGW2216	**08-02-1974-3-C**	**02/26/08 14:15**	**Aqueous**	**ICP 5300**	**02/27/08**	**02/28/08 21:51**	**080227L08**

Parameter	Result	RL	DF	Qual	Units
Chromium	0.0139	0.00500	1		mg/L

GWGW2217	**08-02-1974-4-B**	**02/26/08 16:25**	**Aqueous**	**ICP 5300**	**02/27/08**	**02/28/08 21:53**	**080227L08**

Parameter	Result	RL	DF	Qual	Units
Chromium	0.137	0.00500	1		mg/L

GWGW2218	**08-02-1974-5-A**	**02/26/08 17:15**	**Aqueous**	**ICP 5300**	**02/27/08**	**02/28/08 21:55**	**080227L08**

Parameter	Result	RL	DF	Qual	Units
Chromium	ND	0.00500	1		mg/L

GWGW2250	**08-02-1974-6-C**	**02/26/08 13:36**	**Aqueous**	**ICP 5300**	**02/27/08**	**02/28/08 21:56**	**080227L08**

Parameter	Result	RL	DF	Qual	Units
Chromium	ND	0.00500	1		mg/L

Method Blank	**097-01-003-8,050**	**N/A**	**Aqueous**	**ICP 5300**	**02/27/08**	**02/28/08 10:14**	**080227L08**

Parameter	Result	RL	DF	Qual	Units
Chromium	ND	0.00500	1		mg/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/27/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-1974
Rancho Cordova, CA 95670-7984		Preparation:	N/A
		Method:	EPA 300.0

Project: UC Davis - LEHR / 131261

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2214	**08-02-1974-1-C**	**02/26/08 15:05**	**Aqueous**	**IC 7**	**N/A**	**02/27/08 20:36**	**080227L01**

Parameter	Result	RL	DF	Qual	Units
Nitrate (as N)	37	2.0	20		mg/L

GWGW2216	**08-02-1974-3-D**	**02/26/08 14:15**	**Aqueous**	**IC 7**	**N/A**	**02/27/08 20:53**	**080227L01**

Parameter	Result	RL	DF	Qual	Units
Nitrate (as N)	6.8	0.20	2		mg/L

GWGW2217	**08-02-1974-4-A**	**02/26/08 16:25**	**Aqueous**	**IC 7**	**N/A**	**02/27/08 21:45**	**080227L01**

Parameter	Result	RL	DF	Qual	Units
Nitrate (as N)	30	1.0	10		mg/L

GWGW2218	**08-02-1974-5-B**	**02/26/08 17:15**	**Aqueous**	**IC 7**	**N/A**	**02/27/08 22:03**	**080227L01**

Parameter	Result	RL	DF	Qual	Units
Nitrate (as N)	11	0.50	5		mg/L

GWGW2250	**08-02-1974-6-D**	**02/26/08 13:36**	**Aqueous**	**IC 7**	**N/A**	**02/27/08 22:20**	**080227L01**

Parameter	Result	RL	DF	Qual	Units
Nitrate (as N)	2.6	0.10	1		mg/L

Method Blank	**099-05-118-4,361**	**N/A**	**Aqueous**	**IC 7**	**N/A**	**02/27/08 09:17**	**080227L01**

Parameter	Result	RL	DF	Qual	Units
Nitrate (as N)	ND	0.10	1		mg/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/27/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-1974
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2214	**08-02-1974-1-E**	**02/26/08 15:05**	**Aqueous**	**GC/MS FF**	**03/05/08**	**03/05/08 14:31**	**080305L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	3.1	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	113	74-140		1,2-Dichloroethane-d4	114	74-146	
Toluene-d8	108	88-112		1,4-Bromofluorobenzene	99	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/27/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-1974
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TBGW0504	**08-02-1974-2-A**	**02/26/08 00:00**	**Aqueous**	**GC/MS FF**	**03/05/08**	**03/05/08 14:02**	**080305L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	113	74-140		1,2-Dichloroethane-d4	115	74-146	
Toluene-d8	108	88-112		1,4-Bromofluorobenzene	100	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/27/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-1974
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-24,678**	**N/A**	**Aqueous**	**GC/MS FF**	**03/05/08**	**03/05/08 13:08**	**080305L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	113	74-140		1,2-Dichloroethane-d4	112	74-146	
Toluene-d8	108	88-112		1,4-Bromofluorobenzene	99	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	02/27/08
Work Order No:	08-02-1974
Preparation:	EPA 3010A Total
Method:	EPA 6010B

Project UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-02-1977-1	**Aqueous**	**ICP 5300**	**02/27/08**	**02/28/08**	**080227S08**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Chromium	97	100	86-122	3	0-8	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	02/27/08
Work Order No:	08-02-1974
Preparation:	N/A
Method:	EPA 300.0

Project UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-02-1964-5	**Aqueous**	**IC 7**	**N/A**	**02/27/08**	**080227S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Nitrate (as N)	101	101	58-142	0	0-6	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: 02/27/08
Work Order No: 08-02-1974
Preparation: EPA 5030B
Method: EPA 8260B

Project UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
GWGW2214	**Aqueous**	**GC/MS FF**	**03/05/08**	**03/05/08**	**080305S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	97	97	88-118	1	0-7	
Carbon Tetrachloride	113	115	67-145	2	0-11	
Chlorobenzene	102	101	88-118	1	0-7	
1,2-Dibromoethane	101	102	70-130	1	0-30	
1,2-Dichlorobenzene	99	99	86-116	1	0-8	
1,1-Dichloroethene	100	101	70-130	1	0-25	
Ethylbenzene	102	102	70-130	0	0-30	
Toluene	104	103	87-123	1	0-8	
Trichloroethene	100	100	79-127	1	0-10	
Vinyl Chloride	103	105	69-129	2	0-13	
Methyl-t-Butyl Ether (MTBE)	90	90	71-131	0	0-13	
Tert-Butyl Alcohol (TBA)	130	119	36-168	9	0-45	
Diisopropyl Ether (DIPE)	102	102	81-123	1	0-9	
Ethyl-t-Butyl Ether (ETBE)	90	91	72-126	2	0-12	
Tert-Amyl-Methyl Ether (TAME)	90	92	72-126	2	0-12	
Ethanol	99	82	53-149	13	0-31	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Brown and Caldwell		Date Received:	N/A
10540 White Rock Road, Suite 180		Work Order No:	08-02-1974
Rancho Cordova, CA 95670-7984		Preparation:	EPA 3010A Total
		Method:	EPA 6010B

Project: UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
097-01-003-8,050	**Aqueous**	**ICP 5300**	**02/28/08**	**080227-I-08**	**080227L08**

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Chromium	0.500	0.478	96	80-120	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell		Date Received:	N/A
10540 White Rock Road, Suite 180		Work Order No:	08-02-1974
Rancho Cordova, CA 95670-7984		Preparation:	N/A
		Method:	EPA 300.0

Project: UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-05-118-4,361	**Aqueous**	**IC 7**	**N/A**	**02/27/08**	**080227L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Nitrate (as N)	99	100	87-111	2	0-12	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	N/A
Work Order No:	08-02-1974
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-24,678	**Aqueous**	**GC/MS FF**	**03/05/08**	**03/05/08**	**080305L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	97	97	84-120	0	0-8	
Carbon Tetrachloride	116	114	63-147	2	0-10	
Chlorobenzene	100	100	89-119	0	0-7	
1,2-Dibromoethane	100	101	80-120	1	0-20	
1,2-Dichlorobenzene	100	100	89-119	0	0-9	
1,1-Dichloroethene	102	102	77-125	0	0-16	
Ethylbenzene	102	102	80-120	0	0-20	
Toluene	104	103	83-125	1	0-9	
Trichloroethene	100	101	89-119	1	0-8	
Vinyl Chloride	106	105	63-135	1	0-13	
Methyl-t-Butyl Ether (MTBE)	92	93	82-118	1	0-13	
Tert-Butyl Alcohol (TBA)	129	122	46-154	5	0-32	
Diisopropyl Ether (DIPE)	102	103	81-123	1	0-11	
Ethyl-t-Butyl Ether (ETBE)	93	94	74-122	1	0-12	
Tert-Amyl-Methyl Ether (TAME)	93	94	76-124	1	0-10	
Ethanol	103	107	60-138	4	0-32	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-02-1974

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

BROWN AND CALDWELL

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PROJECT NAME: **UC Davis - LEHR**

PROJECT NUMBER: **131261**

LABORATORY NAME & ADDRESS: CalScience Environmental Laboratories, Inc. Garder CA

	LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
1	01	GWGW2214	2/26/08	1505	CEF	2	500ml 1 L Plastic	NONE	W	Tritium, C-14	—	—	STD	SP	----	
1	02	GWGW2214	2/26/08	1505	↓	3	40 mL VOA	HCl pH < 2	W	SW8260B	—	—	↓	↓	----	
1	03	GWGW2214	2/26/08	1505	↓	1	250ml 1 L Plastic	NONE	W	Nitrate (as N)	—	—	↓	↓	----	
1	04	GWGW2214	2/26/08	1505	↓	1	250 mL Plastic	HNO3 pH < 2	W	Total Chromium	—	—	↓	↓	----	
2	05	TBGW0504	2/26/08	NA	NA	2	40mlVOA	HCl	W	SW8260B	—	—	STD	NA	----	
	06														----	
	07														----	
	08														----	
	09														----	
	10														----	

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Irvine, CA 92602
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PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: CalScience Environmental Laboratories, Inc. Garder CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
01	GWGW2216	2/26/08	1415	CEF	2	500 mL ~~1 L~~ Plastic	NONE	W	Tritium, C-14	–	–	STD	SP	----	
02	GWGW2216	2/26/08	1415	CEF	1	250 mL ~~1 L~~ Plastic	NONE	W	Nitrate (as N)	–	–	STD	SP	----	
03	GWGW2216	2/26/08	1415	CEF	1	250 mL Plastic	HNO3 pH < 2	W	Total Chromium	–	–	STD	SP	----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

3

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PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: CalScience Environmental Laboratories, Inc. Garder CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
01	GWGW2217	2/26/08	1625	CEF	1	~~1L~~ Plastic 250mL	NONE	W	Nitrate (as N)	–	–	STD	SP	----	
02	GWGW2217	2/26/08	1625	CEF	1	250 mL Plastic	HNO3 pH < 2	W	Total Chromium	–	–	STD	SP	----	
03														----	
04														----	
05														----	
06														----	
07														----	
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10														----	

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PROJECT NAME: **UC Davis - LEHR**

PROJECT NUMBER: **131261**

LABORATORY NAME & ADDRESS: CalScience Environmental Laboratories, Inc. Garder CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
01	GWGW2218	2/26/08	1715	CEF	1	1 L Plastic	NONE	W	Nitrate (as N)	–	–	STD	SP	----	
02	GWGW2218	2/26/08	1715	CEF	1	250 mL Plastic	HNO3 pH < 2	W	Total Chromium	–	–	↓	↓	----	
03														----	
04														----	
05														----	
06														----	
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BROWN AND CALDWELL

CHAIN OF CUSTODY RECORD

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714-730-7600 / FAX 714-734-0940

UCD0000263

PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: ~~CalScience Environmental Laboratories, Inc. Garder~~ CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
01	GWGW2250	2/26/08	1336	CEF	2	500ml ~~1L~~ Plastic	NONE	W	Tritium, C-14	–	–	STD	SP	----	
02	GWGW2250	2/26/08	1336	CEF	1	250ml ~~1L~~ Plastic	NONE	W	Nitrate (as N)	–	–	STD	SP	----	
03	GWGW2250	2/26/08	1336	CEF	1	250 mL Plastic	HNO3 pH < 2	W	Total Chromium	–	–	STD	SP	----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

COLLECTED & RELEASED BY	DATE	TIME	COOLER I.D.:	DATE	TIME	COMMENTS (see note on back):
	2/26/08	:				
RECEIVED BY:	DATE / /	TIME :	RELINQUISHED BY:	DATE / /	TIME :	
	2/27/08	1030				
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

DISTRIBUTION: WHITE-LAB RECEIPT • CANARY-PROJECT FILE • PINK-DATA MANAGEMENT • GOLDENROD-FIELD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

BROWN AND CALDWELL

CHAIN OF CUSTODY RECORD

(1974)

COC No. _____

6/6

UCD0000269

☑ 10540 White Rock Rd, Ste. 180
Rancho Cordova, CA 95670
916-444-0123 / FAX 916-635-8805

☐ 9665 Chesapeake Dr. / Suite 201
San Diego, CA 92123
858-514-8822 / FAX 858-514-8833

☐ 201 N. Civic Dr. / Suite 115
Walnut Creek, CA 94596
925-937-9010 / FAX 925-937-9026

☐ 400 Exchange / Suite 100
Irvine, CA 92602
714-730-7600 / FAX 714-734-0940

PROJECT NAME: **UC Davis - LEHR**

PROJECT NUMBER: **131261**

LABORATORY NAME & ADDRESS: **CalScience Environmental Laboratories, Inc. Garder CA**

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
01	GWGW2258	2/26/08	1528	CEF	~~1~~ 2	~~1 L~~ Plastic 500ml	NONE	W	Tritium, C-14	–	–	STD	SP	----	
02														----	
03														----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

COLLECTED & RELEASED BY	DATE	TIME	COOLER I.D.:	DATE	TIME	COMMENTS (see note on back):
	22608	1800				
RECEIVED BY: FedEx	DATE / /	TIME :	RELINQUISHED BY:	DATE / /	TIME :	
CEF	2/27/08	1030				
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

DISTRIBUTION: WHITE-LAB RECEIPT • CANARY-PROJECT FILE • PINK-DATA MANAGEMENT • GOLDENROD-FIELD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 0 2 - 1 9 7 4

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: Brown and Caldwell **DATE:** 2/27/08

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature.

_____ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

_____ °C Temperature blank.
2.5 °C IR thermometer.
_____ Ambient temperature.

Initial: AT

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____ Not Present: ✓

Initial: AT

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)	✓		
VOA vial(s) free of headspace.	✓		
Tedlar bag(s) free of condensation			✓

Initial: AT

COMMENTS:

GEL Laboratories LLC
a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178
www.gel.com

March 07, 2008

Mr. Virendra R. Patel
Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, California 92841-1427

Re: Carbon 14
Work Order: 203810

Dear Mr. Patel:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on February 29, 2008. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4297.

Sincerely,

Amanda Rasco
Project Manager

Purchase Order: 08-02-1974
Enclosures

Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

TO: GEL Laboratories, Inc.

203810

CHAIN OF CUSTODY RECORD

DATE: 02/28/08

PAGE: 1 OF 1

LABORATORY CLIENT: Calscience Environmental Laboratories, Inc.

ADDRESS: 7440 Lincoln Way

CITY: Garden Grove, CA 92841-1427

TEL: (714) 895-5494

E-MAIL: vpatel@calscience.com

CLIENT PROJECT NAME / NUMBER: 08-02-1974

P.O. NO.: 08-02-1974

PROJECT CONTACT: Virendra Patel

QUOTE NO.:

LAB USE ONLY

SAMPLER(S): (PRINT)

TURNAROUND TIME

☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☐ 5 DAYS ☒ NORMAL

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)

☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___/___/___

SPECIAL INSTRUCTIONS

Ship To: GEL Laboratories, Inc.
2040 Savage Rd.
Charleston, SC 29407

Attention: Amanda Rasco 843-556-8171

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	Matrix	#Cont	Carbon-14 by EERF-C	Detection Limit of 20 pCi/L		Send PDF via Email	Send Invoice with Results
	GWGW2214	02/26/08	1505	W	1	X	X		X	X
	GWGW2216	02/26/08	1415	W	1	X	X		X	X
	GWGW2250	02/26/08	1336	W	1	X	X		X	X
	GWGW2258	02/26/08	1528	W	1	X	X		X	X

Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
W Doan (CALSCIENCE)	Tiffany Adams 2-29-08 915	02/28/08	1545
Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: Calscience	SDG/ARCOC/Work Order: 203810
Received By: JRA	Date Received: 2-29-08 915

Suspected Hazard Information	Yes	No	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
Marked as radioactive?		X	Maximum Counts Observed*: 40 CPM
Classified Radioactive II by RSO?		X	
Marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Identified as Foreign Soil?		X	

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (4 +/- 2 C)?		✓		Preservation Method: ice bags blue ice dry ice none other (describe) 30
3	Chain of custody documents included with shipment?	✓			
4	Sample containers intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		✓		Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		✓		Sample ID's and containers affected:
7	Are Encore containers present?			✓	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	✓			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Sample ID's affected:
11	Number of containers received match number indicated on COC?	✓			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	✓			

Comments: Fed Ex 9587 3400 1450

PM (or PMA) review: Initials AM Date 2/29/08

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

CALS001 Calscience Environmental Laboratory, Inc.

Client SDG: 203810 GEL Work Order: 203810

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Amanda Rasco.

Amanda Rasco

Reviewed by

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : Calscience Environmental Laboratories, Inc.
Address : 7440 Lincoln Way
Garden Grove, California 92841−−1427

Report Date: March 7, 2008

Contact: Mr. Virendra R. Patel
Project: **Carbon 14**

Client Sample ID:	GWGW2214	Project:	CALS00101
Sample ID:	203810001	Client ID:	CALS001
Matrix:	Water		
Collect Date:	26−FEB−08 15:05		
Receive Date:	29−FEB−08		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Rad Liquid Scintillation Analysis											
Liquid Scint C14, Liquid											
Carbon−14	U	−5.31	+/−9.31	16.4	20.0	pCi/L		RXE1 03/06/08	1139	731998	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA EERF C−01 Modified	

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : Calscience Environmental Laboratories, Inc.
Address : 7440 Lincoln Way
Garden Grove, California 92841−−1427

Report Date: March 7, 2008

Contact: Mr. Virendra R. Patel
Project: **Carbon 14**

Client Sample ID:	GWGW2216	Project:	CALS00101
Sample ID:	203810002	Client ID:	CALS001
Matrix:	Water		
Collect Date:	26−FEB−08 14:15		
Receive Date:	29−FEB−08		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Rad Liquid Scintillation Analysis											
Liquid Scint C14, Liquid											
Carbon−14		335	+/−17.5	16.5	20.0	pCi/L		RXE1 03/06/08	1210	731998	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA EERF C−01 Modified	

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2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : Calscience Environmental Laboratories, Inc.
Address : 7440 Lincoln Way
Garden Grove, California 92841−−1427

Report Date: March 7, 2008

Contact: Mr. Virendra R. Patel
Project: **Carbon 14**

Client Sample ID:	GWGW2250	Project:	CALS00101
Sample ID:	203810003	Client ID:	CALS001
Matrix:	Water		
Collect Date:	26−FEB−08 13:36		
Receive Date:	29−FEB−08		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Rad Liquid Scintillation Analysis											
Liquid Scint C14, Liquid											
Carbon−14		60.0	+/−11.3	16.3	20.0	pCi/L		RXE1 03/06/08	1242	731998	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA EERF C−01 Modified	

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : Calscience Environmental Laboratories, Inc.
Address : 7440 Lincoln Way
Garden Grove, California 92841−−1427

Report Date: March 7, 2008

Contact: Mr. Virendra R. Patel
Project: **Carbon 14**

Client Sample ID:	GWGW2258	Project:	CALS00101
Sample ID:	203810004	Client ID:	CALS001
Matrix:	Water		
Collect Date:	26−FEB−08 15:28		
Receive Date:	29−FEB−08		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Rad Liquid Scintillation Analysis											
Liquid Scint C14, Liquid											
Carbon−14	U	4.22	+/−9.56	16.3	20.0	pCi/L		RXE1 03/06/08	1313	731998	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA EERF C−01 Modified	

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: March 7, 2008
Page 1 of 2

Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, California

Contact: **Mr. Virendra R. Patel**

Workorder: **203810**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Liquid Scintillation											
Batch 731998											
QC1201527311 203810001 DUP											
Carbon-14		U	-5.31 +/-9.31	U	-9.45 +/-9.16	pCi/L	0		N/A	RXE1	03/06/08 14:15
QC1201527313 LCS											
Carbon-14	523				496 +/-19.9	pCi/L		95	(75%-125%)		03/06/08 15:18
QC1201527310 MB											
Carbon-14				U	-3.84 +/-9.21	pCi/L					03/06/08 13:44
QC1201527312 203810001 MS											
Carbon-14	523	U	-5.31 +/-9.31		502 +/-20.3	pCi/L		96	(75%-125%)		03/06/08 14:46

Notes:
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- M M if above MDC and less than LLD
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy--Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
- h Preparation or preservation holding time was exceeded

GEL LABORATORIES LLC
2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Workorder: **203810**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

List of current GEL Certifications as of 07 March 2008

State	Certification
Alaska	UST-062
Arizona	AZ0668
Arkansas	88-0651
CLIA	42D0904046
California	01151CA
Colorado	GenEngLabs
Connecticut	PH-0169
Dept. of Navy	NFESC 413
EPA	WG-15J
Florida/NELAP	E87156
Georgia	E87156 (FL/NELAP)
Hawaii	N/A
Idaho	N/A
Illinois	200029
Indiana	C-SC-01
Kansas	E-10332
Kentucky	90129
Louisiana	03046
Maryland	270
Massachusetts	M-SC012
Michigan	9903
Nevada	SC12
New Jersey	SC002
New Mexico	FL NELAP E87156
New York	11501
North Carolina	233
North Carolina Drinking W	45709
North Dakota	R-158
Oklahoma	9904
Pennsylvania	68-00485
South Carolina	10120001/10585001/10120002
Tennessee	02934
Texas NELAP	T104704235-07-TX
U.S. Dept. of Agriculture	S-52597
US Army Corps of Engineer	N/A
Utah	8037697376 GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Calscience Environmental Laboratories, Inc.

Supplemental Report 1

March 25, 2008

The original report has been revised/corrected.

Joe Turner
Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Subject: **Calscience Work Order No.: 08-02-1974**
Client Reference: UC Davis - LEHR / 131261

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 2/27/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Virendra Patel
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/27/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-1974
Rancho Cordova, CA 95670-7984		Preparation:	EPA 3010A Total
		Method:	EPA 6010B

Project: UC Davis - LEHR / 131261

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2214	**08-02-1974-1-D**	**02/26/08 15:05**	**Aqueous**	**ICP 5300**	**02/27/08**	**02/28/08 21:46**	**080227L08**

Parameter	Result	RL	DF	Qual	Units
Chromium	0.0948	0.00500	1		mg/L

GWGW2216	**08-02-1974-3-C**	**02/26/08 14:15**	**Aqueous**	**ICP 5300**	**02/27/08**	**02/28/08 21:51**	**080227L08**

Parameter	Result	RL	DF	Qual	Units
Chromium	0.0139	0.00500	1		mg/L

GWGW2217	**08-02-1974-4-B**	**02/26/08 16:25**	**Aqueous**	**ICP 5300**	**02/27/08**	**02/28/08 21:53**	**080227L08**

Parameter	Result	RL	DF	Qual	Units
Chromium	0.137	0.00500	1		mg/L

GWGW2218	**08-02-1974-5-A**	**02/26/08 17:15**	**Aqueous**	**ICP 5300**	**02/27/08**	**02/28/08 21:55**	**080227L08**

Parameter	Result	RL	DF	Qual	Units
Chromium	ND	0.00500	1		mg/L

GWGW2250	**08-02-1974-6-C**	**02/26/08 13:36**	**Aqueous**	**ICP 5300**	**02/27/08**	**02/28/08 21:56**	**080227L08**

Parameter	Result	RL	DF	Qual	Units
Chromium	ND	0.00500	1		mg/L

Method Blank	**097-01-003-8,050**	**N/A**	**Aqueous**	**ICP 5300**	**02/27/08**	**02/28/08 10:14**	**080227L08**

Parameter	Result	RL	DF	Qual	Units
Chromium	ND	0.00500	1		mg/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/27/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-1974
Rancho Cordova, CA 95670-7984		Preparation:	N/A
		Method:	EPA 300.0

Project: UC Davis - LEHR / 131261

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2214	**08-02-1974-1-C**	**02/26/08 15:05**	**Aqueous**	**IC 7**	**N/A**	**02/27/08 20:36**	**080227L01**

Parameter	Result	RL	DF	Qual	Units
Nitrate (as N)	37	2.0	20		mg/L

GWGW2216	**08-02-1974-3-D**	**02/26/08 14:15**	**Aqueous**	**IC 7**	**N/A**	**02/27/08 20:53**	**080227L01**

Parameter	Result	RL	DF	Qual	Units
Nitrate (as N)	6.8	0.20	2		mg/L

GWGW2217	**08-02-1974-4-A**	**02/26/08 16:25**	**Aqueous**	**IC 7**	**N/A**	**02/27/08 21:45**	**080227L01**

Parameter	Result	RL	DF	Qual	Units
Nitrate (as N)	30	1.0	10		mg/L

GWGW2218	**08-02-1974-5-B**	**02/26/08 17:15**	**Aqueous**	**IC 7**	**N/A**	**02/27/08 22:03**	**080227L01**

Parameter	Result	RL	DF	Qual	Units
Nitrate (as N)	11	0.50	5		mg/L

GWGW2250	**08-02-1974-6-D**	**02/26/08 13:36**	**Aqueous**	**IC 7**	**N/A**	**02/27/08 22:20**	**080227L01**

Parameter	Result	RL	DF	Qual	Units
Nitrate (as N)	2.6	0.10	1		mg/L

Method Blank	**099-05-118-4,361**	**N/A**	**Aqueous**	**IC 7**	**N/A**	**02/27/08 09:17**	**080227L01**

Parameter	Result	RL	DF	Qual	Units
Nitrate (as N)	ND	0.10	1		mg/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/27/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-1974
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2214	**08-02-1974-1-E**	**02/26/08 15:05**	**Aqueous**	**GC/MS FF**	**03/05/08**	**03/05/08 14:31**	**080305L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	3.1	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	113	74-140		1,2-Dichloroethane-d4	114	74-146	
Toluene-d8	108	88-112		1,4-Bromofluorobenzene	99	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/27/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-1974
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TBGW0504	**08-02-1974-2-A**	**02/26/08 00:00**	**Aqueous**	**GC/MS FF**	**03/05/08**	**03/05/08 14:02**	**080305L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	113	74-140		1,2-Dichloroethane-d4	115	74-146	
Toluene-d8	108	88-112		1,4-Bromofluorobenzene	100	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/27/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-1974
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-24,678**	**N/A**	**Aqueous**	**GC/MS FF**	**03/05/08**	**03/05/08 13:08**	**080305L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	113	74-140		1,2-Dichloroethane-d4	112	74-146	
Toluene-d8	108	88-112		1,4-Bromofluorobenzene	99	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	02/27/08
Work Order No:	08-02-1974
Preparation:	EPA 3010A Total
Method:	EPA 6010B

Project UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-02-1977-1	**Aqueous**	**ICP 5300**	**02/27/08**	**02/28/08**	**080227S08**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Chromium	97	100	86-122	3	0-8	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	02/27/08
Work Order No:	08-02-1974
Preparation:	N/A
Method:	EPA 300.0

Project UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-02-1964-5	**Aqueous**	**IC 7**	**N/A**	**02/27/08**	**080227S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Nitrate (as N)	101	101	58-142	0	0-6	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: 02/27/08
Work Order No: 08-02-1974
Preparation: EPA 5030B
Method: EPA 8260B

Project UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
GWGW2214	**Aqueous**	**GC/MS FF**	**03/05/08**	**03/05/08**	**080305S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	97	97	88-118	1	0-7	
Carbon Tetrachloride	113	115	67-145	2	0-11	
Chlorobenzene	102	101	88-118	1	0-7	
1,2-Dibromoethane	101	102	70-130	1	0-30	
1,2-Dichlorobenzene	99	99	86-116	1	0-8	
1,1-Dichloroethene	100	101	70-130	1	0-25	
Ethylbenzene	102	102	70-130	0	0-30	
Toluene	104	103	87-123	1	0-8	
Trichloroethene	100	100	79-127	1	0-10	
Vinyl Chloride	103	105	69-129	2	0-13	
Methyl-t-Butyl Ether (MTBE)	90	90	71-131	0	0-13	
Tert-Butyl Alcohol (TBA)	130	119	36-168	9	0-45	
Diisopropyl Ether (DIPE)	102	102	81-123	1	0-9	
Ethyl-t-Butyl Ether (ETBE)	90	91	72-126	2	0-12	
Tert-Amyl-Methyl Ether (TAME)	90	92	72-126	2	0-12	
Ethanol	99	82	53-149	13	0-31	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Brown and Caldwell		Date Received:	N/A
10540 White Rock Road, Suite 180		Work Order No:	08-02-1974
Rancho Cordova, CA 95670-7984		Preparation:	EPA 3010A Total
		Method:	EPA 6010B

Project: UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
097-01-003-8,050	**Aqueous**	**ICP 5300**	**02/28/08**	**080227-I-08**	**080227L08**

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Chromium	0.500	0.478	96	80-120	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell		Date Received:	N/A
10540 White Rock Road, Suite 180		Work Order No:	08-02-1974
Rancho Cordova, CA 95670-7984		Preparation:	N/A
		Method:	EPA 300.0

Project: UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-05-118-4,361	**Aqueous**	**IC 7**	**N/A**	**02/27/08**	**080227L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Nitrate (as N)	99	100	87-111	2	0-12	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	N/A
Work Order No:	08-02-1974
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-24,678	**Aqueous**	**GC/MS FF**	**03/05/08**	**03/05/08**	**080305L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	97	97	84-120	0	0-8	
Carbon Tetrachloride	116	114	63-147	2	0-10	
Chlorobenzene	100	100	89-119	0	0-7	
1,2-Dibromoethane	100	101	80-120	1	0-20	
1,2-Dichlorobenzene	100	100	89-119	0	0-9	
1,1-Dichloroethene	102	102	77-125	0	0-16	
Ethylbenzene	102	102	80-120	0	0-20	
Toluene	104	103	83-125	1	0-9	
Trichloroethene	100	101	89-119	1	0-8	
Vinyl Chloride	106	105	63-135	1	0-13	
Methyl-t-Butyl Ether (MTBE)	92	93	82-118	1	0-13	
Tert-Butyl Alcohol (TBA)	129	122	46-154	5	0-32	
Diisopropyl Ether (DIPE)	102	103	81-123	1	0-11	
Ethyl-t-Butyl Ether (ETBE)	93	94	74-122	1	0-12	
Tert-Amyl-Methyl Ether (TAME)	93	94	76-124	1	0-10	
Ethanol	103	107	60-138	4	0-32	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-02-1974

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

BROWN AND CALDWELL

CHAIN OF CUSTODY RECORD

(1974)

COC No. _____

1/6

UCD0000230

☑ 10540 White Rock Rd, Ste. 180
Rancho Cordova, CA 95670
916-444-0123 / FAX 916-635-8805

☐ 9665 Chesapeake Dr. / Suite 201
San Diego, CA 92123
858-514-8822 / FAX 858-514-8833

☐ 201 N. Civic Dr. / Suite 115
Walnut Creek, CA 94596
925-937-9010 / FAX 925-937-9026

☐ 400 Exchange / Suite 100
Irvine, CA 92602
714-730-7600 / FAX 714-734-0940

PROJECT NAME: **UC Davis - LEHR**

PROJECT NUMBER: **131261**

LABORATORY NAME & ADDRESS: **CalScience Environmental Laboratories, Inc. Garder CA**

	LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
1	01	GWGW2214	2/26/08	1505	CEF	2	500ml 1 L Plastic	NONE	W	Tritium, C-14	—	—	STD	SP	----	
1	02	GWGW2214	2/26/08	1505	↓	3	40 mL VOA	HCl pH < 2	W	SW8260B	—	—	↓	↓	----	
1	03	GWGW2214	2/26/08	1505	↓	1	250ml 1 L Plastic	NONE	W	Nitrate (as N)	—	—	↓	↓	----	
1	04	GWGW2214	2/26/08	1505	↓	1	250 mL Plastic	HNO3 pH < 2	W	Total Chromium	—	—	↓	↓	----	
2	05	TBGW0504	2/26/08	NA	NA	2	40mlVOA	HCl	W	SW8260B	—	—	STD	NA	----	
	06														----	
	07														----	
	08														----	
	09														----	
	10														----	

COLLECTED & RELEASED BY	DATE	TIME	COOLER I.D.:	DATE	TIME	COMMENTS (see note on back):
	2/26/08	18:00				
RECEIVED BY: FedEx	DATE / /	TIME :	RELINQUISHED BY:	DATE / /	TIME :	
Ohm Co	2/27/08	1030				
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER: FedEx			SHIPPING NUMBER: 8631-1772-3921			

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BROWN AND CALDWELL

CHAIN OF CUSTODY RECORD

(1974)

COC No. _____

UGD0000232

☑ 10540 White Rock Rd, Ste. 180
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Irvine, CA 92602
714-730-7600 / FAX 714-734-0940

PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: CalScience Environmental Laboratories, Inc. Garder CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
01	GWGW2216	2/26/08	1415	CEF	2	500 mL ~~1 L~~ Plastic	NONE	W	Tritium, C-14	–	–	STD	SP	----	
02	GWGW2216	2/26/08	1415	CEF	1	250 mL ~~1 L~~ Plastic	NONE	W	Nitrate (as N)	–	–	STD	SP	----	
03	GWGW2216	2/26/08	1415	CEF	1	250 mL Plastic	HNO3 pH < 2	W	Total Chromium	–	–	STD	SP	----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

3

COLLECTED & RELEASED BY	DATE 2/26/08	TIME 1800	COOLER I.D.:			COMMENTS (see note on back):
RECEIVED BY: FED EX	DATE / /	TIME :	RELINQUISHED BY:	DATE / /	TIME :	
[signature] CE	2/27/08	1030				
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

DISTRIBUTION: WHITE-LAB RECEIPT • CANARY-PROJECT FILE • PINK-DATA MANAGEMENT • GOLDENROD-FIELD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

BROWN AND CALDWELL

CHAIN OF CUSTODY RECORD

(1974)

COC No. _____

UCD0000233

☑ 10540 White Rock Rd, Ste. 180
Rancho Cordova, CA 95670
916-444-0123 / FAX 916-635-8805

☐ 9665 Chesapeake Dr. / Suite 201
San Diego, CA 92123
858-514-8822 / FAX 858-514-8833

☐ 201 N. Civic Dr. / Suite 115
Walnut Creek, CA 94596
925-937-9010 / FAX 925-937-9026

☐ 400 Exchange / Suite 100
Irvine, CA 92602
714-730-7600 / FAX 714-734-0940

PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: CalScience Environmental Laboratories, Inc. Garder CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
01	GWGW2217	2/26/08	1625	CEF	1	~~1L~~ Plastic 250mL	NONE	W	Nitrate (as N)	–	–	STD	SP	----	
02	GWGW2217	2/26/08	1625	CEF	1	250 mL Plastic	HNO3 pH < 2	W	Total Chromium	–	–	STD	SP	----	
03														----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

COLLECTED & RELEASED BY	DATE	TIME	COOLER I.D.:			COMMENTS (see note on back):
	2/26/08	18:00				
RECEIVED BY: FED Ex	DATE / /	TIME :	RELINQUISHED BY:	DATE / /	TIME :	
CEF	2/27/08	1030				
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

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BROWN AND CALDWELL

CHAIN OF CUSTODY RECORD

(1974)

COC No. _____

4/6

UCD0000234

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San Diego, CA 92123
858-514-8822 / FAX 858-514-8833

☐ 201 N. Civic Dr. / Suite 115
Walnut Creek, CA 94596
925-937-9010 / FAX 925-937-9026

☐ 400 Exchange / Suite 100
Irvine, CA 92602
714-730-7600 / FAX 714-734-0940

PROJECT NAME: **UC Davis - LEHR**

PROJECT NUMBER: **131261**

LABORATORY NAME & ADDRESS: CalScience Environmental Laboratories, Inc. Garder CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
01	GWGW2218	2/26/08	1715	CEF	1	1 L Plastic	NONE	W	Nitrate (as N)	–	–	STD	SP	----	
02	GWGW2218	2/26/08	1715	CEF	1	250 mL Plastic	HNO3 pH < 2	W	Total Chromium	–	–	↓	↓	----	
03														----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

5

COLLECTED & RELEASED BY	DATE 2/26/08	TIME 18:00	COOLER I.D.:			COMMENTS (see note on back):
RECEIVED BY:	DATE / /	TIME :	RELINQUISHED BY:	DATE / /	TIME :	
	2/27/08	1630				
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

DISTRIBUTION: WHITE-LAB RECEIPT • CANARY-PROJECT FILE • PINK-DATA MANAGEMENT • GOLDENROD-FIELD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

BROWN AND CALDWELL

CHAIN OF CUSTODY RECORD

(1974)

COC No. _____

5/6

☑ 10540 White Rock Rd, Ste. 180
Rancho Cordova, CA 95670
916-444-0123 / FAX 916-635-8805

☐ 9665 Chesapeake Dr. / Suite 201
San Diego, CA 92123
858-514-8822 / FAX 858-514-8833

☐ 201 N. Civic Dr. / Suite 115
Walnut Creek, CA 94596
925-937-9010 / FAX 925-937-9026

☐ 400 Exchange [illegible]
Irvine, CA 92602
714-730-7600 / FAX 714-734-0940

UCD0000263

PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: ~~CalScience Environmental Laboratories, Inc. Garder~~ CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
01	GWGW2250	2/26/08	1336	CEF	2	500ml ~~1L~~ Plastic	NONE	W	Tritium, C-14	–	–	STD	SP	----	
02	GWGW2250	2/26/08	1336	CEF	1	250ml ~~1L~~ Plastic	NONE	W	Nitrate (as N)	–	–	STD	SP	----	
03	GWGW2250	2/26/08	1336	CEF	1	250 mL Plastic	HNO3 pH < 2	W	Total Chromium	–	–	STD	SP	----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

COLLECTED & RELEASED BY	DATE 2/26/08	TIME :	COOLER I.D.:			COMMENTS (see note on back):
RECEIVED BY:	DATE / /	TIME :	RELINQUISHED BY:	DATE / /	TIME :	
	2/27/08	1030				
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

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USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

BROWN AND CALDWELL

CHAIN OF CUSTODY RECORD

(1974)

COC No. _____

6/6

UCD0000269

☑ 10540 White Rock Rd, Ste. 180
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916-444-0123 / FAX 916-635-8805

☐ 9665 Chesapeake Dr. / Suite 201
San Diego, CA 92123
858-514-8822 / FAX 858-514-8833

☐ 201 N. Civic Dr. / Suite 115
Walnut Creek, CA 94596
925-937-9010 / FAX 925-937-9026

☐ 400 Exchange / Suite 100
Irvine, CA 92602
714-730-7600 / FAX 714-734-0940

PROJECT NAME: **UC Davis - LEHR**

PROJECT NUMBER: **131261**

LABORATORY NAME & ADDRESS: **CalScience Environmental Laboratories, Inc. Garder CA**

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
01	GWGW2258	2/26/08	1528	CEF	~~1~~ 2	~~1 L~~ Plastic 500ml	NONE	W	Tritium, C-14	–	–	STD	SP	----	
02														----	
03														----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

COLLECTED & RELEASED BY	DATE	TIME	COOLER I.D.:	DATE	TIME	COMMENTS (see note on back):
	22608	1800				
RECEIVED BY: FedEx	DATE / /	TIME :	RELINQUISHED BY:	DATE / /	TIME :	
[illegible] CEL	2/27/08	1030				
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

DISTRIBUTION: WHITE-LAB RECEIPT • CANARY-PROJECT FILE • PINK-DATA MANAGEMENT • GOLDENROD-FIELD

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 0 2 - 1 9 7 4

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: Brown and Caldwell DATE: 2/27/08

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature.

_____ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

_____ °C Temperature blank.
2.5 °C IR thermometer.
_____ Ambient temperature.

Initial: AT

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____ Not Present: ✓

Initial: AT

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)	✓		
VOA vial(s) free of headspace.	✓		
Tedlar bag(s) free of condensation			✓

Initial: AT

COMMENTS:

GEL Laboratories LLC
a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178

www.gel.com

March 07, 2008

Mr. Virendra R. Patel
Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, California 92841-1427

Re: Carbon 14
Work Order: 203810

Dear Mr. Patel:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on February 29, 2008. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4297.

Sincerely,

Amanda Rasco
Project Manager

Purchase Order: 08-02-1974
Enclosures

Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

TO: GEL Laboratories, Inc.

203810

CHAIN OF CUSTODY RECORD

DATE: 02/28/08

PAGE: 1 OF 1

LABORATORY CLIENT: Calscience Environmental Laboratories, Inc.

ADDRESS: 7440 Lincoln Way

CITY: Garden Grove, CA 92841-1427

TEL: (714) 895-5494

E-MAIL: vpatel@calscience.com

CLIENT PROJECT NAME / NUMBER: 08-02-1974

P.O. NO.: 08-02-1974

PROJECT CONTACT: Virendra Patel

QUOTE NO.:

SAMPLER(S): (PRINT)

LAB USE ONLY

TURNAROUND TIME

☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☐ 5 DAYS ☒ NORMAL

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)

☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___/___/___

SPECIAL INSTRUCTIONS

Ship To: GEL Laboratories, Inc.
2040 Savage Rd.
Charleston, SC 29407

Attention: Amanda Rasco 843-556-8171

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	Matrix	#Cont	Carbon-14 by EERF-C	Detection Limit of 20 pCi/L		Send PDF via Email	Send Invoice with Results
	GWGW2214	02/26/08	1505	W	1	X	X		X	X
	GWGW2216	02/26/08	1415	W	1	X	X		X	X
	GWGW2250	02/26/08	1336	W	1	X	X		X	X
	GWGW2258	02/26/08	1528	W	1	X	X		X	X

Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
W Doan (CALSCIENCE)	Tiffany Adams 2-29-08 915	02/28/08	1545
Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: Calscience	SDG/ARCOC/Work Order: 203810
Received By: JRA	Date Received: 2-29-08 915

Suspected Hazard Information	Yes	No	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
Marked as radioactive?		X	Maximum Counts Observed*: 40 CPM
Classified Radioactive II by RSO?		X	
Marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Identified as Foreign Soil?		X	

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (4 +/- 2 C)?		✓		Preservation Method: ice bags blue ice dry ice none other (describe) 30
3	Chain of custody documents included with shipment?	✓			
4	Sample containers intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		✓		Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		✓		Sample ID's and containers affected:
7	Are Encore containers present?			✓	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	✓			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Sample ID's affected:
11	Number of containers received match number indicated on COC?	✓			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	✓			

Comments: Fed Ex 9587 3400 1450

PM (or PMA) review: Initials AM Date 2/29/08

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

CALS001 Calscience Environmental Laboratory, Inc.

Client SDG: 203810 GEL Work Order: 203810

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Amanda Rasco.

Amanda Rasco

Reviewed by

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : Calscience Environmental Laboratories, Inc.
Address : 7440 Lincoln Way
Garden Grove, California 92841−−1427

Report Date: March 7, 2008

Contact: Mr. Virendra R. Patel
Project: **Carbon 14**

Client Sample ID:	GWGW2214	Project:	CALS00101
Sample ID:	203810001	Client ID:	CALS001
Matrix:	Water		
Collect Date:	26−FEB−08 15:05		
Receive Date:	29−FEB−08		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Rad Liquid Scintillation Analysis											
Liquid Scint C14, Liquid											
Carbon−14	U	−5.31	+/−9.31	16.4	20.0	pCi/L		RXE1 03/06/08	1139	731998	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA EERF C−01 Modified	

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : Calscience Environmental Laboratories, Inc.
Address : 7440 Lincoln Way
Garden Grove, California 92841−−1427

Report Date: March 7, 2008

Contact: Mr. Virendra R. Patel
Project: **Carbon 14**

Client Sample ID:	GWGW2216	Project:	CALS00101
Sample ID:	203810002	Client ID:	CALS001
Matrix:	Water		
Collect Date:	26−FEB−08 14:15		
Receive Date:	29−FEB−08		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Rad Liquid Scintillation Analysis											
Liquid Scint C14, Liquid											
Carbon−14		335	+/−17.5	16.5	20.0	pCi/L		RXE1 03/06/08	1210	731998	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA EERF C−01 Modified	

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Certificate of Analysis

Company : Calscience Environmental Laboratories, Inc.
Address : 7440 Lincoln Way
Garden Grove, California 92841−−1427

Report Date: March 7, 2008

Contact: Mr. Virendra R. Patel
Project: **Carbon 14**

Client Sample ID:	GWGW2250	Project:	CALS00101
Sample ID:	203810003	Client ID:	CALS001
Matrix:	Water		
Collect Date:	26−FEB−08 13:36		
Receive Date:	29−FEB−08		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Rad Liquid Scintillation Analysis											
Liquid Scint C14, Liquid											
Carbon−14		60.0	+/−11.3	16.3	20.0	pCi/L		RXE1 03/06/08	1242	731998	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA EERF C−01 Modified	

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Certificate of Analysis

Company : Calscience Environmental Laboratories, Inc.
Address : 7440 Lincoln Way
Garden Grove, California 92841−−1427

Report Date: March 7, 2008

Contact: Mr. Virendra R. Patel
Project: **Carbon 14**

Client Sample ID:	GWGW2258	Project:	CALS00101
Sample ID:	203810004	Client ID:	CALS001
Matrix:	Water		
Collect Date:	26−FEB−08 15:28		
Receive Date:	29−FEB−08		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Rad Liquid Scintillation Analysis											
Liquid Scint C14, Liquid											
Carbon−14	U	4.22	+/−9.56	16.3	20.0	pCi/L		RXE1 03/06/08	1313	731998	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA EERF C−01 Modified	

GEL LABORATORIES LLC

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QC Summary

Report Date: March 7, 2008
Page 1 of 2

Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, California

Contact: **Mr. Virendra R. Patel**

Workorder: **203810**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Liquid Scintillation											
Batch 731998											
QC1201527311 203810001 DUP											
Carbon-14		U	-5.31 +/-9.31	U	-9.45 +/-9.16	pCi/L	0		N/A	RXE1	03/06/08 14:15
QC1201527313 LCS											
Carbon-14	523				496 +/-19.9	pCi/L		95	(75%-125%)		03/06/08 15:18
QC1201527310 MB											
Carbon-14				U	-3.84 +/-9.21	pCi/L					03/06/08 13:44
QC1201527312 203810001 MS											
Carbon-14	523	U	-5.31 +/-9.31		502 +/-20.3	pCi/L		96	(75%-125%)		03/06/08 14:46

Notes:
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- M M if above MDC and less than LLD
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy--Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
- h Preparation or preservation holding time was exceeded

GEL LABORATORIES LLC
2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Workorder: 203810

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

GEL Laboratories LLC

problem solved

P.O. Box 30712~Charleston, S.C. 29417~2040 Savage Road~29407
(843)556-8171~Fax(843)766-1178

Invoice for Analytical Services

Mr. Virendra R. Patel
Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, California 92841-1427

PO: 08-02-1974

Invoice #:	**160551**
Invoice Date:	**07-MAR-08**
Terms:	**Net 30**
Client:	**Calscience Environmental Laboratory, Inc.**
Description (Order):	**Carbon 14**
Workorder/SDG:	**203810**
Project:	**CALS00101**
Project Manager:	**Amanda Rasco**

GELID: 203810001 **Matrix:** WATER **ClientID:** GWGW2214 **Collected:** 26-FEB-08 **Received:** 29-FEB-08

Test	Description	Methods	Turn Days	Charge
LSC_14CL	Liquid Scint C14, Liquid	EPA EERF C-01 Modified	7 (Receive)	$176.00
			Sample Total:	**$176.00**

GELID: 203810002 **Matrix:** WATER **ClientID:** GWGW2216 **Collected:** 26-FEB-08 **Received:** 29-FEB-08

Test	Description	Methods	Turn Days	Charge
LSC_14CL	Liquid Scint C14, Liquid	EPA EERF C-01 Modified	7 (Receive)	$176.00
			Sample Total:	**$176.00**

GELID: 203810003 **Matrix:** WATER **ClientID:** GWGW2250 **Collected:** 26-FEB-08 **Received:** 29-FEB-08

Test	Description	Methods	Turn Days	Charge
LSC_14CL	Liquid Scint C14, Liquid	EPA EERF C-01 Modified	7 (Receive)	$176.00
			Sample Total:	**$176.00**

GELID: 203810004 **Matrix:** WATER **ClientID:** GWGW2258 **Collected:** 26-FEB-08 **Received:** 29-FEB-08

Test	Description	Methods	Turn Days	Charge
LSC_14CL	Liquid Scint C14, Liquid	EPA EERF C-01 Modified	7 (Receive)	$176.00
			Sample Total:	**$176.00**

Miscellaneous Charge	Description	Charge

Invoice Total: $704.00

List of current GEL Certifications as of 07 March 2008

State	Certification
Alaska	UST-062
Arizona	AZ0668
Arkansas	88-0651
CLIA	42D0904046
California	01151CA
Colorado	GenEngLabs
Connecticut	PH-0169
Dept. of Navy	NFESC 413
EPA	WG-15J
Florida/NELAP	E87156
Georgia	E87156 (FL/NELAP)
Hawaii	N/A
Idaho	N/A
Illinois	200029
Indiana	C-SC-01
Kansas	E-10332
Kentucky	90129
Louisiana	03046
Maryland	270
Massachusetts	M-SC012
Michigan	9903
Nevada	SC12
New Jersey	SC002
New Mexico	FL NELAP E87156
New York	11501
North Carolina	233
North Carolina Drinking W	45709
North Dakota	R-158
Oklahoma	9904
Pennsylvania	68-00485
South Carolina	10120001/10585001/10120002
Tennessee	02934
Texas NELAP	T104704235-07-TX
U.S. Dept. of Agriculture	S-52597
US Army Corps of Engineer	N/A
Utah	8037697376 GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

ENVIRONMENTAL

ANALYTICAL CHEMISTS

March 12, 2008

Lab ID : SP 802244
Customer : 2017756

Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Laboratory Report

Introduction: This report package contains total of 7 pages divided into three sections:

Case Narrative (2 Pages) : An overview of the work performed at FGL.
Chemical Results (4 Pages) : Results for each sample submitted.
Quality Control (1 Page) : Supporting Quality Control (QC) results.

This report package pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab Sample ID #	Matrix
GWGW2214	02/26/2008	02/28/2008	SP 802244-01	DW
GWGW2216	02/26/2008	02/28/2008	SP 802244-02	DW
GWGW2250	02/26/2008	02/28/2008	SP 802244-03	DW
GWGW2258	02/26/2008	02/28/2008	SP 802244-04	DW

Sampling and Receipt Information: All samples were received, prepared and analyzed within the method specified holding times. All samples arrived at 3 °C. All samples were checked for pH if acid or base preservation required (except for VOAs). For details of sample receipt information, please see the attached Chain of Custody and Condition Upon Receipt Forms.

Quality Control: All samples were prepared and analyzed according to the following tables:

Radio Chemistry QC

906.0	03/06/2008:A217 All preparation quality controls are within established criteria.
	03/07/2008:A - LS201 All analysis quality controls are within established criteria.

Case narrative continued on next page...

Corporate Offices & Laboratory
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Mobile: (559) 737-2399

March 12, 2008

Lab ID : SP 802244
Customer : 2017756

Calscience Environmental Laboratories

Certification: I certify that this data package is in compliance with NELAC Standards, both technically and for completeness, except for any conditions listed above. Release of the data contained in this data package is authorized by the Laboratory Director or his designee, as verified by the following signature.

FGL ENVIRONMENTAL

Kelly A. Dunnahoo, B.S.
Laboratory Director

KAD:kdm

ENVIRONMENTAL

ANALYTICAL CHEMISTS

March 12, 2008

Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Description : GWGW2214
Project : 08-02-1974

Lab ID : SP 802244-01
Customer ID: 2-17756

Sampled On : February 26, 2008-15:05
Sampled By : Not Available
Received On: February 28, 2008-11:30
Matrix : Drinking Water

Sample Results - Radio

Constituents	Result ± Error	MDA	Units	MCL	Preparation Method	Preparation Date/ID	Analysis Method	Analysis Date/ID
Radio Chemistry P:1								
Tritium	62.5 ± 204	400	pCi/L	20,000	906.0	03/06/08:A217	906.0	03/07/2008:A01

MDA = Minimum Detectable Activity; Data utilized by the DHS to determine matrix interference. MCL = Maximium Contaminat Level.
Containers: (P) Plastic Preservatives: (1) Cool 4°C

CCR Section 64442: Compliance Note: If Gross Alpha (Result + (0.84 x error)) exceeds 5 pCi/L run Uranium. If Gross Alpha minus Uranium exceeds 5 pCi/L run Radium 226. Samples that exceed 5 pCi/L are held for 6 months at FGL.

Compliance:
Gross Alpha - Uranium ≤ 15 pCi/L
Uranium ≤ 20 pCi/L
Radium 226 + Radium 228 ≤ 5 pCi/L

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ENVIRONMENTAL

ANALYTICAL CHEMISTS

March 12, 2008

Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Description : GWGW2216
Project : 08-02-1974

Lab ID : SP 802244-02
Customer ID: 2-17756

Sampled On : February 26, 2008-14:15
Sampled By : Not Available
Received On: February 28, 2008-11:30
Matrix : Drinking Water

Sample Results - Radio

Constituents	Result ± Error	MDA	Units	MCL	Preparation Method	Preparation Date/ID	Analysis Method	Analysis Date/ID
Radio Chemistry P:1								
Tritium	647 ± 218	400	pCi/L	20,000	906.0	03/06/08:A217	906.0	03/07/2008:A01

MDA = Minimum Detectable Activity; Data utilized by the DHS to determine matrix interference. MCL = Maximium Contaminat Level.
Containers: (P) Plastic Preservatives: (1) Cool 4°C

CCR Section 64442: Compliance Note: If Gross Alpha (Result + (0.84 x error)) exceeds 5 pCi/L run Uranium. If Gross Alpha minus Uranium exceeds 5 pCi/L run Radium 226. Samples that exceed 5 pCi/L are held for 6 months at FGL.

Compliance:
Gross Alpha - Uranium ≤ 15 pCi/L
Uranium ≤ 20 pCi/L
Radium 226 + Radium 228 ≤ 5 pCi/L

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ENVIRONMENTAL

ANALYTICAL CHEMISTS

March 12, 2008

Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Description : GWGW2250
Project : 08-02-1974

Lab ID : SP 802244-03
Customer ID: 2-17756

Sampled On : February 26, 2008-13:36
Sampled By : Not Available
Received On: February 28, 2008-11:30
Matrix : Drinking Water

Sample Results - Radio

Constituents	Result ± Error	MDA	Units	MCL	Preparation Method	Preparation Date/ID	Analysis Method	Analysis Date/ID
Radio Chemistry P:1								
Tritium	0.000 ± 200	400	pCi/L	20,000	906.0	03/06/08:A217	906.0	03/07/2008:A01

MDA = Minimum Detectable Activity; Data utilized by the DHS to determine matrix interference. MCL = Maximium Contaminat Level.
Containers: (P) Plastic Preservatives: (1) Cool 4°C

CCR Section 64442: Compliance Note: If Gross Alpha (Result + (0.84 x error)) exceeds 5 pCi/L run Uranium. If Gross Alpha minus Uranium exceeds 5 pCi/L run Radium 226. Samples that exceed 5 pCi/L are held for 6 months at FGL.

Compliance:
Gross Alpha - Uranium ≤ 15 pCi/L
Uranium ≤ 20 pCi/L
Radium 226 + Radium 228 ≤ 5 pCi/L

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ENVIRONMENTAL

ANALYTICAL CHEMISTS

March 12, 2008

Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Description : GWGW2258
Project : 08-02-1974

Lab ID : SP 802244-04
Customer ID: 2-17756

Sampled On : February 26, 2008-15:28
Sampled By : Not Available
Received On: February 28, 2008-11:30
Matrix : Drinking Water

Sample Results - Radio

Constituents	Result ± Error	MDA	Units	MCL	Preparation Method	Preparation Date/ID	Analysis Method	Analysis Date/ID
Radio Chemistry P:1								
Tritium	158 ± 206	400	pCi/L	20,000	906.0	03/06/08:A217	906.0	03/07/2008:A01

MDA = Minimum Detectable Activity; Data utilized by the DHS to determine matrix interference. MCL = Maximium Contaminat Level.
Containers: (P) Plastic Preservatives: (1) Cool 4°C

CCR Section 64442: Compliance Note: If Gross Alpha (Result + (0.84 x error)) exceeds 5 pCi/L run Uranium. If Gross Alpha minus Uranium exceeds 5 pCi/L run Radium 226. Samples that exceed 5 pCi/L are held for 6 months at FGL.

Compliance:
Gross Alpha - Uranium ≤ 15 pCi/L
Uranium ≤ 20 pCi/L
Radium 226 + Radium 228 ≤ 5 pCi/L

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ENVIRONMENTAL ANALYTICAL CHEMISTS

March 12, 2008

Calscience Environmental Laboratories

Lab ID : SP 802244
Customer : 2-17756

Quality Control - Radio

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Tritium	906.0	03/06/2008:A217	Blank	pCi/L		ND	<518	
			LCS	pCi/L	2406	95.5%	75-125	
			BS	pCi/L	2406	101%	75-125	
			BSD	pCi/L	2406	102%	75-125	
			BSRPD	pCi/L		0.8%	≤25	
	906.0	03/07/2008:A	00-CCB	cpm		11	12±1.7	
			00-CCV	cpm	1075	24.7%	25.5±4.5	

Definitions

Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.
BS/BSD : Blank Spikes - A blank is spiked with a known amount of analyte. It is prepared to verify that the preparation process is not affecting analyte recovery.
CCB : Continuing Calibration Blank - Analyzed to verify the instrument baseline is within criteria.
CCV : Continuing Calibration Verification - Analyzed to verify the instrument calibration is within criteria.
ND : Non-detect - Result was below the DQO listed for the analyte.
DQO : Data Quality Objective - This is the criteria against which the quality control data is compared.

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Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

TO: FGL

CHAIN OF CUSTODY RECORD

DATE: 02/28/08
PAGE: 1 OF 1

802249

LABORATORY CLIENT: Calscience Environmental Laboratories, Inc.
ADDRESS: 7440 Lincoln Way
CITY: Garden Grove, CA 92841-1427
TEL: (714) 895-5494
E-MAIL: vpatel@calscience.com

CLIENT PROJECT NAME / NUMBER: 08-02-1974
PROJECT CONTACT: Virendra Patel
SAMPLER(S): (PRINT)

P.O. NO.: 08-02-1974
QUOTE NO.:
LAB USE ONLY

TURNAROUND TIME
☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☐ 5 DAYS ☒ NORMAL

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ____/____/____

SPECIAL INSTRUCTIONS
SUB. To: FGL
853 Corporation St.
Santa Paula , CA 93061-3005
(805)392-2000

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	Matrix	#Cont	Tritium EPA 906.0	Excel EDD
	GWGW2214	02/26/08	1505	W	1	X	X
	GWGW2216	02/26/08	1415	W	1	X	X
	GWGW2250	02/26/08	1336	W	1	X	X
	GWGW2258	02/26/08	1528	W	1	X	X

Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
(CALSCIENCE)		02/28/08	1532
Golden State Overnight		2/29/08	1130

Santa Paula - Condition Upon Receipt (Attach to COC)

Sample Receipt:

1. Number of ice chests/packages received: 1
   Note as OTC if received over the counter unpackaged.
2. Were samples received in a chilled condition? Temps: 03 ____ / ____ / ____ / ____
   Acceptable is 2° to 6° C. Also acceptable is received on ice (ROI) for the same day of sampling or received at room temperature (RRT) if sampled within one hour of receipt. Client contact for temperature failures must be documented below. If many packages are received at one time check for tests/H.T.'s/rushes/Bacti's to prioritize further review. Please notify Microbiology personnel immediately of bacti samples received.
3. Do the number of bottles received agree with the COC? Yes No N/A
4. Were samples received intact? (i.e. no broken bottles, leaks etc.) Yes No
5. Were sample custody seals intact? N/A Yes No

Sign and date the COC, obtain LIMS sample numbers, select methods/tests and print labels.

Sample Verification, Labeling and Distribution:

1. Were all requested analyses understood and acceptable? Yes No
2. Did bottle labels correspond with the client's ID's? Yes No
3. Were all bottles requiring sample preservation properly preserved? Yes No N/A FGL
4. VOAs checked for Headspace? Yes No N/A
5. Were all analyses within holding times at time of receipt? Yes No
6. Have rush or project due dates been checked and accepted? N/A Yes No

Attach labels to the containers and include a copy of the COC for lab delivery.

Sample Receipt, Login and Verification completed by (initials): _____

Discrepancy Documentation:

Any items above which are "No" or do not meet specifications (i.e. temps) must be resolved.

1. Person Contacted:_____ Phone Number:_____
   Initiated By:_____ Date:_____
   Problem:

   Resolution:

2. Person Contacted:_____ Phone Number:_____
   Initiated By:_____ Date:_____
   Problem:

   Resolution:

(2-17756)
Calscience Environmental Laboratories
SP 0802244
IV-02/29/2008-11:42:01

Calscience Environmental Laboratories, Inc.

March 14, 2008

Joe Turner
Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Subject: **Calscience Work Order No.: 08-02-2114**
Client Reference: UC Davis - LEHR / 131261

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 2/28/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Virendra R Patel

Calscience Environmental
Laboratories, Inc.
Virendra Patel
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/28/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-2114
Rancho Cordova, CA 95670-7984		Preparation:	EPA 3010A Total
		Method:	EPA 6010B

Project: UC Davis - LEHR / 131261

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2215	**08-02-2114-1-D**	**02/27/08 10:15**	**Aqueous**	**ICP 5300**	**02/29/08**	**03/03/08 21:40**	**080229L02**

Parameter	Result	RL	DF	Qual	Units
Chromium	0.117	0.00500	1		mg/L

GWGW2220	**08-02-2114-2-D**	**02/27/08 16:35**	**Aqueous**	**ICP 5300**	**02/29/08**	**03/03/08 21:42**	**080229L02**

Parameter	Result	RL	DF	Qual	Units
Chromium	0.0504	0.00500	1		mg/L

GWGW2221	**08-02-2114-3-B**	**02/27/08 12:55**	**Aqueous**	**ICP 5300**	**02/29/08**	**03/03/08 21:43**	**080229L02**

Parameter	Result	RL	DF	Qual	Units
Chromium	0.452	0.00500	1		mg/L

GWGW2224	**08-02-2114-6-E**	**02/27/08 08:35**	**Aqueous**	**ICP 5300**	**02/29/08**	**03/03/08 21:45**	**080229L02**

Parameter	Result	RL	DF	Qual	Units
Chromium	0.0879	0.00500	1		mg/L

GWGW2226	**08-02-2114-7-B**	**02/27/08 14:25**	**Aqueous**	**ICP 5300**	**02/29/08**	**03/03/08 21:47**	**080229L02**

Parameter	Result	RL	DF	Qual	Units
Chromium	0.394	0.00500	1		mg/L

GWGW2251	**08-02-2114-9-A**	**02/27/08 16:00**	**Aqueous**	**ICP 5300**	**02/29/08**	**03/03/08 21:49**	**080229L02**

Parameter	Result	RL	DF	Qual	Units
Chromium	ND	0.00500	1		mg/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/28/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-2114
Rancho Cordova, CA 95670-7984		Preparation:	EPA 3010A Total
		Method:	EPA 6010B

Project: UC Davis - LEHR / 131261

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2252	**08-02-2114-10-D**	**02/27/08 13:23**	**Aqueous**	**ICP 5300**	**02/29/08**	**03/03/08 21:50**	**080229L02**

Parameter	Result	RL	DF	Qual	Units
Chromium	0.0341	0.00500	1		mg/L

GWGW2253	**08-02-2114-11-E**	**02/27/08 13:26**	**Aqueous**	**ICP 5300**	**02/29/08**	**03/03/08 21:52**	**080229L02**

Parameter	Result	RL	DF	Qual	Units
Chromium	0.0341	0.00500	1		mg/L

GWGW2254	**08-02-2114-12-E**	**02/27/08 14:58**	**Aqueous**	**ICP 5300**	**02/29/08**	**03/03/08 21:54**	**080229L02**

Parameter	Result	RL	DF	Qual	Units
Chromium	0.0227	0.00500	1		mg/L

GWGW2255	**08-02-2114-13-D**	**02/27/08 14:05**	**Aqueous**	**ICP 5300**	**02/29/08**	**03/03/08 21:56**	**080229L02**

Parameter	Result	RL	DF	Qual	Units
Chromium	0.0311	0.00500	1		mg/L

Method Blank	**097-01-003-8,056**	**N/A**	**Aqueous**	**ICP 5300**	**02/29/08**	**02/29/08 11:36**	**080229L02**

Parameter	Result	RL	DF	Qual	Units
Chromium	ND	0.00500	1		mg/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/28/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-2114
Rancho Cordova, CA 95670-7984		Preparation:	N/A
		Method:	EPA 300.0

Project: UC Davis - LEHR / 131261

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2220	**08-02-2114-2-E**	**02/27/08 16:35**	**Aqueous**	**IC 2**	**N/A**	**02/28/08 17:50**	**080228L02**

Parameter	Result	RL	DF	Qual	Units
Nitrate (as N)	10	0.50	5		mg/L

GWGW2221	**08-02-2114-3-A**	**02/27/08 12:55**	**Aqueous**	**IC 2**	**N/A**	**02/28/08 18:03**	**080228L02**

Parameter	Result	RL	DF	Qual	Units
Nitrate (as N)	60	5.0	50		mg/L

GWGW2223	**08-02-2114-5-L**	**02/27/08 11:25**	**Aqueous**	**IC 2**	**N/A**	**02/28/08 18:15**	**080228L02**

Parameter	Result	RL	DF	Qual	Units
Nitrate (as N)	67	5.0	50		mg/L

GWGW2224	**08-02-2114-6-D**	**02/27/08 08:35**	**Aqueous**	**IC 2**	**N/A**	**02/28/08 18:27**	**080228L02**

Parameter	Result	RL	DF	Qual	Units
Nitrate (as N)	54	5.0	50		mg/L

GWGW2226	**08-02-2114-7-A**	**02/27/08 14:25**	**Aqueous**	**IC 2**	**N/A**	**02/28/08 18:39**	**080228L02**

Parameter	Result	RL	DF	Qual	Units
Nitrate (as N)	39	5.0	50		mg/L

GWGW2249	**08-02-2114-8-A**	**02/27/08 12:10**	**Aqueous**	**IC 2**	**N/A**	**02/28/08 18:51**	**080228L02**

Parameter	Result	RL	DF	Qual	Units
Nitrate (as N)	13	0.50	5		mg/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/28/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-2114
Rancho Cordova, CA 95670-7984		Preparation:	N/A
		Method:	EPA 300.0

Project: UC Davis - LEHR / 131261

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2252	**08-02-2114-10-E**	**02/27/08 13:23**	**Aqueous**	**IC 2**	**N/A**	**02/28/08 19:03**	**080228L02**

Parameter	Result	RL	DF	Qual	Units
Nitrate (as N)	9.8	0.50	5		mg/L

GWGW2253	**08-02-2114-11-D**	**02/27/08 13:26**	**Aqueous**	**IC 2**	**N/A**	**02/28/08 19:15**	**080228L02**

Parameter	Result	RL	DF	Qual	Units
Nitrate (as N)	10	0.50	5		mg/L

GWGW2254	**08-02-2114-12-D**	**02/27/08 14:58**	**Aqueous**	**IC 2**	**N/A**	**02/28/08 19:28**	**080228L02**

Parameter	Result	RL	DF	Qual	Units
Nitrate (as N)	6.9	0.20	2		mg/L

GWGW2261	**08-02-2114-15-D**	**02/27/08 09:25**	**Aqueous**	**IC 2**	**N/A**	**02/28/08 19:40**	**080228L02**

Parameter	Result	RL	DF	Qual	Units
Nitrate (as N)	6.3	0.20	2		mg/L

Method Blank	**099-05-118-4,368**	**N/A**	**Aqueous**	**IC 2**	**N/A**	**02/28/08 16:49**	**080228L02**

Parameter	Result	RL	DF	Qual	Units
Nitrate (as N)	ND	0.10	1		mg/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/28/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-2114
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 1 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2215	**08-02-2114-1-A**	**02/27/08 10:15**	**Aqueous**	**GC/MS O**	**03/06/08**	**03/06/08 18:53**	**080306L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	11	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	92	74-140		1,2-Dichloroethane-d4	97	74-146	
Toluene-d8	100	88-112		1,4-Bromofluorobenzene	94	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/28/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-2114
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 2 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2220	**08-02-2114-2-A**	**02/27/08 16:35**	**Aqueous**	**GC/MS O**	**03/06/08**	**03/06/08 19:24**	**080306L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	89	74-140		1,2-Dichloroethane-d4	86	74-146	
Toluene-d8	100	88-112		1,4-Bromofluorobenzene	91	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/28/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-2114
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 3 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2222	**08-02-2114-4-A**	**02/27/08 10:50**	**Aqueous**	**GC/MS O**	**03/06/08**	**03/06/08 19:54**	**080306L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	67	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	2.3	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	94	74-140		1,2-Dichloroethane-d4	99	74-146	
Toluene-d8	100	88-112		1,4-Bromofluorobenzene	94	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/28/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-2114
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 4 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2223	**08-02-2114-5-A**	**02/27/08 11:25**	**Aqueous**	**GC/MS O**	**03/06/08**	**03/06/08 20:24**	**080306L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	160	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	7.0	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	94	74-140		1,2-Dichloroethane-d4	97	74-146	
Toluene-d8	100	88-112		1,4-Bromofluorobenzene	93	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/28/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-2114
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 5 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2224	**08-02-2114-6-A**	**02/27/08 08:35**	**Aqueous**	**GC/MS O**	**03/07/08**	**03/07/08 13:48**	**080307L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	460	10	10		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	1.5	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	6.2	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	6.2	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	1.1	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	95	74-140		1,2-Dichloroethane-d4	95	74-146	
Toluene-d8	99	88-112		1,4-Bromofluorobenzene	94	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/28/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-2114
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 6 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2252	**08-02-2114-10-A**	**02/27/08 13:23**	**Aqueous**	**GC/MS O**	**03/06/08**	**03/06/08 21:54**	**080306L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	60	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	96	74-140		1,2-Dichloroethane-d4	100	74-146	
Toluene-d8	101	88-112		1,4-Bromofluorobenzene	95	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/28/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-2114
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 7 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2253	**08-02-2114-11-A**	**02/27/08 13:26**	**Aqueous**	**GC/MS O**	**03/06/08**	**03/06/08 22:24**	**080306L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	61	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	100	74-140		1,2-Dichloroethane-d4	101	74-146	
Toluene-d8	100	88-112		1,4-Bromofluorobenzene	93	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/28/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-2114
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 8 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2254	**08-02-2114-12-A**	**02/27/08 14:58**	**Aqueous**	**GC/MS O**	**03/06/08**	**03/06/08 22:54**	**080306L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	12	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	94	74-140		1,2-Dichloroethane-d4	100	74-146	
Toluene-d8	100	88-112		1,4-Bromofluorobenzene	92	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/28/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-2114
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 9 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2255	**08-02-2114-13-A**	**02/27/08 14:05**	**Aqueous**	**GC/MS O**	**03/06/08**	**03/06/08 23:23**	**080306L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	99	74-140		1,2-Dichloroethane-d4	103	74-146	
Toluene-d8	101	88-112		1,4-Bromofluorobenzene	94	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/28/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-2114
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 10 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TBGW0505	**08-02-2114-14-A**	**02/27/08 00:00**	**Aqueous**	**GC/MS O**	**03/06/08**	**03/06/08 23:53**	**080306L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	101	74-140		1,2-Dichloroethane-d4	109	74-146	
Toluene-d8	100	88-112		1,4-Bromofluorobenzene	92	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/28/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-2114
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 11 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2261	**08-02-2114-15-B**	**02/27/08 09:25**	**Aqueous**	**GC/MS O**	**03/07/08**	**03/07/08 14:19**	**080307L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	1.3	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	94	74-140		1,2-Dichloroethane-d4	98	74-146	
Toluene-d8	100	88-112		1,4-Bromofluorobenzene	95	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/28/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-2114
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 12 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-24,690**	**N/A**	**Aqueous**	**GC/MS O**	**03/06/08**	**03/06/08 15:01**	**080306L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	96	74-140		1,2-Dichloroethane-d4	100	74-146	
Toluene-d8	100	88-112		1,4-Bromofluorobenzene	95	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/28/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-2114
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 13 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-24,721**	**N/A**	**Aqueous**	**GC/MS O**	**03/07/08**	**03/07/08 13:14**	**080307L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	94	74-140		1,2-Dichloroethane-d4	97	74-146	
Toluene-d8	101	88-112		1,4-Bromofluorobenzene	93	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	02/28/08
Work Order No:	08-02-2114
Preparation:	EPA 3010A Total
Method:	EPA 6010B

Project UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-02-1964-1	**Aqueous**	**ICP 5300**	**02/29/08**	**02/29/08**	**080229S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Chromium	99	98	86-122	1	0-8	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	02/28/08
Work Order No:	08-02-2114
Preparation:	N/A
Method:	EPA 300.0

Project UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
GWGW2223	**Aqueous**	**IC 2**	**N/A**	**02/28/08**	**080228S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Nitrate (as N)	104	105	58-142	0	0-6	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	02/28/08
Work Order No:	08-02-2114
Preparation:	EPA 5030B
Method:	EPA 8260B

Project UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
GWGW2223	**Aqueous**	**GC/MS O**	**03/06/08**	**03/06/08**	**080306S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	102	100	88-118	3	0-7	
Carbon Tetrachloride	97	96	67-145	2	0-11	
Chlorobenzene	102	101	88-118	1	0-7	
1,2-Dibromoethane	114	110	70-130	3	0-30	
1,2-Dichlorobenzene	104	104	86-116	0	0-8	
1,1-Dichloroethene	96	95	70-130	1	0-25	
Ethylbenzene	105	105	70-130	0	0-30	
Toluene	104	103	87-123	1	0-8	
Trichloroethene	102	99	79-127	2	0-10	
Vinyl Chloride	100	100	69-129	0	0-13	
Methyl-t-Butyl Ether (MTBE)	99	96	71-131	3	0-13	
Tert-Butyl Alcohol (TBA)	82	82	36-168	0	0-45	
Diisopropyl Ether (DIPE)	103	101	81-123	2	0-9	
Ethyl-t-Butyl Ether (ETBE)	100	98	72-126	2	0-12	
Tert-Amyl-Methyl Ether (TAME)	101	97	72-126	4	0-12	
Ethanol	92	94	53-149	1	0-31	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	02/28/08
Work Order No:	08-02-2114
Preparation:	EPA 5030B
Method:	EPA 8260B

Project UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
GWGW2261	**Aqueous**	**GC/MS O**	**03/07/08**	**03/07/08**	**080307S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	107	107	88-118	0	0-7	
Carbon Tetrachloride	104	102	67-145	3	0-11	
Chlorobenzene	107	108	88-118	1	0-7	
1,2-Dibromoethane	106	120	70-130	12	0-30	
1,2-Dichlorobenzene	108	109	86-116	1	0-8	
1,1-Dichloroethene	107	101	70-130	6	0-25	
Ethylbenzene	111	111	70-130	1	0-30	
Toluene	111	115	87-123	3	0-8	
Trichloroethene	106	108	79-127	2	0-10	
Vinyl Chloride	111	114	69-129	3	0-13	
Methyl-t-Butyl Ether (MTBE)	96	112	71-131	16	0-13	4
Tert-Butyl Alcohol (TBA)	86	165	36-168	63	0-45	4
Diisopropyl Ether (DIPE)	106	107	81-123	1	0-9	
Ethyl-t-Butyl Ether (ETBE)	100	107	72-126	7	0-12	
Tert-Amyl-Methyl Ether (TAME)	97	114	72-126	17	0-12	4
Ethanol	64	128	53-149	50	0-31	4

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell		Date Received:	N/A
10540 White Rock Road, Suite 180		Work Order No:	08-02-2114
Rancho Cordova, CA 95670-7984		Preparation:	EPA 3010A Total
		Method:	EPA 6010B

Project: UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-003-8,056	**Aqueous**	**ICP 5300**	**02/29/08**	**02/29/08**	**080229L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Chromium	100	101	80-120	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell		Date Received:	N/A
10540 White Rock Road, Suite 180		Work Order No:	08-02-2114
Rancho Cordova, CA 95670-7984		Preparation:	N/A
		Method:	EPA 300.0

Project: UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-05-118-4,368	**Aqueous**	**IC 2**	**N/A**	**02/28/08**	**080228L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Nitrate (as N)	103	103	87-111	0	0-12	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell		Date Received:	N/A
10540 White Rock Road, Suite 180		Work Order No:	08-02-2114
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project: UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-24,690	**Aqueous**	**GC/MS O**	**03/06/08**	**03/06/08**	**080306L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	105	101	84-120	4	0-8	
Carbon Tetrachloride	99	97	63-147	2	0-10	
Chlorobenzene	105	102	89-119	3	0-7	
1,2-Dibromoethane	116	110	80-120	5	0-20	
1,2-Dichlorobenzene	107	102	89-119	4	0-9	
1,1-Dichloroethene	99	98	77-125	0	0-16	
Ethylbenzene	107	104	80-120	2	0-20	
Toluene	112	107	83-125	4	0-9	
Trichloroethene	104	101	89-119	3	0-8	
Vinyl Chloride	108	107	63-135	1	0-13	
Methyl-t-Butyl Ether (MTBE)	114	108	82-118	6	0-13	
Tert-Butyl Alcohol (TBA)	154	153	46-154	1	0-32	
Diisopropyl Ether (DIPE)	105	100	81-123	5	0-11	
Ethyl-t-Butyl Ether (ETBE)	105	100	74-122	5	0-12	
Tert-Amyl-Methyl Ether (TAME)	112	105	76-124	6	0-10	
Ethanol	136	132	60-138	3	0-32	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	N/A
Work Order No:	08-02-2114
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-24,721	**Aqueous**	**GC/MS O**	**03/07/08**	**03/07/08**	**080307L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	108	108	84-120	0	0-8	
Carbon Tetrachloride	109	110	63-147	1	0-10	
Chlorobenzene	106	107	89-119	1	0-7	
1,2-Dibromoethane	117	118	80-120	1	0-20	
1,2-Dichlorobenzene	108	110	89-119	2	0-9	
1,1-Dichloroethene	103	102	77-125	1	0-16	
Ethylbenzene	110	110	80-120	0	0-20	
Toluene	111	110	83-125	1	0-9	
Trichloroethene	111	109	89-119	2	0-8	
Vinyl Chloride	102	102	63-135	0	0-13	
Methyl-t-Butyl Ether (MTBE)	111	111	82-118	0	0-13	
Tert-Butyl Alcohol (TBA)	69	71	46-154	3	0-32	
Diisopropyl Ether (DIPE)	110	110	81-123	0	0-11	
Ethyl-t-Butyl Ether (ETBE)	110	111	74-122	1	0-12	
Tert-Amyl-Methyl Ether (TAME)	110	108	76-124	2	0-10	
Ethanol	100	91	60-138	9	0-32	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-02-2114

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

BROWN AND CALDWELL

CHAIN OF CUSTODY RECORD

2114

COC No. _____

UCD0000231

☑ 10540 White Rock Rd, Ste. 180
Rancho Cordova, CA 95670
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☐ 9665 Chesapeake Dr. / Suite 201
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925-937-9010 / FAX 925-937-9026

☐ 400 Exchange / Suite 100
Irvine, CA 92602
714-730-7600 / FAX 714-734-0940

PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: CalScience Environmental Laboratories, Inc. Garder CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
01	GWGW2215	2/27/08	1015	CEF	3	40 mL VOA	HCl pH < 2	W	SW8260B	–	–	STD		----	
02	GWGW2215	2/27/08	1015	CEF	1	250 mL Plastic	HNO3 pH < 2	W	Total Chromium	–	–	STD		----	
03														----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

COLLECTED & RELEASED BY	DATE	TIME	COOLER I.D.:	DATE	TIME	COMMENTS (see note on back):
	2/27/08	18:30				
RECEIVED BY: FEDEX	DATE / /	TIME :	RELINQUISHED BY: FEDEX 863177239 10	2/28/08	10:00	
WCbolm	2-28-08	1000				
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

DISTRIBUTION: WHITE-LAB RECEIPT • CANARY-PROJECT FILE • PINK-DATA MANAGEMENT • GOLDENROD-FIELD

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CHAIN OF CUSTODY RECORD

(2114)

COC No. UCD00002236

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☐ 400 Exchange / Suite 100
Irvine, CA 92602
714-730-7600 / FAX 714-734-0940

PROJECT NAME: UC DAVIS LEHR

PROJECT NUMBER:

LABORATORY NAME & ADDRESS: CALSCIENCE ENVIRONMENTAL LABORATORIES

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
3 01	GWGW 2220	2/27/08	1635	CEF	3	40ml VOA	HCl	W	SW8260B	–	–	STD	SP	----	
4 2 02	GWGW 2220	2/27/08	1635	CEF	1	250ml POLY	–	W	NITRATES	–	–	↓	↓	----	
5 03	GWGW 2220	2/27/08	1635	CEF	1	250ml POLY	HNO_3	W	TOTAL CHROMIUM	–	–	↓	↓	----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

COLLECTED & RELEASED BY: CEF	DATE 2/27/08	TIME 8:30	COOLER I.D.:			COMMENTS (see note on back):
RECEIVED BY: FED EX	DATE / /	TIME :	RELINQUISHED BY: FEDEX 861177223910	DATE 2/28/08	TIME 10:00	
Wooten CEL	2-28-08	1000				
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

DISTRIBUTION: WHITE-LAB RECEIPT • CANARY-PROJECT FILE • PINK-DATA MANAGEMENT • GOLDENROD-FIELD

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BROWN AND CALDWELL

CHAIN OF CUSTODY RECORD

COC No. _____

2114

UCD0000237

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925-937-9010 / FAX 925-937-9026

☐ 400 Exchange / Suite 100
Irvine, CA 92602
714-730-7600 / FAX 714-734-0940

PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: CalScience Environmental Laboratories, Inc. Garden CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
3	GWGW2221	2/27/08	1255	CEF	1	~~1L~~ Plastic 250ml	NONE	W	Nitrate (as N)	–	–	STD	SP	----	
3	GWGW2221	2/27/08	1255	CEF	1	250 mL Plastic	HNO3 pH < 2	W	Total Chromium	–	–	STD	SP	----	
03														----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

COLLECTED & RELEASED BY	DATE 2/27/08	TIME 18:30	COOLER I.D.:			COMMENTS (see note on back):
RECEIVED BY: FED EX	DATE / /	TIME :	RELINQUISHED BY: FEDEX 863117123910	DATE 2/28/08	TIME 10:00	
W Chatin CEL	2-27-08	1000				
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

DISTRIBUTION: WHITE-LAB RECEIPT • CANARY-PROJECT FILE • PINK-DATA MANAGEMENT • GOLDENROD-FIELD

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Irvine, CA 92602
714-730-7600 / FAX 714-734-0940

PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: CalScience Environmental Laboratories, Inc. Garder CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
4	GWGW2222	2/27/08	1050	CEF	3	40 mL VOA	HCl pH < 2	W	SW8260B	--	--	STD	SP	----	
02														----	
03														----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

COLLECTED & RELEASED BY	DATE 2/27/08	TIME 1830	COOLER I.D.:			COMMENTS (see note on back):
RECEIVED BY: Fed Ex	DATE / /	TIME :	RELINQUISHED BY: FEDEX 863117723910	DATE 2/28/08	TIME 10:00	
Webatch CEL	2/28/08	1000				
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

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925-937-9010 / FAX 925-937-9026

❑ 400 Exchange / Suite 200
Irvine, CA 92602
714-730-7600 / FAX 714-734-0940

PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: ~~CalScience Environmental Laboratories, Inc. Garder~~ CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
01	GWGW2223	2/27/08	1125	CEF	3	500ml ~~1L~~ Plastic	NONE	W	C-14	–	M	STD	SP	----	
02	GWGW2223	2/27/08	1125	CEF	9	40 mL VOA	HCl pH < 2	W	SW8260B	–	M	STD	SP	----	
03	GWGW2223	2/27/08	1125	CEF	3	250ml ~~1L~~ Plastic	NONE	W	Nitrate (as N)	–	M	STD	SP	----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

5

COLLECTED & RELEASED BY: Cly	DATE 2/27/08	TIME 18:30	COOLER I.D.:			COMMENTS (see note on back):
RECEIVED BY: FED EX	DATE / /	TIME :	RELINQUISHED BY: FEDEX 863117723910	DATE 2/28/08	TIME 10:00	
Wbaxter CEL	2-28-08	1000				
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

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CHAIN OF CUSTODY RECORD

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PROJECT NAME: **UC Davis - LEHR**

PROJECT NUMBER: **131261**

LABORATORY NAME & ADDRESS: ~~CalScience Environmental Laboratories, Inc. Garder~~ CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
01	GWGW2224	2/27/08	0835	CEF	1	~~1L~~ Plastic 500ml	NONE	W	C-14	–	–	STD	SP	----	
02	GWGW2224	2/27/08	0835	CEF	3	40 mL VOA	HCl pH < 2	W	SW8260B	–	–	↓	↓	----	
03	GWGW2224	2/27/08	0835	CEF	1	~~1L~~ Plastic 250ml	NONE	W	Nitrate (as N)	–	–	↓	↓	----	
04	GWGW2224	2/27/08	0835	CEF	1	250 mL Plastic	HNO3 pH < 2	W	Total Chromium	–	–	↓	↓	----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

63

COLLECTED & RELEASED BY	DATE	TIME	COOLER I.D.:			COMMENTS (see note on back):
	2/27/08	18:30				
RECEIVED BY: FED EX	DATE / /	TIME :	RELINQUISHED BY: FEDEX 863117239110	DATE 2/28/08	TIME 10:00	
WCDATW CEF	2-28-08	1000				
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

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CHAIN OF CUSTODY RECORD

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COC No. _____

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714-730-7600 / FAX 714-734-0940

PROJECT NAME: **UC Davis - LEHR**

PROJECT NUMBER: **131261**

LABORATORY NAME & ADDRESS: ~~CalScience Environmental Laboratories, Inc. Garder CA~~

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
01	GWGW2226	2/27/08	1425	CEF	1	250 ml ~~1 L~~ Plastic	NONE	W	Nitrate (as N)	–	–	STD	SP	----	
02	GWGW2226	2/27/08	1425	CEF	1	250 mL Plastic	HNO3 pH < 2	W	Total Chromium	–	–	STD	SP	----	
03														----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

7

COLLECTED & RELEASED BY	DATE 2/27/08	TIME 18:30	COOLER I.D.:			COMMENTS (see note on back):
RECEIVED BY: FEDEX	DATE / /	TIME :	RELINQUISHED BY: FEDEX 863117239110	DATE 2-28-08	TIME 10:00	
Woodland CA	2-28-08	1000				
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

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BROWN AND CALDWELL

CHAIN OF CUSTODY RECORD

2114

COC No. _____

UCD0000262

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PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: ~~CalScience Environmental Laboratories, Inc. Garder~~ CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
8	GWGW2249	2/27/08	1210	CEF	1	~~1L~~ Plastic 250ml	NONE	W	Nitrate (as N)	–	–	STD	SP	----	
02														----	
03														----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

COLLECTED & RELEASED BY	DATE 2/27/08	TIME 15:30	COOLER I.D.:			COMMENTS (see note on back):
RECEIVED BY: FED EX	DATE / /	TIME :	RELINQUISHED BY: FEDEX 863117239710	DATE 2/28/08	TIME 10:00	
Wilcox CE	2-28-08	1000				
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

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CHAIN OF CUSTODY RECORD

2114

COC No. _____

UCD0000264

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Irvine, CA 92602
714-730-7600 / FAX 714-734-0940

PROJECT NAME: **UC Davis - LEHR**

PROJECT NUMBER: **131261**

LABORATORY NAME & ADDRESS: CalScience Environmental Laboratories, Inc. Garder CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
9 01	GWGW2251	2/27/08	1600	CEF	1	250 mL Plastic	HNO3 pH < 2	W	Total Chromium	–	–	STD	SP	----	
02														----	
03														----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

COLLECTED & RELEASED BY	DATE 2/27/08	TIME 8:30	COOLER I.D.:			COMMENTS (see note on back):
RECEIVED BY:	DATE / /	TIME :	RELINQUISHED BY: FEDEX 863117239 10	DATE 2/28/08	TIME 10:00	
Wabatu CE	2-28-08	1000				
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

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COC No. _____

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UCD0000265

PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: ~~CalScience Environmental Laboratories, Inc. Garder~~ CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
01	GWGW2252	2/27/08	1323	CEF	3	40 mL VOA	HCl pH < 2	W	SW8260B	—	—	STD	SP	----	
02	GWGW2252		1323		1	250ml ~~1L~~ Plastic	NONE	W	Nitrate (as N)					----	
03	GWGW2252		1323		1	250 mL Plastic	HNO3 pH < 2	W	Total Chromium					----	
04	GWGW2253		1326		3	40 mL VOA	HCl pH < 2	W	SW8260B					----	
05	GWGW2253		1326		1	250ml ~~1L~~ Plastic	NONE	W	Nitrate (as N)					----	
06	GWGW2253		1326		1	250 mL Plastic	HNO3 pH < 2	W	Total Chromium					----	
07														----	
08														----	
09														----	
10														----	

10

11

COLLECTED & RELEASED BY	DATE 2/27/08	TIME 18:30	COOLER I.D.:			COMMENTS (see note on back):
RECEIVED BY: FedEx Walnut Cr	DATE / / 2-28-08	TIME : 1000	RELINQUISHED BY: FedEx 863117239 10	DATE 2/28/08	TIME 10:00	
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

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CHAIN OF CUSTODY RECORD

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COC No. _____

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714-730-7600 / FAX 714-734-0940

PROJECT NAME: **UC Davis - LEHR**

PROJECT NUMBER: **131261**

LABORATORY NAME & ADDRESS: CalScience Environmental Laboratories, Inc. Garder CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
01	GWGW2254	2/27/08	1458	CEF	3	40 mL VOA	HCl pH < 2	W	SW8260B	—	—	STD	SP	----	
02	GWGW2254	2/27/08	1458	CEF	1	~~1L~~ Plastic 250ml	NONE	W	Nitrate (as N)	—	—	STD	SP	----	
03	GWGW2254	2/27/08	1458	CEF	1	250 mL Plastic	HNO3 pH < 2	W	Total Chromium	—	—	STD	SP	----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

12

COLLECTED & RELEASED BY	DATE 2/27/08	TIME 18:30	COOLER I.D.:			COMMENTS (see note on back):
RECEIVED BY: FED EX	DATE / /	TIME :	RELINQUISHED BY: FEDEX 863117239110	DATE 2/28/08	TIME 10:00	
[illegible] CEF	2-28-08	1000				
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

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USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

BROWN AND CALDWELL

CHAIN OF CUSTODY RECORD

2114

COC No. _____

UCD0000267

☑ 10540 White Rock Rd, Ste. 180
Rancho Cordova, CA 95670
916-444-0123 / FAX 916-635-8805

☐ 9665 Chesapeake Dr. / Suite 201
San Diego, CA 92123
858-514-8822 / FAX 858-514-8833

☐ 201 N. Civic Dr. / Suite 115
Walnut Creek, CA 94596
925-937-9010 / FAX 925-937-9026

☐ 400 Exchange / Suite 100
Irvine, CA 92602
714-730-7600 / FAX 714-734-0940

PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: CalScience Environmental Laboratories, Inc. Garder CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
01	GWGW2255	2/27/08	1405	CEF	3	40 mL VOA	HCl pH < 2	W	SW8260B	–	–	STD	SP	----	
13 02	GWGW2255	2/27/08	1405	CEF	1	250 mL Plastic	HNO3 pH < 2	W	Total Chromium	–	–	STD	SP	----	
14 03	TBGW0505	2/27/08	NA	NA	2	40ml VOA	HCl	W	SW 8260B	–	–	STD	NA	----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

COLLECTED & RELEASED BY	DATE	TIME	COOLER I.D.:	DATE	TIME	COMMENTS (see note on back):
	2/27/08	18:10				
RECEIVED BY: FED EX	DATE / /	TIME :	RELINQUISHED BY: FEDEX 863117239 10	2/28/08	10:00	
W Martin CEF	2-28-08	1000				
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

DISTRIBUTION: WHITE-LAB RECEIPT • CANARY-PROJECT FILE • PINK-DATA MANAGEMENT • GOLDENROD-FIELD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

BROWN AND CALDWELL

CHAIN OF CUSTODY RECORD

(2114)

COC No. _____

UCD0000272

☑ 10540 White Rock Rd, Ste. 180
Rancho Cordova, CA 95670
916-444-0123 / FAX 916-635-8805

❑ 9665 Chesapeake Dr. / Suite 201
San Diego, CA 92123
858-514-8822 / FAX 858-514-8833

❑ 201 N. Civic Dr. / Suite 115
Walnut Creek, CA 94596
925-937-9010 / FAX 925-937-9026

❑ 400 Exchange / Suite 100
Irvine, CA 92602
714-730-7600 / FAX 714-734-0940

PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: CalScience Environmental Laboratories, Inc. Garder CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
15	GWGW2261	2/27/08	0925	CEF	3	40 mL VOA	HCl pH < 2	W	SW8260B	–	–	STD	SP	----	
15	GWGW2261	2/27/08	0925	CEF	1	~~1L~~ Plastic 250ml	NONE	W	Nitrate (as N)	–	–	STD	SP	----	
03														----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

COLLECTED & RELEASED BY	DATE 22708	TIME 18:30	COOLER I.D.:			COMMENTS (see note on back):
RECEIVED BY: Fed Ex	DATE / /	TIME :	RELINQUISHED BY: FEDEX 863117239110	DATE 2/28/08	TIME 10:00	
UCDavis CA	2-28-08	1000				
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

DISTRIBUTION: WHITE-LAB RECEIPT • CANARY-PROJECT FILE • PINK-DATA MANAGEMENT • GOLDENROD-FIELD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 0 2 - 2 1 1 4

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: Brown and Caldwell DATE: 02/28/08

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature.

_____ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

_____ °C Temperature blank.
2.4 °C IR thermometer.
_____ Ambient temperature.

Initial: KM

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____ Not Present: ✓

Initial: KM

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)	✓		
VOA vial(s) free of headspace.	✓		
Tedlar bag(s) free of condensation			✓

Initial: KM

COMMENTS:

GEL Laboratories LLC
a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178

www.gel.com

March 11, 2008

Mr. Virendra R. Patel
Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, California 92841-1427

Re: Carbon 14
Work Order: 203910

Dear Mr. Patel:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on March 04, 2008. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4297.

Sincerely,

Amanda Rasco
Project Manager

Purchase Order: 08-02-2114
Enclosures

Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

TO: GEL Laboratories, Inc.

203910

CHAIN OF CUSTODY RECORD

DATE: 02/29/08

PAGE: 1 OF 1

LABORATORY CLIENT: Calscience Environmental Laboratories, Inc.

ADDRESS: 7440 Lincoln Way

CITY: Garden Grove, CA 92841-1427

TEL: (714) 895-5494

E-MAIL: vpatel@calscience.com

CLIENT PROJECT NAME / NUMBER: 08-02-2114

P.O. NO.: 08-02-2114

PROJECT CONTACT: Virendra Patel

QUOTE NO.:

LAB USE ONLY

SAMPLER(S): (PRINT)

TURNAROUND TIME

☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☐ 5 DAYS ☒ NORMAL

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)

☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___/___/___

SPECIAL INSTRUCTIONS

Ship To: GEL Laboratories, Inc.
2040 Savage Rd.
Charleston, SC 29407

Attention: Amanda Rasco 843-556-8171

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	Matrix	#Cont	Carbon-14 by EERF-C	Detection Limit of 20 pCi/L		Send PDF via Email	Send Invoice with Results
	GWGW2223	02/27/08	1125	W	1	X	X		X	X
	GWGW2224	02/27/08	835	W	1	X	X		X	X

Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
(CALSCIENCE)	Tiffany Adams 3-4-08 10:00	3/3/08 ~~02/29/08~~	1530
Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: Cal Science	SDG/ARCOC/Work Order: 203910, 203911
Received By: JRA	Date Received: 3-4-08 1000

Suspected Hazard Information	Yes	No	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
Marked as radioactive?		X	Maximum Counts Observed*: 40cpm
Classified Radioactive II by RSO?		X	
Marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Identified as Foreign Soil?		X	

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (4 +/- 2 C)?		✓		Preservation Method: ice bags blue ice dry ice none other (describe) 3°C
3	Chain of custody documents included with shipment?	✓			
4	Sample containers intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		✓		Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		✓		Sample ID's and containers affected:
7	Are Encore containers present?			✓	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	✓			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Sample ID's affected:
11	Number of containers received match number indicated on COC?	✓			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	✓			

Comments: Fed Ex 9587 3400 1493

PM (or PMA) review: Initials AJR Date 3/4/08

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

CALS001 Calscience Environmental Laboratory, Inc.

Client SDG: 203910 GEL Work Order: 203910

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Amanda Rasco.

Amanda Rasco

Reviewed by

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : Calscience Environmental Laboratories, Inc.
Address : 7440 Lincoln Way
Garden Grove, California 92841−−1427

Report Date: March 11, 2008

Contact: Mr. Virendra R. Patel
Project: **Carbon 14**

Client Sample ID:	GWGW2223	Project:	CALS00101
Sample ID:	203910001	Client ID:	CALS001
Matrix:	Water		
Collect Date:	27−FEB−08 11:25		
Receive Date:	04−MAR−08		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Rad Liquid Scintillation Analysis											
Liquid Scint C14, Liquid											
Carbon−14		41.5	+/−10.2	15.6	20.0	pCi/L		RXE1 03/08/08	1504	733285	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA EERF C−01 Modified	

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : Calscience Environmental Laboratories, Inc.
Address : 7440 Lincoln Way
Garden Grove, California 92841−−1427

Report Date: March 11, 2008

Contact: Mr. Virendra R. Patel
Project: **Carbon 14**

Client Sample ID:	GWGW2224	Project:	CALS00101
Sample ID:	203910002	Client ID:	CALS001
Matrix:	Water		
Collect Date:	27−FEB−08 08:35		
Receive Date:	04−MAR−08		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Rad Liquid Scintillation Analysis											
Liquid Scint C14, Liquid											
Carbon−14		64.9	+/−10.8	15.6	20.0	pCi/L		RXE1 03/08/08	1541	733285	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA EERF C−01 Modified	

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: March 11, 2008
Page 1 of 2

Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, California

Contact: **Mr. Virendra R. Patel**

Workorder: **203910**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Liquid Scintillation										
Batch 733285										
QC1201530273 203910002 DUP										
Carbon-14		64.9 +/-10.8		62.2 +/-10.8	pCi/L	4		(0% - 100%)	RXE1	03/08/08 17:33
QC1201530275 LCS										
Carbon-14	523			501 +/-18.7	pCi/L		96	(75%-125%)		03/08/08 18:47
QC1201530272 MB										
Carbon-14			U	-0.875 +/-8.99	pCi/L					03/08/08 16:55
QC1201530274 203910002 MS										
Carbon-14	523	64.9 +/-10.8		571 +/-19.7	pCi/L		97	(75%-125%)		03/08/08 18:10

Notes:
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- M M if above MDC and less than LLD
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy--Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
- h Preparation or preservation holding time was exceeded

GEL LABORATORIES LLC
2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Workorder: 203910

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

List of current GEL Certifications as of 11 March 2008

State	Certification
Alaska	UST-062
Arizona	AZ0668
Arkansas	88-0651
CLIA	42D0904046
California	01151CA
Colorado	GenEngLabs
Connecticut	PH-0169
Dept. of Navy	NFESC 413
EPA	WG-15J
Florida/NELAP	E87156
Georgia	E87156 (FL/NELAP)
Hawaii	N/A
Idaho	N/A
Illinois	200029
Indiana	C-SC-01
Kansas	E-10332
Kentucky	90129
Louisiana	03046
Maryland	270
Massachusetts	M-SC012
Michigan	9903
Nevada	SC12
New Jersey	SC002
New Mexico	FL NELAP E87156
New York	11501
North Carolina	233
North Carolina Drinking W	45709
North Dakota	R-158
Oklahoma	9904
Pennsylvania	68-00485
South Carolina	10120001/10585001/10120002
Tennessee	02934
Texas NELAP	T104704235-07-TX
U.S. Dept. of Agriculture	S-52597
US Army Corps of Engineer	N/A
Utah	8037697376 GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Calscience Environmental Laboratories, Inc.

April 01, 2008

Joe Turner
Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Subject: **Calscience Work Order No.: 08-03-0174**
Client Reference: UC Davis - LEHR / 131261

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 3/4/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Virendra Patel
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/04/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0174
Rancho Cordova, CA 95670-7984		Preparation:	EPA 3010A Total
		Method:	EPA 6010B

Project: UC Davis - LEHR / 131261

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2213	**08-03-0174-2-B**	**03/03/08 15:30**	**Aqueous**	**ICP 5300**	**03/04/08**	**03/05/08 12:17**	**080304L03**

Parameter	Result	RL	DF	Qual	Units
Chromium	0.0359	0.00500	1		mg/L

GWGW2225	**08-03-0174-4-C**	**03/03/08 14:04**	**Aqueous**	**ICP 5300**	**03/04/08**	**03/05/08 12:20**	**080304L03**

Parameter	Result	RL	DF	Qual	Units
Chromium	0.188	0.00500	1		mg/L

GWGW2259	**08-03-0174-28-D**	**02/28/08 15:00**	**Aqueous**	**ICP 5300**	**03/04/08**	**03/05/08 12:29**	**080304L03**

Parameter	Result	RL	DF	Qual	Units
Chromium	0.0451	0.00500	1		mg/L

Method Blank	**097-01-003-8,069**	**N/A**	**Aqueous**	**ICP 5300**	**03/04/08**	**03/04/08 18:30**	**080304L03**

Parameter	Result	RL	DF	Qual	Units
Chromium	ND	0.00500	1		mg/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/04/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0174
Rancho Cordova, CA 95670-7984		Preparation:	N/A
		Method:	EPA 300.0

Project: UC Davis - LEHR / 131261

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2213	**08-03-0174-2-A**	**03/03/08 15:30**	**Aqueous**	**IC 2**	**N/A**	**03/04/08 17:02**	**080304L01**

Parameter	Result	RL	DF	Qual	Units
Nitrate (as N)	17	2.0	20		mg/L

GWGW2225	**08-03-0174-4-B**	**03/03/08 14:04**	**Aqueous**	**IC 2**	**N/A**	**03/04/08 17:14**	**080304L01**

Parameter	Result	RL	DF	Qual	Units
Nitrate (as N)	64	5.0	50		mg/L

GWGW2227	**08-03-0174-5-A**	**03/03/08 14:38**	**Aqueous**	**IC 2**	**N/A**	**03/04/08 17:26**	**080304L01**

Parameter	Result	RL	DF	Qual	Units
Nitrate (as N)	34	5.0	50		mg/L

GWGW2228	**08-03-0174-6-A**	**03/03/08 14:40**	**Aqueous**	**IC 2**	**N/A**	**03/04/08 17:38**	**080304L01**

Parameter	Result	RL	DF	Qual	Units
Nitrate (as N)	34	5.0	50		mg/L

Method Blank	**099-05-118-4,372**	**N/A**	**Aqueous**	**IC 2**	**N/A**	**03/04/08 09:13**	**080304L01**

Parameter	Result	RL	DF	Qual	Units
Nitrate (as N)	ND	0.10	1		mg/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/04/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0174
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 1 of 25

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TBGW0506	**08-03-0174-3-A**	**02/28/08 00:00**	**Aqueous**	**GC/MS FF**	**03/13/08**	**03/13/08 14:30**	**080313L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	114	74-140		1,2-Dichloroethane-d4	114	74-146	
Toluene-d8	106	88-112		1,4-Bromofluorobenzene	98	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/04/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0174
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 2 of 25

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2229	**08-03-0174-7-A**	**02/29/08 12:03**	**Aqueous**	**GC/MS FF**	**03/14/08**	**03/14/08 18:11**	**080314L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	9.0	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	108	74-140		1,2-Dichloroethane-d4	103	74-146	
Toluene-d8	106	88-112		1,4-Bromofluorobenzene	99	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/04/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0174
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 3 of 25

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2230	**08-03-0174-8-A**	**02/29/08 12:25**	**Aqueous**	**GC/MS FF**	**03/14/08**	**03/14/08 18:40**	**080314L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	9.8	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	107	74-140		1,2-Dichloroethane-d4	105	74-146	
Toluene-d8	106	88-112		1,4-Bromofluorobenzene	98	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/04/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0174
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 4 of 25

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2232	**08-03-0174-10-A**	**02/29/08 13:15**	**Aqueous**	**GC/MS FF**	**03/14/08**	**03/14/08 19:09**	**080314L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	12	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	110	74-140		1,2-Dichloroethane-d4	109	74-146	
Toluene-d8	105	88-112		1,4-Bromofluorobenzene	98	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/04/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0174
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 5 of 25

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2233	**08-03-0174-11-A**	**02/29/08 14:20**	**Aqueous**	**GC/MS FF**	**03/14/08**	**03/14/08 19:38**	**080314L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	140	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	4.1	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	1.6	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	0.55	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	107	74-140		1,2-Dichloroethane-d4	104	74-146	
Toluene-d8	107	88-112		1,4-Bromofluorobenzene	97	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/04/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0174
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 6 of 25

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2234	**08-03-0174-12-A**	**02/29/08 13:42**	**Aqueous**	**GC/MS FF**	**03/14/08**	**03/14/08 20:07**	**080314L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	6.7	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	111	74-140		1,2-Dichloroethane-d4	107	74-146	
Toluene-d8	106	88-112		1,4-Bromofluorobenzene	98	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/04/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0174
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 7 of 25

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2235	**08-03-0174-13-A**	**02/29/08 14:15**	**Aqueous**	**GC/MS FF**	**03/14/08**	**03/14/08 20:36**	**080314L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	130	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	3.9	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	1.6	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	0.58	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	107	74-140		1,2-Dichloroethane-d4	103	74-146	
Toluene-d8	107	88-112		1,4-Bromofluorobenzene	96	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/04/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0174
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 8 of 25

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2237	**08-03-0174-14-A**	**02/29/08 14:54**	**Aqueous**	**GC/MS FF**	**03/14/08**	**03/14/08 21:05**	**080314L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	23	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	1.0	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	108	74-140		1,2-Dichloroethane-d4	105	74-146	
Toluene-d8	105	88-112		1,4-Bromofluorobenzene	98	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/04/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0174
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 9 of 25

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2238	**08-03-0174-15-A**	**03/03/08 09:18**	**Aqueous**	**GC/MS U**	**03/14/08**	**03/14/08 18:22**	**080314L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	1.4	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	32	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	1.2	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	130	74-140		1,2-Dichloroethane-d4	133	74-146	
Toluene-d8	110	88-112		1,4-Bromofluorobenzene	88	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/04/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0174
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 10 of 25

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2239	**08-03-0174-16-A**	**03/03/08 09:40**	**Aqueous**	**GC/MS U**	**03/14/08**	**03/14/08 18:50**	**080314L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	90	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	2.2	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	136	74-140		1,2-Dichloroethane-d4	136	74-146	
Toluene-d8	109	88-112		1,4-Bromofluorobenzene	85	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/04/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0174
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 11 of 25

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2240	**08-03-0174-17-A**	**03/03/08 10:00**	**Aqueous**	**GC/MS U**	**03/14/08**	**03/14/08 19:19**	**080314L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	100	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	3.0	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	130	74-140		1,2-Dichloroethane-d4	132	74-146	
Toluene-d8	112	88-112		1,4-Bromofluorobenzene	84	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/04/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0174
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 12 of 25

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2241	**08-03-0174-18-B**	**03/03/08 10:03**	**Aqueous**	**GC/MS FF**	**03/15/08**	**03/15/08 20:47**	**080315L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	63	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	1.5	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	106	74-140		1,2-Dichloroethane-d4	102	74-146	
Toluene-d8	106	88-112		1,4-Bromofluorobenzene	98	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/04/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0174
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 13 of 25

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2242	**08-03-0174-19-A**	**03/03/08 10:32**	**Aqueous**	**GC/MS U**	**03/14/08**	**03/14/08 20:15**	**080314L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	140	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	3.1	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	135	74-140		1,2-Dichloroethane-d4	138	74-146	
Toluene-d8	111	88-112		1,4-Bromofluorobenzene	86	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/04/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0174
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 14 of 25

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2243	**08-03-0174-20-B**	**03/03/08 11:01**	**Aqueous**	**GC/MS FF**	**03/15/08**	**03/15/08 21:16**	**080315L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	109	74-140		1,2-Dichloroethane-d4	105	74-146	
Toluene-d8	105	88-112		1,4-Bromofluorobenzene	96	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/04/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0174
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 15 of 25

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2244	**08-03-0174-21-C**	**03/03/08 11:16**	**Aqueous**	**GC/MS FF**	**03/17/08**	**03/17/08 13:10**	**080317L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	101	74-140		1,2-Dichloroethane-d4	102	74-146	
Toluene-d8	98	88-112		1,4-Bromofluorobenzene	98	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/04/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0174
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 16 of 25

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2245	**08-03-0174-22-A**	**03/03/08 17:00**	**Aqueous**	**GC/MS O**	**03/14/08**	**03/14/08 18:59**	**080314L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	72	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	93	74-140		1,2-Dichloroethane-d4	89	74-146	
Toluene-d8	98	88-112		1,4-Bromofluorobenzene	87	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/04/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0174
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 17 of 25

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2246	**08-03-0174-23-A**	**03/03/08 11:45**	**Aqueous**	**GC/MS O**	**03/14/08**	**03/14/08 19:29**	**080314L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	19	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	2.3	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	93	74-140		1,2-Dichloroethane-d4	88	74-146	
Toluene-d8	100	88-112		1,4-Bromofluorobenzene	87	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/04/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0174
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 18 of 25

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2247	**08-03-0174-24-A**	**03/03/08 12:47**	**Aqueous**	**GC/MS O**	**03/14/08**	**03/14/08 20:00**	**080314L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	21	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	2.5	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	92	74-140		1,2-Dichloroethane-d4	86	74-146	
Toluene-d8	98	88-112		1,4-Bromofluorobenzene	87	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/04/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0174
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 19 of 25

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2248	**08-03-0174-25-A**	**03/03/08 13:01**	**Aqueous**	**GC/MS O**	**03/14/08**	**03/14/08 20:30**	**080314L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	27	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	2.6	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	92	74-140		1,2-Dichloroethane-d4	87	74-146	
Toluene-d8	99	88-112		1,4-Bromofluorobenzene	87	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/04/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0174
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 20 of 25

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-24,765**	**N/A**	**Aqueous**	**GC/MS FF**	**03/13/08**	**03/13/08 14:01**	**080313L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	112	74-140		1,2-Dichloroethane-d4	112	74-146	
Toluene-d8	107	88-112		1,4-Bromofluorobenzene	98	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/04/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0174
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 21 of 25

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-24,772**	**N/A**	**Aqueous**	**GC/MS FF**	**03/14/08**	**03/14/08 12:49**	**080314L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	110	74-140		1,2-Dichloroethane-d4	106	74-146	
Toluene-d8	106	88-112		1,4-Bromofluorobenzene	99	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/04/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0174
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 22 of 25

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-24,773**	**N/A**	**Aqueous**	**GC/MS U**	**03/14/08**	**03/14/08 13:01**	**080314L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	129	74-140		1,2-Dichloroethane-d4	125	74-146	
Toluene-d8	105	88-112		1,4-Bromofluorobenzene	88	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/04/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0174
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 23 of 25

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-24,776**	**N/A**	**Aqueous**	**GC/MS O**	**03/14/08**	**03/14/08 12:30**	**080314L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	88	74-140		1,2-Dichloroethane-d4	83	74-146	
Toluene-d8	98	88-112		1,4-Bromofluorobenzene	85	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/04/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0174
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 24 of 25

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-24,787**	**N/A**	**Aqueous**	**GC/MS FF**	**03/15/08**	**03/15/08 12:33**	**080315L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		1,2-Dichloropropane	ND	1.0	1	
o-Xylene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	108	74-140		1,2-Dichloroethane-d4	102	74-146	
Toluene-d8	106	88-112		1,4-Bromofluorobenzene	98	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/04/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0174
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 25 of 25

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-24,798**	**N/A**	**Aqueous**	**GC/MS FF**	**03/17/08**	**03/17/08 12:09**	**080317L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	99	74-140		1,2-Dichloroethane-d4	98	74-146	
Toluene-d8	99	88-112		1,4-Bromofluorobenzene	98	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	03/04/08
Work Order No:	08-03-0174
Preparation:	EPA 3010A Total
Method:	EPA 6010B

Project UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-03-0093-3	**Aqueous**	**ICP 5300**	**03/04/08**	**03/05/08**	**080304S03**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Chromium	99	101	86-122	2	0-8	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	03/04/08
Work Order No:	08-03-0174
Preparation:	N/A
Method:	EPA 300.0

Project UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-03-0168-7	**Aqueous**	**IC 2**	**N/A**	**03/04/08**	**080304S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Nitrate (as N)	96	96	58-142	0	0-6	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	03/04/08
Work Order No:	08-03-0174
Preparation:	EPA 5030B
Method:	EPA 8260B

Project UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-03-0900-2	**Aqueous**	**GC/MS FF**	**03/13/08**	**03/13/08**	**080313S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	94	96	88-118	2	0-7	
Carbon Tetrachloride	125	126	67-145	1	0-11	
Chlorobenzene	99	98	88-118	1	0-7	
1,2-Dibromoethane	99	112	70-130	12	0-30	
1,2-Dichlorobenzene	99	101	86-116	3	0-8	
1,1-Dichloroethene	98	98	70-130	0	0-25	
Ethylbenzene	100	95	70-130	5	0-30	
Toluene	101	101	87-123	0	0-8	
Trichloroethene	83	102	79-127	5	0-10	
Vinyl Chloride	98	99	69-129	0	0-13	
Methyl-t-Butyl Ether (MTBE)	88	110	71-131	23	0-13	4
Tert-Butyl Alcohol (TBA)	121	161	36-168	29	0-45	
Diisopropyl Ether (DIPE)	96	111	81-123	15	0-9	4
Ethyl-t-Butyl Ether (ETBE)	100	121	72-126	19	0-12	4
Tert-Amyl-Methyl Ether (TAME)	94	110	72-126	16	0-12	4
Ethanol	107	142	53-149	27	0-31	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	03/04/08
Work Order No:	08-03-0174
Preparation:	EPA 5030B
Method:	EPA 8260B

Project UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-03-0238-4	**Aqueous**	**GC/MS O**	**03/14/08**	**03/14/08**	**080314S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	112	112	88-118	0	0-7	
Carbon Tetrachloride	89	90	67-145	1	0-11	
Chlorobenzene	96	96	88-118	0	0-7	
1,2-Dibromoethane	107	108	70-130	1	0-30	
1,2-Dichlorobenzene	101	102	86-116	1	0-8	
1,1-Dichloroethene	105	105	70-130	0	0-25	
Ethylbenzene	101	101	70-130	0	0-30	
Toluene	112	113	87-123	1	0-8	
Trichloroethene	99	99	79-127	0	0-10	
Vinyl Chloride	110	111	69-129	1	0-13	
Methyl-t-Butyl Ether (MTBE)	115	118	71-131	2	0-13	
Tert-Butyl Alcohol (TBA)	174	187	36-168	7	0-45	3
Diisopropyl Ether (DIPE)	132	135	81-123	2	0-9	3
Ethyl-t-Butyl Ether (ETBE)	120	123	72-126	3	0-12	
Tert-Amyl-Methyl Ether (TAME)	107	109	72-126	2	0-12	
Ethanol	149	160	53-149	7	0-31	3

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	03/04/08
Work Order No:	08-03-0174
Preparation:	EPA 5030B
Method:	EPA 8260B

Project UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-03-0347-2	**Aqueous**	**GC/MS U**	**03/14/08**	**03/14/08**	**080314S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	105	105	88-118	0	0-7	
Carbon Tetrachloride	103	107	67-145	3	0-11	
Chlorobenzene	95	95	88-118	0	0-7	
1,2-Dibromoethane	97	90	70-130	7	0-30	
1,2-Dichlorobenzene	93	99	86-116	7	0-8	
1,1-Dichloroethene	123	122	70-130	1	0-25	
Ethylbenzene	102	104	70-130	2	0-30	
Toluene	107	105	87-123	2	0-8	
Trichloroethene	106	106	79-127	0	0-10	
Vinyl Chloride	95	96	69-129	2	0-13	
Methyl-t-Butyl Ether (MTBE)	102	102	71-131	0	0-13	
Tert-Butyl Alcohol (TBA)	101	100	36-168	1	0-45	
Diisopropyl Ether (DIPE)	107	107	81-123	0	0-9	
Ethyl-t-Butyl Ether (ETBE)	104	105	72-126	1	0-12	
Tert-Amyl-Methyl Ether (TAME)	103	102	72-126	1	0-12	
Ethanol	81	81	53-149	1	0-31	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	03/04/08
Work Order No:	08-03-0174
Preparation:	EPA 5030B
Method:	EPA 8260B

Project UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-03-0192-10	**Aqueous**	**GC/MS FF**	**03/14/08**	**03/14/08**	**080314S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	97	97	88-118	0	0-7	
Carbon Tetrachloride	129	129	67-145	0	0-11	
Chlorobenzene	101	100	88-118	1	0-7	
1,2-Dibromoethane	102	103	70-130	1	0-30	
1,2-Dichlorobenzene	99	99	86-116	0	0-8	
1,1-Dichloroethene	106	107	70-130	1	0-25	
Ethylbenzene	102	102	70-130	1	0-30	
Toluene	103	103	87-123	0	0-8	
Trichloroethene	100	101	79-127	1	0-10	
Vinyl Chloride	108	108	69-129	0	0-13	
Methyl-t-Butyl Ether (MTBE)	87	89	71-131	2	0-13	
Tert-Butyl Alcohol (TBA)	131	137	36-168	4	0-45	
Diisopropyl Ether (DIPE)	96	96	81-123	0	0-9	
Ethyl-t-Butyl Ether (ETBE)	100	103	72-126	2	0-12	
Tert-Amyl-Methyl Ether (TAME)	93	96	72-126	3	0-12	
Ethanol	107	115	53-149	7	0-31	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	03/04/08
Work Order No:	08-03-0174
Preparation:	EPA 5030B
Method:	EPA 8260B

Project UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-03-0506-1	**Aqueous**	**GC/MS FF**	**03/15/08**	**03/15/08**	**080315S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	95	95	88-118	0	0-7	
Carbon Tetrachloride	129	129	67-145	0	0-11	
Chlorobenzene	100	99	88-118	1	0-7	
1,2-Dibromoethane	100	100	70-130	0	0-30	
1,2-Dichlorobenzene	98	99	86-116	1	0-8	
1,1-Dichloroethene	104	104	70-130	1	0-25	
Ethylbenzene	100	101	70-130	1	0-30	
Toluene	101	101	87-123	0	0-8	
Trichloroethene	98	99	79-127	1	0-10	
Vinyl Chloride	107	108	69-129	1	0-13	
Methyl-t-Butyl Ether (MTBE)	92	92	71-131	1	0-13	
Tert-Butyl Alcohol (TBA)	124	124	36-168	0	0-45	
Diisopropyl Ether (DIPE)	93	92	81-123	1	0-9	
Ethyl-t-Butyl Ether (ETBE)	98	98	72-126	0	0-12	
Tert-Amyl-Methyl Ether (TAME)	90	91	72-126	1	0-12	
Ethanol	99	100	53-149	1	0-31	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	03/04/08
Work Order No:	08-03-0174
Preparation:	EPA 5030B
Method:	EPA 8260B

Project UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-03-0233-2	**Aqueous**	**GC/MS FF**	**03/17/08**	**03/17/08**	**080317S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	101	100	88-118	1	0-7	
Carbon Tetrachloride	103	103	67-145	0	0-11	
Chlorobenzene	100	100	88-118	0	0-7	
1,2-Dibromoethane	104	104	70-130	0	0-30	
1,2-Dichlorobenzene	97	98	86-116	1	0-8	
1,1-Dichloroethene	96	93	70-130	2	0-25	
Ethylbenzene	101	102	70-130	0	0-30	
Toluene	100	100	87-123	1	0-8	
Trichloroethene	98	97	79-127	1	0-10	
Vinyl Chloride	113	114	69-129	0	0-13	
Methyl-t-Butyl Ether (MTBE)	96	96	71-131	0	0-13	
Tert-Butyl Alcohol (TBA)	128	128	36-168	0	0-45	
Diisopropyl Ether (DIPE)	100	99	81-123	0	0-9	
Ethyl-t-Butyl Ether (ETBE)	100	100	72-126	0	0-12	
Tert-Amyl-Methyl Ether (TAME)	100	100	72-126	0	0-12	
Ethanol	100	98	53-149	2	0-31	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell		Date Received:	N/A
10540 White Rock Road, Suite 180		Work Order No:	08-03-0174
Rancho Cordova, CA 95670-7984		Preparation:	EPA 3010A Total
		Method:	EPA 6010B

Project: UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-003-8,069	**Aqueous**	**ICP 5300**	**03/04/08**	**03/04/08**	**080304L03**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Chromium	103	102	80-120	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell		Date Received:	N/A
10540 White Rock Road, Suite 180		Work Order No:	08-03-0174
Rancho Cordova, CA 95670-7984		Preparation:	N/A
		Method:	EPA 300.0

Project: UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-05-118-4,372	**Aqueous**	**IC 2**	**N/A**	**03/04/08**	**080304L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Nitrate (as N)	98	98	87-111	0	0-12	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	N/A
Work Order No:	08-03-0174
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-24,765	**Aqueous**	**GC/MS FF**	**03/13/08**	**03/13/08**	**080313L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	94	94	84-120	0	0-8	
Carbon Tetrachloride	126	124	63-147	1	0-10	
Chlorobenzene	99	99	89-119	0	0-7	
1,2-Dibromoethane	100	102	80-120	2	0-20	
1,2-Dichlorobenzene	99	99	89-119	1	0-9	
1,1-Dichloroethene	98	97	77-125	1	0-16	
Ethylbenzene	100	100	80-120	0	0-20	
Toluene	101	101	83-125	1	0-9	
Trichloroethene	97	97	89-119	1	0-8	
Vinyl Chloride	97	96	63-135	1	0-13	
Methyl-t-Butyl Ether (MTBE)	86	88	82-118	2	0-13	
Tert-Butyl Alcohol (TBA)	126	135	46-154	7	0-32	
Diisopropyl Ether (DIPE)	97	98	81-123	1	0-11	
Ethyl-t-Butyl Ether (ETBE)	103	104	74-122	1	0-12	
Tert-Amyl-Methyl Ether (TAME)	97	99	76-124	2	0-10	
Ethanol	110	118	60-138	6	0-32	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-03-0174
Preparation: EPA 5030B
Method: EPA 8260B

Project: UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-24,776	**Aqueous**	**GC/MS O**	**03/14/08**	**03/14/08**	**080314L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	107	107	84-120	0	0-8	
Carbon Tetrachloride	83	82	63-147	2	0-10	
Chlorobenzene	97	97	89-119	0	0-7	
1,2-Dibromoethane	106	105	80-120	1	0-20	
1,2-Dichlorobenzene	105	105	89-119	0	0-9	
1,1-Dichloroethene	96	95	77-125	1	0-16	
Ethylbenzene	102	101	80-120	0	0-20	
Toluene	108	109	83-125	2	0-9	
Trichloroethene	94	95	89-119	1	0-8	
Vinyl Chloride	103	101	63-135	2	0-13	
Methyl-t-Butyl Ether (MTBE)	104	102	82-118	2	0-13	
Tert-Butyl Alcohol (TBA)	144	141	46-154	2	0-32	
Diisopropyl Ether (DIPE)	122	122	81-123	0	0-11	
Ethyl-t-Butyl Ether (ETBE)	109	108	74-122	1	0-12	
Tert-Amyl-Methyl Ether (TAME)	100	99	76-124	0	0-10	
Ethanol	133	128	60-138	4	0-32	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	N/A
Work Order No:	08-03-0174
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-24,773	**Aqueous**	**GC/MS U**	**03/14/08**	**03/14/08**	**080314L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	108	108	84-120	0	0-8	
Carbon Tetrachloride	105	105	63-147	0	0-10	
Chlorobenzene	101	102	89-119	1	0-7	
1,2-Dibromoethane	97	99	80-120	2	0-20	
1,2-Dichlorobenzene	98	102	89-119	4	0-9	
1,1-Dichloroethene	116	121	77-125	5	0-16	
Ethylbenzene	111	112	80-120	2	0-20	
Toluene	113	112	83-125	1	0-9	
Trichloroethene	109	108	89-119	0	0-8	
Vinyl Chloride	93	98	63-135	5	0-13	
Methyl-t-Butyl Ether (MTBE)	101	105	82-118	4	0-13	
Tert-Butyl Alcohol (TBA)	83	94	46-154	13	0-32	
Diisopropyl Ether (DIPE)	110	108	81-123	1	0-11	
Ethyl-t-Butyl Ether (ETBE)	103	104	74-122	1	0-12	
Tert-Amyl-Methyl Ether (TAME)	101	105	76-124	3	0-10	
Ethanol	79	81	60-138	2	0-32	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	N/A
Work Order No:	08-03-0174
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-24,772	**Aqueous**	**GC/MS FF**	**03/14/08**	**03/14/08**	**080314L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	97	97	84-120	1	0-8	
Carbon Tetrachloride	132	132	63-147	0	0-10	
Chlorobenzene	101	100	89-119	1	0-7	
1,2-Dibromoethane	100	102	80-120	1	0-20	
1,2-Dichlorobenzene	99	100	89-119	1	0-9	
1,1-Dichloroethene	108	107	77-125	1	0-16	
Ethylbenzene	103	101	80-120	2	0-20	
Toluene	104	103	83-125	1	0-9	
Trichloroethene	100	99	89-119	1	0-8	
Vinyl Chloride	113	112	63-135	0	0-13	
Methyl-t-Butyl Ether (MTBE)	92	88	82-118	4	0-13	
Tert-Butyl Alcohol (TBA)	113	125	46-154	10	0-32	
Diisopropyl Ether (DIPE)	97	99	81-123	2	0-11	
Ethyl-t-Butyl Ether (ETBE)	102	105	74-122	3	0-12	
Tert-Amyl-Methyl Ether (TAME)	95	96	76-124	1	0-10	
Ethanol	102	111	60-138	8	0-32	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	N/A
Work Order No:	08-03-0174
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-24,787	**Aqueous**	**GC/MS FF**	**03/15/08**	**03/15/08**	**080315L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	96	95	84-120	1	0-8	
Carbon Tetrachloride	131	131	63-147	0	0-10	
Chlorobenzene	100	99	89-119	1	0-7	
1,2-Dibromoethane	98	99	80-120	1	0-20	
1,2-Dichlorobenzene	99	99	89-119	0	0-9	
1,1-Dichloroethene	106	106	77-125	0	0-16	
Ethylbenzene	101	100	80-120	2	0-20	
Toluene	102	102	83-125	0	0-9	
Trichloroethene	99	98	89-119	1	0-8	
Vinyl Chloride	111	109	63-135	1	0-13	
Methyl-t-Butyl Ether (MTBE)	89	93	82-118	5	0-13	
Tert-Butyl Alcohol (TBA)	110	112	46-154	1	0-32	
Diisopropyl Ether (DIPE)	93	94	81-123	1	0-11	
Ethyl-t-Butyl Ether (ETBE)	99	101	74-122	2	0-12	
Tert-Amyl-Methyl Ether (TAME)	91	93	76-124	2	0-10	
Ethanol	92	104	60-138	12	0-32	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	N/A
Work Order No:	08-03-0174
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-24,798	**Aqueous**	**GC/MS FF**	**03/17/08**	**03/17/08**	**080317L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	101	101	84-120	1	0-8	
Carbon Tetrachloride	104	103	63-147	1	0-10	
Chlorobenzene	99	99	89-119	0	0-7	
1,2-Dibromoethane	97	99	80-120	2	0-20	
1,2-Dichlorobenzene	97	98	89-119	1	0-9	
1,1-Dichloroethene	98	97	77-125	1	0-16	
Ethylbenzene	103	103	80-120	0	0-20	
Toluene	101	101	83-125	0	0-9	
Trichloroethene	97	98	89-119	1	0-8	
Vinyl Chloride	121	120	63-135	1	0-13	
Methyl-t-Butyl Ether (MTBE)	99	100	82-118	2	0-13	
Tert-Butyl Alcohol (TBA)	99	105	46-154	6	0-32	
Diisopropyl Ether (DIPE)	100	101	81-123	1	0-11	
Ethyl-t-Butyl Ether (ETBE)	101	102	74-122	1	0-12	
Tert-Amyl-Methyl Ether (TAME)	100	101	76-124	1	0-10	
Ethanol	81	86	60-138	5	0-32	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-03-0174

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Emma Dennison

From: Withrow, Amanda [AWithrow@BrwnCald.com]
Sent: Wednesday, March 05, 2008 11:41 AM
To: Emma Dennison
Cc: Virendra Patel; Turner, Joseph; Frey, Chuck
Subject: RE: COC / 08-03-0174 / UC Davis - LEHR / 131261 <response requested>

We will resample these wells and resubmit the samples.

I spoke with my field staff and he indicated that he had problems with the vials that have "Calscience" on them; he had to throw away quite a few because the caps would not seal properly. In addition, many of the trip blanks could not be used because the bubbles were too big. He didn't have any trouble with the second batch of vials that Virendra had sent out to me (the rush delivery ones last week); they didn't have "Calscience" on the side.

Regards ~

Amanda M. Withrow, P.E.
B R O W N A N D C A L D W E L L
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670
Office: (916) 853-5369
Fax: (916) 635-8805

-----Original Message-----
From: Emma Dennison [mailto:EDennison@calscience.com]
Sent: Wednesday, March 05, 2008 11:22 AM
To: Withrow, Amanda
Cc: Virendra Patel
Subject: RE: COC / 08-03-0174 / UC Davis - LEHR / 131261 <response requested>

Pea-size bubble.

Thanks,
Emma

-----Original Message-----
From: Withrow, Amanda [mailto:AWithrow@BrwnCald.com]
Sent: Wednesday, March 05, 2008 11:04 AM
To: Emma Dennison
Subject: RE: COC / 08-03-0174 / UC Davis - LEHR / 131261 <response requested>

Hello ~

How much headspace? Pea-size bubble or significant amount?

Amanda M. Withrow, P.E.
B R O W N A N D C A L D W E L L
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670
Office: (916) 853-5369
Fax: (916) 635-8805

-----Original Message-----
From: Emma Dennison [mailto:EDennison@calscience.com]
Sent: Wednesday, March 05, 2008 10:58 AM
To: Turner, Joseph; Withrow, Amanda

Cc: Virendra Patel
Subject: COC / 08-03-0174 / UC Davis - LEHR / 131261 <response requested>
Importance: High

<<08-03-0174.PDF>>

COC attached for the samples received on 03/04/08. Please see Sample Receipt Form (last page) for comments. GWGW2231, GWGW2256, GWGW2257, GWGW2259 and GWGW2260 - all vials sent have headspace. Please confirm if we have to proceed with the VOC analysis for all these samples.

Thanks,

Emma C. Dennison
Assistant Project Manager
Calscience Environmental
Laboratories, Inc.
7440 Lincoln Way
Garden Grove, CA 92841-1427
Tel.: 714-895-5494
Fax : 714-894-7501
edennison@calscience.com

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BROWN AND CALDWELL

CHAIN OF CUSTODY RECORD

COC No. _____

0174

UCD0000228

☑ 10540 White Rock Rd, Ste. 180
Rancho Cordova, CA 95670
916-444-0123 / FAX 916-635-8805

☐ 9665 Chesapeake Dr. / Suite 201
San Diego, CA 92123
858-514-8822 / FAX 858-514-8833

☐ 201 N. Civic Dr. / Suite 115
Walnut Creek, CA 94596
925-937-9010 / FAX 925-937-9026

☐ 400 Exchange / Suite 100
Irvine, CA 92602
714-730-7600 / FAX 714-734-0940

PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: ~~CalScience Environmental Laboratories, Inc. Garder~~ CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
01	GWGW2212	3/3/08	1334	CEF	1	1 L Plastic	NONE	W	Tritium	—	—	STD	B	----	
02														----	
03														----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

COLLECTED & RELEASED BY	DATE 3/3/08	TIME 1700	COOLER I.D.:			COMMENTS (see note on back):
RECEIVED BY: Fed Ex	DATE / /	TIME :	RELINQUISHED BY:	DATE / /	TIME :	
	3/4/08	1200				
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

DISTRIBUTION: WHITE-LAB RECEIPT • CANARY-PROJECT FILE • PINK-DATA MANAGEMENT • GOLDENROD-FIELD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

BROWN AND CALDWELL

CHAIN OF CUSTODY RECORD

0174

COC No. _____

UCD0000229

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☐ 400 Exchange
Irvine, CA 92602
714-730-7600 / FAX 714-734-0940

PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: CalScience Environmental Laboratories, Inc. Garder CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
01	GWGW2213	3/3/08	1530	CEF	1	~~1L~~ Plastic 250ml	NONE	W	Nitrate (as N)	–	–	STD	B	----	
02	GWGW2213	3/3/08	1530	CEF	1	250 mL Plastic	HNO3 pH < 2	W	Total Chromium	–	–	STD	B	----	
03	TBGW0506	2/28/08	NA	NA	3	40ml VOA	HCl	W	SW8260B	–	–	STD	NA	----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

COLLECTED & RELEASED BY	DATE 3/3/08	TIME 1700	COOLER I.D.:			COMMENTS (see note on back):
RECEIVED BY:	DATE / /	TIME :	RELINQUISHED BY:	DATE / /	TIME :	
	3/4/08	1200				
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

DISTRIBUTION: WHITE-LAB RECEIPT • CANARY-PROJECT FILE • PINK-DATA MANAGEMENT • GOLDENROD-FIELD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

BROWN AND CALDWELL

CHAIN OF CUSTODY RECORD

COC No. _____

0174

UCD0000241

☑ 10540 White Rock Rd, Ste. 180
Rancho Cordova, CA 95670
916-444-0123 / FAX 916-635-8805

☐ 9665 Chesapeake Dr. / Suite 201
San Diego, CA 92123
858-514-8822 / FAX 858-514-8833

☐ 201 N. Civic Dr. / Suite 115
Walnut Creek, CA 94596
925-937-9010 / FAX 925-937-9026

☐ 400 Exchange / Suite 100
Irvine, CA 92602
714-730-7600 / FAX 714-734-0940

PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: ~~CalScience Environmental Laboratories, Inc. Garder~~ CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
01	GWGW2225	3/3/08	1404	CEF	1	500ml ~~1L~~ Plastic	NONE	W	Tritium	—	—	STD	SP	----	
02	GWGW2225	3/3/08	1404	CEF	1	250ml ~~1L~~ Plastic	NONE	W	Nitrate (as N)	—	—	STD	SP	----	
03	GWGW2225	3/3/08	1404	CEF	1	250 mL Plastic	HNO3 pH < 2	W	Total Chromium	—	—	STD	SP	----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

COLLECTED & RELEASED BY	DATE 3/5 08	TIME 1700	COOLER I.D.:			COMMENTS (see note on back):
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COC No. _____

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PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: CalScience Environmental Laboratories, Inc. Garder CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
5	GWGW2227	3/3/08	1438	CEF	1	~~1L~~ Plastic 250ml	NONE	W	Nitrate (as N)	—	—	STD	B	----	
6	GWGW2228	3/3/08	1440 1438	CEF	1	~~1L~~ Plastic 250ml	NONE	W	Nitrate (as N)	—	—	STD	B	----	
03														----	
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COLLECTED & RELEASED BY	DATE 3/3/08	TIME 17:00	COOLER I.D.:			COMMENTS (see note on back):
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PROJECT NAME: UC Davis - LEHR

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LABORATORY NAME & ADDRESS: ~~CalScience Environmental Laboratories, Inc. Garder CA~~

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
~~01~~	GWGW2229	2/24/08	1203	CEi	3	40 mL VOA	HCl pH < 2	W	SW8260B	—	—	STD	B	----	
02														----	
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COLLECTED & RELEASED BY	DATE 3/3/08	TIME 17:0	COOLER I.D.:			COMMENTS (see note on back):
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PROJECT NAME: ~~UC Davis - LEHR~~

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LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
8	GWGW2230	2/29/08	1225	CEF	3	40 mL VOA	HCl pH < 2	W	SW8260B	—	—	STD	B	----	
02														----	
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05														----	
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	DATE	TIME				
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	3/4/08	1200				
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PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: CalScience Environmental Laboratories, Inc. Garder CA

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01	GWGW2231	2/29/08	1248	CEF	3	40 mL VOA	HCl pH < 2	W	SW8260B					----	
02														----	
03														----	
04														----	
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COLLECTED & RELEASED BY	DATE 3/3 08	TIME 17:00	COOLER I.D.:			COMMENTS (see note on back):
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PROJECT NAME: UC Davis - LEHR

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LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
10	GWGW2232	2/29/08	1315	CEF	3	40 mL VOA	HCl pH < 2	W	SW8260B	—	—	STD	B	----	
11	GWGW2233	2/29/08	1420	CEF	3	40 mL VOA	HCl pH < 2	W	SW8260B	—	—	STD	B	----	
03														----	
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02	GWGW2234	3/29/08	1342	CEF	3	40 mL VOA	HCl pH < 2	W	SW8260B	–	–	STD	B	----	
03														----	
04														----	
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COLLECTED & RELEASED BY	DATE 3/28	TIME 17:00	COOLER I.D.:			COMMENTS (see note on back):
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LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
B3	GWGW2235	3/29/08	1415	CEF	3	40 mL VOA	HCl pH < 2	W	SW8260B	—	—	STD	B	----	
02														----	
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07														----	
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COLLECTED & RELEASED BY	DATE 3/30/08	TIME 17:00	COOLER I.D.:			COMMENTS (see note on back):
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PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: CalScience Environmental Laboratories, Inc. Garder CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
164	GWGW2237	2/29/08	1454	CEF	3	40 mL VOA	HCl pH < 2	W	SW8260B	—	—	STD	B	----	
02														----	
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COLLECTED & RELEASED BY	DATE 3/3/08	TIME 17:00	COOLER I.D.:			COMMENTS (see note on back):
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01 15	GWGW2238	3/3/08	0918	CEF	3	40 mL VOA	HCl pH < 2	W	SW8260B	–	–	STD	B	----	
02														----	
03														----	
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RECORD RETURNED BY:	DATE / /	TIME :				
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PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: CalScience Environmental Laboratories, Inc. Garder CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
16	GWGW2239	3/3/08	940	CEF	3	40 mL VOA	HCl pH < 2	W	SW8260B	—	—	STD	B	----	
02														----	
03														----	
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17	GWGW2240	3/3/08	1000	CEF	3	40 mL VOA	HCl pH < 2	W	SW8260B	–	–	STD	B	----	
18	GWGW2241	3/3/08	1003	CEF	3	40 mL VOA	HCl pH < 2	W	SW8260B	–	–	STD	B	----	
03														----	
04														----	
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PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: ~~CalScience Environmental Laboratories, Inc. Garder~~ CA

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19	GWGW2242	3/3/08	1032	CEF	9	40 mL VOA	HCl pH < 2	W	SW8260B	–	–	STD	B	----	
02														----	
03														----	
04														----	
05														----	
06														----	
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COLLECTED & RELEASED BY	DATE	TIME	COOLER I.D.:			COMMENTS (see note on back):
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RECEIVED BY: FED Ex	DATE / /	TIME :	RELINQUISHED BY:	DATE / /	TIME :	
	3/4/08	1200				
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

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714-730-7600 / FAX 714-734-0940

PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: ~~CalScience Environmental Laboratories, Inc. Garder~~ CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
20	GWGW2243	3/3/08	1101	CEF	3	40 mL VOA	HCl pH < 2	W	SW8260B	–	–	STD	B	----	
02														----	
03														----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

COLLECTED & RELEASED BY: CEF	DATE 3/3/08	TIME 17:00	COOLER I.D.:			COMMENTS (see note on back):
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	3/4/08	1200				
RECORD RETURNED BY:	DATE / /	TIME :				
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USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

BROWN AND CALDWELL

CHAIN OF CUSTODY RECORD

COC No. _____

0174

UCD0000237

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PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: ~~CalScience Environmental Laboratories, Inc. Garder CA~~

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
21	GWGW2244	3/3/08	1116	CEF	3	40 mL VOA	HCl pH < 2	W	SW8260B	—	—	STD	B	----	
02														----	
03														----	
04														----	
05														----	
06														----	
07														----	
08														----	
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COLLECTED & RELEASED BY	DATE 3/7/08	TIME 17:00	COOLER I.D.:			COMMENTS (see note on back):
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714-730-7600 / FAX 714-734-0940

PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: CalScience Environmental Laboratories, Inc. Garder CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
22	GWGW2245	3/3/08	1700	CEF	3	40 mL VOA	HCl pH < 2	W	SW8260B	—	—	STD	B	----	
02														----	
03														----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

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	3/4/08	1200				
RECORD RETURNED BY:	DATE / /	TIME :				
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PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: CalScience Environmental Laboratories, Inc. Garder CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
23	GWGW2246	3/3/08	1145	CAF	3	40 mL VOA	HCl pH < 2	W	SW8260B	—	—	STD	B	----	
02														----	
03														----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

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	3/4/08	1200				
RECORD RETURNED BY:	DATE / /	TIME :				
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UCD0000260

PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: ~~CalScience Environmental Laboratories, Inc. Garder~~ CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
24	GWGW2247	3/3/08	1247	CEF	3	40 mL VOA	HCl pH < 2	W	SW8260B	—	—	STD	B	----	
02														----	
03														----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

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CEF	3/3/08	17:00				
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3/4/08	1200					
RECORD RETURNED BY:	DATE / /	TIME :				
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PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: ~~CalScience Environmental Laboratories, Inc. Garder~~ CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
25	GWGW2248	3/3/08	1301	CEF	3	40 mL VOA	HCl pH < 2	W	SW8260B	—	—	STD	B	----	
02														----	
03														----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

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RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

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PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: CalScience Environmental Laboratories, Inc. Garder CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
26	GWGW2256	2/28/08	1418	CEF	3	40 mL VOA	HCl pH < 2	W	SW8260B	–	–	STD	SP	----	
27	GWGW2257	2/28/08	1421	CEF	3	40 mL VOA	HCl pH < 2	W	SW8260B	–	–	STD	SP	----	
03														----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

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	3/04/08	1200				
RECORD RETURNED BY:	DATE / /	TIME :				
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PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: ~~CalScience Environmental Laboratories, Inc. Garder~~ CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
28	GWGW2259	2/28/08	1500	CEF	3	40 mL VOA	HCl pH < 2	W	SW8260B	—	—	STD	SP	----	
02	GWGW2259	2/28/08	1500	CEF	1	250 mL Plastic	HNO3 pH < 2	W	Total Chromium	—	—	STD	SP	----	
03														----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

COLLECTED & RELEASED BY	DATE	TIME	COOLER I.D.:	DATE	TIME	COMMENTS (see note on back):
CEF	3/3/08	1700				
RECEIVED BY: FED EX	DATE / /	TIME :	RELINQUISHED BY:	DATE / /	TIME :	
[signature]	3/4/08	1200				
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

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29	GWGW2260	2/28/08	1555	CEF	3	40 mL VOA	HCl pH < 2	W	SW8260B	—	—	STD	SP	----	
02														----	
03														----	
04														----	
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06														----	
07														----	
08														----	
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RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 0 3 - 0 1 7 4

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: Brown and Caldwell **DATE:** 03/04/08

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature.

_____ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

_____ °C Temperature blank.
2.4 °C IR thermometer.
_____ Ambient temperature.

Initial: KM

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____ Not Present: ✓

Initial: KM

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)	✓		
VOA vial(s) free of headspace.	X ur3	✓	
Tedlar bag(s) free of condensation			✓

Initial: KM

COMMENTS:

GWGW2230 – 1 OUT OF 2 VIALS HAVE HEADSPACE
GWGW2231 – ALL 3 VIALS " "
GWGW2256 – ALL 3 VIALS " "
GWGW2257 – ALL 3 VIALS " "
GWGW2259 – ALL 3 VIALS " "
GWGW2260 – ALL 3 VIALS " "

ENVIRONMENTAL

ANALYTICAL CHEMISTS

March 28, 2008

Lab ID : SP 802483
Customer : 2017756

Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Laboratory Report

Introduction: This report package contains total of 4 pages divided into three sections:

Case Narrative (1 Page) : An overview of the work performed at FGL.
Chemical Results (2 Pages) : Results for each sample submitted.
Quality Control (1 Page) : Supporting Quality Control (QC) results.

This report package pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab Sample ID #	Matrix
GWGW2212	03/03/2008	03/06/2008	SP 802483-01	GW
GWGW2225	03/03/2008	03/06/2008	SP 802483-02	GW

Sampling and Receipt Information: All samples were received, prepared and analyzed within the method specified holding times. All samples arrived at 3 °C. All samples were checked for pH if acid or base preservation required (except for VOAs). For details of sample receipt information, please see the attached Chain of Custody and Condition Upon Receipt Forms.

Quality Control: All samples were prepared and analyzed according to the following tables:

Radio Chemistry QC

906.0	03/24/2008:A217 All preparation quality controls are within established criteria.
	03/24/2008:A - LS201 All analysis quality controls are within established criteria.

Certification: I certify that this data package is in compliance with NELAC Standards, both technically and for completeness, except for any conditions listed above. Release of the data contained in this data package is authorized by the Laboratory Director or his designee, as verified by the following signature.

FGL ENVIRONMENTAL

KAD:jlk

Kelly A. Dunnahoo, B.S.
Laboratory Director

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CA ELAP Certification No. 1573

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FAX: (209) 942-0423
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FAX: (559) 734-8435
Mobile: (559) 737-2399

ENVIRONMENTAL

ANALYTICAL CHEMISTS

March 28, 2008

Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Description : GWGW2212
Project : 08-03-0174

Lab ID : SP 802483-01
Customer ID: 2-17756

Sampled On : March 3, 2008-13:34
Sampled By : Not Available
Received On: March 6, 2008-11:45
Matrix : Ground Water

Sample Results - Radio

Constituents	Result ± Error	MDA	Units	MCL	Preparation Method	Preparation Date/ID	Analysis Method	Analysis Date/ID
Radio Chemistry P:1								
Tritium	1960 ± 254	420	pCi/L	20,000	906.0	03/24/08:A217	906.0	03/24/2008:A01

MDA = Minimum Detectable Activity; Data utilized by the DHS to determine matrix interference. MCL = Maximium Contaminat Level.
Containers: (P) Plastic Preservatives: (1) Cool 4°C

CCR Section 64442: Compliance Note: If Gross Alpha (Result + (0.84 x error)) exceeds 5 pCi/L run Uranium. If Gross Alpha minus Uranium exceeds 5 pCi/L run Radium 226. Samples that exceed 5 pCi/L are held for 6 months at FGL.

Compliance:
Gross Alpha - Uranium ≤ 15 pCi/L
Uranium ≤ 20 pCi/L
Radium 226 + Radium 228 ≤ 5 pCi/L

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Mobile: (559) 737-2399

ENVIRONMENTAL

ANALYTICAL CHEMISTS

March 28, 2008

Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Description : GWGW2225
Project : 08-03-0174

Lab ID : SP 802483-02
Customer ID: 2-17756

Sampled On : March 3, 2008-14:04
Sampled By : Not Available
Received On: March 6, 2008-11:45
Matrix : Ground Water

Sample Results - Radio

Constituents	Result ± Error	MDA	Units	MCL	Preparation Method	Preparation Date/ID	Analysis Method	Analysis Date/ID
Radio Chemistry P:1								
Tritium	0.000 ± 209	420	pCi/L	20,000	906.0	03/24/08:A217	906.0	03/24/2008:A01

MDA = Minimum Detectable Activity; Data utilized by the DHS to determine matrix interference. MCL = Maximium Contaminat Level.
Containers: (P) Plastic Preservatives: (1) Cool 4°C

CCR Section 64442: Compliance Note: If Gross Alpha (Result + (0.84 x error)) exceeds 5 pCi/L run Uranium. If Gross Alpha minus Uranium exceeds 5 pCi/L run Radium 226. Samples that exceed 5 pCi/L are held for 6 months at FGL.

Compliance:
Gross Alpha - Uranium ≤ 15 pCi/L
Uranium ≤ 20 pCi/L
Radium 226 + Radium 228 ≤ 5 pCi/L

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TEL: (805) 392-2000
FAX: (805) 525-4172
CA NELAP Certification No. 01110CA
CA ELAP Certification No. 1573

Office & Laboratory
2500 Stagecoach Road
Stockton, CA 95215
TEL: (209) 942-0182
FAX: (209) 942-0423
CA ELAP Certification No. 1563

Office & Laboratory
563 East Lindo Avenue
Chico, CA 95926
TEL: (530) 343-5818
FAX: (530) 343-3807

Field Office
Visalia, California
TEL: (559) 734-9473
FAX: (559) 734-8435
Mobile: (559) 737-2399

ENVIRONMENTAL ANALYTICAL CHEMISTS

March 28, 2008

Calscience Environmental Laboratories

Lab ID : SP 802483
Customer : 2-17756

Quality Control - Radio

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Tritium	906.0	03/24/2008:A217	Blank	pCi/L		ND	<518	
			LCS	pCi/L	2399	89.5%	75-125	
			BS	pCi/L	2399	104%	75-125	
			BSD	pCi/L	2399	101%	75-125	
			BSRPD	pCi/L		3.4%	≤25	
	906.0	03/24/2008:A	00-CCB	cpm		12	12±1.7	
			00-CCV	cpm	1072	24.8%	25.5±4.5	

Definitions

Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.
BS/BSD : Blank Spikes - A blank is spiked with a known amount of analyte. It is prepared to verify that the preparation process is not affecting analyte recovery.
CCB : Continuing Calibration Blank - Analyzed to verify the instrument baseline is within criteria.
CCV : Continuing Calibration Verification - Analyzed to verify the instrument calibration is within criteria.
ND : Non-detect - Result was below the DQO listed for the analyte.
DQO : Data Quality Objective - This is the criteria against which the quality control data is compared.

Corporate Offices & Laboratory
P.O. Box 272 / 853 Corporation Street
Santa Paula, CA 93061-0272
TEL: (805) 392-2000
FAX: (805) 525-4172
CA NELAP Certification No. 01110CA
CA ELAP Certification No. 1573

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2500 Stagecoach Road
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Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

TO: FGL

CHAIN OF CUSTODY RECORD

83 DATE: 03/04/08
802438 PAGE: 1 OF 1

LABORATORY CLIENT: Calscience Environmental Laboratories, Inc.
ADDRESS: 7440 Lincoln Way
CITY: Garden Grove, CA 92841-1427
TEL: (714) 895-5494
E-MAIL: vpatel@calscience.com

CLIENT PROJECT NAME / NUMBER: 08-03-0174
P.O. NO.: 08-03-0174
PROJECT CONTACT: Virendra Patel
QUOTE NO.:
SAMPLER(S): (PRINT)
LAB USE ONLY

TURNAROUND TIME
☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☐ 5 DAYS ☒ NORMAL

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ____/____/____

SPECIAL INSTRUCTIONS
SUB. To: FGL
853 Corporation St.
Santa Paula , CA 93061-3005
(805)392-2000

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	Matrix	#Cont	Tritium EPA 906.0	Excel EDD
	GWGW2212	03/03/08	1334	GW	1	X	X
	GWGW2225	03/03/08	1404	GW	1	X	X

Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
(CALSCIENCE)		03/05/08	1538
Golden State Overnight		3/6/08	1145.

Santa Paula - Condition Upon Receipt (Attach to COC)

Sample Receipt:

1. Number of ice chests/packages received: 1
   Note as OTC if received over the counter unpackaged.
2. Were samples received in a chilled condition? Temps: 3 / ____ / ____ / ____ / ____
   Acceptable is 2° to 6° C. Also acceptable is received on ice (ROI) for the same day of sampling or received at room temperature (RRT) if sampled within one hour of receipt. Client contact for temperature failures must be documented below. If many packages are received at one time check for tests/H.T.'s/rushes/Bacti's to prioritize further review. Please notify Microbiology personnel immediately of bacti samples received.
3. Do the number of bottles received agree with the COC? Yes No N/A
4. Were samples received intact? (i.e. no broken bottles, leaks etc.) Yes No
5. Were sample custody seals intact? N/A Yes No

Sign and date the COC, obtain LIMS sample numbers, select methods/tests and print labels.

Sample Verification, Labeling and Distribution:

1. Were all requested analyses understood and acceptable? Yes No
2. Did bottle labels correspond with the client's ID's? Yes No
3. Were all bottles requiring sample preservation properly preserved? Yes No N/A FGL
4. VOAs checked for Headspace? Yes No N/A
5. Were all analyses within holding times at time of receipt? Yes No
6. Have rush or project due dates been checked and accepted? N/A Yes No

Attach labels to the containers and include a copy of the COC for lab delivery.

Sample Receipt, Login and Verification completed by (initials): [illegible]

Discrepancy Documentation:

Any items above which are "No" or do not meet specifications (i.e. temps) must be resolved.

1. Person Contacted:_____ Phone Number:_____
   Initiated By:_____ Date:_____
   Problem:

   Resolution:

2. Person Contacted:_____ Phone Number:_____
   Initiated By:_____ Date:_____
   Problem:

   Resolution:

(2-17756)
Calscience Environmental Laboratories
SP 0802483
IV-03/06/2008-12:31:55

Calscience Environmental Laboratories, Inc.

March 24, 2008

Joe Turner
Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Subject: **Calscience Work Order No.: 08-03-0722**
Client Reference: UC Davis - LEHR / 131261

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 3/8/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Virendra Patel
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/08/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0722
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 1 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2231	**08-03-0722-1-A**	**03/07/08 13:35**	**Aqueous**	**GC/MS FF**	**03/19/08**	**03/20/08 00:27**	**080319L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	3700	50	50		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	18	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	1.4	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	8.7	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	6.5	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	9.8	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	96	74-140		1,2-Dichloroethane-d4	91	74-146	
Toluene-d8	99	88-112		1,4-Bromofluorobenzene	97	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/08/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0722
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 2 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2256	**08-03-0722-2-A**	**03/07/08 12:23**	**Aqueous**	**GC/MS FF**	**03/19/08**	**03/20/08 00:56**	**080319L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	2.5	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	98	74-140		1,2-Dichloroethane-d4	95	74-146	
Toluene-d8	98	88-112		1,4-Bromofluorobenzene	97	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/08/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0722
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 3 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2257	**08-03-0722-3-A**	**03/07/08 12:27**	**Aqueous**	**GC/MS FF**	**03/19/08**	**03/20/08 06:44**	**080319L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	1.0	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	100	74-140		1,2-Dichloroethane-d4	98	74-146	
Toluene-d8	99	88-112		1,4-Bromofluorobenzene	97	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/08/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0722
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 4 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2266	**08-03-0722-4-A**	**03/07/08 12:58**	**Aqueous**	**GC/MS FF**	**03/19/08**	**03/20/08 08:39**	**080319L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	6.5	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	99	74-140		1,2-Dichloroethane-d4	96	74-146	
Toluene-d8	98	88-112		1,4-Bromofluorobenzene	96	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/08/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0722
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 5 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2260	**08-03-0722-5-A**	**03/07/08 11:40**	**Aqueous**	**GC/MS FF**	**03/20/08**	**03/20/08 23:26**	**080320L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	99	74-140		1,2-Dichloroethane-d4	96	74-146	
Toluene-d8	98	88-112		1,4-Bromofluorobenzene	97	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/08/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0722
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 6 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TBGW0507	**08-03-0722-6-A**	**03/07/08 00:00**	**Aqueous**	**GC/MS FF**	**03/19/08**	**03/20/08 04:48**	**080319L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	102	74-140		1,2-Dichloroethane-d4	98	74-146	
Toluene-d8	96	88-112		1,4-Bromofluorobenzene	97	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/08/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0722
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 7 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-24,838**	**N/A**	**Aqueous**	**GC/MS FF**	**03/19/08**	**03/19/08 15:16**	**080319L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	98	74-140		1,2-Dichloroethane-d4	93	74-146	
Toluene-d8	99	88-112		1,4-Bromofluorobenzene	97	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/08/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0722
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 8 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-24,846**	**N/A**	**Aqueous**	**GC/MS FF**	**03/19/08**	**03/20/08 04:19**	**080319L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	114	74-140		1,2-Dichloroethane-d4	110	74-146	
Toluene-d8	99	88-112		1,4-Bromofluorobenzene	96	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/08/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-0722
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis - LEHR / 131261			Page 9 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-24,853**	**N/A**	**Aqueous**	**GC/MS FF**	**03/20/08**	**03/20/08 15:06**	**080320L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	96	74-140		1,2-Dichloroethane-d4	94	74-146	
Toluene-d8	98	88-112		1,4-Bromofluorobenzene	97	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	03/08/08
Work Order No:	08-03-0722
Preparation:	EPA 5030B
Method:	EPA 8260B

Project UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-03-0531-18	**Aqueous**	**GC/MS FF**	**03/19/08**	**03/19/08**	**080319S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	100	99	88-118	1	0-7	
Carbon Tetrachloride	103	101	67-145	2	0-11	
Chlorobenzene	101	99	88-118	2	0-7	
1,2-Dibromoethane	96	90	70-130	7	0-30	
1,2-Dichlorobenzene	97	96	86-116	1	0-8	
1,1-Dichloroethene	95	96	70-130	1	0-25	
Ethylbenzene	102	102	70-130	0	0-30	
Toluene	101	101	87-123	0	0-8	
Trichloroethene	98	96	79-127	2	0-10	
Vinyl Chloride	119	116	69-129	2	0-13	
Methyl-t-Butyl Ether (MTBE)	92	83	71-131	11	0-13	
Tert-Butyl Alcohol (TBA)	95	72	36-168	28	0-45	
Diisopropyl Ether (DIPE)	92	89	81-123	4	0-9	
Ethyl-t-Butyl Ether (ETBE)	89	86	72-126	3	0-12	
Tert-Amyl-Methyl Ether (TAME)	86	84	72-126	2	0-12	
Ethanol	75	66	53-149	12	0-31	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	03/08/08
Work Order No:	08-03-0722
Preparation:	EPA 5030B
Method:	EPA 8260B

Project UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-03-0692-4	**Aqueous**	**GC/MS FF**	**03/19/08**	**03/20/08**	**080319S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	96	102	88-118	6	0-7	
Carbon Tetrachloride	97	105	67-145	7	0-11	
Chlorobenzene	98	102	88-118	4	0-7	
1,2-Dibromoethane	108	96	70-130	12	0-30	
1,2-Dichlorobenzene	98	97	86-116	1	0-8	
1,1-Dichloroethene	89	102	70-130	14	0-25	
Ethylbenzene	96	105	70-130	9	0-30	
Toluene	99	103	87-123	3	0-8	
Trichloroethene	90	98	79-127	8	0-10	
Vinyl Chloride	105	118	69-129	12	0-13	
Methyl-t-Butyl Ether (MTBE)	114	102	71-131	11	0-13	
Tert-Butyl Alcohol (TBA)	104	92	36-168	13	0-45	
Diisopropyl Ether (DIPE)	101	100	81-123	1	0-9	
Ethyl-t-Butyl Ether (ETBE)	100	93	72-126	7	0-12	
Tert-Amyl-Methyl Ether (TAME)	96	88	72-126	9	0-12	
Ethanol	93	75	53-149	22	0-31	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	03/08/08
Work Order No:	08-03-0722
Preparation:	EPA 5030B
Method:	EPA 8260B

Project UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-03-0510-1	**Aqueous**	**GC/MS FF**	**03/20/08**	**03/20/08**	**080320S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	99	99	88-118	1	0-7	
Carbon Tetrachloride	101	103	67-145	2	0-11	
Chlorobenzene	102	102	88-118	0	0-7	
1,2-Dibromoethane	101	100	70-130	1	0-30	
1,2-Dichlorobenzene	98	101	86-116	2	0-8	
1,1-Dichloroethene	95	95	70-130	0	0-25	
Ethylbenzene	104	105	70-130	1	0-30	
Toluene	101	100	87-123	1	0-8	
Trichloroethene	97	96	79-127	1	0-10	
Vinyl Chloride	115	117	69-129	1	0-13	
Methyl-t-Butyl Ether (MTBE)	90	93	71-131	3	0-13	
Tert-Butyl Alcohol (TBA)	101	97	36-168	4	0-45	
Diisopropyl Ether (DIPE)	90	92	81-123	2	0-9	
Ethyl-t-Butyl Ether (ETBE)	86	89	72-126	3	0-12	
Tert-Amyl-Methyl Ether (TAME)	85	88	72-126	3	0-12	
Ethanol	76	76	53-149	0	0-31	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	N/A
Work Order No:	08-03-0722
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-24,838	**Aqueous**	**GC/MS FF**	**03/19/08**	**03/19/08**	**080319L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	102	100	84-120	1	0-8	
Carbon Tetrachloride	106	106	63-147	0	0-10	
Chlorobenzene	102	101	89-119	2	0-7	
1,2-Dibromoethane	104	105	80-120	0	0-20	
1,2-Dichlorobenzene	101	99	89-119	2	0-9	
1,1-Dichloroethene	99	99	77-125	0	0-16	
Ethylbenzene	105	103	80-120	2	0-20	
Toluene	104	102	83-125	2	0-9	
Trichloroethene	99	98	89-119	0	0-8	
Vinyl Chloride	117	120	63-135	2	0-13	
Methyl-t-Butyl Ether (MTBE)	97	100	82-118	3	0-13	
Tert-Butyl Alcohol (TBA)	121	119	46-154	1	0-32	
Diisopropyl Ether (DIPE)	100	101	81-123	1	0-11	
Ethyl-t-Butyl Ether (ETBE)	100	103	74-122	3	0-12	
Tert-Amyl-Methyl Ether (TAME)	99	100	76-124	2	0-10	
Ethanol	96	96	60-138	0	0-32	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	N/A
Work Order No:	08-03-0722
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-24,846	**Aqueous**	**GC/MS FF**	**03/19/08**	**03/20/08**	**080319L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	101	97	84-120	3	0-8	
Carbon Tetrachloride	105	99	63-147	6	0-10	
Chlorobenzene	100	98	89-119	2	0-7	
1,2-Dibromoethane	99	93	80-120	6	0-20	
1,2-Dichlorobenzene	99	96	89-119	3	0-9	
1,1-Dichloroethene	102	95	77-125	7	0-16	
Ethylbenzene	103	100	80-120	3	0-20	
Toluene	102	99	83-125	3	0-9	
Trichloroethene	99	97	89-119	3	0-8	
Vinyl Chloride	125	114	63-135	9	0-13	
Methyl-t-Butyl Ether (MTBE)	93	86	82-118	7	0-13	
Tert-Butyl Alcohol (TBA)	97	83	46-154	15	0-32	
Diisopropyl Ether (DIPE)	96	91	81-123	5	0-11	
Ethyl-t-Butyl Ether (ETBE)	93	90	74-122	4	0-12	
Tert-Amyl-Methyl Ether (TAME)	90	87	76-124	4	0-10	
Ethanol	81	72	60-138	13	0-32	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	N/A
Work Order No:	08-03-0722
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: UC Davis - LEHR / 131261

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-24,853	**Aqueous**	**GC/MS FF**	**03/20/08**	**03/20/08**	**080320L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	104	104	84-120	0	0-8	
Carbon Tetrachloride	108	108	63-147	0	0-10	
Chlorobenzene	106	105	89-119	1	0-7	
1,2-Dibromoethane	106	107	80-120	1	0-20	
1,2-Dichlorobenzene	105	104	89-119	1	0-9	
1,1-Dichloroethene	101	101	77-125	0	0-16	
Ethylbenzene	109	107	80-120	1	0-20	
Toluene	106	106	83-125	0	0-9	
Trichloroethene	102	102	89-119	0	0-8	
Vinyl Chloride	122	121	63-135	0	0-13	
Methyl-t-Butyl Ether (MTBE)	96	99	82-118	3	0-13	
Tert-Butyl Alcohol (TBA)	113	118	46-154	4	0-32	
Diisopropyl Ether (DIPE)	99	102	81-123	3	0-11	
Ethyl-t-Butyl Ether (ETBE)	97	101	74-122	4	0-12	
Tert-Amyl-Methyl Ether (TAME)	97	99	76-124	2	0-10	
Ethanol	90	99	60-138	9	0-32	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-03-0722

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

BROWN AND CALDWELL

CHAIN OF CUSTODY RECORD

COC No. (0720) 1/4

UCD0000279

☑ 10540 White Rock Rd, Ste. 180
Rancho Cordova, CA 95670
916-444-0123 / FAX 916-635-8805

☐ 9665 Chesapeake Dr. / Suite 201
San Diego, CA 92123
858-514-8822 / FAX 858-514-8833

☐ 201 N. Civic Dr. / Suite 115
Walnut Creek, CA 94596
925-937-9010 / FAX 925-937-9026

☐ 400 Exchange / Suite 100
Irvine, CA 92602
714-730-7600 / FAX 714-734-0940

PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: CalScience Environmental Laboratories, Inc. Garder CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
01	~~GWGW2231~~				~~1~~	~~1 L Plastic~~	~~NONE~~	~~W~~	~~Tritium, C-14~~					----	
02	GWGW2231	3/7/08	1330		3	40 mL VOA	HCl pH < 2	W	SW8260B	—	—	STD	B	----	
03	~~GWGW2231~~				~~1~~	~~1 L Plastic~~	~~NONE~~	~~W~~	~~Nitrate (as N), EC~~					----	
04	~~GWGW2231~~				~~1~~	~~250 mL Plastic~~	~~HNO3 pH < 2~~	~~W~~	~~Total Chromium~~					----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

D

COLLECTED & RELEASED BY	DATE 3/7/08	TIME 16:00	COOLER I.D.:			COMMENTS (see note on back):
RECEIVED BY:	DATE 3/7/08	TIME :	RELINQUISHED BY: GSO 509095117	DATE 3/8/08	TIME 08:45	
Wdatu CE	3-8-08	0845				
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

DISTRIBUTION: WHITE-LAB RECEIPT • CANARY-PROJECT FILE • PINK-DATA MANAGEMENT • GOLDENROD-FIELD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

BROWN AND CALDWELL

CHAIN OF CUSTODY RECORD

COC No. (0722) 2/4

☑ 10540 White Rock Rd, Ste. 180
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❑ 9665 Chesapeake Dr. / Suite 201
San Diego, CA 92123
858-514-8822 / FAX 858-514-8833

❑ 201 N. Civic Dr. / Suite 115
Walnut Creek, CA 94596
925-937-9010 / FAX 925-937-9026

❑ 400 Exp[illegible]
Irvine, CA 92602
714-730-7600 / FAX 714-734-0940

UCD0000277

PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: ~~CalScience Environmental Laboratories, Inc. Garder~~ CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
01	~~GWGW2256~~				1	1 L Plastic	NONE	W	Tritium, C-14					----	
(2) 02	GWGW2256	3/7/08	1223	CEF	3	40 mL VOA	HCl pH < 2	W	SW8260B	—	—	STD	SP	----	
03	~~GWGW2256~~				1	~~1 L Plastic~~	NONE	W	~~Nitrate (as N), EC~~					----	
04	~~GWGW2256~~				1	250 mL Plastic	HNO3 pH < 2	W	~~Total Chromium~~					----	
05	~~GWGW2257~~				1	1 L Plastic	NONE	W	Tritium, C-14					----	
(3) 06	GWGW2257	3/7/08	1227	CEF	3	40 mL VOA	HCl pH < 2	W	SW8260B	—	—	STD	SP	----	
07	~~GWGW2257~~				1	~~1 L Plastic~~	NONE	W	~~Nitrate (as N), EC~~					----	
08	~~GWGW2257~~				1	250 mL Plastic	HNO3 pH < 2	W	~~Total Chromium~~					----	
09														----	
10														----	

COLLECTED & RELEASED BY	DATE 3/7/08	TIME 16:00	COOLER I.D.:			COMMENTS (see note on back):
RECEIVED BY: GSO	DATE 3/7/08	TIME 16:00	RELINQUISHED BY: GSO 5092925117	DATE 3/8/08	TIME 08:45	
- WCbatu	3-8-08	0845				
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

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BROWN AND CALDWELL

CHAIN OF CUSTODY RECORD

COC No. (0722) 3/4

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Irvine, CA 92602
714-730-7600 / FAX 714-734-0940

UCD0000280

PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: CalScience Environmental Laboratories, Inc. Garder CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
(4) 01	GWGW2266	3/7/08	1258	CEP	3	40 mL VOA	HCl pH < 2	W	SW8260B	–	–	STD	SP	----	
02														----	
03														----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

COLLECTED & RELEASED BY	DATE 3/7/08	TIME 16:00	COOLER I.D.:			COMMENTS (see note on back):
RECEIVED BY:	DATE 3/7/08	TIME 16:00	RELINQUISHED BY: G50509095117	DATE 3/8/08	TIME 08:45	
Wooten CEL	3-8-08	0845				
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

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BROWN AND CALDWELL

CHAIN OF CUSTODY RECORD

COC No. (0722) 4/4

UCD0000278

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Rancho Cordova, CA 95670
916-444-0123 / FAX 916-635-8805

☐ 9665 Chesapeake Dr. / Suite 201
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Walnut Creek, CA 94596
925-937-9010 / FAX 925-937-9026

☐ 400 Exchange
Irvine, CA 92602
714-730-7600 / FAX 714-734-0940

PROJECT NAME: UC Davis - LEHR

PROJECT NUMBER: 131261

LABORATORY NAME & ADDRESS: CalScience Environmental Laboratories, Inc. Garder CA

LINE NO.	SAMPLE – I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ---- END	PID READING (ppm)
01	~~GWGW2260~~				1	~~1 L Plastic~~	~~NONE~~	W	Tritium, C-14					----	
(5) 02	GWGW2260	3/7/08	1140	CEF	3	40 mL VOA	HCl pH < 2	W	SW8260B	–	–	STD	SP	----	
03	~~GWGW2260~~				1	1 L Plastic	NONE	W	Nitrate (as N), EC					----	
04	~~GWGW2260~~				1	250 mL Plastic	HNO3 pH < 2	W	Total Chromium					----	
(6) 05	TBGW0507	3/7/08	NA	NA	2	40mL VOA	HCl	W	SW8260B	–	–	STD	NA	----	
06														----	
07														----	
08														----	
09														----	
10														----	

COLLECTED & RELEASED BY	DATE 3/7/08	TIME 16:00	COOLER I.D.:			COMMENTS (see note on back):
RECEIVED BY: GSO	DATE / /	TIME :	RELINQUISHED BY: GS0509095117	DATE 3/8/08	TIME 08:45	
W Cobatu CEF	3-8-08	0845				
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 0 3 - 0 7 2 2

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: BROWN + CALDWELL **DATE:** 3-8-08

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature.

_____ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

_____ °C Temperature blank.
3.1 °C IR thermometer.
_____ Ambient temperature.

Initial: WB

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____ Not Present: ✓

Initial: WB

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)	✓		
VOA vial(s) free of headspace.	✓		
Tedlar bag(s) free of condensation			✓

Initial: WB

COMMENTS:

Calscience Environmental Laboratories, Inc.

December 12, 2008

Tim Utterback
Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Subject: **Calscience Work Order No.: 08-12-0410**
Client Reference: UC Davis / 388-1856-2-16

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 12/4/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Virendra R Patel

Calscience Environmental
Laboratories, Inc.
Virendra Patel
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/04/08
5801 Christie Avenue		Work Order No:	08-12-0410
Suite 600		Preparation:	N/A
Emeryville, CA 94608-1939		Method:	RSK-175M

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2369	**08-12-0410-1-B**	**12/03/08 11:30**	**Aqueous**	**GC 14**	**N/A**	**12/05/08 00:00**	**081205L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	4110	1.70	0.00547	1		ug/L

GWGW2380	**08-12-0410-2-H**	**12/03/08 11:10**	**Aqueous**	**GC 14**	**N/A**	**12/05/08 00:00**	**081205L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	16400	17.0	0.0547	10		ug/L

GWGW2381	**08-12-0410-3-H**	**12/03/08 14:55**	**Aqueous**	**GC 14**	**N/A**	**12/05/08 00:00**	**081205L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	21700	17.0	0.0547	10		ug/L

Method Blank	**099-12-659-35**	**N/A**	**Aqueous**	**GC 14**	**N/A**	**12/05/08 00:00**	**081205L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	ND	1.70	0.00547	1		ug/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/04/08
5801 Christie Avenue		Work Order No:	08-12-0410
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6010B

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2369	**08-12-0410-1-E**	**12/03/08 11:30**	**Aqueous**	**ICP 5300**	**12/05/08**	**12/06/08 17:05**	**081205LA4F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	12.4	0.0500	0.0464	1		mg/L

GWGW2380	**08-12-0410-2-E**	**12/03/08 11:10**	**Aqueous**	**ICP 5300**	**12/05/08**	**12/06/08 17:08**	**081205LA4F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	15.2	0.0500	0.0464	1		mg/L

GWGW2381	**08-12-0410-3-E**	**12/03/08 14:55**	**Aqueous**	**ICP 5300**	**12/05/08**	**12/06/08 17:10**	**081205LA4F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	17.1	0.0500	0.0464	1		mg/L

Method Blank	**097-01-003-8,883**	**N/A**	**Aqueous**	**ICP 5300**	**12/05/08**	**12/06/08 13:18**	**081205LA4F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	ND	0.0500	0.0464	1		mg/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/04/08
5801 Christie Avenue		Work Order No:	08-12-0410
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6020
		Units:	mg/L
Project: UC Davis / 388-1856-2-16			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2369	**08-12-0410-1-E**	**12/03/08 11:30**	**Aqueous**	**ICP/MS A**	**12/05/08**	**12/06/08 21:53**	**081205L02F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	0.00492	0.00100	0.000169	1	B	Vanadium	0.0136	0.00100	0.0000157	1	
Chromium	0.139	0.00100	0.0000184	1		Aluminum	0.00509	0.0500	0.00188	1	J

GWGW2380	**08-12-0410-2-E**	**12/03/08 11:10**	**Aqueous**	**ICP/MS A**	**12/05/08**	**12/06/08 21:58**	**081205L02F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	ND	0.00100	0.0000790	1		Molybdenum	0.00301	0.00100	0.000280	1	
Arsenic	0.00239	0.00100	0.000169	1	B	Nickel	0.00660	0.00100	0.0000234	1	
Barium	0.136	0.00100	0.0000401	1	B	Selenium	ND	0.00100	0.000783	1	
Beryllium	ND	0.00500	0.000276	5		Silver	ND	0.00100	0.0000183	1	
Cadmium	0.0000522	0.00100	0.0000151	1	J	Thallium	ND	0.00100	0.0000153	1	
Chromium	0.0382	0.00100	0.0000184	1		Vanadium	0.0116	0.00100	0.0000157	1	
Cobalt	0.00153	0.00100	0.0000171	1		Zinc	0.00507	0.00500	0.000340	1	
Copper	0.00239	0.00100	0.0000181	1		Aluminum	0.00836	0.0500	0.00188	1	J
Lead	0.0000525	0.00100	0.0000130	1	J						

GWGW2381	**08-12-0410-3-E**	**12/03/08 14:55**	**Aqueous**	**ICP/MS A**	**12/05/08**	**12/06/08 22:02**	**081205L02F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	ND	0.00100	0.0000790	1		Molybdenum	0.00166	0.00100	0.000280	1	
Arsenic	0.00213	0.00100	0.000169	1	B	Nickel	0.00374	0.00100	0.0000234	1	
Barium	0.182	0.00100	0.0000401	1	B	Selenium	ND	0.00100	0.000783	1	
Beryllium	ND	0.00500	0.000276	5		Silver	ND	0.00100	0.0000183	1	
Cadmium	0.0000464	0.00100	0.0000151	1	J	Thallium	ND	0.00100	0.0000153	1	
Chromium	0.0796	0.00100	0.0000184	1		Vanadium	0.0107	0.00100	0.0000157	1	
Cobalt	0.000706	0.00100	0.0000171	1	J	Zinc	0.00693	0.00500	0.000340	1	
Copper	0.00281	0.00100	0.0000181	1		Aluminum	0.00510	0.0500	0.00188	1	J
Lead	0.0000697	0.00100	0.0000130	1	J						

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/04/08
5801 Christie Avenue		Work Order No:	08-12-0410
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6020
		Units:	mg/L
Project: UC Davis / 388-1856-2-16			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**096-06-003-1,820**	**N/A**	**Aqueous**	**ICP/MS A**	**12/05/08**	**12/05/08 23:08**	**081205L02F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	ND	0.00100	0.0000790	1		Molybdenum	ND	0.00100	0.000280	1	
Arsenic	0.000358	0.00100	0.000169	1	J	Nickel	ND	0.00100	0.0000234	1	
Barium	0.000156	0.00100	0.0000401	1	J	Selenium	ND	0.00100	0.000783	1	
Beryllium	ND	0.00100	0.0000553	1		Silver	ND	0.00100	0.0000183	1	
Cadmium	ND	0.00100	0.0000151	1		Thallium	ND	0.00100	0.0000153	1	
Chromium	ND	0.00100	0.0000184	1		Vanadium	ND	0.00100	0.0000157	1	
Cobalt	ND	0.00100	0.0000171	1		Zinc	ND	0.00500	0.000340	1	
Copper	ND	0.00100	0.0000181	1		Aluminum	ND	0.0500	0.00188	1	
Lead	ND	0.00100	0.0000130	1							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/04/08
5801 Christie Avenue		Work Order No:	08-12-0410
Suite 600		Preparation:	EPA 7470A Filt.
Emeryville, CA 94608-1939		Method:	EPA 7470A

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2380	**08-12-0410-2-E**	**12/03/08 11:10**	**Aqueous**	**Mercury**	**12/05/08**	**12/05/08 14:22**	**081205L02F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Mercury	ND	0.000200	0.0000177	1		mg/L

GWGW2381	**08-12-0410-3-E**	**12/03/08 14:55**	**Aqueous**	**Mercury**	**12/05/08**	**12/05/08 14:24**	**081205L02F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Mercury	ND	0.000200	0.0000177	1		mg/L

Method Blank	**099-12-457-96**	**N/A**	**Aqueous**	**Mercury**	**12/05/08**	**12/05/08 13:44**	**081205L02F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Mercury	ND	0.000200	0.0000177	1		mg/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/04/08
5801 Christie Avenue		Work Order No:	08-12-0410
Suite 600		Preparation:	EPA 3520C
Emeryville, CA 94608-1939		Method:	EPA 8270C(M) Isotope Dilution
Project: UC Davis / 388-1856-2-16			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2369	**08-12-0410-1-A**	**12/03/08 11:30**	**Aqueous**	**GC/MS AAA**	**12/10/08**	**12/11/08 17:34**	**081210L08D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	3.8	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	99	56-123	

GWGW2380	**08-12-0410-2-J**	**12/03/08 11:10**	**Aqueous**	**GC/MS AAA**	**12/10/08**	**12/11/08 17:58**	**081210L08D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	92	56-123	

GWGW2381	**08-12-0410-3-J**	**12/03/08 14:55**	**Aqueous**	**GC/MS AAA**	**12/10/08**	**12/11/08 18:22**	**081210L08D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	14	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	88	56-123	

Method Blank	**099-09-004-1,155**	**N/A**	**Aqueous**	**GC/MS AAA**	**12/10/08**	**12/11/08 18:46**	**081210L08D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	86	56-123	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/04/08
5801 Christie Avenue		Work Order No:	08-12-0410
Suite 600		Preparation:	EPA 3510C
Emeryville, CA 94608-1939		Method:	EPA 8081A
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2380	**08-12-0410-2-L**	**12/03/08 11:10**	**Aqueous**	**GC 51**	**12/05/08**	**12/09/08 20:09**	**081205L05M**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Alpha-BHC	ND	0.050	0.013	1		4,4'-DDE	ND	0.050	0.012	1	
Gamma-BHC	ND	0.050	0.020	1		Endrin	ND	0.050	0.012	1	
Beta-BHC	ND	0.050	0.0082	1		Endrin Aldehyde	ND	0.050	0.0052	1	
Heptachlor	ND	0.050	0.0074	1		4,4'-DDD	ND	0.050	0.012	1	
Delta-BHC	ND	0.050	0.018	1		Endosulfan II	ND	0.050	0.011	1	
Aldrin	ND	0.050	0.010	1		4,4'-DDT	ND	0.050	0.015	1	
Heptachlor Epoxide	ND	0.050	0.023	1		Endosulfan Sulfate	ND	0.050	0.0079	1	
Endosulfan I	ND	0.050	0.0052	1		Chlordane	ND	0.50	0.085	1	
Dieldrin	ND	0.050	0.012	1		Toxaphene	ND	2.0	0.31	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	93	50-135		2,4,5,6-Tetrachloro-m-Xylene	88	50-135	

GWGW2381	**08-12-0410-3-L**	**12/03/08 14:55**	**Aqueous**	**GC 51**	**12/05/08**	**12/09/08 20:36**	**081205L05M**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Alpha-BHC	ND	0.050	0.013	1		4,4'-DDE	ND	0.050	0.012	1	
Gamma-BHC	ND	0.050	0.020	1		Endrin	ND	0.050	0.012	1	
Beta-BHC	ND	0.050	0.0082	1		Endrin Aldehyde	ND	0.050	0.0052	1	
Heptachlor	ND	0.050	0.0074	1		4,4'-DDD	ND	0.050	0.012	1	
Delta-BHC	ND	0.050	0.018	1		Endosulfan II	ND	0.050	0.011	1	
Aldrin	ND	0.050	0.010	1		4,4'-DDT	ND	0.050	0.015	1	
Heptachlor Epoxide	ND	0.050	0.023	1		Endosulfan Sulfate	ND	0.050	0.0079	1	
Endosulfan I	ND	0.050	0.0052	1		Chlordane	ND	0.50	0.085	1	
Dieldrin	ND	0.050	0.012	1		Toxaphene	ND	2.0	0.31	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	92	50-135		2,4,5,6-Tetrachloro-m-Xylene	74	50-135	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/04/08
5801 Christie Avenue		Work Order No:	08-12-0410
Suite 600		Preparation:	EPA 3510C
Emeryville, CA 94608-1939		Method:	EPA 8081A
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-525-57**	**N/A**	**Aqueous**	**GC 51**	**12/05/08**	**12/09/08 02:59**	**081205L05M**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Alpha-BHC	ND	0.050	0.013	1		4,4'-DDE	ND	0.050	0.012	1	
Gamma-BHC	ND	0.050	0.020	1		Endrin	ND	0.050	0.012	1	
Beta-BHC	ND	0.050	0.0082	1		Endrin Aldehyde	ND	0.050	0.0052	1	
Heptachlor	ND	0.050	0.0074	1		4,4'-DDD	ND	0.050	0.012	1	
Delta-BHC	ND	0.050	0.018	1		Endosulfan II	ND	0.050	0.011	1	
Aldrin	ND	0.050	0.010	1		4,4'-DDT	ND	0.050	0.015	1	
Heptachlor Epoxide	ND	0.050	0.023	1		Endosulfan Sulfate	ND	0.050	0.0079	1	
Endosulfan I	ND	0.050	0.0052	1		Chlordane	ND	0.50	0.085	1	
Dieldrin	ND	0.050	0.012	1		Toxaphene	ND	2.0	0.31	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	l Limits	Qual
Decachlorobiphenyl	83	50-135		2,4,5,6-Tetrachloro-m-Xylene	73	50-135	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/04/08
5801 Christie Avenue		Work Order No:	08-12-0410
Suite 600		Preparation:	EPA 3510C
Emeryville, CA 94608-1939		Method:	EPA 8082
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2380	**08-12-0410-2-L**	**12/03/08 11:10**	**Aqueous**	**GC 16**	**12/05/08**	**12/08/08 12:49**	**081205L06**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Aroclor-1016	ND	0.50	0.077	1		Aroclor-1248	ND	0.50	0.050	1	
Aroclor-1221	ND	0.50	0.050	1		Aroclor-1254	ND	0.50	0.050	1	
Aroclor-1232	ND	0.50	0.050	1		Aroclor-1260	ND	0.50	0.12	1	
Aroclor-1242	ND	0.50	0.050	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
Decachlorobiphenyl	93	50-135		2,4,5,6-Tetrachloro-m-Xylene	74	50-135	

GWGW2381	**08-12-0410-3-L**	**12/03/08 14:55**	**Aqueous**	**GC 16**	**12/05/08**	**12/08/08 13:08**	**081205L06**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Aroclor-1016	ND	0.50	0.077	1		Aroclor-1248	ND	0.50	0.050	1	
Aroclor-1221	ND	0.50	0.050	1		Aroclor-1254	ND	0.50	0.050	1	
Aroclor-1232	ND	0.50	0.050	1		Aroclor-1260	ND	0.50	0.12	1	
Aroclor-1242	ND	0.50	0.050	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
Decachlorobiphenyl	94	50-135		2,4,5,6-Tetrachloro-m-Xylene	72	50-135	

Method Blank	**099-12-527-60**	**N/A**	**Aqueous**	**GC 16**	**12/05/08**	**12/08/08 11:52**	**081205L06**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Aroclor-1016	ND	0.50	0.077	1		Aroclor-1248	ND	0.50	0.050	1	
Aroclor-1221	ND	0.50	0.050	1		Aroclor-1254	ND	0.50	0.050	1	
Aroclor-1232	ND	0.50	0.050	1		Aroclor-1260	ND	0.50	0.12	1	
Aroclor-1242	ND	0.50	0.050	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
Decachlorobiphenyl	92	50-135		2,4,5,6-Tetrachloro-m-Xylene	76	50-135	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/04/08
5801 Christie Avenue		Work Order No:	08-12-0410
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2380	**08-12-0410-2-A**	**12/03/08 11:10**	**Aqueous**	**GC/MS L**	**12/09/08**	**12/09/08 22:43**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	5.0	1.5	1		1,1-Dichloroethene	ND	0.50	0.039	1	
Benzene	ND	0.50	0.50	1		c-1,2-Dichloroethene	ND	0.50	0.029	1	
Bromochloromethane	ND	0.50	0.11	1		t-1,2-Dichloroethene	ND	0.50	0.046	1	
Bromodichloromethane	ND	0.50	0.041	1		1,2-Dichloropropane	ND	0.50	0.036	1	
Bromoform	ND	0.50	0.11	1		c-1,3-Dichloropropene	ND	0.50	0.028	1	
Bromomethane	ND	0.50	0.19	1		t-1,3-Dichloropropene	ND	0.50	0.032	1	
2-Butanone	ND	5.0	1.5	1		Ethylbenzene	ND	0.50	0.079	1	
Carbon Disulfide	ND	0.50	0.13	1		2-Hexanone	ND	5.0	1.5	1	
Carbon Tetrachloride	ND	0.50	0.045	1		Methylene Chloride	ND	0.50	0.13	1	
Chlorobenzene	ND	0.50	0.38	1		4-Methyl-2-Pentanone	ND	5.0	1.3	1	
Chloroethane	ND	0.50	0.067	1		Styrene	ND	0.50	0.31	1	
Chloroform	ND	0.50	0.087	1		1,1,2,2-Tetrachloroethane	ND	0.50	0.098	1	
Chloromethane	ND	0.50	0.069	1		Tetrachloroethene	ND	0.50	0.027	1	
Dibromochloromethane	ND	0.50	0.048	1		Toluene	ND	0.50	0.46	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	0.88	1		1,1,1-Trichloroethane	ND	0.50	0.046	1	
1,2-Dibromoethane	ND	0.50	0.12	1		1,1,2-Trichloroethane	ND	0.50	0.086	1	
1,2-Dichlorobenzene	ND	0.50	0.029	1		Trichloroethene	ND	0.50	0.036	1	
1,3-Dichlorobenzene	ND	0.50	0.028	1		Vinyl Chloride	ND	0.50	0.041	1	
1,4-Dichlorobenzene	ND	0.50	0.025	1		p/m-Xylene	ND	0.50	0.13	1	
1,1-Dichloroethane	ND	0.50	0.026	1		o-Xylene	ND	0.50	0.32	1	
1,2-Dichloroethane	ND	0.50	0.080	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	92	73-157		Dibromofluoromethane	101	82-142	
Toluene-d8	96	82-112		1,4-Bromofluorobenzene	89	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/04/08
5801 Christie Avenue		Work Order No:	08-12-0410
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2381	**08-12-0410-3-B**	**12/03/08 14:55**	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08 13:23**	**081210L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	5.0	1.5	1		1,1-Dichloroethene	ND	0.50	0.039	1	
Benzene	ND	0.50	0.50	1		c-1,2-Dichloroethene	ND	0.50	0.029	1	
Bromochloromethane	ND	0.50	0.11	1		t-1,2-Dichloroethene	ND	0.50	0.046	1	
Bromodichloromethane	ND	0.50	0.041	1		1,2-Dichloropropane	ND	0.50	0.036	1	
Bromoform	ND	0.50	0.11	1		c-1,3-Dichloropropene	ND	0.50	0.028	1	
Bromomethane	ND	0.50	0.19	1		t-1,3-Dichloropropene	ND	0.50	0.032	1	
2-Butanone	ND	5.0	1.5	1		Ethylbenzene	ND	0.50	0.079	1	
Carbon Disulfide	ND	0.50	0.13	1		2-Hexanone	ND	5.0	1.5	1	
Carbon Tetrachloride	ND	0.50	0.045	1		Methylene Chloride	ND	0.50	0.13	1	
Chlorobenzene	ND	0.50	0.38	1		4-Methyl-2-Pentanone	ND	5.0	1.3	1	
Chloroethane	ND	0.50	0.067	1		Styrene	ND	0.50	0.31	1	
Chloroform	ND	0.50	0.087	1		1,1,2,2-Tetrachloroethane	ND	0.50	0.098	1	
Chloromethane	ND	0.50	0.069	1		Tetrachloroethene	ND	0.50	0.027	1	
Dibromochloromethane	ND	0.50	0.048	1		Toluene	ND	0.50	0.46	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	0.88	1		1,1,1-Trichloroethane	ND	0.50	0.046	1	
1,2-Dibromoethane	ND	0.50	0.12	1		1,1,2-Trichloroethane	ND	0.50	0.086	1	
1,2-Dichlorobenzene	ND	0.50	0.029	1		Trichloroethene	ND	0.50	0.036	1	
1,3-Dichlorobenzene	ND	0.50	0.028	1		Vinyl Chloride	ND	0.50	0.041	1	
1,4-Dichlorobenzene	ND	0.50	0.025	1		p/m-Xylene	ND	0.50	0.13	1	
1,1-Dichloroethane	ND	0.50	0.026	1		o-Xylene	ND	0.50	0.32	1	
1,2-Dichloroethane	ND	0.50	0.080	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	85	73-157		Dibromofluoromethane	95	82-142	
Toluene-d8	96	82-112		1,4-Bromofluorobenzene	86	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/04/08
5801 Christie Avenue		Work Order No:	08-12-0410
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TBGW0523	**08-12-0410-4-A**	**12/03/08 07:00**	**Aqueous**	**GC/MS L**	**12/09/08**	**12/09/08 22:16**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	5.0	1.5	1		1,1-Dichloroethene	ND	0.50	0.039	1	
Benzene	ND	0.50	0.50	1		c-1,2-Dichloroethene	ND	0.50	0.029	1	
Bromochloromethane	ND	0.50	0.11	1		t-1,2-Dichloroethene	ND	0.50	0.046	1	
Bromodichloromethane	ND	0.50	0.041	1		1,2-Dichloropropane	ND	0.50	0.036	1	
Bromoform	ND	0.50	0.11	1		c-1,3-Dichloropropene	ND	0.50	0.028	1	
Bromomethane	ND	0.50	0.19	1		t-1,3-Dichloropropene	ND	0.50	0.032	1	
2-Butanone	ND	5.0	1.5	1		Ethylbenzene	ND	0.50	0.079	1	
Carbon Disulfide	ND	0.50	0.13	1		2-Hexanone	ND	5.0	1.5	1	
Carbon Tetrachloride	ND	0.50	0.045	1		Methylene Chloride	ND	0.50	0.13	1	
Chlorobenzene	ND	0.50	0.38	1		4-Methyl-2-Pentanone	ND	5.0	1.3	1	
Chloroethane	ND	0.50	0.067	1		Styrene	ND	0.50	0.31	1	
Chloroform	ND	0.50	0.087	1		1,1,2,2-Tetrachloroethane	ND	0.50	0.098	1	
Chloromethane	ND	0.50	0.069	1		Tetrachloroethene	ND	0.50	0.027	1	
Dibromochloromethane	ND	0.50	0.048	1		Toluene	ND	0.50	0.46	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	0.88	1		1,1,1-Trichloroethane	ND	0.50	0.046	1	
1,2-Dibromoethane	ND	0.50	0.12	1		1,1,2-Trichloroethane	ND	0.50	0.086	1	
1,2-Dichlorobenzene	ND	0.50	0.029	1		Trichloroethene	ND	0.50	0.036	1	
1,3-Dichlorobenzene	ND	0.50	0.028	1		Vinyl Chloride	ND	0.50	0.041	1	
1,4-Dichlorobenzene	ND	0.50	0.025	1		p/m-Xylene	ND	0.50	0.13	1	
1,1-Dichloroethane	ND	0.50	0.026	1		o-Xylene	ND	0.50	0.32	1	
1,2-Dichloroethane	ND	0.50	0.080	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	88	73-157		Dibromofluoromethane	102	82-142	
Toluene-d8	90	82-112		1,4-Bromofluorobenzene	86	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/04/08
5801 Christie Avenue		Work Order No:	08-12-0410
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-025-730**	**N/A**	**Aqueous**	**GC/MS L**	**12/09/08**	**12/09/08 13:40**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	5.0	1.5	1		1,1-Dichloroethene	ND	0.50	0.039	1	
Benzene	ND	0.50	0.50	1		c-1,2-Dichloroethene	ND	0.50	0.029	1	
Bromochloromethane	ND	0.50	0.11	1		t-1,2-Dichloroethene	ND	0.50	0.046	1	
Bromodichloromethane	ND	0.50	0.041	1		1,2-Dichloropropane	ND	0.50	0.036	1	
Bromoform	ND	0.50	0.11	1		c-1,3-Dichloropropene	ND	0.50	0.028	1	
Bromomethane	ND	0.50	0.19	1		t-1,3-Dichloropropene	ND	0.50	0.032	1	
2-Butanone	ND	5.0	1.5	1		Ethylbenzene	ND	0.50	0.079	1	
Carbon Disulfide	ND	0.50	0.13	1		2-Hexanone	ND	5.0	1.5	1	
Carbon Tetrachloride	ND	0.50	0.045	1		Methylene Chloride	ND	0.50	0.13	1	
Chlorobenzene	ND	0.50	0.38	1		4-Methyl-2-Pentanone	ND	5.0	1.3	1	
Chloroethane	ND	0.50	0.067	1		Styrene	ND	0.50	0.31	1	
Chloroform	ND	0.50	0.087	1		1,1,2,2-Tetrachloroethane	ND	0.50	0.098	1	
Chloromethane	ND	0.50	0.069	1		Tetrachloroethene	ND	0.50	0.027	1	
Dibromochloromethane	ND	0.50	0.048	1		Toluene	ND	0.50	0.46	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	0.88	1		1,1,1-Trichloroethane	ND	0.50	0.046	1	
1,2-Dibromoethane	ND	0.50	0.12	1		1,1,2-Trichloroethane	ND	0.50	0.086	1	
1,2-Dichlorobenzene	ND	0.50	0.029	1		Trichloroethene	ND	0.50	0.036	1	
1,3-Dichlorobenzene	ND	0.50	0.028	1		Vinyl Chloride	ND	0.50	0.041	1	
1,4-Dichlorobenzene	ND	0.50	0.025	1		p/m-Xylene	ND	0.50	0.13	1	
1,1-Dichloroethane	ND	0.50	0.026	1		o-Xylene	ND	0.50	0.32	1	
1,2-Dichloroethane	ND	0.50	0.080	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	91	73-157		Dibromofluoromethane	99	82-142	
Toluene-d8	94	82-112		1,4-Bromofluorobenzene	89	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/04/08
5801 Christie Avenue		Work Order No:	08-12-0410
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-025-731**	**N/A**	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08 12:56**	**081210L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	5.0	1.5	1		1,1-Dichloroethene	ND	0.50	0.039	1	
Benzene	ND	0.50	0.50	1		c-1,2-Dichloroethene	ND	0.50	0.029	1	
Bromochloromethane	ND	0.50	0.11	1		t-1,2-Dichloroethene	ND	0.50	0.046	1	
Bromodichloromethane	ND	0.50	0.041	1		1,2-Dichloropropane	ND	0.50	0.036	1	
Bromoform	ND	0.50	0.11	1		c-1,3-Dichloropropene	ND	0.50	0.028	1	
Bromomethane	ND	0.50	0.19	1		t-1,3-Dichloropropene	ND	0.50	0.032	1	
2-Butanone	ND	5.0	1.5	1		Ethylbenzene	ND	0.50	0.079	1	
Carbon Disulfide	ND	0.50	0.13	1		2-Hexanone	ND	5.0	1.5	1	
Carbon Tetrachloride	ND	0.50	0.045	1		Methylene Chloride	ND	0.50	0.13	1	
Chlorobenzene	ND	0.50	0.38	1		4-Methyl-2-Pentanone	ND	5.0	1.3	1	
Chloroethane	ND	0.50	0.067	1		Styrene	ND	0.50	0.31	1	
Chloroform	ND	0.50	0.087	1		1,1,2,2-Tetrachloroethane	ND	0.50	0.098	1	
Chloromethane	ND	0.50	0.069	1		Tetrachloroethene	ND	0.50	0.027	1	
Dibromochloromethane	ND	0.50	0.048	1		Toluene	ND	0.50	0.46	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	0.88	1		1,1,1-Trichloroethane	ND	0.50	0.046	1	
1,2-Dibromoethane	ND	0.50	0.12	1		1,1,2-Trichloroethane	ND	0.50	0.086	1	
1,2-Dichlorobenzene	ND	0.50	0.029	1		Trichloroethene	ND	0.50	0.036	1	
1,3-Dichlorobenzene	ND	0.50	0.028	1		Vinyl Chloride	ND	0.50	0.041	1	
1,4-Dichlorobenzene	ND	0.50	0.025	1		p/m-Xylene	ND	0.50	0.13	1	
1,1-Dichloroethane	ND	0.50	0.026	1		o-Xylene	ND	0.50	0.32	1	
1,2-Dichloroethane	ND	0.50	0.080	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	93	73-157		Dibromofluoromethane	98	82-142	
Toluene-d8	86	82-112		1,4-Bromofluorobenzene	87	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Date Received: 12/04/08
Work Order No: 08-12-0410

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date Collected	Matrix
GWGW2380	**08-12-0410-2**	**12/03/08**	**Aqueous**

Comment(s): (24) Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrate (as N)	0.74	0.10	0.028	1		mg/L	N/A	12/04/08	EPA 300.0
Bicarbonate (as CaCO3)	646	5.0	0.85	1		mg/L	N/A	12/10/08	SM 2320B
Carbonate (as CaCO3) (24)	ND	1.0	0.85	1		mg/L	N/A	12/10/08	SM 2320B

GWGW2381	**08-12-0410-3**	**12/03/08**	**Aqueous**

Comment(s): (24) Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrate (as N)	4.5	0.10	0.028	1		mg/L	N/A	12/04/08	EPA 300.0
Bicarbonate (as CaCO3)	582	5.0	0.85	1		mg/L	N/A	12/10/08	SM 2320B
Carbonate (as CaCO3) (24)	ND	1.0	0.85	1		mg/L	N/A	12/10/08	SM 2320B

Method Blank	**N/A**	**Aqueous**

Comment(s): (24) Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrate (as N) (24)	ND	0.10	0.028	1		mg/L	N/A	12/04/08	EPA 300.0
Bicarbonate (as CaCO3)	ND	1.0	0.85	1		mg/L	N/A	12/10/08	SM 2320B
Carbonate (as CaCO3)	ND	1.0	0.85	1		mg/L	N/A	12/10/08	SM 2320B

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Weiss Associates		Date Received:	12/04/08
5801 Christie Avenue		Work Order No:	08-12-0410
Suite 600		Preparation:	EPA 3010A Total
Emeryville, CA 94608-1939		Method:	EPA 6010B

Project UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-12-0549-2	**Aqueous**	**ICP 5300**	**12/05/08**	**12/06/08**	**081205SA4**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Silicon	4X	4X	24-180	4X	0-15	Q

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Weiss Associates		Date Received:	12/04/08
5801 Christie Avenue		Work Order No:	08-12-0410
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6020

Project UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
GWGW2380	**Aqueous**	**ICP/MS A**	**12/05/08**	**12/06/08**	**081205S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	105	104	85-133	2	0-11	
Arsenic	101	98	73-127	3	0-11	
Barium	107	102	74-128	2	0-10	
Beryllium	105	112	56-122	6	0-11	
Cadmium	103	100	84-114	3	0-8	
Chromium	104	101	73-133	2	0-11	
Cobalt	105	101	79-121	3	0-10	
Copper	101	97	72-108	3	0-10	
Lead	100	95	79-121	5	0-10	
Molybdenum	108	105	83-137	3	0-10	
Nickel	101	96	68-122	5	0-10	
Selenium	92	89	59-125	4	0-12	
Silver	106	104	68-128	1	0-14	
Thallium	98	94	73-121	4	0-11	
Vanadium	109	106	77-137	3	0-15	
Zinc	98	94	43-145	3	0-39	
Aluminum	116	116	47-161	1	0-24	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - PDS / PDSD

Weiss Associates		Date Received	12/04/08
5801 Christie Avenue		Work Order No:	08-12-0410
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6020

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
GWGW2380	**Aqueous**	**ICP/MS A**	**12/05/08**	**12/06/08**	**081205S02**

Parameter	PDS %REC	PDSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	99	99	75-125	0	0-11	
Arsenic	93	92	75-125	0	0-11	
Barium	96	97	75-125	1	0-10	
Beryllium	96	94	75-125	1	0-11	
Cadmium	98	96	75-125	2	0-8	
Chromium	96	96	75-125	1	0-11	
Cobalt	98	96	75-125	2	0-10	
Copper	93	93	75-125	0	0-10	
Lead	93	92	75-125	1	0-10	
Molybdenum	99	98	75-125	0	0-10	
Nickel	93	93	75-125	0	0-10	
Selenium	86	85	75-125	1	0-12	
Silver	94	94	75-125	0	0-14	
Thallium	91	91	75-125	0	0-11	
Vanadium	102	101	75-125	0	0-15	
Zinc	93	91	75-125	1	0-39	
Aluminum	112	116	75-125	3	0-24	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Weiss Associates		Date Received:	12/04/08
5801 Christie Avenue		Work Order No:	08-12-0410
Suite 600		Preparation:	EPA 7470A Total
Emeryville, CA 94608-1939		Method:	EPA 7470A

Project UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-12-0373-3	**Aqueous**	**Mercury**	**12/05/08**	**12/05/08**	**081205S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	88	87	66-126	2	0-7	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Weiss Associates		Date Received:	12/04/08
5801 Christie Avenue		Work Order No:	08-12-0410
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B

Project UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-12-0253-2	**Aqueous**	**GC/MS L**	**12/09/08**	**12/09/08**	**081209S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	107	104	86-122	2	0-8	
Carbon Tetrachloride	106	106	78-138	1	0-9	
Chlorobenzene	113	113	90-120	0	0-9	
1,2-Dibromoethane	123	116	70-130	6	0-30	
1,2-Dichlorobenzene	112	105	89-119	6	0-10	
1,1-Dichloroethene	107	107	52-142	0	0-23	
Ethylbenzene	111	114	70-130	2	0-30	
Toluene	109	106	85-127	3	0-12	
Trichloroethene	106	105	78-126	1	0-10	
Vinyl Chloride	107	114	56-140	6	0-21	
Methyl-t-Butyl Ether (MTBE)	113	102	64-136	10	0-28	
Tert-Butyl Alcohol (TBA)	90	108	27-183	19	0-60	
Diisopropyl Ether (DIPE)	109	99	78-126	10	0-16	
Ethyl-t-Butyl Ether (ETBE)	113	99	67-133	13	0-21	
Tert-Amyl-Methyl Ether (TAME)	117	105	63-141	11	0-21	
Ethanol	86	104	11-167	19	0-64	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Weiss Associates		Date Received:	12/04/08
5801 Christie Avenue		Work Order No:	08-12-0410
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B

Project UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
GWGW2381	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08**	**081210S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	112	108	86-122	3	0-8	
Carbon Tetrachloride	106	110	78-138	4	0-9	
Chlorobenzene	113	112	90-120	0	0-9	
1,2-Dibromoethane	117	112	70-130	4	0-30	
1,2-Dichlorobenzene	109	109	89-119	1	0-10	
1,1-Dichloroethene	109	114	52-142	5	0-23	
Ethylbenzene	115	115	70-130	0	0-30	
Toluene	118	112	85-127	5	0-12	
Trichloroethene	114	112	78-126	2	0-10	
Vinyl Chloride	111	124	56-140	11	0-21	
Methyl-t-Butyl Ether (MTBE)	107	95	64-136	12	0-28	
Tert-Butyl Alcohol (TBA)	101	124	27-183	21	0-60	
Diisopropyl Ether (DIPE)	102	101	78-126	0	0-16	
Ethyl-t-Butyl Ether (ETBE)	105	103	67-133	2	0-21	
Tert-Amyl-Methyl Ether (TAME)	111	100	63-141	10	0-21	
Ethanol	98	112	11-167	13	0-64	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Date Received: N/A
Work Order No: 08-12-0410

Project: UC Davis / 388-1856-2-16

Matrix: Aqueous

Parameter	Method	Quality Control Sample ID	Date Analyzed	Date Extracted	MS% REC	MSD % REC	%REC CL	RPD	RPD CL	Qualifiers
Nitrate (as N)	EPA 300.0	08-12-0376-6	12/04/08	N/A	96	99	58-142	3	0-6	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Date Received: N/A
Work Order No: 08-12-0410

Project: UC Davis / 388-1856-2-16

Matrix: Aqueous

Parameter	Method	QC Sample ID	Date Analyzed	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Alkalinity, Total (as CaCO3)	SM 2320B	08-12-0376-6	12/10/08	182	182	0	0-25	
Bicarbonate (as CaCO3)	SM 2320B	08-12-0376-6	12/10/08	182	182	0	0-25	
Carbonate (as CaCO3)	SM 2320B	08-12-0376-6	12/10/08	ND	ND	NA	0-25	
Hydroxide (as CaCO3)	SM 2320B	08-12-0376-6	12/10/08	ND	ND	NA	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0410
Suite 600		Preparation:	N/A
Emeryville, CA 94608-1939		Method:	RSK-175M

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-659-35	**Aqueous**	**GC 14**	**N/A**	**12/05/08**	**081205L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Carbon Dioxide	97	97	80-120	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0410
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6010B

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
097-01-003-8,883	**Aqueous**	**ICP 5300**	**12/06/08**	**081205-la-4**	**081205LA4F**

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Silicon	0.500	0.581	116	80-120	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0410
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6020

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
096-06-003-1,820	**Aqueous**	**ICP/MS A**	**12/05/08**	**12/06/08**	**081205L02F**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Antimony	91	91	80-120	73-127	0	0-20	
Arsenic	97	98	80-120	73-127	1	0-20	
Barium	98	98	80-120	73-127	0	0-20	
Beryllium	103	100	80-120	73-127	2	0-20	
Cadmium	102	102	80-120	73-127	0	0-20	
Chromium	98	99	80-120	73-127	0	0-20	
Cobalt	101	100	80-120	73-127	2	0-20	
Copper	105	103	80-120	73-127	2	0-20	
Lead	100	99	80-120	73-127	1	0-20	
Molybdenum	98	96	80-120	73-127	2	0-20	
Nickel	102	100	80-120	73-127	2	0-20	
Selenium	99	98	80-120	73-127	0	0-20	
Silver	105	104	80-120	73-127	1	0-20	
Thallium	98	97	80-120	73-127	1	0-20	
Vanadium	98	96	80-120	73-127	2	0-20	
Zinc	98	101	80-120	73-127	4	0-20	
Aluminum	104	106	80-120	73-127	2	0-20	

Total number of LCS compounds : 17
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0410
Suite 600		Preparation:	EPA 7470A Filt.
Emeryville, CA 94608-1939		Method:	EPA 7470A

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-457-96	**Aqueous**	**Mercury**	**12/05/08**	**12/05/08**	**081205L02F**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	91	91	90-122	0	0-14	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0410
Suite 600		Preparation:	EPA 3520C
Emeryville, CA 94608-1939		Method:	EPA 8270C(M) Isotope Dilution

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-09-004-1,155	**Aqueous**	**GC/MS AAA**	**12/10/08**	**12/11/08**	**081210L08D**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
1,4-Dioxane	113	118	50-130	4	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0410
Suite 600		Preparation:	EPA 3510C
Emeryville, CA 94608-1939		Method:	EPA 8081A

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-525-57	**Aqueous**	**GC 51**	**12/05/08**	**12/08/08**	**081205L05M**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gamma-BHC	80	73	50-135	8	0-25	
Heptachlor	74	69	50-135	7	0-25	
Endosulfan I	76	73	50-135	3	0-25	
Dieldrin	73	69	50-135	5	0-25	
Endrin	84	79	50-135	5	0-25	
4,4'-DDT	68	66	50-135	3	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0410
Suite 600		Preparation:	EPA 3510C
Emeryville, CA 94608-1939		Method:	EPA 8082

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-527-60	**Aqueous**	**GC 16**	**12/05/08**	**12/08/08**	**081205L06**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Aroclor-1260	96	96	50-135	1	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0410
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-025-730	**Aqueous**	**GC/MS L**	**12/09/08**	**12/09/08**	**081209L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	102	110	87-117	82-122	7	0-7	
Carbon Tetrachloride	105	104	78-132	69-141	0	0-8	
Chlorobenzene	112	110	88-118	83-123	2	0-8	
1,2-Dibromoethane	120	117	80-120	73-127	2	0-20	
1,2-Dichlorobenzene	112	114	88-118	83-123	3	0-8	
1,1-Dichloroethene	104	106	71-131	61-141	2	0-14	
Ethylbenzene	113	111	80-120	73-127	1	0-20	
Toluene	105	110	85-127	78-134	4	0-7	
Trichloroethene	106	110	85-121	79-127	3	0-11	
Vinyl Chloride	106	111	64-136	52-148	4	0-10	
Methyl-t-Butyl Ether (MTBE)	112	110	67-133	56-144	2	0-16	
Tert-Butyl Alcohol (TBA)	96	92	34-154	14-174	4	0-19	
Diisopropyl Ether (DIPE)	100	100	80-122	73-129	0	0-8	
Ethyl-t-Butyl Ether (ETBE)	108	112	73-127	64-136	3	0-11	
Tert-Amyl-Methyl Ether (TAME)	112	115	69-135	58-146	3	0-12	
Ethanol	93	85	34-124	19-139	9	0-44	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0410
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-025-731	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08**	**081210L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	108	107	87-117	82-122	1	0-7	
Carbon Tetrachloride	108	106	78-132	69-141	2	0-8	
Chlorobenzene	110	109	88-118	83-123	2	0-8	
1,2-Dibromoethane	117	106	80-120	73-127	10	0-20	
1,2-Dichlorobenzene	112	110	88-118	83-123	2	0-8	
1,1-Dichloroethene	110	107	71-131	61-141	3	0-14	
Ethylbenzene	110	110	80-120	73-127	0	0-20	
Toluene	114	112	85-127	78-134	2	0-7	
Trichloroethene	113	111	85-121	79-127	2	0-11	
Vinyl Chloride	115	118	64-136	52-148	2	0-10	
Methyl-t-Butyl Ether (MTBE)	106	101	67-133	56-144	5	0-16	
Tert-Butyl Alcohol (TBA)	109	95	34-154	14-174	14	0-19	
Diisopropyl Ether (DIPE)	109	105	80-122	73-129	4	0-8	
Ethyl-t-Butyl Ether (ETBE)	109	107	73-127	64-136	2	0-11	
Tert-Amyl-Methyl Ether (TAME)	110	108	69-135	58-146	3	0-12	
Ethanol	97	88	34-124	19-139	10	0-44	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Date Received: N/A
Work Order No: 08-12-0410

Project: UC Davis / 388-1856-2-16

Matrix: Aqueous

Parameter	Method	Quality Control Sample ID	Date Extracted	Date Analyzed	LCS % REC	LCSD % REC	%REC CL	RPD	RPD CL	Qual
Nitrate (as N)	EPA 300.0	099-05-118-4,915	N/A	12/04/08	99	100	87-111	0	0-12	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-12-0410

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Revised COC received on 12/08/08 at 15:24 - VP

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

0410

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AquaTerra Associates Incorporated, DBA

Calscience Environmental Lab
5063 Commercial Circle, Suite H
Concord, CA 94520
phone: (925) 689-9022

Project ID: 388-1856-2-16
Protocol No.: ROD

Client Contact		Project Manager: Bob Devany	Sampled by: KHA	Date: 12/3/08	COC Number: UCD
Weiss Associates		Tel: 510-450-6144	Lab Contact: Micah Smith	Carrier:	Page 3 of 3
5801 Christie Avenue, Suite 600		Analysis Turnaround Time			Job No.
Emeryville, CA 94608		Calendar (C) or Work Days (W) — 5W			
(510) 450-6000	Phone	TAT if different from Below 10 days			SDG No.
(510) 547-5043	FAX	☐ 2 weeks			
		☐ 1 week			
Job Name: UC Davis		☐ 2 days			
Address: One Shields Ave, Davis		☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	Carbonate/Bicarbonate (SM2320B)	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
2 GWGW2381	12/3	1455	L	W	1									X									
3 GWGW2381	12/3	1455	|	|	1							X											Al, Si + Title 22
GWGW2381	12/3	1455	|	|	1																X	
4 GWGW2381	12/3	1455	|	|	1										X							
4/5 ~~Travel Blank~~ TRU 12/8/08	12/3	~~[illegible]~~	0700 AGP		1						X												~~HOLD~~ TRU 12/8/08
TBGW0523																							
					Field Filtered	X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: Level II Reporting with Initial Calibration Curves and Continuing Calibration **Note: Nitrate 48 hour hold time!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
J. Petti AGP	WEISS	12/3/08 1600		CEL	12-3-08 1600
Relinquished by: to GSO	Company:	Date/Time: 12-3-08 1730	Received by:	Company: CEL	Date/Time: 12/4/08 1030
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

0410

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AquaTierra Associates Incorporated, DBA

Calscience Environmental Lab
5063 Commercial Circle, Suite H
Concord, CA 94520
phone: (925) 689-9022

Project ID: 388-1856-2-16
Protocol No.: ROD

Client Contact	
Weiss Associates	
5801 Christie Avenue, Suite 600	
Emeryville, CA 94608	
(510) 450-6000	Phone
(510) 547-5043	FAX
Job Name: UC Davis	
Address: One Shields Ave, Davis	

Project Manager: Bob Devany
Tel: 510-450-6144

Analysis Turnaround Time
Calendar (C) or Work Days (W) --- 5W
TAT if different from Below 10 days
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sampled by: MD/KHA **Date:** 12/3/08
Lab Contact: Micah Smith **Carrier:**
COC Number: UCD
Page 1 of 3
Job No.
SDG No.

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	Carbonate/Bicarbonate (SM2320B)	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
1	GWGW 2369	12/3/08	1130	L	W	1	X		X															
	GWGW 2369	12/3/08	1130	L		1																	X	
	GWGW 2369	12/3/08	1130	L		2		X																
	GWGW 2369	12/3/08	1130	L		1																X		
2	GWGW 2380	12/3/08	1110	L		1																X		
	GWGW 2380	12/3/08	1110	L		2		X																
	GWGW 2380	12/3/08	1110	L		1						X												
	GWGW 2380	12/3/08	1110	L		1				X														
	GWGW 2380	12/3/08	1110	L		3					X													
						Field Filtered	X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: Level II Reporting with Initial Calibration Curves and Continuing Calibration **Note: Nitrate 48 hour hold time!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Patti ALP	WEISS	12/3/08 1600		CEL	12-3-08 1600
to GSO		12-3-08 1730		CEL	12/4/08 1030
5108 48365					

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

0410

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AguaTierra Associates Incorporated, DBA

Calscience Environmental Lab
5063 Commercial Circle, Suite H
Concord, CA 94520
phone: (925) 689-9022

Project ID: 388-1856-2-16
Protocol No.: ROD

Client Contact		Project Manager: Bob Devany	Sampled by: KHA	Date: 12/3/08	COC Number: UCD
Weiss Associates		Tel: 510-450-6144	Lab Contact: Micah Smith	Carrier:	Page 2 of 2
5801 Christie Avenue, Suite 600		Analysis Turnaround Time			Job No.
Emeryville, CA 94608		Calendar (C) or Work Days (W) --- 5W			
(510) 450-6000	Phone	TAT if different from Below 10 days			SDG No.
(510) 547-5043	FAX	☐ 2 weeks			
		☐ 1 week			
Job Name: UC Davis		☐ 2 days			
Address: One Shields Ave, Davis		☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	Carbonate/Bicarbonate (SM2320B)	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
	GWGW 2380	12/3/08	1110	L	W	1							X											Al, Si + Title 22
2	GWGW 2380	12/3/08	1110	L		1																	X	
	GWGW 2380	12/3/08	1110	L		1										X								
	GWGW 2380	12/3/08	1110	L		1									X									
	GWGW 2381	12/3/08	1455	L		1																X		
	GWGW 2381	12/3/08	1455	L		1				X														
3	GWGW 2381	12/3/08	1455	L		1						X												
	GWGW 2381	12/3/08	1455	L		3					X													
	GWGW 2381	12/3/08	1455	L		2		X																
						Field Filtered	X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **Level II Reporting with Initial Calibration Curves and Continuing Calibration** **Note: Nitrate 48 hour hold time!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	WEISS	12/3/08 1600	[signature]	CEL	12-3-08
[signature] TO GSD		12-3-08 1730	[signature]	CEL	12/4/08 1030

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

0410

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phone: (925) 689-9022

Project ID: 388-1856-2-16
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Client Contact	Project Manager: Bob Devany	Sampled by: KHA	Date: 12/3/08	COC Number: UCD
Weiss Associates	Tel: 510-450-6144	Lab Contact: Micah Smith	Carrier:	Page 3 of 3
5801 Christie Avenue, Suite 600	Analysis Turnaround Time			Job No.
Emeryville, CA 94608	Calendar (C) or Work Days (W) --- 5W			
(510) 450-6000 Phone	TAT if different from Below 10 days			SDG No.
(510) 547-5043 FAX	☐ 2 weeks			
	☐ 1 week			
Job Name: UC Davis	☐ 2 days			
Address: One Shields Ave, Davis	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	Carbonate/Bicarbonate (SM2320B)	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
3 GWGW2381	12/3	1455	L	W	1									X									
3 GWGW2381	12/3	1455	|	|	1							X											Al, Si + Title 22
3 GWGW2381	12/3	1455	|	|	1																X	
3 GWGW2381	12/3	1455	|	|	1									X								
4 Travel Blank	12/3	~~1455~~	0700 MAP	|	1						X												HOLD
					Field Filtered	X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: Level II Reporting with Initial Calibration Curves and Continuing Calibration **Note: Nitrate 48 hour hold time!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
B. Petti MAP	WEISS	12/3/08 1600		CEL	12-3-08 1600
To GSO		12-3-08 1730		CEL	12/4/08 1030

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 0 8 - 1 2 - 0 4 1 0

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Weiss Asso.

DATE: 12/04/08

TEMPERATURE: (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 2.6 °C - 0.2 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by:_____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only **Initial:** [illegible]

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Initial:** [illegible]

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** W.SC

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	☑	☐	☐
COC document(s) received complete.....	☑	☐	☐
Sampler's name indicated on COC.....	☑	☐	☐
Sample container label(s) consistent with COC.....	☑	☐	☐
Sample container(s) intact and good condition.....	☑	☐	☐
Correct containers and volume for analyses requested.....	☑	☐	☐
Analyses received within holding time.....	☑	☐	☐
Proper preservation noted on sample label(s).....	☑	☐	☐
Volatile analysis container(s) free of headspace.....	☑	☐	☐
Tedlar bag(s) free of condensation.....	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☑VOAh ☐VOAna$_2$ ☑125AGB ☐125AGBh ☐125AGBpo$_4$ ☐1AGB ☑1AGBna$_2$ ☐1AGBs ☐500AGB ☐500AGBs ☐250CGB ☐250CGBs ☐1PB ☐500PB ☐500PBna ☐250PB ☑250PBn ☑125PB ☐125PBznna ☐100PBsterile ☐100PBna$_2$ ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® ☐_____

Checked/Labeled by: W.S.C

Reviewed by: DL

Scanned by: W.S.C

Container: C:Clear A:Amber P:Poly/Plastic G:Glass J:Jar B:Bottle

Preservative: h:HCL n:HNO_3 na$_2$:$Na_2S_2O_3$ na:NaOH po$_4$:H_3PO_4 s:H_2SO_4 znna:$ZnAc_2$+NaOH

Work Order#: 08-12-0410

Client: WEISS Associates

RSK-175M

Calibration

☐ EPA METHOD 25 ☐ SCAQMD METHOD 25.1
☐ SCAQMD METHOD 25.1M (Low VOCs) ☐ SCAQMD METHOD 25.1M (Non-Condensable Fraction

QUALITY CONTROL DATA SHEET

Work Order Number: 08-12-0410.
Instrument ID: GC14
Batch Number (LCS/MS/SA): 081205W1

Analyst: _____ Date ___/___/___
QC Review: _____ Date ___/___/___
Date Analyzed: 12/05/08

LCS/LCS Duplicate

Thermal Conductivity Detector (TCD) Analysis ☐ % by Volume ☐ ppm(v/v) ☐ other _____

Analyte	Conc Added	LCS REC	LCS %REC	LCSD REC	LCSD %REC	Control Limit(%REC)	RPD	Control Limit(RPD)
Oxygen	20.0					80-120		0-20
Nitrogen	75.1					80-120		0-20
Carbon Dioxide	4.92					80-120		0-20

Flame Ionization Detector (FID) Analysis ☐ ppm(v/v) ☐ other _____

Methane	99.9	104	104	104	104	80-120	0	0-20
Carbon Monoxide	100	108	108	109	109	80-120	1	0-20
TGNMO (as Methane) (Total Gaseous Non-Methane Organic compounds)	385	407	106	411	107	80-120	1	0-20

Daily Midpoint Calibration Check

Thermal Conductivity Detector (TCD) Analysis ☐ % by Volume ☐ ppm(v/v) ☐ other _____

Analyte	Conc Added	Conc Recovered	% D	Control Limit
Oxygen	3.50			0 - 15
Nitrogen	10.03			0 - 15
Methane	10.03			0 - 15
Carbon Monoxide	9.96			0 - 15
Carbon Dioxide	10.0			0 - 15

Flame Ionization Detector (FID) Analysis ☐ ppm(v/v) ☐ other _____

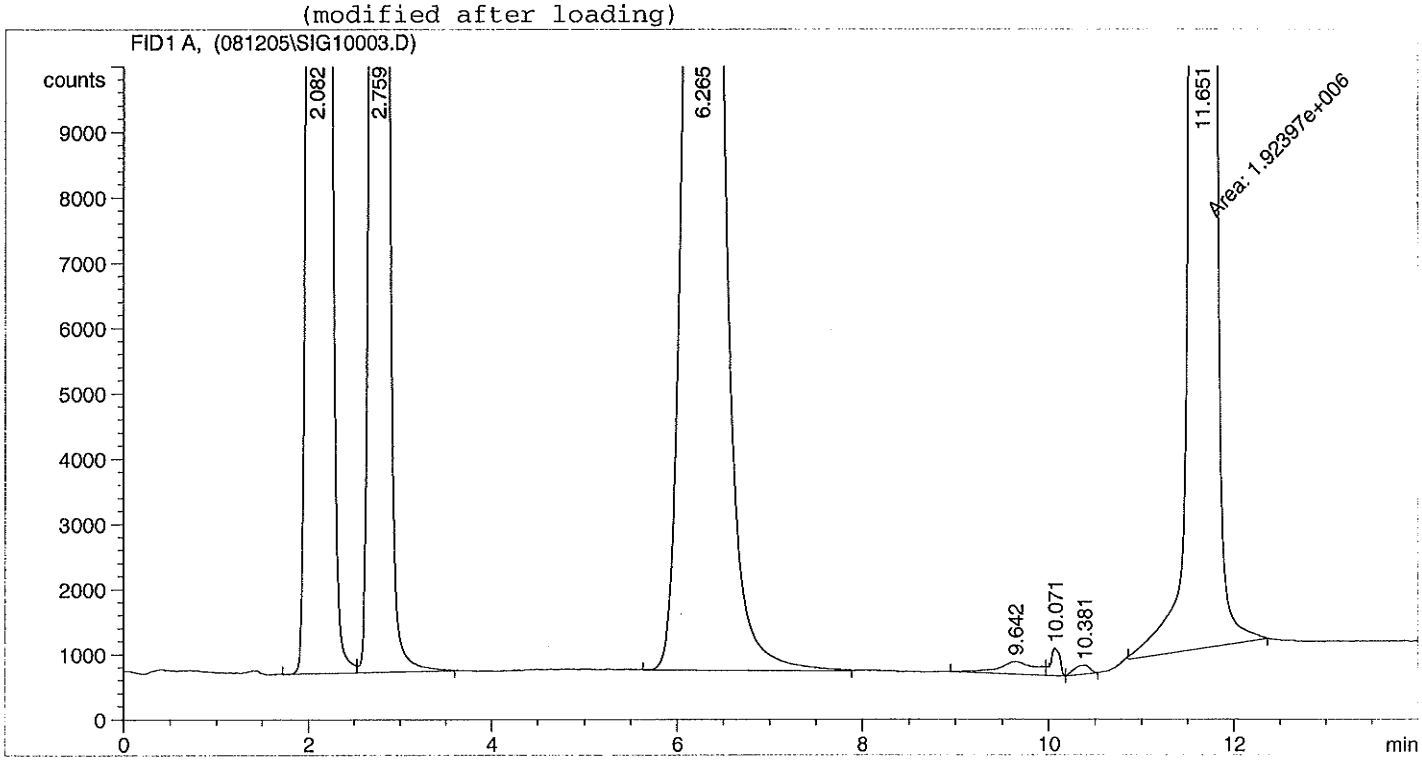
Analyte	Conc Added	Conc Recovered	% D	Control Limit
Methane	308	321	4	0 - 15
Carbon Monoxide	304	318	5	0 - 15
Carbon Dioxide	302	313	4	0 - 15
TGNMO (as Methane) (Total Gaseous Non-Methane Organic compounds)	918	933	2	0 - 15

Analyst's Comments: _____

Data File C:\HPCHEM\2\DATA\081205\SIG10003.D Sample Name: FID CCV 1mL

==========

Injection Date : 12/5/2008 9:17:27 AM
Sample Name : FID CCV 1mL Location : Vial 1
Acq. Operator : GC 14
Inj Volume : Manually
Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 10/3/2008 1:49:33 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M\071908.M
Last changed : 12/5/2008 9:35:16 AM by GC 14
(modified after loading)



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External Standard Report

==========

MANUAL INTEGRATION
BEFORE / AFTER
Date: 12-05-08
Chemist: u GL:
Reason: BASELINE CORR., PEAK ID CORR.
Other :
This stamp appears in red ink on original copy.

Sorted By : Signal
Calib. Data Modified : 12/5/2008 9:35:14 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.082	BV	6.47389e5	4.91062e-4	317.90838		Carbon Monoxide
2.759	VB	6.48515e5	4.94479e-4	320.67683		Methane
6.265	PV	6.54900e5	4.77635e-4	312.80319		Carbon Dioxide
11.651	MM	1.92397e6	4.81128e-4	925.67748		TGNMO

Totals : 1877.06589

Results obtained with standard integrator!

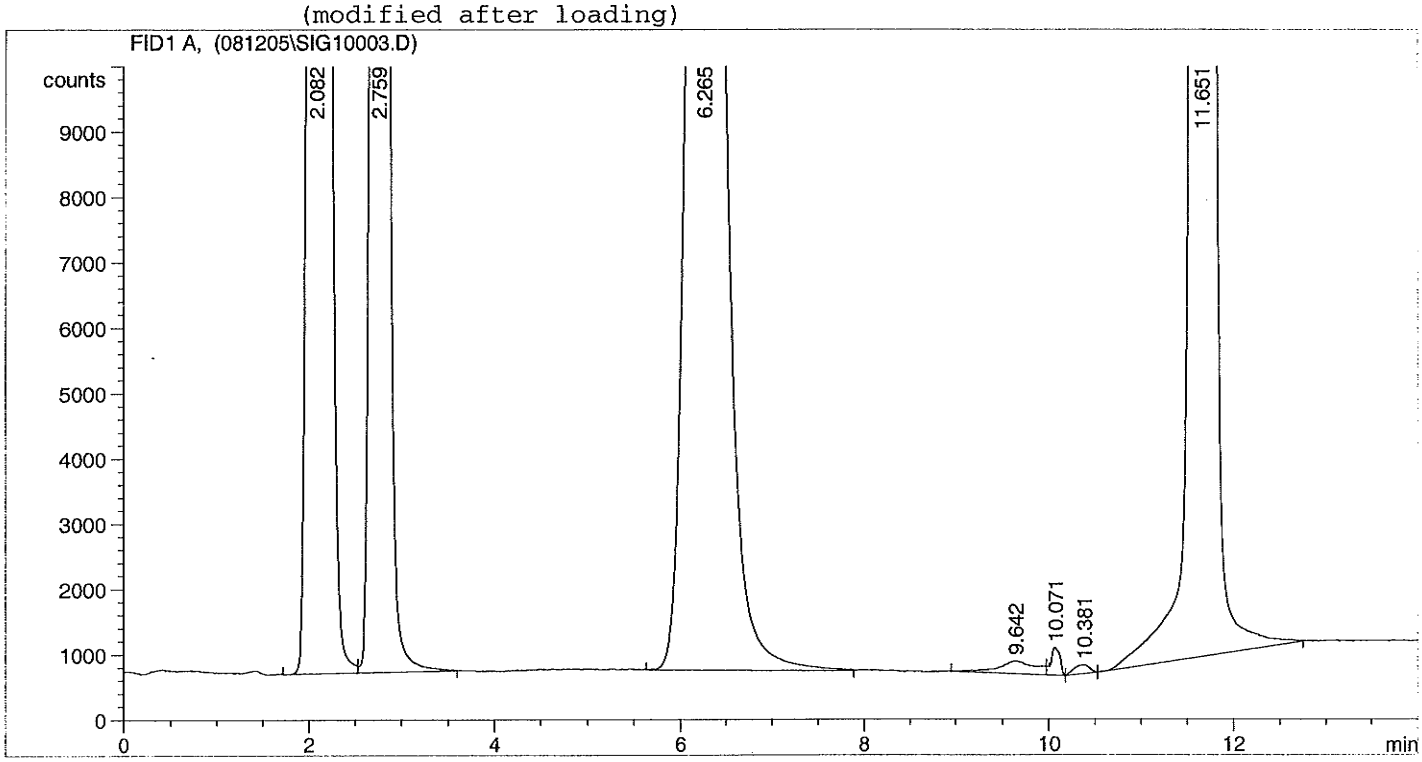
==========

*** End of Report ***

Data File C:\HPCHEM\2\DATA\081205\SIG10003.D Sample Name: FID CCV 1mL

==========

Injection Date : 12/5/2008 9:17:27 AM
Sample Name : FID CCV 1mL Location : Vial 1
Acq. Operator : GC 14
Inj Volume : Manually
Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 10/3/2008 1:49:33 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M\071908.M
Last changed : 12/4/2008 3:23:54 PM by GC 14
(modified after loading)



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External Standard Report

==========

MANUAL INTEGRATION
BEFORE / AFTER
Date:
Chemist: GL:
Reason: BASELINE CORR., PEAK ID CORR.
Other :
This stamp appears in red ink on original copy.

Sorted By : Signal
Calib. Data Modified : 12/4/2008 10:40:19 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.082	BV	6.47389e5	4.91062e-4	317.90838		Carbon Monoxide
2.759	VB	6.48515e5	4.94479e-4	320.67683		Methane
6.265	PV	6.54900e5	4.77635e-4	312.80319		Carbon Dioxide
11.651	PV	1.93853e6	4.81128e-4	932.68259		TGNMO

Totals : 1884.07099

Results obtained with standard integrator!

==========

*** End of Report ***

GC 14 25.1 METHOD 071908
Multipoint Calibration

C0		5ppm	300ppm	5000ppm		Average	SD	RSD
Conc.ppm		5.06	304	5110				
Area		11148	608729	9727630		3449169		
RF		2203.162	2002.398	1903.646		2036.402	152.626	7.494886
Methane	1ppm	5ppm	300ppm	5000ppm				
Conc.ppm	1.01	5.07	308	4950				
Area	2226	9790	612460	9774190		2599667		
RF	2203.96	1930.966	1988.506	1974.584		2024.504	122.1225	6.032217
C02	1ppm	5ppm	300ppm	5000ppm				
Conc.ppm	1.07	5.37	302	4980				
Area	2416	10976	623378	10044400		2670293		
RF	2257.944	2043.948	2064.166	2016.948		2095.751	109.8449	5.241313
TGNMO	1ppm	5ppm	300ppm	5000ppm				
Conc.ppm	3.06	15.3	918	2082				
Area	7467	29582	1772460	4179080		1497147		
RF	2440.196	1933.464	1930.784	2007.243		2077.922	244.1008	11.74735

Air Analysis Logbook

DATE	DIRECTORY	DATA FILE	CEL ID #	TEST METHOD	STANDARD LOT # / ID	LOOP VOL (mL)	ANALYST	COMMENTS
07/18/08	080718	SIG100009	ICAL std #1	TGMHO	01-13-08	200µL	NV	
		10	ICAL std #3		01-13-07	1mL		
		11	ICAL STD #4		01-13-14			
		12	MB		N/A			
		13	MDL #1		01-13-08			
		14	2					
		15	3					
		16	4					
		17	5					
		18	6					
		19	7					
		20	ICAL #4		01-13-09			
07/19/08	080719	SIG1000 1	BLANK	TGMHO	NA	1	EY	
		02	ICAL std #3		01-10-15		LL	25.1 300 ppm
		03	blank		NA			
		04	ICAL std #1		01-13-08	200ul		1 ppm (~5 ppm)
		05	ICAL std #2			1		5 ppm
		06	ICAL std #3		01-10-15			300 ppm
		07	ICAL std ~~#3~~		~~01-10-15~~ 07/19			~~5000~~ 300 ppm LL 07/19/08
		08	ICAL std #3		~~01-13-09~~			5000 ppm
		09	ICAL STD #4					
		10	Blank		NA	1		~~5 ppm~~ LL 07/19
		11	MDL #1		01-13-08		EY	5 ppm
		12	ICAL std #1			200ul		
		13	ICAL std #2			1		
		14	blank		NA		LL	
		15	#10 CCV		01-10-15			
		16	LCS		01-13-07			

Reviewed by: _____ Date ____/____/____

10/19/06 Revision

Air Analysis Logbook

DATE	DIRECTORY	DATA FILE	CEL ID #	TEST METHOD	STANDARD LOT # / ID	LOOP VOL (mL)	ANALYST	COMMENTS
07/19/08	080719	SIG100017	LCSD	TGNMO	01-13-07	1	LL	
↓	↓	↓18	BLANK	↓	NA	↓	↓	
		19	ICAL STD #1		01-13-08	200µL	HH	
		20	1		↓	↓		
		21	2		~~01-10-15~~ HH 07/19/08			
		22	3		~~01-13-09~~			01-10-15
		23	4		01-13-09			
		24	4		01-13-09			
		25	3		01-10-15			
		26	2		01-13-08			
		27	1		↓	200µL		
		28	1		↓	↓		
		29	4		01-13-09	1		mislabled
		30	4		↓			
		31	2		01-13-08			
↓	↓	↓32	↓ 2	↓	↓	↓	↓	
07/20/08	080720	SIG10001	Blank	TGNMO	NA	1	NL	
		2	FID CCV		01-10-15		NL	
		3	↓		↓		↓	
		4	LCS		01-13-07		NL	
		5	LCSD		1			
		6	Blank		NA		↓	
		7	08-07-1437-1A		1		LL	
		8	-2A					
		9	-2A					
		10	3A				NL	
		11	4A					
↓	↓	↓	12 08-07-1431-1A	↓	↓		↓	

Reviewed by: _____ Date ____/____/____

10/19/06 Revision

Calibration Table

Calib. Data Modified : Sunday, July 20, 2008 11:10:47 AM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 20.000 %
Abs. Reference Window : 0.000 min
Rel. Non-ref. Window : 20.000 %
Abs. Non-ref. Window : 0.000 min
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times : No, only for identified peaks

Curve Type : Power
Origin : Ignored
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

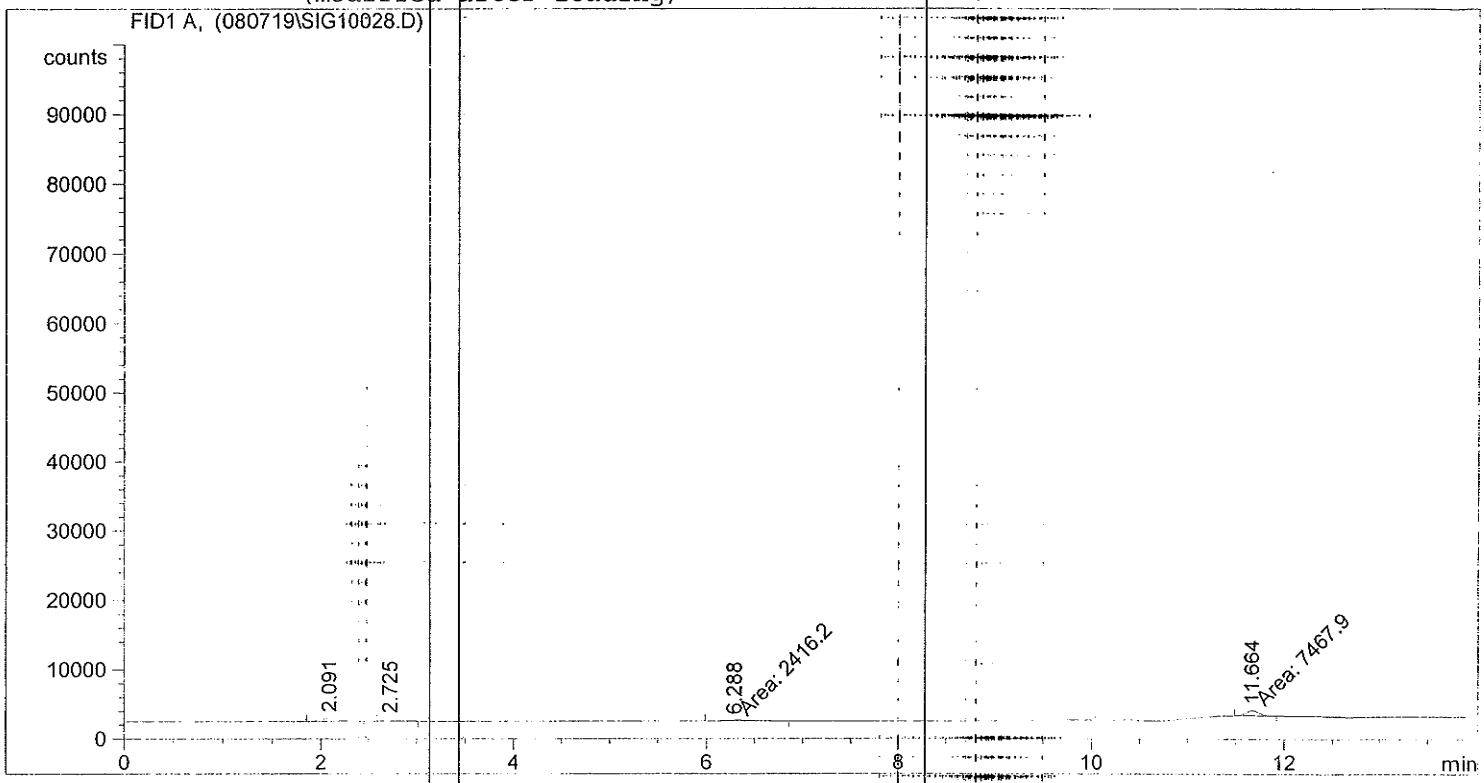
Signal 1: FID1 A,

RetTime [min]	Sig	Lvl	Amount [ppm v/v]	Area	Amt/Area	Ref	Grp	Name
2.218	1	2	5.06000	1.11479e4	4.53898e-4			Carbon Monoxide
		3	304.00000	6.08729e5	4.99401e-4			
		4	5110.00000	9.72763e6	5.25308e-4			
2.817	1	1	1.01400	2226.19580	4.55486e-4			Methane
		2	5.07000	9790.16699	5.17867e-4			
		3	308.00000	6.12460e5	5.02890e-4			
		4	4950.00000	9.77419e6	5.06436e-4			
6.396	1	1	1.07400	2416.20410	4.44499e-4			Carbon Dioxide
		2	5.37000	1.09761e4	4.89244e-4			
		3	302.00000	6.23378e5	4.84457e-4			
		4	4980.00000	1.00444e7	4.95799e-4			
11.667	1	1	3.06000	7467.90234	4.09754e-4			TGNMO
		2	15.30000	2.95820e4	5.17207e-4			
		3	918.00000	1.77246e6	5.17925e-4			
		4	2082.00000	4.17908e6	4.98196e-4			

Peak Sum Table

No Entries in table

Injection Date : 7/19/2008 11:46:49 PM
Sample Name : ICAL #1 200uL Location : Vial 1
Acq. Operator : GC 14
Inj Volume : Manually
Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 10:59:10 AM by GC 14
(modified after loading)



External Standard Report

Sorted By : Signal
Calib. Data Modified : 7/20/2008 10:59:08 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

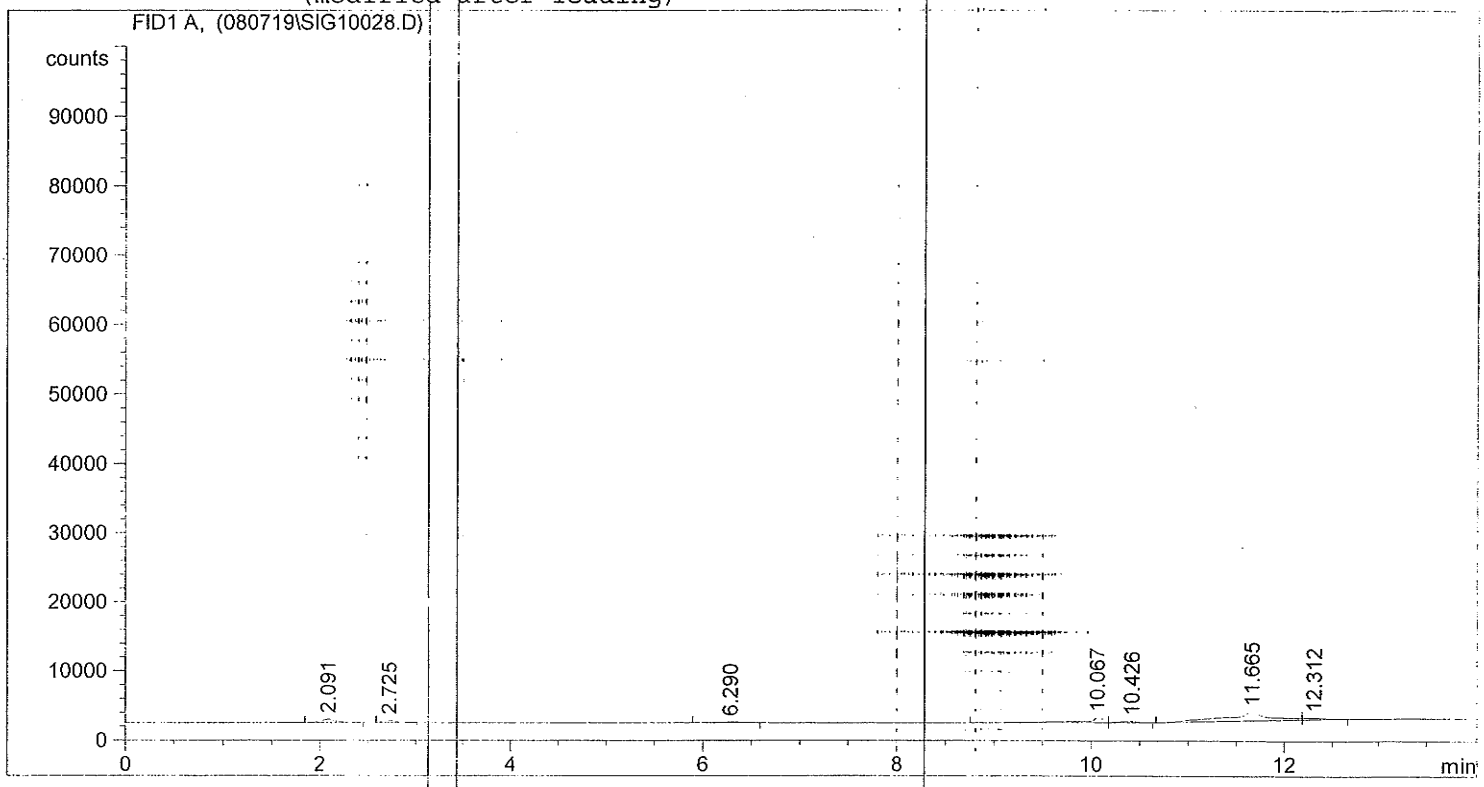
RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.091	BB	5333.47119	2.20085e-4	1.17382		Carbon Monoxide
2.725	BB	2226.19580	4.81720e-4	1.07240		Methane
6.288	MM	2416.20410	2.55639e-4	6.17675e-1		Carbon Dioxide
11.664	MM	7467.90234	4.72564e-4	3.52906		TGNMO
Totals :				6.39296		

Results obtained with standard integrator!

*** End of Report ***

==========

Injection Date : 7/19/2008 11:46:49 PM
Sample Name : ICAL #1 200uL Location : Vial 1
Acq. Operator : GC 14
Inj Volume : Manually
Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 10:59:10 AM by GC 14
(modified after loading)



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 7/20/2008 10:59:08 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.091	BB	5333.47119	2.20085e-4	1.17382		Carbon Monoxide
2.725	BB	2226.19580	4.81720e-4	1.07240		Methane
6.290	BB	1793.48889	2.46801e-4	4.42634e-1		Carbon Dioxide
11.665	BV	4.09466e4	5.00967e-4	20.51291		TGNMO

Totals : 23.20177

Results obtained with standard integrator!

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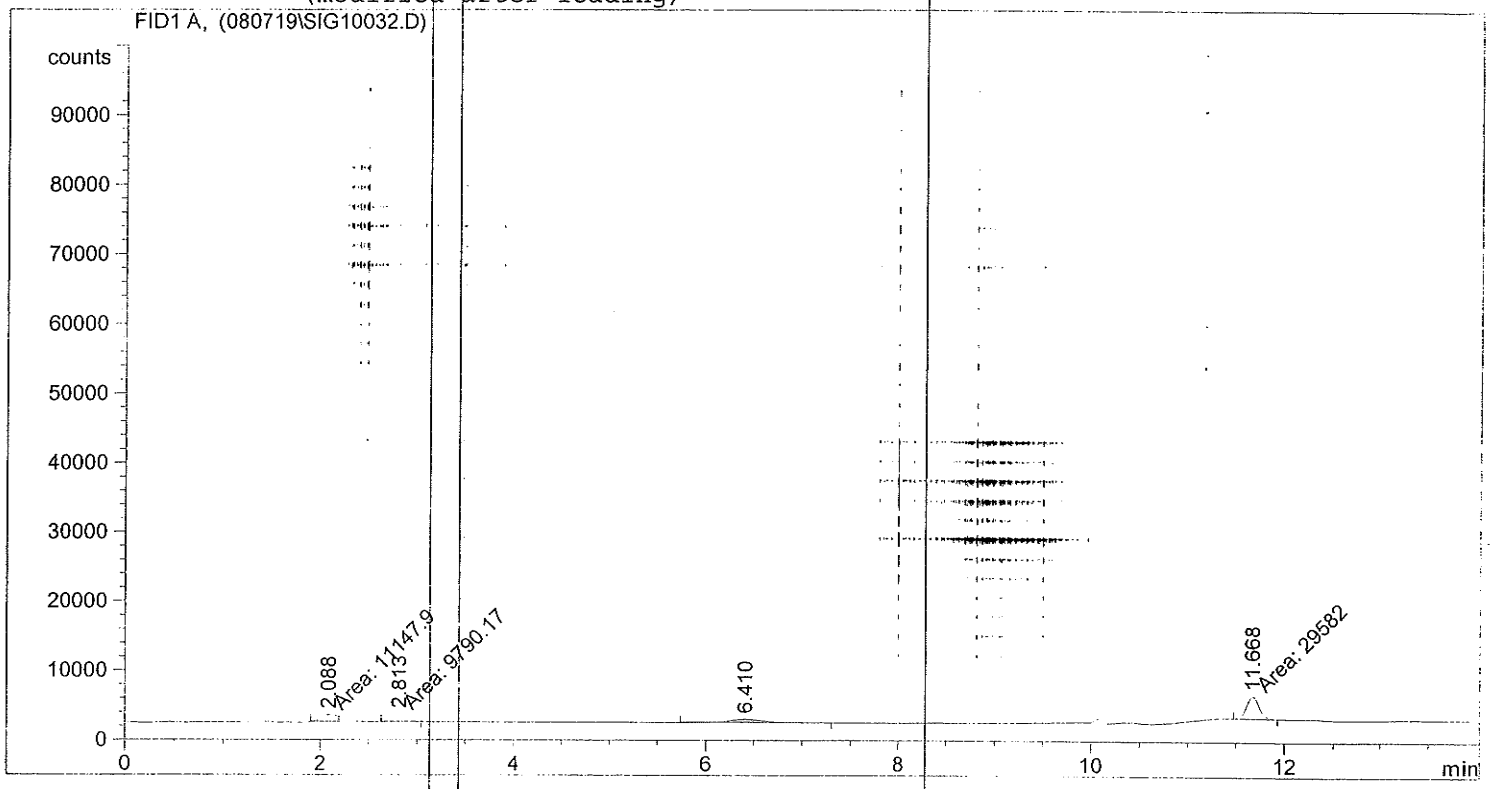
*** End of Report ***

Injection Date : 7/20/2008 1:12:23 AM
Sample Name : ICAL #2 1mL
Acq. Operator : GC 14

Location : Vial 1
Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 11:08:23 AM by GC 14
(modified after loading)



External Standard Report

Sorted By : Signal
Calib. Data Modified : Sunday, July 20, 2008 11:08:23 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.088	MF	1.11479e4	4.34978e-4	4.84908		Carbon Monoxide
2.813	MM	9790.16699	4.86574e-4	4.76364		Methane
6.410	BB	1.09761e4	4.68418e-4	5.14142		Carbon Dioxide
11.668	MM	2.95820e4	4.67871e-4	13.84055		TGNMO

Totals : 28.59469

Results obtained with standard integrator!

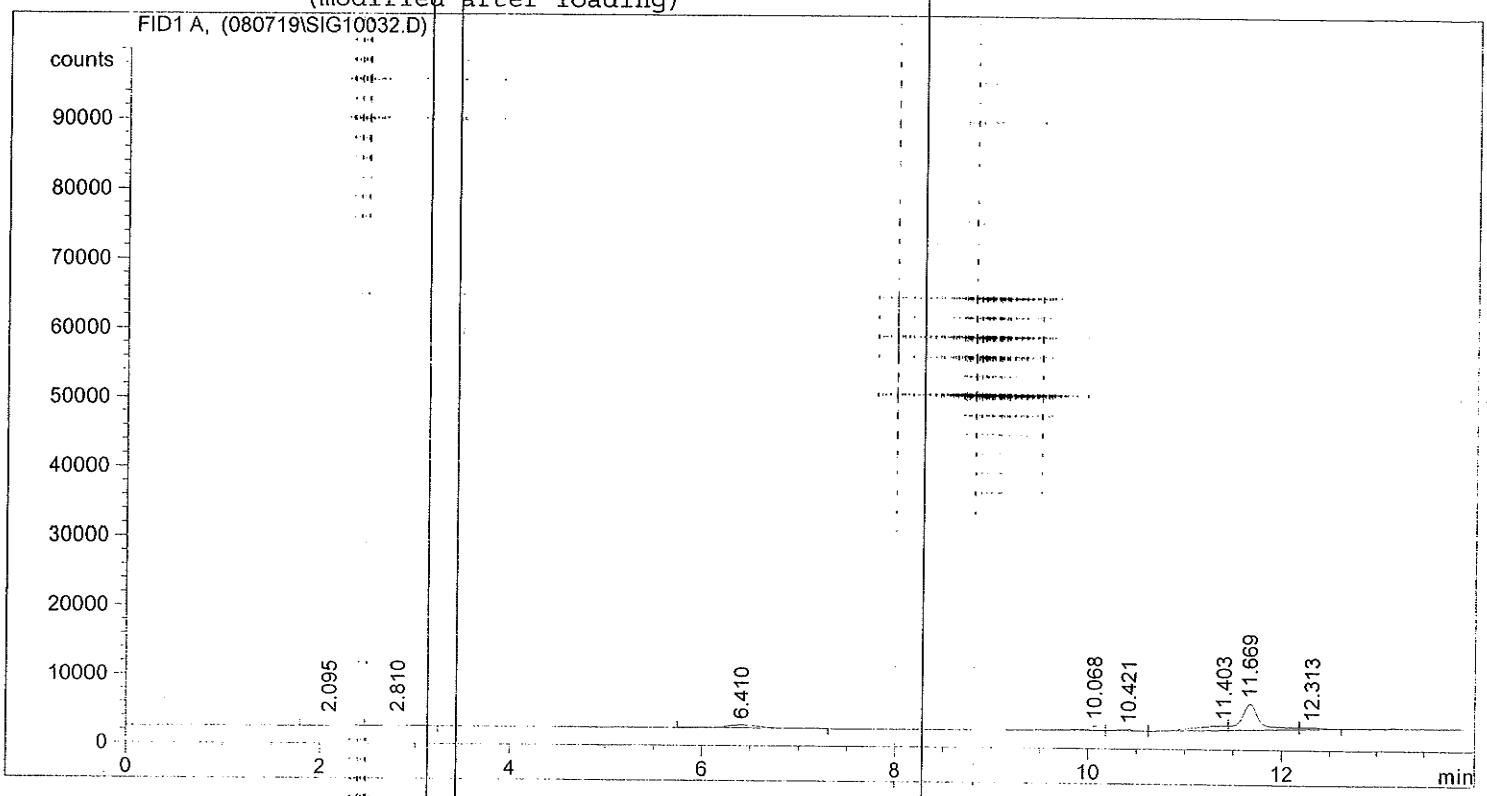
*** End of Report ***

Injection Date : 7/20/2008 1:12:23 AM
Sample Name : ICAL #2 1mL
Acq. Operator : GC 14

Location : Vial 1

Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 11:02:59 AM by GC 14
(modified after loading)



External Standard Report

Sorted By : Signal
Calib. Data Modified : Sunday, July 20, 2008 11:02:59 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.095	BV	1.74076e4	2.66416e-4	4.63767		Carbon Monoxide
2.810	VB	1.16931e4	4.63584e-4	5.42075		Methane
6.410	BB	1.09761e4	4.49500e-4	4.93377		Carbon Dioxide
11.669	VV	4.94595e4	4.66855e-4	23.09040		TGNMO

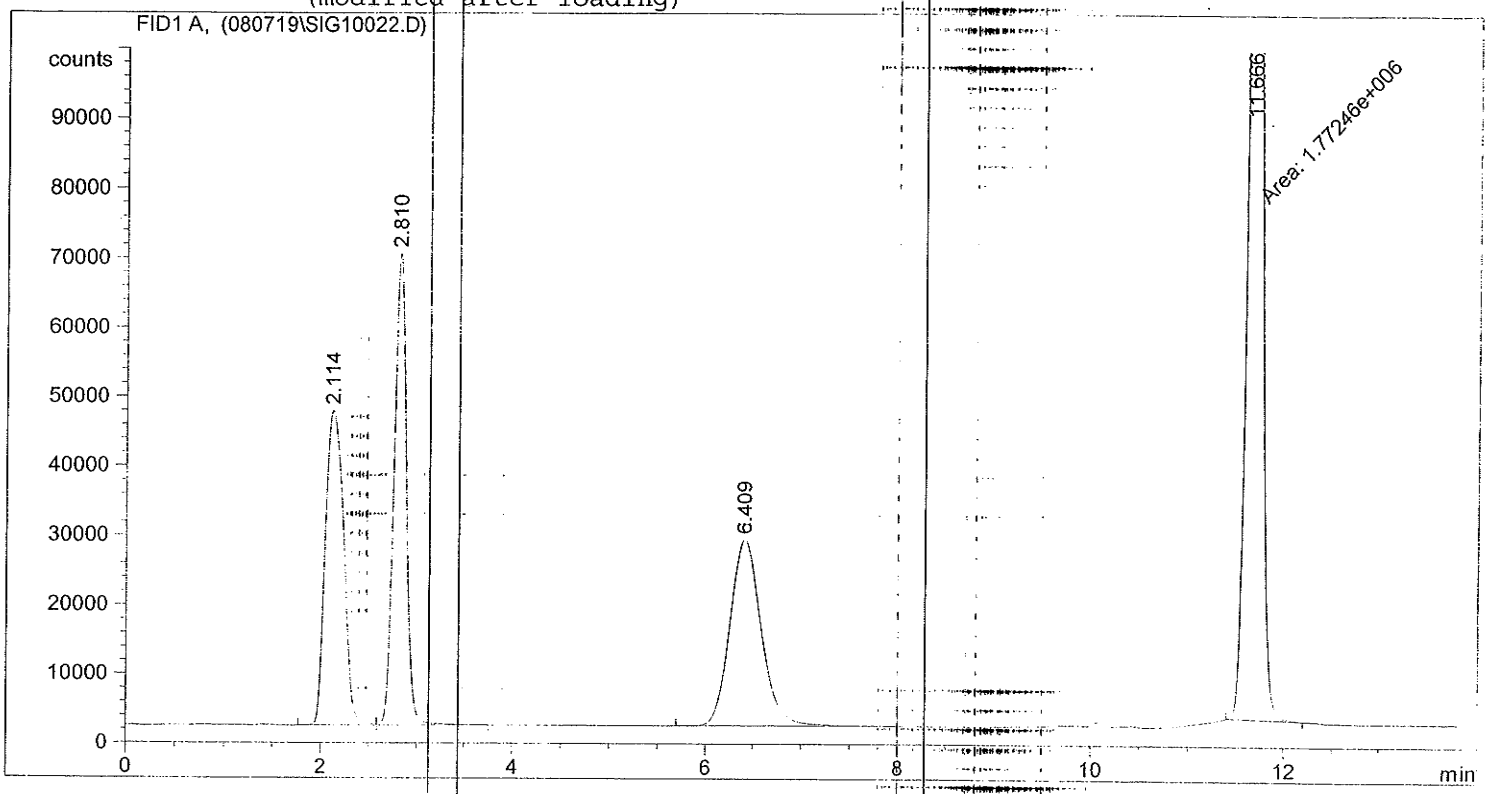
Totals : 38.08258

Results obtained with standard integrator!

*** End of Report ***

Injection Date : 7/19/2008 7:54:26 PM
Sample Name : ICAL #3 1mL Location : Vial 1
Acq. Operator : GC 14 Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 10:41:13 AM by GC 14
(modified after loading)



External Standard Report

Sorted By : Signal
Calib. Data Modified : Sunday, July 20, 2008 10:41:12 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.114	BV	6.08729e5	5.18394e-4	315.56139		Carbon Monoxide
2.810	VB	6.12460e5	5.51524e-4	337.78630		Methane
6.409	BV	6.23378e5	4.76516e-4	297.04967		Carbon Dioxide
11.666	MM	1.77246e6	5.81475e-4	1030.63989		TGNMO

Totals : 1981.03725

Results obtained with standard integrator!

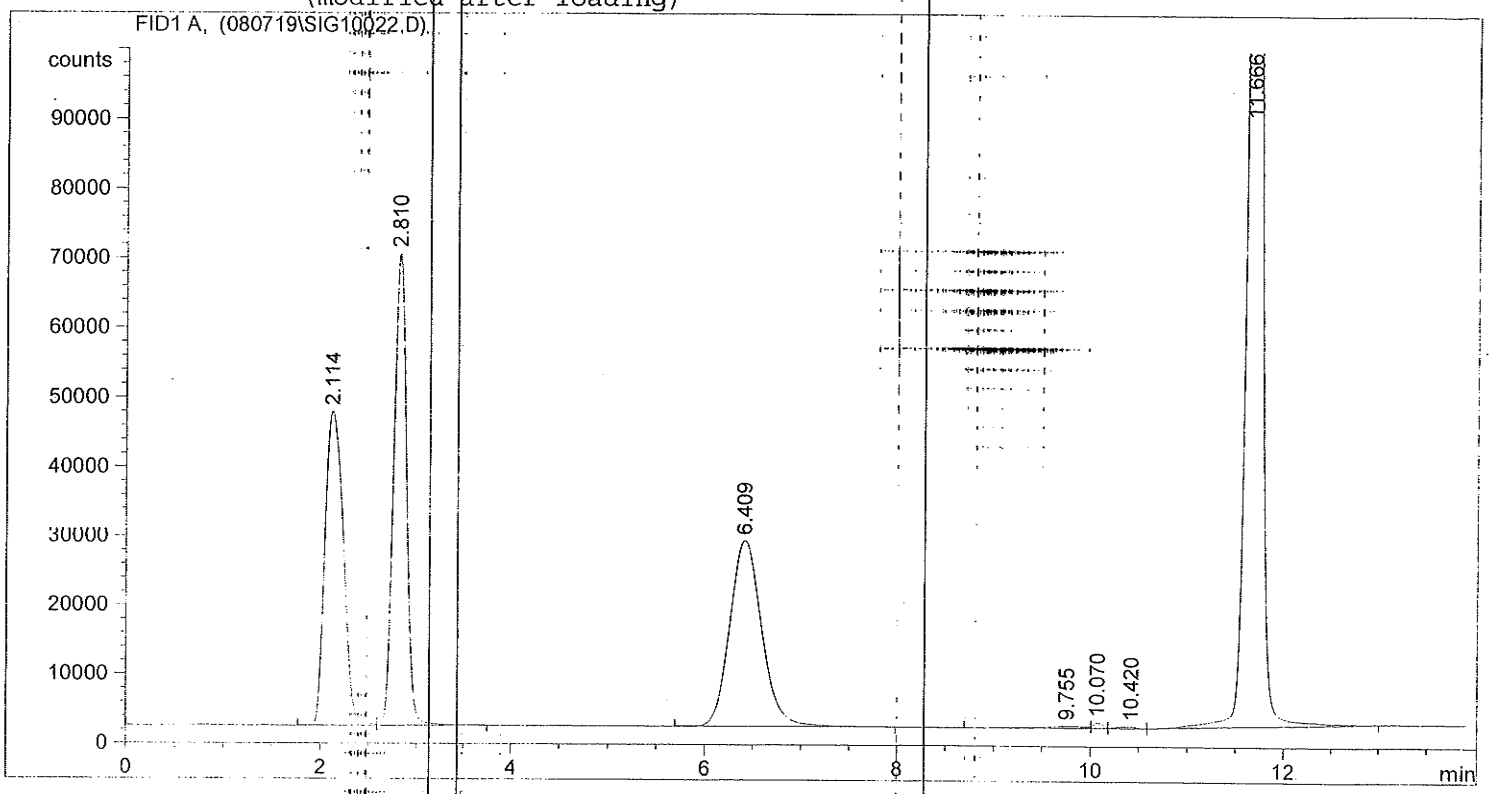
*** End of Report ***

Injection Date : 7/19/2008 7:54:26 PM
Sample Name : ICAL #3 1mL
Acq. Operator : GC 14

Location : Vial 1

Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 10:37:22 AM by GC 14
(modified after loading)



External Standard Report

Sorted By : Signal
Calib. Data Modified : 7/20/2008 10:37:20 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.114	BV	6.08729e5	4.82486e-4	293.70355		Carbon Monoxide
2.810	VB	6.12460e5	5.08124e-4	311.20580		Methane
6.409	BV	6.23378e5	4.39930e-4	274.24266		Carbon Dioxide
11.666	PV	1.84478e6	5.27180e-4	972.53302		TGNMO

Totals : 1851.68502

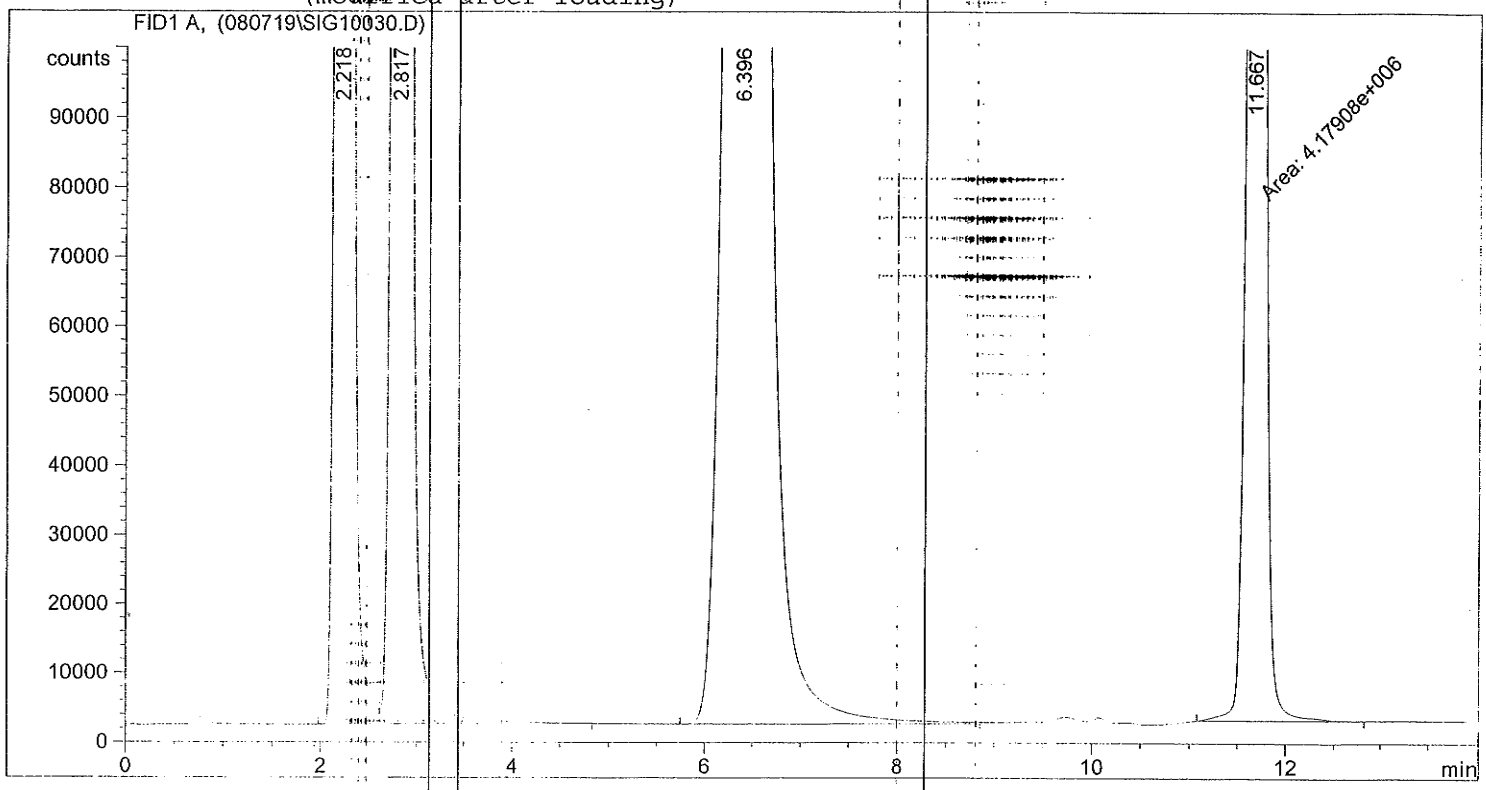
Results obtained with standard integrator!

*** End of Report ***

Injection Date : 7/20/2008 12:31:29 AM
Sample Name : ICAL #4 1mL
Acq. Operator : GC 14

Location : Vial 1
Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 11:10:47 AM by GC 14
(modified after loading)



External Standard Report

Sorted By : Signal
Calib. Data Modified : Sunday, July 20, 2008 11:10:47 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.218	BV	9.72763e6	5.27203e-4	5128.43195		Carbon Monoxide
2.817	VB	9.77419e6	5.13222e-4	5016.33247		Methane
6.396	BV	1.00444e7	4.99095e-4	5013.11061		Carbon Dioxide
11.667	MM	4.17908e6	5.19835e-4	2172.43283		TGNMO
Totals :				1.73303e4		

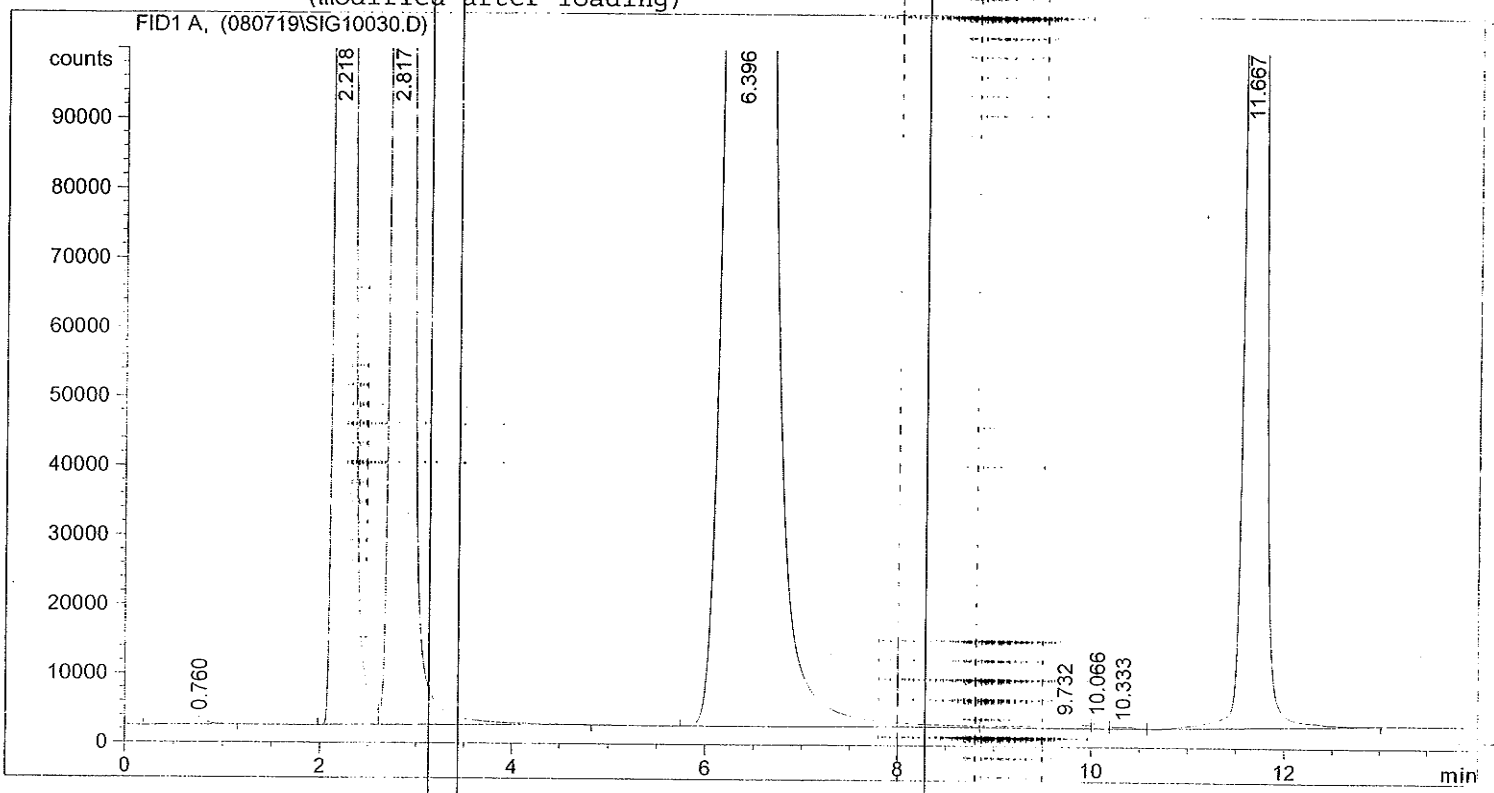
Results obtained with standard integrator!

*** End of Report ***

Injection Date : 7/20/2008 12:31:29 AM
Sample Name : ICAL #4 1mL
Acq. Operator : GC 14

Location : Vial 1
Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 11:08:23 AM by GC 14
(modified after loading)



External Standard Report

Sorted By : Signal
Calib. Data Modified : Sunday, July 20, 2008 11:08:23 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.218	BV	9.72763e6	6.55749e-4	6378.87873		Carbon Monoxide
2.817	VB	9.77419e6	6.26868e-4	6127.12819		Methane
6.396	BV	1.00444e7	5.94616e-4	5972.55680		Carbon Dioxide
11.667	PV	4.21085e6	6.03754e-4	2542.31342		TGNMO
Totals :				2.10209e4		

Results obtained with standard integrator!

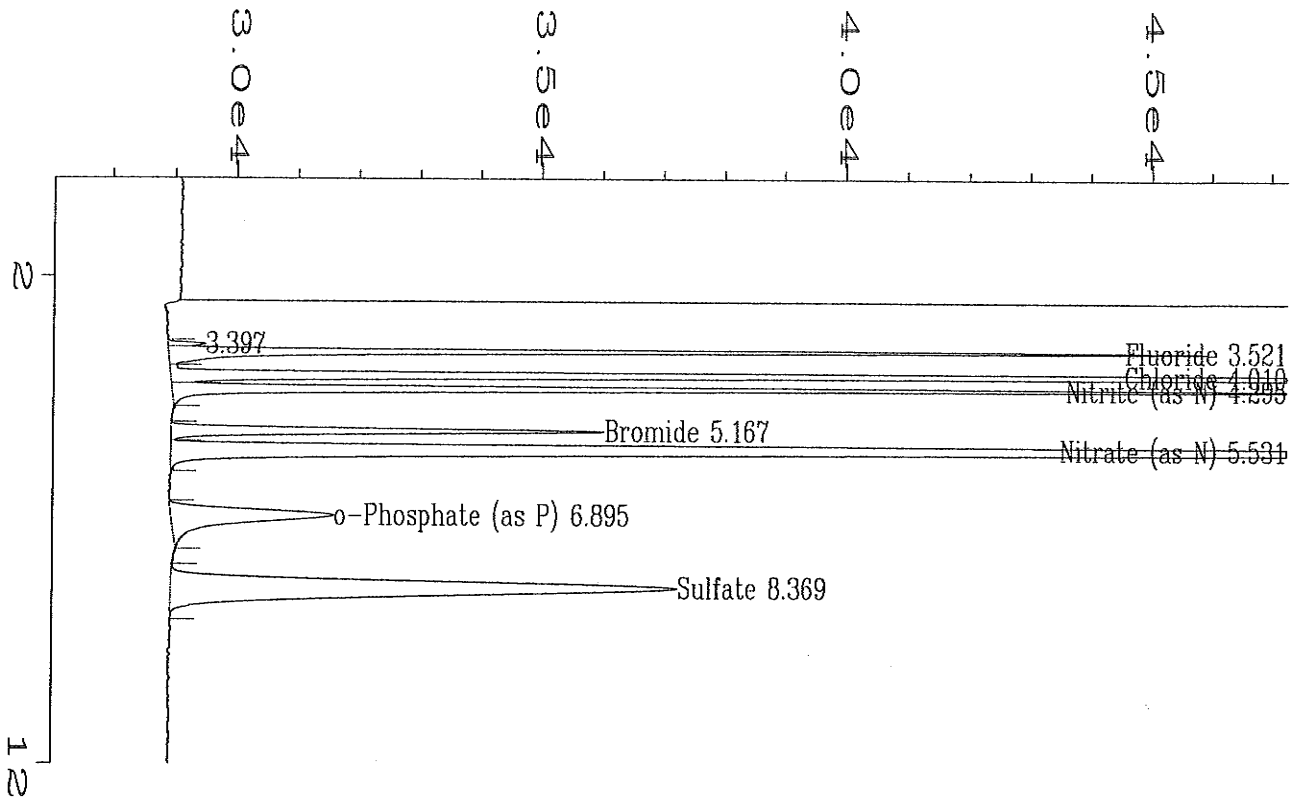
*** End of Report ***

Work Order#: 08-12-0410

Client: WEISS Associates

EPA 300.0

Calibration



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External Standard Report

==========

Data File Name : C:\HPCHEM\1\DATA\081204\003F0101.D
Operator : ELEO
Instrument : IC 2
Sample Name : CCV
Run Time Bar Code:
Acquired on : 04 Dec 08 09:39 AM
Report Created on: 04 Dec 08 01:58 PM
Last Recalib on : 19 NOV 08 03:28 PM
Multiplier : 1

Page Number : 1
Vial Number : 3
Injection Number : 1
Sequence Line : 1
Instrument Method: EPA300.MTH
Analysis Method : EPA300A.MTH
Sample Amount : 0
ISTD Amount :

Sig. 1 in C:\HPCHEM\1\DATA\081204\003F0101.D

Ret Time	Area	Type	Width	Ref#	mg/L	Name
3.521	89343	VV	0.078	1	0.986	Fluoride
4.010	259585	VV	0.074	1	3.869	Chloride
4.295	111804	VB	0.088	1	0.998	Nitrite (as N)
5.167	52453	BV	0.115	1	2.028	Bromide
5.531	342563	VB	0.135	1	1.967	Nitrate (as N)
6.895	47705	BB	0.265	1	1.069	o-Phosphate (as P)
8.369	161657	BB	0.301	1	4.071	Sulfate

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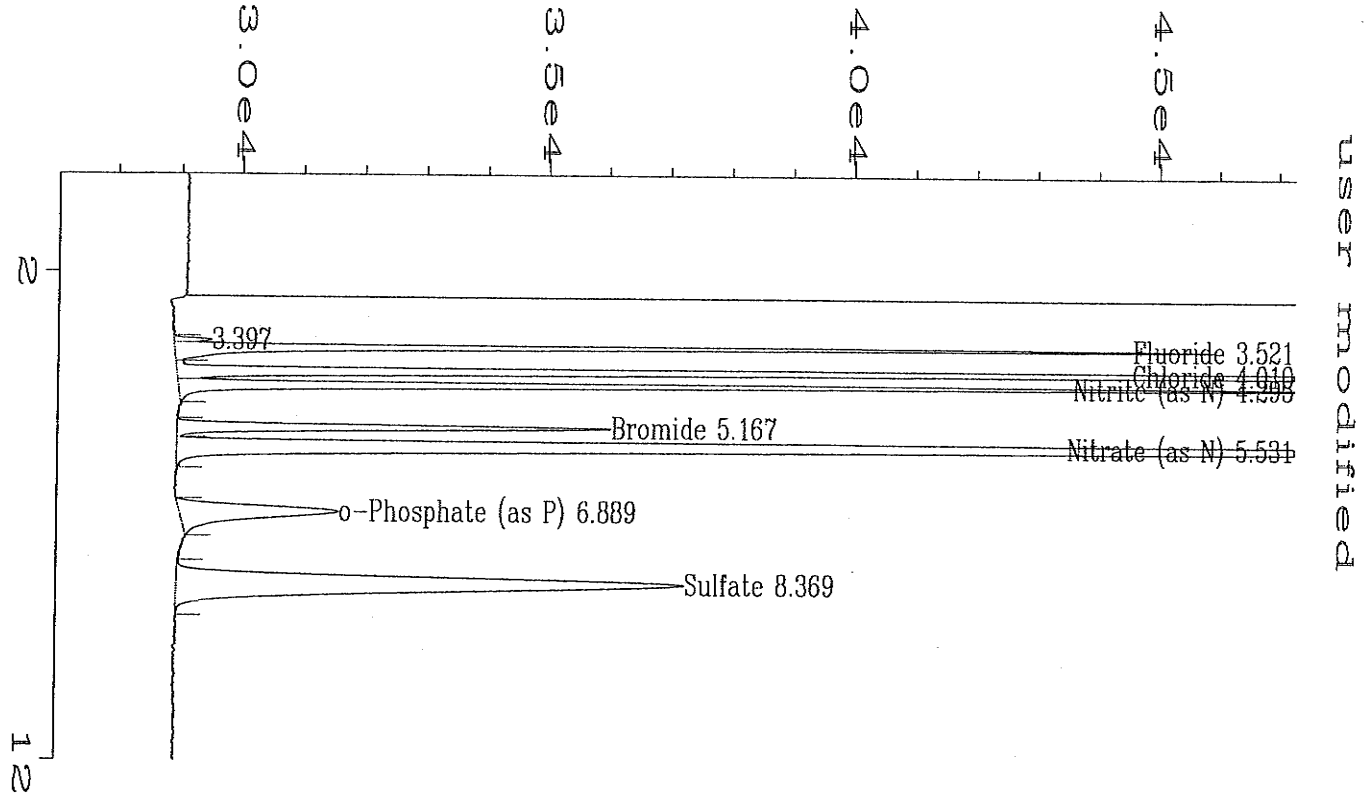
MANUAL INTEGRATION
BEFORE/AFTER
Date:
Chemist: GL:
Reason:
This stamp appears in red ink on original copy.



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External Standard Report

==========

Data File Name : C:\HPCHEM\1\DATA\081204\003F0101.D
Operator : ELEO
Instrument : IC 2
Sample Name : CCV
Run Time Bar Code:
Acquired on : 04 Dec 08 09:39 AM
Report Created on: 04 Dec 08 01:58 PM
Last Recalib on : 19 NOV 08 03:28 PM
Multiplier : 1

Page Number : 1
Vial Number : 3
Injection Number : 1
Sequence Line : 1
Instrument Method: EPA300.MTH
Analysis Method : EPA300A.MTH
Sample Amount : 0
ISTD Amount :

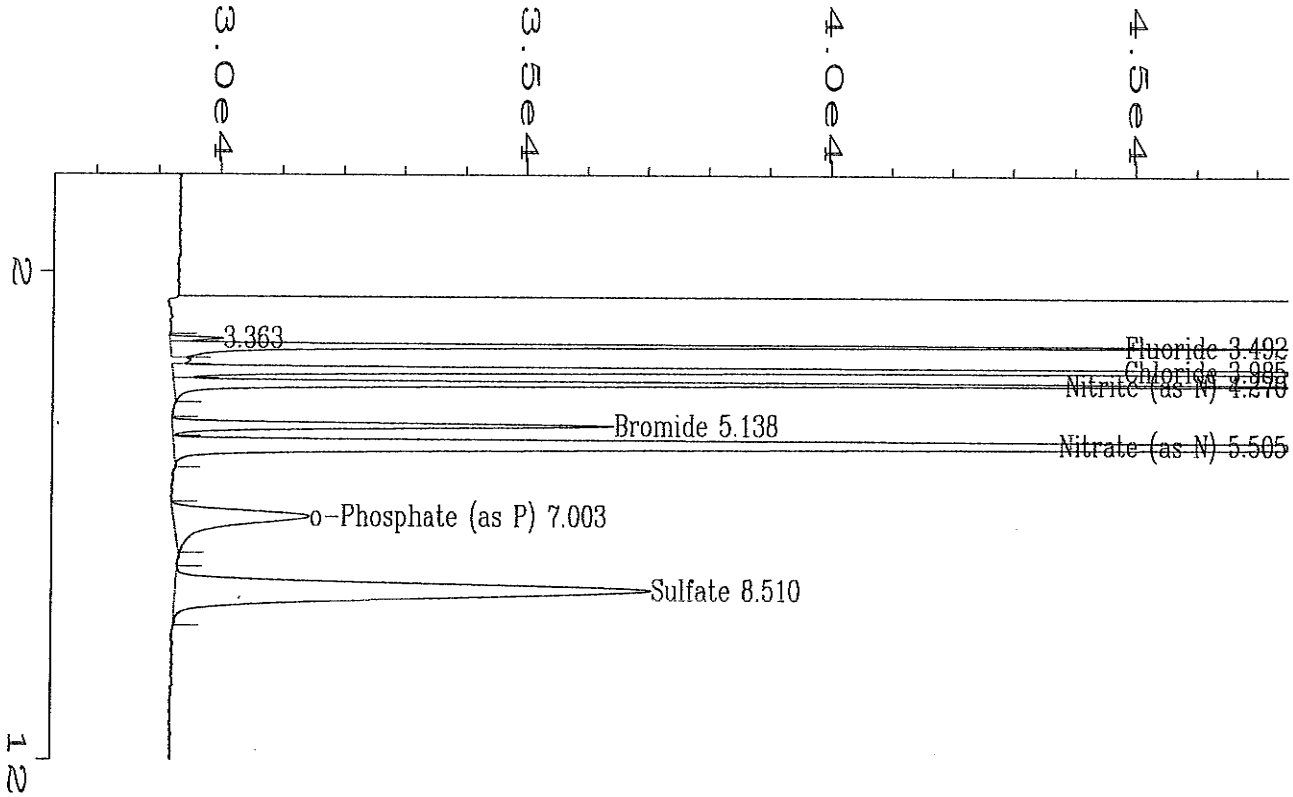
Sig. 1 in C:\HPCHEM\1\DATA\081204\003F0101.D

Ret Time	Area	Type	Width	Ref#	mg/L	Name
3.521	89343	VV	0.078	1	0.986	Fluoride
4.010	259585	VV	0.074	1	3.869	Chloride
4.295	111804	VB	0.088	1	0.998	Nitrite (as N)
5.167	52453	BV	0.115	1	2.028	Bromide
5.531	342563	VB	0.135	1	1.967	Nitrate (as N)
6.889	44923	MM	0.287	1	1.010	o-Phosphate (as P)
8.369	161657	BB	0.301	1	4.071	Sulfate

User Modified

==========

MANUAL INTEGRATION
BEFORE/AFTER
Date: 12/11/08
Chemist: B GL:
Reason: Baseline
This stamp appears in red ink on original copy.



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External Standard Report

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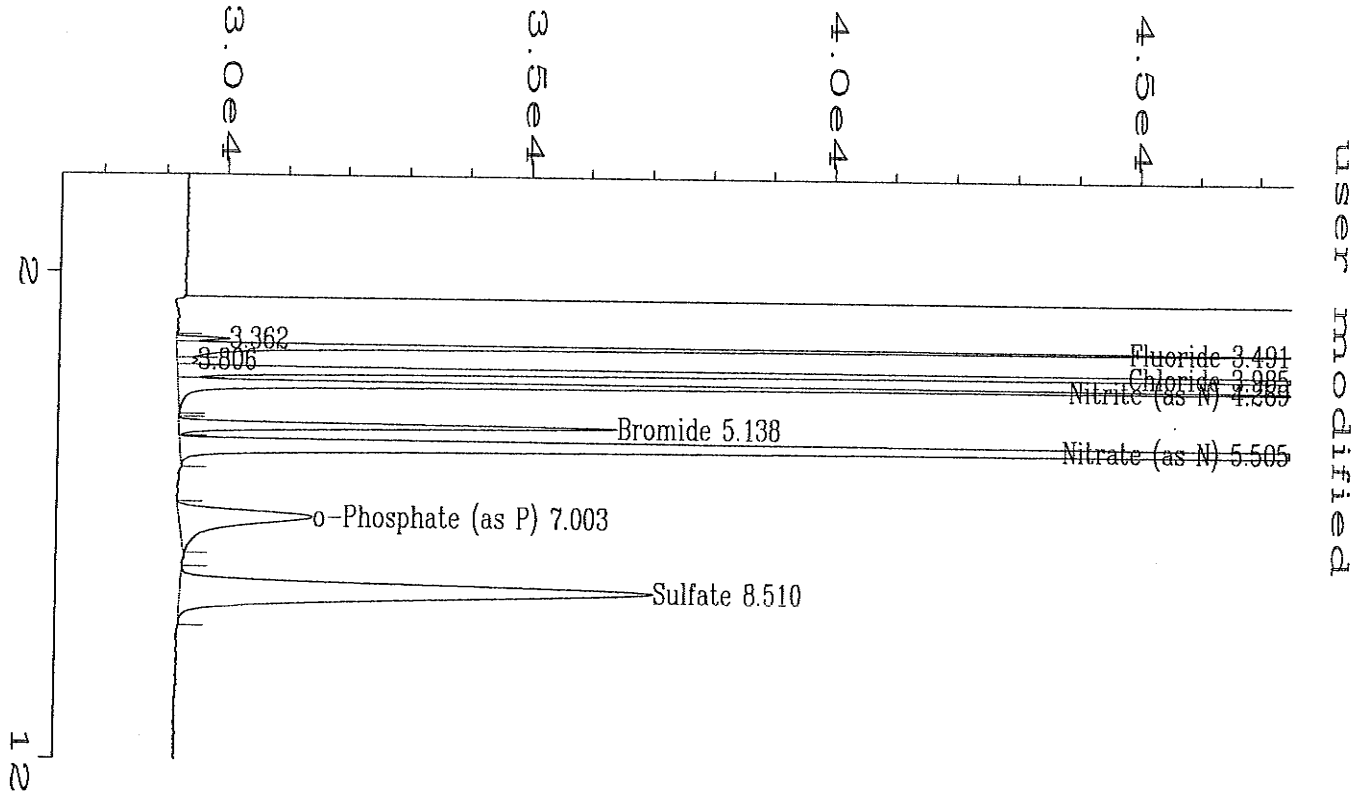
Data File Name	: C:\HPCHEM\1\DATA\081119\009F0101.D		
Operator	: ELEO	Page Number	: 1
Instrument	: IC 2	Vial Number	: 9
Sample Name	: ICV	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 19 Nov 08 10:57 AM	Instrument Method:	EPA300.MTH
Report Created on:	12 Dec 08 11:18 AM	Analysis Method	: EPA300A.MTH
Last Recalib on	: 19 NOV 08 03:28 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\1\DATA\081119\009F0101.D

Ret Time	Area	Type	Width	Ref#	mg/L	Name
3.492	89474	VV	0.068	1	0.987	Fluoride
3.985	254503	VV	0.067	1	3.798	Chloride
4.270	110046	VB	0.082	1	0.983	Nitrite (as N)
5.138	51215	BV	0.111	1	1.981	Bromide
5.505	332802	VB	0.133	1	1.914	Nitrate (as N)
7.003	44539	BB	0.306	1	1.002	o-Phosphate (as P)
8.510	156803	BB	0.318	1	3.951	Sulfate

==========

MANUAL INTEGRATION
BEFORE/AFTER
Date:
Chemist: GL:
Reason:
This stamp appears in red ink on original copy.



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External Standard Report

==========

Data File Name : C:\HPCHEM\1\DATA\081119\009F0101.D
Operator : ELEO
Instrument : IC 2
Sample Name : ICV
Run Time Bar Code:
Acquired on : 19 Nov 08 10:57 AM
Report Created on: 12 Dec 08 11:18 AM
Last Recalib on : 19 NOV 08 03:28 PM
Multiplier : 1

Page Number : 1
Vial Number : 9
Injection Number : 1
Sequence Line : 1
Instrument Method: EPA300.MTH
Analysis Method : EPA300A.MTH
Sample Amount : 0
ISTD Amount :

Sig. 1 in C:\HPCHEM\1\DATA\081119\009F0101.D

Ret Time	Area	Type	Width	Ref#	mg/L	Name
3.491	89808	VF	0.076	1	0.991	Fluoride
3.985	254990	VV	0.073	1	3.804	Chloride
4.269	111822	VM	0.091	1	0.998	Nitrite (as N)
5.138	51215	BV	0.111	1	1.981	Bromide
5.505	332802	VB	0.133	1	1.914	Nitrate (as N)
7.003	44539	BB	0.306	1	1.002	o-Phosphate (as P)
8.510	156803	BB	0.318	1	3.951	Sulfate

User Modified

==========

MANUAL INTEGRATION
BEFORE/AFTER
Date: 12/11/08
Chemist: GL:
Reason: baseline
This stamp appears in red ink on original copy.

Work Order#: 08-12-0410

Client: WEISS Associates

EPA 6010B

Calibration

Sequence No.: 6
Sample ID: icv-si
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:

Autosampler Location: 157
Date Collected: 12/6/2008 10:48:22 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: icv-si

Analyte	Back Pressure	Flow
All	172.0 kPa	0.60 L/min

Mean Data: icv-si

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ho 339.898	58695.9	5.052	mg/L	0.0471				0.93%
Ho 345.600	99432.9	5.066	mg/L	0.0609				1.20%
Tb 350.917	24996.4	5.065	mg/L	0.0665				1.31%
Tb 384.873	14408.8	5.070	mg/L	0.0725				1.43%
Y 324.227	168055.4	5.112	mg/L	0.0659				1.29%
Y 371.029	279182.5	5.064	mg/L	0.0686				1.36%
Ag 328.068*†	-26.6	-0.0003	mg/L	0.00038	-0.0003	mg/L	0.00038	127.49%
Ag 338.289†	72.5	0.0014	mg/L	0.00134	0.0014	mg/L	0.00134	96.64%
Al 308.215*†	92.0	0.0077	mg/L	0.00425	0.0077	mg/L	0.00425	55.38%
Al 396.153†	903.2	0.0092	mg/L	0.00008	0.0092	mg/L	0.00008	0.88%
As 188.979†	7.3	0.0032	mg/L	0.00275	0.0032	mg/L	0.00275	85.34%
As 193.696*†	12.1	0.0067	mg/L	0.00193	0.0067	mg/L	0.00193	28.90%
B 249.677*†	2924.3	0.1305	mg/L	0.00425	0.1305	mg/L	0.00425	3.26%
B 249.772†	4366.2	0.1293	mg/L	0.00450	0.1293	mg/L	0.00450	3.48%
Ba 233.527*†	129.6	0.0011	mg/L	0.00018	0.0011	mg/L	0.00018	16.86%
Ba 455.403†	307.5	0.0020	mg/L	0.00035	0.0020	mg/L	0.00035	17.59%
Be 313.042*†	213.9	0.0001	mg/L	0.00004	0.0001	mg/L	0.00004	38.96%
Be 313.107†	183.5	0.0002	mg/L	0.00011	0.0002	mg/L	0.00011	69.34%
Ca 317.933*†	20.8	0.0106	mg/L	0.00086	0.0106	mg/L	0.00086	8.11%
Ca 422.673†	72.1	0.0137	mg/L	0.00850	0.0137	mg/L	0.00850	62.15%
Cd 226.502*†	12.0	0.0002	mg/L	0.00006	0.0002	mg/L	0.00006	35.37%
Cd 228.802†	26.3	0.0004	mg/L	0.00009	0.0004	mg/L	0.00009	23.70%
Co 228.616*†	17.5	0.0004	mg/L	0.00032	0.0004	mg/L	0.00032	88.75%
Co 230.786†	12.1	0.0003	mg/L	0.00019	0.0003	mg/L	0.00019	63.69%
Cr 267.716*†	17.9	0.0004	mg/L	0.00009	0.0004	mg/L	0.00009	21.92%
Cr 357.869†	7.8	0.0002	mg/L	0.00017	0.0002	mg/L	0.00017	86.06%
Cu 324.752*†	96.0	0.0009	mg/L	0.00016	0.0009	mg/L	0.00016	17.87%
Cu 327.393†	15.9	0.0003	mg/L	0.00122	0.0003	mg/L	0.00122	425.91%
Fe 239.562†	0.8	0.0039	mg/L	0.00953	0.0039	mg/L	0.00953	246.01%
Fe 259.939†	6.4	0.0084	mg/L	0.00108	0.0084	mg/L	0.00108	12.86%
Fe 273.955*†	57.8	0.0030	mg/L	0.00068	0.0030	mg/L	0.00068	23.09%
K 766.490*†	13.5	0.0179	mg/L	0.02215	0.0179	mg/L	0.02215	123.53%
Li 610.362*†	1247.6	0.0051	mg/L	0.00093	0.0051	mg/L	0.00093	18.07%
Mg 279.077*†	5.8	0.0007	mg/L	0.00219	0.0007	mg/L	0.00219	298.68%
Mg 280.271†	34.4	0.0026	mg/L	0.00037	0.0026	mg/L	0.00037	14.20%
Mn 257.610*†	126.1	0.0002	mg/L	0.00001	0.0002	mg/L	0.00001	4.59%
Mn 259.372†	86.3	0.0002	mg/L	0.00005	0.0002	mg/L	0.00005	24.24%
Mo 202.031*†	3.5	0.0003	mg/L	0.00093	0.0003	mg/L	0.00093	347.76%
Mo 203.845†	1.5	0.0002	mg/L	0.00003	0.0002	mg/L	0.00003	14.87%
Na 330.237†	-33.5	-0.1198	mg/L	0.24338	-0.1198	mg/L	0.24338	203.13%
Na 589.592*†	562.5	0.1401	mg/L	0.07475	0.1401	mg/L	0.07475	53.35%
Ni 231.604*†	-18.7	-0.0007	mg/L	0.00034	-0.0007	mg/L	0.00034	47.80%
Ni 232.003†	-1.3	-0.0001	mg/L	0.00002	-0.0001	mg/L	0.00002	27.97%
P 213.617*†	-4.0	-0.0018	mg/L	0.00236	-0.0018	mg/L	0.00236	134.18%
P 214.914†	16.0	0.0077	mg/L	0.00302	0.0077	mg/L	0.00302	39.04%
Pb 217.000†	-17.5	-0.0090	mg/L	0.00094	-0.0090	mg/L	0.00094	10.47%
Pb 220.353*†	24.9	0.0036	mg/L	0.00113	0.0036	mg/L	0.00113	31.18%
Sb 206†	40.5	0.0124	mg/L	0.00084	0.0124	mg/L	0.00084	6.76%
Sb 206.836†	36.3	0.0096	mg/L	0.00621	0.0096	mg/L	0.00621	64.53%
Sb 217.582*†	24.3	0.0099	mg/L	0.00049	0.0099	mg/L	0.00049	4.97%
Se 196.026*†	-5.5	-0.0023	mg/L	0.00184	-0.0023	mg/L	0.00184	80.88%
Se 203.985†	-16.3	-0.0109	mg/L	0.00551	-0.0109	mg/L	0.00551	50.36%
Si 251.611*†	325477.3	10.56	mg/L	0.011	10.56	mg/L	0.011	0.10%
Si 288.158†	97411.3	10.66	mg/L	0.032	10.66	mg/L	0.032	0.30%
Sn 189.927*†	59.2	0.0099	mg/L	0.00101	0.0099	mg/L	0.00101	10.27%

Sn 242.170†	63.1	0.0238 mg/L	0.00908	0.0238 mg/L	0.00908	38.19%
Sr 407.771*†	-15.1	0.0000 mg/L	0.00008	0.0000 mg/L	0.00008	259.99%
Sr 421.552†	299.8	0.0000 mg/L	0.00001	0.0000 mg/L	0.00001	15.34%
Ti 334.940†	46.6	0.0002 mg/L	0.00021	0.0002 mg/L	0.00021	133.11%
Ti 336.121*†	71.4	0.0003 mg/L	0.00024	0.0003 mg/L	0.00024	90.33%
Tl†	4.6	0.0014 mg/L	0.00052	0.0014 mg/L	0.00052	36.76%
Tl 190.801*†	0.2	0.0001 mg/L	0.00090	0.0001 mg/L	0.00090	>999.9%
Tl 351.924†	38.2	0.0105 mg/L	0.01787	0.0105 mg/L	0.01787	169.68%
V 292.402*†	5.7	0.0001 mg/L	0.00001	0.0001 mg/L	0.00001	7.37%
V 310.230†	-46.1	-0.0003 mg/L	0.00085	-0.0003 mg/L	0.00085	296.14%
Zn 202.548†	239.7	0.0034 mg/L	0.00001	0.0034 mg/L	0.00001	0.25%
Zn 206.200*†	168.5	0.0032 mg/L	0.00004	0.0032 mg/L	0.00004	1.30%
Zn 213.857*†	195.9	0.0033 mg/L	0.00000	0.0033 mg/L	0.00000	0.15%

Sequence No.: 34
Sample ID: CCV
Analyst: icp 5300
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/6/2008 3:51:53 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	172.0 kPa	0.60 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ho 339.898	58698.6	5.301	mg/L	0.0329				0.62%
Ho 345.600	98472.6	5.359	mg/L	0.0191				0.36%
Tb 384.873	14162.0	5.286	mg/L	0.0163				0.31%
Tb 350.917	25375.9	5.488	mg/L	0.0253				0.46%
Y 324.227	160744.9	5.380	mg/L	0.0190				0.35%
Y 371.029	277121.7	5.291	mg/L	0.0290				0.55%
Ag 328.068*†	31342.9	0.3726	mg/L	0.00036	0.3726	mg/L	0.00036	0.10%
QC value within limits for Ag 328.068* Recovery = 99.37%								
Ag 338.289†	18174.5	0.3729	mg/L	0.00112	0.3729	mg/L	0.00112	0.30%
Al 308.215*†	147028.7	13.24	mg/L	0.020	13.24	mg/L	0.020	0.15%
QC value within limits for Al 308.215* Recovery = 98.04%								
Al 396.153†	1243541.5	13.64	mg/L	0.103	13.64	mg/L	0.103	0.75%
As 188.979†	7862.3	3.710	mg/L	0.0346	3.710	mg/L	0.0346	0.93%
QC value within limits for As 188.979 Recovery = 98.93%								
As 193.696*†	6259.7	3.701	mg/L	0.0411	3.701	mg/L	0.0411	1.11%
QC value within limits for As 193.696* Recovery = 98.70%								
B 249.677*†	160895.2	7.690	mg/L	0.2194	7.690	mg/L	0.2194	2.85%
QC value greater than the upper limit for B 249.677* Recovery = 205.06%								
B 249.772†	246037.7	7.660	mg/L	0.2112	7.660	mg/L	0.2112	2.76%
Ba 455.403†	984971.9	7.352	mg/L	0.0260	7.352	mg/L	0.0260	0.35%
Ba 233.527*†	861163.5	7.526	mg/L	0.0131	7.526	mg/L	0.0131	0.17%
QC value within limits for Ba 233.527* Recovery = 100.35%								
Be 313.107†	642003.4	0.5590	mg/L	0.00075	0.5590	mg/L	0.00075	0.13%
Be 313.042*†	1243047.9	0.5595	mg/L	0.00115	0.5595	mg/L	0.00115	0.21%
QC value within limits for Be 313.042* Recovery = 99.46%								
Ca 422.673†	150718.3	28.76	mg/L	0.106	28.76	mg/L	0.106	0.37%
Ca 317.933*†	54242.9	28.96	mg/L	0.171	28.96	mg/L	0.171	0.59%
QC value within limits for Ca 317.933* Recovery = 96.52%								
Cd 226.502*†	46048.2	0.7536	mg/L	0.00020	0.7536	mg/L	0.00020	0.03%
QC value within limits for Cd 226.502* Recovery = 100.47%								
Cd 228.802†	46787.9	0.7468	mg/L	0.00127	0.7468	mg/L	0.00127	0.17%
Co 230.786†	69914.1	1.885	mg/L	0.0008	1.885	mg/L	0.0008	0.04%
Co 228.616*†	85196.0	1.886	mg/L	0.0012	1.886	mg/L	0.0012	0.06%
QC value within limits for Co 228.616* Recovery = 100.61%								
Cr 357.869†	20711.4	0.5798	mg/L	0.00097	0.5798	mg/L	0.00097	0.17%
Cr 267.716*†	24903.6	0.6042	mg/L	0.00140	0.6042	mg/L	0.00140	0.23%
QC value within limits for Cr 267.716* Recovery = 100.69%								
Cu 324.752*†	90905.0	0.9293	mg/L	0.00042	0.9293	mg/L	0.00042	0.05%
QC value within limits for Cu 324.752* Recovery = 99.12%								
Cu 327.393†	48987.5	0.9393	mg/L	0.00099	0.9393	mg/L	0.00099	0.11%
Fe 259.939†	2767.9	3.730	mg/L	0.0408	3.730	mg/L	0.0408	1.09%
Fe 273.955*†	68127.1	3.765	mg/L	0.0044	3.765	mg/L	0.0044	0.12%
QC value within limits for Fe 273.955* Recovery = 100.41%								
Fe 239.562†	704.1	3.664	mg/L	0.0512	3.664	mg/L	0.0512	1.40%
K 766.490*†	19784.8	27.52	mg/L	0.043	27.52	mg/L	0.043	0.16%
QC value within limits for K 766.490* Recovery = 101.91%								
Mg 279.077*†	54853.1	7.520	mg/L	0.0153	7.520	mg/L	0.0153	0.20%
QC value within limits for Mg 279.077* Recovery = 100.27%								
Mg 280.271†	93114.0	7.380	mg/L	0.0337	7.380	mg/L	0.0337	0.46%
Mn 257.610*†	412610.9	0.7495	mg/L	0.00071	0.7495	mg/L	0.00071	0.09%
QC value within limits for Mn 257.610* Recovery = 99.93%								
Mn 259.372†	310894.8	0.7490	mg/L	0.00047	0.7490	mg/L	0.00047	0.06%
Mo 202.031*†	7309.1	0.5989	mg/L	0.00537	0.5989	mg/L	0.00537	0.90%
QC value within limits for Mo 202.031* Recovery = 99.82%								
Mo 203.845†	5025.5	0.5988	mg/L	0.00522	0.5988	mg/L	0.00522	0.87%

Na 589.592*†	144314.0	39.00	mg/L	0.210	39.00	mg/L	0.210	0.54%
QC value within limits for Na 589.592* Recovery = 108.34%								
Na 330.237†	9247.9	35.64	mg/L	0.004	35.64	mg/L	0.004	0.01%
Ni 231.604*†	14598.5	0.5994	mg/L	0.00644	0.5994	mg/L	0.00644	1.07%
QC value within limits for Ni 231.604* Recovery = 99.90%								
Ni 232.003†	9019.7	0.5945	mg/L	0.00447	0.5945	mg/L	0.00447	0.75%
Pb 217.000†	6891.7	3.709	mg/L	0.0310	3.709	mg/L	0.0310	0.84%
Pb 220.353*†	24783.0	3.760	mg/L	0.0020	3.760	mg/L	0.0020	0.05%
QC value within limits for Pb 220.353* Recovery = 100.28%								
Sb 206†	13681.6	4.475	mg/L	0.0410	4.475	mg/L	0.0410	0.92%
Sb 217.582*†	10482.3	4.485	mg/L	0.0367	4.485	mg/L	0.0367	0.82%
QC value within limits for Sb 217.582* Recovery = 99.66%								
Sb 206.836†	16625.1	4.602	mg/L	0.0225	4.602	mg/L	0.0225	0.49%
Se 203.985†	2055.4	1.478	mg/L	0.0031	1.478	mg/L	0.0031	0.21%
Se 196.026*†	3343.0	1.486	mg/L	0.0090	1.486	mg/L	0.0090	0.61%
QC value within limits for Se 196.026* Recovery = 99.05%								
Si 288.158†	51592.7	6.066	mg/L	0.0025	6.066	mg/L	0.0025	0.04%
Si 251.611*†	177953.3	6.116	mg/L	0.0004	6.116	mg/L	0.0004	0.01%
QC value within limits for Si 251.611* Recovery = 101.94%								
Tl†	4611.2	1.503	mg/L	0.0185	1.503	mg/L	0.0185	1.23%
Tl 351.924†	4757.5	1.448	mg/L	0.0157	1.448	mg/L	0.0157	1.08%
Tl 190.801*†	5467.7	1.504	mg/L	0.0184	1.504	mg/L	0.0184	1.22%
QC value within limits for Tl 190.801* Recovery = 100.27%								
V 292.402*†	146729.3	1.881	mg/L	0.0010	1.881	mg/L	0.0010	0.05%
QC value within limits for V 292.402* Recovery = 100.34%								
V 310.230†	277064.7	1.853	mg/L	0.0024	1.853	mg/L	0.0024	0.13%
Zn 213.857*†	139592.1	2.515	mg/L	0.0019	2.515	mg/L	0.0019	0.07%
QC value within limits for Zn 213.857* Recovery = 100.60%								
Zn 202.548†	168099.3	2.512	mg/L	0.0076	2.512	mg/L	0.0076	0.30%

QC Failed. Continue with analysis.

Sequence No.: 8
Sample ID: CCV
Analyst: icp 5300
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/6/2008 5:12:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	172.0 kPa	0.60 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Ho 339.898	58220.3	5.258	mg/L	0.0185				0.35%
Ho 345.600	97226.0	5.291	mg/L	0.0316				0.60%
Tb 384.873	13851.3	5.170	mg/L	0.0075				0.15%
Tb 350.917	24910.0	5.387	mg/L	0.0253				0.47%
Y 324.227	157716.1	5.279	mg/L	0.0381				0.72%
Y 371.029	271798.4	5.189	mg/L	0.0395				0.76%
Al 308.215*†	149166.6	13.43	mg/L	0.021	13.43	mg/L	0.021	0.16%
QC value within limits for Al 308.215* Recovery = 99.47%								
Al 396.153†	1271067.1	13.94	mg/L	0.071	13.94	mg/L	0.071	0.51%
B 249.677*†	79771.3	3.813	mg/L	0.0088	3.813	mg/L	0.0088	0.23%
QC value within limits for B 249.677* Recovery = 101.69%								
B 249.772†	122931.3	3.827	mg/L	0.0094	3.827	mg/L	0.0094	0.25%
Ba 455.403†	1028709.3	7.679	mg/L	0.0157	7.679	mg/L	0.0157	0.20%
Ba 233.527*†	880085.4	7.693	mg/L	0.0377	7.693	mg/L	0.0377	0.49%
QC value within limits for Ba 233.527* Recovery = 102.58%								
Ca 422.673†	153875.0	29.36	mg/L	0.097	29.36	mg/L	0.097	0.33%
Ca 317.933*†	54728.9	29.22	mg/L	0.242	29.22	mg/L	0.242	0.83%
QC value within limits for Ca 317.933* Recovery = 97.39%								
Fe 259.939†	2816.6	3.796	mg/L	0.0319	3.796	mg/L	0.0319	0.84%
Fe 273.955*†	69220.7	3.826	mg/L	0.0171	3.826	mg/L	0.0171	0.45%
QC value within limits for Fe 273.955* Recovery = 102.02%								
Fe 239.562†	725.4	3.775	mg/L	0.0151	3.775	mg/L	0.0151	0.40%
K 766.490*†	19035.8	26.47	mg/L	0.073	26.47	mg/L	0.073	0.27%
QC value within limits for K 766.490* Recovery = 98.05%								
Mg 279.077*†	55729.0	7.640	mg/L	0.0022	7.640	mg/L	0.0022	0.03%
QC value within limits for Mg 279.077* Recovery = 101.87%								
Mg 280.271†	94095.4	7.458	mg/L	0.0291	7.458	mg/L	0.0291	0.39%
Mn 257.610*†	418236.4	0.7599	mg/L	0.00134	0.7599	mg/L	0.00134	0.18%
QC value within limits for Mn 257.610* Recovery = 101.32%								
Mn 259.372†	314122.4	0.7568	mg/L	0.00196	0.7568	mg/L	0.00196	0.26%
Na 589.592*†	136439.7	36.88	mg/L	0.066	36.88	mg/L	0.066	0.18%
QC value within limits for Na 589.592* Recovery = 102.43%								
Na 330.237†	9041.4	34.84	mg/L	0.087	34.84	mg/L	0.087	0.25%
Si 288.158†	51950.6	6.108	mg/L	0.0089	6.108	mg/L	0.0089	0.15%
Si 251.611*†	178917.8	6.150	mg/L	0.0137	6.150	mg/L	0.0137	0.22%
QC value within limits for Si 251.611* Recovery = 102.50%								

All analyte(s) passed QC.

Work Order#: 08-12-0410

Client: WEISS Associates

EPA 6020

Calibration

SAMPLE INFORMATION

Sample ID: ICV

Sample Description:

Autosampler Position: 6

Sample Date/Time: Saturday, December 06, 2008 11:09:57

Method File: C:\elandata\Method\cel\cel_std_t22.mth

Dataset File: C:\elandata\Dataset\Data\08120601\ICV.020

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass		Meas. Intens. Mean	Conc. Mean	Report Unit	Meas. Intens. RSD	Blank Intensity
Li	6		95953		ppb	1.6	97632
Be	9		58130	103.9142	ppb	0.6	43
B	11		63234	102.6311	ppb	1.1	2084
B	10		13774	107.6394	ppb	3.2	463
Sc	45	>	1226504		ppb	1.0	1236502
Al	27		1108821	106.7220	ppb	0.7	24107
Mg	24		723677	108.5366	ppb	0.5	9447
Ti	47		146438	94.6208	ppb	1.3	639
Ti	49		122309	94.9621	ppb	2.0	1936
V	51		1795194	98.0209	ppb	1.9	-9237
Cr	52		1645103	98.2236	ppb	1.6	22767
Mn	55		2420907	97.7307	ppb	1.8	2291
Fe	54		169823	109.9311	ppb	2.6	35782
Fe	57		59962	105.9242	ppb	1.6	9435
Co	59		1914414	99.5213	ppb	0.4	350
Ni	60		417066	99.8948	ppb	1.9	181
Cu	65		448758	104.6387	ppb	0.7	728
Ge	74		388283		mg/L	0.9	394237
As	75		323257	98.3832	ppb	2.2	-1174
As-1	75		321496	98.2312	ppb	1.9	7690
Se	78		86225	99.9721	ppb	0.8	8831
Se	82		32280	100.3385	ppb	1.1	3
Sr	88		3535591	98.0070	ppb	1.1	1599
Zn	66		274708	100.3656	ppb	0.5	2475
Zn	68		202193	100.6943	ppb	1.4	2670
Y	89		2361034		ppb	0.7	2361352
Mo	95		574715	98.7841	ppb	1.6	1024
In	115	>	1923456		ppb	1.3	1936367
Ag	107		683610	53.3102	ppb	2.1	724
Cd	111		323080	102.6555	ppb	0.6	1554
Cd	114		721364	104.3616	ppb	1.1	169
Sn	118		825385	100.5454	ppb	1.8	4933
Sb	123		720237	90.4177	ppb	4.5	1463
Ba	135		254834	100.7317	ppb	1.4	656
Tb	159	>	2550800		ppb	1.3	2503922
Tl	203		1147367	96.5780	ppb	1.6	3421
Pb	207		3727425	100.5273	ppb	0.9	948
Bi	209		1741302		ppb	1.0	1742965

QC Out Of Limits

Mass	Analyte	Out of Limits Message

SAMPLE INFORMATION

Sample ID: CCV

Sample Description:

Autosampler Position: 4

Sample Date/Time: Saturday, December 06, 2008 21:13:49

Method File: C:\elandata\Method\cel\cel_std_t22.mth

Dataset File: C:\elandata\Dataset\Data\08120601\CCV.166

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass		Meas. Intens. Mean	Conc. Mean	Report Unit	Meas. Intens. RSD	Blank Intensity
Li	6		106175		ppb	3.2	109369
Be	9		58533	99.4396	ppb	3.0	36
B	11		150656	251.5910	ppb	2.3	1033
B	10		32087	247.1030	ppb	2.0	247
Sc	45	>	1286484		ppb	1.2	1298939
Al	27		1030725	106.1119	ppb	1.2	13647
Mg	24		30510506	5037.4849	ppb	3.4	3853
Ti	47		144079	99.5612	ppb	1.4	466
Ti	49		118572	100.1424	ppb	0.6	1243
V	51		1674598	100.4044	ppb	1.1	-16388
Cr	52		1579814	102.6573	ppb	0.5	27820
Mn	55		2294012	98.7574	ppb	0.5	2477
Fe	54		5709310	4990.9187	ppb	0.9	36974
Fe	57		2257087	5039.3418	ppb	2.2	11320
Co	59		1780305	100.0564	ppb	0.7	125
Ni	60		388876	100.2245	ppb	1.2	133
Cu	65		410500	102.6207	ppb	0.9	330
Ge	74		403155		mg/L	1.4	413374
As	75		305509	100.1325	ppb	1.4	-1001
As-1	75		302544	100.1305	ppb	1.6	7304
Se	78		80049	100.7383	ppb	2.2	8241
Se	82		30454	100.6638	ppb	1.0	-10
Sr	88		3276968	98.7604	ppb	1.6	938
Zn	66		260943	100.1710	ppb	1.9	15687
Zn	68		190665	99.9638	ppb	1.1	12141
Y	89		2411970		ppb	0.8	2426426
Mo	95		535615	98.8303	ppb	1.0	248
In	115	>	1965021		ppb	0.7	1999720
Ag	107		1242962	103.5627	ppb	1.8	289
Cd	111		297178	100.8445	ppb	1.6	1292
Cd	114		664013	100.8127	ppb	1.6	53
Sn	118		771559	99.8453	ppb	1.0	2790
Sb	123		754510	100.7901	ppb	0.9	1003
Ba	135		236262	100.3432	ppb	0.1	261
Tb	159	>	2569698		ppb	2.0	2507629
Tl	203		1043840	100.0246	ppb	0.3	829
Pb	207		3339514	98.8496	ppb	0.3	585
Bi	209		1701139		ppb	1.1	1737311

QC Out Of Limits

Mass	Analyte	Out of Limits Message

SAMPLE INFORMATION

Sample ID: CCV

Sample Description:

Autosampler Position: 4

Sample Date/Time: Saturday, December 06, 2008 22:11:04

Method File: C:\elandata\Method\cel\cel_std_t22.mth

Dataset File: C:\elandata\Dataset\Data\08120601\CCV.179

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass		Meas. Intens. Mean	Conc. Mean	Report Unit	Meas. Intens. RSD	Blank Intensity
Li	6		58626		ppb	2.5	109369
Be	9		42224	80.6923	ppb	0.6	36
B	11		122687	230.3131	ppb	1.4	1033
B	10		24533	212.2511	ppb	3.9	247
Sc	45	>	1143504		ppb	0.9	1298939
Al	27		1052323	122.0795	ppb	0.6	13647
Mg	24		28953646	5377.2568	ppb	2.4	3853
Ti	47		126741	95.2218	ppb	1.4	466
Ti	49		109961	100.9952	ppb	1.3	1243
V	51		1558762	101.6235	ppb	1.5	-16388
Cr	52		1454485	102.7776	ppb	1.1	27820
Mn	55		2055766	96.2290	ppb	2.0	2477
Fe	54		5168853	4912.9656	ppb	1.9	36974
Fe	57		2019448	4902.5293	ppb	1.1	11320
Co	59		1603671	98.0094	ppb	1.1	125
Ni	60		353049	98.9362	ppb	1.3	133
Cu	65		363630	98.8471	ppb	0.5	330
Ge	74		353156		mg/L	1.1	413374
As	75		265804	94.7526	ppb	1.0	-1001
As-1	75		263614	94.7447	ppb	1.3	7304
Se	78		69329	94.2139	ppb	1.6	8241
Se	82		26238	94.3134	ppb	0.4	-10
Sr	88		2885720	94.5725	ppb	1.0	938
Zn	66		232274	96.7591	ppb	0.6	15687
Zn	68		168709	95.9299	ppb	0.9	12141
Y	89		2122136		ppb	1.0	2426426
Mo	95		487638	97.8499	ppb	1.1	248
In	115	>	1807149		ppb	1.5	1999720
Ag	107		1139689	103.2582	ppb	1.4	289
Cd	111		269442	99.4196	ppb	1.3	1292
Cd	114		604383	99.7850	ppb	1.1	53
Sn	118		713448	100.4048	ppb	0.7	2790
Sb	123		694552	100.8967	ppb	0.5	1003
Ba	135		220608	101.8912	ppb	0.8	261
Tb	159	>	2544499		ppb	0.7	2507629
Tl	203		1097469	106.1778	ppb	1.4	829
Pb	207		3513945	105.0155	ppb	0.5	585
Bi	209		1790701		ppb	1.3	1737311

QC Out Of Limits

Mass	Analyte	Out of Limits Message
9	Be	
27	Al	

SAMPLE INFORMATION

For Br (XC)

Sample ID: ICV

Sample Description: water

Autosampler Position: 6

Sample Date/Time: Monday, December 08, 2008 12:46:00

Method File: C:\elandata\Method\cel\cel_std_t22.mth

Dataset File: C:\elandata\Dataset\Data\08120801\ICV.016

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass		Meas. Intens. Mean	Conc. Mean	Report Unit	Meas. Intens. RSD	Blank Intensity
Li	6		76069		ppb	5.2	106918
Be	9		45569	102.8832	ppb	3.6	38
B	11		41150	102.8921	ppb	3.9	627
B	10		9082	103.6103	ppb	5.2	163
Sc	45	>	824623		ppb	1.3	826393
Al	27		706691	98.8093	ppb	2.0	6838
Mg	24		472048	108.5567	ppb	0.2	1759
Ti	47		100811	93.5704	ppb	0.9	539
Ti	49		84832	93.5624	ppb	1.1	2107
V	51		1327230	104.5708	ppb	1.2	-11110
Cr	52		1169912	100.9182	ppb	1.4	14954
Mn	55		1761860	99.0876	ppb	1.2	1979
Fe	54		118932	107.7342	ppb	1.9	27506
Fe	57		43551	107.6394	ppb	1.1	7227
Co	59		1370212	102.3545	ppb	1.5	426
Ni	60		293251	100.7581	ppb	2.9	346
Cu	65		323579	102.2721	ppb	1.9	5314
Ge	74		302354		mg/L	2.2	306960
As	75		264570	101.1776	ppb	0.2	-1235
As-1	75		262497	101.4977	ppb	0.2	5746
Se	78		63314	99.7002	ppb	1.2	6812
Se	82		23989	98.6951	ppb	1.1	-49
Sr	88		2875086	97.8235	ppb	0.9	634
Zn	66		215693	99.9680	ppb	0.4	1190
Zn	68		159076	100.1922	ppb	2.4	1578
Y	89		1842176		ppb	0.6	1905859
Mo	95		459537	99.1446	ppb	0.7	46
In	115	>	1580696		ppb	1.1	1627357
Ag	107		579862	53.6856	ppb	1.7	143
Cd	111		278814	102.4931	ppb	0.7	1095
Cd	114		589562	103.3711	ppb	1.0	-45
Sn	118		712471	99.6557	ppb	0.9	1406
Sb	123		676193	91.4895	ppb	4.3	351
Ba	135		217360	96.2194	ppb	2.0	135
Tb	159	>	1738504		ppb	1.9	1779460
Tl	203		894158	101.6863	ppb	1.2	79
Pb	207		2985092	105.5871	ppb	1.9	398
Bi	209		1367405		ppb	3.2	1394879

QC Out Of Limits

Mass	Analyte	Out of Limits Message

SAMPLE INFORMATION

Sample ID: CCV

Sample Description:

Autosampler Position: 4

Sample Date/Time: Monday, December 08, 2008 13:29:57

Method File: C:\elandata\Method\cel\cel_std_t22.mth

Dataset File: C:\elandata\Dataset\Data\08120801\CCV.026

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass		Meas. Intens. Mean	Conc. Mean	Report Unit	Meas. Intens. RSD	Blank Intensity
Li	6		64987		ppb	3.5	106918
Be	9		43540	99.5159	ppb	2.8	38
B	11		97207	248.4534	ppb	1.9	627
B	10		20955	244.6310	ppb	3.0	163
Sc	45	>	814510		ppb	1.8	826393
Al	27		712597	100.9148	ppb	0.2	6838
Mg	24		21780563	5090.5427	ppb	2.3	1759
Ti	47		103221	95.6102	ppb	2.6	539
Ti	49		88954	97.9965	ppb	3.0	2107
V	51		1339970	105.3322	ppb	1.8	-11110
Cr	52		1203531	103.6185	ppb	2.0	14954
Mn	55		1780490	99.9005	ppb	1.5	1979
Fe	54		4350738	5038.5656	ppb	2.7	27506
Fe	57		1801347	5274.7107	ppb	1.7	7227
Co	59		1331152	99.1961	ppb	1.2	426
Ni	60		292225	100.2013	ppb	1.2	346
Cu	65		317929	100.2377	ppb	1.4	5314
Ge	74		299370		mg/L	0.5	306960
As	75		267042	101.8886	ppb	1.4	-1235
As-1	75		264574	102.0815	ppb	1.1	5746
Se	78		64034	100.7110	ppb	3.3	6812
Se	82		24397	100.1466	ppb	2.5	-49
Sr	88		2942906	99.9136	ppb	1.3	634
Zn	66		222495	102.8938	ppb	0.5	1190
Zn	68		162550	102.1643	ppb	0.7	1578
Y	89		1861793		ppb	0.8	1905859
Mo	95		468762	100.8976	ppb	0.3	46
In	115	>	1584460		ppb	1.3	1627357
Ag	107		1129789	104.3798	ppb	0.5	143
Cd	111		273145	100.1615	ppb	1.3	1095
Cd	114		583433	102.0413	ppb	2.6	-45
Sn	118		729798	101.8341	ppb	0.7	1406
Sb	123		743704	100.3998	ppb	0.7	351
Ba	135		221867	97.9783	ppb	1.0	135
Tb	159	>	1759376		ppb	2.4	1779460
Tl	203		910369	102.2778	ppb	2.2	79
Pb	207		2935055	102.5876	ppb	0.7	398
Bi	209		1328322		ppb	0.7	1394879

QC Out Of Limits

Mass	Analyte	Out of Limits Message

SAMPLE INFORMATION

Sample ID: CCV

Sample Description:

Autosampler Position: 4

Sample Date/Time: Monday, December 08, 2008 14:03:11

Method File: C:\elandata\Method\cel\cel_std_t22.mth

Dataset File: C:\elandata\Dataset\Data\08120801\CCV.033

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass		Meas. Intens. Mean	Conc. Mean	Report Unit	Meas. Intens. RSD	Blank Intensity
Li	6		70297		ppb	5.0	106918
Be	9		44428	100.9112	ppb	1.5	38
B	11		100862	256.0574	ppb	5.9	627
B	10		21250	246.5158	ppb	1.9	163
Sc	45	>	819735		ppb	0.4	826393
Al	27		729733	102.6751	ppb	2.2	6838
Mg	24		21766192	5052.7463	ppb	4.1	1759
Ti	47		102795	96.0624	ppb	3.1	539
Ti	49		87260	96.9529	ppb	1.9	2107
V	51		1297469	102.9086	ppb	2.4	-11110
Cr	52		1182756	102.7220	ppb	2.8	14954
Mn	55		1751904	99.1815	ppb	3.1	1979
Fe	54		4368868	5106.3457	ppb	3.1	27506
Fe	57		1772706	5237.3776	ppb	0.8	7227
Co	59		1318144	99.1182	ppb	0.0	426
Ni	60		289998	100.3190	ppb	1.5	346
Cu	65		313652	99.7624	ppb	1.7	5314
Ge	74		300276		mg/L	0.9	306960
As	75		266907	102.7412	ppb	2.2	-1235
As-1	75		264645	103.0417	ppb	2.2	5746
Se	78		63640	101.0189	ppb	1.5	6812
Se	82		24178	100.1233	ppb	1.6	-49
Sr	88		2893543	99.1089	ppb	0.3	634
Zn	66		216796	101.1496	ppb	0.1	1190
Zn	68		159772	101.3127	ppb	1.7	1578
Y	89		1848663		ppb	0.3	1905859
Mo	95		459705	99.8366	ppb	0.6	46
In	115	>	1570187		ppb	0.5	1627357
Ag	107		1097740	102.3257	ppb	1.2	143
Cd	111		273166	101.0810	ppb	1.4	1095
Cd	114		577296	101.8981	ppb	0.4	-45
Sn	118		710869	100.0866	ppb	1.3	1406
Sb	123		722931	98.4771	ppb	0.3	351
Ba	135		217549	96.9369	ppb	2.6	135
Tb	159	>	1736919		ppb	2.5	1779460
Tl	203		902015	102.6780	ppb	1.1	79
Pb	207		2886114	102.1855	ppb	0.5	398
Bi	209		1339942		ppb	1.1	1394879

QC Out Of Limits

Mass	Analyte	Out of Limits Message

Work Order#: 08-12-0410

Client: WEISS Associates

EPA 7470A

Calibration

==========

Analysis Begun

Logged In Analyst: Xue-Wen Xu
Spectrometer Model: FIMS-400, S/N B050-9560

Technique: AA FIMS-MHS
Autosampler Model: AS-90

Sample Information File: C:\data-AA\xue-wen xu\Sample Information\081205D1.sif
Batch ID: 081205D1
Results Data Set: 081205D1
Results Library: C:\data-AA\xue-wen xu\Results\Results.mdb

==========

Method Loaded
Method Name: Hg
Method Description:

Method Last Saved: 12/5/2008 10:35:52 AM

==========

Sequence No.: 1
Sample ID: Calib blank 1
Analyst:

Autosampler Location: 6
Date Collected: 12/5/2008 12:14:37 PM
Data Type: Original

Replicate Data: Calib blank 1

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0000	-0.0009	0.0000	12:15:43	Yes
2		[0.00]	0.0000	-0.0004	0.0000	12:16:26	Yes
Mean:		[0.00]	0.0000				
SD:		0.00	0.0000				
%RSD:		0.00	39.02				

Auto-zero performed.

==========

Sequence No.: 2
Sample ID: 0.25ppb
Analyst:

Autosampler Location: 1
Date Collected: 12/5/2008 12:16:53 PM
Data Type: Original

Replicate Data: 0.25ppb

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.250000]	0.0016	0.0069	0.0016	12:17:56	Yes
2		[0.250000]	0.0016	0.0061	0.0016	12:18:40	Yes
Mean:		[0.250000]	0.0016				
SD:		0.000000	0.0000				
%RSD:		0.000000	0.20				

Standard number 1 applied. [0.250000]
Correlation Coef.: 1.000000 Slope: 0.00634 Intercept: 0.00000

==========

Sequence No.: 3
Sample ID: 1.00ppb
Analyst:

Autosampler Location: 2
Date Collected: 12/5/2008 12:19:04 PM
Data Type: Original

Replicate Data: 1.00ppb

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[1.000000]	0.0059	0.0240	0.0059	12:20:08	Yes
2		[1.000000]	0.0058	0.0238	0.0058	12:20:52	Yes
Mean:		[1.000000]	0.0059				
SD:		0.000000	0.0001				
%RSD:		0.000000	0.98				

Standard number 2 applied. [1.000000]
Correlation Coef.: 0.999764 Slope: 0.00583 Intercept: 0.00005

==========

Sequence No.: 4
Sample ID: 2.00ppb
Analyst:

Autosampler Location: 3
Date Collected: 12/5/2008 12:21:16 PM
Data Type: Original

Replicate Data: 2.00ppb

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.000000]	0.0116	0.0419	0.0116	12:22:20	Yes
2		[2.000000]	0.0118	0.0465	0.0118	12:23:05	Yes
Mean:		[2.000000]	0.0117				
SD:		0.000000	0.0001				
%RSD:		0.000000	1.14				

Standard number 3 applied. [2.000000]
Correlation Coef.: 0.999945 Slope: 0.00581 Intercept: 0.00006

Sequence No.: 5 **Autosampler Location: 4**
Sample ID: 5.00ppb **Date Collected: 12/5/2008 12:23:29 PM**
Analyst: **Data Type: Original**

Replicate Data: 5.00ppb

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.000000]	0.0298	0.1149	0.0299	12:24:34	Yes
2		[5.000000]	0.0297	0.1132	0.0297	12:25:18	Yes
Mean:		[5.000000]	0.0298				
SD:		0.000000	0.0001				
%RSD:		0.000000	0.33				

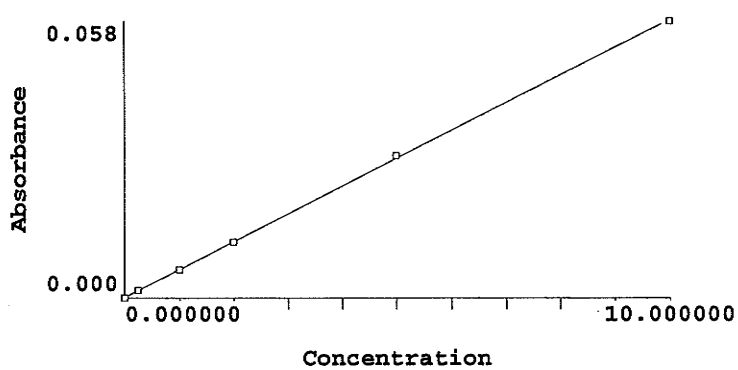
Standard number 4 applied. [5.000000]
Correlation Coef.: 0.999948 Slope: 0.00595 Intercept: -0.00003

Sequence No.: 6 **Autosampler Location: 5**
Sample ID: 10.00ppb **Date Collected: 12/5/2008 12:25:43 PM**
Analyst: **Data Type: Original**

Replicate Data: 10.00ppb

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.00000]	0.0585	0.2263	0.0585	12:26:49	Yes
2		[10.00000]	0.0580	0.2240	0.0580	12:27:33	Yes
Mean:		[10.00000]	0.0583				
SD:		0.00000	0.0004				
%RSD:		0.00000	0.66				

Standard number 5 applied. [10.00000]
Correlation Coef.: 0.999938 Slope: 0.00584 Intercept: 0.00011



Calibration data for Hg 253.7 **Equation: Linear, Calculated Intercept**

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib blank 1	0.0000	0	-0.018618	0.00	39.0
0.25ppb	0.0016	0.250000	0.253070	0.00	0.2
1.00ppb	0.0059	1.000000	0.986615	0.00	1.0
2.00ppb	0.0117	2.000000	1.982106	0.00	1.1
5.00ppb	0.0298	5.000000	5.083973	0.00	0.3
10.00ppb	0.0583	10.00000	9.962854	0.00	0.7

Correlation Coef.: 0.999938 Slope: 0.00584 Intercept: 0.00011

==========

Analysis Begun

Logged In Analyst: Xue-Wen Xu
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-400, S/N B050-9560
Autosampler Model: AS-90

Sample Information File: C:\data-AA\xue-wen xu\Sample Information\081205D1.sif
Batch ID: 081205D1
Results Data Set: 081205D1
Results Library: C:\data-AA\xue-wen xu\Results\Results.mdb

==========

Method Loaded
Method Name: Hg
Method Last Saved: 12/5/2008 10:35:52 AM
Method Description:

==========

Sequence No.: 1
Autosampler Location: 7
Sample ID: ICV
Date Collected: 12/5/2008 12:28:43 PM
Analyst:
Data Type: Original

Replicate Data: ICV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00508	5.08	0.0298	0.1107	0.0298	12:29:49	Yes
2	0.00501	5.01	0.0293	0.1119	0.0293	12:30:33	Yes
Mean:	0.00504	5.04	0.0295				
SD:	0.000052	0.0519	0.0003				
%RSD:	1.03	1.03	1.03				

QC value within limits for Hg 253.7 Recovery = 100.88%
All analyte(s) passed QC.

==========

Sequence No.: 2
Autosampler Location: 6
Sample ID: ICB
Date Collected: 12/5/2008 12:30:59 PM
Analyst:
Data Type: Original

Replicate Data: ICB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.000017	-0.0167	0.0000	-0.0004	0.0000	12:32:05	Yes
2	-0.000017	-0.0169	0.0000	-0.0009	0.0000	12:32:49	Yes
Mean:	-0.000017	-0.0168	0.0000				
SD:	0.000000	0.000119	0.0000				
%RSD:	0.711	0.711	6.48				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 3
Autosampler Location: 9
Sample ID: CRDL 0.50 PPB
Date Collected: 12/5/2008 12:33:15 PM
Analyst:
Data Type: Original

Replicate Data: CRDL 0.50 PPB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000475	0.475	0.0029	0.0099	0.0029	12:34:19	Yes
2	0.000470	0.470	0.0028	0.0102	0.0029	12:35:03	Yes
Mean:	0.000473	0.473	0.0029				
SD:	0.000004	0.00418	0.0000				
%RSD:	0.884	0.884	0.85				

==========

Sequence No.: 4
Autosampler Location: 3
Sample ID: CCV
Date Collected: 12/5/2008 12:35:27 PM
Analyst:
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00196	1.96	0.0116	0.0438	0.0116	12:36:31	Yes
2	0.00199	1.99	0.0117	0.0458	0.0117	12:37:15	Yes
Mean:	0.00198	1.98	0.0116				
SD:	0.000021	0.0211	0.0001				
%RSD:	1.07	1.07	1.06				

QC value within limits for Hg 253.7 Recovery = 98.79%
All analyte(s) passed QC.

==========

Sequence No.: 5 **Autosampler Location: 6**
Sample ID: CCB **Date Collected: 12/5/2008 12:37:40 PM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.000019	-0.0193	-0.0000	-0.0006	0.0000	12:38:46	Yes
2	-0.000020	-0.0200	-0.0000	-0.0009	0.0000	12:39:29	Yes
Mean:	-0.000020	-0.0196	-0.0000				
SD:	0.000000	0.000493	0.0000				
%RSD:	2.51	2.51	48.81				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

2	-0.000022	-0.0109	0.0000	0.0002	0.0001	14:13:03	Yes
Mean:	-0.000024	-0.0119	0.0000				
SD:	0.000003	0.00137	0.0000				
%RSD:	11.5	11.5	20.43				

==========

Sequence No.: 24 **Autosampler Location: 29**
Sample ID: 08-12-0373-9 **Date Collected: 12/5/2008 2:13:29 PM**
Analyst: **Data Type: Original**

Replicate Data: 08-12-0373-9

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.000019	-0.00947	0.0001	0.0002	0.0001	14:14:35	Yes
2	-0.000010	-0.00496	0.0001	0.0006	0.0001	14:15:19	Yes
Mean:	-0.000014	-0.00721	0.0001				
SD:	0.000006	0.00318	0.0000				
%RSD:	44.2	44.2	27.92				

==========

Sequence No.: 25 **Autosampler Location: 3**
Sample ID: CCV **Date Collected: 12/5/2008 2:15:46 PM**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00176	1.76	0.0104	0.0412	0.0104	14:16:50	Yes
2	0.00176	1.76	0.0104	0.0403	0.0104	14:17:34	Yes
Mean:	0.00176	1.76	0.0104				
SD:	0.000000	0.000039	0.0000				
%RSD:	0.00223	0.00223	0.00				

QC value within limits for Hg 253.7 Recovery = 88.03%
All analyte(s) passed QC.

==========

Sequence No.: 26 **Autosampler Location: 6**
Sample ID: CCB **Date Collected: 12/5/2008 2:17:59 PM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.000012	-0.0122	0.0000	-0.0002	0.0001	14:19:04	Yes
2	-0.000008	-0.00831	0.0001	0.0007	0.0001	14:19:49	Yes
Mean:	-0.000010	-0.0103	0.0000				
SD:	0.000003	0.00278	0.0000				
%RSD:	27.0	27.0	33.28				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 27 **Autosampler Location: 30**
Sample ID: 08-12-0410-2 **Date Collected: 12/5/2008 2:20:15 PM**
Analyst: **Data Type: Original**

Replicate Data: 08-12-0410-2

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000008	0.00418	0.0001	0.0006	0.0001	14:21:21	Yes
2	0.000013	0.00661	0.0001	0.0008	0.0002	14:22:05	Yes
Mean:	0.000011	0.00539	0.0001				
SD:	0.000003	0.00172	0.0000				
%RSD:	31.8	31.8	7.15				

==========

Sequence No.: 28 **Autosampler Location: 31**
Sample ID: 08-12-0410-3 **Date Collected: 12/5/2008 2:22:31 PM**

Analyst: Data Type: Original

Replicate Data: 08-12-0410-3

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000007	0.00372	0.0001	0.0008	0.0001	14:23:38	Yes
2	0.000015	0.00743	0.0002	0.0009	0.0002	14:24:22	Yes
Mean:	0.000011	0.00558	0.0001				
SD:	0.000005	0.00262	0.0000				
%RSD:	47.0	47.0	10.83				

Sequence No.: 29 Autosampler Location: 32
Sample ID: 08-12-0476-2 Date Collected: 12/5/2008 2:24:49 PM
Analyst: Data Type: Original

Replicate Data: 08-12-0476-2

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000038	0.0189	0.0002	0.0012	0.0002	14:25:51	Yes
2	0.000029	0.0147	0.0002	0.0004	0.0002	14:26:35	Yes
Mean:	0.000034	0.0168	0.0002				
SD:	0.000006	0.00296	0.0000				
%RSD:	17.7	17.7	8.38				

Sequence No.: 30 Autosampler Location: 3
Sample ID: CCV Date Collected: 12/5/2008 2:26:58 PM
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00176	1.76	0.0104	0.0406	0.0104	14:28:03	Yes
2	0.00177	1.77	0.0104	0.0407	0.0104	14:28:47	Yes
Mean:	0.00176	1.76	0.0104				
SD:	0.000004	0.00350	0.0000				
%RSD:	0.199	0.199	0.20				

QC value within limits for Hg 253.7 Recovery = 88.15%
All analyte(s) passed QC.

Sequence No.: 31 Autosampler Location: 6
Sample ID: CCB Date Collected: 12/5/2008 2:29:11 PM
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.000013	-0.0127	0.0000	0.0000	0.0001	14:30:17	Yes
2	-0.000013	-0.0134	0.0000	-0.0002	0.0000	14:31:01	Yes
Mean:	-0.000013	-0.0131	0.0000				
SD:	0.000000	0.000483	0.0000				
%RSD:	3.69	3.69	8.70				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Work Order#: 08-12-0410

Client: WEISS Associates

EPA 8081A

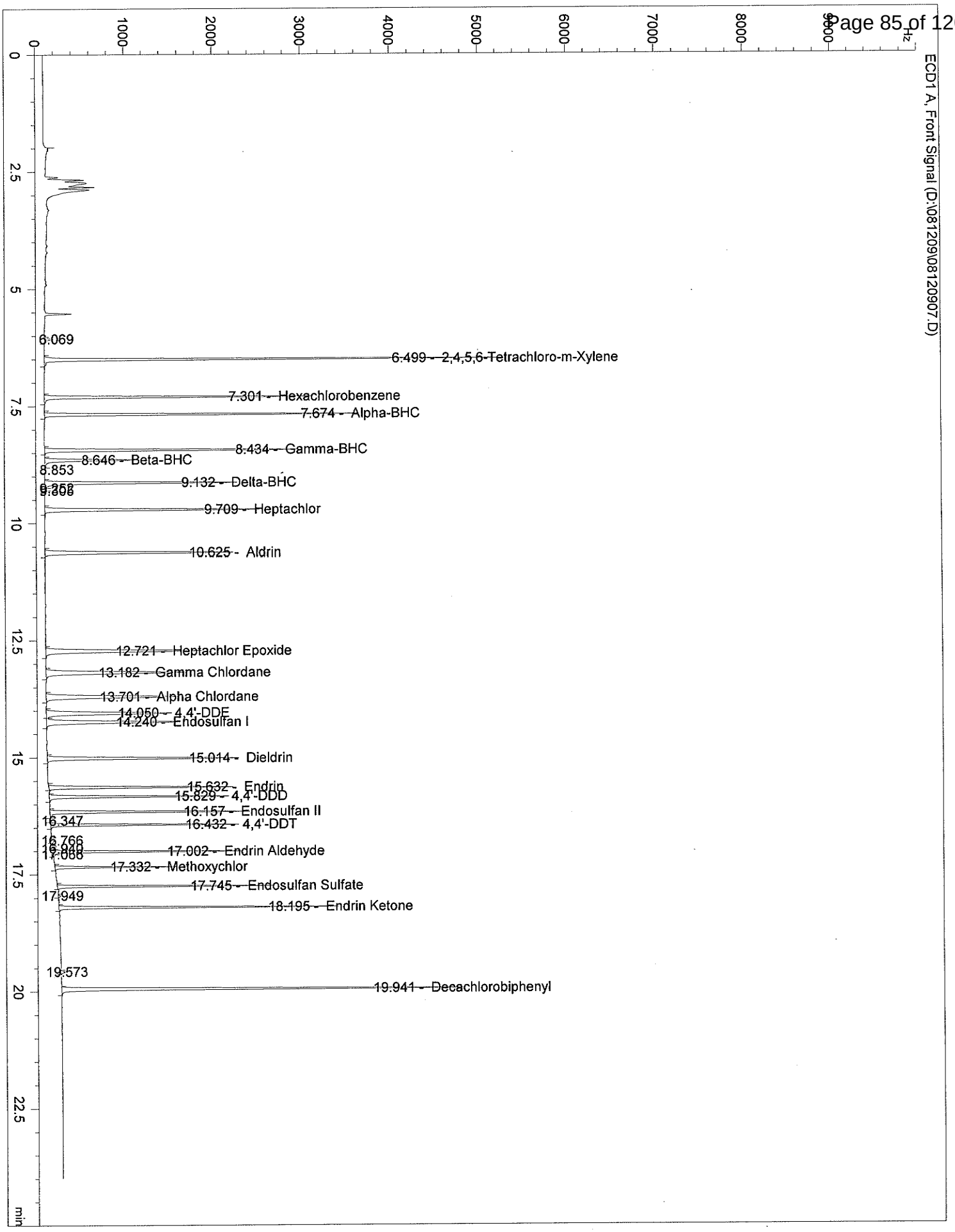
Calibration

External Standard Report

Data File Name	: D:\081209\08120907.D		
Operator	:	Page Number	:
Instrument	: GC 51	Vial Number	: Vial 7
Sample Name	: PEST 40 ICV	Injection Number	: 1
Run Time Bar Code	:	Sequence Line	: 7
Acquired on	: 09 Dec 08 01:21 pm	Instrument Method	: C:\CHEM32\1\METHODS->
Report Created on	: 09 Dec 08 02:43 pm	Sample Amount	:
Calibrated on	: 28 Aug 07 05:51 pm	Last Modified on	: 09Dec08
Analysis Method	: C:\CHEM32\1\METHODS\PEST081209F.M		

Sig. ECD1 A, D:\081209\08120907.D

Ret Time	Area	Type	Width	Ref #	ppb	Name
6.499	10265.3	BB	0.029		81.502	2,4,5,6-Tetrachloro-m-Xylene
7.301	6725.1	VB	0.034		42.720	Hexachlorobenzene
7.674	7583.0	BB	0.033		38.556	Alpha-BHC
8.434	6749.0	BB	0.034		38.626	Gamma-BHC
8.646	2759.4	BB	0.038		37.125	Beta-BHC
9.132	5890.6	VV	0.038		39.088	Delta-BHC
9.709	6438.2	VB	0.039		38.281	Heptachlor
10.625	6055.6	VB	0.037		38.847	Aldrin
12.721	6060.9	VB	0.047		38.159	Heptachlor Epoxide
13.182	5461.9	BB	0.042		37.753	Gamma Chlordane
13.701	5336.0	BV	0.043		37.816	Alpha Chlordane
14.050	5067.0	VV	0.044		39.052	4,4'-DDE
14.240	5222.3	VB	0.045		38.171	Endosulfan I
15.014	5733.7	VB	0.036		38.473	Dieldrin
15.632	4879.1	VV	0.036		37.648	Endrin
15.829	4649.9	VB	0.034		37.898	4,4'-DDD
16.157	5053.7	VB	0.032		38.192	Endosulfan II
16.432	4304.0	VV	0.031		40.116	4,4'-DDT
17.002	4276.5	VV	0.030		40.320	Endrin Aldehyde
17.332	2480.5	VV	0.027		37.270	Methoxychlor
17.745	4428.7	VV	0.028		37.696	Endosulfan Sulfate
18.195	6141.8	VV	0.029		38.052	Endrin Ketone
19.941	10730.4	VB	0.035		90.425	Decachlorobiphenyl
0.000	0.0		0.000		0.000	Chlordane
0.000	0.0		0.000		0.000	Toxaphene


ECD1 A, Front Signal (D:\081209\08120907.D)
Hz
1000
2000
3000
4000
5000
6000
7000
8000
9000
min
0
2.5
5
7.5
10
12.5
15
17.5
20
22.5
6.069
6.499 - 2,4,5,6-Tetrachloro-m-Xylene
7.301 - Hexachlorobenzene
7.674 - Alpha-BHC
8.434 - Gamma-BHC
8.646 - Beta-BHC
8.853
9.132 - Delta-BHC
9.709 - Heptachlor
10.625 - Aldrin
12.721 - Heptachlor Epoxide
13.182 - Gamma Chlordane
13.701 - Alpha Chlordane
14.050 - 4,4'-DDE
14.240 - Endosulfan I
15.014 - Dieldrin
15.632 - Endrin
15.829 - 4,4'-DDD
16.157 - Endosulfan II
16.347
16.432 - 4,4'-DDT
16.766
17.002 - Endrin Aldehyde
17.332 - Methoxychlor
17.745 - Endosulfan Sulfate
17.949
18.195 - Endrin Ketone
19.573
19.941 - Decachlorobiphenyl

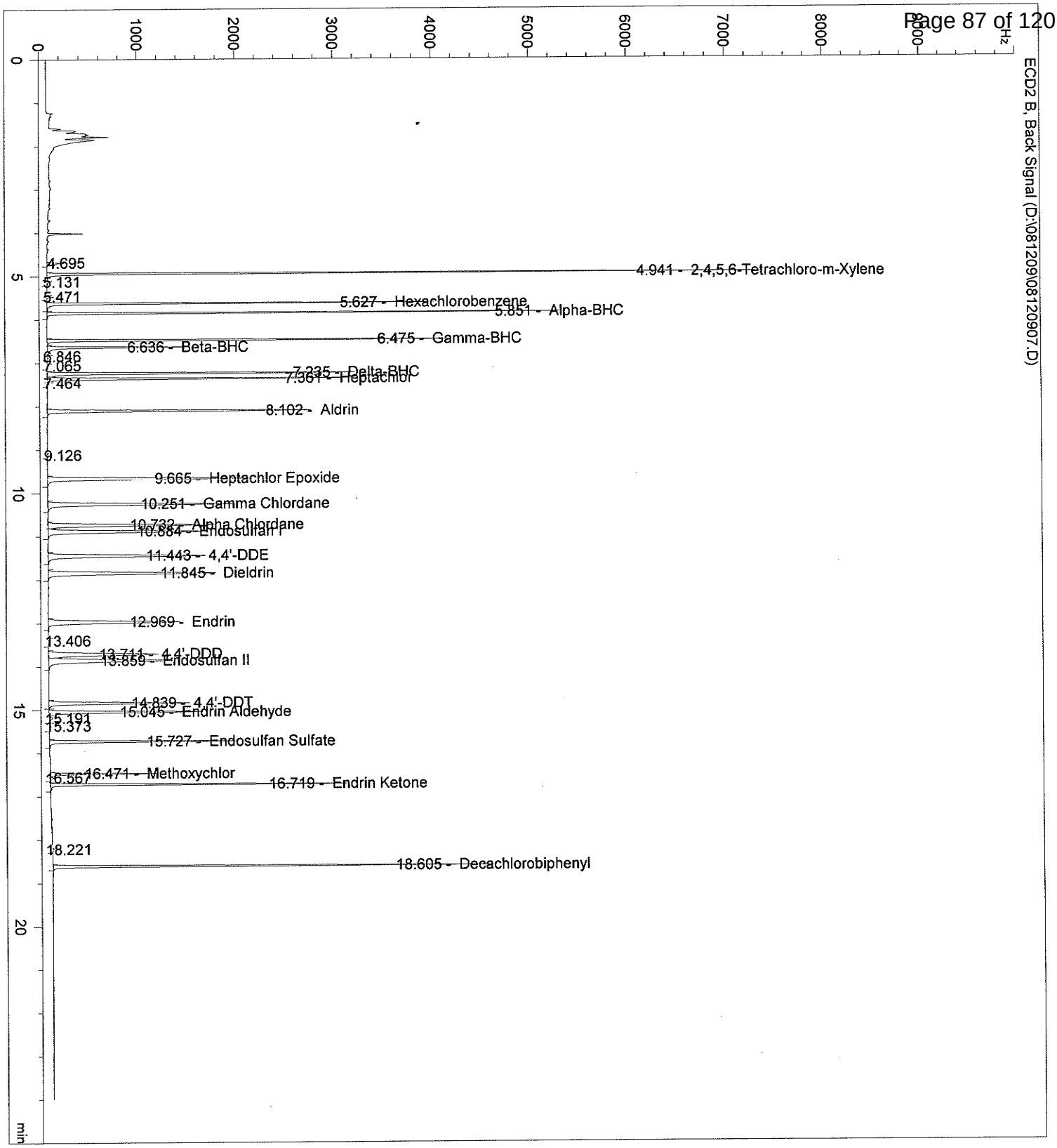
External Standard Report

Data File Name : D:\081209\08120907.D
Operator :
Instrument : GC 51
Sample Name : PEST 40 ICV
Run Time Bar Code:
Acquired on : 09 Dec 08 01:21 pm
Report Created on: 09 Dec 08 02:43 pm
Calibrated on : 28 Aug 07 06:35 pm
Analysis Method : C:\CHEM32\1\METHODS\PEST081209R.M

Page Number :
Vial Number : Vial 7
Injection Number : 1
Sequence Line : 7
Instrument Method: C:\CHEM32\1\METHODS\ ->
Sample Amount :
Last Modified on : 09Dec08

Sig. ECD2 B, D:\081209\08120907.D

Ret Time	Area	Type	Width	Ref #	ppb	Name
4.941	10297.0	BB	0.022		81.180	2,4,5,6-Tetrachloro-m-Xylene
5.627	6362.0	BV	0.025		42.686	Hexachlorobenzene
5.851	8154.0	VB	0.025		38.038	Alpha-BHC
6.475	7318.0	BB	0.028		38.001	Gamma-BHC
6.636	2884.0	BB	0.032		36.262	Beta-BHC
7.235	6693.4	BV	0.033		38.126	Delta-BHC
7.361	6414.0	VV	0.033		38.306	Heptachlor
8.102	6335.2	BB	0.037		38.226	Aldrin
9.665	5873.2	BB	0.045		37.469	Heptachlor Epoxide
10.251	5904.3	BB	0.048		37.562	Gamma Chlordane
10.732	5478.8	BV	0.049		37.431	Alpha Chlordane
10.884	5378.5	VB	0.051		37.468	Endosulfan I
11.443	5475.4	BB	0.053		38.390	4,4'-DDE
11.845	5841.2	BB	0.053		37.743	Dieldrin
12.969	5008.7	BB	0.056		37.272	Endrin
13.711	4452.5	BV	0.062		36.442	4,4'-DDD
13.859	5299.3	VB	0.065		37.489	Endosulfan II
14.839	4088.5	BV	0.044		38.986	4,4'-DDT
15.045	4330.2	VV	0.042		39.299	Endrin Aldehyde
15.727	4334.0	BB	0.035		37.068	Endosulfan Sulfate
16.471	2060.0	BV	0.029		36.574	Methoxychlor
16.719	5600.9	BB	0.030		37.706	Endrin Ketone
18.605	8017.8	BB	0.028		92.155	Decachlorobiphenyl
0.000	0.0		0.000		0.000	Chlordane
0.000	0.0		0.000		0.000	Toxaphene


ECD2 B, Back Signal (D:\081209\08120907.D)
Hz
min
4.695
4.941 - 2,4,5,6-Tetrachloro-m-Xylene
5.131
5.471
5.627 - Hexachlorobenzene
5.851 - Alpha-BHC
6.475 - Gamma-BHC
6.636 - Beta-BHC
6.846
7.065
7.235 - Delta-BHC
7.361 - Heptachlor
7.464
8.102 - Aldrin
9.126
9.665 - Heptachlor Epoxide
10.251 - Gamma Chlordane
10.732 - Alpha Chlordane
10.884 - Endosulfan I
11.443 - 4,4'-DDE
11.845 - Dieldrin
12.969 - Endrin
13.406
13.711 - 4,4'-DDD
13.859 - Endosulfan II
14.839 - 4,4'-DDT
15.045 - Endrin Aldehyde
15.191
15.373
15.727 - Endosulfan Sulfate
16.471 - Methoxychlor
16.567
16.719 - Endrin Ketone
18.221
18.605 - Decachlorobiphenyl

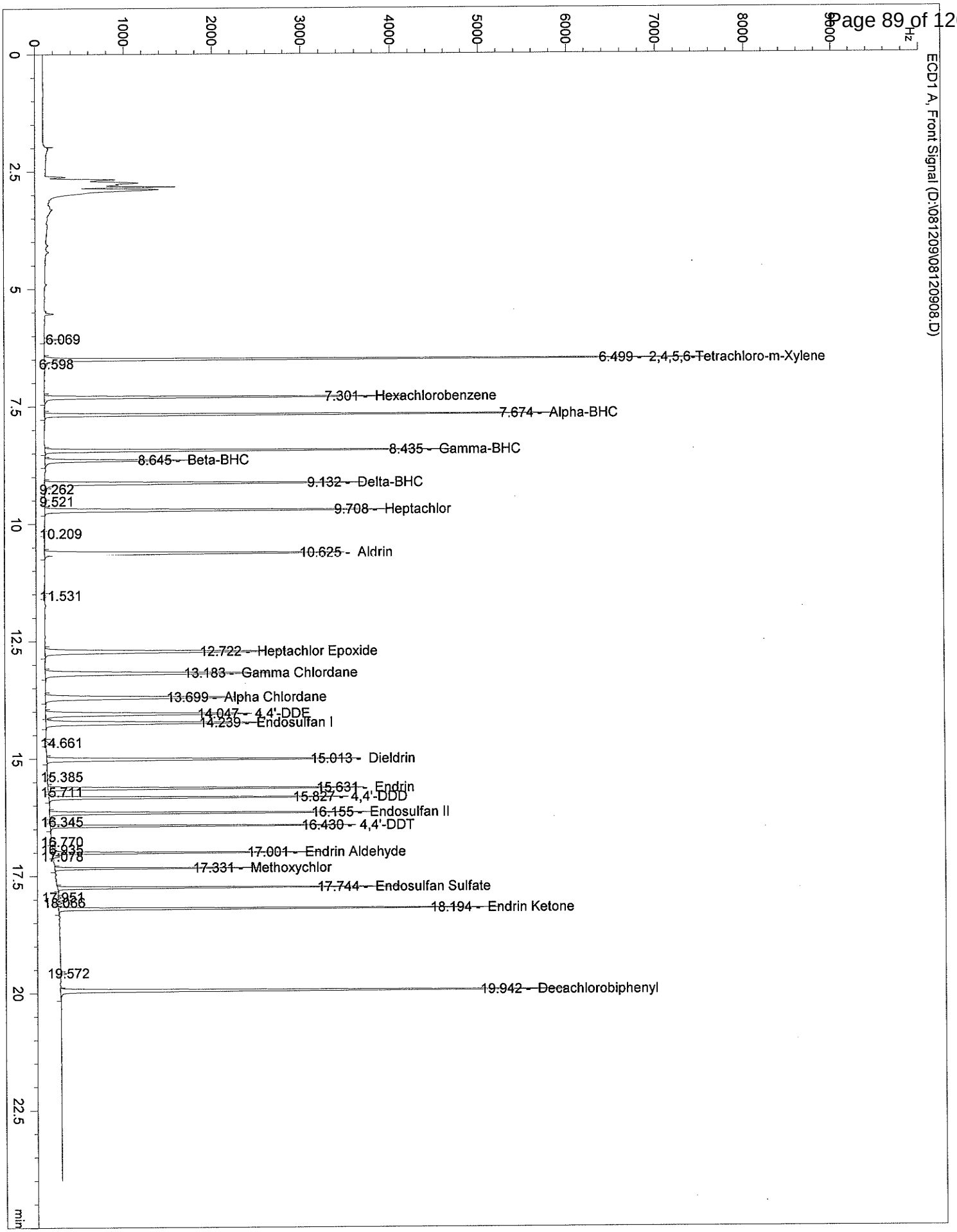
External Standard Report

Data File Name : D:\081209\08120908.D
Operator :
Instrument : GC 51
Sample Name : PEST 60 CCV
Run Time Bar Code:
Acquired on : 09 Dec 08 01:48 pm
Report Created on: 09 Dec 08 02:43 pm
Calibrated on : 28 Aug 07 05:51 pm
Analysis Method : C:\CHEM32\1\METHODS\PEST081209F.M

Page Number :
Vial Number : Vial 8
Injection Number : 1
Sequence Line : 8
Instrument Method: C:\CHEM32\1\METHODS->
Sample Amount :
Last Modified on : 09Dec08

Sig. ECD1 A, D:\081209\08120908.D

Ret Time	Area	Type	Width	Ref #	ppb	Name
6.499	14988.0	VB	0.031		118.998	2,4,5,6-Tetrachloro-m-Xylene
7.301	9136.7	VB	0.033		58.039	Hexachlorobenzene
7.674	12374.1	BB	0.033		62.917	Alpha-BHC
8.435	10904.1	BB	0.035		62.406	Gamma-BHC
8.645	4381.3	VB	0.038		58.946	Beta-BHC
9.132	9677.6	BV	0.037		64.217	Delta-BHC
9.708	10392.7	VB	0.035		61.793	Heptachlor
10.625	9733.7	BB	0.036		62.442	Aldrin
12.722	9320.8	VV	0.044		58.684	Heptachlor Epoxide
13.183	8820.3	VV	0.047		60.966	Gamma Chlordane
13.699	8135.6	BB	0.047		57.656	Alpha Chlordane
14.047	8231.4	BV	0.046		63.441	4,4'-DDE
14.239	8391.1	VB	0.045		61.331	Endosulfan I
15.013	9374.6	VB	0.038		62.903	Dieldrin
15.631	8377.5	VV	0.035		64.642	Endrin
15.827	7456.1	VB	0.034		60.770	4,4'-DDD
16.155	8098.5	BB	0.032		61.203	Endosulfan II
16.430	6802.9	VB	0.029		63.408	4,4'-DDT
17.001	5932.6	VV	0.029		55.934	Endrin Aldehyde
17.331	4007.8	VV	0.026		60.216	Methoxychlor
17.744	6885.5	VB	0.028		58.607	Endosulfan Sulfate
18.194	9512.1	VB	0.029		58.933	Endrin Ketone
19.942	13575.5	VB	0.036		114.401	Decachlorobiphenyl
0.000	0.0		0.000		0.000	Chlordane
0.000	0.0		0.000		0.000	Toxaphene


ECD1 A, Front Signal (D:\081209\08120908.D)
Hz
min
6.069
6.499 - 2,4,5,6-Tetrachloro-m-Xylene
6.598
7.301 - Hexachlorobenzene
7.674 - Alpha-BHC
8.435 - Gamma-BHC
8.645 - Beta-BHC
9.132 - Delta-BHC
9.262
9.521
9.708 - Heptachlor
10.209
10.625 - Aldrin
11.531
12.722 - Heptachlor Epoxide
13.183 - Gamma Chlordane
13.699 - Alpha Chlordane
14.047 - 4,4'-DDE
14.239 - Endosulfan I
14.661
15.013 - Dieldrin
15.385
15.631 - Endrin
15.711
15.827 - 4,4'-DDD
16.155 - Endosulfan II
16.345
16.430 - 4,4'-DDT
16.770
16.935
17.001 - Endrin Aldehyde
17.078
17.331 - Methoxychlor
17.744 - Endosulfan Sulfate
17.951
18.086
18.194 - Endrin Ketone
19.572
19.942 - Decachlorobiphenyl

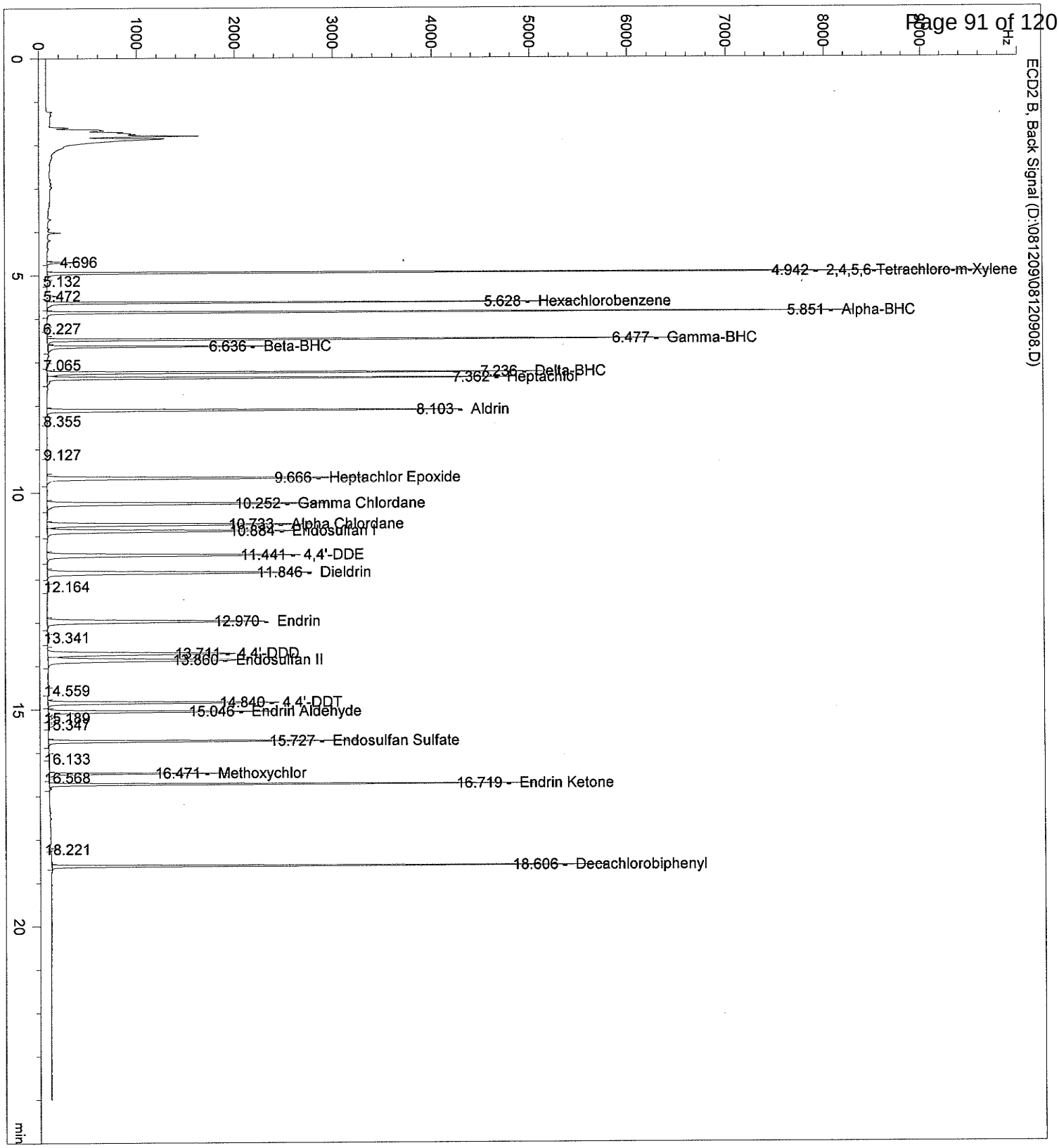
External Standard Report

Data File Name : D:\081209\08120908.D
Operator :
Instrument : GC 51
Sample Name : PEST 60 CCV
Run Time Bar Code:
Acquired on : 09 Dec 08 01:48 pm
Report Created on: 09 Dec 08 02:43 pm
Calibrated on : 28 Aug 07 06:35 pm
Analysis Method : C:\CHEM32\1\METHODS\PEST081209R.M

Page Number :
Vial Number : Vial 8
Injection Number : 1
Sequence Line : 8
Instrument Method: C:\CHEM32\1\METHODS\ ->
Sample Amount :
Last Modified on : 09Dec08

Sig. ECD2 B, D:\081209\08120908.D

Ret Time	Area	Type	Width	Ref #	ppb	Name
4.942	14904.1	BB	0.022		117.503	2,4,5,6-Tetrachloro-m-Xylene
5.628	8612.5	BV	0.026		57.786	Hexachlorobenzene
5.851	12914.3	VB	0.025		60.244	Alpha-BHC
6.477	11656.4	VB	0.029		60.529	Gamma-BHC
6.636	4469.6	BB	0.031		56.199	Beta-BHC
7.236	10631.9	BV	0.033		60.560	Delta-BHC
7.362	10015.0	VB	0.033		59.812	Heptachlor
8.103	9844.8	BB	0.037		59.402	Aldrin
9.666	9262.8	BB	0.044		59.093	Heptachlor Epoxide
10.252	8865.6	BB	0.048		56.401	Gamma Chlordane
10.733	8582.0	BV	0.049		58.631	Alpha Chlordane
10.884	8419.0	VB	0.050		58.648	Endosulfan I
11.441	8555.1	BB	0.052		59.983	4,4'-DDE
11.846	9256.3	BB	0.054		59.811	Dieldrin
12.970	8268.8	BB	0.057		61.531	Endrin
13.711	7268.7	BV	0.059		59.492	4,4'-DDD
13.860	8134.5	VB	0.064		57.545	Endosulfan II
14.840	6508.8	BV	0.043		62.065	4,4'-DDT
15.046	6097.8	VV	0.041		55.340	Endrin Aldehyde
15.727	6897.3	BB	0.033		58.991	Endosulfan Sulfate
16.471	3293.4	BV	0.028		58.474	Methoxychlor
16.719	8725.3	BB	0.028		58.740	Endrin Ketone
18.606	10006.8	BB	0.028		115.016	Decachlorobiphenyl
0.000	0.0		0.000		0.000	Chlordane
0.000	0.0		0.000		0.000	Toxaphene


ECD2 B, Back Signal (D:\081209\08120908.D)
4.696
4.942 - 2,4,5,6-Tetrachloro-m-Xylene
5.132
5.472
5.628 - Hexachlorobenzene
5.851 - Alpha-BHC
6.227
6.477 - Gamma-BHC
6.636 - Beta-BHC
7.065
7.236 - Delta-BHC
7.362 - Heptachlor
8.103 - Aldrin
8.355
9.127
9.666 - Heptachlor Epoxide
10.252 - Gamma Chlordane
10.733 - Alpha Chlordane
10.884 - Endosulfan I
11.441 - 4,4'-DDE
11.846 - Dieldrin
12.164
12.970 - Endrin
13.341
13.741 - 4,4'-DDD
13.860 - Endosulfan II
14.559
14.840 - 4,4'-DDT
15.046 - Endrin Aldehyde
15.189
15.347
15.727 - Endosulfan Sulfate
16.133
16.471 - Methoxychlor
16.568
16.719 - Endrin Ketone
18.221
18.606 - Decachlorobiphenyl
min

Work Order#: 08-12-0410

Client: WEISS Associates

EPA 8082

Calibration

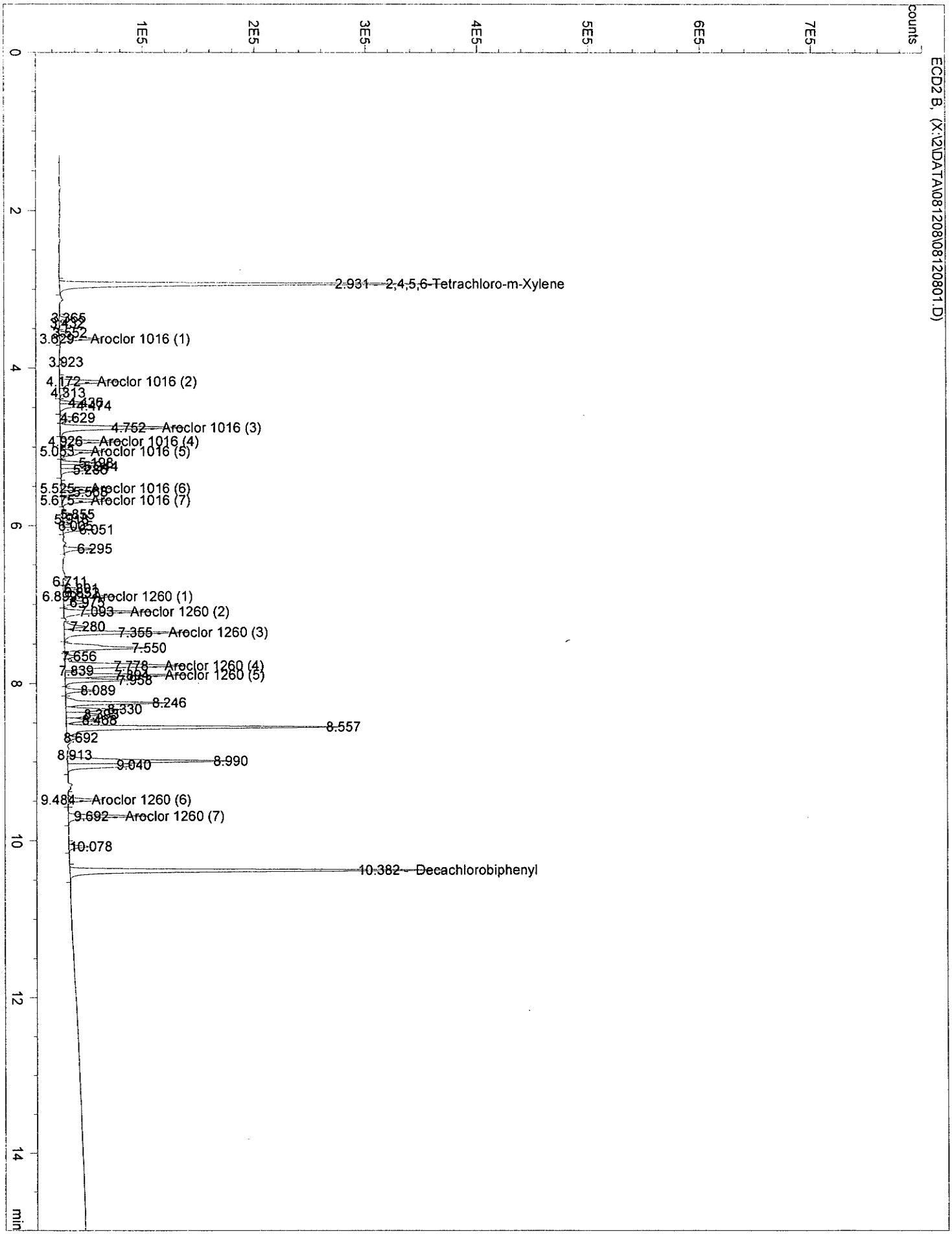
External Standard Report

Data File Name	: X:\2\DATA\081208\08120801.D		
Operator	:	Page Number	:
Instrument	: GC 16	Vial Number	: Vial 1
Sample Name	: PCB 750	Injection Number	: 1
Run Time Bar Code	:	Sequence Line	: 2
Acquired on	: 12/8/2008 9:58:55 AM	Instrument Method	: 8082.M
Report Created on	: 08 Dec 08 10:23 am	Sample Amount	:
Calibrated on	: 24 Sep 04 04:14 pm	Last Modified on	: 08Dec08
Analysis Method	: X:\2\METHODS\081204R.M\P101660R.M		

Sig. ECD2 B, X:\2\DATA\081208\08120801.D

Ret Time	Area	Type	Width	Ref #	ppb	Name
2.931	783835.7	BV	0.034		150.512	2,4,5,6-Tetrachloro-m-Xylene
3.629	82230.7	VV	0.034		0.000	Aroclor 1016 (1)
4.172	146011.0	BV	0.042		0.000	Aroclor 1016 (2)
4.752	296504.7	VV	0.042		0.000	Aroclor 1016 (3)
4.926	138206.7	VV	0.038		0.000	Aroclor 1016 (4)
5.053	113839.7	VV	0.039		0.000	Aroclor 1016 (5)
5.525	93340.4	BV	0.032		0.000	Aroclor 1016 (6)
5.675	119989.0	VV	0.042		0.000	Aroclor 1016 (7)
6.899	102158.9	VV	0.033		0.000	Aroclor 1260 (1)
7.093	180387.4	VV	0.034		0.000	Aroclor 1260 (2)
7.355	251846.0	VV	0.034		0.000	Aroclor 1260 (3)
7.778	342956.6	VV	0.045		0.000	Aroclor 1260 (4)
7.894	228652.0	VV	0.032		0.000	Aroclor 1260 (5)
9.484	73201.0	VV	0.034		0.000	Aroclor 1260 (6)
9.692	160431.7	PB	0.034		0.000	Aroclor 1260 (7)
10.382	727906.2	BB	0.033		145.908	Decachlorobiphenyl
0.000	0.0		0.000		0.000	Aroclor-1016
0.000	0.0		0.000		0.000	Aroclor-1221
0.000	0.0		0.000		0.000	Aroclor-1232
0.000	0.0		0.000		0.000	Aroclor-1242
0.000	0.0		0.000		0.000	Aroclor-1248
0.000	0.0		0.000		0.000	Aroclor-1254
0.000	0.0		0.000		0.000	Aroclor-1260
0.000	0.0		0.000		0.000	Aroclor-1262
0.000	0.0		0.000		0.000	Aroclor-1268

Area Sum	Comp. Group Nam
990122.2	Aroclor 1016
1339633.6	Aroclor 1260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ECD2 B, (X:\2\DATA\081208\08120801.D)
2.931 - 2,4,5,6-Tetrachloro-m-Xylene
3.365
3.452
3.629 - Aroclor 1016 (1)
3.923
4.172 - Aroclor 1016 (2)
4.313
4.474
4.629
4.752 - Aroclor 1016 (3)
4.926 - Aroclor 1016 (4)
5.053 - Aroclor 1016 (5)
5.280
5.525 - Aroclor 1016 (6)
5.675 - Aroclor 1016 (7)
5.855
6.051
6.295
6.711
6.891
6.973
7.093 - Aroclor 1260 (2)
7.280
7.355 - Aroclor 1260 (3)
7.550
7.656
7.778 - Aroclor 1260 (4)
7.839
7.894 - Aroclor 1260 (5)
7.958
8.089
8.246
8.330
8.488
8.557
8.692
8.913
8.990
9.040
9.484 - Aroclor 1260 (6)
9.692 - Aroclor 1260 (7)
10.078
10.382 - Decachlorobiphenyl
0
2
4
6
8
10
12
14
min

PCB CCV Calculations GC 16

Calculations: ***750PPB***

Components	Total Area	RF	Ave RF	%D(<15%)	Pass?
Aroclor-1016-R	**990122.2**	1320	1505	12.3	YES
Aroclor-1260-R	**1339634**	1786	2053	13.0	YES

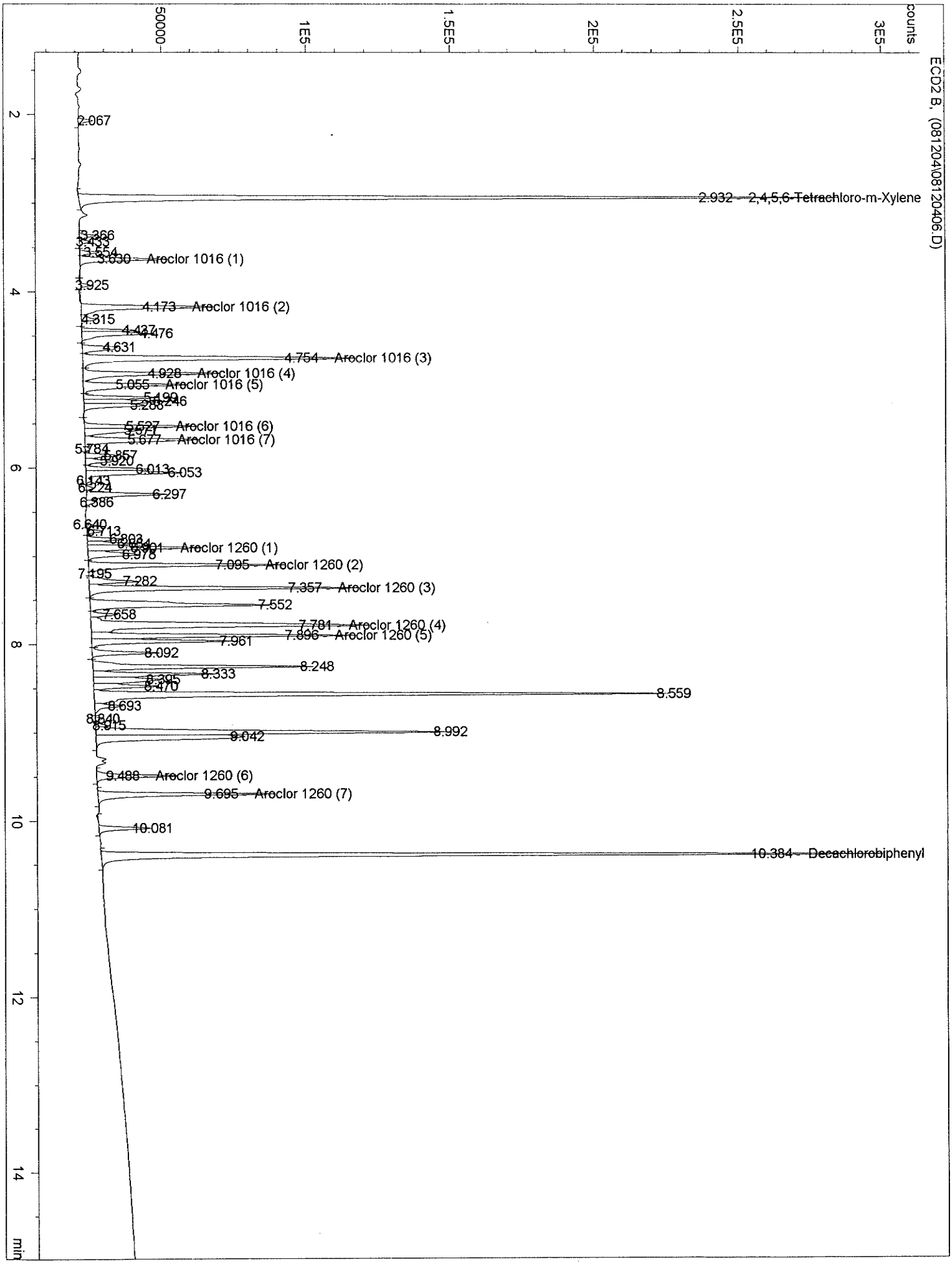
External Standard Report

Data File Name : C:\HPCHEM\2\DATA\081204\08120406.D
Operator :
Page Number :
Instrument : GC 16
Vial Number : Vial 6
Sample Name : PCB 500 ICV
Injection Number : 1
Run Time Bar Code:
Sequence Line : 7
Acquired on : 12/4/2008 1:49:25 PM
Instrument Method: 8082.M
Report Created on: 05 Dec 08 10:45 am
Sample Amount :
Calibrated on : 24 Sep 04 04:14 pm
Last Modified on : 05Dec08
Analysis Method : C:\HPCHEM\2\METHODS\081204R.M\ ->

Sig. ECD2B, C:\HPCHEM\2\DATA\081204\08120406.D

Ret Time	Area	Type	Width	Ref #	ppb	Name
2.932	590844.3	BV	0.033		110.108	2,4,5,6-Tetrachloro-m-Xylene
3.630	69372.5	VV	0.037		0.000	Aroclor 1016 (1)
4.173	123322.1	VV	0.044		0.000	Aroclor 1016 (2)
4.754	255048.5	VV	0.045		0.000	Aroclor 1016 (3)
4.928	120278.6	VV	0.042		0.000	Aroclor 1016 (4)
5.055	98366.0	VV	0.045		0.000	Aroclor 1016 (5)
5.527	82198.0	VV	0.035		0.000	Aroclor 1016 (6)
5.677	107046.9	VV	0.045		0.000	Aroclor 1016 (7)
6.901	88356.9	VV	0.037		0.000	Aroclor 1260 (1)
7.095	159494.1	VV	0.039		0.000	Aroclor 1260 (2)
7.357	208221.3	VV	0.037		0.000	Aroclor 1260 (3)
7.781	311967.4	VV	0.054		0.000	Aroclor 1260 (4)
7.896	196927.8	VV	0.036		0.000	Aroclor 1260 (5)
9.488	65225.4	BB	0.035		0.000	Aroclor 1260 (6)
9.695	143663.8	BB	0.035		0.000	Aroclor 1260 (7)
10.384	595075.5	BB	0.033		115.557	Decachlorobiphenyl
0.000	0.0		0.000		0.000	Aroclor-1016
0.000	0.0		0.000		0.000	Aroclor-1221
0.000	0.0		0.000		0.000	Aroclor-1232
0.000	0.0		0.000		0.000	Aroclor-1242
0.000	0.0		0.000		0.000	Aroclor-1248
0.000	0.0		0.000		0.000	Aroclor-1254
0.000	0.0		0.000		0.000	Aroclor-1260
0.000	0.0		0.000		0.000	Aroclor-1262
0.000	0.0		0.000		0.000	Aroclor-1268

Area Sum	Comp. Group Nam
855632.7	Aroclor 1016
1173856.8	Aroclor 1260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ECD2 B, (081204\08120406.D)
2
4
6
8
10
12
14
min
2.067
2.932 - 2,4,5,6-Tetrachloro-m-Xylene
3.366
3.433
3.554
3.630 - Aroclor 1016 (1)
3.925
4.173 - Aroclor 1016 (2)
4.315
4.437
4.476
4.631
4.754 - Aroclor 1016 (3)
4.928 - Aroclor 1016 (4)
5.055 - Aroclor 1016 (5)
5.199
5.246
5.288
5.527 - Aroclor 1016 (6)
5.677 - Aroclor 1016 (7)
5.784
5.857
5.920
6.013
6.053
6.143
6.224
6.297
6.386
6.640
6.713
6.802
6.978
7.095 - Aroclor 1260 (1)
7.195
7.282
7.357 - Aroclor 1260 (2)
7.552
7.658
7.781 - Aroclor 1260 (3)
7.896 - Aroclor 1260 (4)
7.961
8.092
8.248
8.333
8.395
8.470
8.559
8.693
8.840
8.915
8.992
9.042
9.488 - Aroclor 1260 (6)
9.695 - Aroclor 1260 (7)
10.081
10.384 - Decachlorobiphenyl

PCB CCV Calculations GC 16

Calculations: ***500PPB***

J 12/5/07

Components	Total Area	RF	Ave RF	%D(<15%)	Pass?
Aroclor-1016-R	**855632.7**	1711.3	1505	13.7	YES
Aroclor-1260R	**1173856.8**	2347.7	2053	14.3	YES

Work Order#: 08-12-0410

Client: WEISS Associates

EPA 8260B

Calibration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D
Acq On : 3 Dec 2008 3:12 pm
Sample : ICV/LCS V111908D/V112608B
Misc : V120308A
MS Integration Params: RTEINT.P
Quant Time: Dec 03 15:47:56 2008

Vial: 24
Operator:
Inst : GCMS_L
Multiplr: 1.00
Quant Results File: 081203_BP.RES

Quant Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Tert-Butyl Alcohol-d9	3.8865	65	28844	50.0000 ug/l	-0
4) Pentafluorobenzene	6.4012	168	424065	10.0000 ug/l	0
47) 1,4-Difluorobenzene	7.3265	114	545475	10.0000 ug/l	0
63) Chlorobenzene-d5	10.9182	117	422275	10.0000 ug/l	0
87) 1,4-Dichlorobenzene-d4	13.7936	152	223638	10.0000 ug/l	0

System Monitoring Compounds					
41) Dibromofluoromethane	6.3018	113	161198	9.64 ug/l	0.0
Spiked Amount 10.000	Range 53 - 141		Recovery	= 96.40%	
46) 1,2-Dichloroethane-d4	6.7305	65	144382	8.92 ug/l	0.0
Spiked Amount 10.000	Range 50 - 150		Recovery	= 89.20%	
60) Toluene-d8	9.1616	98	605274	10.45 ug/l	0.0
Spiked Amount 10.000	Range 69 - 134		Recovery	= 104.50%	
80) 1,4-Bromofluorobenzene	12.3611	95	174937	10.50 ug/l	0.0
Spiked Amount 10.000	Range 51 - 152		Recovery	= 105.00%	

Target Compounds				Qvalue	
2) Ethanol	2.7520	45	8955	98.7768 ug/l	
3) Tert-Butyl Alcohol (TBA)	4.0224	59	27037	43.2509 ug/l	
5) Dichlorodifluoromethane	1.5600	85	262525	10.7621 ug/l	
6) Chloromethane	1.7273	50	280280	10.7022 ug/l	
7) Vinyl Chloride	1.8423	62	283358	10.8929 ug/l	
8) Bromomethane	2.1770	94	177331	10.2001 ug/l	
9) Chloroethane	2.2867	64	163810	10.7455 ug/l	
10) Trichlorofluoromethane	2.5690	101	404509	9.7828 ug/l	
11) Diethyl Ether	2.8984	45	75134	9.1520 ug/l	
12) Acetone	3.2173	43	18271	9.2761 ug/l	
13) Iodomethane	3.3428	142	244361	14.3479 ug/l	
14) 1,1-Dichloroethene	3.1650	61	313070	10.2122 ug/l	
15) 1,1,2-Trichloro-1,2,2-Trif	3.1807	101	211509	10.4074 ug/l	
16) Carbon Disulfide	3.4317	76	585329	10.5179 ug/l	
17) Acetonitrile	3.6303	41	355436	10.3171 ug/l	
18) Acrylonitrile	4.1531	53	22568	8.7847 ug/l	#
19) Allyl Chloride	3.6303	41	349482	10.1325 ug/l	
20) Acrolein	3.0291	56	15606	21.1622 ug/l	
21) Methyl Acetate	3.6721	43	56058	8.4071 ug/l	
22) Methylene Chloride	3.7976	84	168631	9.6228 ug/l	
23) t-1,2-Dichloroethene	4.2211	96	208398	10.0213 ug/l	
24) Isobutyl Alcohol	3.6721	43	56058	8.9841 ug/l	
25) Methyl-t-Butyl Ether (MTBE	4.2577	73	294560	9.0958 ug/l	
26) Hexane	4.6602	57	323382	10.4897 ug/l	
27) 1,1-Dichloroethane	4.8275	63	365742	9.5512 ug/l	

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D
Acq On : 3 Dec 2008 3:12 pm
Sample : ICV/LCS V111908D/V112608B
Misc : V120308A
MS Integration Params: RTEINT.P
Quant Time: Dec 03 15:47:56 2008

Vial: 24
Operator:
Inst : GCMS_L
Multiplr: 1.00
Quant Results File: 081203_BP.RES

Quant Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
28) Vinyl Acetate	4.9478	86	18568	9.3596 ug/l	#
29) Diisopropyl Ether (DIPE)	4.9948	45	548039	9.6932 ug/l	
30) Chloroprene	4.9687	53	370046	10.1898 ug/l	
31) Ethyl-t-Butyl Ether (ETBE)	5.5124	59	372778	9.4608 ug/l	
32) c-1,2-Dichloroethene	5.6536	96	201268	9.8534 ug/l	
33) 2,2-Dichloropropane	5.6431	77	326271	9.6253 ug/l	
34) 2-Butanone	5.6902	43	30132	9.4451 ug/l	
35) Propionitrile	5.7372	54	8138	9.9047 ug/l	
36) Methacrylonitrile	5.9568	41	47181	9.2983 ug/l	
37) Propanedinitrile	5.9620	66	8361	8.8060 ug/l	
38) Bromochloromethane	5.9725	130	93788	9.5125 ug/l	
39) Tetrahydrofuran	6.0614	42	18570	9.1903 ug/l	
40) Chloroform	6.0927	83	335188	9.5025 ug/l	
42) 1,1,1-Trichloroethane	6.3332	97	318154	9.5310 ug/l	
43) Cyclohexane	6.4116	84	307782	9.4906 ug/l	
44) 1,1-Dichloropropene	6.5528	75	279671	10.0255 ug/l	
45) Carbon Tetrachloride	6.5580	117	279041	9.8157 ug/l	
48) Benzene	6.8142	78	740847	10.0458 ug/l	
49) 1,2-Dichloroethane	6.8299	62	170972	8.9862 ug/l	
50) Tert-Amyl-Methyl Ether (TA	7.0129	73	273087	9.3398 ug/l	
51) Thiophene	7.0808	84	319546	9.9647 ug/l	
52) Trichloroethene	7.6507	95	186590	10.0765 ug/l	
53) 1,2-Dichloropropane	7.9173	63	153740	9.3217 ug/l	
54) Methylcyclohexane	7.9016	83	328562	10.0874 ug/l	
55) Dibromomethane	8.0585	93	55892	9.3092 ug/l	
56) Methyl Methacrylate	8.1107	69	40865	9.5124 ug/l	
57) Bromodichloromethane	8.2623	83	190955	9.2961 ug/l	
58) 2-Chloroethyl Vinyl Ether	8.6649	63	44517	8.5468 ug/l	
59) c-1,3-Dichloropropene	8.8270	75	206053	9.6417 ug/l	
61) Toluene	9.2400	91	697614	10.1924 ug/l	
62) 4-Methyl-2-Pentanone	9.1563	58	4915	14.6828 ug/l	
64) t-1,3-Dichloropropene	9.5118	75	156814	9.9286 ug/l	
65) Ethyl Methacrylate	9.6478	69	84497	9.7639 ug/l	
66) 1,1,2-Trichloroethane	9.7262	83	68520	9.7461 ug/l	
67) Tetrachloroethene	9.9248	166	242385	10.1024 ug/l	
68) 1,3-Dichloropropane	9.9301	76	157836	9.6435 ug/l	
69) 2-Hexanone	10.0556	58	13507	9.3630 ug/l	
70) Dibromochloromethane	10.2072	129	105738	10.0363 ug/l	
71) 1,2-Dibromoethane	10.3379	107	77450	9.6633 ug/l	
72) Chlorobenzene	10.9548	112	417096	9.8661 ug/l	
73) 1,1,1,2-Tetrachloroethane	11.0541	131	154180	10.1227 ug/l	

(#) = qualifier out of range (m) = manual integration

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D Vial: 24
Acq On : 3 Dec 2008 3:12 pm Operator:
Sample : ICV/LCS V111908D/V112608B Inst : GCMS_L
Misc : V120308A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 03 15:47:56 2008 Quant Results File: 081203_BP.RES

Quant Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration
DataAcq Meth : 8260

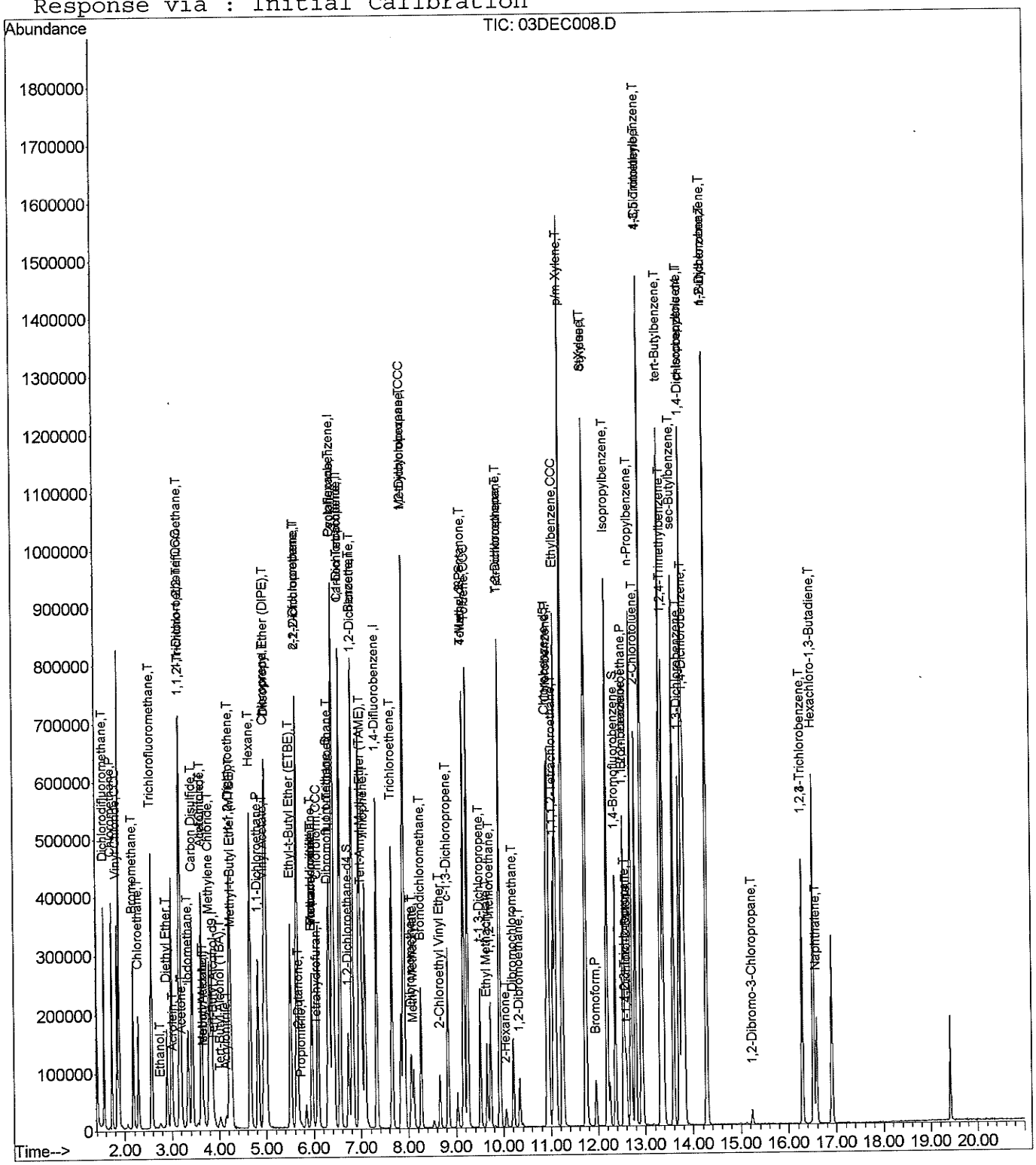
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
74)	Ethylbenzene	11.1011	91	785840	10.7903	ug/l	
75)	p/m-Xylene	11.2475	91	1165099	21.0150	ug/l	
76)	o-Xylene	11.7285	91	568688	10.6254	ug/l	
77)	Styrene	11.7442	104	438553	10.7030	ug/l	
78)	Bromoform	11.9533	173	50945	11.3184	ug/l	
79)	Isopropylbenzene	12.1886	105	782745	11.1343	ug/l	
81)	1,2,3-Trichloropropane	12.5859	75	96128	10.2239	ug/l	
82)	Bromobenzene	12.5441	156	171066	10.4499	ug/l	
83)	n-Propylbenzene	12.6957	91	885137	10.8359	ug/l	
84)	t-1,4-Dichloro-2-Butene	12.6120	53	21407	10.4142	ug/l	
85)	2-Chlorotoluene	12.7950	91	492077	10.6585	ug/l	
86)	1,3,5-Trimethylbenzene	12.9153	105	614940	10.9102	ug/l	
88)	4-Chlorotoluene	12.9257	91	584602	10.6378	ug/l	
89)	1,1,2,2-Tetrachloroethane	12.5336	83	76613	9.6235	ug/l	
90)	1,2,4-Trimethylbenzene	13.3753	105	598219	10.8114	ug/l	
91)	tert-Butylbenzene	13.3231	119	624166	10.8272	ug/l	
92)	p-Isopropyltoluene	13.7727	119	723823	10.8584	ug/l	
93)	sec-Butylbenzene	13.5949	105	856394	11.1148	ug/l	
94)	1,3-Dichlorobenzene	13.7152	146	347034	10.4040	ug/l	
95)	1,4-Dichlorobenzene	13.8249	146	334057	9.7335	ug/l	
96)	1,2-Dichlorobenzene	14.2798	146	273914	9.8216	ug/l	
97)	n-Butylbenzene	14.2850	91	637311	10.7920	ug/l	
98)	1,2-Dibromo-3-Chloropropan	15.2417	75	9509	9.8117	ug/l	
99)	1,2,4-Trichlorobenzene	16.2873	180	204087	10.0816	ug/l	
100)	Hexachloro-1,3-Butadiene	16.5226	225	177288	10.1949	ug/l	
101)	Naphthalene	16.5853	128	213858	9.3894	ug/l	
102)	1,2,3-Trichlorobenzene	16.2873	180	204087	10.0805	ug/l	

(#) = qualifier out of range (m) = manual integration

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D
Acq On : 3 Dec 2008 3:12 pm
Sample : ICV/LCS V111908D/V112608B
Misc : V120308A
MS Integration Params: RTEINT.P
Quant Time: Dec 3 15:47 2008

Vial: 24
Operator:
Inst : GCMS_L
Multiplr: 1.00
Quant Results File: 081203_BP.

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D
Acq On : 3 Dec 2008 3:12 pm
Sample : ICV/LCS V111908D/V112608B
Misc : V120308A
MS Integration Params: RTEINT.P

Vial: 24
Operator:
Inst : GCMS_L
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Tert-Butyl Alcohol-d9	1.000	1.000	0.0	106	-0.01
2	T	Ethanol	0.157	0.155	1.3	113	0.00
3	T	Tert-Butyl Alcohol (TBA)	1.084	0.937	13.6	99	0.00
4	I	Pentafluorobenzene	1.000	1.000	0.0	115	0.00
5	T	Dichlorodifluoromethane	0.575	0.619	-7.7	125	0.00
6	P	Chloromethane	0.618	0.661	-7.0	121	0.00
7	CCC	Vinyl Chloride	0.613	0.668	-9.0	123	0.00
8	T	Bromomethane	0.410	0.418	2.0	122	0.00
9	T	Chloroethane	0.359	0.386	-7.5	124	0.00
10	T	Trichlorofluoromethane	0.975	0.954	2.2	111	0.00
11	T	Diethyl Ether	0.194	0.177	8.8	102	0.00
12	T	Acetone	0.046	0.043#	6.5	114	0.00
13	T	Iodomethane	0.402	0.576	-43.3#	146	0.00
14	CCC	1,1-Dichloroethene	0.723	0.738	-2.1	113	0.00
15	T	1,1,2-Trichloro-1,2,2-Trifl	0.479	0.499	-4.2	116	0.00
16	T	Carbon Disulfide	1.312	1.380	-5.2	113	0.00
17	T	Acetonitrile	0.812	0.838	-3.2	116	0.00
18	T	Acrylonitrile	0.061	0.053#	13.1	102	0.00
19	T	Allyl Chloride	0.813	0.824	-1.4	114	0.00
20	T	Acrolein	0.017	0.018#	-5.9	115	0.00
21	T	Methyl Acetate	0.157	0.132	15.9	102	0.00
22	T	Methylene Chloride	0.413	0.398	3.6	107	0.00
23	T	t-1,2-Dichloroethene	0.490	0.491	-0.2	112	0.00
24	T	Isobutyl Alcohol	0.147	0.132	10.2	102	0.00
25	T	Methyl-t-Butyl Ether (MTBE)	0.764	0.695	9.0	103	0.00
26	T	Hexane	0.727	0.763	-5.0	118	0.00
27	P	1,1-Dichloroethane	0.903	0.862	4.5	108	0.00
28	T	Vinyl Acetate	0.047	0.044#	6.4	106	0.00
29	T	Diisopropyl Ether (DIPE)	1.333	1.292	3.1	110	0.00
30	T	Chloroprene	0.856	0.873	-2.0	110	0.00
31	T	Ethyl-t-Butyl Ether (ETBE)	0.929	0.879	5.4	104	0.00
32	T	c-1,2-Dichloroethene	0.482	0.475	1.5	111	0.00
33	T	2,2-Dichloropropane	0.799	0.769	3.8	111	0.00
34	T	2-Butanone	0.075	0.071#	5.3	123	-0.01
35	T	Propionitrile	0.019	0.019#	0.0	99	-0.01
36	T	Methacrylonitrile	0.120	0.111	7.5	105	0.00
37	T	Propanedinitrile	0.022	0.020#	9.1	104	0.00
38	T	Bromochloromethane	0.232	0.221	4.7	104	0.00
39	T	Tetrahydrofuran	0.048	0.044#	8.3	113	0.00
40	CCC	Chloroform	0.832	0.790	5.0	106	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D
Acq On : 3 Dec 2008 3:12 pm
Sample : ICV/LCS V111908D/V112608B
Misc : V120308A
MS Integration Params: RTEINT.P

Vial: 24
Operator:
Inst : GCMS_L
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	S	Dibromofluoromethane	0.394	0.380	3.6	107	0.00
42	T	1,1,1-Trichloroethane	0.787	0.750	4.7	106	0.00
43	T	Cyclohexane	0.765	0.726	5.1	112	0.00
44	T	1,1-Dichloropropene	0.658	0.660	-0.3	110	0.00
45	T	Carbon Tetrachloride	0.670	0.658	1.8	108	0.00
46	S	1,2-Dichloroethane-d4	0.381	0.340	10.8	100	0.00
47	I	1,4-Difluorobenzene	1.000	1.000	0.0	109	0.00
48	T	Benzene	1.352	1.358	-0.4	107	0.00
49	T	1,2-Dichloroethane	0.349	0.313	10.3	97	0.00
50	T	Tert-Amyl-Methyl Ether (TAM	0.536	0.501	6.5	97	0.00
51	T	Thiophene	0.588	0.586	0.3	105	0.00
52	T	Trichloroethene	0.339	0.342	-0.9	105	0.00
53	CCC	1,2-Dichloropropane	0.302	0.282	6.6	99	0.00
54	T	Methylcyclohexane	0.597	0.602	-0.8	109	0.00
55	T	Dibromomethane	0.110	0.102	7.3	96	0.00
56	T	Methyl Methacrylate	0.079	0.075#	5.1	101	0.00
57	T	Bromodichloromethane	0.377	0.350	7.2	102	0.00
58	T	2-Chloroethyl Vinyl Ether	0.095	0.082#	13.7	101	0.00
59	T	c-1,3-Dichloropropene	0.392	0.378	3.6	104	0.00
60	S	Toluene-d8	1.062	1.110	-4.5	113	0.00
61	CCC	Toluene	1.255	1.279	-1.9	105	0.00
62	T	4-Methyl-2-Pentanone	0.006	0.009#	-50.0#	207#	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	106	0.00
64	T	t-1,3-Dichloropropene	0.374	0.371	0.8	101	0.00
65	T	Ethyl Methacrylate	0.205	0.200	2.4	96	0.00
66	T	1,1,2-Trichloroethane	0.166	0.162	2.4	97	0.00
67	T	Tetrachloroethene	0.568	0.574	-1.1	108	0.00
68	T	1,3-Dichloropropane	0.388	0.374	3.6	96	0.00
69	T	2-Hexanone	0.034	0.032#	5.9	97	0.00
70	T	Dibromochloromethane	0.249	0.250	-0.4	105	0.00
71	T	1,2-Dibromoethane	0.190	0.183	3.7	100	0.00
72	P	Chlorobenzene	1.001	0.988	1.3	102	0.00
73	T	1,1,1,2-Tetrachloroethane	0.361	0.365	-1.1	104	0.00
74	CCC	Ethylbenzene	1.725	1.861	-7.9	109	0.00
75	T	p/m-Xylene	1.313	1.380	-5.1	106	0.00
76	T	o-Xylene	1.267	1.347	-6.3	105	0.00
77	T	Styrene	0.970	1.039	-7.1	103	0.00
78	P	Bromoform	0.107	0.121	-13.1	98	0.00
79	T	Isopropylbenzene	1.665	1.854	-11.4	108	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D
Acq On : 3 Dec 2008 3:12 pm
Sample : ICV/LCS V111908D/V112608B
Misc : V120308A
MS Integration Params: RTEINT.P

Vial: 24
Operator:
Inst : GCMS_L
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
80	S	1,4-Bromofluorobenzene	0.395	0.414	-4.8	107	0.00
81	T	1,2,3-Trichloropropane	0.223	0.228	-2.2	95	0.00
82	T	Bromobenzene	0.388	0.405	-4.4	103	0.00
83	T	n-Propylbenzene	1.934	2.096	-8.4	105	0.00
84	T	t-1,4-Dichloro-2-Butene	0.049	0.051#	-4.1	97	0.00
85	T	2-Chlorotoluene	1.093	1.165	-6.6	107	0.00
86	T	1,3,5-Trimethylbenzene	1.335	1.456	-9.1	107	0.00
87	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	0.00
88	T	4-Chlorotoluene	2.457	2.614	-6.4	106	0.00
89	P	1,1,2,2-Tetrachloroethane	0.356	0.343	3.7	97	0.00
90	T	1,2,4-Trimethylbenzene	2.474	2.675	-8.1	105	0.00
91	T	tert-Butylbenzene	2.578	2.791	-8.3	105	0.00
92	T	p-Isopropyltoluene	2.981	3.237	-8.6	108	0.00
93	T	sec-Butylbenzene	3.445	3.829	-11.1	110	0.00
94	T	1,3-Dichlorobenzene	1.492	1.552	-4.0	103	0.00
95	T	1,4-Dichlorobenzene	1.535	1.494	2.7	99	0.00
96	T	1,2-Dichlorobenzene	1.247	1.225	1.8	98	0.00
97	T	n-Butylbenzene	2.641	2.850	-7.9	107	0.00
98	T	1,2-Dibromo-3-Chloropropane	0.043	0.043#	0.0	104	0.00
99	T	1,2,4-Trichlorobenzene	0.905	0.913	-0.9	101	0.00
100	T	Hexachloro-1,3-Butadiene	0.778	0.793	-1.9	106	0.00
101	T	Naphthalene	1.018	0.956	6.1	89	0.00
102	T	1,2,3-Trichlorobenzene	0.905	0.913	-0.9	101	0.00

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\081209\09DEC029.D
Acq On : 10 Dec 2008 12:06 am
Sample : CCV 10PPB V120408A/V120508A
Misc : V120308A
MS Integration Params: RTEINT.P
Quant Time: Dec 10 09:44:42 2008

Vial: 13
Operator:
Inst : GCMS_L
Multiplr: 1.00
Quant Results File: 081203_BP.RES

Quant Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Tert-Butyl Alcohol-d9	3.9025	65	17624	50.0000 ug/l	0
4) Pentafluorobenzene	6.4067	168	250557	10.0000 ug/l	0
47) 1,4-Difluorobenzene	7.3373	114	358521	10.0000 ug/l	0
63) Chlorobenzene-d5	10.9237	117	245340	10.0000 ug/l	0
87) 1,4-Dichlorobenzene-d4	13.7939	152	142136	10.0000 ug/l	0

System Monitoring Compounds					
41) Dibromofluoromethane	6.3073	113	106387	10.77 ug/l	0.0
Spiked Amount 10.000	Range 53 - 141		Recovery	= 107.70%	
46) 1,2-Dichloroethane-d4	6.7360	65	98826	10.34 ug/l	0.0
Spiked Amount 10.000	Range 50 - 150		Recovery	= 103.40%	
60) Toluene-d8	9.1671	98	336100	8.83 ug/l	0.0
Spiked Amount 10.000	Range 69 - 134		Recovery	= 88.30%	
80) 1,4-Bromofluorobenzene	12.3666	95	98599	10.18 ug/l	0.0
Spiked Amount 10.000	Range 51 - 152		Recovery	= 101.80%	

Target Compounds					Qvalue
2) Ethanol	2.7680	45	4514	81.4896 ug/l	
3) Tert-Butyl Alcohol (TBA)	4.0384	59	17979	47.0709 ug/l	
5) Dichlorodifluoromethane	1.5603	85	129549	8.9885 ug/l	
6) Chloromethane	1.7329	50	129318	8.3573 ug/l	
7) Vinyl Chloride	1.8479	62	157314	10.2354 ug/l	
8) Bromomethane	2.1825	94	104366	10.1602 ug/l	
9) Chloroethane	2.2923	64	86791	9.6358 ug/l	
10) Trichlorofluoromethane	2.5746	101	242465	9.9246 ug/l	
11) Diethyl Ether	2.9039	45	53277	10.9836 ug/l	
12) Acetone	3.2176	43	14853	12.7627 ug/l	
13) Iodomethane	3.3483	142	170910	16.9844 ug/l	
14) 1,1-Dichloroethene	3.1653	61	197534	10.9055 ug/l	
15) 1,1,2-Trichloro-1,2,2-Trif	3.1862	101	147297	12.2669 ug/l	
16) Carbon Disulfide	3.4372	76	381152	11.5918 ug/l	
17) Acetonitrile	3.6359	41	208276	10.2320 ug/l	
18) Acrylonitrile	4.1534	53	16542	10.8980 ug/l	
19) Allyl Chloride	3.6359	41	208276	10.2202 ug/l	
20) Acrolein	3.0294	56	12391	28.4381 ug/l	
21) Methyl Acetate	3.6829	43	39524	10.0321 ug/l	
22) Methylene Chloride	3.8032	84	122407	11.8222 ug/l	
23) t-1,2-Dichloroethene	4.2266	96	135046	10.9910 ug/l	
24) Isobutyl Alcohol	3.6829	43	39528	10.7218 ug/l	
25) Methyl-t-Butyl Ether (MTBE	4.2580	73	205222	10.7255 ug/l	
26) Hexane	4.6710	57	203941	11.1964 ug/l	
27) 1,1-Dichloroethane	4.8331	63	241163	10.6590 ug/l	

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\081209\09DEC029.D
Acq On : 10 Dec 2008 12:06 am
Sample : CCV 10PPB V120408A/V120508A
Misc : V120308A
MS Integration Params: RTEINT.P
Quant Time: Dec 10 09:44:42 2008

Vial: 13
Operator:
Inst : GCMS_L
Multiplr: 1.00
Quant Results File: 081203_BP.RES

Quant Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
28) Vinyl Acetate	4.9481	86	13750	11.7306 ug/l	#
29) Diisopropyl Ether (DIPE)	5.0004	45	367995	11.0160 ug/l	
30) Chloroprene	4.9794	53	215910	10.0626 ug/l	
31) Ethyl-t-Butyl Ether (ETBE)	5.5127	59	267656	11.4969 ug/l	
32) c-1,2-Dichloroethene	5.6591	96	139090	11.5248 ug/l	
33) 2,2-Dichloropropane	5.6539	77	186721	9.3230 ug/l	
34) 2-Butanone	5.7009	43	21837	11.5850 ug/l	
35) Propionitrile	5.7375	54	5705	11.7518 ug/l	
36) Methacrylonitrile	5.9623	41	31659	10.5599 ug/l	
37) Propanedinitrile	5.9623	66	5660	10.0894 ug/l	
38) Bromochloromethane	5.9728	130	70548	12.1104 ug/l	
39) Tetrahydrofuran	6.0669	42	11734	9.8286 ug/l	
40) Chloroform	6.1035	83	237837	11.4118 ug/l	
42) 1,1,1-Trichloroethane	6.3387	97	210804	10.6882 ug/l	
43) Cyclohexane	6.4224	84	209641	10.9409 ug/l	
44) 1,1-Dichloropropene	6.5583	75	173827	10.5464 ug/l	
45) Carbon Tetrachloride	6.5635	117	181899	10.8295 ug/l	
48) Benzene	6.8249	78	494785	10.2078 ug/l	
49) 1,2-Dichloroethane	6.8406	62	126712	10.1328 ug/l	
50) Tert-Amyl-Methyl Ether (TA	7.0131	73	207116	10.7773 ug/l	
51) Thiophene	7.0811	84	235732	11.1843 ug/l	
52) Trichloroethene	7.6614	95	127692	10.4917 ug/l	
53) 1,2-Dichloropropane	7.9228	63	116802	10.7751 ug/l	
54) Methylcyclohexane	7.9071	83	222688	10.4021 ug/l	
55) Dibromomethane	8.0640	93	43516	11.0274 ug/l	
56) Methyl Methacrylate	8.1110	69	32530	11.5208 ug/l	
57) Bromodichloromethane	8.2731	83	135943	10.0690 ug/l	
58) 2-Chloroethyl Vinyl Ether	8.6652	63	33464	9.7750 ug/l	
59) c-1,3-Dichloropropene	8.8325	75	137436	9.7844 ug/l	
61) Toluene	9.2455	91	437073	9.7157 ug/l	
62) 4-Methyl-2-Pentanone	9.1618	58	2306	10.4811 ug/l	
64) t-1,3-Dichloropropene	9.5069	75	99865	10.8829 ug/l	
65) Ethyl Methacrylate	9.6533	69	57504	11.4368 ug/l	
66) 1,1,2-Trichloroethane	9.7265	83	51686	12.6536 ug/l	
67) Tetrachloroethene	9.9251	166	156654	11.2379 ug/l	
68) 1,3-Dichloropropane	9.9304	76	114030	11.9915 ug/l	
69) 2-Hexanone	10.0506	58	9241	11.0257 ug/l	
70) Dibromochloromethane	10.2075	129	73524	12.0115 ug/l	
71) 1,2-Dibromoethane	10.3381	107	56535	12.1408 ug/l	
72) Chlorobenzene	10.9551	112	273921	11.1522 ug/l	
73) 1,1,1,2-Tetrachloroethane	11.0596	131	105356	11.9057 ug/l	

(#) = qualifier out of range (m) = manual integration

Data File : C:\MSDCHEM\1\DATA\081209\09DEC029.D Vial: 13
Acq On : 10 Dec 2008 12:06 am Operator:
Sample : CCV 10PPB V120408A/V120508A Inst : GCMS_L
Misc : V120308A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 10 09:44:42 2008 Quant Results File: 081203_BP.RES

Quant Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration
DataAcq Meth : 8260

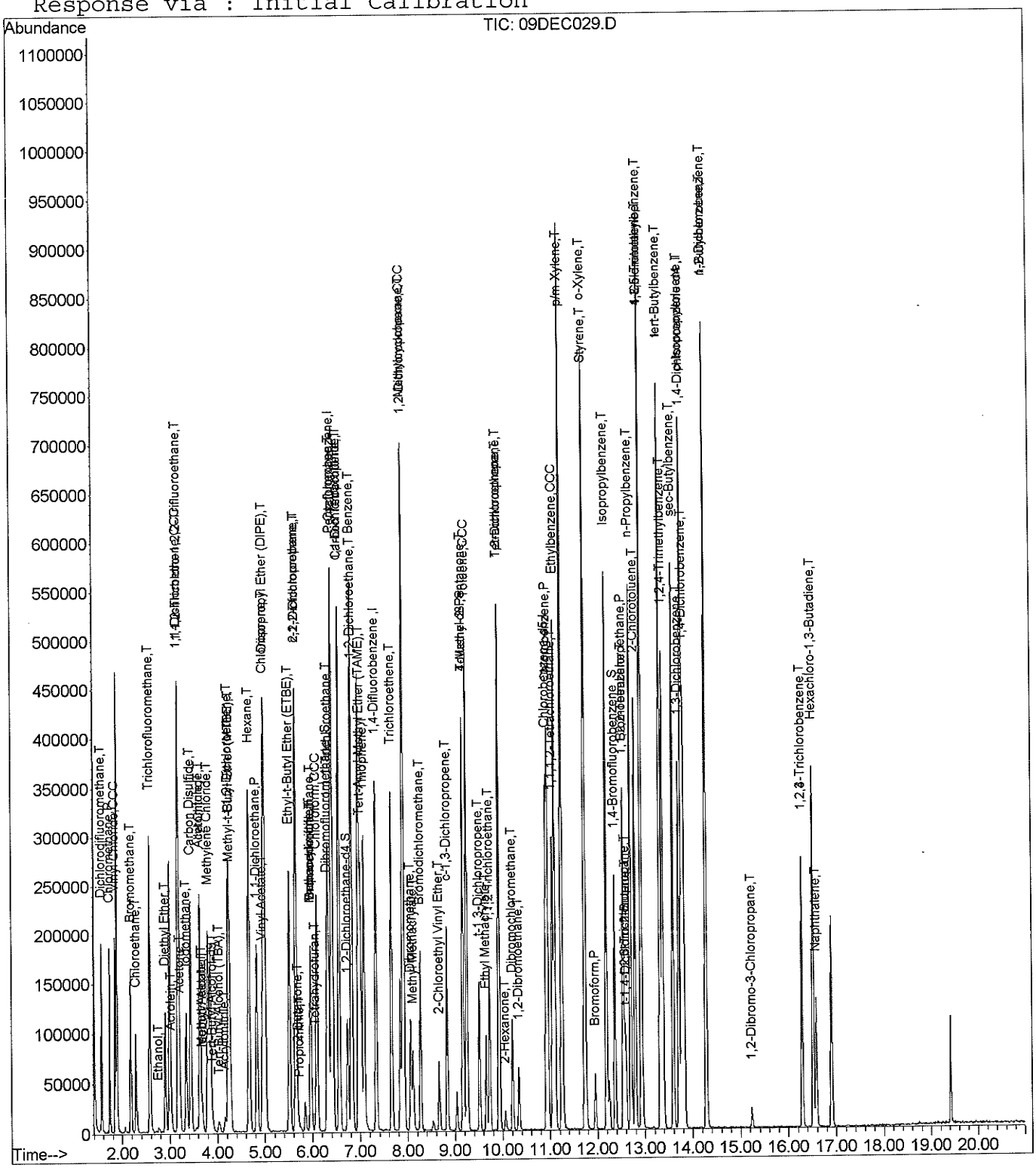
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
74) Ethylbenzene	11.1014	91	458916	10.8458	ug/l	
75) p/m-Xylene	11.2478	91	715042	22.1985	ug/l	
76) o-Xylene	11.7340	91	370613	11.9184	ug/l	
77) Styrene	11.7497	104	289201	12.1482	ug/l	
78) Bromoform	11.9484	173	36609	13.9991	ug/l	
79) Isopropylbenzene	12.1941	105	474307	11.6126	ug/l	
81) 1,2,3-Trichloropropane	12.5862	75	67468	12.3507	ug/l	
82) Bromobenzene	12.5496	156	113612	11.9453	ug/l	
83) n-Propylbenzene	12.6960	91	551911	11.6292	ug/l	
84) t-1,4-Dichloro-2-Butene	12.6071	53	13053	10.9297	ug/l	
85) 2-Chlorotoluene	12.7953	91	321913	12.0013	ug/l	
86) 1,3,5-Trimethylbenzene	12.9208	105	390627	11.9286	ug/l	
88) 4-Chlorotoluene	12.9260	91	373816	10.7026	ug/l	
89) 1,1,2,2-Tetrachloroethane	12.5339	83	57900	11.4433	ug/l	
90) 1,2,4-Trimethylbenzene	13.3808	105	363988	10.3503	ug/l	
91) tert-Butylbenzene	13.3233	119	382551	10.4411	ug/l	
92) p-Isopropyltoluene	13.7782	119	434250	10.2497	ug/l	
93) sec-Butylbenzene	13.5952	105	514852	10.5136	ug/l	
94) 1,3-Dichlorobenzene	13.7154	146	222329	10.4874	ug/l	
95) 1,4-Dichlorobenzene	13.8252	146	235943	10.8168	ug/l	
96) 1,2-Dichlorobenzene	14.2853	146	182827	10.3145	ug/l	
97) n-Butylbenzene	14.2800	91	355097	9.4611	ug/l	
98) 1,2-Dibromo-3-Chloropropan	15.2316	75	5935	9.6354	ug/l	
99) 1,2,4-Trichlorobenzene	16.2876	180	123307	9.5839	ug/l	
100) Hexachloro-1,3-Butadiene	16.5229	225	105238	9.5217	ug/l	
101) Naphthalene	16.5856	128	150695	10.4100	ug/l	
102) 1,2,3-Trichlorobenzene	16.2876	180	123307	9.5829	ug/l	

(#) = qualifier out of range (m) = manual integration

Data File : C:\MSDCHEM\1\DATA\081209\09DEC029.D
Acq On : 10 Dec 2008 12:06 am
Sample : CCV 10PPB V120408A/V120508A
Misc : V120308A
MS Integration Params: RTEINT.P
Quant Time: Dec 10 9:44 2008

Vial: 13
Operator:
Inst : GCMS_L
Multiplr: 1.00
Quant Results File: 081203_BP.

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\081209\09DEC002.D
Acq On : 9 Dec 2008 11:43 am
Sample : CCV 10PPB V120408A/V120508A
Misc : V120308A
MS Integration Params: RTEINT.P

Vial: 17
Operator:
Inst : GCMS_L
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Tert-Butyl Alcohol-d9	1.000	1.000	0.0	89	0.01
2	T	Ethanol	0.157	0.186	-18.5	115	0.00
3	T	Tert-Butyl Alcohol (TBA)	1.084	1.299	-19.8	115	0.00
4	I	Pentafluorobenzene	1.000	1.000	0.0	103	0.00
5	T	Dichlorodifluoromethane	0.575	0.538	6.4	98	0.00
6	P	Chloromethane	0.618	0.596	3.6	98	0.00
7	CCC	Vinyl Chloride	0.613	0.683	-11.4	113	0.00
8	T	Bromomethane	0.410	0.438	-6.8	115	0.00
9	T	Chloroethane	0.359	0.333	7.2	96	0.00
10	T	Trichlorofluoromethane	0.975	0.925	5.1	96	0.00
11	T	Diethyl Ether	0.194	0.196	-1.0	101	0.00
12	T	Acetone	0.046	0.043#	6.5	101	0.00
13	T	Iodomethane	0.402	0.453	-12.7	103	0.00
14	CCC	1,1-Dichloroethene	0.723	0.745	-3.0	102	0.00
15	T	1,1,2-Trichloro-1,2,2-Trifl	0.479	0.523	-9.2	109	0.00
16	T	Carbon Disulfide	1.312	1.475	-12.4	108	0.00
17	T	Acetonitrile	0.812	0.795	2.1	98	0.00
18	T	Acrylonitrile	0.061	0.064#	-4.9	111	0.00
19	T	Allyl Chloride	0.813	0.795	2.2	98	0.00
20	T	Acrolein	0.017	0.026#	-52.9#	147	0.00
21	T	Methyl Acetate	0.157	0.158	-0.6	110	0.00
22	T	Methylene Chloride	0.413	0.421	-1.9	101	0.00
23	T	t-1,2-Dichloroethene	0.490	0.494	-0.8	101	0.00
24	T	Isobutyl Alcohol	0.147	0.158	-7.5	109	0.00
25	T	Methyl-t-Butyl Ether (MTBE)	0.764	0.838	-9.7	111	0.00
26	T	Hexane	0.727	0.773	-6.3	107	0.00
27	P	1,1-Dichloroethane	0.903	0.876	3.0	99	0.00
28	T	Vinyl Acetate	0.047	0.055#	-17.0	119	0.00
29	T	Diisopropyl Ether (DIPE)	1.333	1.356	-1.7	104	0.00
30	T	Chloroprene	0.856	0.847	1.1	96	0.00
31	T	Ethyl-t-Butyl Ether (ETBE)	0.929	0.984	-5.9	105	0.00
32	T	c-1,2-Dichloroethene	0.482	0.487	-1.0	102	0.00
33	T	2,2-Dichloropropane	0.799	0.784	1.9	101	0.00
34	T	2-Butanone	0.075	0.071#	5.3	111	0.00
35	T	Propionitrile	0.019	0.023#	-21.1#	108	0.00
36	T	Methacrylonitrile	0.120	0.126	-5.0	106	0.00
37	T	Propanedinitrile	0.022	0.025#	-13.6	117	0.00
38	T	Bromochloromethane	0.232	0.255	-9.9	107	0.00
39	T	Tetrahydrofuran	0.048	0.048#	0.0	112	0.00
40	CCC	Chloroform	0.832	0.813	2.3	98	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\081209\09DEC002.D
Acq On : 9 Dec 2008 11:43 am
Sample : CCV 10PPB V120408A/V120508A
Misc : V120308A
MS Integration Params: RTEINT.P

Vial: 17
Operator:
Inst : GCMS_L
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	S	Dibromofluoromethane	0.394	0.368	6.6	93	0.00
42	T	1,1,1-Trichloroethane	0.787	0.786	0.1	100	0.00
43	T	Cyclohexane	0.765	0.768	-0.4	106	0.00
44	T	1,1-Dichloropropene	0.658	0.668	-1.5	99	0.00
45	T	Carbon Tetrachloride	0.670	0.680	-1.5	100	0.00
46	S	1,2-Dichloroethane-d4	0.381	0.343	10.0	90	0.00
47	I	1,4-Difluorobenzene	1.000	1.000	0.0	95	0.00
48	T	Benzene	1.352	1.460	-8.0	100	0.00
49	T	1,2-Dichloroethane	0.349	0.368	-5.4	99	0.00
50	T	Tert-Amyl-Methyl Ether (TAM	0.536	0.617	-15.1	104	0.00
51	T	Thiophene	0.588	0.663	-12.8	104	0.00
52	T	Trichloroethene	0.339	0.369	-8.8	99	0.00
53	CCC	1,2-Dichloropropane	0.302	0.325	-7.6	99	0.00
54	T	Methylcyclohexane	0.597	0.667	-11.7	105	0.00
55	T	Dibromomethane	0.110	0.131	-19.1	107	0.00
56	T	Methyl Methacrylate	0.079	0.109	-38.0#	128	0.00
57	T	Bromodichloromethane	0.377	0.401	-6.4	102	0.00
58	T	2-Chloroethyl Vinyl Ether	0.095	0.105	-10.5	113	0.00
59	T	c-1,3-Dichloropropene	0.392	0.424	-8.2	102	0.00
60	S	Toluene-d8	1.062	1.036	2.4	92	0.00
61	CCC	Toluene	1.255	1.344	-7.1	96	0.00
62	T	4-Methyl-2-Pentanone	0.006	0.008#	-33.3#	157#	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	89	0.00
64	T	t-1,3-Dichloropropene	0.374	0.409	-9.4	93	0.00
65	T	Ethyl Methacrylate	0.205	0.256	-24.9#	104	0.00
66	T	1,1,2-Trichloroethane	0.166	0.205	-23.5#	103	0.00
67	T	Tetrachloroethene	0.568	0.645	-13.6	102	0.00
68	T	1,3-Dichloropropane	0.388	0.440	-13.4	95	0.00
69	T	2-Hexanone	0.034	0.041#	-20.6#	105	0.00
70	T	Dibromochloromethane	0.249	0.291	-16.9	103	0.00
71	T	1,2-Dibromoethane	0.190	0.230	-21.1#	106	0.00
72	P	Chlorobenzene	1.001	1.145	-14.4	100	0.00
73	T	1,1,1,2-Tetrachloroethane	0.361	0.406	-12.5	97	0.00
74	CCC	Ethylbenzene	1.725	1.932	-12.0	95	0.00
75	T	p/m-Xylene	1.313	1.498	-14.1	97	0.00
76	T	o-Xylene	1.267	1.443	-13.9	95	0.00
77	T	Styrene	0.970	1.176	-21.2#	99	0.00
78	P	Bromoform	0.107	0.160	-49.5#	109	0.00
79	T	Isopropylbenzene	1.665	1.914	-15.0	94	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\081209\09DEC002.D
Acq On : 9 Dec 2008 11:43 am
Sample : CCV 10PPB V120408A/V120508A
Misc : V120308A
MS Integration Params: RTEINT.P

Vial: 17
Operator:
Inst : GCMS_L
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
80	S	1,4-Bromofluorobenzene	0.395	0.410	-3.8	89	0.00
81	T	1,2,3-Trichloropropane	0.223	0.295	-32.3#	104	0.00
82	T	Bromobenzene	0.388	0.487	-25.5#	104	0.00
83	T	n-Propylbenzene	1.934	2.287	-18.3	97	0.00
84	T	t-1,4-Dichloro-2-Butene	0.049	0.064#	-30.6#	104	0.00
85	T	2-Chlorotoluene	1.093	1.270	-16.2	98	0.00
86	T	1,3,5-Trimethylbenzene	1.335	1.581	-18.4	98	0.00
87	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	97	0.00
88	T	4-Chlorotoluene	2.457	2.497	-1.6	96	0.00
89	P	1,1,2,2-Tetrachloroethane	0.356	0.399	-12.1	107	0.00
90	T	1,2,4-Trimethylbenzene	2.474	2.533	-2.4	95	0.00
91	T	tert-Butylbenzene	2.578	2.682	-4.0	96	0.00
92	T	p-Isopropyltoluene	2.981	3.236	-8.6	102	0.00
93	T	sec-Butylbenzene	3.445	3.526	-2.4	96	0.00
94	T	1,3-Dichlorobenzene	1.492	1.590	-6.6	100	0.00
95	T	1,4-Dichlorobenzene	1.535	1.652	-7.6	104	0.00
96	T	1,2-Dichlorobenzene	1.247	1.313	-5.3	100	0.00
97	T	n-Butylbenzene	2.641	2.652	-0.4	94	0.00
98	T	1,2-Dibromo-3-Chloropropane	0.043	0.049#	-14.0	115	0.00
99	T	1,2,4-Trichlorobenzene	0.905	0.967	-6.9	102	0.00
100	T	Hexachloro-1,3-Butadiene	0.778	0.780	-0.3	99	0.00
101	T	Naphthalene	1.018	1.161	-14.0	102	0.00
102	T	1,2,3-Trichlorobenzene	0.905	0.967	-6.9	102	0.00

Work Order#: 08-12-0410

Client: WEISS Associates

EPA 8270C (M) Isotope Dilution

Calibration

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\081107\
Data File : 07NOV007.D
Acq On : 7 Nov 2008 2:05 pm
Operator :
Sample : ICV S101308G
ALS Vial : 8 Sample Multiplier: 1
InstName : GCMS AAA

Quant Time: Nov 07 17:57:53 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Fri Nov 07 17:56:50 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dioxane-d8	3.010	96	46060	40.00 mg/l	# 0.00
3) Naphthalene-d8	7.112	136	226354	40.00 mg/l	# 0.00
System Monitoring Compounds					
4) Nitrobenzene-d5	6.379	82	274608	79.29 mg/l	0.00
Target Compounds					Qvalue
2) 1,4-Dioxane	3.036	88	86006	73.61 mg/l #	71

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\MSDCHEM\1\DATA\081107\
Data File : 07NOV007.D
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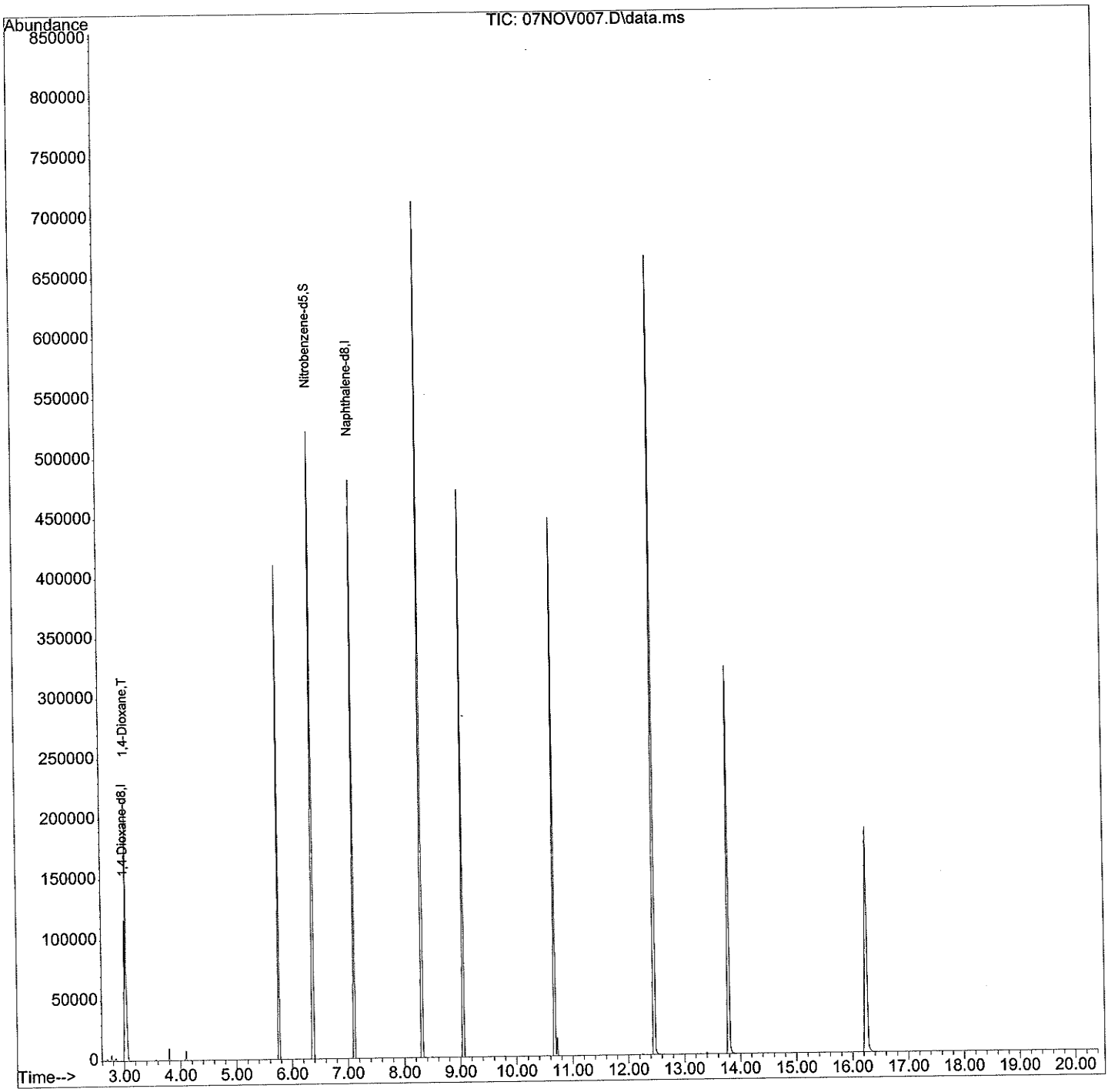
DataAcq Meth:SVOA.M



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\081211\
Data File : 11DEC002.D
Acq On : 11 Dec 2008 9:32 am
Operator :
Sample : DIOX-80 S101308D
ALS Vial : 2 Sample Multiplier: 1
InstName : GCMS AAA

Quant Time: Dec 11 09:51:36 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Wed Nov 19 09:17:53 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M

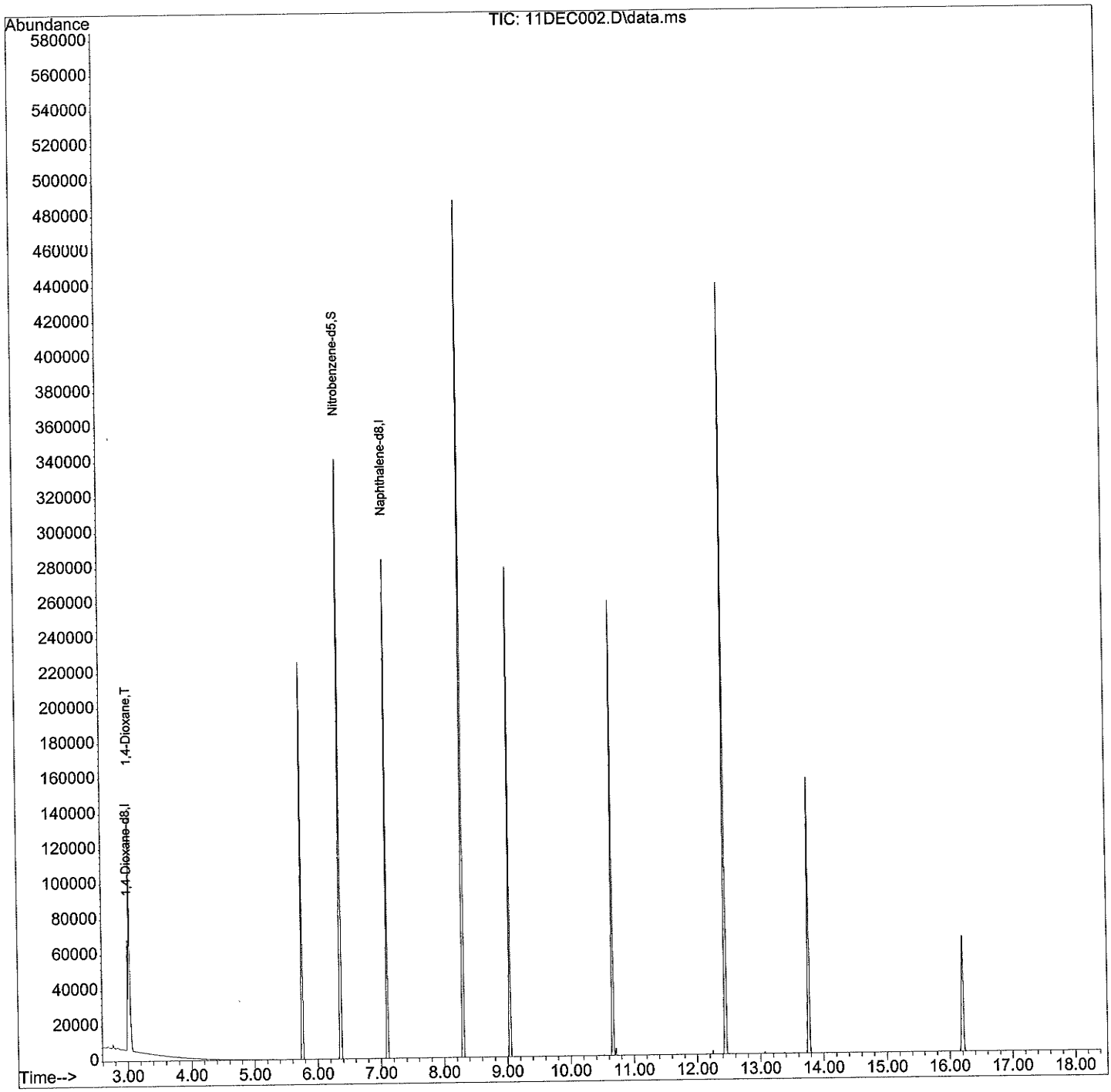
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dioxane-d8	2.999	96	21753	40.00 mg/l	# 0.00
3) Naphthalene-d8	7.101	136	110859	40.00 mg/l	# 0.00
System Monitoring Compounds					
4) Nitrobenzene-d5	6.368	82	138846	81.86 mg/l	0.00
Target Compounds					Qvalue
2) 1,4-Dioxane	3.025	88	44652	80.92 mg/l #	46

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\081211\
Data File : 11DEC002.D
Acq On : 11 Dec 2008 9:32 am
Operator :
Sample : DIOX-80 S101308D
ALS Vial : 2 Sample Multiplier: 1
InstName : GCMS AAA

Quant Time: Dec 11 09:51:36 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Wed Nov 19 09:17:53 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\081107\
Data File : 07NOV004.D
Acq On : 7 Nov 2008 12:46 pm
Operator :
Sample : DIOX 80PPM S101308D
ALS Vial : 4 Sample Multiplier: 1
InstName : GCMS AAA

Quant Time: Nov 07 17:55:21 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Fri Nov 07 17:55:11 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M

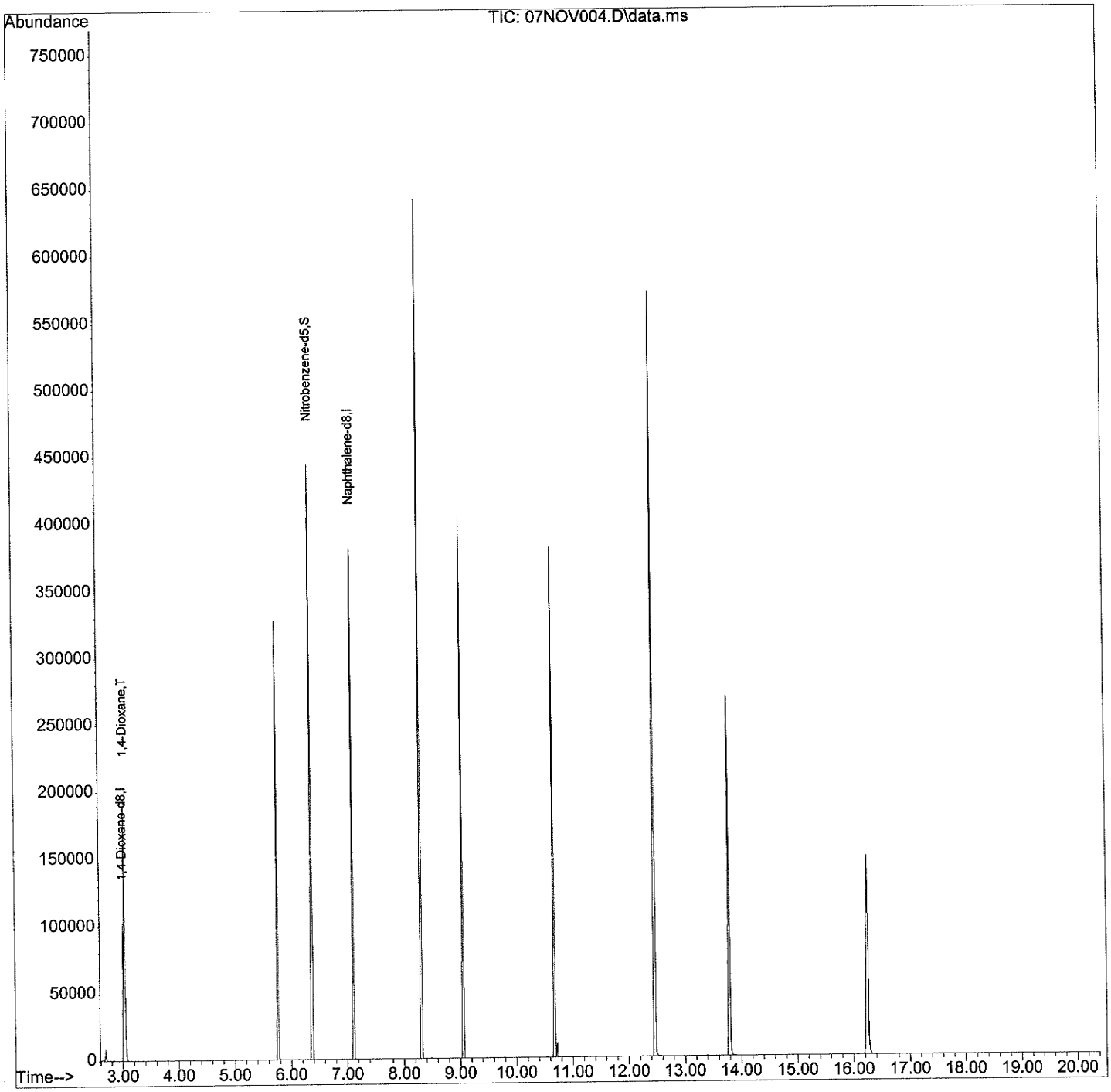
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dioxane-d8	3.009	96	39293	40.00 mg/l	# 0.00
3) Naphthalene-d8	7.112	136	178255	40.00 mg/l	# 0.00
System Monitoring Compounds					
4) Nitrobenzene-d5	6.374	82	215387	81.07 mg/l	0.00
Target Compounds					Qvalue
2) 1,4-Dioxane	3.036	88	76923	76.08 mg/l #	70

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\081107\
Data File : 07NOV004.D
Acq On : 7 Nov 2008 12:46 pm
Operator :
Sample : DIOX 80PPM S101308D
ALS Vial : 4 Sample Multiplier: 1
InstName : GCMS AAA

Quant Time: Nov 07 17:55:21 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Fri Nov 07 17:55:11 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M



Calscience Environmental Laboratories, Inc.

Supplemental Report 1

December 16, 2008

Subcontract analyses are reported as a stand-alone report.

Tim Utterback
Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Subject: **Calscience Work Order No.: 08-12-0410**
Client Reference: UC Davis / 388-1856-2-16

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 12/4/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Virendra Patel
Project Manager

Revised COC received on 12/08/08 at 15:24 - VP

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

0410

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AquaTerra Associates Incorporated, DBA

Calscience Environmental Lab
5063 Commercial Circle, Suite H
Concord, CA 94520
phone: (925) 689-9022

Project ID: 388-1856-2-16
Protocol No.: ROD

Client Contact		Project Manager: Bob Devany	Sampled by: KHA	Date: 12/3/08	COC Number: UCD
Weiss Associates		Tel: 510-450-6144	Lab Contact: Micah Smith	Carrier:	Page 3 of 3
5801 Christie Avenue, Suite 600		Analysis Turnaround Time			Job No.
Emeryville, CA 94608		Calendar (C) or Work Days (W) — 5W			
(510) 450-6000	Phone	TAT if different from Below 10 days			SDG No.
(510) 547-5043	FAX	☐ 2 weeks			
		☐ 1 week			
Job Name: UC Davis		☐ 2 days			
Address: One Shields Ave, Davis		☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	Carbonate/Bicarbonate (SM2320B)	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
2 GWGW2381	12/3	1455	L	W	1									X									
3 GWGW2381	12/3	1455	|	|	1							X											Al, Si + Title 22
GWGW2381	12/3	1455	|	|	1																X	
GWGW2381	12/3	1455	|	|	1									X								
4 ~~Travel Blank~~ TRU 12/8/08	12/3	~~[illegible]~~	0700 AGP		1						X											~~HOLD~~ TRU 12/8/08
TBGW0523																							
					Field Filtered	X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: Level II Reporting with Initial Calibration Curves and Continuing Calibration **Note: Nitrate 48 hour hold time!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
J. Petti AGP	WEISS	12/3/08 1600		CEL	12-3-08 1600
Relinquished by: to GSO	Company:	Date/Time: 12-3-08 1730	Received by:	Company: CEL	Date/Time: 12/4/08 1030
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Chain of Custody Record

Calscience Environmental Lab
5063 Commercial Circle, Suite H
Concord, CA 94520
phone: (925) 689-9022

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

Project ID: 388-1856-2-16
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

0410

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AguaTierra Associates Incorporated, DBA

Client Contact	Project Manager: Bob Devany	Sampled by: MD/KHA	Date: 12/3/08	COC Number: UCD
Weiss Associates	Tel: 510-450-6144	Lab Contact: Micah Smith	Carrier:	Page 1 of 3
5801 Christie Avenue, Suite 600	**Analysis Turnaround Time**			Job No.
Emeryville, CA 94608	Calendar (C) or Work Days (W) --- 5W			
(510) 450-6000 Phone	TAT if different from Below 10 days			SDG No.
(510) 547-5043 FAX	☐ 2 weeks			
	☐ 1 week			
Job Name: UC Davis	☐ 2 days			
Address: One Shields Ave, Davis	☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	Carbonate/Bicarbonate (SM2320B)	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
1	GWGW 2369	12/3/08	1130	L	W	1	X		X															
	GWGW 2369	12/3/08	1130	L		1																	X	
	GWGW 2369	12/3/08	1130	L		2		X																
	GWGW 2369	12/3/08	1130	L		1																X		
2	GWGW 2380	12/3/08	1110	L		1																X		
	GWGW 2380	12/3/08	1110	L		2		X																
	GWGW 2380	12/3/08	1110	L		1						X												
	GWGW 2380	12/3/08	1110	L		1				X														
	GWGW 2380	12/3/08	1110	L		3					X													
						Field Filtered	X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: Level II Reporting with Initial Calibration Curves and Continuing Calibration **Note: Nitrate 48 hour hold time!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Patti ALP	WEISS	12/3/08 1600		CEL	12-3-08 1600
to GSO		12-3-08 1730		CEL	12/4/08 1030
5108 48365					

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

0410

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AguaTierra Associates Incorporated, DBA

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5063 Commercial Circle, Suite H
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phone: (925) 689-9022

Project ID: 388-1856-2-16
Protocol No.: ROD

Client Contact		Project Manager: Bob Devany	Sampled by: KHA	Date: 12/3/08	COC Number: UCD
Weiss Associates		Tel: 510-450-6144	Lab Contact: Micah Smith	Carrier:	Page 2 of 2
5801 Christie Avenue, Suite 600		Analysis Turnaround Time			Job No.
Emeryville, CA 94608		Calendar (C) or Work Days (W) --- 5W			
(510) 450-6000	Phone	TAT if different from Below 10 days			SDG No.
(510) 547-5043	FAX	☐ 2 weeks			
		☐ 1 week			
Job Name: UC Davis		☐ 2 days			
Address: One Shields Ave, Davis		☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	Carbonate/Bicarbonate (SM2320B)	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
	GWGW 2380	12/3/08	1110	L	W	1							X											Al, Si + Title 22
2	GWGW 2380	12/3/08	1110	L		1																	X	
	GWGW 2380	12/3/08	1110	L		1										X								
	GWGW 2380	12/3/08	1110	L		1									X									
	GWGW 2381	12/3/08	1455	L		1																X		
	GWGW 2381	12/3/08	1455	L		1				X														
3	GWGW 2381	12/3/08	1455	L		1						X												
	GWGW 2381	12/3/08	1455	L		3					X													
	GWGW 2381	12/3/08	1455	L		2		X																
						Field Filtered	X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **Level II Reporting with Initial Calibration Curves and Continuing Calibration** **Note: Nitrate 48 hour hold time!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	WEISS	12/3/08 1600	[signature]	CEL	12-3-08
[signature] TO GSD		12-3-08 1730	[signature]	CEL	12/4/08 1030

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

0410

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AguaTierra Associates Incorporated, DBA

Calscience Environmental Lab
5063 Commercial Circle, Suite H
Concord, CA 94520
phone: (925) 689-9022

Project ID: 388-1856-2-16
Protocol No.: ROD

Client Contact		Project Manager: Bob Devany	Sampled by: KHA	Date: 12/3/08	COC Number: UCD
Weiss Associates		Tel: 510-450-6144	Lab Contact: Micah Smith	Carrier:	Page 3 of 3
5801 Christie Avenue, Suite 600		Analysis Turnaround Time			Job No.
Emeryville, CA 94608		Calendar (C) or Work Days (W) --- 5W			
(510) 450-6000	Phone	TAT if different from Below 10 days			SDG No.
(510) 547-5043	FAX	☐ 2 weeks			
		☐ 1 week			
Job Name: UC Davis		☐ 2 days			
Address: One Shields Ave, Davis		☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	Carbonate/Bicarbonate (SM2320B)	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
3	GWGW2381	12/3	1455	L	W	1									X									
3	GWGW2381	12/3	1455	|	|	1							X											Al, Si + Title 22
3	GWGW2381	12/3	1455	|	|	1																	X	
3	GWGW2381	12/3	1455	|	|	1										X								
4	Travel Blank	12/3	~~1455~~	0700 MAP	|	1						X												HOLD
						Field Filtered	X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: Level II Reporting with Initial Calibration Curves and Continuing Calibration **Note: Nitrate 48 hour hold time!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
J. Petti MAP	WEISS	12/3/08 1600		CEL	12-3-08 1600
To GSO		12-3-08 1730		CEL	12/4/08 1030

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 0 8 - 1 2 - 0 4 1 0

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Weiss Asso.

DATE: 12/04/08

TEMPERATURE: (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 2.6 °C - 0.2 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by:_____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only **Initial:** [illegible]

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Initial:** [illegible]

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** W.SC

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	☑	☐	☐
COC document(s) received complete.....	☑	☐	☐
Sampler's name indicated on COC.....	☑	☐	☐
Sample container label(s) consistent with COC.....	☑	☐	☐
Sample container(s) intact and good condition.....	☑	☐	☐
Correct containers and volume for analyses requested.....	☑	☐	☐
Analyses received within holding time.....	☑	☐	☐
Proper preservation noted on sample label(s).....	☑	☐	☐
Volatile analysis container(s) free of headspace.....	☑	☐	☐
Tedlar bag(s) free of condensation.....	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☑VOAh ☐VOAna$_2$ ☑125AGB ☐125AGBh ☐125AGBpo$_4$ ☐1AGB ☑1AGBna$_2$ ☐1AGBs ☐500AGB ☐500AGBs ☐250CGB ☐250CGBs ☐1PB ☐500PB ☐500PBna ☐250PB ☑250PBn ☑125PB ☐125PBznna ☐100PBsterile ☐100PBna$_2$ ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® ☐_____

Checked/Labeled by: W.S.C

Reviewed by: DL

Scanned by: W.S.C

Container: C:Clear A:Amber P:Poly/Plastic G:Glass J:Jar B:Bottle

Preservative: h:HCL n:HNO_3 na$_2$:$Na_2S_2O_3$ na:NaOH po$_4$:H_3PO_4 s:H_2SO_4 znna:$ZnAc_2$+NaOH

Weck Laboratories, Inc.
Analytical Laboratory Services - Since 1964

Report Date: Monday, December 15, 2008
Received Date: Friday, December 5, 2008
Received Time: 12:49 pm

Turnaround Time: 7 days

Client: Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Phone: (714) 895-5494
FAX: (714) 894-7501

Attn: Virendra Patel

Project: 08-12-0410

P.O.#:

Certificate of Analysis

Work Order: 8120526-01 **Sample ID: GWGW2369** **Matrix: Water**

Sampled by: Client **Sampled: 12/03/08 11:30** **Sample Note:**

Analyte	Result	Qualifier	Units	Reporting Limit	Dil	Method	Prepared	Analyzed		Batch
Uranium, Total	**5.6**		ug/l	0.20	1	EPA 200.8	12/11/08	12/11/08	ppy	W8L0704

Work Order: 8120526-02 **Sample ID: GWGW2380** **Matrix: Water**

Sampled by: Client **Sampled: 12/03/08 11:10** **Sample Note:**

Analyte	Result	Qualifier	Units	Reporting Limit	Dil	Method	Prepared	Analyzed		Batch
Uranium, Total	**4.8**		ug/l	0.20	1	EPA 200.8	12/11/08	12/11/08	ppy	W8L0704

Work Order: 8120526-03 **Sample ID: GWGW2381** **Matrix: Water**

Sampled by: Client **Sampled: 12/03/08 14:55** **Sample Note:**

Analyte	Result	Qualifier	Units	Reporting Limit	Dil	Method	Prepared	Analyzed		Batch
Uranium, Total	**4.5**		ug/l	0.20	1	EPA 200.8	12/11/08	12/11/08	ppy	W8L0704

14859 East Clark Avenue, City of Industry, California 91745-1396 (626) 336-2139 FAX (626) 336-2634
www.wecklabs.com

Weck Laboratories, Inc.
Analytical Laboratory Services - Since 1964

Certificate of Analysis

Weck Laboratories, Inc

Metals by EPA 200 Series Methods - Quality Control

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Batch W8L0704 - EPA 200.8									
Blank (W8L0704-BLK1)					Prepared & Analyzed: 12/11/08				
Uranium, Total		ND		ug/l					
LCS (W8L0704-BS1)					Prepared & Analyzed: 12/11/08				
Uranium, Total		47.4		ug/l	50.0	95	85-115		
Matrix Spike (W8L0704-MS1)			Source: 8120526-01		Prepared & Analyzed: 12/11/08				
Uranium, Total	5.62	60.4		ug/l	50.0	110	70-130		
Matrix Spike Dup (W8L0704-MSD1)			Source: 8120526-01		Prepared & Analyzed: 12/11/08				
Uranium, Total	5.62	62.2		ug/l	50.0	113	70-130	3	30

14859 East Clark Avenue, City of Industry, California 91745-1396 (626) 336-2139 FAX (626) 336-2634
www.wecklabs.com

Weck Laboratories, Inc.
Analytical Laboratory Services - Since 1964

Certificate of Analysis

Notes:
The Chain of Custody document is part of the analytical report.
Any remaining sample(s) for testing will be disposed of one month from the final report date unless other arrangements are made in advance.
All results are expressed on wet weight basis unless otherwise specified.
ND = NOT DETECTED at or above the Reporting Limit. If J-value reported, then NOT DETECTED at or above the Method Detection Limit (MDL).
Sub = Subcontracted analysis, original report enclosed.
Dil = Dilution Factor
MDL = Method Detection Limit
MDA = Minimum Detectable Activity

An Absence of Total Coliform meets the drinking water standards as established by the State of California Department of Health Services.
The Reporting Limit (RL) is referenced as laboratory's Practical Quantitation Limit (PQL).
For Potable water analysis, the Reporting Limit (RL) is referenced as Detection Limit for reporting purposes (DLRs) defined by EPA.

If sample collected by Weck Laboratories, sampled in accordance to lab SOP MIS002

Authorized Signature

Contact: Kim G Tu (Project Manager)

ELAP # 1132
LACSD # 10143
NELAC # 04229CA

The results in this report apply to the samples analyzed in accordance with the chain of custody document. Weck Laboratories certifies that the test results meet all requirements of NELAC unless noted in the Case Narrative. This analytical report must be reproduced in its entirety.

Flags for Data Qualifiers:

14859 East Clark Avenue, City of Industry, California 91745-1396 (626) 336-2139 FAX (626) 336-2634
www.wecklabs.com

Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

TO: WECK

8120526

CHAIN OF CUSTODY RECORD

DATE: 12/04/08
PAGE: 1 OF 1

LABORATORY CLIENT: Calscience Environmental Laboratories, Inc.
ADDRESS: 7440 Lincoln Way
CITY: Garden Grove, CA 92841-1427
TEL: (714) 895-5494
E-MAIL: vpatel@calscience.com

CLIENT PROJECT NAME / NUMBER: 08-12-0410
PROJECT CONTACT: Virendra Patel
SAMPLER(S): (PRINT)

P.O. NO.: 08-12-0410
QUOTE NO.:
LAB USE ONLY

TURNAROUND TIME
☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☐ 5 DAYS ☒ 7 Days

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ____/____/____

SPECIAL INSTRUCTIONS
7 Days TAT a must. Please call if you will be delayed.

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	Matrix	#Cont	Uranium (EPA 200.8)	Units -- ug/L	ICV/CCV required with final report in PDF format	Standard Excel EDD	FIELD FILTERED
	GWGW2369	12/03/08	1130	W	1	X	X	X	X	X
	GWGW2380	12/03/08	1110	W	1	X	X	X	X	X
	GWGW2381	12/03/08	1455	W	1	X	X	X	X	X

Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
(CALSCIENCE)	Jamel Smith 12/5/08 12:50 4.9C	12/04/08	
Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:

Calscience Environmental Laboratories, Inc.

December 16, 2008

Tim Utterback
Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Subject: **Calscience Work Order No.: 08-12-0585**
Client Reference: UC Davis / 388-1856-2-16

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 12/5/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Virendra R Patel

Calscience Environmental
Laboratories, Inc.
Virendra Patel
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	N/A
Emeryville, CA 94608-1939		Method:	RSK-175M

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2368A	**08-12-0585-1-D**	**12/03/08 16:15**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	24000	17.0	0.0547	10		ug/L

GWGW2368B	**08-12-0585-2-D**	**12/03/08 16:15**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	23500	17.0	0.0547	10		ug/L

GWGW2378	**08-12-0585-4-L**	**12/03/08 17:25**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	36800	17.0	0.0547	10		ug/L

GWGW2379A	**08-12-0585-5-D**	**12/03/08 16:30**	**Aqueous**	**GC 14**	**N/A**	**12/08/08 00:00**	**081208L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	4040	1.70	0.00547	1		ug/L

GWGW2379B	**08-12-0585-6-D**	**12/03/08 16:30**	**Aqueous**	**GC 14**	**N/A**	**12/08/08 00:00**	**081208L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	3860	1.70	0.00547	1		ug/L

GWGW2373	**08-12-0585-7-D**	**12/04/08 10:15**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	34100	17.0	0.0547	10		ug/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	N/A
Emeryville, CA 94608-1939		Method:	RSK-175M

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2390	**08-12-0585-9-D**	**12/04/08 10:35**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	15000	17.0	0.0547	10		ug/L

GWGW2382A	**08-12-0585-10-L**	**12/04/08 11:45**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	33400	17.0	0.0547	10		ug/L

GWGW2382B	**08-12-0585-11-K**	**12/04/08 11:45**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	33600	17.0	0.0547	10		ug/L

GWGW2377	**08-12-0585-12-H**	**12/04/08 14:30**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	21600	17.0	0.0547	10		ug/L

Method Blank	**099-12-659-36**	**N/A**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	ND	1.70	0.00547	1		ug/L

Method Blank	**099-12-659-37**	**N/A**	**Aqueous**	**GC 14**	**N/A**	**12/08/08 00:00**	**081208L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	ND	1.70	0.00547	1		ug/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6010B

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2368A	**08-12-0585-1-B**	**12/03/08 16:15**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:12**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	15.0	0.0500	0.0464	1		mg/L

GWGW2368B	**08-12-0585-2-B**	**12/03/08 16:15**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:07**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	15.4	0.0500	0.0464	1		mg/L

GWGW2378	**08-12-0585-4-H**	**12/03/08 17:25**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:14**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	17.1	0.0500	0.0464	1		mg/L

GWGW2379A	**08-12-0585-5-A**	**12/03/08 16:30**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:15**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	14.8	0.0500	0.0464	1		mg/L

GWGW2379B	**08-12-0585-6-A**	**12/03/08 16:30**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:17**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	14.5	0.0500	0.0464	1		mg/L

GWGW2373	**08-12-0585-7-B**	**12/04/08 10:15**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:19**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	17.4	0.0500	0.0464	1		mg/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6010B

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2390	**08-12-0585-9-A**	**12/04/08 10:35**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:24**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	18.0	0.0500	0.0464	1		mg/L

GWGW2382A	**08-12-0585-10-G**	**12/04/08 11:45**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:26**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	17.1	0.0500	0.0464	1		mg/L

GWGW2382B	**08-12-0585-11-G**	**12/04/08 11:45**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:27**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	17.3	0.0500	0.0464	1		mg/L

GWGW2377	**08-12-0585-12-E**	**12/04/08 14:30**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/11/08 16:02**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	17.3	0.0500	0.0464	1		mg/L

Method Blank	**097-01-003-8,893**	**N/A**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:03**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	ND	0.0500	0.0464	1		mg/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6020
		Units:	mg/L
Project: UC Davis / 388-1856-2-16			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2368A	**08-12-0585-1-B**	**12/03/08 16:15**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/11/08 14:09**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	0.00380	0.00200	0.000338	2		Vanadium	0.0128	0.00200	0.0000314	2	
Chromium	0.145	0.00200	0.0000368	2	B	Aluminum	0.00448	0.100	0.00377	2	J

GWGW2368B	**08-12-0585-2-B**	**12/03/08 16:15**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/10/08 19:54**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	0.00356	0.00200	0.000338	2		Vanadium	0.0129	0.00200	0.0000314	2	
Chromium	0.150	0.00200	0.0000368	2	B	Aluminum	0.00497	0.100	0.00377	2	J

GWGW2378	**08-12-0585-4-H**	**12/03/08 17:25**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/10/08 20:12**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	ND	0.00200	0.000158	2		Molybdenum	0.00118	0.00200	0.000560	2	J
Arsenic	0.00377	0.00200	0.000338	2		Nickel	0.00412	0.00200	0.0000468	2	
Barium	0.0567	0.00200	0.0000802	2		Selenium	0.00897	0.00200	0.00157	2	
Beryllium	ND	0.00200	0.000111	2		Silver	ND	0.00200	0.0000366	2	
Cadmium	ND	0.00200	0.0000302	2		Thallium	ND	0.00200	0.0000306	2	
Chromium	0.123	0.00200	0.0000368	2	B	Vanadium	0.0131	0.00200	0.0000314	2	
Cobalt	0.000578	0.00200	0.0000342	2	J	Zinc	0.0122	0.0100	0.000681	2	
Copper	0.00275	0.00200	0.0000362	2		Aluminum	0.00692	0.100	0.00377	2	J
Lead	0.0000959	0.00200	0.0000260	2	J						

GWGW2379A	**08-12-0585-5-A**	**12/03/08 16:30**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/10/08 20:16**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	0.00273	0.00100	0.000169	1		Vanadium	0.0103	0.00100	0.0000157	1	
Chromium	0.0251	0.00100	0.0000184	1	B	Aluminum	0.0168	0.0500	0.00188	1	J

GWGW2379B	**08-12-0585-6-A**	**12/03/08 16:30**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/10/08 20:21**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	0.00266	0.00100	0.000169	1		Vanadium	0.0102	0.00100	0.0000157	1	
Chromium	0.0246	0.00100	0.0000184	1	B	Aluminum	0.0215	0.0500	0.00188	1	J

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6020
		Units:	mg/L
Project: UC Davis / 388-1856-2-16			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2373	**08-12-0585-7-B**	**12/04/08 10:15**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/10/08 20:25**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	0.00347	0.00200	0.000338	2		Vanadium	0.00320	0.00200	0.0000314	2	
Chromium	0.425	0.00200	0.0000368	2	B	Aluminum	0.0237	0.100	0.00377	2	J

GWGW2390	**08-12-0585-9-A**	**12/04/08 10:35**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/10/08 20:30**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	0.00327	0.00200	0.000338	2		Vanadium	0.0118	0.00200	0.0000314	2	
Chromium	0.0460	0.00200	0.0000368	2	B	Aluminum	0.0202	0.100	0.00377	2	J

GWGW2382A	**08-12-0585-10-G**	**12/04/08 11:45**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/10/08 20:35**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	ND	0.00200	0.000158	2		Molybdenum	0.00184	0.00200	0.000560	2	J
Arsenic	0.00342	0.00200	0.000338	2		Nickel	0.00600	0.00200	0.0000468	2	
Barium	0.0491	0.00200	0.0000802	2		Selenium	0.00447	0.00200	0.00157	2	
Beryllium	ND	0.00200	0.000111	2		Silver	ND	0.00200	0.0000366	2	
Cadmium	ND	0.00200	0.0000302	2		Thallium	ND	0.00200	0.0000306	2	
Chromium	0.0695	0.00200	0.0000368	2	B	Vanadium	0.0148	0.00200	0.0000314	2	
Cobalt	0.000506	0.00200	0.0000342	2	J	Zinc	0.0129	0.0100	0.000681	2	
Copper	0.00413	0.00200	0.0000362	2		Aluminum	0.0206	0.100	0.00377	2	J
Lead	0.000116	0.00200	0.0000260	2	J						

GWGW2382B	**08-12-0585-11-G**	**12/04/08 11:45**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/10/08 20:39**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	ND	0.00200	0.000158	2		Molybdenum	0.00176	0.00200	0.000560	2	J
Arsenic	0.00362	0.00200	0.000338	2		Nickel	0.00635	0.00200	0.0000468	2	
Barium	0.0498	0.00200	0.0000802	2		Selenium	0.00488	0.00200	0.00157	2	
Beryllium	ND	0.00200	0.000111	2		Silver	ND	0.00200	0.0000366	2	
Cadmium	ND	0.00200	0.0000302	2		Thallium	ND	0.00200	0.0000306	2	
Chromium	0.0714	0.00200	0.0000368	2	B	Vanadium	0.0158	0.00200	0.0000314	2	
Cobalt	0.000519	0.00200	0.0000342	2	J	Zinc	0.0156	0.0100	0.000681	2	
Copper	0.00437	0.00200	0.0000362	2		Aluminum	0.0239	0.100	0.00377	2	J
Lead	0.000200	0.00200	0.0000260	2	J						

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6020
		Units:	mg/L
Project: UC Davis / 388-1856-2-16			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPEF0365	**08-12-0585-13-G**	**12/04/08 13:50**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/11/08 14:13**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	ND	0.00100	0.0000790	1		Nickel	0.00439	0.00100	0.0000234	1	
Arsenic	0.00237	0.00100	0.000169	1		Selenium	0.00275	0.00100	0.000783	1	
Barium	0.199	0.00100	0.0000401	1		Silver	ND	0.00100	0.0000183	1	
Beryllium	ND	0.00100	0.0000553	1		Thallium	ND	0.00100	0.0000153	1	
Cadmium	ND	0.00100	0.0000151	1		Vanadium	0.0108	0.00100	0.0000157	1	
Chromium	0.0372	0.00100	0.0000184	1	B	Zinc	0.0134	0.00500	0.000340	1	
Cobalt	0.000193	0.00100	0.0000171	1	J	Calcium	46.7	1.00	0.113	10	
Copper	0.0118	0.00100	0.0000181	1		Magnesium	77.8	0.100	0.00163	1	
Lead	0.0000746	0.00100	0.0000130	1	J	Potassium	0.908	1.00	0.0324	10	J
Molybdenum	0.00166	0.00100	0.000280	1		Sodium	47.1	1.00	0.0473	10	

Method Blank	**096-06-003-1,821**	**N/A**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/11/08 13:33**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	ND	0.00100	0.0000790	1		Selenium	ND	0.00100	0.000783	1	
Arsenic	ND	0.00100	0.000169	1		Silver	ND	0.00100	0.0000183	1	
Barium	ND	0.00100	0.0000401	1		Thallium	ND	0.00100	0.0000153	1	
Beryllium	ND	0.00100	0.0000553	1		Vanadium	ND	0.00100	0.0000157	1	
Cadmium	ND	0.00100	0.0000151	1		Zinc	ND	0.00500	0.000340	1	
Chromium	0.00139	0.00100	0.0000184	1		Aluminum	ND	0.0500	0.00188	1	
Cobalt	ND	0.00100	0.0000171	1		Calcium	ND	0.100	0.0113	1	
Copper	ND	0.00100	0.0000181	1		Magnesium	ND	0.100	0.00163	1	
Lead	ND	0.00100	0.0000130	1		Potassium	ND	0.100	0.00324	1	
Molybdenum	ND	0.00100	0.000280	1		Sodium	ND	0.100	0.00473	1	
Nickel	ND	0.00100	0.0000234	1							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 7470A Filt.
Emeryville, CA 94608-1939		Method:	EPA 7470A

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2378	**08-12-0585-4-H**	**12/03/08 17:25**	**Aqueous**	**Mercury**	**12/12/08**	**12/12/08 18:08**	**081212L04A**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Mercury	0.000167	0.000200	0.0000177	1	J	mg/L

GWGW2382A	**08-12-0585-10-G**	**12/04/08 11:45**	**Aqueous**	**Mercury**	**12/12/08**	**12/12/08 18:10**	**081212L04A**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Mercury	0.000125	0.000200	0.0000177	1	J	mg/L

GWGW2382B	**08-12-0585-11-G**	**12/04/08 11:45**	**Aqueous**	**Mercury**	**12/12/08**	**12/12/08 18:12**	**081212L04A**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Mercury	0.0000638	0.000200	0.0000177	1	J	mg/L

TPEF0365	**08-12-0585-13-G**	**12/04/08 13:50**	**Aqueous**	**Mercury**	**12/12/08**	**12/12/08 18:14**	**081212L04A**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Mercury	0.0000926	0.000200	0.0000177	1	J	mg/L

Method Blank	**099-12-457-99**	**N/A**	**Aqueous**	**Mercury**	**12/12/08**	**12/12/08 14:24**	**081212L04A**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Mercury	ND	0.000200	0.0000177	1		mg/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3520C
Emeryville, CA 94608-1939		Method:	EPA 8270C(M) Isotope Dilution
Project: UC Davis / 388-1856-2-16			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2368A	**08-12-0585-1-A**	**12/03/08 16:15**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/12/08 12:19**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	1.4	2.0	0.40	1	J	ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	82	56-123	

GWGW2368B	**08-12-0585-2-A**	**12/03/08 16:15**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/12/08 12:43**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	1.4	2.0	0.40	1	J	ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	82	56-123	

GWGW2383	**08-12-0585-3-A**	**12/03/08 16:50**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/12/08 13:07**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	83	56-123	

GWGW2378	**08-12-0585-4-A**	**12/03/08 17:25**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/12/08 13:31**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	81	56-123	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3520C
Emeryville, CA 94608-1939		Method:	EPA 8270C(M) Isotope Dilution
Project: UC Davis / 388-1856-2-16			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2373	**08-12-0585-7-A**	**12/04/08 10:15**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/12/08 13:55**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	77	56-123	

GWGW2404	**08-12-0585-8-A**	**12/04/08 11:10**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/12/08 14:19**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	73	56-123	

GWGW2382A	**08-12-0585-10-D**	**12/04/08 11:45**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/12/08 14:44**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	5.5	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	82	56-123	

GWGW2382B	**08-12-0585-11-D**	**12/04/08 11:45**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/12/08 15:08**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	5.9	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	76	56-123	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3520C
Emeryville, CA 94608-1939		Method:	EPA 8270C(M) Isotope Dilution
Project: UC Davis / 388-1856-2-16			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2377	**08-12-0585-12-D**	**12/04/08 14:30**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/12/08 15:32**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	76	56-123	

TPEF0365	**08-12-0585-13-D**	**12/04/08 13:50**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/12/08 15:56**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	80	56-123	

Method Blank	**099-09-004-1,156**	**N/A**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/11/08 21:59**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	97	56-123	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3510C
Emeryville, CA 94608-1939		Method:	EPA 8081A
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2378	**08-12-0585-4-E**	**12/03/08 17:25**	**Aqueous**	**GC 41**	**12/09/08**	**12/12/08 13:42**	**081209L16M**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Alpha-BHC	ND	0.050	0.013	1		4,4'-DDE	ND	0.050	0.012	1	
Gamma-BHC	ND	0.050	0.020	1		Endrin	ND	0.050	0.012	1	
Beta-BHC	ND	0.050	0.0082	1		Endrin Aldehyde	ND	0.050	0.0052	1	
Heptachlor	ND	0.050	0.0074	1		4,4'-DDD	ND	0.050	0.012	1	
Delta-BHC	ND	0.050	0.018	1		Endosulfan II	ND	0.050	0.011	1	
Aldrin	ND	0.050	0.010	1		4,4'-DDT	ND	0.050	0.015	1	
Heptachlor Epoxide	ND	0.050	0.023	1		Endosulfan Sulfate	ND	0.050	0.0079	1	
Endosulfan I	ND	0.050	0.0052	1		Chlordane	ND	0.50	0.085	1	
Dieldrin	ND	0.050	0.012	1		Toxaphene	ND	2.0	0.31	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	77	50-135		2,4,5,6-Tetrachloro-m-Xylene	70	50-135	

GWGW2382A	**08-12-0585-10-E**	**12/04/08 11:45**	**Aqueous**	**GC 41**	**12/09/08**	**12/12/08 14:11**	**081209L16M**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Alpha-BHC	ND	0.050	0.013	1		4,4'-DDE	ND	0.050	0.012	1	
Gamma-BHC	ND	0.050	0.020	1		Endrin	ND	0.050	0.012	1	
Beta-BHC	ND	0.050	0.0082	1		Endrin Aldehyde	ND	0.050	0.0052	1	
Heptachlor	ND	0.050	0.0074	1		4,4'-DDD	ND	0.050	0.012	1	
Delta-BHC	ND	0.050	0.018	1		Endosulfan II	ND	0.050	0.011	1	
Aldrin	ND	0.050	0.010	1		4,4'-DDT	ND	0.050	0.015	1	
Heptachlor Epoxide	ND	0.050	0.023	1		Endosulfan Sulfate	ND	0.050	0.0079	1	
Endosulfan I	ND	0.050	0.0052	1		Chlordane	ND	0.50	0.085	1	
Dieldrin	ND	0.050	0.012	1		Toxaphene	ND	2.0	0.31	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	78	50-135		2,4,5,6-Tetrachloro-m-Xylene	75	50-135	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3510C
Emeryville, CA 94608-1939		Method:	EPA 8081A
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2382B	**08-12-0585-11-F**	**12/04/08 11:45**	**Aqueous**	**GC 41**	**12/09/08**	**12/12/08 14:39**	**081209L16M**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Alpha-BHC	ND	0.050	0.013	1		4,4'-DDE	ND	0.050	0.012	1	
Gamma-BHC	ND	0.050	0.020	1		Endrin	ND	0.050	0.012	1	
Beta-BHC	ND	0.050	0.0082	1		Endrin Aldehyde	ND	0.050	0.0052	1	
Heptachlor	ND	0.050	0.0074	1		4,4'-DDD	ND	0.050	0.012	1	
Delta-BHC	ND	0.050	0.018	1		Endosulfan II	ND	0.050	0.011	1	
Aldrin	ND	0.050	0.010	1		4,4'-DDT	ND	0.050	0.015	1	
Heptachlor Epoxide	ND	0.050	0.023	1		Endosulfan Sulfate	ND	0.050	0.0079	1	
Endosulfan I	ND	0.050	0.0052	1		Chlordane	ND	0.50	0.085	1	
Dieldrin	ND	0.050	0.012	1		Toxaphene	ND	2.0	0.31	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	67	50-135		2,4,5,6-Tetrachloro-m-Xylene	67	50-135	

Method Blank	**099-12-525-58**	**N/A**	**Aqueous**	**GC 41**	**12/09/08**	**12/12/08 13:14**	**081209L16M**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Alpha-BHC	ND	0.050	0.013	1		4,4'-DDE	ND	0.050	0.012	1	
Gamma-BHC	ND	0.050	0.020	1		Endrin	ND	0.050	0.012	1	
Beta-BHC	ND	0.050	0.0082	1		Endrin Aldehyde	ND	0.050	0.0052	1	
Heptachlor	ND	0.050	0.0074	1		4,4'-DDD	ND	0.050	0.012	1	
Delta-BHC	ND	0.050	0.018	1		Endosulfan II	ND	0.050	0.011	1	
Aldrin	ND	0.050	0.010	1		4,4'-DDT	ND	0.050	0.015	1	
Heptachlor Epoxide	ND	0.050	0.023	1		Endosulfan Sulfate	ND	0.050	0.0079	1	
Endosulfan I	ND	0.050	0.0052	1		Chlordane	ND	0.50	0.085	1	
Dieldrin	ND	0.050	0.012	1		Toxaphene	ND	2.0	0.31	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	105	50-135		2,4,5,6-Tetrachloro-m-Xylene	91	50-135	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3510C
Emeryville, CA 94608-1939		Method:	EPA 8082
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2378	**08-12-0585-4-E**	**12/03/08 17:25**	**Aqueous**	**GC 16**	**12/09/08**	**12/12/08 12:29**	**081209L05**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Aroclor-1016	ND	0.50	0.077	1		Aroclor-1248	ND	0.50	0.050	1	
Aroclor-1221	ND	0.50	0.050	1		Aroclor-1254	ND	0.50	0.050	1	
Aroclor-1232	ND	0.50	0.050	1		Aroclor-1260	ND	0.50	0.12	1	
Aroclor-1242	ND	0.50	0.050	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
Decachlorobiphenyl	67	50-135		2,4,5,6-Tetrachloro-m-Xylene	53	50-135	

GWGW2382A	**08-12-0585-10-G**	**12/04/08 11:45**	**Aqueous**	**GC 16**	**12/09/08**	**12/12/08 12:48**	**081209L05**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Aroclor-1016	ND	0.50	0.077	1		Aroclor-1248	ND	0.50	0.050	1	
Aroclor-1221	ND	0.50	0.050	1		Aroclor-1254	ND	0.50	0.050	1	
Aroclor-1232	ND	0.50	0.050	1		Aroclor-1260	ND	0.50	0.12	1	
Aroclor-1242	ND	0.50	0.050	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
Decachlorobiphenyl	66	50-135		2,4,5,6-Tetrachloro-m-Xylene	58	50-135	

GWGW2382B	**08-12-0585-11-F**	**12/04/08 11:45**	**Aqueous**	**GC 16**	**12/09/08**	**12/12/08 13:07**	**081209L05**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Aroclor-1016	ND	0.50	0.077	1		Aroclor-1248	ND	0.50	0.050	1	
Aroclor-1221	ND	0.50	0.050	1		Aroclor-1254	ND	0.50	0.050	1	
Aroclor-1232	ND	0.50	0.050	1		Aroclor-1260	ND	0.50	0.12	1	
Aroclor-1242	ND	0.50	0.050	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
Decachlorobiphenyl	62	50-135		2,4,5,6-Tetrachloro-m-Xylene	57	50-135	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3510C
Emeryville, CA 94608-1939		Method:	EPA 8082
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-527-62**	**N/A**	**Aqueous**	**GC 16**	**12/09/08**	**12/11/08 19:10**	**081209L05**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Aroclor-1016	ND	0.50	0.077	1		Aroclor-1248	ND	0.50	0.050	1	
Aroclor-1221	ND	0.50	0.050	1		Aroclor-1254	ND	0.50	0.050	1	
Aroclor-1232	ND	0.50	0.050	1		Aroclor-1260	ND	0.50	0.12	1	
Aroclor-1242	ND	0.50	0.050	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
Decachlorobiphenyl	106	50-135		2,4,5,6-Tetrachloro-m-Xylene	91	50-135	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 1 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2378	**08-12-0585-4-B**	**12/03/08 17:25**	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08 15:11**	**081210L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	5.0	1.5	1		1,1-Dichloroethene	ND	0.50	0.039	1	
Benzene	ND	0.50	0.50	1		c-1,2-Dichloroethene	ND	0.50	0.029	1	
Bromochloromethane	ND	0.50	0.11	1		t-1,2-Dichloroethene	ND	0.50	0.046	1	
Bromodichloromethane	ND	0.50	0.041	1		1,2-Dichloropropane	ND	0.50	0.036	1	
Bromoform	ND	0.50	0.11	1		c-1,3-Dichloropropene	ND	0.50	0.028	1	
Bromomethane	ND	0.50	0.19	1		t-1,3-Dichloropropene	ND	0.50	0.032	1	
2-Butanone	ND	5.0	1.5	1		Ethylbenzene	ND	0.50	0.079	1	
Carbon Disulfide	ND	0.50	0.13	1		2-Hexanone	ND	5.0	1.5	1	
Carbon Tetrachloride	ND	0.50	0.045	1		Methylene Chloride	ND	0.50	0.13	1	
Chlorobenzene	ND	0.50	0.38	1		4-Methyl-2-Pentanone	ND	5.0	1.3	1	
Chloroethane	ND	0.50	0.067	1		Styrene	ND	0.50	0.31	1	
Chloroform	ND	0.50	0.087	1		1,1,2,2-Tetrachloroethane	ND	0.50	0.098	1	
Chloromethane	ND	0.50	0.069	1		Tetrachloroethene	ND	0.50	0.027	1	
Dibromochloromethane	ND	0.50	0.048	1		Toluene	ND	0.50	0.46	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	0.88	1		1,1,1-Trichloroethane	ND	0.50	0.046	1	
1,2-Dibromoethane	ND	0.50	0.12	1		1,1,2-Trichloroethane	ND	0.50	0.086	1	
1,2-Dichlorobenzene	ND	0.50	0.029	1		Trichloroethene	ND	0.50	0.036	1	
1,3-Dichlorobenzene	ND	0.50	0.028	1		Vinyl Chloride	ND	0.50	0.041	1	
1,4-Dichlorobenzene	ND	0.50	0.025	1		p/m-Xylene	ND	0.50	0.13	1	
1,1-Dichloroethane	ND	0.50	0.026	1		o-Xylene	ND	0.50	0.32	1	
1,2-Dichloroethane	ND	0.50	0.080	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	94	73-157		Dibromofluoromethane	101	82-142	
Toluene-d8	91	82-112		1,4-Bromofluorobenzene	91	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 2 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2382A	**08-12-0585-10-B**	**12/04/08 11:45**	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08 15:38**	**081210L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	10	3.0	2		1,1-Dichloroethene	0.56	1.0	0.077	2	J
Benzene	ND	1.0	1.0	2		c-1,2-Dichloroethene	ND	1.0	0.059	2	
Bromochloromethane	ND	1.0	0.21	2		t-1,2-Dichloroethene	ND	1.0	0.092	2	
Bromodichloromethane	ND	1.0	0.083	2		1,2-Dichloropropane	ND	1.0	0.073	2	
Bromoform	ND	1.0	0.21	2		c-1,3-Dichloropropene	ND	1.0	0.055	2	
Bromomethane	ND	1.0	0.38	2		t-1,3-Dichloropropene	ND	1.0	0.065	2	
2-Butanone	ND	10	3.0	2		Ethylbenzene	ND	1.0	0.16	2	
Carbon Disulfide	ND	1.0	0.26	2		2-Hexanone	ND	10	3.0	2	
Carbon Tetrachloride	ND	1.0	0.090	2		Methylene Chloride	ND	1.0	0.25	2	
Chlorobenzene	ND	1.0	0.76	2		4-Methyl-2-Pentanone	ND	10	2.6	2	
Chloroethane	ND	1.0	0.13	2		Styrene	ND	1.0	0.63	2	
Chloroform	48	1.0	0.17	2		1,1,2,2-Tetrachloroethane	ND	1.0	0.20	2	
Chloromethane	ND	1.0	0.14	2		Tetrachloroethene	ND	1.0	0.055	2	
Dibromochloromethane	ND	1.0	0.096	2		Toluene	ND	1.0	0.91	2	
1,2-Dibromo-3-Chloropropane	ND	10	1.8	2		1,1,1-Trichloroethane	ND	1.0	0.093	2	
1,2-Dibromoethane	ND	1.0	0.25	2		1,1,2-Trichloroethane	ND	1.0	0.17	2	
1,2-Dichlorobenzene	ND	1.0	0.059	2		Trichloroethene	ND	1.0	0.073	2	
1,3-Dichlorobenzene	ND	1.0	0.056	2		Vinyl Chloride	ND	1.0	0.082	2	
1,4-Dichlorobenzene	ND	1.0	0.049	2		p/m-Xylene	ND	1.0	0.26	2	
1,1-Dichloroethane	1.1	1.0	0.052	2		o-Xylene	ND	1.0	0.64	2	
1,2-Dichloroethane	ND	1.0	0.16	2							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	91	73-157		Dibromofluoromethane	96	82-142	
Toluene-d8	99	82-112		1,4-Bromofluorobenzene	89	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 3 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2382B	**08-12-0585-11-B**	**12/04/08 11:45**	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08 16:05**	**081210L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	10	3.0	2		1,1-Dichloroethene	0.49	1.0	0.077	2	J
Benzene	ND	1.0	1.0	2		c-1,2-Dichloroethene	ND	1.0	0.059	2	
Bromochloromethane	ND	1.0	0.21	2		t-1,2-Dichloroethene	ND	1.0	0.092	2	
Bromodichloromethane	ND	1.0	0.083	2		1,2-Dichloropropane	ND	1.0	0.073	2	
Bromoform	ND	1.0	0.21	2		c-1,3-Dichloropropene	ND	1.0	0.055	2	
Bromomethane	ND	1.0	0.38	2		t-1,3-Dichloropropene	ND	1.0	0.065	2	
2-Butanone	ND	10	3.0	2		Ethylbenzene	ND	1.0	0.16	2	
Carbon Disulfide	ND	1.0	0.26	2		2-Hexanone	ND	10	3.0	2	
Carbon Tetrachloride	ND	1.0	0.090	2		Methylene Chloride	ND	1.0	0.25	2	
Chlorobenzene	ND	1.0	0.76	2		4-Methyl-2-Pentanone	ND	10	2.6	2	
Chloroethane	ND	1.0	0.13	2		Styrene	ND	1.0	0.63	2	
Chloroform	46	1.0	0.17	2		1,1,2,2-Tetrachloroethane	ND	1.0	0.20	2	
Chloromethane	ND	1.0	0.14	2		Tetrachloroethene	ND	1.0	0.055	2	
Dibromochloromethane	ND	1.0	0.096	2		Toluene	ND	1.0	0.91	2	
1,2-Dibromo-3-Chloropropane	ND	10	1.8	2		1,1,1-Trichloroethane	ND	1.0	0.093	2	
1,2-Dibromoethane	ND	1.0	0.25	2		1,1,2-Trichloroethane	ND	1.0	0.17	2	
1,2-Dichlorobenzene	ND	1.0	0.059	2		Trichloroethene	ND	1.0	0.073	2	
1,3-Dichlorobenzene	ND	1.0	0.056	2		Vinyl Chloride	ND	1.0	0.082	2	
1,4-Dichlorobenzene	ND	1.0	0.049	2		p/m-Xylene	ND	1.0	0.26	2	
1,1-Dichloroethane	1.0	1.0	0.052	2		o-Xylene	ND	1.0	0.64	2	
1,2-Dichloroethane	ND	1.0	0.16	2							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	89	73-157		Dibromofluoromethane	100	82-142	
Toluene-d8	99	82-112		1,4-Bromofluorobenzene	89	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 4 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2377	**08-12-0585-12-B**	**12/04/08 14:30**	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08 16:33**	**081210L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	5.0	1.5	1		1,1-Dichloroethene	ND	0.50	0.039	1	
Benzene	ND	0.50	0.50	1		c-1,2-Dichloroethene	ND	0.50	0.029	1	
Bromochloromethane	ND	0.50	0.11	1		t-1,2-Dichloroethene	ND	0.50	0.046	1	
Bromodichloromethane	ND	0.50	0.041	1		1,2-Dichloropropane	ND	0.50	0.036	1	
Bromoform	ND	0.50	0.11	1		c-1,3-Dichloropropene	ND	0.50	0.028	1	
Bromomethane	ND	0.50	0.19	1		t-1,3-Dichloropropene	ND	0.50	0.032	1	
2-Butanone	ND	5.0	1.5	1		Ethylbenzene	ND	0.50	0.079	1	
Carbon Disulfide	ND	0.50	0.13	1		2-Hexanone	ND	5.0	1.5	1	
Carbon Tetrachloride	ND	0.50	0.045	1		Methylene Chloride	ND	0.50	0.13	1	
Chlorobenzene	ND	0.50	0.38	1		4-Methyl-2-Pentanone	ND	5.0	1.3	1	
Chloroethane	ND	0.50	0.067	1		Styrene	ND	0.50	0.31	1	
Chloroform	0.25	0.50	0.087	1	J	1,1,2,2-Tetrachloroethane	ND	0.50	0.098	1	
Chloromethane	ND	0.50	0.069	1		Tetrachloroethene	ND	0.50	0.027	1	
Dibromochloromethane	ND	0.50	0.048	1		Toluene	ND	0.50	0.46	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	0.88	1		1,1,1-Trichloroethane	ND	0.50	0.046	1	
1,2-Dibromoethane	ND	0.50	0.12	1		1,1,2-Trichloroethane	ND	0.50	0.086	1	
1,2-Dichlorobenzene	ND	0.50	0.029	1		Trichloroethene	ND	0.50	0.036	1	
1,3-Dichlorobenzene	ND	0.50	0.028	1		Vinyl Chloride	ND	0.50	0.041	1	
1,4-Dichlorobenzene	ND	0.50	0.025	1		p/m-Xylene	ND	0.50	0.13	1	
1,1-Dichloroethane	ND	0.50	0.026	1		o-Xylene	ND	0.50	0.32	1	
1,2-Dichloroethane	ND	0.50	0.080	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	97	73-157		Dibromofluoromethane	104	82-142	
Toluene-d8	92	82-112		1,4-Bromofluorobenzene	82	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 5 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPEF0365	**08-12-0585-13-B**	**12/04/08 13:50**	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08 17:00**	**081210L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	5.0	1.5	1		1,1-Dichloroethene	ND	0.50	0.039	1	
Benzene	ND	0.50	0.50	1		c-1,2-Dichloroethene	ND	0.50	0.029	1	
Bromochloromethane	ND	0.50	0.11	1		t-1,2-Dichloroethene	ND	0.50	0.046	1	
Bromodichloromethane	ND	0.50	0.041	1		1,2-Dichloropropane	ND	0.50	0.036	1	
Bromoform	ND	0.50	0.11	1		c-1,3-Dichloropropene	ND	0.50	0.028	1	
Bromomethane	ND	0.50	0.19	1		t-1,3-Dichloropropene	ND	0.50	0.032	1	
2-Butanone	ND	5.0	1.5	1		Ethylbenzene	ND	0.50	0.079	1	
Carbon Disulfide	ND	0.50	0.13	1		2-Hexanone	ND	5.0	1.5	1	
Carbon Tetrachloride	ND	0.50	0.045	1		Methylene Chloride	ND	0.50	0.13	1	
Chlorobenzene	ND	0.50	0.38	1		4-Methyl-2-Pentanone	ND	5.0	1.3	1	
Chloroethane	ND	0.50	0.067	1		Styrene	ND	0.50	0.31	1	
Chloroform	ND	0.50	0.087	1		1,1,2,2-Tetrachloroethane	ND	0.50	0.098	1	
Chloromethane	ND	0.50	0.069	1		Tetrachloroethene	ND	0.50	0.027	1	
Dibromochloromethane	ND	0.50	0.048	1		Toluene	ND	0.50	0.46	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	0.88	1		1,1,1-Trichloroethane	ND	0.50	0.046	1	
1,2-Dibromoethane	ND	0.50	0.12	1		1,1,2-Trichloroethane	ND	0.50	0.086	1	
1,2-Dichlorobenzene	ND	0.50	0.029	1		Trichloroethene	ND	0.50	0.036	1	
1,3-Dichlorobenzene	ND	0.50	0.028	1		Vinyl Chloride	ND	0.50	0.041	1	
1,4-Dichlorobenzene	ND	0.50	0.025	1		p/m-Xylene	ND	0.50	0.13	1	
1,1-Dichloroethane	ND	0.50	0.026	1		o-Xylene	ND	0.50	0.32	1	
1,2-Dichloroethane	ND	0.50	0.080	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	92	73-157		Dibromofluoromethane	100	82-142	
Toluene-d8	84	82-112		1,4-Bromofluorobenzene	87	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 6 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TBGW0521	**08-12-0585-14-B**	**12/04/08 07:30**	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08 17:27**	**081210L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	5.0	1.5	1		1,1-Dichloroethene	ND	0.50	0.039	1	
Benzene	ND	0.50	0.50	1		c-1,2-Dichloroethene	ND	0.50	0.029	1	
Bromochloromethane	ND	0.50	0.11	1		t-1,2-Dichloroethene	ND	0.50	0.046	1	
Bromodichloromethane	ND	0.50	0.041	1		1,2-Dichloropropane	ND	0.50	0.036	1	
Bromoform	ND	0.50	0.11	1		c-1,3-Dichloropropene	ND	0.50	0.028	1	
Bromomethane	ND	0.50	0.19	1		t-1,3-Dichloropropene	ND	0.50	0.032	1	
2-Butanone	ND	5.0	1.5	1		Ethylbenzene	ND	0.50	0.079	1	
Carbon Disulfide	ND	0.50	0.13	1		2-Hexanone	ND	5.0	1.5	1	
Carbon Tetrachloride	ND	0.50	0.045	1		Methylene Chloride	ND	0.50	0.13	1	
Chlorobenzene	ND	0.50	0.38	1		4-Methyl-2-Pentanone	ND	5.0	1.3	1	
Chloroethane	ND	0.50	0.067	1		Styrene	ND	0.50	0.31	1	
Chloroform	ND	0.50	0.087	1		1,1,2,2-Tetrachloroethane	ND	0.50	0.098	1	
Chloromethane	ND	0.50	0.069	1		Tetrachloroethene	ND	0.50	0.027	1	
Dibromochloromethane	ND	0.50	0.048	1		Toluene	ND	0.50	0.46	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	0.88	1		1,1,1-Trichloroethane	ND	0.50	0.046	1	
1,2-Dibromoethane	ND	0.50	0.12	1		1,1,2-Trichloroethane	ND	0.50	0.086	1	
1,2-Dichlorobenzene	ND	0.50	0.029	1		Trichloroethene	ND	0.50	0.036	1	
1,3-Dichlorobenzene	ND	0.50	0.028	1		Vinyl Chloride	ND	0.50	0.041	1	
1,4-Dichlorobenzene	ND	0.50	0.025	1		p/m-Xylene	ND	0.50	0.13	1	
1,1-Dichloroethane	ND	0.50	0.026	1		o-Xylene	ND	0.50	0.32	1	
1,2-Dichloroethane	ND	0.50	0.080	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	89	73-157		Dibromofluoromethane	97	82-142	
Toluene-d8	93	82-112		1,4-Bromofluorobenzene	77	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 7 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPIN 0365	**08-12-0585-15-B**	**12/04/08 14:10**	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08 17:54**	**081210L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	5.0	1.5	1		1,1-Dichloroethene	ND	0.50	0.039	1	
Benzene	ND	0.50	0.50	1		c-1,2-Dichloroethene	ND	0.50	0.029	1	
Bromochloromethane	ND	0.50	0.11	1		t-1,2-Dichloroethene	ND	0.50	0.046	1	
Bromodichloromethane	ND	0.50	0.041	1		1,2-Dichloropropane	ND	0.50	0.036	1	
Bromoform	ND	0.50	0.11	1		c-1,3-Dichloropropene	ND	0.50	0.028	1	
Bromomethane	ND	0.50	0.19	1		t-1,3-Dichloropropene	ND	0.50	0.032	1	
2-Butanone	ND	5.0	1.5	1		Ethylbenzene	ND	0.50	0.079	1	
Carbon Disulfide	ND	0.50	0.13	1		2-Hexanone	ND	5.0	1.5	1	
Carbon Tetrachloride	ND	0.50	0.045	1		Methylene Chloride	ND	0.50	0.13	1	
Chlorobenzene	ND	0.50	0.38	1		4-Methyl-2-Pentanone	ND	5.0	1.3	1	
Chloroethane	ND	0.50	0.067	1		Styrene	ND	0.50	0.31	1	
Chloroform	17	0.50	0.087	1		1,1,2,2-Tetrachloroethane	ND	0.50	0.098	1	
Chloromethane	ND	0.50	0.069	1		Tetrachloroethene	ND	0.50	0.027	1	
Dibromochloromethane	ND	0.50	0.048	1		Toluene	ND	0.50	0.46	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	0.88	1		1,1,1-Trichloroethane	ND	0.50	0.046	1	
1,2-Dibromoethane	ND	0.50	0.12	1		1,1,2-Trichloroethane	ND	0.50	0.086	1	
1,2-Dichlorobenzene	ND	0.50	0.029	1		Trichloroethene	ND	0.50	0.036	1	
1,3-Dichlorobenzene	ND	0.50	0.028	1		Vinyl Chloride	ND	0.50	0.041	1	
1,4-Dichlorobenzene	ND	0.50	0.025	1		p/m-Xylene	ND	0.50	0.13	1	
1,1-Dichloroethane	ND	0.50	0.026	1		o-Xylene	ND	0.50	0.32	1	
1,2-Dichloroethane	ND	0.50	0.080	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	88	73-157		Dibromofluoromethane	100	82-142	
Toluene-d8	89	82-112		1,4-Bromofluorobenzene	93	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 8 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-025-731**	**N/A**	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08 12:56**	**081210L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	5.0	1.5	1		1,1-Dichloroethene	ND	0.50	0.039	1	
Benzene	ND	0.50	0.50	1		c-1,2-Dichloroethene	ND	0.50	0.029	1	
Bromochloromethane	ND	0.50	0.11	1		t-1,2-Dichloroethene	ND	0.50	0.046	1	
Bromodichloromethane	ND	0.50	0.041	1		1,2-Dichloropropane	ND	0.50	0.036	1	
Bromoform	ND	0.50	0.11	1		c-1,3-Dichloropropene	ND	0.50	0.028	1	
Bromomethane	ND	0.50	0.19	1		t-1,3-Dichloropropene	ND	0.50	0.032	1	
2-Butanone	ND	5.0	1.5	1		Ethylbenzene	ND	0.50	0.079	1	
Carbon Disulfide	ND	0.50	0.13	1		2-Hexanone	ND	5.0	1.5	1	
Carbon Tetrachloride	ND	0.50	0.045	1		Methylene Chloride	ND	0.50	0.13	1	
Chlorobenzene	ND	0.50	0.38	1		4-Methyl-2-Pentanone	ND	5.0	1.3	1	
Chloroethane	ND	0.50	0.067	1		Styrene	ND	0.50	0.31	1	
Chloroform	ND	0.50	0.087	1		1,1,2,2-Tetrachloroethane	ND	0.50	0.098	1	
Chloromethane	ND	0.50	0.069	1		Tetrachloroethene	ND	0.50	0.027	1	
Dibromochloromethane	ND	0.50	0.048	1		Toluene	ND	0.50	0.46	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	0.88	1		1,1,1-Trichloroethane	ND	0.50	0.046	1	
1,2-Dibromoethane	ND	0.50	0.12	1		1,1,2-Trichloroethane	ND	0.50	0.086	1	
1,2-Dichlorobenzene	ND	0.50	0.029	1		Trichloroethene	ND	0.50	0.036	1	
1,3-Dichlorobenzene	ND	0.50	0.028	1		Vinyl Chloride	ND	0.50	0.041	1	
1,4-Dichlorobenzene	ND	0.50	0.025	1		p/m-Xylene	ND	0.50	0.13	1	
1,1-Dichloroethane	ND	0.50	0.026	1		o-Xylene	ND	0.50	0.32	1	
1,2-Dichloroethane	ND	0.50	0.080	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	93	73-157		Dibromofluoromethane	98	82-142	
Toluene-d8	86	82-112		1,4-Bromofluorobenzene	87	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Date Received: 12/05/08
Work Order No: 08-12-0585

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date Collected	Matrix
GWGW2378	**08-12-0585-4**	**12/03/08**	**Aqueous**

Comment(s): (24) Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.
(68) Dilution analysis was performed outside the recommended holding time.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrate (as N) (68)	28	1.0	0.28	10		mg/L	N/A	12/05/08	EPA 300.0
Bicarbonate (as CaCO3)	722	5.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B
Carbonate (as CaCO3) (24)	ND	1.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B

GWGW2379A	**08-12-0585-5**	**12/03/08**	**Aqueous**

Comment(s): (24) Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Bicarbonate (as CaCO3)	334	5.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B
Carbonate (as CaCO3) (24)	ND	1.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B

GWGW2379B	**08-12-0585-6**	**12/03/08**	**Aqueous**

Comment(s): (24) Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Bicarbonate (as CaCO3)	338	5.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B
Carbonate (as CaCO3) (24)	ND	1.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B

GWGW2390	**08-12-0585-9**	**12/04/08**	**Aqueous**

Comment(s): (24) Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Bicarbonate (as CaCO3)	546	5.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B
Carbonate (as CaCO3) (24)	ND	1.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B

GWGW2382A	**08-12-0585-10**	**12/04/08**	**Aqueous**

Comment(s): (24) Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.
(68) Dilution analysis was performed outside the recommended holding time.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrate (as N) (68)	12	0.50	0.14	5		mg/L	N/A	12/06/08	EPA 300.0
Bicarbonate (as CaCO3)	746	5.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B
Carbonate (as CaCO3) (24)	ND	1.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Date Received: 12/05/08
Work Order No: 08-12-0585

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date Collected	Matrix
GWGW2382B	**08-12-0585-11**	**12/04/08**	**Aqueous**

Comment(s): (24) Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.
(68) Dilution analysis was performed outside the recommended holding time.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrate (as N) (68)	12	0.50	0.14	5		mg/L	N/A	12/06/08	EPA 300.0
Bicarbonate (as CaCO3)	750	5.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B
Carbonate (as CaCO3) (24)	ND	1.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B

GWGW2377	**08-12-0585-12**	**12/04/08**	**Aqueous**

Comment(s): (24) Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.
(68) Dilution analysis was performed outside the recommended holding time.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrate (as N) (68)	9.5	0.50	0.14	5		mg/L	N/A	12/06/08	EPA 300.0
Bicarbonate (as CaCO3)	646	5.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B
Carbonate (as CaCO3) (24)	ND	1.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B

TPEF0365	**08-12-0585-13**	**12/04/08**	**Aqueous**

Comment(s): (68) Dilution analysis was performed outside the recommended holding time.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chloride (68)	23	5.0	0.27	5		mg/L	N/A	12/06/08	EPA 300.0
Nitrate (as N) (68)	10	0.50	0.14	5		mg/L	N/A	12/06/08	EPA 300.0
Sulfate	60	10	0.69	10		mg/L	N/A	12/06/08	EPA 300.0
Solids, Total Dissolved	542	1.0	1.0	1		mg/L	N/A	12/06/08	SM 2540 C

TPIN 0365	**08-12-0585-15**	**12/04/08**	**Aqueous**

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Carbon, Total Organic	1.6	0.50	0.021	1		mg/L	N/A	12/05/08	SM 5310 D

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Date Received: 12/05/08
Work Order No: 08-12-0585

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date Collected	Matrix
Method Blank		**N/A**	**Aqueous**

Comment(s): (24) Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chloride (24)	ND	1.0	0.055	1		mg/L	N/A	12/05/08	EPA 300.0
Nitrate (as N) (24)	ND	0.10	0.028	1		mg/L	N/A	12/05/08	EPA 300.0
Sulfate (24)	ND	1.0	0.069	1		mg/L	N/A	12/05/08	EPA 300.0
Chloride (24)	ND	1.0	0.055	1		mg/L	N/A	12/06/08	EPA 300.0
Nitrate (as N) (24)	ND	0.10	0.028	1		mg/L	N/A	12/06/08	EPA 300.0
Sulfate (24)	ND	1.0	0.069	1		mg/L	N/A	12/06/08	EPA 300.0
Bicarbonate (as CaCO3)	ND	1.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B
Carbonate (as CaCO3)	ND	1.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B
Solids, Total Dissolved (24)	ND	1.0	1.0	1		mg/L	N/A	12/06/08	SM 2540 C
Carbon, Total Organic (24)	ND	0.50	0.021	1		mg/L	N/A	12/05/08	SM 5310 D

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6010B

Project UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
GWGW2368B	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08**	**081208SA6**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Silicon	4X	4X	24-180	4X	0-15	Q

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6020

Project UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
GWGW2368A	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/11/08**	**081208S04**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	112	108	85-133	4	0-11	
Arsenic	109	110	73-127	1	0-11	
Barium	129	131	74-128	0	0-10	3
Beryllium	105	112	56-122	7	0-11	
Cadmium	108	110	84-114	2	0-8	
Chromium	120	119	73-133	0	0-11	
Cobalt	107	109	79-121	2	0-10	
Copper	106	107	72-108	1	0-10	
Lead	107	108	79-121	1	0-10	
Molybdenum	104	104	83-137	1	0-10	
Nickel	105	105	68-122	0	0-10	
Selenium	104	108	59-125	4	0-12	
Silver	101	104	68-128	3	0-14	
Thallium	104	106	73-121	2	0-11	
Vanadium	117	120	77-137	2	0-15	
Zinc	122	106	43-145	12	0-39	
Aluminum	174	126	47-161	32	0-24	3,4
Calcium	4X	4X	80-120	4X	0-20	Q
Magnesium	4X	4X	63-123	4X	0-32	Q
Potassium	170	169	80-120	0	0-20	3
Sodium	4X	4X	80-120	4X	0-20	Q

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 7470A Total
Emeryville, CA 94608-1939		Method:	EPA 7470A

Project UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-12-1173-1	**Aqueous**	**Mercury**	**12/12/08**	**12/12/08**	**081212S04**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	111	111	66-126	0	0-7	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B

Project UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-12-0410-3	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08**	**081210S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	112	108	86-122	3	0-8	
Carbon Tetrachloride	106	110	78-138	4	0-9	
Chlorobenzene	113	112	90-120	0	0-9	
1,2-Dibromoethane	117	112	70-130	4	0-30	
1,2-Dichlorobenzene	109	109	89-119	1	0-10	
1,1-Dichloroethene	109	114	52-142	5	0-23	
Ethylbenzene	115	115	70-130	0	0-30	
Toluene	118	112	85-127	5	0-12	
Trichloroethene	114	112	78-126	2	0-10	
Vinyl Chloride	111	124	56-140	11	0-21	
Methyl-t-Butyl Ether (MTBE)	107	95	64-136	12	0-28	
Tert-Butyl Alcohol (TBA)	101	124	27-183	21	0-60	
Diisopropyl Ether (DIPE)	102	101	78-126	0	0-16	
Ethyl-t-Butyl Ether (ETBE)	105	103	67-133	2	0-21	
Tert-Amyl-Methyl Ether (TAME)	111	100	63-141	10	0-21	
Ethanol	98	112	11-167	13	0-64	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Date Received: N/A
Work Order No: 08-12-0585

Project: UC Davis / 388-1856-2-16

Matrix: Aqueous

Parameter	Method	Quality Control Sample ID	Date Analyzed	Date Extracted	MS% REC	MSD % REC	%REC CL	RPD	RPD CL	Qualifiers
Chloride	EPA 300.0	08-12-0536-1	12/05/08	N/A	102	101	56-134	1	0-3	
Nitrate (as N)	EPA 300.0	08-12-0536-1	12/05/08	N/A	104	104	58-142	0	0-6	
Sulfate	EPA 300.0	08-12-0536-1	12/05/08	N/A	110	110	49-133	1	0-3	
Chloride	EPA 300.0	GWGW2382A	12/06/08	N/A	99	99	56-134	1	0-3	
Nitrate (as N)	EPA 300.0	GWGW2382A	12/06/08	N/A	99	101	58-142	2	0-6	
Sulfate	EPA 300.0	GWGW2382A	12/06/08	N/A	100	102	49-133	2	0-3	
Carbon, Total Organic	SM 5310 D	08-12-0558-2	12/05/08	N/A	95	94	70-130	1	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Date Received: N/A
Work Order No: 08-12-0585

Project: UC Davis / 388-1856-2-16

Matrix: Aqueous

Parameter	Method	QC Sample ID	Date Analyzed	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Alkalinity, Total (as CaCO3)	SM 2320B	08-12-0558-1	12/11/08	522	520	0	0-25	
Bicarbonate (as CaCO3)	SM 2320B	08-12-0558-1	12/11/08	522	520	0	0-25	
Carbonate (as CaCO3)	SM 2320B	08-12-0558-1	12/11/08	ND	ND	NA	0-25	
Hydroxide (as CaCO3)	SM 2320B	08-12-0558-1	12/11/08	ND	ND	NA	0-25	
Solids, Total Dissolved	SM 2540 C	08-12-0558-2	12/06/08	1700	1690	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	N/A
Emeryville, CA 94608-1939		Method:	RSK-175M

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-659-37	**Aqueous**	**GC 14**	**N/A**	**12/08/08**	**081208L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Carbon Dioxide	96	96	80-120	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	N/A
Emeryville, CA 94608-1939		Method:	RSK-175M

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-659-36	**Aqueous**	**GC 14**	**N/A**	**12/09/08**	**081209L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Carbon Dioxide	95	95	80-120	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6010B

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
097-01-003-8,893	**Aqueous**	**ICP 5300**	**12/09/08**	**081208-la-6**	**081208LA6F**

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Silicon	0.500	0.538	108	80-120	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6020

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
096-06-003-1,821	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/11/08**	**081208L04F**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Antimony	89	90	80-120	73-127	1	0-20	
Arsenic	96	97	80-120	73-127	0	0-20	
Barium	95	97	80-120	73-127	2	0-20	
Beryllium	104	105	80-120	73-127	1	0-20	
Cadmium	100	101	80-120	73-127	1	0-20	
Chromium	98	99	80-120	73-127	1	0-20	
Cobalt	99	97	80-120	73-127	2	0-20	
Copper	102	100	80-120	73-127	2	0-20	
Lead	95	96	80-120	73-127	1	0-20	
Molybdenum	93	93	80-120	73-127	0	0-20	
Nickel	99	97	80-120	73-127	1	0-20	
Selenium	95	96	80-120	73-127	0	0-20	
Silver	102	103	80-120	73-127	2	0-20	
Thallium	93	93	80-120	73-127	0	0-20	
Vanadium	96	97	80-120	73-127	1	0-20	
Zinc	98	98	80-120	73-127	1	0-20	
Aluminum	108	108	80-120	73-127	0	0-20	
Calcium	108	109	80-120	73-127	1	0-20	
Magnesium	110	111	80-120	73-127	1	0-20	
Potassium	97	97	80-120	73-127	0	0-20	
Sodium	99	99	80-120	73-127	0	0-20	

Total number of LCS compounds : 21
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 7470A Filt.
Emeryville, CA 94608-1939		Method:	EPA 7470A

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-457-99	**Aqueous**	**Mercury**	**12/12/08**	**12/12/08**	**081212L04A**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	107	107	90-122	0	0-14	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3520C
Emeryville, CA 94608-1939		Method:	EPA 8270C(M) Isotope Dilution

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-09-004-1,156	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/11/08**	**081209L13D**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
1,4-Dioxane	114	122	50-130	7	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3510C
Emeryville, CA 94608-1939		Method:	EPA 8081A

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-525-58	**Aqueous**	**GC 41**	**12/09/08**	**12/12/08**	**081209L16M**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gamma-BHC	94	90	50-135	3	0-25	
Heptachlor	88	85	50-135	3	0-25	
Endosulfan I	92	89	50-135	3	0-25	
Dieldrin	81	78	50-135	3	0-25	
Endrin	98	95	50-135	3	0-25	
4,4'-DDT	99	97	50-135	2	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3510C
Emeryville, CA 94608-1939		Method:	EPA 8082

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-527-62	**Aqueous**	**GC 16**	**12/09/08**	**12/11/08**	**081209L05**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Aroclor-1260	90	112	50-135	22	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-025-731	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08**	**081210L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	108	107	87-117	82-122	1	0-7	
Carbon Tetrachloride	108	106	78-132	69-141	2	0-8	
Chlorobenzene	110	109	88-118	83-123	2	0-8	
1,2-Dibromoethane	117	106	80-120	73-127	10	0-20	
1,2-Dichlorobenzene	112	110	88-118	83-123	2	0-8	
1,1-Dichloroethene	110	107	71-131	61-141	3	0-14	
Ethylbenzene	110	110	80-120	73-127	0	0-20	
Toluene	114	112	85-127	78-134	2	0-7	
Trichloroethene	113	111	85-121	79-127	2	0-11	
Vinyl Chloride	115	118	64-136	52-148	2	0-10	
Methyl-t-Butyl Ether (MTBE)	106	101	67-133	56-144	5	0-16	
Tert-Butyl Alcohol (TBA)	109	95	34-154	14-174	14	0-19	
Diisopropyl Ether (DIPE)	109	105	80-122	73-129	4	0-8	
Ethyl-t-Butyl Ether (ETBE)	109	107	73-127	64-136	2	0-11	
Tert-Amyl-Methyl Ether (TAME)	110	108	69-135	58-146	3	0-12	
Ethanol	97	88	34-124	19-139	10	0-44	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Date Received: N/A
Work Order No: 08-12-0585

Project: UC Davis / 388-1856-2-16

Matrix: Aqueous

Parameter	Method	Quality Control Sample ID	Date Extracted	Date Analyzed	LCS % REC	LCSD % REC	%REC CL	RPD	RPD CL	Qual
Chloride	EPA 300.0	099-05-118-4,918	N/A	12/05/08	93	92	81-111	2	0-5	
Nitrate (as N)	EPA 300.0	099-05-118-4,918	N/A	12/05/08	104	103	87-111	1	0-12	
Sulfate	EPA 300.0	099-05-118-4,918	N/A	12/05/08	97	99	89-107	1	0-13	
Chloride	EPA 300.0	099-05-118-4,923	N/A	12/06/08	95	97	81-111	2	0-5	
Nitrate (as N)	EPA 300.0	099-05-118-4,923	N/A	12/06/08	103	104	87-111	1	0-12	
Sulfate	EPA 300.0	099-05-118-4,923	N/A	12/06/08	103	100	89-107	2	0-13	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Date Received: N/A
Work Order No: 08-12-0585

Project: UC Davis / 388-1856-2-16

Matrix : Aqueous

Parameter	Method	Quality Control Sample ID	Date Analyzed	Date Extracted	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Carbon, Total Organic	SM 5310 D	099-05-097-3,166	12/05/08	N/A	5.00	5.14	103	80-120	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-12-0585

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Revised COC received on 12/08/08 at 15:24 - VP

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AquaTerra Associates Incorporated, DBA

0585

Calscience Environmental Lab
5063 Commercial Circle, Suite H
Concord, CA 94520
phone: (925) 689-9022

Project ID: 388-1856-2-16
Protocol No.: ROD

Client Contact		Project Manager: Bob Devany	Sampled by: JMD / KHA	Date: 12/4/08	COC Number: UCD
Weiss Associates		Tel: 510-450-6144	Lab Contact: Micah Smith	Carrier:	Page 2 of 3
5801 Christie Avenue, Suite 600		Analysis Turnaround Time			Job No.
Emeryville, CA 94608		Calendar (C) or Work Days (W) --- 5W			
(510) 450-6000	Phone	TAT if different from Below _____			SDG No.
(510) 547-5043	FAX	☐ 2 weeks			
		☐ 1 week			
Job Name: UC Davis		☐ 2 days			
Address: One Shields Ave, Davis		☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	Carbonate/Bicarbonate (SM2320B)	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
10	GWGW2382A	12/4	1145	L	W	12		X		X	X	X	X		X	X						X	X	Title 22 + Al + Si
11	GWGW2382B	12/4	1145	|	|	12		X		X	X	X	X		X	X						X	X	Title 22 + Al + Si
12	GWGW2377	12/4	1430	|	|	9		X	X	X	X	X										X		
13	TPEF0365	12/4	1350	|	|	9					X	X	X				X		X	X	X	X		Title 22 + Ca, K, Mg, Na
																				X				
14	~~GPTN0365~~																							
	TRU 12/8/08																							
15	~~Travel Blank~~ TBGW0521	0730	12/4	L	W						X													~~HOLD~~ TRU 12/8/08
						Field Filtered	X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For _____ Months*

Special Instructions/QC Requirements & Comments: Level II Reporting with Initial Calibration Curves and Continuing Calibration **Note: Nitrate 48 hour hold time!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	WEISS	1505, 12/4/08	[signature] CEL		12/4/08 1505
[signature] to GSD		12-4-08 1730	[signature]	CEL	12/05/08 1030

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

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AguaTierra Associates Incorporated, DBA

0585

Calscience Environmental Lab
5063 Commercial Circle, Suite H
Concord, CA 94520
phone: (925) 689-9022

Project ID: 388-1856-2-16
Protocol No.: ROD

Client Contact	
Weiss Associates	
5801 Christie Avenue, Suite 600	
Emeryville, CA 94608	
(510) 450-6000	Phone
(510) 547-5043	FAX
Job Name:	UC Davis
Address:	One Shields Ave, Davis

Project Manager: Bob Devany
Tel: 510-450-6144

Analysis Turnaround Time
Calendar (C) or Work Days (W) --- 5W
TAT if different from Below _____
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sampled by: JmD/KHA
Lab Contact: Micah Smith
Date: 12/4/08
Carrier:
COC Number: UCD
Page 1 of 3
Job No.
SDG No.

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	Carbonate/Bicarbonate (SM2320B)	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
1	GWGW2368A	12/3	1615	L	W	5	X	X	X													X	X	
2	GWGW2368B	12/3	1615			5	X	X	X													X	X	
3	GWGW2383	12/3	1650			1																X		
4	GWGW2378	12/3	1725			12		X		X	X	X	X		X	X						X	X	Al, Si + Title 22 6010B
5	GWGW2379A	12/3	1630			5	X	X	X	X													X	
6	GWGW2379B	12/3	1630			5	X	X	X	X													X	
7	GWGW2373	12/4	1015			9	X	X	X													X	X	
8	GWGW2404	12/4	1110			1																X		
9	GWGW2390	12/4	1035			5	X	X	X	X													X	
						Field Filtered	X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: Level II Reporting with Initial Calibration Curves and Continuing Calibration **Note: Nitrate 48 hour hold time!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	WEISS	1505, 12/4/08	Tom Ompley	CEC	12/4/08 1505
[signature] To CSO		12-4-08 1730	[signature]	CEC	12/5/08 1030
510857382 510857383					

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
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Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

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phone: (925) 689-9022

Project ID: 388-1856-2-16
Protocol No.: ROD

Client Contact	
Weiss Associates	
5801 Christie Avenue, Suite 600	
Emeryville, CA 94608	
(510) 450-6000	Phone
(510) 547-5043	FAX
Job Name:	UC Davis
Address:	One Shields Ave, Davis

Project Manager: Bob Devany
Tel: 510-450-6144

Analysis Turnaround Time
Calendar (C) or Work Days (W) --- 5W
TAT if different from Below _____
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sampled by: JMD / KHA
Lab Contact: Micah Smith
Date: 12/4/08
Carrier:

COC Number: UCD
Page 2 of 3

Job No.

SDG No.

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	Carbonate/Bicarbonate (SM2320B)	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
10	GWGW2382A	12/4	1145	L	W	12		X		X	X	X	X		X	X					X	X	X	Title 22 + Al + Si
11	GWGW2382B	12/4	1145	|	|	12		X		X	X	X	X		X	X					X	X	X	Title 22 + Al + Si
12	GWGW2377	12/4	1430	|	|	9		X	X	X	X	X									X	X		
13	TPEF0365	12/4	1350	|	|	9					X	X	X				X		X	X	X	X		Title 22 + Ca, K, Mg, Na
																				X				
14	GPTN0365																							
15	Travel Blank	0730	12/4	L	W						X													HOLD
						Field Filtered	X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For _____ Months*

Special Instructions/QC Requirements & Comments: Level II Reporting with Initial Calibration Curves and Continuing Calibration **Note: Nitrate 48 hour hold time!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	WEISS	1505, 12/4/08	Tom O'Malley	CEL	12/4/08 1505
[signature] to GSD		12-4-08 1730	[signature]	CEL	12/05/08 1030

Chain of Custody Record

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Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
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Specify analytic/prep method and detection limit in report.
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0585

Calscience Environmental Lab
5063 Commercial Circle, Suite H
Concord, CA 94520
phone: (925) 689-9022

Project ID: 388-1856-2-16
Protocol No.: ROD

Client Contact	
Weiss Associates	
5801 Christie Avenue, Suite 600	
Emeryville, CA 94608	
(510) 450-6000	Phone
(510) 547-5043	FAX
Job Name:	UC Davis
Address:	One Shields Ave, Davis

Project Manager: Bob Devany
Tel: 510-450-6144

Analysis Turnaround Time
Calendar (C) or Work Days (W) --- 5W
TAT if different from Below _____
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sampled by: JMD
Lab Contact: Micah Smith
Date: 12/4/08
Carrier:

COC Number: UCD
Page 3 of 3

Job No.

SDG No.

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	Carbonate/Bicarbonate (SM2320B)	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
15 TPIN 0365	12/4	1410	W	W	4					X										X			
Field Filtered						X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: Level II Reporting with Initial Calibration Curves and Continuing Calibration

Note: Nitrate 48 hour hold time!

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	WEISS	1505 / 12/4	[signature]	CEL	12/4/08 1505
[signature] to GSD		12-4-08 1730	[signature]	CEL	12/5/08 1030

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 0 8 - 1 2 - 0 5 0 5

SAMPLE RECEIPT FORM

Cooler 1 of 2

CLIENT: Weiss Associates

DATE: 12/5/08

TEMPERATURE: (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 2.1 °C - 0.2 °C (CF) = 1.9 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by:_____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only **Initial:** JP

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Initial:** JP

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** WB

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	☑	☐	☐
COC document(s) received complete.....	☑	☐	☐
Sampler's name indicated on COC.....	☑	☐	☐
Sample container label(s) consistent with COC.....	☑	☐	☐
Sample container(s) intact and good condition.....	☑	☐	☐
Correct containers and volume for analyses requested.....	☑	☐	☐
Analyses received within holding time.....	☑	☐	☐
Proper preservation noted on sample label(s).....	☑	☐	☐
Volatile analysis container(s) free of headspace.....	☑	☐	☐
Tedlar bag(s) free of condensation.....	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☑VOAh ☐VOAna$_2$ ☑125AGB ☐125AGBh ☐125AGBpo$_4$ ☐1AGB ☑1AGBna$_2$ ☐1AGBs ☐500AGB ☐500AGBs ☐250CGB ☑250CGBs ☑1PB ☐500PB ☐500PBna ☐250PB ☑250PBn ☑125PB ☐125PBznna ☐100PBsterile ☐100PBna$_2$ ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® ☐_____

Checked/Labeled by: WB

Reviewed by: D.C

Scanned by: WB

Container: C:Clear A:Amber P:Poly/Plastic G:Glass J:Jar B:Bottle

Preservative: h:HCL n:HNO_3 na$_2$:$Na_2S_2O_3$ na:NaOH po$_4$:H_3PO_4 s:H_2SO_4 znna:$ZnAc_2$+NaOH

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 0 8 - 1 2 - 0 5 8 5

SAMPLE RECEIPT FORM

Cooler 2 of 2

CLIENT: Weiss Associates

DATE: 12/5/08

TEMPERATURE: (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 1.7 °C - 0.2 °C (CF) = 1.5 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by:_____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only **Initial:** JP

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Initial:** JP

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** WB

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	☑	☐	☐
COC document(s) received complete.....	☑	☐	☐
Sampler's name indicated on COC.....	☑	☐	☐
Sample container label(s) consistent with COC.....	☑	☐	☐
Sample container(s) intact and good condition.....	☑	☐	☐
Correct containers and volume for analyses requested.....	☑	☐	☐
Analyses received within holding time.....	☑	☐	☐
Proper preservation noted on sample label(s).....	☑	☐	☐
Volatile analysis container(s) free of headspace.....	☑	☐	☐
Tedlar bag(s) free of condensation.....	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☑VOAh ☐VOAna$_2$ ☑125AGB ☐125AGBh ☐125AGBpo$_4$ ☐1AGB ☑1AGBna$_2$ ☐1AGBs ☐500AGB ☐500AGBs ☐250CGB ☑250CGBs ☑1PB ☐500PB ☐500PBna ☐250PB ☑250PBn ☑125PB ☐125PBznna ☐100PBsterile ☐100PBna$_2$ ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® ☐_____

Checked/Labeled by: WB

Reviewed by: D.L

Scanned by: WB

Container: C:Clear A:Amber P:Poly/Plastic G:Glass J:Jar B:Bottle

Preservative: h:HCL n:HNO_3 na$_2$:$Na_2S_2O_3$ na:NaOH po$_4$:H_3PO_4 s:H_2SO_4 znna:$ZnAc_2$+NaOH

Work Order#: 08-12-0585

Client: WEISS Associates

RSK-175M

Calibration

☐ EPA METHOD 25 ☐ SCAQMD METHOD 25.1
☐ SCAQMD METHOD 25.1M (Low VOCs) ☐ SCAQMD METHOD 25.1M (Non-Condensable Fraction

QUALITY CONTROL DATA SHEET

Work Order Number: 08-12-0585
Instrument ID: GC14
Batch Number (LCS/MS/SA): 08120801

Analyst: _____ Date ___/___/___
QC Review: _____ Date ___/___/___
Date Analyzed: 12/08/08

LCS/LCS Duplicate

Thermal Conductivity Detector (TCD) Analysis ☐ % by Volume ☐ ppm(v/v) ☐ other _____

Analyte	Conc Added	LCS REC	LCS %REC	LCSD REC	LCSD %REC	Control Limit(%REC)	RPD	Control Limit(RPD)
Oxygen	20.0					80-120		0-20
Nitrogen	75.1					80-120		0-20
Carbon Dioxide	4.92					80-120		0-20

Flame Ionization Detector (FID) Analysis ☐ ppm(v/v) ☐ other _____

Methane	99.9	103	103	102	102	80-120	1	0-20
Carbon Monoxide	100	107	107	107	107	80-120	0	0-20
TGNMO (as Methane) (Total Gaseous Non-Methane Organic compounds)	385	404	105	402	104	80-120	0	0-20

Daily Midpoint Calibration Check

Thermal Conductivity Detector (TCD) Analysis ☐ % by Volume ☐ ppm(v/v) ☐ other _____

Analyte	Conc Added	Conc Recovered	% D	Control Limit
Oxygen	3.50			0 - 15
Nitrogen	10.03			0 - 15
Methane	10.03			0 - 15
Carbon Monoxide	9.96			0 - 15
Carbon Dioxide	10.0			0 - 15

Flame Ionization Detector (FID) Analysis ☐ ppm(v/v) ☐ other _____

Analyte	Conc Added	Conc Recovered	% D	Control Limit
Methane	308	317	3	0 - 15
Carbon Monoxide	304	314	3	0 - 15
Carbon Dioxide	302	308	2	0 - 15
TGNMO (as Methane) (Total Gaseous Non-Methane Organic compounds)	918	920	0	0 - 15

Analyst's Comments: _____

☐ EPA METHOD 25 ☐ SCAQMD METHOD 25.1
☐ SCAQMD METHOD 25.1M (Low VOCs) ☐ SCAQMD METHOD 25.1M (Non-Condensable Fraction

QUALITY CONTROL DATA SHEET

Work Order Number: 08-12-0585
Instrument ID: GC14
Batch Number (LCS/MS/SA): 081209L01
Analyst: _____ Date ___/___/___
QC Review: _____ Date ___/___/___
Date Analyzed: 12/09/08

LCS/LCS Duplicate

Thermal Conductivity Detector (TCD) Analysis ☐ % by Volume ☐ ppm(v/v) ☐ other _____

Analyte	Conc Added	LCS REC	LCS %REC	LCSD REC	LCSD %REC	Control Limit(%REC)	RPD	Control Limit(RPD)
Oxygen	20.0					80-120		0-20
Nitrogen	75.1					80-120		0-20
Carbon Dioxide	4.92					80-120		0-20

Flame Ionization Detector (FID) Analysis ☐ ppm(v/v) ☐ other _____

Analyte	Conc Added	LCS REC	LCS %REC	LCSD REC	LCSD %REC	Control Limit(%REC)	RPD	Control Limit(RPD)
Methane	99.9	101	101	100	100	80-120	1	0-20
Carbon Monoxide	100	106	106	105	105	80-120	1	0-20
TGNMO (as Methane) (Total Gaseous Non-Methane Organic compounds)	385	391	102	398	103	80-120	2	0-20

pc 12/09/08

Daily Midpoint Calibration Check

Thermal Conductivity Detector (TCD) Analysis ☐ % by Volume ☐ ppm(v/v) ☐ other _____

Analyte	Conc Added	Conc Recovered	% D	Control Limit
Oxygen	3.50			0 - 15
Nitrogen	10.03			0 - 15
Methane	10.03			0 - 15
Carbon Monoxide	9.96			0 - 15
Carbon Dioxide	10.0			0 - 15

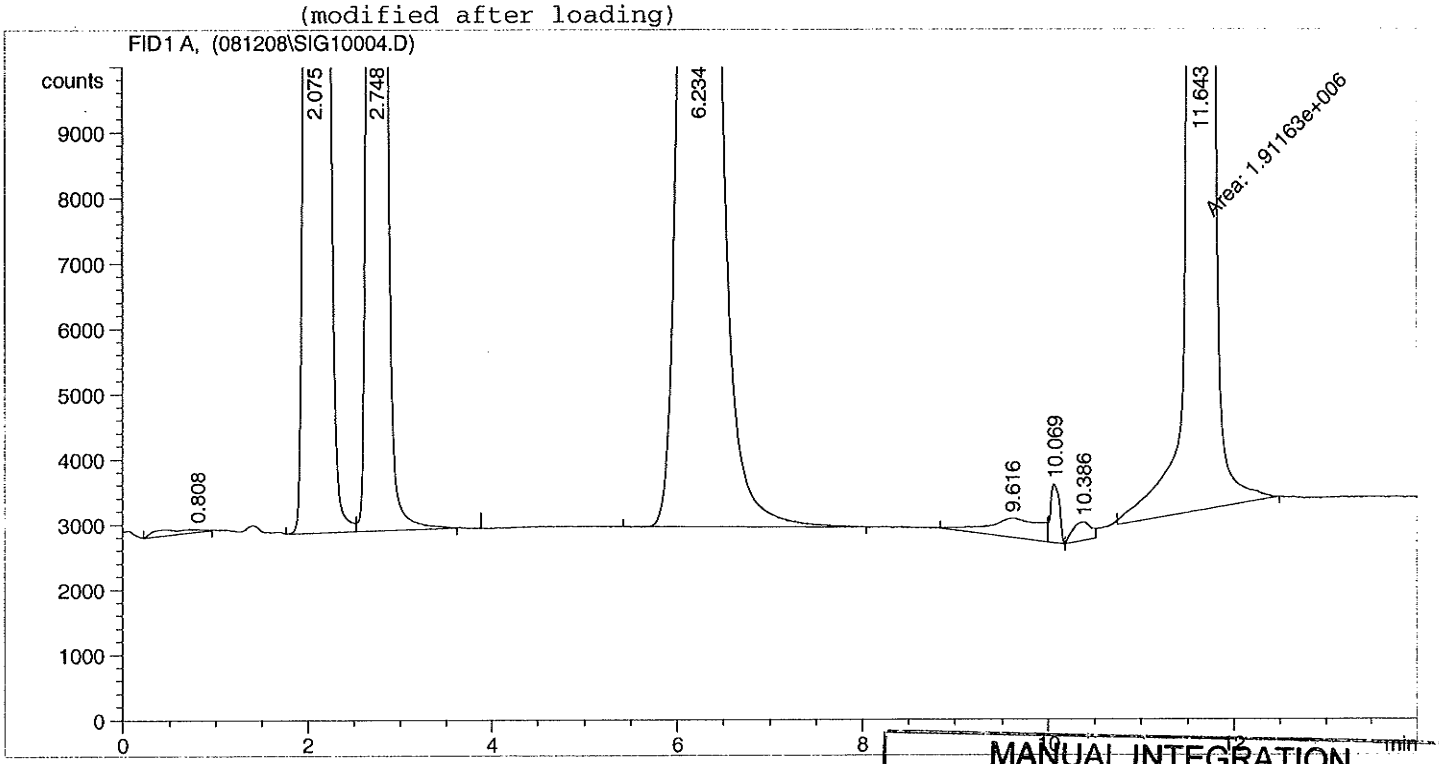
Flame Ionization Detector (FID) Analysis ☐ ppm(v/v) ☐ other _____

Analyte	Conc Added	Conc Recovered	% D	Control Limit
Methane	308	315	2	0 - 15
Carbon Monoxide	304	312	3	0 - 15
Carbon Dioxide	302	306	1	0 - 15
TGNMO (as Methane) (Total Gaseous Non-Methane Organic compounds)	918	909	1	0 - 15

Analyst's Comments: _____

Data File C:\HPCHEM\2\DATA\081208\SIG10004.D Sample Name: FID CCV 1mL

```
==========================================================================
Injection Date  : 12/8/2008 9:36:57 AM
Sample Name     : FID CCV 1mL                    Location : Vial 1
Acq. Operator   : GC 14
                                                 Inj Volume : Manually
Acq. Method     : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed    : 10/3/2008 1:49:33 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M\071908.M
Last changed    : 12/8/2008 9:55:16 AM by GC 14
                  (modified after loading)
```



MANUAL INTEGRATION
BEFORE / AFTER
Date: 12/08/08
Chemist: JC GL: W
Reason: BASELINE CORR., PEAK ID CORR.
Other :
This stamp appears in red ink on original copy.

```
==========================================================================
                        External Standard Report
==========================================================================

Sorted By              :      Signal
Calib. Data Modified   :      12/8/2008 9:55:13 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: FID1 A,
```

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.075	PV	6.39802e5	4.91062e-4	314.18242		Carbon Monoxide
2.748	VV	6.40484e5	4.94479e-4	316.70610		Methane
6.234	BV	6.44112e5	4.77635e-4	307.65035		Carbon Dioxide
11.643	MM	1.91163e6	4.81128e-4	919.73904		TGNMO

Totals : 1858.27790

Results obtained with standard integrator!

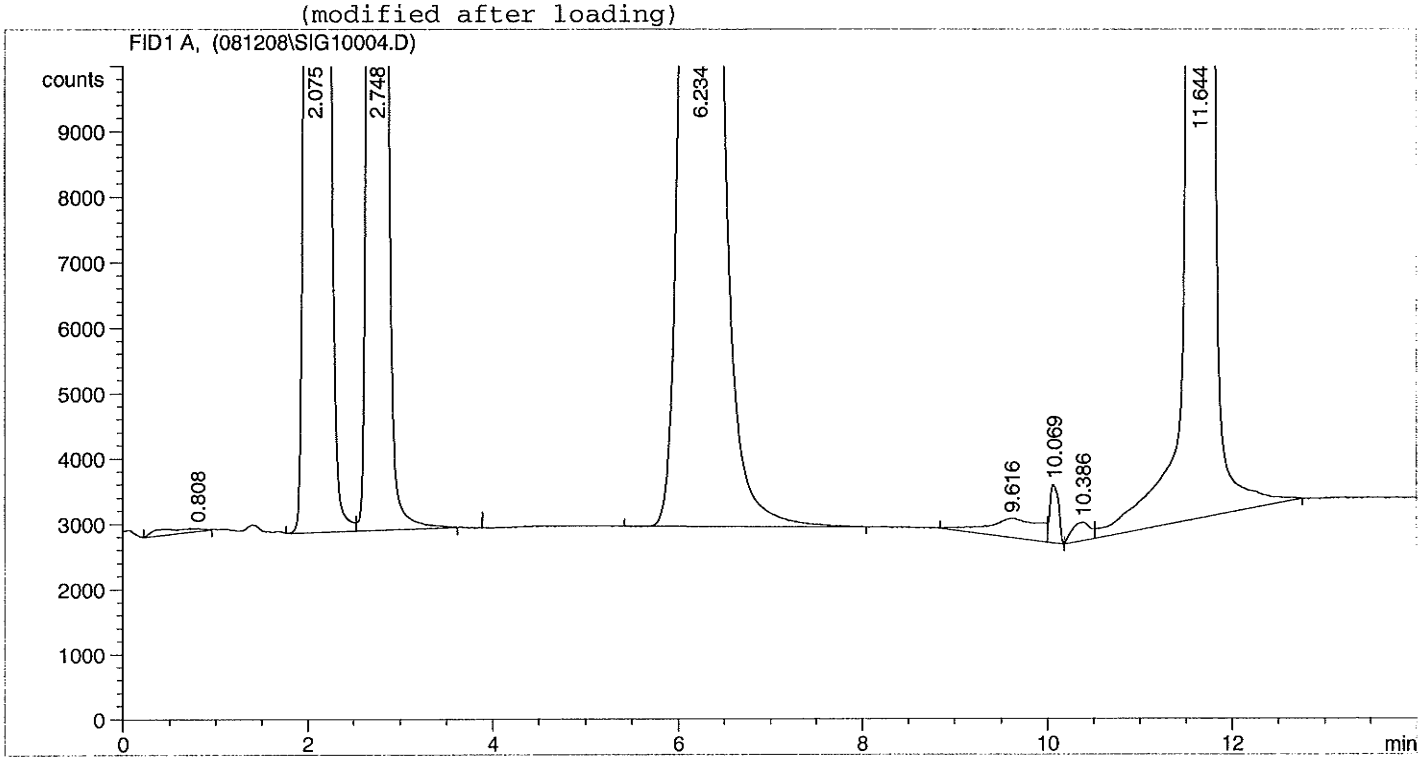
==========

*** End of Report ***

Data File C:\HPCHEM\2\DATA\081208\SIG10004.D Sample Name: FID CCV 1mL

==========

Injection Date : 12/8/2008 9:36:57 AM
Sample Name : FID CCV 1mL Location : Vial 1
Acq. Operator : GC 14
Inj Volume : Manually
Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 10/3/2008 1:49:33 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M\071908.M
Last changed : 12/6/2008 12:34:37 PM by GC 14
(modified after loading)



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External Standard Report

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MANUAL INTEGRATION
BEFORE / AFTER
Date:
Chemist: GL:
Reason: BASELINE CORR., PEAK ID CORR.
Other :
This stamp appears in red ink on original copy.

Sorted By : Signal
Calib. Data Modified : 12/6/2008 12:30:58 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.075	PV	6.39802e5	4.91062e-4	314.18242		Carbon Monoxide
2.748	VV	6.40484e5	4.94479e-4	316.70610		Methane
6.234	BV	6.44112e5	4.77635e-4	307.65035		Carbon Dioxide
11.644	VV	1.92673e6	4.81128e-4	927.00516		TGNMO

Totals : 1865.54402

Results obtained with standard integrator!

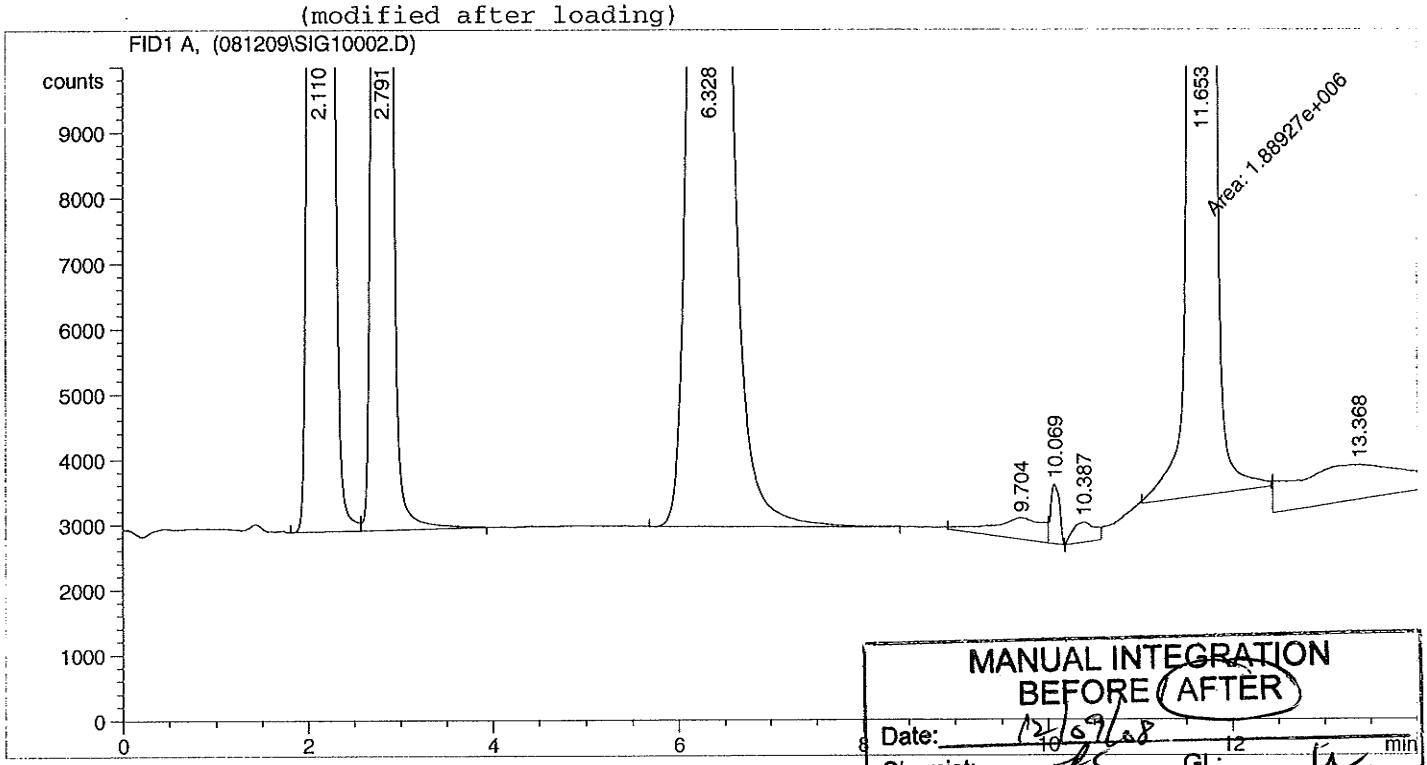
==========

*** End of Report ***

Data File C:\HPCHEM\2\DATA\081209\SIG10002.D Sample Name: FID CCV 1mL

==========

Injection Date : 12/9/2008 9:14:55 AM
Sample Name : FID CCV 1mL Location : Vial 1
Acq. Operator : GC 14
Inj Volume : Manually
Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 10/3/2008 1:49:33 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M\071908.M
Last changed : 12/9/2008 9:36:18 AM by GC 14
(modified after loading)



MANUAL INTEGRATION
BEFORE / AFTER
Date: 12/09/08
Chemist: GL:
Reason: BASELINE CORR., PEAK ID CORR.
Other:
This stamp appears in red ink on original copy.

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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 12/9/2008 9:36:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.110	BV	6.34792e5	4.91062e-4	311.72226		Carbon Monoxide
2.791	VB	6.36451e5	4.94479e-4	314.71138		Methane
6.328	BB	6.40763e5	4.77635e-4	306.05075		Carbon Dioxide
11.653	MM	1.88927e6	4.81128e-4	908.97981		TGNMO

Totals : 1841.46419

Results obtained with standard integrator!

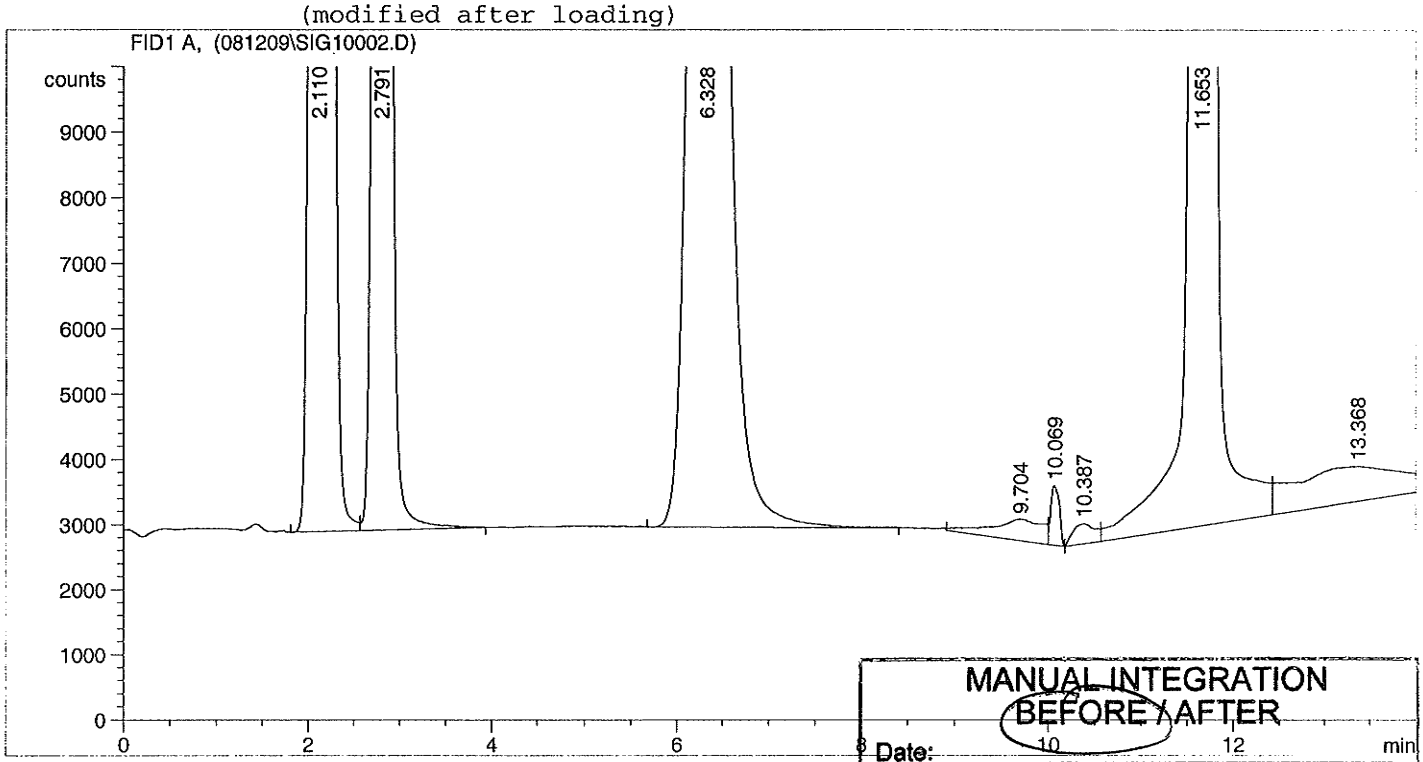
==========

*** End of Report ***

Data File C:\HPCHEM\2\DATA\081209\SIG10002.D Sample Name: FID CCV 1mL

==========

Injection Date : 12/9/2008 9:14:55 AM
Sample Name : FID CCV 1mL Location : Vial 1
Acq. Operator : GC 14
Inj Volume : Manually
Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 10/3/2008 1:49:33 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M\071908.M
Last changed : 12/8/2008 12:45:54 PM by GC 14
(modified after loading)



MANUAL INTEGRATION
BEFORE / AFTER
Date:
Chemist: GL:
Reason: ~~BASELINE~~ CORR., PEAK ID CORR.
Other :
This stamp appears in red ink on original copy.

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External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : 12/8/2008 12:45:52 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.110	BV	6.34792e5	4.91062e-4	311.72226		Carbon Monoxide
2.791	VB	6.36451e5	4.94479e-4	314.71138		Methane
6.328	BB	6.40763e5	4.77635e-4	306.05075		Carbon Dioxide
10.387	PV	5033.19775	4.81128e-4	2.42161		TGNMO

Totals : 934.90599

Results obtained with standard integrator!

==========

*** End of Report ***

GC 14 25.1 METHOD 071908
Multipoint Calibration

C0		5ppm	300ppm	5000ppm		Average	SD	RSD
Conc.ppm		5.06	304	5110				
Area		11148	608729	9727630		3449169		
RF		2203.162	2002.398	1903.646		2036.402	152.626	7.494886

Methane	1ppm	5ppm	300ppm	5000ppm				
Conc.ppm	1.01	5.07	308	4950				
Area	2226	9790	612460	9774190		2599667		
RF	2203.96	1930.966	1988.506	1974.584		2024.504	122.1225	6.032217

C02	1ppm	5ppm	300ppm	5000ppm				
Conc.ppm	1.07	5.37	302	4980				
Area	2416	10976	623378	10044400		2670293		
RF	2257.944	2043.948	2064.166	2016.948		2095.751	109.8449	5.241313

TGNMO	1ppm	5ppm	300ppm	5000ppm				
Conc.ppm	3.06	15.3	918	2082				
Area	7467	29582	1772460	4179080		1497147		
RF	2440.196	1933.464	1930.784	2007.243		2077.922	244.1008	11.74735

Air Analysis Logbook

DATE	DIRECTORY	DATA FILE	CEL ID #	TEST METHOD	STANDARD LOT # / ID	LOOP VOL (mL)	ANALYST	COMMENTS
07/18/08	080718	SIG100009	ICAL std #1	TGMNO	01-13-08	200µL	NV	
		10	ICAL std #3		01-13-07	1mL		
		11	ICAL STD #4		01-13-14		NV	
		12	MB		N/A			
		13	MDL #1		01-13-08			
		14	2					
		15	3					
		16	4					
		17	5					
		18	6					
		19	7					
		20	ICAL #4		01-13-09			
07/19/08	080719	SIG1000	BLANK	TGMNO	N/A	1	EY	
		02	ICAL std #3		01-10-15		LL	25.1 300 ppm
		03	blank		NA			
		04	ICAL std #1		01-13-08	200ul		1ppm (~5ppm)
		05	ICAL std #2			1		5 ppm
		06	ICAL std #3		01-10-15			300 ppm
		07	ICAL std ~~#3~~		~~01-10-15~~ 07/19			~~5000~~ 300 ppm LL 07/19/08
		08	ICAL std #3		~~01-13-09~~			5000 ppm
		09	ICAL STD #4					
		10	Blank		NA	1		~~5 ppm~~ LL 07/19
		11	MDL #1		01-13-08		EY	5 ppm
		12	ICAL std #1			200ul		
		13	ICAL std #2			1		
		14	blank		NA		LL	
		15	#10 CCV		01-10-15			
		16	LCS		01-13-07			

Reviewed by: _____ Date ____/____/____

Air Analysis Logbook

DATE	DIRECTORY	DATA FILE	CEL ID #	TEST METHOD	STANDARD LOT # / ID	LOOP VOL (mL)	ANALYST	COMMENTS
07/19/08	080719	SIG100017	LCSD	TGNMO	01-13-07	1	LL	
		18	BLANK		NA			
		19	ICAL STD #1		01-13-08	200µL		
		20	1					
		21	2		~~01-10-15~~			
		22	3		~~01-13-09~~			01-10-15
		23	4		01-13-09			
		24	4		01-13-09			
		25	3		01-10-15			
		26	2		01-13-08			
		27	1			200µL		
		28	1					
		29	4		01-13-09	1		mislabled
		30	4					
		31	2		01-13-08			
		32	2					
07/20/08	080720	SIG100001	Blank	TGNMO	NA	1	NL	
		2	FID CCV		01-10-15		PM	
		3						
		4	LCS		01-13-07		NL	
		5	LCSD		1			
		6	Blank		NA			
		7	08-07-1427-1A		1		LL	
		8	-2A					
		9	-2A					
		10	3A				PM	
		11	4A					
		12	08-07-1431-1A					

Reviewed by: _____ Date ____/____/____

Calibration Table

Calib. Data Modified : Sunday, July 20, 2008 11:10:47 AM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 20.000 %
Abs. Reference Window : 0.000 min
Rel. Non-ref. Window : 20.000 %
Abs. Non-ref. Window : 0.000 min
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times : No, only for identified peaks

Curve Type : Power
Origin : Ignored
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: FID1 A,

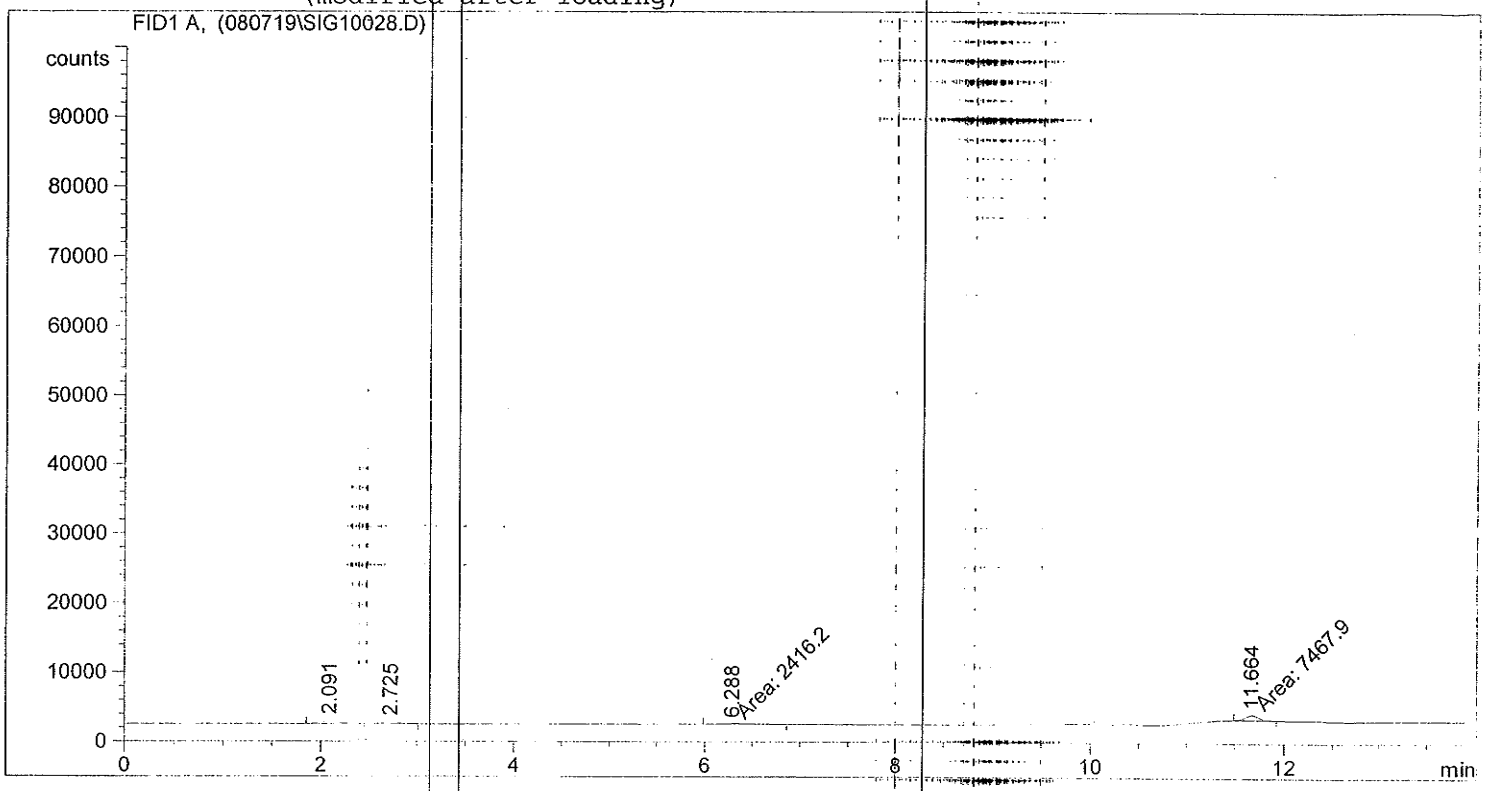
RetTime [min]	Sig	Lvl	Amount [ppm v/v]	Area	Amt/Area	Ref	Grp	Name
2.218	1	2	5.06000	1.11479e4	4.53898e-4			Carbon Monoxide
		3	304.00000	6.08729e5	4.99401e-4			
		4	5110.00000	9.72763e6	5.25308e-4			
2.817	1	1	1.01400	2226.19580	4.55486e-4			Methane
		2	5.07000	9790.16699	5.17867e-4			
		3	308.00000	6.12460e5	5.02890e-4			
		4	4950.00000	9.77419e6	5.06436e-4			
6.396	1	1	1.07400	2416.20410	4.44499e-4			Carbon Dioxide
		2	5.37000	1.09761e4	4.89244e-4			
		3	302.00000	6.23378e5	4.84457e-4			
		4	4980.00000	1.00444e7	4.95799e-4			
11.667	1	1	3.06000	7467.90234	4.09754e-4			TGNMO
		2	15.30000	2.95820e4	5.17207e-4			
		3	918.00000	1.77246e6	5.17925e-4			
		4	2082.00000	4.17908e6	4.98196e-4			

Peak Sum Table

No Entries in table

==========

Injection Date : 7/19/2008 11:46:49 PM
Sample Name : ICAL #1 200uL Location : Vial 1
Acq. Operator : GC 14
Inj Volume : Manually
Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 10:59:10 AM by GC 14
(modified after loading)



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 7/20/2008 10:59:08 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.091	BB	5333.47119	2.20085e-4	1.17382		Carbon Monoxide
2.725	BB	2226.19580	4.81720e-4	1.07240		Methane
6.288	MM	2416.20410	2.55639e-4	6.17675e-1		Carbon Dioxide
11.664	MM	7467.90234	4.72564e-4	3.52906		TGNMO
Totals :				6.39296		

Results obtained with standard integrator!

==========

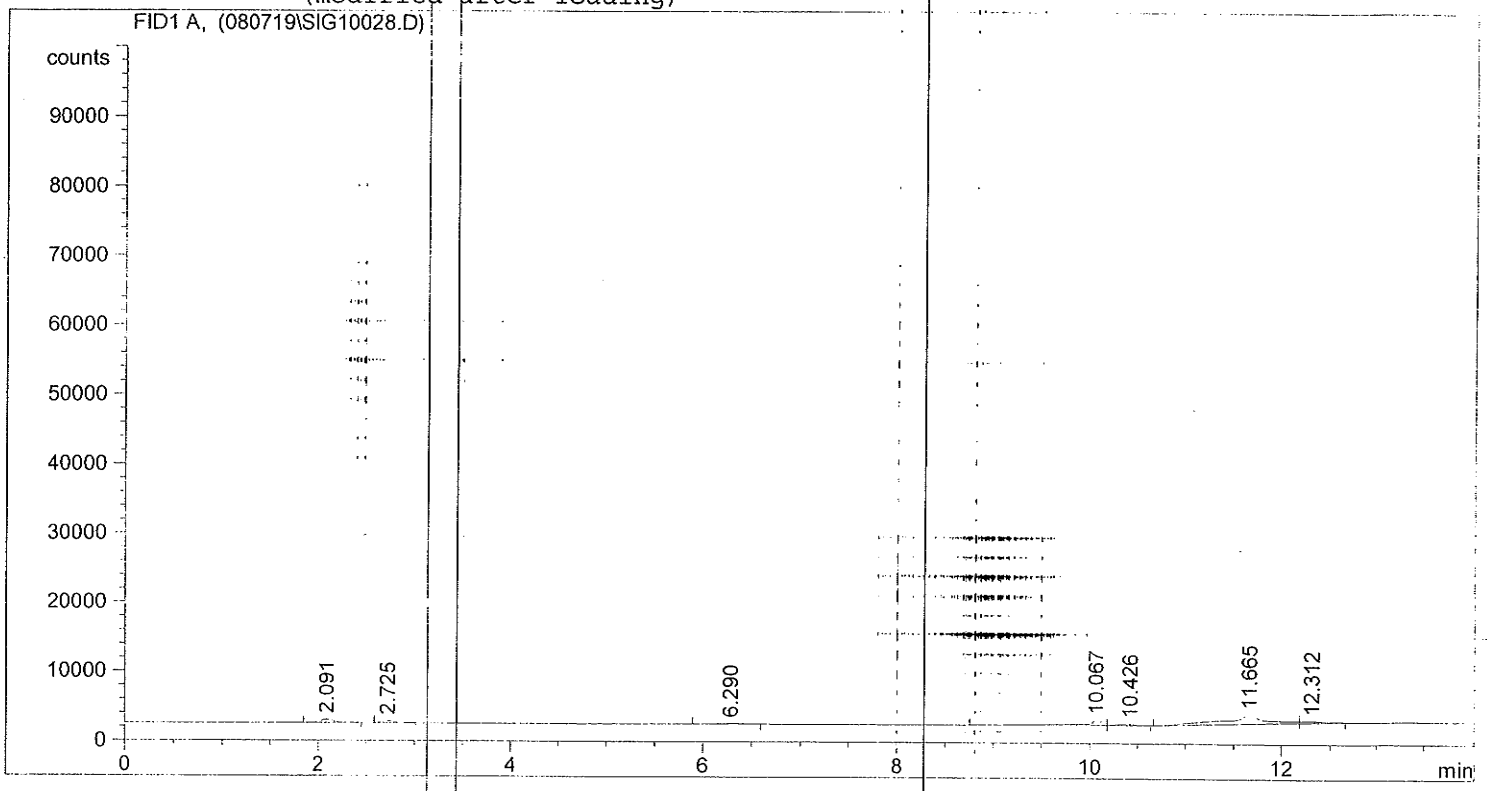
*** End of Report ***

==========

Injection Date : 7/19/2008 11:46:49 PM
Sample Name : ICAL #1 200uL
Acq. Operator : GC 14

Location : Vial 1
Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 10:59:10 AM by GC 14
(modified after loading)



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External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : 7/20/2008 10:59:08 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.091	BB	5333.47119	2.20085e-4	1.17382		Carbon Monoxide
2.725	BB	2226.19580	4.81720e-4	1.07240		Methane
6.290	BB	1793.48889	2.46801e-4	4.42634e-1		Carbon Dioxide
11.665	BV	4.09466e4	5.00967e-4	20.51291		TGNMO

Totals : 23.20177

Results obtained with standard integrator!

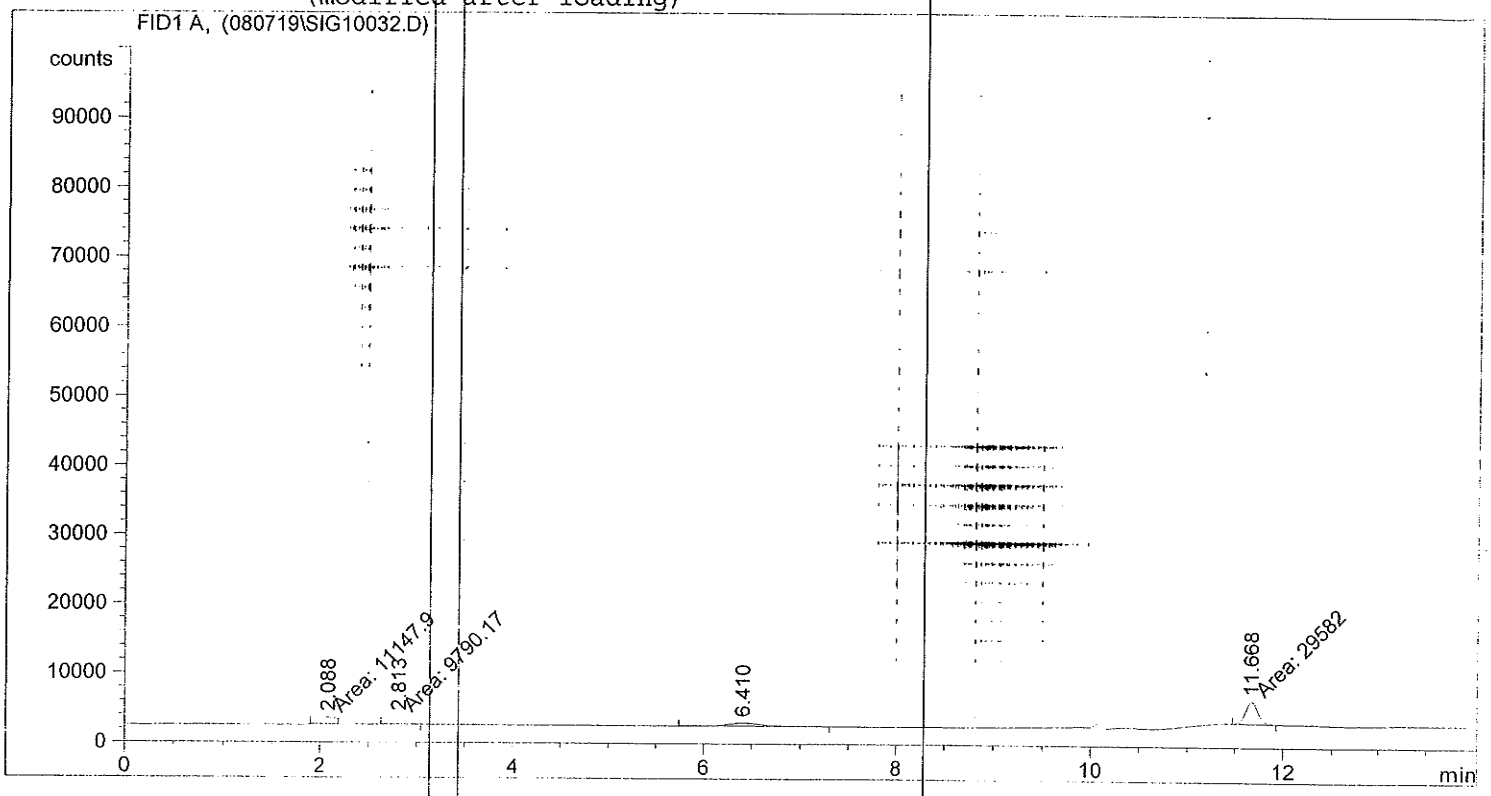
==========

*** End of Report ***

Injection Date : 7/20/2008 1:12:23 AM
Sample Name : ICAL #2 1mL
Acq. Operator : GC 14

Location : Vial 1
Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 11:08:23 AM by GC 14
(modified after loading)



External Standard Report

Sorted By : Signal
Calib. Data Modified : Sunday, July 20, 2008 11:08:23 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.088	MF	1.11479e4	4.34978e-4	4.84908		Carbon Monoxide
2.813	MM	9790.16699	4.86574e-4	4.76364		Methane
6.410	BB	1.09761e4	4.68418e-4	5.14142		Carbon Dioxide
11.668	MM	2.95820e4	4.67871e-4	13.84055		TGNMO

Totals : 28.59469

Results obtained with standard integrator!

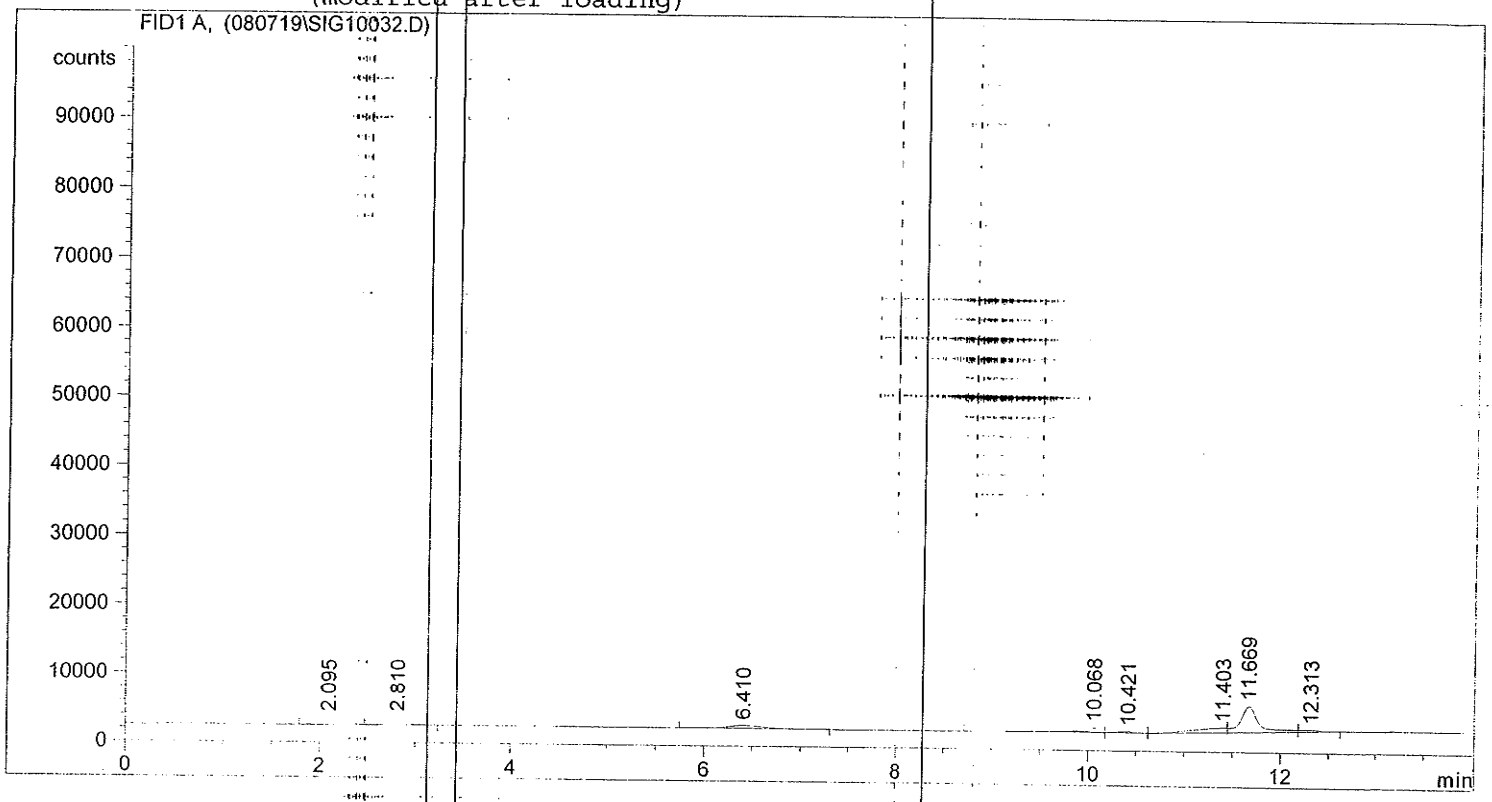
*** End of Report ***

Injection Date : 7/20/2008 1:12:23 AM
Sample Name : ICAL #2 1mL
Acq. Operator : GC 14

Location : Vial 1

Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 11:02:59 AM by GC 14
(modified after loading)



External Standard Report

Sorted By : Signal
Calib. Data Modified : Sunday, July 20, 2008 11:02:59 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.095	BV	1.74076e4	2.66416e-4	4.63767		Carbon Monoxide
2.810	VB	1.16931e4	4.63584e-4	5.42075		Methane
6.410	BB	1.09761e4	4.49500e-4	4.93377		Carbon Dioxide
11.669	VV	4.94595e4	4.66855e-4	23.09040		TGNMO

Totals : 38.08258

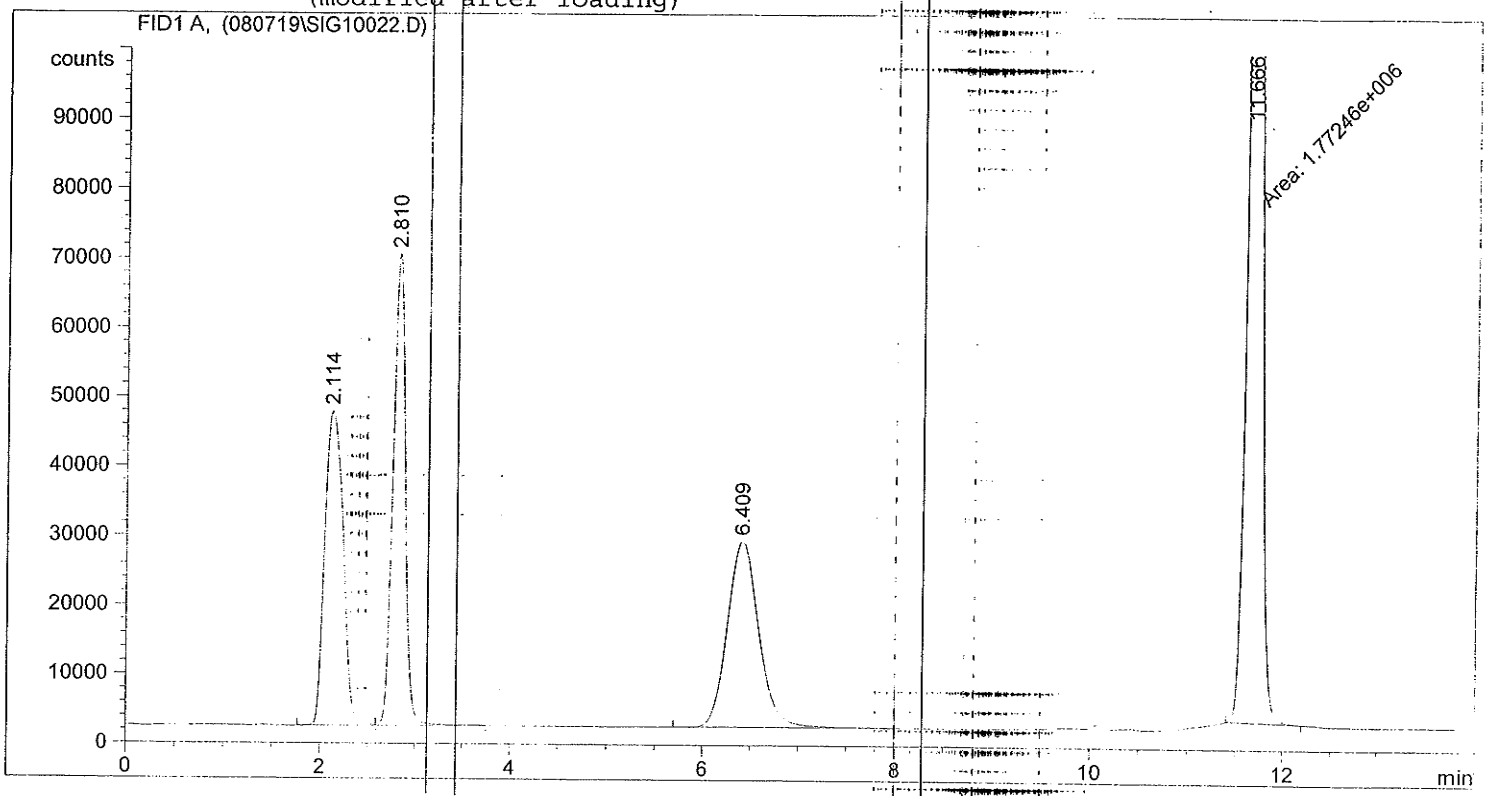
Results obtained with standard integrator!

*** End of Report ***

Injection Date : 7/19/2008 7:54:26 PM
Sample Name : ICAL #3 1mL
Acq. Operator : GC 14

Location : Vial 1
Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 10:41:13 AM by GC 14
(modified after loading)



External Standard Report

Sorted By : Signal
Calib. Data Modified : Sunday, July 20, 2008 10:41:12 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.114	BV	6.08729e5	5.18394e-4	315.56139		Carbon Monoxide
2.810	VB	6.12460e5	5.51524e-4	337.78630		Methane
6.409	BV	6.23378e5	4.76516e-4	297.04967		Carbon Dioxide
11.666	MM	1.77246e6	5.81475e-4	1030.63989		TGNMO

Totals : 1981.03725

Results obtained with standard integrator!

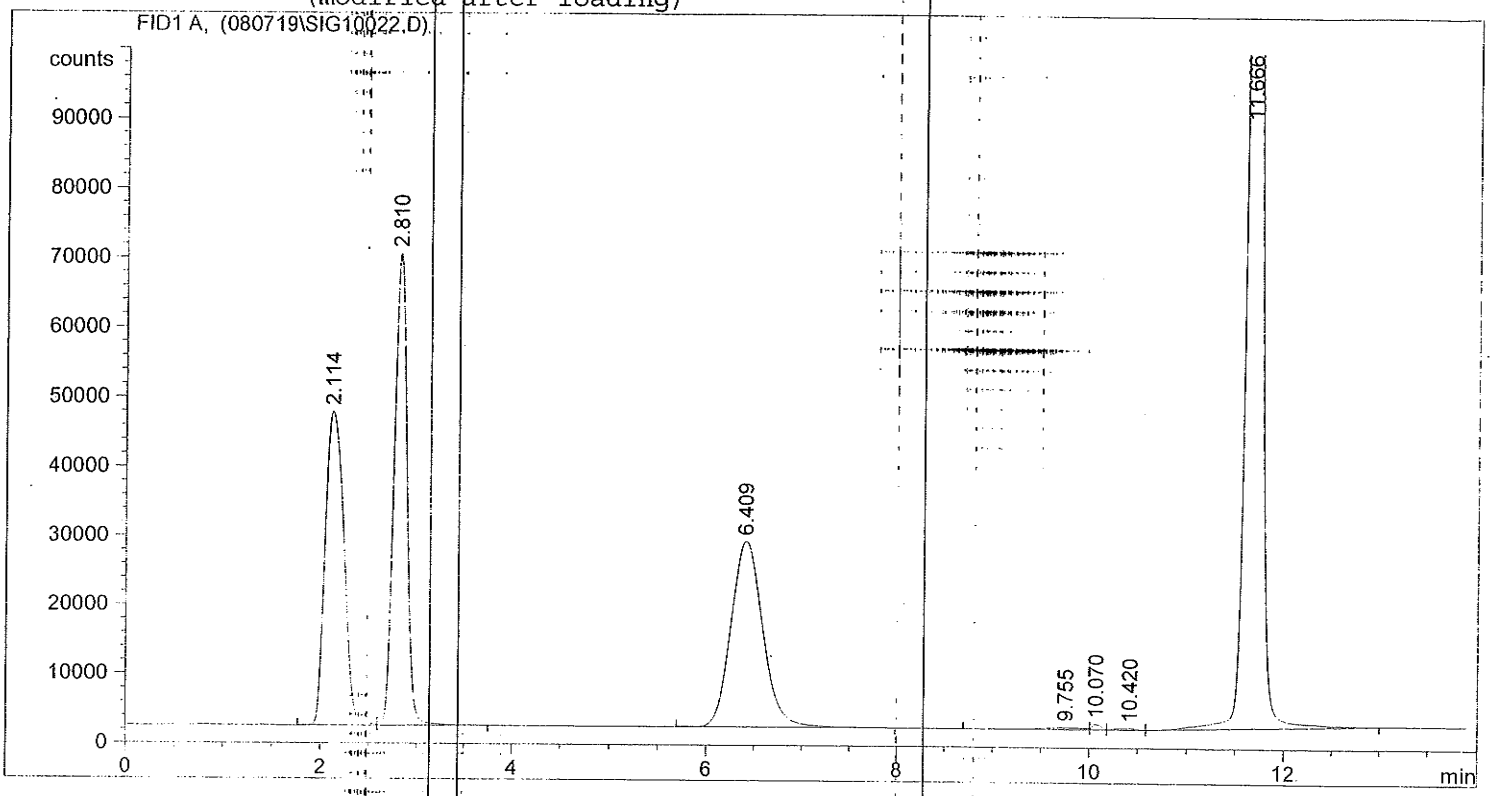
*** End of Report ***

Injection Date : 7/19/2008 7:54:26 PM
Sample Name : ICAL #3 1mL
Acq. Operator : GC 14

Location : Vial 1

Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 10:37:22 AM by GC 14
(modified after loading)



External Standard Report

Sorted By : Signal
Calib. Data Modified : 7/20/2008 10:37:20 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.114	BV	6.08729e5	4.82486e-4	293.70355		Carbon Monoxide
2.810	VB	6.12460e5	5.08124e-4	311.20580		Methane
6.409	BV	6.23378e5	4.39930e-4	274.24266		Carbon Dioxide
11.666	PV	1.84478e6	5.27180e-4	972.53302		TGNMO

Totals : 1851.68502

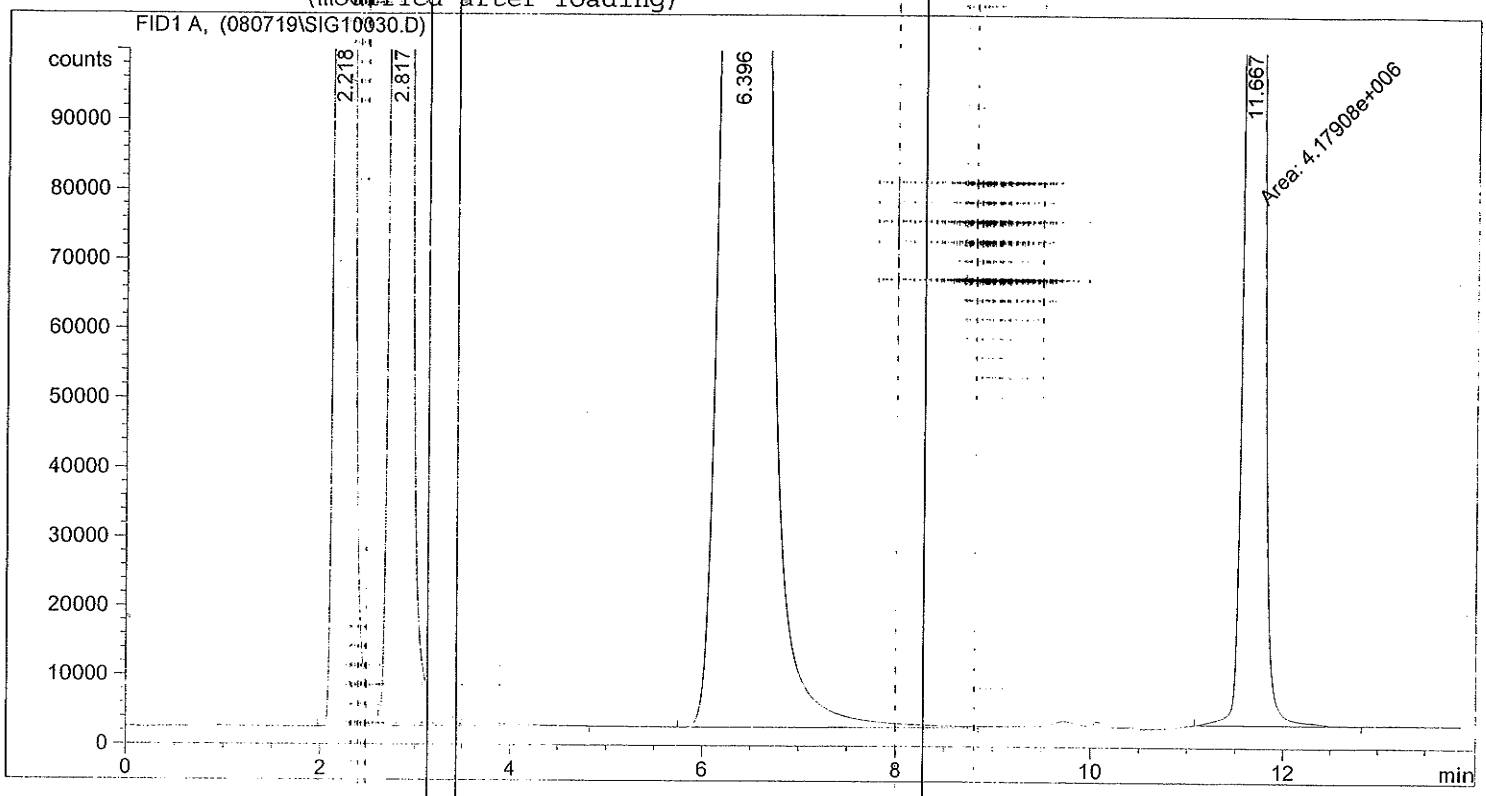
Results obtained with standard integrator!

*** End of Report ***

Injection Date : 7/20/2008 12:31:29 AM
Sample Name : ICAL #4 1mL
Acq. Operator : GC 14

Location : Vial 1
Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 11:10:47 AM by GC 14
(modified after loading)



External Standard Report

Sorted By : Signal
Calib. Data Modified : Sunday, July 20, 2008 11:10:47 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.218	BV	9.72763e6	5.27203e-4	5128.43195		Carbon Monoxide
2.817	VB	9.77419e6	5.13222e-4	5016.33247		Methane
6.396	BV	1.00444e7	4.99095e-4	5013.11061		Carbon Dioxide
11.667	MM	4.17908e6	5.19835e-4	2172.43283		TGNMO
Totals :				1.73303e4		

Results obtained with standard integrator!

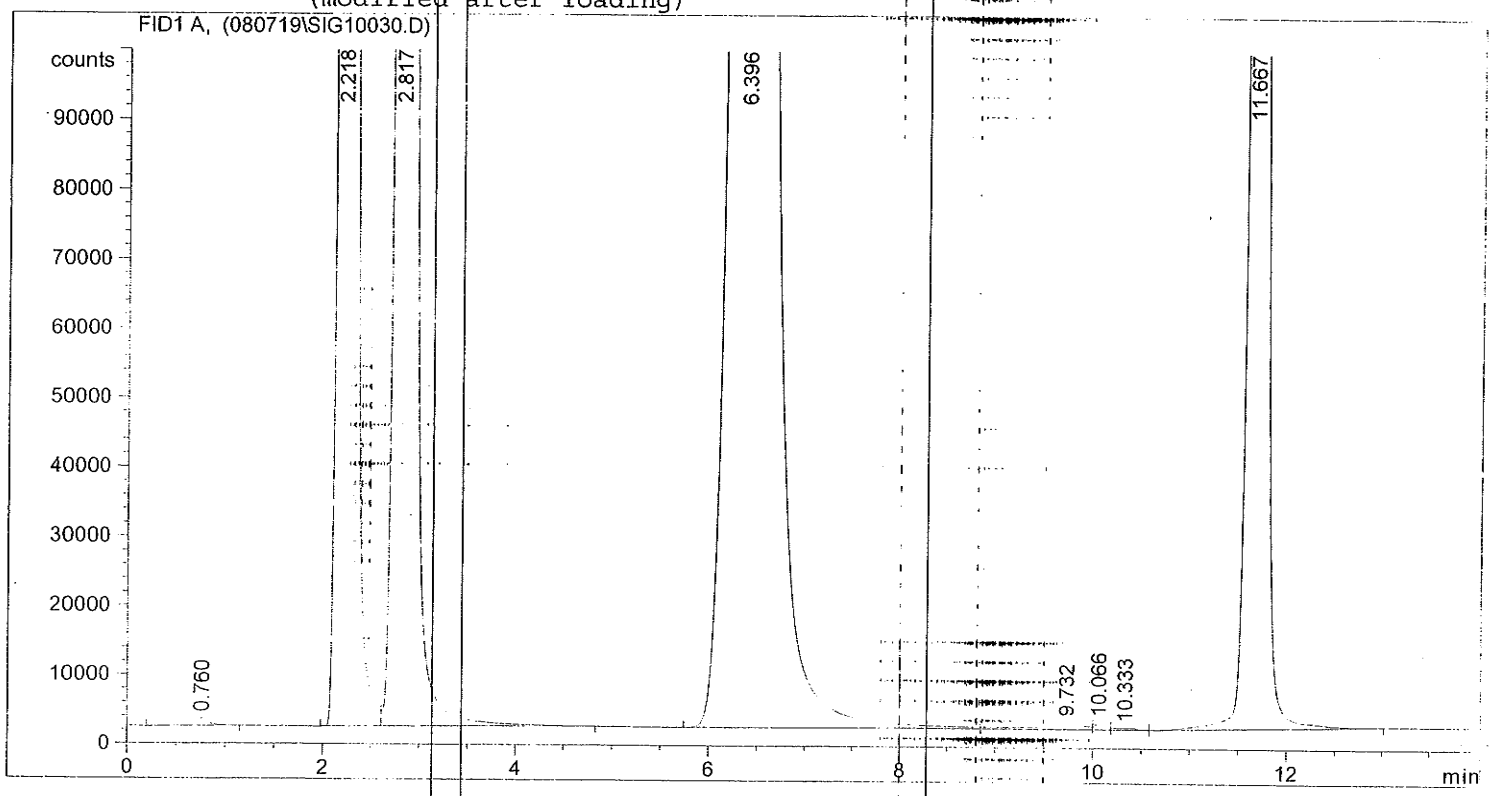
*** End of Report ***

Injection Date : 7/20/2008 12:31:29 AM
Sample Name : ICAL #4 1mL
Acq. Operator : GC 14

Location : Vial 1

Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 11:08:23 AM by GC 14
(modified after loading)



External Standard Report

Sorted By : Signal
Calib. Data Modified : Sunday, July 20, 2008 11:08:23 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.218	BV	9.72763e6	6.55749e-4	6378.87873		Carbon Monoxide
2.817	VB	9.77419e6	6.26868e-4	6127.12819		Methane
6.396	BV	1.00444e7	5.94616e-4	5972.55680		Carbon Dioxide
11.667	PV	4.21085e6	6.03754e-4	2542.31342		TGNMO

Totals : 2.10209e4

Results obtained with standard integrator!

*** End of Report ***

Work Order#: 08-12-0585

Client: WEISS Associates

EPA 6010B

Calibration

Sequence No.: 8
Sample ID: icv si
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:

Autosampler Location: 157
Date Collected: 12/9/2008 10:53:33 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: icv si

Analyte	Back Pressure	Flow
All	170.0 kPa	0.60 L/min

Mean Data: icv si

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ho 339.898	62290.7	5.004	mg/L	0.0778				1.56%
Ho 345.600	102700.9	5.014	mg/L	0.0739				1.47%
Tb 350.917	25310.9	4.991	mg/L	0.0853				1.71%
Tb 384.873	13503.4	4.967	mg/L	0.0891				1.79%
Y 324.227	167530.6	5.015	mg/L	0.1143				2.28%
Y 371.029	271938.4	4.996	mg/L	0.0942				1.89%
Ag 328.068*†	-1.5	0.0000	mg/L	0.00053	0.0000	mg/L	0.00053	>999.9%
Ag 338.289†	76.7	0.0014	mg/L	0.00102	0.0014	mg/L	0.00102	73.66%
Al 308.215*†	374.6	0.0283	mg/L	0.00334	0.0283	mg/L	0.00334	11.83%
Al 396.153†	3081.2	0.0296	mg/L	0.00002	0.0296	mg/L	0.00002	0.08%
As 188.979†	13.2	0.0052	mg/L	0.00001	0.0052	mg/L	0.00001	0.19%
As 193.696*†	8.0	0.0040	mg/L	0.00116	0.0040	mg/L	0.00116	29.08%
B 249.677*†	2183.7	0.0850	mg/L	0.00240	0.0850	mg/L	0.00240	2.83%
B 249.772†	3238.0	0.0839	mg/L	0.00241	0.0839	mg/L	0.00241	2.87%
Ba 455.403†	292.6	0.0020	mg/L	0.00015	0.0020	mg/L	0.00015	7.43%
Ba 233.527*†	216.0	0.0016	mg/L	0.00029	0.0016	mg/L	0.00029	17.94%
Be 313.107†	160.1	0.0001	mg/L	0.00021	0.0001	mg/L	0.00021	184.41%
Be 313.042*†	300.2	0.0001	mg/L	0.00005	0.0001	mg/L	0.00005	43.94%
Bi 190.171†	3.2	0.0021	mg/L	0.00049	0.0021	mg/L	0.00049	23.56%
Bi 223.061*†	5.2	0.0012	mg/L	0.00014	0.0012	mg/L	0.00014	11.14%
Ca 422.673†	209.6	0.0422	mg/L	0.00130	0.0422	mg/L	0.00130	3.08%
Ca 317.933*†	56.3	0.0296	mg/L	0.00755	0.0296	mg/L	0.00755	25.53%
Cd 226.502*†	20.9	0.0003	mg/L	0.00015	0.0003	mg/L	0.00015	50.91%
Cd 228.802†	30.6	0.0004	mg/L	0.00014	0.0004	mg/L	0.00014	34.49%
Co 230.786†	29.1	0.0007	mg/L	0.00027	0.0007	mg/L	0.00027	41.43%
Co 228.616*†	12.8	0.0002	mg/L	0.00003	0.0002	mg/L	0.00003	11.10%
Cr 357.869†	6.9	0.0002	mg/L	0.00137	0.0002	mg/L	0.00137	828.87%
Cr 267.716*†	7.0	0.0001	mg/L	0.00042	0.0001	mg/L	0.00042	284.38%
Cu 324.752*†	182.6	0.0016	mg/L	0.00001	0.0016	mg/L	0.00001	0.84%
Cu 327.393†	150.2	0.0026	mg/L	0.00044	0.0026	mg/L	0.00044	16.80%
Fe 239.562†	3.9	0.0200	mg/L	0.00041	0.0200	mg/L	0.00041	2.05%
Fe 259.939†	7.8	0.0101	mg/L	0.00126	0.0101	mg/L	0.00126	12.46%
Fe 273.955*†	221.1	0.0103	mg/L	0.00718	0.0103	mg/L	0.00718	69.52%
K 766.490*†	46.0	0.0677	mg/L	0.00031	0.0677	mg/L	0.00031	0.47%
Li 610.362*†	197.1	0.0007	mg/L	0.00157	0.0007	mg/L	0.00157	211.33%
Mg 279.077*†	40.8	0.0046	mg/L	0.00401	0.0046	mg/L	0.00401	87.97%
Mg 280.271†	51.3	0.0039	mg/L	0.00002	0.0039	mg/L	0.00002	0.54%
Mn 257.610*†	361.1	0.0006	mg/L	0.00011	0.0006	mg/L	0.00011	19.32%
Mn 259.372†	267.3	0.0005	mg/L	0.00005	0.0005	mg/L	0.00005	9.27%
Mo 202.031*†	2.8	0.0002	mg/L	0.00054	0.0002	mg/L	0.00054	273.56%
Mo 203.845†	7.0	0.0007	mg/L	0.00049	0.0007	mg/L	0.00049	66.94%
Na 589.592*†	235.8	0.0593	mg/L	0.00273	0.0593	mg/L	0.00273	4.61%
Na 330.237†	85.7	0.2820	mg/L	0.08198	0.2820	mg/L	0.08198	29.07%
Ni 231.604*†	-5.4	-0.0002	mg/L	0.00000	-0.0002	mg/L	0.00000	2.28%
Ni 232.003†	-2.5	-0.0001	mg/L	0.00047	-0.0001	mg/L	0.00047	340.43%
P 213.617*†	0.2	0.0001	mg/L	0.00426	0.0001	mg/L	0.00426	>999.9%
P 214.914†	13.5	0.0058	mg/L	0.00032	0.0058	mg/L	0.00032	5.53%
Pb 217.000†	9.4	0.0043	mg/L	0.00580	0.0043	mg/L	0.00580	134.66%
Pb 220.353*†	15.8	0.0020	mg/L	0.00036	0.0020	mg/L	0.00036	17.37%
S 181.975*†	2.3	0.0034	mg/L	0.00379	0.0034	mg/L	0.00379	112.75%
S 180.669†	4.3	0.0050	mg/L	0.00276	0.0050	mg/L	0.00276	55.17%
S 182.563†	-3.0	-0.0097	mg/L	0.00549	-0.0097	mg/L	0.00549	56.78%
Sb 217.582*†	-3.6	-0.0013	mg/L	0.00233	-0.0013	mg/L	0.00233	174.04%
Sb 206.836†	-15.1	-0.0035	mg/L	0.00563	-0.0035	mg/L	0.00563	160.48%
Sb 206†	12.0	0.0033	mg/L	0.00026	0.0033	mg/L	0.00026	7.85%

Se 196.026*†	-3.1	-0.0012 mg/L	0.00078	-0.0012 mg/L	0.00078	65.82%
Se 203.985†	-24.0	-0.0146 mg/L	0.00411	-0.0146 mg/L	0.00411	28.20%
Si 251.611*†	350923.4	10.60 mg/L	0.038	10.60 mg/L	0.038	0.36%
Si 288.158†	103269.0	10.63 mg/L	0.023	10.63 mg/L	0.023	0.21%
Sn 242.170†	-22.8	-0.0081 mg/L	0.02428	-0.0081 mg/L	0.02428	301.26%
Sn 189.927*†	18.8	0.0029 mg/L	0.00075	0.0029 mg/L	0.00075	26.25%
Sr 407.771*†	124.0	0.0003 mg/L	0.00003	0.0003 mg/L	0.00003	11.87%
Sr 421.552†	1331.5	0.0002 mg/L	0.00000	0.0002 mg/L	0.00000	2.34%
Ti 334.940†	109.8	0.0003 mg/L	0.00029	0.0003 mg/L	0.00029	85.14%
Ti 336.121*†	95.6	0.0003 mg/L	0.00011	0.0003 mg/L	0.00011	31.30%
Tl†	16.9	0.0046 mg/L	0.00042	0.0046 mg/L	0.00042	9.13%
Tl 351.924†	6.5	0.0017 mg/L	0.00177	0.0017 mg/L	0.00177	103.11%
Tl 190.801*†	22.3	0.0052 mg/L	0.00037	0.0052 mg/L	0.00037	7.07%
V 310.230†	-50.6	-0.0003 mg/L	0.00095	-0.0003 mg/L	0.00095	323.42%
V 292.402*†	76.9	0.0009 mg/L	0.00026	0.0009 mg/L	0.00026	29.87%
Zn 206.200*†	308.7	0.0052 mg/L	0.00012	0.0052 mg/L	0.00012	2.27%
Zn 213.857*†	331.9	0.0052 mg/L	0.00006	0.0052 mg/L	0.00006	1.19%
Zn 202.548†	411.1	0.0051 mg/L	0.00016	0.0051 mg/L	0.00016	3.12%

Sequence No.: 3
Sample ID: CCV
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/9/2008 5:59:18 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	171.0 kPa	0.60 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ho 339.898	64856.5	5.020	mg/L	0.0175				0.35%
Ho 345.600	106379.0	5.015	mg/L	0.0323				0.64%
Tb 384.873	14474.2	4.813	mg/L	0.0391				0.81%
Tb 350.917	27729.1	5.014	mg/L	0.0377				0.75%
Y 324.227	168353.8	4.932	mg/L	0.0333				0.68%
Y 371.029	297974.5	4.896	mg/L	0.0404				0.82%
Ag 328.068*†	37558.8	0.3822	mg/L	0.00039	0.3822	mg/L	0.00039	0.10%
QC value within limits for Ag 328.068* Recovery = 101.93%								
Ag 338.289†	21731.3	0.3852	mg/L	0.00165	0.3852	mg/L	0.00165	0.43%
Al 308.215*†	181869.9	13.58	mg/L	0.008	13.58	mg/L	0.008	0.06%
QC value within limits for Al 308.215* Recovery = 100.57%								
Al 396.153†	1494826.1	13.95	mg/L	0.284	13.95	mg/L	0.284	2.03%
As 188.979†	10068.2	3.850	mg/L	0.0323	3.850	mg/L	0.0323	0.84%
QC value within limits for As 188.979 Recovery = 102.67%								
As 193.696*†	7951.9	3.835	mg/L	0.0329	3.835	mg/L	0.0329	0.86%
QC value within limits for As 193.696* Recovery = 102.27%								
B 249.677*†	101219.1	3.854	mg/L	0.0103	3.854	mg/L	0.0103	0.27%
QC value within limits for B 249.677* Recovery = 102.77%								
B 249.772†	160555.0	3.849	mg/L	0.0033	3.849	mg/L	0.0033	0.09%
Ba 455.403†	1010749.9	7.687	mg/L	0.0081	7.687	mg/L	0.0081	0.11%
Ba 233.527*†	1120517.0	7.871	mg/L	0.0009	7.871	mg/L	0.0009	0.01%
QC value within limits for Ba 233.527* Recovery = 104.95%								
Be 313.107†	796022.6	0.5796	mg/L	0.00151	0.5796	mg/L	0.00151	0.26%
Be 313.042*†	1591087.3	0.5723	mg/L	0.00021	0.5723	mg/L	0.00021	0.04%
QC value within limits for Be 313.042* Recovery = 101.75%								
Ca 422.673†	168971.2	30.59	mg/L	0.080	30.59	mg/L	0.080	0.26%
Ca 317.933*†	64424.3	31.26	mg/L	0.055	31.26	mg/L	0.055	0.18%
QC value within limits for Ca 317.933* Recovery = 104.19%								
Cd 226.502*†	56728.9	0.7800	mg/L	0.00127	0.7800	mg/L	0.00127	0.16%
QC value within limits for Cd 226.502* Recovery = 104.00%								
Cd 228.802†	57158.6	0.7696	mg/L	0.00196	0.7696	mg/L	0.00196	0.25%
Co 230.786†	89546.3	1.954	mg/L	0.0014	1.954	mg/L	0.0014	0.07%
Co 228.616*†	106994.4	1.951	mg/L	0.0018	1.951	mg/L	0.0018	0.09%
QC value within limits for Co 228.616* Recovery = 104.03%								
Cr 357.869†	25081.5	0.5973	mg/L	0.00035	0.5973	mg/L	0.00035	0.06%
Cr 267.716*†	30214.0	0.6238	mg/L	0.00019	0.6238	mg/L	0.00019	0.03%
QC value within limits for Cr 267.716* Recovery = 103.97%								
Cu 324.752*†	107456.9	0.9575	mg/L	0.00290	0.9575	mg/L	0.00290	0.30%
QC value within limits for Cu 324.752* Recovery = 102.13%								
Cu 327.393†	59004.3	0.9634	mg/L	0.00071	0.9634	mg/L	0.00071	0.07%
Fe 259.939†	3208.9	3.811	mg/L	0.0233	3.811	mg/L	0.0233	0.61%
Fe 273.955*†	83500.9	3.887	mg/L	0.0055	3.887	mg/L	0.0055	0.14%
QC value within limits for Fe 273.955* Recovery = 103.65%								
Fe 239.562†	760.6	3.836	mg/L	0.0532	3.836	mg/L	0.0532	1.39%
K 766.490*†	20139.0	27.99	mg/L	0.271	27.99	mg/L	0.271	0.97%
QC value within limits for K 766.490* Recovery = 103.68%								
Li 610.362*†	885219.2	3.100	mg/L	0.0017	3.100	mg/L	0.0017	0.05%
QC value within limits for Li 610.362* Recovery = 103.35%								
Mg 279.077*†	69014.1	7.786	mg/L	0.0185	7.786	mg/L	0.0185	0.24%
QC value within limits for Mg 279.077* Recovery = 103.81%								
Mg 280.271†	113347.1	7.795	mg/L	0.0293	7.795	mg/L	0.0293	0.38%
Mn 257.610*†	523976.2	0.7772	mg/L	0.00008	0.7772	mg/L	0.00008	0.01%
QC value within limits for Mn 257.610* Recovery = 103.63%								
Mn 259.372†	375275.1	0.7762	mg/L	0.00138	0.7762	mg/L	0.00138	0.18%
Mo 202.031*†	9222.9	0.6163	mg/L	0.00470	0.6163	mg/L	0.00470	0.76%

QC value within limits for Mo 202.031* Recovery = 102.71%						
Mo 203.845†	6293.5	0.6211 mg/L	0.00560	0.6211 mg/L	0.00560	0.90%
Na 589.592*†	146103.1	36.91 mg/L	0.049	36.91 mg/L	0.049	0.13%
QC value within limits for Na 589.592* Recovery = 102.53%						
Na 330.237†	11226.4	33.82 mg/L	0.262	33.82 mg/L	0.262	0.77%
Ni 231.604*†	18108.5	0.6241 mg/L	0.00339	0.6241 mg/L	0.00339	0.54%
QC value within limits for Ni 231.604* Recovery = 104.01%						
Ni 232.003†	11245.8	0.6138 mg/L	0.00656	0.6138 mg/L	0.00656	1.07%
P 213.617*†	16204.1	6.104 mg/L	0.0536	6.104 mg/L	0.0536	0.88%
QC value within limits for P 213.617* Recovery = 101.74%						
P 214.914†	14443.6	6.114 mg/L	0.0598	6.114 mg/L	0.0598	0.98%
Pb 217.000†	8782.1	3.821 mg/L	0.0333	3.821 mg/L	0.0333	0.87%
Pb 220.353*†	31967.6	3.907 mg/L	0.0027	3.907 mg/L	0.0027	0.07%
QC value within limits for Pb 220.353* Recovery = 104.18%						
Sb 206†	16948.5	4.623 mg/L	0.0384	4.623 mg/L	0.0384	0.83%
Sb 217.582*†	13074.4	4.604 mg/L	0.0424	4.604 mg/L	0.0424	0.92%
QC value within limits for Sb 217.582* Recovery = 102.30%						
Sb 206.836†	21160.0	4.623 mg/L	0.0075	4.623 mg/L	0.0075	0.16%
Se 203.985†	2611.1	1.530 mg/L	0.0187	1.530 mg/L	0.0187	1.22%
Se 196.026*†	4299.7	1.545 mg/L	0.0162	1.545 mg/L	0.0162	1.05%
QC value within limits for Se 196.026* Recovery = 102.99%						
Si 288.158†	61326.2	6.310 mg/L	0.0189	6.310 mg/L	0.0189	0.30%
Si 251.611*†	219648.2	6.305 mg/L	0.0004	6.305 mg/L	0.0004	0.01%
QC value within limits for Si 251.611* Recovery = 105.08%						
Sn 189.927*†	21198.4	3.103 mg/L	0.0321	3.103 mg/L	0.0321	1.03%
QC value within limits for Sn 189.927* Recovery = 103.42%						
Sn 242.170†	8957.9	3.064 mg/L	0.0354	3.064 mg/L	0.0354	1.16%
Sr 421.552†	2545803.2	0.3158 mg/L	0.00630	0.3158 mg/L	0.00630	2.00%
Sr 407.771*†	162158.5	0.3070 mg/L	0.00095	0.3070 mg/L	0.00095	0.31%
QC value within limits for Sr 407.771* Recovery = 102.33%						
Ti 336.121*†	179106.8	0.6166 mg/L	0.00055	0.6166 mg/L	0.00055	0.09%
QC value within limits for Ti 336.121* Recovery = 102.76%						
Ti 334.940†	211475.8	0.6161 mg/L	0.00105	0.6161 mg/L	0.00105	0.17%
Tl†	5870.1	1.551 mg/L	0.0115	1.551 mg/L	0.0115	0.74%
Tl 351.924†	5853.1	1.532 mg/L	0.0022	1.532 mg/L	0.0022	0.14%
Tl 190.801*†	6997.7	1.551 mg/L	0.0116	1.551 mg/L	0.0116	0.75%
QC value within limits for Tl 190.801* Recovery = 103.43%						
V 292.402*†	174838.0	1.929 mg/L	0.0004	1.929 mg/L	0.0004	0.02%
QC value within limits for V 292.402* Recovery = 102.86%						
V 310.230†	336156.6	1.925 mg/L	0.0004	1.925 mg/L	0.0004	0.02%
Zn 213.857*†	175783.4	2.581 mg/L	0.0014	2.581 mg/L	0.0014	0.05%
QC value within limits for Zn 213.857* Recovery = 103.23%						
Zn 202.548†	222861.6	2.590 mg/L	0.0015	2.590 mg/L	0.0015	0.06%
Zn 206.200*†	167459.1	2.599 mg/L	0.0014	2.599 mg/L	0.0014	0.05%
QC value within limits for Zn 206.200* Recovery = 103.95%						

All analyte(s) passed QC.

Sequence No.: 11
Sample ID: CCV
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/9/2008 6:20:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	171.0 kPa	0.60 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Ho 345.600	106099.6	5.002	mg/L	0.0173				0.34%
Ho 339.898	64814.4	5.016	mg/L	0.0222				0.44%
Tb 384.873	14432.5	4.799	mg/L	0.0269				0.56%
Tb 350.917	27831.6	5.033	mg/L	0.0550				1.09%
Y 324.227	166664.9	4.883	mg/L	0.0326				0.67%
Y 371.029	296873.7	4.878	mg/L	0.0268				0.55%
Si 251.611*†	219744.0	6.308	mg/L	0.0292	6.308	mg/L	0.0292	0.46%
QC value within limits for Si 251.611* Recovery = 105.14%								
Si 288.158	61096.9	6.286	mg/L	0.0374	6.286	mg/L	0.0374	0.60%

All analyte(s) passed QC.

Sequence No.: 23
Sample ID: CCV
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/9/2008 6:41:16 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	171.0 kPa	0.60 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ho 345.600	107892.5	5.087	mg/L	0.0050				0.10%
Ho 339.898	65817.4	5.094	mg/L	0.0075				0.15%
Tb 384.873	14646.5	4.870	mg/L	0.0255				0.52%
Tb 350.917	28378.4	5.132	mg/L	0.0455				0.89%
Y 324.227	169991.8	4.980	mg/L	0.0144				0.29%
Y 371.029	302111.4	4.964	mg/L	0.0140				0.28%
Si 251.611*†	218105.3	6.261	mg/L	0.0454	6.261	mg/L	0.0454	0.73%
QC value within limits for Si 251.611* Recovery = 104.35%								
Si 288.158	61722.4	6.350	mg/L	0.0018	6.350	mg/L	0.0018	0.03%

All analyte(s) passed QC.

Sequence No.: 8
Sample ID: icv-si
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:
User canceled analysis.

Autosampler Location: 157
Date Collected: 12/11/2008 9:40:13 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Sequence No.: 8
Sample ID: icv-si
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:

Autosampler Location: 157
Date Collected: 12/11/2008 9:43:29 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: icv-si

Analyte	Back Pressure	Flow
All	166.0 kPa	0.60 L/min

Mean Data: icv-si

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ho 339.898	63874.7	5.095	mg/L	0.0309				0.61%
Ho 345.600	108902.0	5.135	mg/L	0.0291				0.57%
Tb 350.917	26431.3	5.125	mg/L	0.0456				0.89%
Tb 384.873	14138.1	5.115	mg/L	0.0162				0.32%
Y 324.227	185295.9	5.184	mg/L	0.0420				0.81%
Y 371.029	283284.5	5.108	mg/L	0.0430				0.84%
Ag 328.068*†	-13.2	-0.0001	mg/L	0.00030	-0.0001	mg/L	0.00030	210.52%
Ag 338.289†	-82.0	-0.0015	mg/L	0.00125	-0.0015	mg/L	0.00125	82.62%
Al 308.215*†	39.2	0.0030	mg/L	0.00172	0.0030	mg/L	0.00172	58.04%
Al 396.153†	600.3	0.0059	mg/L	0.00159	0.0059	mg/L	0.00159	27.15%
As 188.979†	5.9	0.0024	mg/L	0.00152	0.0024	mg/L	0.00152	64.71%
As 193.696*†	-0.6	-0.0003	mg/L	0.00226	-0.0003	mg/L	0.00226	734.63%
B 249.677*†	1548.9	0.0610	mg/L	0.00057	0.0610	mg/L	0.00057	0.93%
B 249.772†	2235.8	0.0600	mg/L	0.00035	0.0600	mg/L	0.00035	0.59%
Ba 455.403†	38.4	0.0002	mg/L	0.00021	0.0002	mg/L	0.00021	87.36%
Ba 233.527*†	43.2	0.0003	mg/L	0.00009	0.0003	mg/L	0.00009	27.69%
Be 313.107†	82.3	0.0001	mg/L	0.00015	0.0001	mg/L	0.00015	244.91%
Be 313.042*†	550.0	0.0002	mg/L	0.00002	0.0002	mg/L	0.00002	7.81%
Bi 190.171†	0.1	0.0001	mg/L	0.00733	0.0001	mg/L	0.00733	>999.9%
Bi 223.061*†	15.2	0.0035	mg/L	0.00021	0.0035	mg/L	0.00021	6.06%
Ca 422.673†	19.0	0.0042	mg/L	0.00911	0.0042	mg/L	0.00911	219.54%
Ca 317.933*†	4.2	0.0022	mg/L	0.00390	0.0022	mg/L	0.00390	177.05%
Cd 226.502*†	15.3	0.0002	mg/L	0.00002	0.0002	mg/L	0.00002	8.14%
Cd 228.802†	6.6	0.0001	mg/L	0.00003	0.0001	mg/L	0.00003	32.90%
Co 230.786†	23.2	0.0005	mg/L	0.00013	0.0005	mg/L	0.00013	23.48%
Co 228.616*†	22.1	0.0004	mg/L	0.00003	0.0004	mg/L	0.00003	7.13%
Cr 357.869†	-30.3	-0.0007	mg/L	0.00126	-0.0007	mg/L	0.00126	174.97%
Cr 267.716*†	15.4	0.0003	mg/L	0.00021	0.0003	mg/L	0.00021	62.74%
Cu 324.752*†	5.5	0.0000	mg/L	0.00025	0.0000	mg/L	0.00025	524.74%
Cu 327.393†	50.2	0.0009	mg/L	0.00071	0.0009	mg/L	0.00071	79.36%
Fe 239.562†	1.8	0.0091	mg/L	0.00528	0.0091	mg/L	0.00528	57.82%
Fe 259.939†	-2.0	-0.0027	mg/L	0.00266	-0.0027	mg/L	0.00266	98.95%
Fe 273.955*†	-45.5	-0.0022	mg/L	0.00037	-0.0022	mg/L	0.00037	16.99%
K 766.490*†	11.8	0.0177	mg/L	0.00613	0.0177	mg/L	0.00613	34.69%
Li 610.362*†	461.3	0.0018	mg/L	0.00121	0.0018	mg/L	0.00121	66.98%
Mg 279.077*†	-7.4	-0.0008	mg/L	0.00188	-0.0008	mg/L	0.00188	226.49%
Mg 280.271†	5.1	0.0004	mg/L	0.00008	0.0004	mg/L	0.00008	19.77%
Mn 257.610*†	176.0	0.0003	mg/L	0.00002	0.0003	mg/L	0.00002	7.78%
Mn 259.372†	161.8	0.0003	mg/L	0.00000	0.0003	mg/L	0.00000	0.15%
Mo 202.031*†	3.1	0.0002	mg/L	0.00007	0.0002	mg/L	0.00007	29.23%
Mo 203.845†	-3.9	-0.0004	mg/L	0.00002	-0.0004	mg/L	0.00002	3.98%
Na 589.592*†	-434.2	-0.1094	mg/L	0.02367	-0.1094	mg/L	0.02367	21.64%
Na 330.237†	47.7	0.1602	mg/L	0.18485	0.1602	mg/L	0.18485	115.37%
Ni 231.604*†	14.5	0.0005	mg/L	0.00026	0.0005	mg/L	0.00026	50.34%
Ni 232.003†	-10.5	-0.0006	mg/L	0.00039	-0.0006	mg/L	0.00039	64.50%
P 213.617*†	-9.8	-0.0039	mg/L	0.00050	-0.0039	mg/L	0.00050	12.74%
P 214.914†	8.0	0.0036	mg/L	0.00369	0.0036	mg/L	0.00369	103.92%

Pb 217.000†	-1.5	-0.0007 mg/L	0.00250	-0.0007 mg/L	0.00250	349.58%
Pb 220.353*†	8.9	0.0012 mg/L	0.00105	0.0012 mg/L	0.00105	87.39%
S 181.975*†	-34.9	-0.0492 mg/L	0.01195	-0.0492 mg/L	0.01195	24.29%
S 180.669†	-59.7	-0.0685 mg/L	0.00253	-0.0685 mg/L	0.00253	3.69%
S 182.563†	-21.3	-0.0668 mg/L	0.00847	-0.0668 mg/L	0.00847	12.67%
Sb 217.582*†	-3.5	-0.0013 mg/L	0.00024	-0.0013 mg/L	0.00024	18.09%
Sb 206.836†	10.9	0.0027 mg/L	0.01332	0.0027 mg/L	0.01332	500.35%
Sb 206†	-0.8	-0.0002 mg/L	0.00019	-0.0002 mg/L	0.00019	89.86%
Se 196.026*†	6.2	0.0024 mg/L	0.00142	0.0024 mg/L	0.00142	58.14%
Se 203.985†	-18.4	-0.0115 mg/L	0.00674	-0.0115 mg/L	0.00674	58.54%
Si 251.611*†	334318.2	10.19 mg/L	0.012	10.19 mg/L	0.012	0.12%
Si 288.158†	100865.9	10.25 mg/L	0.003	10.25 mg/L	0.003	0.02%
Sn 242.170†	57.1	0.0205 mg/L	0.00559	0.0205 mg/L	0.00559	27.31%
Sn 189.927*†	12.1	0.0019 mg/L	0.00064	0.0019 mg/L	0.00064	34.23%
Sr 407.771*†	123.6	0.0003 mg/L	0.00008	0.0003 mg/L	0.00008	28.43%
Sr 421.552†	1395.4	0.0002 mg/L	0.00000	0.0002 mg/L	0.00000	1.65%
Ti 334.940†	23.1	0.0001 mg/L	0.00009	0.0001 mg/L	0.00009	120.03%
Ti 336.121*†	35.7	0.0001 mg/L	0.00003	0.0001 mg/L	0.00003	26.64%
Tl†	7.4	0.0021 mg/L	0.00135	0.0021 mg/L	0.00135	63.76%
Tl 351.924†	-53.3	-0.0142 mg/L	0.01001	-0.0142 mg/L	0.01001	70.70%
Tl 190.801*†	13.3	0.0032 mg/L	0.00261	0.0032 mg/L	0.00261	81.11%
V 310.230†	-129.7	-0.0008 mg/L	0.00100	-0.0008 mg/L	0.00100	129.89%
V 292.402*†	65.0	0.0008 mg/L	0.00035	0.0008 mg/L	0.00035	44.89%
Zn 206.200*†	11.6	0.0002 mg/L	0.00011	0.0002 mg/L	0.00011	50.89%
Zn 213.857*†	11.7	0.0002 mg/L	0.00006	0.0002 mg/L	0.00006	28.82%
Zn 202.548†	12.1	0.0002 mg/L	0.00004	0.0002 mg/L	0.00004	22.95%

Sequence No.: 2
Sample ID: CCV
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/11/2008 3:57:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	174.0 kPa	0.60 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ho 339.898	64122.2	5.115	mg/L	0.0427				0.83%
Ho 345.600	110869.5	5.228	mg/L	0.0376				0.72%
Tb 384.873	13624.8	4.929	mg/L	0.0726				1.47%
Tb 350.917	26616.6	5.161	mg/L	0.0796				1.54%
Y 324.227	188118.6	5.263	mg/L	0.0487				0.93%
Y 371.029	275753.5	4.972	mg/L	0.0522				1.05%
Ag 328.068*†	33728.1	0.3589	mg/L	0.00174	0.3589	mg/L	0.00174	0.49%
QC value within limits for Ag 328.068* Recovery = 95.69%								
Ag 338.289†	19462.5	0.3602	mg/L	0.00200	0.3602	mg/L	0.00200	0.56%
Al 308.215*†	174102.1	13.18	mg/L	0.056	13.18	mg/L	0.056	0.43%
QC value within limits for Al 308.215* Recovery = 97.67%								
Al 396.153†	1337394.2	13.04	mg/L	0.201	13.04	mg/L	0.201	1.54%
As 188.979†	9380.6	3.756	mg/L	0.0545	3.756	mg/L	0.0545	1.45%
QC value within limits for As 188.979 Recovery = 100.17%								
As 193.696*†	7341.0	3.744	mg/L	0.0426	3.744	mg/L	0.0426	1.14%
QC value within limits for As 193.696* Recovery = 99.84%								
B 249.677*†	92644.4	3.648	mg/L	0.0002	3.648	mg/L	0.0002	0.01%
QC value within limits for B 249.677* Recovery = 97.27%								
B 249.772†	132562.8	3.558	mg/L	0.0029	3.558	mg/L	0.0029	0.08%
Ba 455.403†	1094314.3	6.950	mg/L	0.0562	6.950	mg/L	0.0562	0.81%
Ba 233.527*†	923530.7	7.221	mg/L	0.1577	7.221	mg/L	0.1577	2.18%
QC value within limits for Ba 233.527* Recovery = 96.28%								
Be 313.107†	760714.7	0.5598	mg/L	0.01349	0.5598	mg/L	0.01349	2.41%
Be 313.042*†	1314189.9	0.5463	mg/L	0.01191	0.5463	mg/L	0.01191	2.18%
QC value within limits for Be 313.042* Recovery = 97.12%								
Ca 422.673†	144386.3	31.59	mg/L	0.396	31.59	mg/L	0.396	1.25%
Ca 317.933*†	54496.3	28.36	mg/L	0.332	28.36	mg/L	0.332	1.17%
QC value within limits for Ca 317.933* Recovery = 94.55%								
Cd 226.502*†	51561.0	0.7520	mg/L	0.00278	0.7520	mg/L	0.00278	0.37%
QC value within limits for Cd 226.502* Recovery = 100.27%								
Cd 228.802†	55253.0	0.7589	mg/L	0.00363	0.7589	mg/L	0.00363	0.48%
Co 230.786†	81545.9	1.900	mg/L	0.0084	1.900	mg/L	0.0084	0.44%
Co 228.616*†	99765.8	1.921	mg/L	0.0058	1.921	mg/L	0.0058	0.30%
QC value within limits for Co 228.616* Recovery = 102.46%								
Cr 357.869†	49859.5	1.184	mg/L	0.0471	1.184	mg/L	0.0471	3.98%
Cr 267.716*†	53429.9	1.181	mg/L	0.0450	1.181	mg/L	0.0450	3.81%
QC value greater than the upper limit for Cr 267.716* Recovery = 196.91%								
Cu 324.752*†	106188.3	0.9310	mg/L	0.00411	0.9310	mg/L	0.00411	0.44%
QC value within limits for Cu 324.752* Recovery = 99.31%								
Cu 327.393†	50787.0	0.9009	mg/L	0.00150	0.9009	mg/L	0.00150	0.17%
Fe 259.939†	2640.9	3.511	mg/L	0.0491	3.511	mg/L	0.0491	1.40%
Fe 273.955*†	80526.3	3.851	mg/L	0.0138	3.851	mg/L	0.0138	0.36%
QC value within limits for Fe 273.955* Recovery = 102.68%								
Fe 239.562†	734.4	3.660	mg/L	0.0372	3.660	mg/L	0.0372	1.02%
K 766.490*†	18042.6	27.03	mg/L	0.401	27.03	mg/L	0.401	1.48%
QC value within limits for K 766.490* Recovery = 100.11%								
Mg 279.077*†	68278.8	7.667	mg/L	0.0104	7.667	mg/L	0.0104	0.14%
QC value within limits for Mg 279.077* Recovery = 102.23%								
Mg 280.271†	96385.7	7.271	mg/L	0.0896	7.271	mg/L	0.0896	1.23%
Mn 257.610*†	451054.3	0.7351	mg/L	0.00217	0.7351	mg/L	0.00217	0.30%
QC value within limits for Mn 257.610* Recovery = 98.02%								
Mn 259.372†	366520.6	0.7600	mg/L	0.00372	0.7600	mg/L	0.00372	0.49%
Mo 202.031*†	8004.4	0.5855	mg/L	0.00735	0.5855	mg/L	0.00735	1.26%
QC value within limits for Mo 202.031* Recovery = 97.58%								
Mo 203.845†	5441.3	0.5871	mg/L	0.00909	0.5871	mg/L	0.00909	1.55%

Na 589.592*†	143455.7	36.13	mg/L	0.340	36.13	mg/L	0.340	0.94%
QC value within limits for Na 589.592* Recovery = 100.37%								
Na 330.237†	9594.3	32.23	mg/L	0.025	32.23	mg/L	0.025	0.08%
Ni 231.604*†	17032.9	0.6053	mg/L	0.00955	0.6053	mg/L	0.00955	1.58%
QC value within limits for Ni 231.604* Recovery = 100.88%								
Ni 232.003†	10871.6	0.6240	mg/L	0.00994	0.6240	mg/L	0.00994	1.59%
Pb 217.000†	7541.0	3.588	mg/L	0.0556	3.588	mg/L	0.0556	1.55%
Pb 220.353*†	27391.8	3.700	mg/L	0.0044	3.700	mg/L	0.0044	0.12%
QC value within limits for Pb 220.353* Recovery = 98.67%								
Sb 206†	16758.9	4.626	mg/L	0.0739	4.626	mg/L	0.0739	1.60%
Sb 217.582*†	11594.4	4.392	mg/L	0.0619	4.392	mg/L	0.0619	1.41%
QC value within limits for Sb 217.582* Recovery = 97.61%								
Sb 206.836†	17497.8	4.257	mg/L	0.0622	4.257	mg/L	0.0622	1.46%
Se 203.985†	2510.9	1.570	mg/L	0.0286	1.570	mg/L	0.0286	1.82%
Se 196.026*†	3779.2	1.485	mg/L	0.0197	1.485	mg/L	0.0197	1.33%
QC value within limits for Se 196.026* Recovery = 98.99%								
Si 288.158†	63685.7	6.474	mg/L	0.0385	6.474	mg/L	0.0385	0.59%
Si 251.611*†	205016.8	6.251	mg/L	0.0318	6.251	mg/L	0.0318	0.51%
QC value within limits for Si 251.611* Recovery = 104.18%								
Tl†	5303.2	1.507	mg/L	0.0197	1.507	mg/L	0.0197	1.31%
Tl 351.924†	5626.6	1.493	mg/L	0.0242	1.493	mg/L	0.0242	1.62%
Tl 190.801*†	6246.6	1.507	mg/L	0.0182	1.507	mg/L	0.0182	1.21%
QC value within limits for Tl 190.801* Recovery = 100.45%								
V 292.402*†	154915.9	1.838	mg/L	0.0096	1.838	mg/L	0.0096	0.52%
QC value within limits for V 292.402* Recovery = 98.05%								
V 310.230†	308351.0	1.831	mg/L	0.0082	1.831	mg/L	0.0082	0.45%
Zn 213.857*†	152069.5	2.471	mg/L	0.0058	2.471	mg/L	0.0058	0.23%
QC value within limits for Zn 213.857* Recovery = 98.85%								
Zn 202.548†	187381.4	2.456	mg/L	0.0027	2.456	mg/L	0.0027	0.11%

QC Failed. Continue with analysis.

Sequence No.: 8
Sample ID: CCV
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/11/2008 4:18:46 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	173.0 kPa	0.60 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ho 339.898	64281.5	5.128	mg/L	0.0796				1.55%
Ho 345.600	110689.4	5.219	mg/L	0.0950				1.82%
Tb 384.873	13670.5	4.946	mg/L	0.1123				2.27%
Tb 350.917	26599.4	5.158	mg/L	0.1131				2.19%
Y 324.227	188138.2	5.264	mg/L	0.1238				2.35%
Y 371.029	276001.0	4.977	mg/L	0.1025				2.06%
Al 308.215*†	173360.6	13.13	mg/L	0.021	13.13	mg/L	0.021	0.16%
QC value within limits for Al 308.215* Recovery = 97.25%								
Al 396.153†	1360824.5	13.27	mg/L	0.120	13.27	mg/L	0.120	0.91%
B 249.677*†	92809.8	3.656	mg/L	0.0068	3.656	mg/L	0.0068	0.18%
QC value within limits for B 249.677* Recovery = 97.49%								
B 249.772†	133001.4	3.570	mg/L	0.0023	3.570	mg/L	0.0023	0.06%
Ba 455.403†	1080456.3	6.862	mg/L	0.1620	6.862	mg/L	0.1620	2.36%
Ba 233.527*†	941859.8	7.366	mg/L	0.1198	7.366	mg/L	0.1198	1.63%
QC value within limits for Ba 233.527* Recovery = 98.21%								
Ca 422.673†	141948.8	31.06	mg/L	0.605	31.06	mg/L	0.605	1.95%
Ca 317.933*†	53874.4	28.04	mg/L	0.261	28.04	mg/L	0.261	0.93%
QC value within limits for Ca 317.933* Recovery = 93.47%								
Fe 259.939†	2652.7	3.527	mg/L	0.0634	3.527	mg/L	0.0634	1.80%
Fe 273.955*†	80484.1	3.849	mg/L	0.0040	3.849	mg/L	0.0040	0.10%
QC value within limits for Fe 273.955* Recovery = 102.63%								
Fe 239.562†	733.9	3.658	mg/L	0.0659	3.658	mg/L	0.0659	1.80%
K 766.490*†	17977.6	26.93	mg/L	0.208	26.93	mg/L	0.208	0.77%
QC value within limits for K 766.490* Recovery = 99.75%								
Mg 279.077*†	68435.2	7.685	mg/L	0.0175	7.685	mg/L	0.0175	0.23%
QC value within limits for Mg 279.077* Recovery = 102.46%								
Mg 280.271†	95614.9	7.213	mg/L	0.0574	7.213	mg/L	0.0574	0.80%
Mn 257.610*†	449923.1	0.7335	mg/L	0.00053	0.7335	mg/L	0.00053	0.07%
QC value within limits for Mn 257.610* Recovery = 97.80%								
Mn 259.372†	365854.8	0.7586	mg/L	0.00003	0.7586	mg/L	0.00003	0.00%
Na 589.592*†	142913.8	36.00	mg/L	0.854	36.00	mg/L	0.854	2.37%
QC value within limits for Na 589.592* Recovery = 99.99%								
Na 330.237†	9465.3	31.79	mg/L	0.110	31.79	mg/L	0.110	0.35%
Si 288.158†	63397.5	6.445	mg/L	0.0021	6.445	mg/L	0.0021	0.03%
Si 251.611*†	204250.5	6.228	mg/L	0.0012	6.228	mg/L	0.0012	0.02%
QC value within limits for Si 251.611* Recovery = 103.80%								

All analyte(s) passed QC.

Work Order#: 08-12-0585

Client: WEISS Associates

EPA 6020

Calibration

SAMPLE INFORMATION

Sample ID: ICV

Sample Description:

Autosampler Position: 6

Sample Date/Time: Wednesday, December 10, 2008 11:25:26

Method File: C:\elandata\Method\cel\CEL_STD_T22_w.mth

Dataset File: C:\elandata\Dataset\Data\08121001\ICV.009

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass		Meas. Intens. Mean	Conc. Mean	Report Unit	Meas. Intens. RSD	Blank Intensity
Li	6		81094		ppb	4.4	88020
Be	9		43873	100.2230	ppb	0.0	40
B	11		61358	110.1604	ppb	0.4	704
B	10		12591	108.6202	ppb	0.1	160
Sc	45	>	1898428		ppb	3.4	1982938
Al	27		1175376	109.3673	ppb	3.9	14309
Mg	24		736307	111.9050	ppb	0.7	2160
Ti	47		159848	97.6812	ppb	0.1	502
Ti	49		132688	97.9597	ppb	1.4	3780
V	51		1796667	97.6420	ppb	0.8	-19899
Cr	52		1704314	100.4829	ppb	0.4	43227
Mn	55		2606275	102.6996	ppb	1.4	2205
Fe	54		196941	111.8693	ppb	0.1	54351
Fe	57		69566	112.1865	ppb	1.7	13851
Co	59		1988937	106.2515	ppb	0.2	131
Ni	60		441243	106.2866	ppb	0.5	195
Cu	65		465936	109.0362	ppb	0.5	513
Ge	74	>	557749		mg/L	2.9	586621
As	75		315381	103.0669	ppb	0.2	-2104
As-1	75		313260	102.8539	ppb	0.4	10720
Se	78		91120	100.7016	ppb	1.4	12816
Se	82		34208	101.7264	ppb	0.8	17
Sr	88		3779979	100.8751	ppb	0.8	834
Zn	66		272423	104.2686	ppb	0.5	2810
Zn	68		198991	104.2636	ppb	0.4	3202
Y	89		3455300		ppb	2.5	3552351
Mo	95		587543	99.8296	ppb	0.4	71
In	115	>	3038503		ppb	3.7	3080988
Ag	107		797393	55.6620	ppb	0.6	304
Cd	111		370537	104.7665	ppb	1.3	2390
Cd	114		789508	105.7231	ppb	1.4	80
Sn	118		957064	103.5962	ppb	0.3	1207
Sb	123		773047	91.9461	ppb	2.9	421
Ba	135		290369	101.8875	ppb	3.1	146
Tb	159		3779277	-210.8499	ppb	3.1	3798289
Tl	203		1143814	97.2613	ppb	0.7	137
Pb	207		4153883	98.7727	ppb	0.3	784
Bi	209	>	2775187		ppb	3.5	2728116

QC Out Of Limits

Mass	Analyte	Out of Limits Message
11	B	
24	Mg	
107	Ag	

SAMPLE INFORMATION

Sample ID: CCV

Sample Description:

Autosampler Position: 4

Sample Date/Time: Wednesday, December 10, 2008 19:02:51

Method File: C:\elandata\Method\cel\CEL_STD_T22_w.mth

Dataset File: C:\elandata\Dataset\Data\08121001\CCV.129

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass		Meas. Intens. Mean	Conc. Mean	Report Unit	Meas. Intens. RSD	Blank Intensity
Li	6		131590		ppb	2.2	148779
Be	9		45057	102.7518	ppb	0.9	22
B	11		147701	249.2632	ppb	2.7	3737
B	10		30685	243.8010	ppb	1.7	790
Sc	45	>	1998801		ppb	2.7	2107484
Al	27		1135598	112.0852	ppb	2.1	13403
Mg	24		33703194	5132.6835	ppb	3.1	3220
Ti	47		151335	99.2001	ppb	0.7	449
Ti	49		124892	99.0106	ppb	1.7	3097
V	51		1674297	100.3889	ppb	2.6	-16701
Cr	52		1579159	102.3538	ppb	1.2	39279
Mn	55		2326646	98.2554	ppb	1.4	2532
Fe	54		5994093	5059.9363	ppb	1.6	51494
Fe	57		2325347	5002.6963	ppb	2.2	12274
Co	59		1735252	98.5993	ppb	0.3	124
Ni	60		376950	99.7505	ppb	0.6	192
Cu	65		383422	100.1778	ppb	1.3	381
Ge	74	>	558711		mg/L	1.1	597288
As	75		269747	97.9685	ppb	0.9	-1890
As-1	75		268682	97.8914	ppb	0.8	9538
Se	78		80484	98.0628	ppb	0.5	11373
Se	82		29919	98.2941	ppb	0.8	-2
Sr	88		3295568	96.4029	ppb	1.5	1308
Zn	66		235373	98.8613	ppb	0.7	2940
Zn	68		172511	99.2105	ppb	1.2	3842
Y	89		3519868		ppb	1.4	3667811
Mo	95		509821	95.8648	ppb	1.5	264
In	115	>	3127741		ppb	1.2	3274247
Ag	107		1302816	99.4052	ppb	2.7	384
Cd	111		317924	96.6037	ppb	1.1	2929
Cd	114		686156	99.0892	ppb	0.8	94
Sn	118		860221	98.9020	ppb	1.2	1361
Sb	123		772837	99.9324	ppb	0.6	509
Ba	135		259184	98.0119	ppb	0.2	170
Tb	159		4155525	171.1931	ppb	1.2	4031559
Tl	203		946642	98.5783	ppb	0.8	867
Pb	207		3410708	98.1246	ppb	0.2	620
Bi	209	>	2561683		ppb	0.7	2553012

QC Out Of Limits

Mass	Analyte	Out of Limits Message
27	Al	

SAMPLE INFORMATION

Sample ID: CCV

Sample Description:

Autosampler Position: 4

Sample Date/Time: Wednesday, December 10, 2008 20:58:16

Method File: C:\elandata\Method\cel\CEL_STD_T22_w.mth

Dataset File: C:\elandata\Dataset\Data\08121001\CCV.154

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass		Meas. Intens. Mean	Conc. Mean	Report Unit	Meas. Intens. RSD	Blank Intensity
Li	6		106222		ppb	5.6	148779
Be	9		38405	103.7873	ppb	0.4	22
B	11		127283	254.7116	ppb	3.1	3737
B	10		26028	245.0937	ppb	2.9	790
Sc	45	>	1686185		ppb	0.6	2107484
Al	27		903966	105.6749	ppb	0.3	13403
Mg	24		25646694	4630.0385	ppb	1.1	3220
Ti	47		122863	95.4145	ppb	0.4	449
Ti	49		102531	96.2692	ppb	0.3	3097
V	51		1363405	96.9334	ppb	0.8	-16701
Cr	52		1344273	103.2723	ppb	0.2	39279
Mn	55		1945656	97.3732	ppb	0.7	2532
Fe	54		4865815	4866.2949	ppb	1.3	51494
Fe	57		1950795	4974.7996	ppb	2.0	12274
Co	59		1497347	96.2030	ppb	0.5	124
Ni	60		325327	97.3440	ppb	0.7	192
Cu	65		332755	98.3073	ppb	0.8	381
Ge	74	>	494089		mg/L	0.2	597288
As	75		235296	96.6394	ppb	0.4	-1890
As-1	75		234285	96.4733	ppb	0.4	9538
Se	78		70136	96.4060	ppb	1.2	11373
Se	82		26102	96.9676	ppb	1.3	-2
Sr	88		2867838	94.8641	ppb	1.4	1308
Zn	66		201601	95.7104	ppb	0.8	2940
Zn	68		147741	96.0119	ppb	0.2	3842
Y	89		3135513		ppb	1.2	3667811
Mo	95		466473	92.6723	ppb	0.8	264
In	115	>	2961555		ppb	2.9	3274247
Ag	107		1220444	98.3989	ppb	0.8	384
Cd	111		297291	95.4364	ppb	1.0	2929
Cd	114		637667	97.2999	ppb	0.7	94
Sn	118		813485	98.8012	ppb	1.5	1361
Sb	123		722489	98.7011	ppb	0.7	509
Ba	135		248705	99.3561	ppb	1.7	170
Tb	159		4262581	-225.6444	ppb	2.4	4031559
Tl	203		1028019	97.9421	ppb	2.3	867
Pb	207		3676124	96.7632	ppb	1.9	620
Bi	209	>	2799873		ppb	2.2	2553012

QC Out Of Limits

Mass	Analyte	Out of Limits Message

SAMPLE INFORMATION

Sample ID: CCV

Sample Description:

Autosampler Position: 4

Sample Date/Time: Wednesday, December 10, 2008 19:59:05

Method File: C:\elandata\Method\cel\CEL_STD_T22_w.mth

Dataset File: C:\elandata\Dataset\Data\08121001\CCV.141

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass		Meas. Intens. Mean	Conc. Mean	Report Unit	Meas. Intens. RSD	Blank Intensity
Li	6		124999		ppb	3.9	148779
Be	9		43137	**104.4355**	ppb	1.9	22
B	11		140046	**250.9985**	ppb	1.0	3737
B	10		29476	**248.7412**	ppb	0.5	790
Sc	45	>	1882382		ppb	0.8	2107484
Al	27		1033072	**108.2094**	ppb	0.7	13403
Mg	24		30236078	**4889.6503**	ppb	1.1	3220
Ti	47		136383	**94.8759**	ppb	0.5	449
Ti	49		113182	**95.1659**	ppb	0.9	3097
V	51		1523672	**97.0372**	ppb	0.7	-16701
Cr	52		1459669	**100.3820**	ppb	0.6	39279
Mn	55		2112189	**94.6881**	ppb	0.8	2532
Fe	54		5420573	**4855.9252**	ppb	1.7	51494
Fe	57		2117597	**4836.0148**	ppb	1.2	12274
Co	59		1605269	**98.2144**	ppb	1.1	124
Ni	60		348861	**99.4076**	ppb	0.5	192
Cu	65		352889	**99.2827**	ppb	1.3	381
Ge	74	>	518848		mg/L	0.5	597288
As	75		247601	**96.8397**	ppb	0.8	-1890
As-1	75		246022	**96.4706**	ppb	1.0	9538
Se	78		73722	**96.5137**	ppb	1.3	11373
Se	82		27626	**97.7350**	ppb	0.8	-2
Sr	88		3053468	**96.1857**	ppb	0.8	1308
Zn	66		216033	**97.6918**	ppb	0.7	2940
Zn	68		157828	**97.7118**	ppb	0.2	3842
Y	89		3319929		ppb	1.1	3667811
Mo	95		481551	**92.8082**	ppb	1.9	264
In	115	>	3051480		ppb	1.3	3274247
Ag	107		1250266	**97.7865**	ppb	1.8	384
Cd	111		307287	**95.7018**	ppb	2.2	2929
Cd	114		662325	**98.0345**	ppb	1.4	94
Sn	118		833132	**98.1811**	ppb	1.1	1361
Sb	123		742804	**98.4477**	ppb	0.9	509
Ba	135		249343	**96.6410**	ppb	1.2	170
Tb	159		4225778	**-72.9019**	ppb	1.6	4031559
Tl	203		964171	**94.9823**	ppb	1.7	867
Pb	207		3504930	**95.3926**	ppb	1.6	620
Bi	209	>	2708204		ppb	2.6	2553012

QC Out Of Limits

Mass	Analyte	Out of Limits Message

Work Order#: 08-12-0585

Client: WEISS Associates

EPA 8270C (M) Isotope Dilution

Calibration

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\081107\
Data File : 07NOV007.D
Acq On : 7 Nov 2008 2:05 pm
Operator :
Sample : ICV S101308G
ALS Vial : 8 Sample Multiplier: 1
InstName : GCMS AAA

Quant Time: Nov 07 17:57:53 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Fri Nov 07 17:56:50 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M

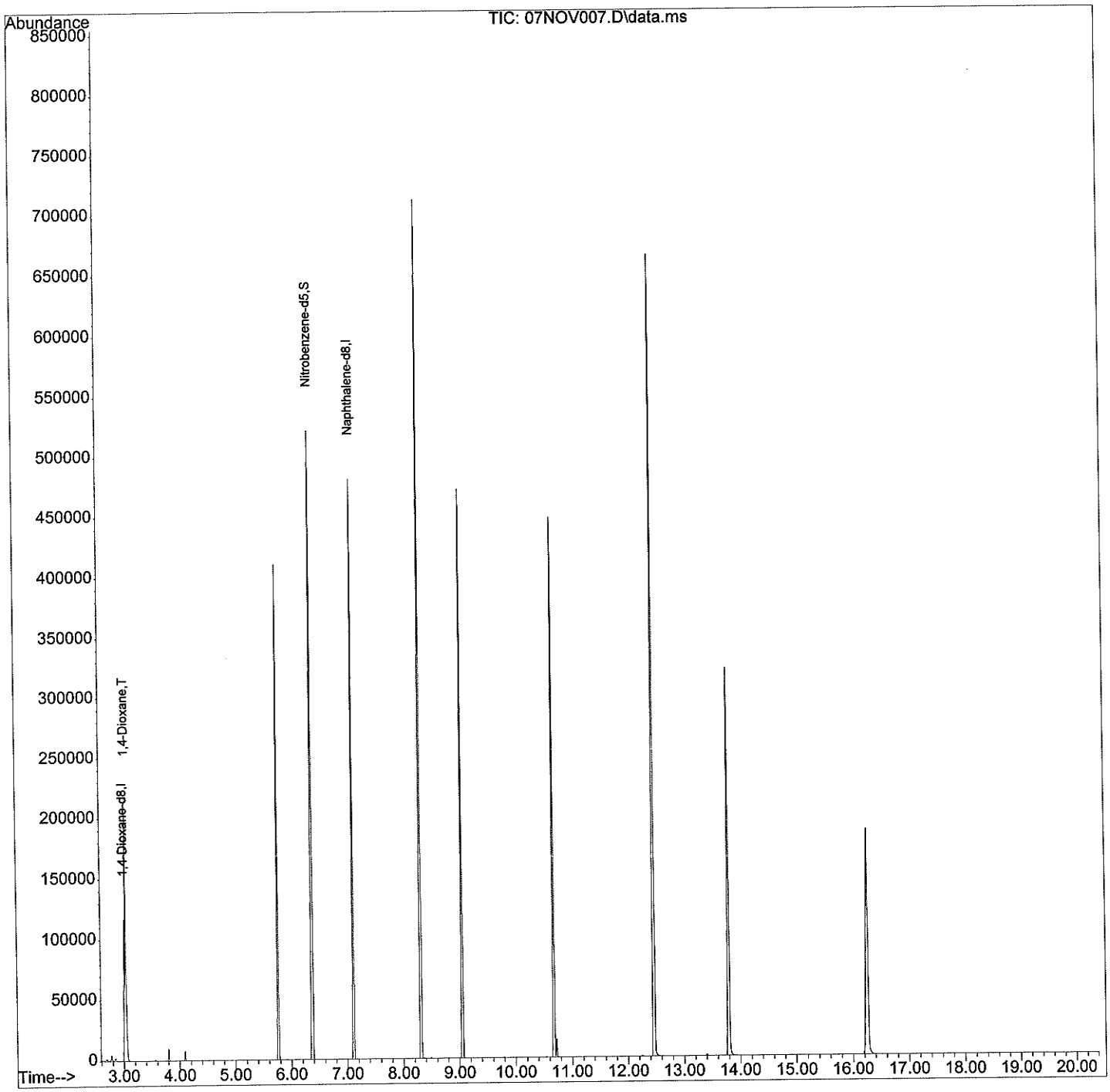
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dioxane-d8	3.010	96	46060	40.00 mg/l	# 0.00
3) Naphthalene-d8	7.112	136	226354	40.00 mg/l	# 0.00
System Monitoring Compounds					
4) Nitrobenzene-d5	6.379	82	274608	79.29 mg/l	0.00
Target Compounds					Qvalue
2) 1,4-Dioxane	3.036	88	86006	73.61 mg/l #	71

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\081107\
Data File : 07NOV007.D
Acq On : 7 Nov 2008 2:05 pm
Operator :
Sample : ICV S101308G
ALS Vial : 8 Sample Multiplier: 1
InstName : GCMS AAA

Quant Time: Nov 07 17:57:53 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Fri Nov 07 17:56:50 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\081212\
Data File : 12dec002.D
Acq On : 12 Dec 2008 9:55 am
Operator :
Sample : DIOX-80 S101308D
ALS Vial : 2 Sample Multiplier: 1
InstName : GCMS AAA

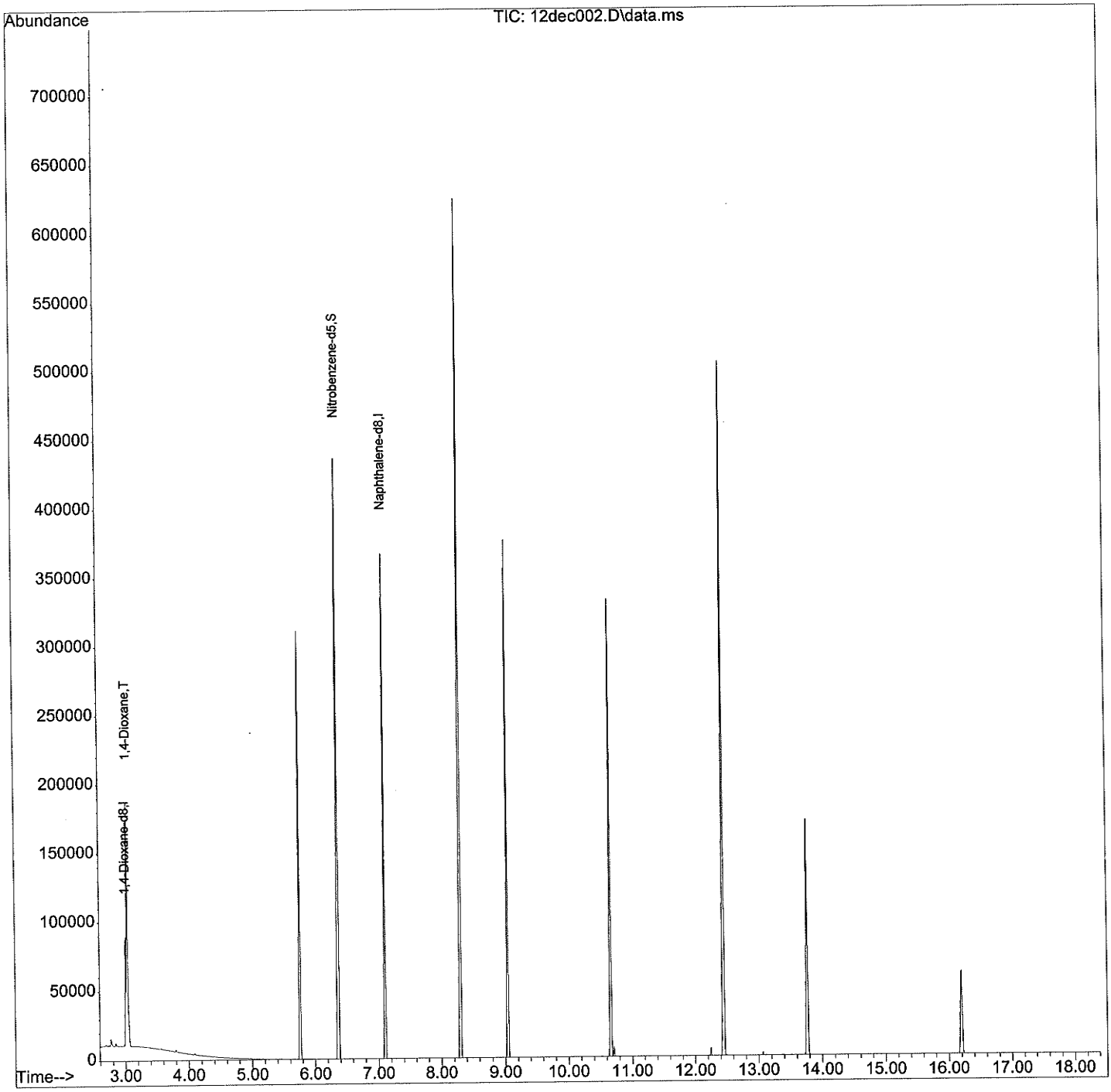
Quant Time: Dec 12 10:18:56 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Wed Nov 19 09:17:53 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dioxane-d8	3.004	96	28021	40.00 mg/l	# 0.00
3) Naphthalene-d8	7.101	136	151463	40.00 mg/l	# 0.00
System Monitoring Compounds					
4) Nitrobenzene-d5	6.374	82	194665	84.00 mg/l	0.00
Target Compounds					Qvalue
2) 1,4-Dioxane	3.031	88	57980	81.57 mg/l #	45

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\MSDCHEM\1\DATA\081212\
Data File : 12dec002.D
Acq On : 12 Dec 2008 9:55 am
Operator :
Sample : DIOX-80 S101308D
ALS Vial : 2 Sample Multiplier: 1
InstName : GCMS AAA

Quant Time: Dec 12 10:18:56 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Wed Nov 19 09:17:53 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\081107\
Data File : 07NOV004.D
Acq On : 7 Nov 2008 12:46 pm
Operator :
Sample : DIOX 80PPM S101308D
ALS Vial : 4 Sample Multiplier: 1
InstName : GCMS AAA

Quant Time: Nov 07 17:55:21 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Fri Nov 07 17:55:11 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M

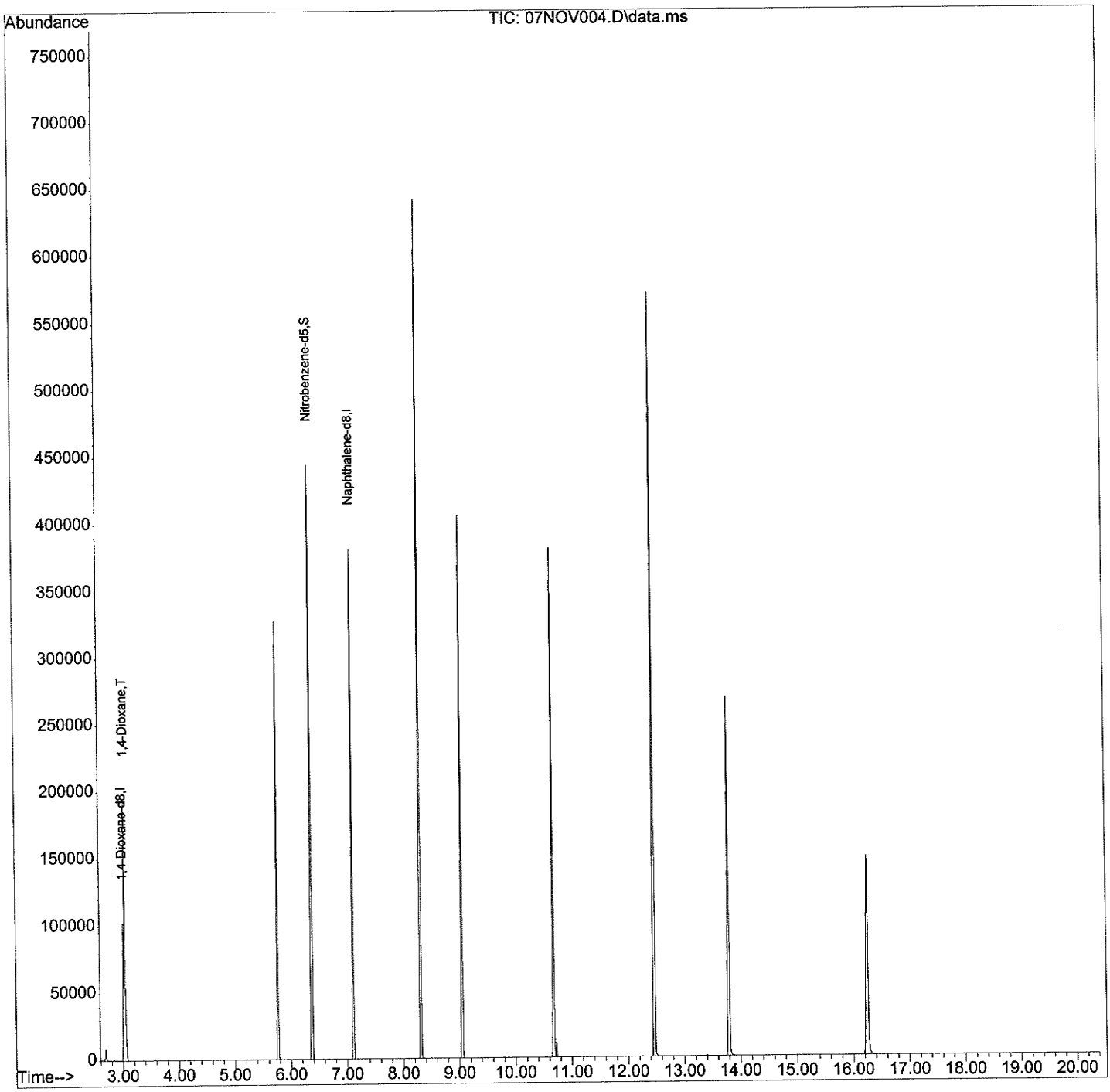
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dioxane-d8	3.009	96	39293	40.00 mg/l	# 0.00
3) Naphthalene-d8	7.112	136	178255	40.00 mg/l	# 0.00
System Monitoring Compounds					
4) Nitrobenzene-d5	6.374	82	215387	81.07 mg/l	0.00
Target Compounds					Qvalue
2) 1,4-Dioxane	3.036	88	76923	76.08 mg/l #	70

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\081107\
Data File : 07NOV004.D
Acq On : 7 Nov 2008 12:46 pm
Operator :
Sample : DIOX 80PPM S101308D
ALS Vial : 4 Sample Multiplier: 1
InstName : GCMS AAA

Quant Time: Nov 07 17:55:21 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Fri Nov 07 17:55:11 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M



Work Order#: 08-12-0585

Client: WEISS Associates

EPA 7470A

Calibration

==========

Analysis Begun

Logged In Analyst: Xue-Wen Xu
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-400, S/N B050-9560
Autosampler Model: AS-90

Sample Information File: C:\data-AA\xue-wen xu\Sample Information\081212D1.sif
Batch ID: 081212D1
Results Data Set: 081212D1
Results Library: C:\data-AA\xue-wen xu\Results\Results.mdb

==========

Method Loaded
Method Name: Hg
Method Last Saved: 12/12/2008 10:23:39 AM
Method Description:

==========

Sequence No.: 1
Autosampler Location: 6
Sample ID: Calib blank 1
Date Collected: 12/12/2008 11:22:40 AM
Analyst:
Data Type: Original

Replicate Data: Calib blank 1

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	-0.0000	-0.0026	-0.0000	11:23:46	Yes
2		[0.00]	0.0000	-0.0012	0.0000	11:24:30	Yes
Mean:		[0.00]	0.0000				
SD:		0.00	0.0000				
%RSD:		0.00	187.90				

Auto-zero performed.

==========

Sequence No.: 2
Autosampler Location: 1
Sample ID: 0.25ppb
Date Collected: 12/12/2008 11:24:56 AM
Analyst:
Data Type: Original

Replicate Data: 0.25ppb

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.250000]	0.0010	0.0019	0.0010	11:26:00	Yes
2		[0.250000]	0.0009	0.0018	0.0009	11:26:44	Yes
Mean:		[0.250000]	0.0009				
SD:		0.000000	0.0001				
%RSD:		0.000000	7.51				

Standard number 1 applied. [0.250000]
Correlation Coef.: 1.000000 Slope: 0.00374 Intercept: 0.00000

==========

Sequence No.: 3
Autosampler Location: 2
Sample ID: 1.00ppb
Date Collected: 12/12/2008 11:27:08 AM
Analyst:
Data Type: Original

Replicate Data: 1.00ppb

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[1.000000]	0.0039	0.0120	0.0039	11:28:11	Yes
2		[1.000000]	0.0039	0.0115	0.0039	11:28:55	Yes
Mean:		[1.000000]	0.0039				
SD:		0.000000	0.0000				
%RSD:		0.000000	0.27				

Standard number 2 applied. [1.000000]
Correlation Coef.: 0.999950 Slope: 0.00389 Intercept: -0.00002

==========

Sequence No.: 4
Autosampler Location: 3
Sample ID: 2.00ppb
Date Collected: 12/12/2008 11:29:20 AM
Analyst:
Data Type: Original

Replicate Data: 2.00ppb

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.000000]	0.0075	0.0241	0.0075	11:30:24	Yes
2		[2.000000]	0.0076	0.0243	0.0076	11:31:08	Yes
Mean:		[2.000000]	0.0075				
SD:		0.000000	0.0001				
%RSD:		0.000000	1.18				

Standard number 3 applied. [2.000000]
Correlation Coef.: 0.999867 Slope: 0.00378 Intercept: 0.00002

Sequence No.: 5 **Autosampler Location: 4**
Sample ID: 5.00ppb **Date Collected: 12/12/2008 11:31:33 AM**
Analyst: **Data Type: Original**

Replicate Data: 5.00ppb

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.000000]	0.0191	0.0641	0.0191	11:32:38	Yes
2		[5.000000]	0.0191	0.0638	0.0191	11:33:22	Yes
Mean:		[5.000000]	0.0191				
SD:		0.000000	0.0000				
%RSD:		0.000000	0.16				

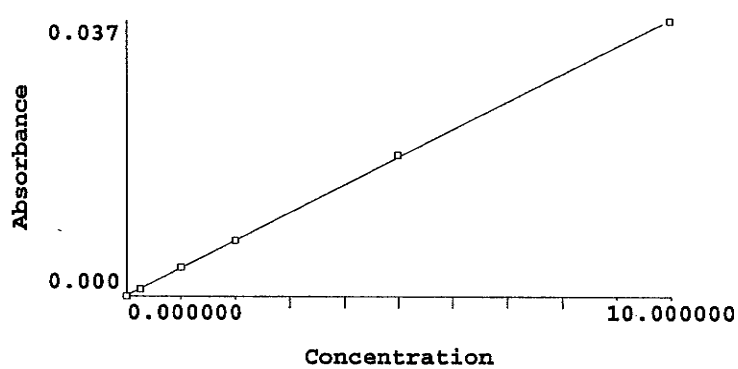
Standard number 4 applied. [5.000000]
Correlation Coef.: 0.999973 Slope: 0.00382 Intercept: -0.00001

Sequence No.: 6 **Autosampler Location: 5**
Sample ID: 10.00ppb **Date Collected: 12/12/2008 11:33:47 AM**
Analyst: **Data Type: Original**

Replicate Data: 10.00ppb

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.00000]	0.0374	0.1232	0.0374	11:34:53	Yes
2		[10.00000]	0.0373	0.1242	0.0373	11:35:37	Yes
Mean:		[10.00000]	0.0374				
SD:		0.00000	0.0001				
%RSD:		0.00000	0.16				

Standard number 5 applied. [10.00000]
Correlation Coef.: 0.999934 Slope: 0.00374 Intercept: 0.00009



Calibration data for Hg 253.7 **Equation: Linear, Calculated Intercept**

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib blank 1	0.0000	0	-0.023539	0.00	187.9
0.25ppb	0.0009	0.250000	0.225976	0.00	7.5
1.00ppb	0.0039	1.000000	1.013407	0.00	0.3
2.00ppb	0.0075	2.000000	1.992018	0.00	1.2
5.00ppb	0.0191	5.000000	5.082562	0.00	0.2
10.00ppb	0.0374	10.00000	9.959575	0.00	0.2

Correlation Coef.: 0.999934 Slope: 0.00374 Intercept: 0.00009

==========

Analysis Begun

Logged In Analyst: Xue-Wen Xu
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-400, S/N B050-9560
Autosampler Model: AS-90

Sample Information File: C:\data-AA\xue-wen xu\Sample Information\081212D1.sif
Batch ID: 081212D1
Results Data Set: 081212D1
Results Library: C:\data-AA\xue-wen xu\Results\Results.mdb

==========

Method Loaded
Method Name: Hg
Method Last Saved: 12/12/2008 10:23:39 AM
Method Description:

==========

Sequence No.: 1
Autosampler Location: 7
Sample ID: ICV
Date Collected: 12/12/2008 11:37:09 AM
Analyst:
Data Type: Original

Replicate Data: ICV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00504	5.04	0.0190	0.0631	0.0190	11:38:15	Yes
2	0.00506	5.06	0.0190	0.0631	0.0190	11:38:59	Yes
Mean:	0.00505	5.05	0.0190				
SD:	0.000013	0.0130	0.0000				
%RSD:	0.257	0.257	0.26				

QC value within limits for Hg 253.7 Recovery = 101.07%
All analyte(s) passed QC.

==========

Sequence No.: 2
Autosampler Location: 6
Sample ID: ICB
Date Collected: 12/12/2008 11:39:26 AM
Analyst:
Data Type: Original

Replicate Data: ICB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.000024	-0.0239	-0.0000	-0.0016	0.0000	11:40:32	Yes
2	-0.000027	-0.0272	-0.0000	-0.0020	-0.0000	11:41:16	Yes
Mean:	-0.000026	-0.0255	-0.0000				
SD:	0.000002	0.00235	0.0000				
%RSD:	9.20	9.20	118.03				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 3
Autosampler Location: 9
Sample ID: CRDL 0.50 PPB
Date Collected: 12/12/2008 11:41:42 AM
Analyst:
Data Type: Original

Replicate Data: CRDL 0.50 PPB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000479	0.479	0.0019	0.0046	0.0019	11:42:45	Yes
2	0.000523	0.523	0.0020	0.0055	0.0020	11:43:29	Yes
Mean:	0.000501	0.501	0.0020				
SD:	0.000031	0.0308	0.0001				
%RSD:	6.14	6.14	5.87				

==========

Sequence No.: 4
Autosampler Location: 3
Sample ID: CCV
Date Collected: 12/12/2008 11:43:53 AM
Analyst:
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00196	1.96	0.0074	0.0235	0.0074	11:44:58	Yes
2	0.00201	2.01	0.0076	0.0243	0.0076	11:45:42	Yes
Mean:	0.00198	1.98	0.0075				
SD:	0.000034	0.0343	0.0001				
%RSD:	1.73	1.73	1.71				

QC value within limits for Hg 253.7 Recovery = 99.15%
All analyte(s) passed QC.

==========

Sequence No.: 5
Sample ID: CCB
Analyst:

Autosampler Location: 6
Date Collected: 12/12/2008 11:46:06 AM
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.000023	-0.0234	0.0000	-0.0015	0.0000	11:47:12	Yes
2	-0.000020	-0.0200	0.0000	-0.0015	0.0000	11:47:57	Yes
Mean:	-0.000022	-0.0217	0.0000				
SD:	0.000002	0.00244	0.0000				
%RSD:	11.2	11.2	130.88				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Analysis Begun

Logged In Analyst: Xue-Wen Xu
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-400, S/N B050-9560
Autosampler Model: AS-90

Sample Information File: C:\data-AA\xue-wen xu\Sample Information\081212D1.sif
Batch ID: 081212D1
Results Data Set: 081212D1
Results Library: C:\data-AA\xue-wen xu\Results\Results.mdb

==========

Sequence No.: 1
Autosampler Location: 3
Sample ID: CCV
Date Collected: 12/12/2008 5:59:28 PM
Analyst:
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00219	2.19	0.0083	0.0230	0.0083	18:00:32	Yes
2	0.00213	2.13	0.0080	0.0285	0.0081	18:01:17	Yes
Mean:	0.00216	2.16	0.0082				
SD:	0.000047	0.0471	0.0002				
%RSD:	2.18	2.18	2.16				

QC value within limits for Hg 253.7 Recovery = 107.96%
All analyte(s) passed QC.

==========

Sequence No.: 2
Autosampler Location: 6
Sample ID: CCB
Date Collected: 12/12/2008 6:01:41 PM
Analyst:
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000004	0.00397	0.0001	0.0006	0.0001	18:02:47	Yes
2	0.000707	0.707	0.0027	-0.0255	0.0027	18:03:31	Yes
Mean:	0.000356	0.356	0.0014				
SD:	0.000497	0.497	0.0019				
%RSD:	140	140	131.16				

QC value greater than the upper limit for Hg 253.7 Recovery = Not calculated
QC Failed. Continue with analysis.
User canceled analysis.

==========

Analysis Begun

Logged In Analyst: Xue-Wen Xu
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-400, S/N B050-9560
Autosampler Model: AS-90

Sample Information File: C:\data-AA\xue-wen xu\Sample Information\081212D1.sif
Batch ID: 081212D1
Results Data Set: 081212D1
Results Library: C:\data-AA\xue-wen xu\Results\Results.mdb

==========

Sequence No.: 2
Autosampler Location: 6
Sample ID: CCB
Date Collected: 12/12/2008 6:04:28 PM
Analyst:
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.000008	-0.00759	0.0001	0.0007	0.0001	18:05:20	Yes
2	-0.000006	-0.00643	0.0001	0.0005	0.0001	18:06:04	Yes
Mean:	-0.000007	-0.00701	0.0001				
SD:	0.000001	0.000821	0.0000				
%RSD:	11.7	11.7	4.96				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 3
Sample ID: 08-12-0585-4
Analyst:
Autosampler Location: 81
Date Collected: 12/12/2008 6:06:31 PM
Data Type: Original

Replicate Data: 08-12-0585-4

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000159	0.0793	0.0004	0.0014	0.0004	18:07:34	Yes
2	0.000174	0.0872	0.0004	0.0020	0.0004	18:08:18	Yes
Mean:	0.000167	0.0833	0.0004				
SD:	0.000011	0.00556	0.0000				
%RSD:	6.67	6.67	5.20				

Sequence No.: 4
Sample ID: 08-12-0585-10
Analyst:
Autosampler Location: 82
Date Collected: 12/12/2008 6:08:41 PM
Data Type: Original

Replicate Data: 08-12-0585-10

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000147	0.0736	0.0004	0.0028	0.0004	18:09:44	Yes
2	0.000102	0.0511	0.0003	0.0014	0.0003	18:10:29	Yes
Mean:	0.000125	0.0623	0.0003				
SD:	0.000032	0.0159	0.0001				
%RSD:	25.4	25.4	18.47				

Sequence No.: 5
Sample ID: 08-12-0585-11
Analyst:
Autosampler Location: 83
Date Collected: 12/12/2008 6:10:52 PM
Data Type: Original

Replicate Data: 08-12-0585-11

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000066	0.0332	0.0002	0.0009	0.0002	18:11:56	Yes
2	0.000061	0.0306	0.0002	0.0010	0.0002	18:12:40	Yes
Mean:	0.000064	0.0319	0.0002				
SD:	0.000004	0.00182	0.0000				
%RSD:	5.72	5.72	3.29				

Sequence No.: 6
Sample ID: 08-12-0585-13
Analyst:
Autosampler Location: 84
Date Collected: 12/12/2008 6:13:04 PM
Data Type: Original

Replicate Data: 08-12-0585-13

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000096	0.0480	0.0003	0.0012	0.0003	18:14:08	Yes
2	0.000089	0.0445	0.0003	0.0003	0.0003	18:14:51	Yes
Mean:	0.000093	0.0463	0.0003				
SD:	0.000005	0.00242	0.0000				
%RSD:	5.24	5.24	3.47				

Sequence No.: 7
Sample ID: CCV
Analyst:
Autosampler Location: 3
Date Collected: 12/12/2008 6:15:16 PM
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	0.00316	3.16	0.0119	0.0426	0.0119	18:16:20	Yes
2	0.00318	3.18	0.0120	0.0433	0.0120	18:17:04	Yes
Mean:	0.00317	3.17	0.0120				
SD:	0.000018	0.0177	0.0001				
%RSD:	0.557	0.557	0.55				

QC value greater than the upper limit for Hg 253.7 Recovery = 158.62%
QC Failed. Retry.

==========

Sequence No.: 8
Sample ID: CCV
Analyst:

Autosampler Location: 3
Date Collected: 12/12/2008 6:17:29 PM
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00277	2.77	0.0105	0.0452	0.0105	18:18:33	Yes
2	0.00216	2.16	0.0082	0.0422	0.0082	18:19:17	Yes
Mean:	0.00247	2.47	0.0093				
SD:	0.000430	0.430	0.0016				
%RSD:	17.4	17.4	17.26				

QC value greater than the upper limit for Hg 253.7 Recovery = 123.33%
QC Failed. Continue with analysis.
User canceled analysis.

==========

Analysis Begun

Logged In Analyst: Xue-Wen Xu
Spectrometer Model: FIMS-400, S/N B050-9560

Technique: AA FIMS-MHS
Autosampler Model: AS-90

Sample Information File: C:\data-AA\xue-wen xu\Sample Information\081212D1.sif
Batch ID: 081212D1
Results Data Set: 081212D1
Results Library: C:\data-AA\xue-wen xu\Results\Results.mdb

==========

Sequence No.: 8
Sample ID: CCV
Analyst:

Autosampler Location: 3
Date Collected: 12/12/2008 6:19:58 PM
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00206	2.06	0.0078	0.0409	0.0078	18:21:02	Yes
2	0.00209	2.09	0.0079	0.0412	0.0079	18:21:46	Yes
Mean:	0.00208	2.08	0.0079				
SD:	0.000019	0.0186	0.0001				
%RSD:	0.897	0.897	0.89				

QC value within limits for Hg 253.7 Recovery = 103.78%
All analyte(s) passed QC.

==========

Sequence No.: 9
Sample ID: CCB
Analyst:

Autosampler Location: 6
Date Collected: 12/12/2008 6:22:11 PM
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.000017	-0.0169	0.0000	0.0000	0.0000	18:23:17	Yes
2	-0.000008	-0.00797	0.0001	0.0002	0.0001	18:24:01	Yes
Mean:	-0.000012	-0.0124	0.0000				
SD:	0.000006	0.00631	0.0000				
%RSD:	50.8	50.8	56.87				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Work Order#: 08-12-0585

Client: WEISS Associates

EPA 8081A

Calibration

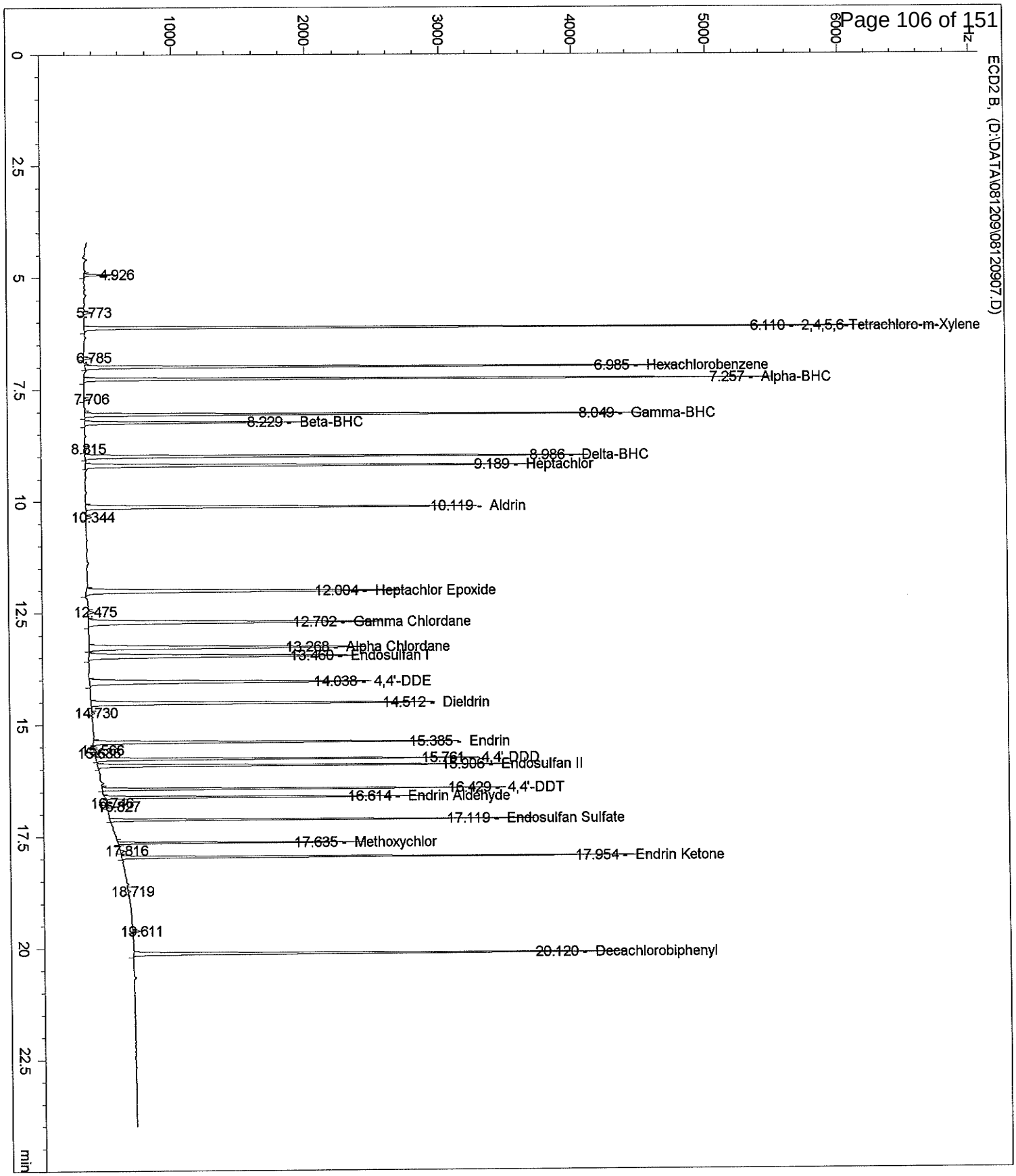
External Standard Report

Data File Name : D:\DATA\081209\08120907.D
Operator :
Instrument : GC 41
Sample Name : PEST 40 ICV
Run Time Bar Code:
Acquired on : 12/9/2008 1:30:49 PM
Report Created on: 12 Dec 08 02:34 pm
Calibrated on : 22 Aug 03 05:56 pm
Analysis Method : C:\CHEM32\1\METHODS\PEST081209R.M

Page Number :
Vial Number : Vial 7
Injection Number : 1
Sequence Line : 7
Instrument Method: D:\DATA\081209\8081.M
Sample Amount :
Last Modified on : 12Dec08

Sig. ECD2B, D:\DATA\081209\08120907.D

Ret Time	Area	Type	Width	Ref #	ppb	Name
6.110	11579.5	BB	0.028		82.753	2,4,5,6-Tetrachloro-m-Xylene
6.985	9018.7	VB	0.032		40.799	Hexachlorobenzene
7.257	10204.7	BB	0.031		42.107	Alpha-BHC
8.049	9246.9	VB	0.035		42.044	Gamma-BHC
8.229	3806.3	BB	0.036		41.472	Beta-BHC
8.986	9286.7	VB	0.039		42.316	Delta-BHC
9.189	8451.6	BB	0.040		41.644	Heptachlor
10.119	8011.2	BB	0.043		41.189	Aldrin
12.004	7817.0	BV	0.050		41.418	Heptachlor Epoxide
12.702	7517.4	BB	0.053		39.444	Gamma Chlordane
13.268	7304.4	BV	0.053		41.278	Alpha Chlordane
13.460	7196.5	VB	0.055		41.198	Endosulfan I
14.038	7439.7	BB	0.055		41.283	4,4'-DDE
14.512	7650.2	BB	0.047		41.656	Dieldrin
15.385	6484.3	BB	0.037		42.131	Endrin
15.761	5925.1	VB	0.033		41.762	4,4'-DDD
15.906	6543.3	BB	0.033		41.884	Endosulfan II
16.429	5455.5	BB	0.028		42.203	4,4'-DDT
16.614	4503.5	BB	0.030		40.370	Endrin Aldehyde
17.119	5540.4	BB	0.027		41.763	Endosulfan Sulfate
17.635	2826.3	BB	0.025		42.036	Methoxychlor
17.954	6679.9	VB	0.027		41.963	Endrin Ketone
20.120	8267.7	BB	0.035		81.647	Decachlorobiphenyl
0.000	0.0		0.000		0.000	Chlordane
0.000	0.0		0.000		0.000	Toxaphene


ECD2 B, (D:\DATA\081209\08120907.D)
4.926
5.773
6.110 - 2,4,5,6-Tetrachloro-m-Xylene
6.785
6.985 - Hexachlorobenzene
7.257 - Alpha-BHC
7.706
8.049 - Gamma-BHC
8.229 - Beta-BHC
8.815
8.986 - Delta-BHC
9.189 - Heptachlor
10.119 - Aldrin
10.344
12.004 - Heptachlor Epoxide
12.475
12.702 - Gamma Chlordane
13.268 - Alpha Chlordane
13.460 - Endosulfan I
14.038 - 4,4'-DDE
14.512 - Dieldrin
14.730
15.385 - Endrin
15.586
15.761 - 4,4'-DDD
15.906 - Endosulfan II
16.429 - 4,4'-DDT
16.614 - Endrin Aldehyde
16.827
17.119 - Endosulfan Sulfate
17.635 - Methoxychlor
17.816
17.954 - Endrin Ketone
18.719
19.611
20.120 - Decachlorobiphenyl
min

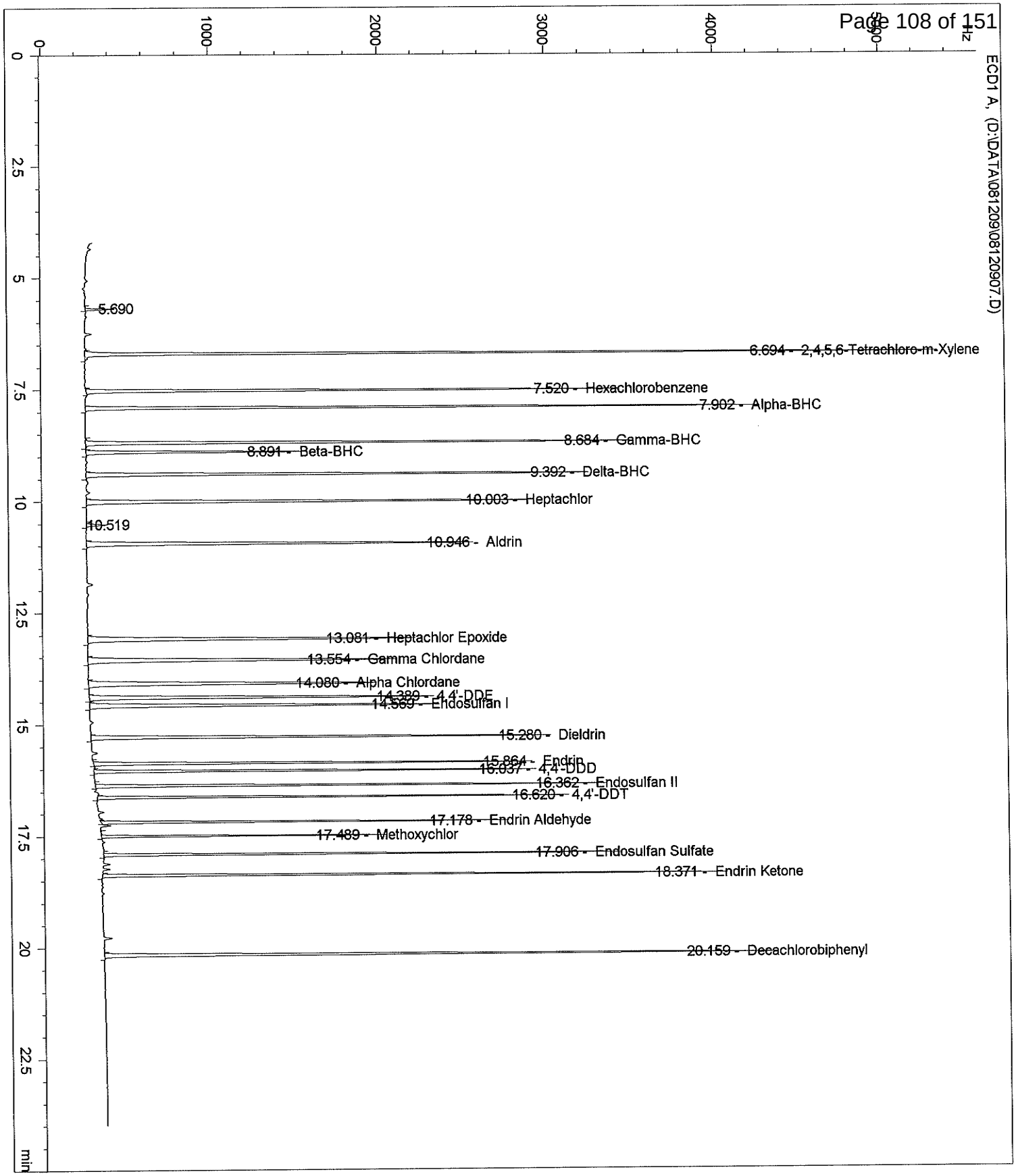
External Standard Report

Data File Name : D:\DATA\081209\08120907.D
Operator :
Instrument : GC 41
Sample Name : PEST 40 ICV
Run Time Bar Code:
Acquired on : 12/9/2008 1:30:49 PM
Report Created on: 12 Dec 08 02:34 pm
Calibrated on : 22 Aug 03 05:56 pm
Analysis Method : C:\CHEM32\1\METHODS\PEST081209F.M

Page Number :
Vial Number : Vial 7
Injection Number : 1
Sequence Line : 7
Instrument Method: D:\DATA\081209\8081.M
Sample Amount :
Last Modified on : 09Dec08

Sig. ECD1 A, D:\DATA\081209\08120907.D

Ret Time	Area	Type	Width	Ref #	ppb	Name
6.694	10590.5	VB	0.033		83.908	2,4,5,6-Tetrachloro-m-Xylene
7.520	7229.6	BB	0.036		41.033	Hexachlorobenzene
7.902	8852.9	BB	0.035		43.119	Alpha-BHC
8.684	8009.4	BB	0.039		43.198	Gamma-BHC
8.891	3307.1	BB	0.040		42.105	Beta-BHC
9.392	7825.4	BB	0.041		43.356	Delta-BHC
10.003	7304.9	BB	0.044		41.939	Heptachlor
10.946	6831.8	BB	0.046		42.465	Aldrin
13.081	6738.7	BB	0.054		40.565	Heptachlor Epoxide
13.554	6376.7	BB	0.053		42.333	Gamma Chlordane
14.080	6155.9	BB	0.056		41.467	Alpha Chlordane
14.389	6140.0	BB	0.047		42.976	4,4'-DDE
14.569	6272.0	BB	0.048		42.417	Endosulfan I
15.280	6833.6	BB	0.039		42.906	Dieldrin
15.864	5840.6	BB	0.035		43.167	Endrin
16.037	5449.5	BB	0.033		43.249	4,4'-DDD
16.362	6272.9	BB	0.032		42.721	Endosulfan II
16.620	5235.6	BB	0.030		43.240	4,4'-DDT
17.178	4533.4	BB	0.029		40.855	Endrin Aldehyde
17.489	2825.4	BB	0.027		42.041	Methoxychlor
17.906	5657.6	BB	0.029		42.583	Endosulfan Sulfate
18.371	7074.5	BB	0.030		42.456	Endrin Ketone
20.159	9553.2	BB	0.038		82.456	Decachlorobiphenyl
0.000	0.0		0.000		0.000	Chlordane
0.000	0.0		0.000		0.000	Toxaphene


ECD1 A, (D:\DATA\081209\08120907.D)
Hz
1000
2000
3000
4000
5000
0
2.5
5
7.5
10
12.5
15
17.5
20
22.5
min
5.690
6.694 - 2,4,5,6-Tetrachloro-m-Xylene
7.520 - Hexachlorobenzene
7.902 - Alpha-BHC
8.684 - Gamma-BHC
8.891 - Beta-BHC
9.392 - Delta-BHC
10.003 - Heptachlor
10.519
10.946 - Aldrin
13.081 - Heptachlor Epoxide
13.554 - Gamma Chlordane
14.080 - Alpha Chlordane
14.389 - 4,4'-DDE
14.569 - Endosulfan I
15.280 - Dieldrin
15.864 - Endrin
16.037 - 4,4'-DDD
16.362 - Endosulfan II
16.620 - 4,4'-DDT
17.178 - Endrin Aldehyde
17.489 - Methoxychlor
17.906 - Endosulfan Sulfate
18.371 - Endrin Ketone
20.159 - Decachlorobiphenyl

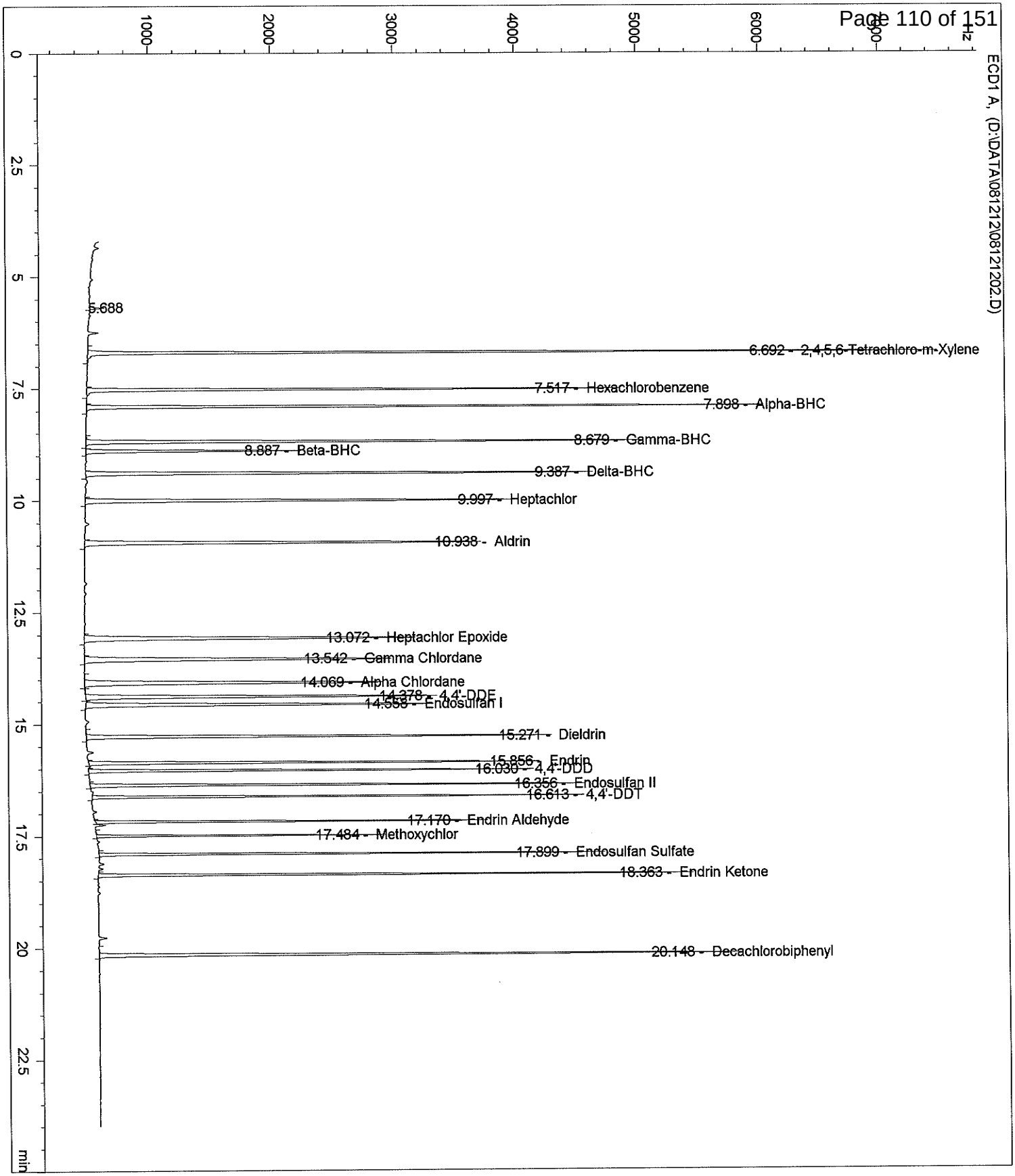
External Standard Report

Data File Name : D:\DATA\081212\08121202.D
Operator :
Instrument : GC 41
Sample Name : PEST 60
Run Time Bar Code:
Acquired on : 12/12/2008 11:21:52 AM
Report Created on: 12 Dec 08 02:32 pm
Calibrated on : 22 Aug 03 05:56 pm
Analysis Method : C:\CHEM32\1\METHODS\PEST081209F.M

Page Number :
Vial Number : Vial 2
Injection Number : 1
Sequence Line : 4
Instrument Method: D:\DATA\081212\8081.M
Sample Amount :
Last Modified on : 09Dec08

Sig. ECD1 A, D:\DATA\081212\08121202.D

Ret Time	Area	Type	Width	Ref #	ppb	Name
6.692	14683.7	BB	0.033		116.339	2,4,5,6-Tetrachloro-m-Xylene
7.517	10122.1	BB	0.036		57.451	Hexachlorobenzene
7.898	12690.6	BB	0.036		61.811	Alpha-BHC
8.679	11408.6	BB	0.039		61.531	Gamma-BHC
8.887	4600.9	BB	0.041		58.577	Beta-BHC
9.387	11091.9	BB	0.042		61.455	Delta-BHC
9.997	9917.0	BB	0.045		56.936	Heptachlor
10.938	9923.4	BB	0.048		61.681	Aldrin
13.072	9613.4	BB	0.056		57.869	Heptachlor Epoxide
13.542	9087.5	BB	0.057		60.330	Gamma Chlordane
14.069	8981.7	BB	0.057		60.502	Alpha Chlordane
14.378	8762.4	BB	0.049		61.331	4,4'-DDE
14.558	8860.8	BB	0.048		59.925	Endosulfan I
15.271	9741.7	BB	0.040		61.165	Dieldrin
15.856	8436.7	BB	0.036		62.355	Endrin
16.030	7534.0	BB	0.031		59.793	4,4'-DDD
16.356	8530.2	BB	0.033		58.094	Endosulfan II
16.613	7628.4	BB	0.029		63.002	4,4'-DDT
17.170	5985.4	BB	0.029		53.940	Endrin Aldehyde
17.484	3995.3	BB	0.027		59.448	Methoxychlor
17.899	7486.3	BB	0.028		56.347	Endosulfan Sulfate
18.363	9491.2	BB	0.030		56.959	Endrin Ketone
20.148	12584.2	BB	0.038		108.618	Decachlorobiphenyl
0.000	0.0		0.000		0.000	Chlordane
0.000	0.0		0.000		0.000	Toxaphene


ECD1 A, (D:\DATA\08121212\08121202.D)
5.688
6.692 - 2,4,5,6-Tetrachloro-m-Xylene
7.517 - Hexachlorobenzene
7.898 - Alpha-BHC
8.679 - Gamma-BHC
8.887 - Beta-BHC
9.387 - Delta-BHC
9.997 - Heptachlor
10.938 - Aldrin
13.072 - Heptachlor Epoxide
13.542 - Gamma Chlordane
14.069 - Alpha Chlordane
14.378 - 4,4'-DDE
14.558 - Endosulfan I
15.271 - Dieldrin
15.856 - Endrin
16.030 - 4,4'-DDD
16.356 - Endosulfan II
16.613 - 4,4'-DDT
17.170 - Endrin Aldehyde
17.484 - Methoxychlor
17.899 - Endosulfan Sulfate
18.363 - Endrin Ketone
20.148 - Decachlorobiphenyl
min

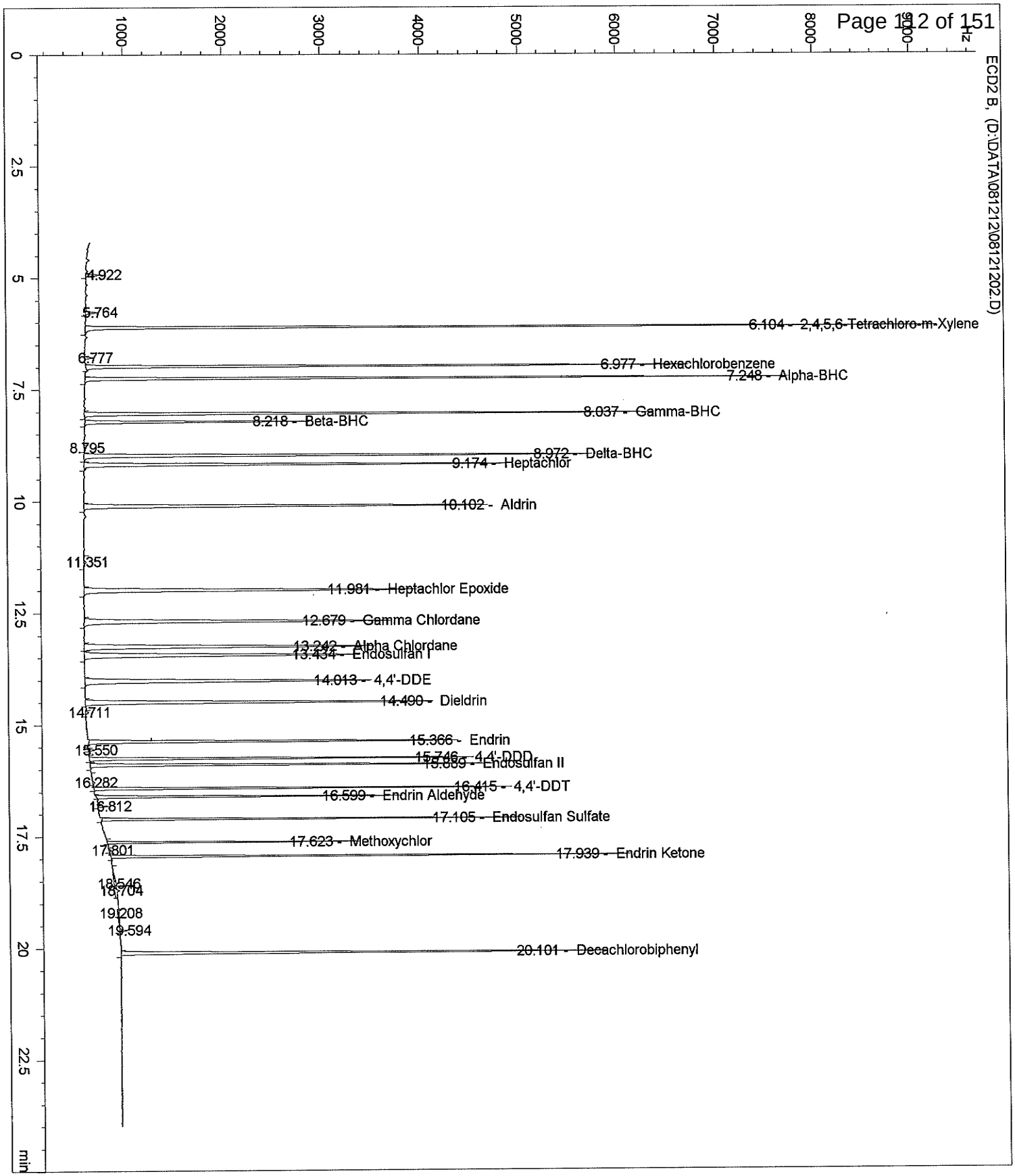
External Standard Report

Data File Name : D:\DATA\081212\08121202.D
Operator :
Instrument : GC 41
Sample Name : PEST 60
Run Time Bar Code:
Acquired on : 12/12/2008 11:21:52 AM
Report Created on: 12 Dec 08 02:32 pm
Calibrated on : 22 Aug 03 05:56 pm
Analysis Method : C:\CHEM32\1\METHODS\PEST081209R.M

Page Number :
Vial Number : Vial 2
Injection Number : 1
Sequence Line : 4
Instrument Method: D:\DATA\081212\8081.M
Sample Amount :
Last Modified on : 12Dec08

Sig. ECD2 B, D:\DATA\081212\08121202.D

Ret Time	Area	Type	Width	Ref #	ppb	Name
6.104	15992.4	BB	0.029		114.290	2,4,5,6-Tetrachloro-m-Xylene
6.977	12429.0	VB	0.032		56.227	Hexachlorobenzene
7.248	14339.4	BB	0.032		59.168	Alpha-BHC
8.037	12980.0	VB	0.035		59.018	Gamma-BHC
8.218	5212.0	BB	0.036		56.788	Beta-BHC
8.972	12920.5	BV	0.038		58.874	Delta-BHC
9.174	11100.3	VB	0.040		54.696	Heptachlor
10.102	11467.4	BB	0.045		58.958	Aldrin
11.981	10956.9	BB	0.051		58.055	Heptachlor Epoxide
12.679	10639.1	BB	0.053		55.823	Gamma Chlordane
13.242	10312.2	BV	0.055		58.276	Alpha Chlordane
13.434	10167.4	VB	0.056		58.205	Endosulfan I
14.013	10395.8	BB	0.057		57.687	4,4'-DDE
14.490	10789.5	BV	0.048		58.749	Dieldrin
15.366	9034.4	BV	0.038		58.700	Endrin
15.746	8018.0	VV	0.032		56.513	4,4'-DDD
15.889	8814.0	VB	0.034		56.419	Endosulfan II
16.415	7690.0	BB	0.028		59.489	4,4'-DDT
16.599	5867.9	BB	0.030		52.601	Endrin Aldehyde
17.105	7296.5	BB	0.027		55.001	Endosulfan Sulfate
17.623	3902.6	BV	0.024		58.045	Methoxychlor
17.939	8830.0	VB	0.026		55.471	Endrin Ketone
20.101	10997.4	BB	0.035		108.604	Decachlorobiphenyl
0.000	0.0		0.000		0.000	Chlordane
0.000	0.0		0.000		0.000	Toxaphene


ECD2 B, (D:\DATA\081212\08121202.D)
4.922
5.764
6.104 - 2,4,5,6-Tetrachloro-m-Xylene
6.777
6.977 - Hexachlorobenzene
7.248 - Alpha-BHC
8.037 - Gamma-BHC
8.218 - Beta-BHC
8.795
8.972 - Delta-BHC
9.174 - Heptachlor
10.102 - Aldrin
11.351
11.981 - Heptachlor Epoxide
12.679 - Gamma Chlordane
13.242 - Alpha Chlordane
13.434 - Endosulfan I
14.013 - 4,4'-DDE
14.490 - Dieldrin
14.711
15.366 - Endrin
15.550
15.746 - 4,4'-DDD
15.889 - Endosulfan II
16.282
16.415 - 4,4'-DDT
16.599 - Endrin Aldehyde
16.812
17.105 - Endosulfan Sulfate
17.623 - Methoxychlor
17.801
17.939 - Endrin Ketone
18.546
18.704
19.208
19.594
20.101 - Decachlorobiphenyl
min

Work Order#: 08-12-0585

Client: WEISS Associates

EPA 8082

Calibration

External Standard Report

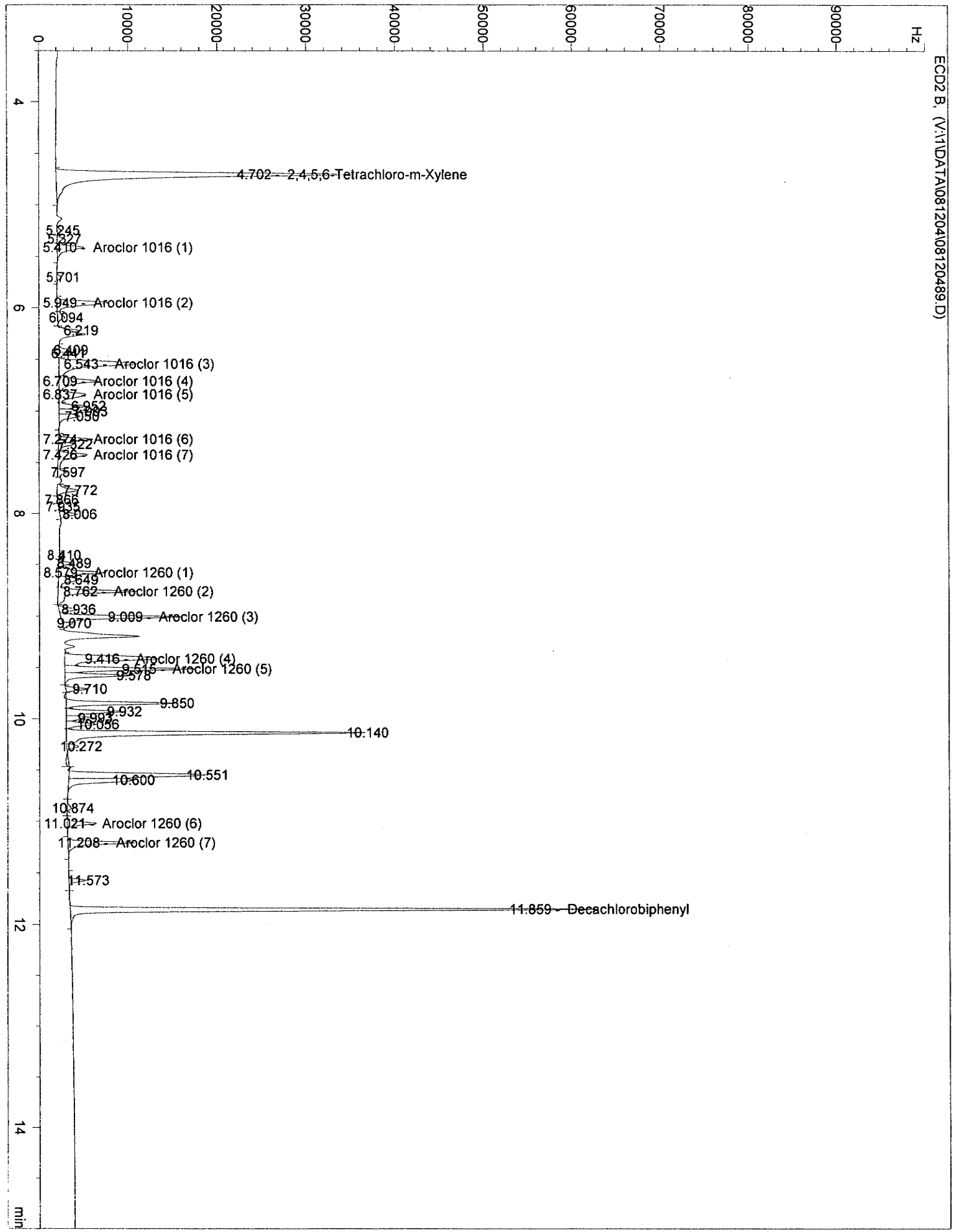
Data File Name : V:\1\DATA\081204\08120489.D
Operator :
Instrument : GC 31
Sample Name : PCB 500 1cu
Run Time Bar Code: Winter
Acquired on : 12/4/2008 9:01:07 PM
Report Created on: 05 Dec 08 11:46 am
Calibrated on : 24 Sep 04 04:14 pm
Analysis Method : V:\1\METHODS\081204R.M\P101660R.M

Page Number :
Vial Number : Vial 1
Injection Number : 1
Sequence Line : 12
Instrument Method: 8082.M
Sample Amount :
Last Modified on : 05Dec08

Sig. ECD2 B, V:\1\DATA\081204\08120489.D

Ret Time	Area	Type	Width	Ref #	ppb	Name
4.702	108826.9	BB	0.046		95.536	2,4,5,6-Tetrachloro-m-Xylene
5.410	9362.0	VB	0.043		0.000	Aroclor 1016 (1)
5.949	17431.3	BV	0.048		0.000	Aroclor 1016 (2)
6.543	32932.1	VV	0.053		0.000	Aroclor 1016 (3)
6.709	14399.5	VV	0.047		0.000	Aroclor 1016 (4)
6.837	10574.4	VV	0.049		0.000	Aroclor 1016 (5)
7.274	7924.0	BV	0.031		0.000	Aroclor 1016 (6)
7.426	11153.8	VV	0.048		0.000	Aroclor 1016 (7)
8.579	12957.5	VV	0.035		0.000	Aroclor 1260 (1)
8.762	21311.6	VV	0.036		0.000	Aroclor 1260 (2)
9.009	28400.5	VV	0.032		0.000	Aroclor 1260 (3)
9.416	35562.3	VV	0.054		0.000	Aroclor 1260 (4)
9.515	28094.4	VV	0.030		0.000	Aroclor 1260 (5)
11.021	7437.3	PV	0.033		0.000	Aroclor 1260 (6)
11.208	16430.2	BB	0.033		0.000	Aroclor 1260 (7)
11.859	106796.2	BB	0.028		101.293	Decachlorobiphenyl
0.000	0.0		0.000		0.000	Aroclor-1016
0.000	0.0		0.000		0.000	Aroclor-1221
0.000	0.0		0.000		0.000	Aroclor-1232
0.000	0.0		0.000		0.000	Aroclor-1242
0.000	0.0		0.000		0.000	Aroclor-1248
0.000	0.0		0.000		0.000	Aroclor-1254
0.000	0.0		0.000		0.000	Aroclor-1260
0.000	0.0		0.000		0.000	Aroclor-1262
0.000	0.0		0.000		0.000	Aroclor-1268

Area Sum	Comp. Group Nam
103777.1	Aroclor 1016
150193.8	Aroclor 1260


ECD2 B, (V:\1\DATA\081204\08120489.D)
Hz
0
10000
20000
30000
40000
50000
60000
70000
80000
90000
4.702 - 2,4,5,6-Tetrachloro-m-Xylene
5.245
5.327
5.410 - Aroclor 1016 (1)
5.701
5.949 - Aroclor 1016 (2)
6.094
6.219
6.409
6.441
6.543 - Aroclor 1016 (3)
6.709 - Aroclor 1016 (4)
6.837 - Aroclor 1016 (5)
6.952
7.050
7.274 - Aroclor 1016 (6)
7.322
7.426 - Aroclor 1016 (7)
7.597
7.772
7.866
7.935
8.006
8.410
8.489
8.579 - Aroclor 1260 (1)
8.649
8.762 - Aroclor 1260 (2)
8.936
9.009 - Aroclor 1260 (3)
9.070
9.416 - Aroclor 1260 (4)
9.515 - Aroclor 1260 (5)
9.578
9.710
9.850
9.932
9.993
10.056
10.140
10.272
10.551
10.600
10.874
11.021 - Aroclor 1260 (6)
11.208 - Aroclor 1260 (7)
11.573
11.859 - Decachlorobiphenyl
4
6
8
10
12
14
min

PCB CCV Calculations GC 31

Calculations: ***500PPB***

Components	Total Area	RF	Ave RF	%D(<15%)	Pass?
Aroclor-1016-R	**103777.1**	207.6	206	0.9	YES
Aroclor-1260R	**150193.8**	300.4	291	3.2	YES

External Standard Report

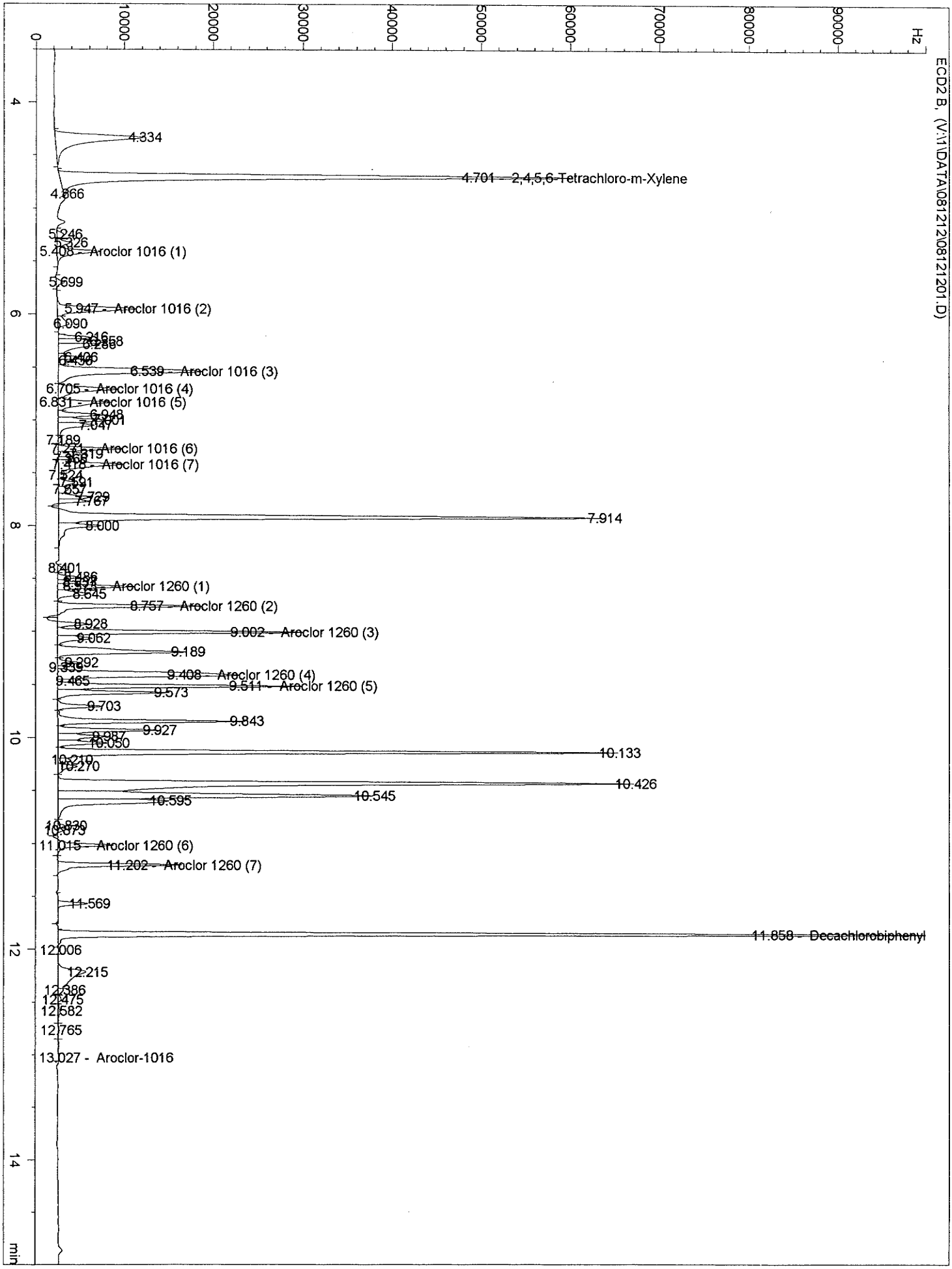
Data File Name : V:\1\DATA\081212\08121201.D
Operator :
Instrument : GC 31
Sample Name : PCB 750
Run Time Bar Code:
Acquired on : 12/12/2008 12:10:35 PM
Report Created on: 12 Dec 08 03:24 pm
Calibrated on : 24 Sep 04 04:14 pm
Analysis Method : V:\1\METHODS\081204R.M\P101660R.M

Page Number :
Vial Number : Vial 1
Injection Number : 1
Sequence Line : 2
Instrument Method: 8082.M
Sample Amount :
Last Modified on : 05Dec08

Sig. ECD2B, V:\1\DATA\081212\08121201.D

Ret Time	Area	Type	Width	Ref #	ppb	Name
4.701	160651.2	BV	0.040		138.613	2,4,5,6-Tetrachloro-m-Xylene
5.408	14013.1	VB	0.041		0.000	Aroclor 1016 (1)
5.947	26126.9	BV	0.047		0.000	Aroclor 1016 (2)
6.539	53966.3	VV	0.055		0.000	Aroclor 1016 (3)
6.705	20226.2	VV	0.050		0.000	Aroclor 1016 (4)
6.831	16881.0	VV	0.048		0.000	Aroclor 1016 (5)
7.271	13669.9	VV	0.031		0.000	Aroclor 1016 (6)
7.418	21492.9	VV	0.048		0.000	Aroclor 1016 (7)
8.573	16151.5	VV	0.031		0.000	Aroclor 1260 (1)
8.757	31060.6	VV	0.032		0.000	Aroclor 1260 (2)
9.002	49680.8	VV	0.030		0.000	Aroclor 1260 (3)
9.408	60203.7	VV	0.049		0.000	Aroclor 1260 (4)
9.511	48067.2	VV	0.029		0.000	Aroclor 1260 (5)
11.015	12668.3	VV	0.034		0.000	Aroclor 1260 (6)
11.202	26269.0	VV	0.031		0.000	Aroclor 1260 (7)
11.858	175499.7	VV	0.028		161.209	Decachlorobiphenyl
13.027	361.7	VM	0.106		0.000	Aroclor-1016
0.000	0.0		0.000		0.000	Aroclor-1221
0.000	0.0		0.000		0.000	Aroclor-1232
0.000	0.0		0.000		0.000	Aroclor-1242
0.000	0.0		0.000		0.000	Aroclor-1248
0.000	0.0		0.000		0.000	Aroclor-1254
0.000	0.0		0.000		0.000	Aroclor-1260
0.000	0.0		0.000		0.000	Aroclor-1262
0.000	0.0		0.000		0.000	Aroclor-1268

Area Sum	Comp. Group Nam
166376.3	Aroclor 1016
244101.2	Aroclor 1260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Hz
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10000
20000
30000
40000
50000
60000
70000
80000
90000
4
6
8
10
12
14
min
4.334
4.701 - 2,4,5,6-Tetrachloro-m-Xylene
4.866
5.246
5.326
5.408 - Aroclor 1016 (1)
5.699
5.947 - Aroclor 1016 (2)
6.090
6.216
6.258
6.406
6.450
6.539 - Aroclor 1016 (3)
6.705 - Aroclor 1016 (4)
6.831 - Aroclor 1016 (5)
6.948
7.001
7.047
7.189
7.319
Aroclor 1016 (6)
7.418 - Aroclor 1016 (7)
7.524
7.591
7.657
7.729
7.767
7.914
8.000
8.401
8.486
8.591
Aroclor 1260 (1)
8.645
8.757 - Aroclor 1260 (2)
8.928
9.002 - Aroclor 1260 (3)
9.062
9.189
9.292
9.339
9.408 - Aroclor 1260 (4)
9.465
9.511 - Aroclor 1260 (5)
9.573
9.703
9.843
9.927
9.987
10.050
10.133
10.219
10.270
10.426
10.545
10.595
10.839
10.879
11.015 - Aroclor 1260 (6)
11.202 - Aroclor 1260 (7)
11.569
11.858 - Decachlorobiphenyl
12.006
12.215
12.386
12.475
12.582
12.765
13.027 - Aroclor-1016

PCB CCV Calculations GC 31

Calculations: ***750PPB***

Components	Total Area	RF	Ave RF	%D(<15%)	Pass?
Aroclor-1016-R	**166376.3**	222	206	7.9	YES
Aroclor-1260-R	**244101.2**	325	291	11.8	YES

Work Order#: 08-12-0585

Client: WEISS Associates

EPA 8260B

Calibration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D
Acq On : 3 Dec 2008 3:12 pm
Sample : ICV/LCS V111908D/V112608B
Misc : V120308A
MS Integration Params: RTEINT.P
Quant Time: Dec 03 15:47:56 2008

Vial: 24
Operator:
Inst : GCMS_L
Multiplr: 1.00
Quant Results File: 081203_BP.RES

Quant Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Tert-Butyl Alcohol-d9	3.8865	65	28844	50.0000 ug/l	-0
4) Pentafluorobenzene	6.4012	168	424065	10.0000 ug/l	0
47) 1,4-Difluorobenzene	7.3265	114	545475	10.0000 ug/l	0
63) Chlorobenzene-d5	10.9182	117	422275	10.0000 ug/l	0
87) 1,4-Dichlorobenzene-d4	13.7936	152	223638	10.0000 ug/l	0

System Monitoring Compounds					
41) Dibromofluoromethane	6.3018	113	161198	9.64 ug/l	0.0
Spiked Amount 10.000	Range 53 - 141		Recovery	= 96.40%	
46) 1,2-Dichloroethane-d4	6.7305	65	144382	8.92 ug/l	0.0
Spiked Amount 10.000	Range 50 - 150		Recovery	= 89.20%	
60) Toluene-d8	9.1616	98	605274	10.45 ug/l	0.0
Spiked Amount 10.000	Range 69 - 134		Recovery	= 104.50%	
80) 1,4-Bromofluorobenzene	12.3611	95	174937	10.50 ug/l	0.0
Spiked Amount 10.000	Range 51 - 152		Recovery	= 105.00%	

Target Compounds					Qvalue
2) Ethanol	2.7520	45	8955	98.7768 ug/l	
3) Tert-Butyl Alcohol (TBA)	4.0224	59	27037	43.2509 ug/l	
5) Dichlorodifluoromethane	1.5600	85	262525	10.7621 ug/l	
6) Chloromethane	1.7273	50	280280	10.7022 ug/l	
7) Vinyl Chloride	1.8423	62	283358	10.8929 ug/l	
8) Bromomethane	2.1770	94	177331	10.2001 ug/l	
9) Chloroethane	2.2867	64	163810	10.7455 ug/l	
10) Trichlorofluoromethane	2.5690	101	404509	9.7828 ug/l	
11) Diethyl Ether	2.8984	45	75134	9.1520 ug/l	
12) Acetone	3.2173	43	18271	9.2761 ug/l	
13) Iodomethane	3.3428	142	244361	14.3479 ug/l	
14) 1,1-Dichloroethene	3.1650	61	313070	10.2122 ug/l	
15) 1,1,2-Trichloro-1,2,2-Trif	3.1807	101	211509	10.4074 ug/l	
16) Carbon Disulfide	3.4317	76	585329	10.5179 ug/l	
17) Acetonitrile	3.6303	41	355436	10.3171 ug/l	
18) Acrylonitrile	4.1531	53	22568	8.7847 ug/l #	
19) Allyl Chloride	3.6303	41	349482	10.1325 ug/l	
20) Acrolein	3.0291	56	15606	21.1622 ug/l	
21) Methyl Acetate	3.6721	43	56058	8.4071 ug/l	
22) Methylene Chloride	3.7976	84	168631	9.6228 ug/l	
23) t-1,2-Dichloroethene	4.2211	96	208398	10.0213 ug/l	
24) Isobutyl Alcohol	3.6721	43	56058	8.9841 ug/l	
25) Methyl-t-Butyl Ether (MTBE	4.2577	73	294560	9.0958 ug/l	
26) Hexane	4.6602	57	323382	10.4897 ug/l	
27) 1,1-Dichloroethane	4.8275	63	365742	9.5512 ug/l	

(#) = qualifier out of range (m) = manual integration

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D Vial: 24
Acq On : 3 Dec 2008 3:12 pm Operator:
Sample : ICV/LCS V111908D/V112608B Inst : GCMS_L
Misc : V120308A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 03 15:47:56 2008 Quant Results File: 081203_BP.RES

Quant Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
28) Vinyl Acetate	4.9478	86	18568	9.3596 ug/l	#
29) Diisopropyl Ether (DIPE)	4.9948	45	548039	9.6932 ug/l	
30) Chloroprene	4.9687	53	370046	10.1898 ug/l	
31) Ethyl-t-Butyl Ether (ETBE)	5.5124	59	372778	9.4608 ug/l	
32) c-1,2-Dichloroethene	5.6536	96	201268	9.8534 ug/l	
33) 2,2-Dichloropropane	5.6431	77	326271	9.6253 ug/l	
34) 2-Butanone	5.6902	43	30132	9.4451 ug/l	
35) Propionitrile	5.7372	54	8138	9.9047 ug/l	
36) Methacrylonitrile	5.9568	41	47181	9.2983 ug/l	
37) Propanedinitrile	5.9620	66	8361	8.8060 ug/l	
38) Bromochloromethane	5.9725	130	93788	9.5125 ug/l	
39) Tetrahydrofuran	6.0614	42	18570	9.1903 ug/l	
40) Chloroform	6.0927	83	335188	9.5025 ug/l	
42) 1,1,1-Trichloroethane	6.3332	97	318154	9.5310 ug/l	
43) Cyclohexane	6.4116	84	307782	9.4906 ug/l	
44) 1,1-Dichloropropene	6.5528	75	279671	10.0255 ug/l	
45) Carbon Tetrachloride	6.5580	117	279041	9.8157 ug/l	
48) Benzene	6.8142	78	740847	10.0458 ug/l	
49) 1,2-Dichloroethane	6.8299	62	170972	8.9862 ug/l	
50) Tert-Amyl-Methyl Ether (TA	7.0129	73	273087	9.3398 ug/l	
51) Thiophene	7.0808	84	319546	9.9647 ug/l	
52) Trichloroethene	7.6507	95	186590	10.0765 ug/l	
53) 1,2-Dichloropropane	7.9173	63	153740	9.3217 ug/l	
54) Methylcyclohexane	7.9016	83	328562	10.0874 ug/l	
55) Dibromomethane	8.0585	93	55892	9.3092 ug/l	
56) Methyl Methacrylate	8.1107	69	40865	9.5124 ug/l	
57) Bromodichloromethane	8.2623	83	190955	9.2961 ug/l	
58) 2-Chloroethyl Vinyl Ether	8.6649	63	44517	8.5468 ug/l	
59) c-1,3-Dichloropropene	8.8270	75	206053	9.6417 ug/l	
61) Toluene	9.2400	91	697614	10.1924 ug/l	
62) 4-Methyl-2-Pentanone	9.1563	58	4915	14.6828 ug/l	
64) t-1,3-Dichloropropene	9.5118	75	156814	9.9286 ug/l	
65) Ethyl Methacrylate	9.6478	69	84497	9.7639 ug/l	
66) 1,1,2-Trichloroethane	9.7262	83	68520	9.7461 ug/l	
67) Tetrachloroethene	9.9248	166	242385	10.1024 ug/l	
68) 1,3-Dichloropropane	9.9301	76	157836	9.6435 ug/l	
69) 2-Hexanone	10.0556	58	13507	9.3630 ug/l	
70) Dibromochloromethane	10.2072	129	105738	10.0363 ug/l	
71) 1,2-Dibromoethane	10.3379	107	77450	9.6633 ug/l	
72) Chlorobenzene	10.9548	112	417096	9.8661 ug/l	
73) 1,1,1,2-Tetrachloroethane	11.0541	131	154180	10.1227 ug/l	

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D
Acq On : 3 Dec 2008 3:12 pm
Sample : ICV/LCS V111908D/V112608B
Misc : V120308A
MS Integration Params: RTEINT.P
Quant Time: Dec 03 15:47:56 2008

Vial: 24
Operator:
Inst : GCMS_L
Multiplr: 1.00
Quant Results File: 081203_BP.RES

Quant Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
74)	Ethylbenzene	11.1011	91	785840	10.7903	ug/l	
75)	p/m-Xylene	11.2475	91	1165099	21.0150	ug/l	
76)	o-Xylene	11.7285	91	568688	10.6254	ug/l	
77)	Styrene	11.7442	104	438553	10.7030	ug/l	
78)	Bromoform	11.9533	173	50945	11.3184	ug/l	
79)	Isopropylbenzene	12.1886	105	782745	11.1343	ug/l	
81)	1,2,3-Trichloropropane	12.5859	75	96128	10.2239	ug/l	
82)	Bromobenzene	12.5441	156	171066	10.4499	ug/l	
83)	n-Propylbenzene	12.6957	91	885137	10.8359	ug/l	
84)	t-1,4-Dichloro-2-Butene	12.6120	53	21407	10.4142	ug/l	
85)	2-Chlorotoluene	12.7950	91	492077	10.6585	ug/l	
86)	1,3,5-Trimethylbenzene	12.9153	105	614940	10.9102	ug/l	
88)	4-Chlorotoluene	12.9257	91	584602	10.6378	ug/l	
89)	1,1,2,2-Tetrachloroethane	12.5336	83	76613	9.6235	ug/l	
90)	1,2,4-Trimethylbenzene	13.3753	105	598219	10.8114	ug/l	
91)	tert-Butylbenzene	13.3231	119	624166	10.8272	ug/l	
92)	p-Isopropyltoluene	13.7727	119	723823	10.8584	ug/l	
93)	sec-Butylbenzene	13.5949	105	856394	11.1148	ug/l	
94)	1,3-Dichlorobenzene	13.7152	146	347034	10.4040	ug/l	
95)	1,4-Dichlorobenzene	13.8249	146	334057	9.7335	ug/l	
96)	1,2-Dichlorobenzene	14.2798	146	273914	9.8216	ug/l	
97)	n-Butylbenzene	14.2850	91	637311	10.7920	ug/l	
98)	1,2-Dibromo-3-Chloropropan	15.2417	75	9509	9.8117	ug/l	
99)	1,2,4-Trichlorobenzene	16.2873	180	204087	10.0816	ug/l	
100)	Hexachloro-1,3-Butadiene	16.5226	225	177288	10.1949	ug/l	
101)	Naphthalene	16.5853	128	213858	9.3894	ug/l	
102)	1,2,3-Trichlorobenzene	16.2873	180	204087	10.0805	ug/l	

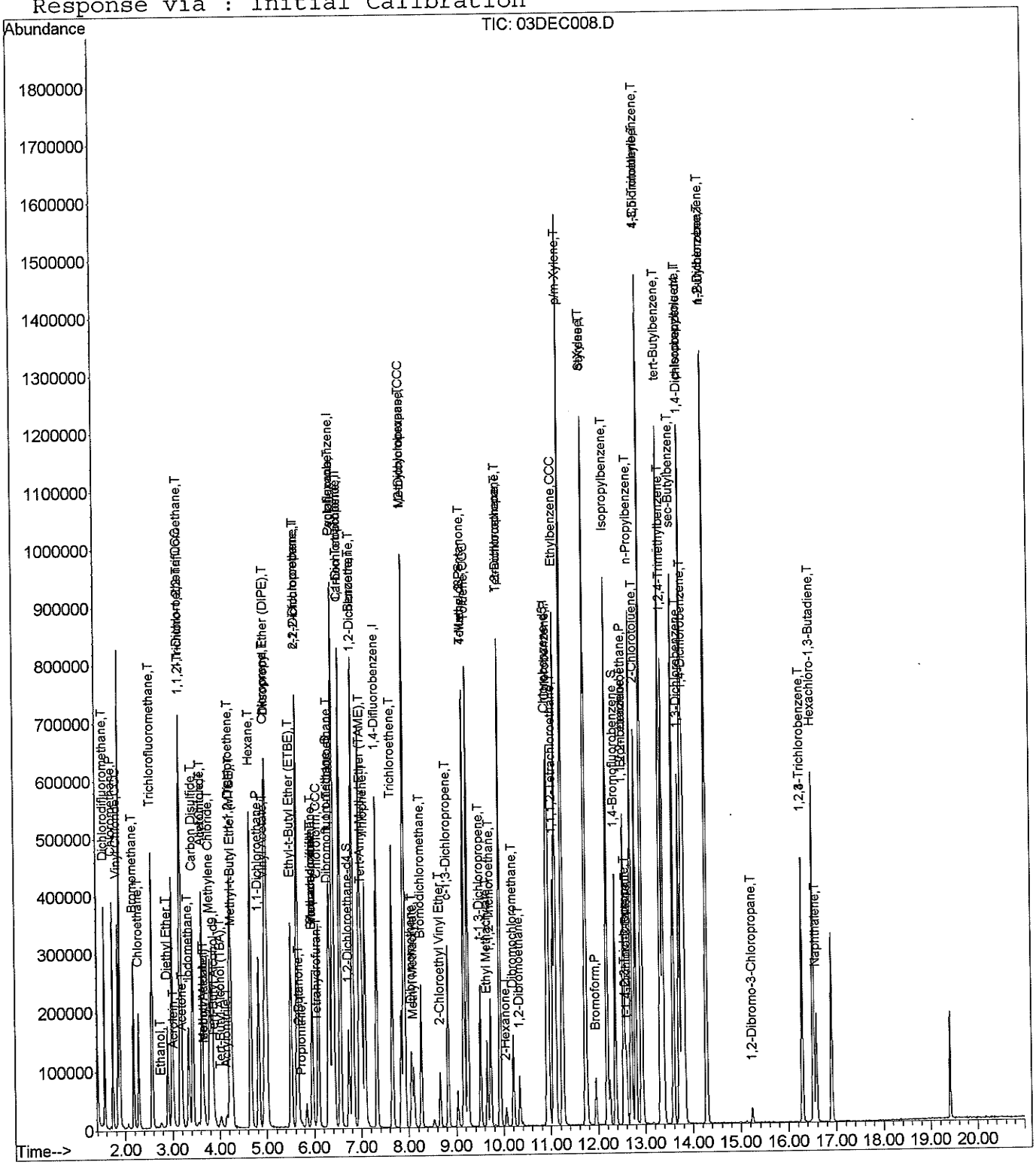
(#) = qualifier out of range (m) = manual integration

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D
Acq On : 3 Dec 2008 3:12 pm
Sample : ICV/LCS V111908D/V112608B
Misc : V120308A
MS Integration Params: RTEINT.P
Quant Time: Dec 3 15:47 2008

Vial: 24
Operator:
Inst : GCMS_L
Multiplr: 1.00

Quant Results File: 081203_BP.

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D
Acq On : 3 Dec 2008 3:12 pm
Sample : ICV/LCS V111908D/V112608B
Misc : V120308A
MS Integration Params: RTEINT.P

Vial: 24
Operator:
Inst : GCMS_L
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Tert-Butyl Alcohol-d9	1.000	1.000	0.0	106	-0.01
2	T	Ethanol	0.157	0.155	1.3	113	0.00
3	T	Tert-Butyl Alcohol (TBA)	1.084	0.937	13.6	99	0.00
4	I	Pentafluorobenzene	1.000	1.000	0.0	115	0.00
5	T	Dichlorodifluoromethane	0.575	0.619	-7.7	125	0.00
6	P	Chloromethane	0.618	0.661	-7.0	121	0.00
7	CCC	Vinyl Chloride	0.613	0.668	-9.0	123	0.00
8	T	Bromomethane	0.410	0.418	-2.0	122	0.00
9	T	Chloroethane	0.359	0.386	-7.5	124	0.00
10	T	Trichlorofluoromethane	0.975	0.954	2.2	111	0.00
11	T	Diethyl Ether	0.194	0.177	8.8	102	0.00
12	T	Acetone	0.046	0.043#	6.5	114	0.00
13	T	Iodomethane	0.402	0.576	-43.3#	146	0.00
14	CCC	1,1-Dichloroethene	0.723	0.738	-2.1	113	0.00
15	T	1,1,2-Trichloro-1,2,2-Trifl	0.479	0.499	-4.2	116	0.00
16	T	Carbon Disulfide	1.312	1.380	-5.2	113	0.00
17	T	Acetonitrile	0.812	0.838	-3.2	116	0.00
18	T	Acrylonitrile	0.061	0.053#	13.1	102	0.00
19	T	Allyl Chloride	0.813	0.824	-1.4	114	0.00
20	T	Acrolein	0.017	0.018#	-5.9	115	0.00
21	T	Methyl Acetate	0.157	0.132	15.9	102	0.00
22	T	Methylene Chloride	0.413	0.398	3.6	107	0.00
23	T	t-1,2-Dichloroethene	0.490	0.491	-0.2	112	0.00
24	T	Isobutyl Alcohol	0.147	0.132	10.2	102	0.00
25	T	Methyl-t-Butyl Ether (MTBE)	0.764	0.695	9.0	103	0.00
26	T	Hexane	0.727	0.763	-5.0	118	0.00
27	P	1,1-Dichloroethane	0.903	0.862	4.5	108	0.00
28	T	Vinyl Acetate	0.047	0.044#	6.4	106	0.00
29	T	Diisopropyl Ether (DIPE)	1.333	1.292	3.1	110	0.00
30	T	Chloroprene	0.856	0.873	-2.0	110	0.00
31	T	Ethyl-t-Butyl Ether (ETBE)	0.929	0.879	5.4	104	0.00
32	T	c-1,2-Dichloroethene	0.482	0.475	1.5	111	0.00
33	T	2,2-Dichloropropane	0.799	0.769	3.8	111	0.00
34	T	2-Butanone	0.075	0.071#	5.3	123	-0.01
35	T	Propionitrile	0.019	0.019#	0.0	99	-0.01
36	T	Methacrylonitrile	0.120	0.111	7.5	105	0.00
37	T	Propanedinitrile	0.022	0.020#	9.1	104	0.00
38	T	Bromochloromethane	0.232	0.221	4.7	104	0.00
39	T	Tetrahydrofuran	0.048	0.044#	8.3	113	0.00
40	CCC	Chloroform	0.832	0.790	5.0	106	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D
Acq On : 3 Dec 2008 3:12 pm
Sample : ICV/LCS V111908D/V112608B
Misc : V120308A
MS Integration Params: RTEINT.P

Vial: 24
Operator:
Inst : GCMS_L
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	S	Dibromofluoromethane	0.394	0.380	3.6	107	0.00
42	T	1,1,1-Trichloroethane	0.787	0.750	4.7	106	0.00
43	T	Cyclohexane	0.765	0.726	5.1	112	0.00
44	T	1,1-Dichloropropene	0.658	0.660	-0.3	110	0.00
45	T	Carbon Tetrachloride	0.670	0.658	1.8	108	0.00
46	S	1,2-Dichloroethane-d4	0.381	0.340	10.8	100	0.00
47	I	1,4-Difluorobenzene	1.000	1.000	0.0	109	0.00
48	T	Benzene	1.352	1.358	-0.4	107	0.00
49	T	1,2-Dichloroethane	0.349	0.313	10.3	97	0.00
50	T	Tert-Amyl-Methyl Ether (TAM	0.536	0.501	6.5	97	0.00
51	T	Thiophene	0.588	0.586	0.3	105	0.00
52	T	Trichloroethene	0.339	0.342	-0.9	105	0.00
53	CCC	1,2-Dichloropropane	0.302	0.282	6.6	99	0.00
54	T	Methylcyclohexane	0.597	0.602	-0.8	109	0.00
55	T	Dibromomethane	0.110	0.102	7.3	96	0.00
56	T	Methyl Methacrylate	0.079	0.075#	5.1	101	0.00
57	T	Bromodichloromethane	0.377	0.350	7.2	102	0.00
58	T	2-Chloroethyl Vinyl Ether	0.095	0.082#	13.7	101	0.00
59	T	c-1,3-Dichloropropene	0.392	0.378	3.6	104	0.00
60	S	Toluene-d8	1.062	1.110	-4.5	113	0.00
61	CCC	Toluene	1.255	1.279	-1.9	105	0.00
62	T	4-Methyl-2-Pentanone	0.006	0.009#	-50.0#	207#	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	106	0.00
64	T	t-1,3-Dichloropropene	0.374	0.371	0.8	101	0.00
65	T	Ethyl Methacrylate	0.205	0.200	2.4	96	0.00
66	T	1,1,2-Trichloroethane	0.166	0.162	2.4	97	0.00
67	T	Tetrachloroethene	0.568	0.574	-1.1	108	0.00
68	T	1,3-Dichloropropane	0.388	0.374	3.6	96	0.00
69	T	2-Hexanone	0.034	0.032#	5.9	97	0.00
70	T	Dibromochloromethane	0.249	0.250	-0.4	105	0.00
71	T	1,2-Dibromoethane	0.190	0.183	3.7	100	0.00
72	P	Chlorobenzene	1.001	0.988	1.3	102	0.00
73	T	1,1,1,2-Tetrachloroethane	0.361	0.365	-1.1	104	0.00
74	CCC	Ethylbenzene	1.725	1.861	-7.9	109	0.00
75	T	p/m-Xylene	1.313	1.380	-5.1	106	0.00
76	T	o-Xylene	1.267	1.347	-6.3	105	0.00
77	T	Styrene	0.970	1.039	-7.1	103	0.00
78	P	Bromoform	0.107	0.121	-13.1	98	0.00
79	T	Isopropylbenzene	1.665	1.854	-11.4	108	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D
Acq On : 3 Dec 2008 3:12 pm
Sample : ICV/LCS V111908D/V112608B
Misc : V120308A
MS Integration Params: RTEINT.P

Vial: 24
Operator:
Inst : GCMS_L
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
80	S	1,4-Bromofluorobenzene	0.395	0.414	-4.8	107	0.00
81	T	1,2,3-Trichloropropane	0.223	0.228	-2.2	95	0.00
82	T	Bromobenzene	0.388	0.405	-4.4	103	0.00
83	T	n-Propylbenzene	1.934	2.096	-8.4	105	0.00
84	T	t-1,4-Dichloro-2-Butene	0.049	0.051#	-4.1	97	0.00
85	T	2-Chlorotoluene	1.093	1.165	-6.6	107	0.00
86	T	1,3,5-Trimethylbenzene	1.335	1.456	-9.1	107	0.00
87	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	0.00
88	T	4-Chlorotoluene	2.457	2.614	-6.4	106	0.00
89	P	1,1,2,2-Tetrachloroethane	0.356	0.343	3.7	97	0.00
90	T	1,2,4-Trimethylbenzene	2.474	2.675	-8.1	105	0.00
91	T	tert-Butylbenzene	2.578	2.791	-8.3	105	0.00
92	T	p-Isopropyltoluene	2.981	3.237	-8.6	108	0.00
93	T	sec-Butylbenzene	3.445	3.829	-11.1	110	0.00
94	T	1,3-Dichlorobenzene	1.492	1.552	-4.0	103	0.00
95	T	1,4-Dichlorobenzene	1.535	1.494	2.7	99	0.00
96	T	1,2-Dichlorobenzene	1.247	1.225	1.8	98	0.00
97	T	n-Butylbenzene	2.641	2.850	-7.9	107	0.00
98	T	1,2-Dibromo-3-Chloropropane	0.043	0.043#	0.0	104	0.00
99	T	1,2,4-Trichlorobenzene	0.905	0.913	-0.9	101	0.00
100	T	Hexachloro-1,3-Butadiene	0.778	0.793	-1.9	106	0.00
101	T	Naphthalene	1.018	0.956	6.1	89	0.00
102	T	1,2,3-Trichlorobenzene	0.905	0.913	-0.9	101	0.00

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\081210\10DEC002.D Vial: 17
Acq On : 10 Dec 2008 11:08 am Operator:
Sample : CCV 10PPB V120408A/V120508A Inst : GCMS_L
Misc : V120308A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 10 11:33:20 2008 Quant Results File: 081203_BP.RES

Quant Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Tert-Butyl Alcohol-d9	3.9052	65	25587	50.0000 ug/l	0
4) Pentafluorobenzene	6.3990	168	335115	10.0000 ug/l	0
47) 1,4-Difluorobenzene	7.3348	114	423751	10.0000 ug/l	0
63) Chlorobenzene-d5	10.9212	117	311193	10.0000 ug/l	0
87) 1,4-Dichlorobenzene-d4	13.7966	152	178836	10.0000 ug/l	0

System Monitoring Compounds					
41) Dibromofluoromethane	6.2996	113	122206	9.25 ug/l	0.0
Spiked Amount 10.000	Range 53 - 141		Recovery	= 92.50%	
46) 1,2-Dichloroethane-d4	6.7388	65	113353	8.87 ug/l	0.0
Spiked Amount 10.000	Range 50 - 150		Recovery	= 88.70%	
60) Toluene-d8	9.1646	98	430312	9.56 ug/l	0.0
Spiked Amount 10.000	Range 69 - 134		Recovery	= 95.60%	
80) 1,4-Bromofluorobenzene	12.3641	95	126218	10.28 ug/l	0.0
Spiked Amount 10.000	Range 51 - 152		Recovery	= 102.80%	

Target Compounds					Qvalue
2) Ethanol	2.7655	45	7292	90.6718 ug/l	
3) Tert-Butyl Alcohol (TBA)	4.0307	59	25561	46.0946 ug/l	
5) Dichlorodifluoromethane	1.5579	85	187758	9.7401 ug/l	
6) Chloromethane	1.7304	50	201811	9.7513 ug/l	
7) Vinyl Chloride	1.8402	62	237613	11.5589 ug/l	
8) Bromomethane	2.1748	94	142581	10.3781 ug/l	
9) Chloroethane	2.2845	64	120217	9.9791 ug/l	
10) Trichlorofluoromethane	2.5721	101	306865	9.3912 ug/l	
11) Diethyl Ether	2.9015	45	65452	10.0888 ug/l	
12) Acetone	3.2151	43	13892	8.9249 ug/l	
13) Iodomethane	3.3458	142	196241	14.5809 ug/l	
14) 1,1-Dichloroethene	3.1681	61	263710	10.8854 ug/l	
15) 1,1,2-Trichloro-1,2,2-Trif	3.1837	101	185267	11.5359 ug/l	
16) Carbon Disulfide	3.4347	76	516116	11.7358 ug/l	
17) Acetonitrile	3.6334	41	277535	10.1942 ug/l	
18) Acrylonitrile	4.1509	53	21307	10.4953 ug/l	
19) Allyl Chloride	3.6334	41	273501	10.0344 ug/l	
20) Acrolein	3.0269	56	16883	28.9705 ug/l	
21) Methyl Acetate	3.6804	43	50942	9.6677 ug/l	
22) Methylene Chloride	3.8007	84	146730	10.5955 ug/l	
23) t-1,2-Dichloroethene	4.2241	96	171436	10.4321 ug/l	
24) Isobutyl Alcohol	3.6804	43	50940	10.3308 ug/l	
25) Methyl-t-Butyl Ether (MTBE	4.2555	73	266879	10.4284 ug/l	
26) Hexane	4.6581	57	263581	10.8193 ug/l	
27) 1,1-Dichloroethane	4.8254	63	305965	10.1109 ug/l	

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\081210\10DEC002.D Vial: 17
Acq On : 10 Dec 2008 11:08 am Operator:
Sample : CCV 10PPB V120408A/V120508A Inst : GCMS_L
Misc : V120308A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 10 11:33:20 2008 Quant Results File: 081203_BP.RES

Quant Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
28) Vinyl Acetate	4.9404	86	16875	10.7640 ug/l	#
29) Diisopropyl Ether (DIPE)	5.0031	45	428836	9.5981 ug/l	
30) Chloroprene	4.9665	53	300107	10.4574 ug/l	
31) Ethyl-t-Butyl Ether (ETBE)	5.5155	59	318961	10.2436 ug/l	
32) c-1,2-Dichloroethene	5.6514	96	171479	10.6234 ug/l	
33) 2,2-Dichloropropane	5.6461	77	273892	10.2248 ug/l	
34) 2-Butanone	5.7036	43	24188	9.5944 ug/l	
35) Propionitrile	5.7455	54	6412	9.8754 ug/l	
36) Methacrylonitrile	5.9650	41	40018	9.9800 ug/l	
37) Propanedinitrile	5.9546	66	7643	10.1865 ug/l	#
38) Bromochloromethane	5.9650	130	82765	10.6227 ug/l	
39) Tetrahydrofuran	6.0644	42	16107	10.0872 ug/l	
40) Chloroform	6.0957	83	278701	9.9983 ug/l	
42) 1,1,1-Trichloroethane	6.3362	97	268168	10.1659 ug/l	
43) Cyclohexane	6.4147	84	269780	10.5269 ug/l	
44) 1,1-Dichloropropene	6.5558	75	228751	10.3767 ug/l	
45) Carbon Tetrachloride	6.5558	117	235555	10.4853 ug/l	
48) Benzene	6.8172	78	621764	10.8529 ug/l	
49) 1,2-Dichloroethane	6.8329	62	149508	10.1153 ug/l	
50) Tert-Amyl-Methyl Ether (TA	7.0159	73	248470	10.9389 ug/l	
51) Thiophene	7.0786	84	274905	11.0351 ug/l	
52) Trichloroethene	7.6537	95	160710	11.1719 ug/l	
53) 1,2-Dichloropropane	7.9203	63	132931	10.3753 ug/l	
54) Methylcyclohexane	7.9046	83	278941	11.0240 ug/l	
55) Dibromomethane	8.0615	93	52139	11.1787 ug/l	
56) Methyl Methacrylate	8.1137	69	38370	11.4972 ug/l	
57) Bromodichloromethane	8.2706	83	159086	9.9693 ug/l	
58) 2-Chloroethyl Vinyl Ether	8.6627	63	37867	9.3585 ug/l	
59) c-1,3-Dichloropropene	8.8300	75	165126	9.9461 ug/l	
61) Toluene	9.2482	91	583606	10.9760 ug/l	
62) 4-Methyl-2-Pentanone	9.1698	58	3363	12.9323 ug/l	
64) t-1,3-Dichloropropene	9.5096	75	130194	11.1856 ug/l	
65) Ethyl Methacrylate	9.6560	69	72346	11.3438 ug/l	
66) 1,1,2-Trichloroethane	9.7292	83	61513	11.8726 ug/l	
67) Tetrachloroethene	9.9227	166	210458	11.9028 ug/l	
68) 1,3-Dichloropropane	9.9279	76	133474	11.0660 ug/l	
69) 2-Hexanone	10.0586	58	11229	10.5625 ug/l	
70) Dibromochloromethane	10.2102	129	92316	11.8900 ug/l	
71) 1,2-Dibromoethane	10.3409	107	67568	11.4396 ug/l	
72) Chlorobenzene	10.9578	112	362758	11.6437 ug/l	
73) 1,1,1,2-Tetrachloroethane	11.0624	131	129381	11.5267 ug/l	

(#) = qualifier out of range (m) = manual integration

Data File : C:\MSDCHEM\1\DATA\081210\10DEC002.D Vial: 17
Acq On : 10 Dec 2008 11:08 am Operator:
Sample : CCV 10PPB V120408A/V120508A Inst : GCMS_L
Misc : V120308A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 10 11:33:20 2008 Quant Results File: 081203_BP.RES

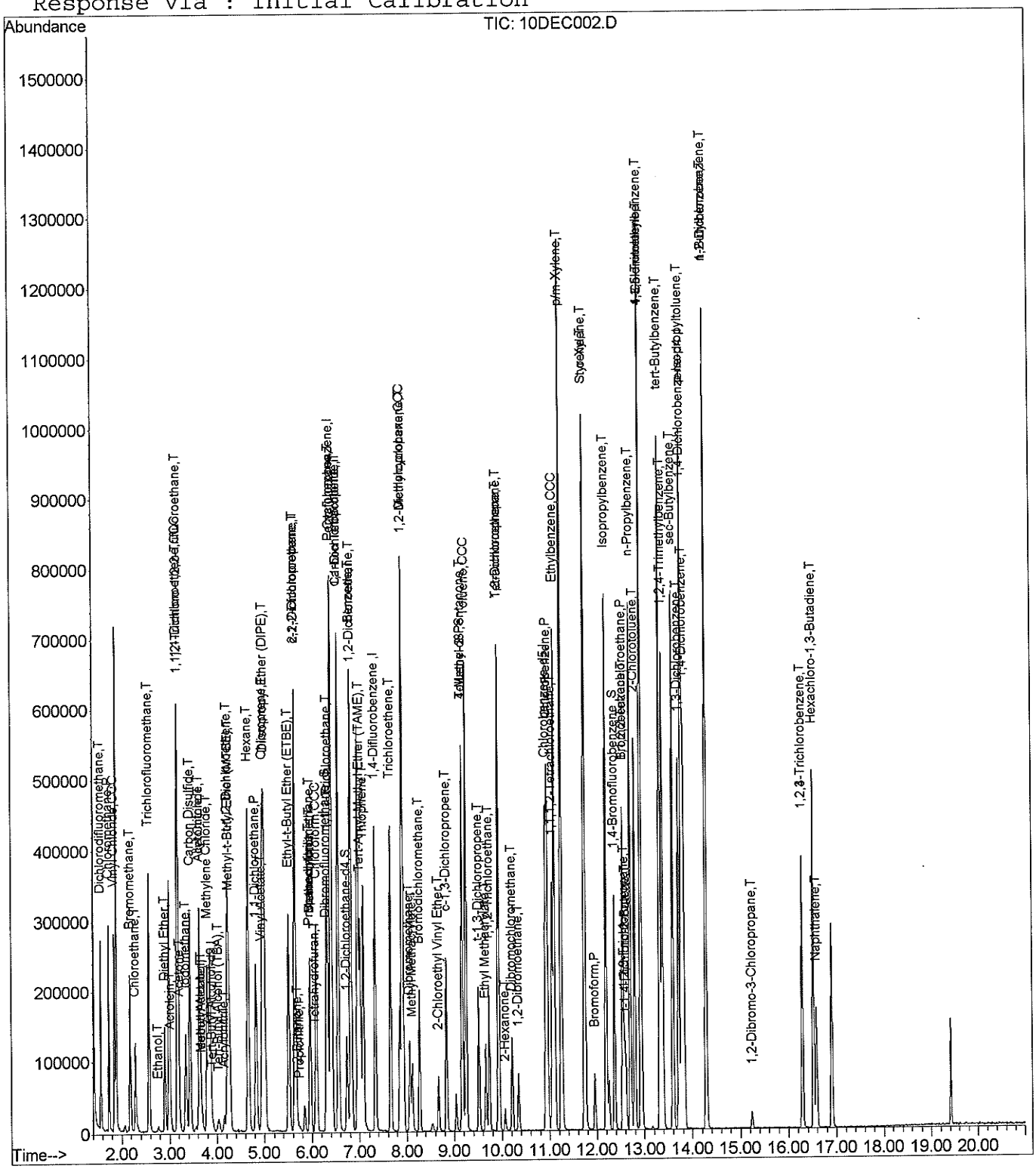
Quant Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
74) Ethylbenzene	11.1042	91	631907	11.7739 ug/l	
75) p/m-Xylene	11.2506	91	953370	23.3342 ug/l	
76) o-Xylene	11.7315	91	460012	11.6628 ug/l	
77) Styrene	11.7472	104	374121	12.3897 ug/l	
78) Bromoform	11.9511	173	50177	15.1270 ug/l	
79) Isopropylbenzene	12.1916	105	618066	11.9301 ug/l	
81) 1,2,3-Trichloropropane	12.5889	75	88507	12.7735 ug/l	
82) Bromobenzene	12.5471	156	151282	12.5401 ug/l	
83) n-Propylbenzene	12.6987	91	734261	12.1975 ug/l	
84) t-1,4-Dichloro-2-Butene	12.6098	53	18976	12.5268 ug/l	
85) 2-Chlorotoluene	12.7928	91	405626	11.9221 ug/l	
86) 1,3,5-Trimethylbenzene	12.9183	105	537705	12.9453 ug/l	
88) 4-Chlorotoluene	12.9288	91	504687	11.4843 ug/l	
89) 1,1,2,2-Tetrachloroethane	12.5419	83	71796	11.2778 ug/l	
90) 1,2,4-Trimethylbenzene	13.3783	105	489621	11.0656 ug/l	
91) tert-Butylbenzene	13.3209	119	519769	11.2750 ug/l	
92) p-Isopropyltoluene	13.7757	119	602030	11.2938 ug/l	
93) sec-Butylbenzene	13.5927	105	685621	11.1277 ug/l	
94) 1,3-Dichlorobenzene	13.7182	146	304618	11.4202 ug/l	
95) 1,4-Dichlorobenzene	13.8227	146	297425	10.8372 ug/l	
96) 1,2-Dichlorobenzene	14.2828	146	249400	11.1829 ug/l	
97) n-Butylbenzene	14.2828	91	511087	10.8228 ug/l	
98) 1,2-Dibromo-3-Chloropropan	15.2448	75	8402	10.8413 ug/l	
99) 1,2,4-Trichlorobenzene	16.2904	180	179832	11.1089 ug/l	
100) Hexachloro-1,3-Butadiene	16.5204	225	147562	10.6113 ug/l	
101) Naphthalene	16.5883	128	199053	10.9287 ug/l	
102) 1,2,3-Trichlorobenzene	16.2904	180	179832	11.1078 ug/l	

(#) = qualifier out of range (m) = manual integration

Data File : C:\MSDCHEM\1\DATA\081210\10DEC002.D Vial: 17
Acq On : 10 Dec 2008 11:08 am Operator:
Sample : CCV 10PPB V120408A/V120508A Inst : GCMS_L
Misc : V120308A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 10 11:33 2008 Quant Results File: 081203_BP.

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\081210\10DEC002.D
Acq On : 10 Dec 2008 11:08 am
Sample : CCV 10PPB V120408A/V120508A
Misc : V120308A
MS Integration Params: RTEINT.P

Vial: 17
Operator:
Inst : GCMS_L
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Tert-Butyl Alcohol-d9	1.000	1.000	0.0	94	0.00
2	T	Ethanol	0.157	0.142	9.6	92	0.00
3	T	Tert-Butyl Alcohol (TBA)	1.084	0.999	7.8	93	0.00
4	I	Pentafluorobenzene	1.000	1.000	0.0	91	0.00
5	T	Dichlorodifluoromethane	0.575	0.560	2.6	90	0.00
6	P	Chloromethane	0.618	0.602	2.6	87	0.00
7	CCC	Vinyl Chloride	0.613	0.709	-15.7	103	0.00
8	T	Bromomethane	0.410	0.425	-3.7	98	0.00
9	T	Chloroethane	0.359	0.359	0.0	91	0.00
10	T	Trichlorofluoromethane	0.975	0.916	6.1	84	0.00
11	T	Diethyl Ether	0.194	0.195	-0.5	89	0.00
12	T	Acetone	0.046	0.041#	10.9	87	0.00
13	T	Iodomethane	0.402	0.586	-45.8#	117	0.00
14	CCC	1,1-Dichloroethene	0.723	0.787	-8.9	95	0.00
15	T	1,1,2-Trichloro-1,2,2-Trifl	0.479	0.553	-15.4	101	0.00
16	T	Carbon Disulfide	1.312	1.540	-17.4	99	0.00
17	T	Acetonitrile	0.812	0.828	-2.0	90	0.00
18	T	Acrylonitrile	0.061	0.064#	-4.9	97	-0.01
19	T	Allyl Chloride	0.813	0.816	-0.4	89	0.00
20	T	Acrolein	0.017	0.025#	-47.1#	125	0.00
21	T	Methyl Acetate	0.157	0.152	3.2	93	0.00
22	T	Methylene Chloride	0.413	0.438	-6.1	93	0.00
23	T	t-1,2-Dichloroethene	0.490	0.512	-4.5	92	0.00
24	T	Isobutyl Alcohol	0.147	0.152	-3.4	93	0.00
25	T	Methyl-t-Butyl Ether (MTBE)	0.764	0.796	-4.2	93	0.00
26	T	Hexane	0.727	0.787	-8.3	96	0.00
27	P	1,1-Dichloroethane	0.903	0.913	-1.1	91	0.00
28	T	Vinyl Acetate	0.047	0.050#	-6.4	96	0.00
29	T	Diisopropyl Ether (DIPE)	1.333	1.280	4.0	86	0.00
30	T	Chloroprene	0.856	0.896	-4.7	89	0.00
31	T	Ethyl-t-Butyl Ether (ETBE)	0.929	0.952	-2.5	89	0.00
32	T	c-1,2-Dichloroethene	0.482	0.512	-6.2	94	0.00
33	T	2,2-Dichloropropane	0.799	0.817	-2.3	93	0.00
34	T	2-Butanone	0.075	0.072#	4.0	99	0.00
35	T	Propionitrile	0.019	0.019#	0.0	78	0.00
36	T	Methacrylonitrile	0.120	0.119	0.8	89	0.00
37	T	Propanedinitrile	0.022	0.023#	-4.5	95	0.00
38	T	Bromochloromethane	0.232	0.247	-6.5	92	0.00
39	T	Tetrahydrofuran	0.048	0.048#	0.0	98	0.00
40	CCC	Chloroform	0.832	0.832	0.0	88	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\081210\10DEC002.D
Acq On : 10 Dec 2008 11:08 am
Sample : CCV 10PPB V120408A/V120508A
Misc : V120308A
MS Integration Params: RTEINT.P

Vial: 17
Operator:
Inst : GCMS_L
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	S	Dibromofluoromethane	0.394	0.365	7.4	81	0.00
42	T	1,1,1-Trichloroethane	0.787	0.800	-1.7	90	0.00
43	T	Cyclohexane	0.765	0.805	-5.2	98	0.00
44	T	1,1-Dichloropropene	0.658	0.683	-3.8	90	0.00
45	T	Carbon Tetrachloride	0.670	0.703	-4.9	91	0.00
46	S	1,2-Dichloroethane-d4	0.381	0.338	11.3	79	0.00
47	I	1,4-Difluorobenzene	1.000	1.000	0.0	84	0.00
48	T	Benzene	1.352	1.467	-8.5	90	0.00
49	T	1,2-Dichloroethane	0.349	0.353	-1.1	84	0.00
50	T	Tert-Amyl-Methyl Ether (TAM	0.536	0.586	-9.3	88	0.00
51	T	Thiophene	0.588	0.649	-10.4	91	0.00
52	T	Trichloroethene	0.339	0.379	-11.8	91	0.00
53	CCC	1,2-Dichloropropane	0.302	0.314	-4.0	85	0.00
54	T	Methylcyclohexane	0.597	0.658	-10.2	92	0.00
55	T	Dibromomethane	0.110	0.123	-11.8	90	0.00
56	T	Methyl Methacrylate	0.079	0.091#	-15.2	95	0.00
57	T	Bromodichloromethane	0.377	0.375	0.5	85	0.00
58	T	2-Chloroethyl Vinyl Ether	0.095	0.089#	6.3	86	0.00
59	T	c-1,3-Dichloropropene	0.392	0.390	0.5	83	0.00
60	S	Toluene-d8	1.062	1.015	4.4	80	0.00
61	CCC	Toluene	1.255	1.377	-9.7	88	0.00
62	T	4-Methyl-2-Pentanone	0.006	0.008#	-33.3#	141	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	78	0.00
64	T	t-1,3-Dichloropropene	0.374	0.418	-11.8	84	0.00
65	T	Ethyl Methacrylate	0.205	0.232	-13.2	83	0.00
66	T	1,1,2-Trichloroethane	0.166	0.198	-19.3	87	0.00
67	T	Tetrachloroethene	0.568	0.676	-19.0	93	0.00
68	T	1,3-Dichloropropane	0.388	0.429	-10.6	81	0.00
69	T	2-Hexanone	0.034	0.036#	-5.9	80	0.00
70	T	Dibromochloromethane	0.249	0.297	-19.3	92	0.00
71	T	1,2-Dibromoethane	0.190	0.217	-14.2	88	0.00
72	P	Chlorobenzene	1.001	1.166	-16.5	89	0.00
73	T	1,1,1,2-Tetrachloroethane	0.361	0.416	-15.2	87	0.00
74	CCC	Ethylbenzene	1.725	2.031	-17.7	88	0.00
75	T	p/m-Xylene	1.313	1.532	-16.7	87	0.00
76	T	o-Xylene	1.267	1.478	-16.7	85	0.00
77	T	Styrene	0.970	1.202	-23.9#	88	0.00
78	P	Bromoform	0.107	0.161	-50.5#	96	0.00
79	T	Isopropylbenzene	1.665	1.986	-19.3	86	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\081210\10DEC002.D
Acq On : 10 Dec 2008 11:08 am
Sample : CCV 10PPB V120408A/V120508A
Misc : V120308A
MS Integration Params: RTEINT.P

Vial: 17
Operator:
Inst : GCMS_L
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
80	S	1,4-Bromofluorobenzene	0.395	0.406	-2.8	77	0.00
81	T	1,2,3-Trichloropropane	0.223	0.284	-27.4#	87	0.00
82	T	Bromobenzene	0.388	0.486	-25.3#	91	0.00
83	T	n-Propylbenzene	1.934	2.360	-22.0#	87	0.00
84	T	t-1,4-Dichloro-2-Butene	0.049	0.061#	-24.5#	86	0.00
85	T	2-Chlorotoluene	1.093	1.303	-19.2	88	0.00
86	T	1,3,5-Trimethylbenzene	1.335	1.728	-29.4#	93	0.00
87	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	81	0.00
88	T	4-Chlorotoluene	2.457	2.822	-14.9	91	0.00
89	P	1,1,2,2-Tetrachloroethane	0.356	0.401	-12.6	91	0.00
90	T	1,2,4-Trimethylbenzene	2.474	2.738	-10.7	86	0.00
91	T	tert-Butylbenzene	2.578	2.906	-12.7	87	0.00
92	T	p-Isopropyltoluene	2.981	3.366	-12.9	89	0.00
93	T	sec-Butylbenzene	3.445	3.834	-11.3	88	0.00
94	T	1,3-Dichlorobenzene	1.492	1.703	-14.1	90	0.00
95	T	1,4-Dichlorobenzene	1.535	1.663	-8.3	88	0.00
96	T	1,2-Dichlorobenzene	1.247	1.395	-11.9	89	0.00
97	T	n-Butylbenzene	2.641	2.858	-8.2	85	0.00
98	T	1,2-Dibromo-3-Chloropropane	0.043	0.047#	-9.3	92	0.00
99	T	1,2,4-Trichlorobenzene	0.905	1.006	-11.2	89	0.00
100	T	Hexachloro-1,3-Butadiene	0.778	0.825	-6.0	88	0.00
101	T	Naphthalene	1.018	1.113	-9.3	82	0.00
102	T	1,2,3-Trichlorobenzene	0.905	1.006	-11.2	89	0.00

Work Order#: 08-12-0585

Client: WEISS Associates

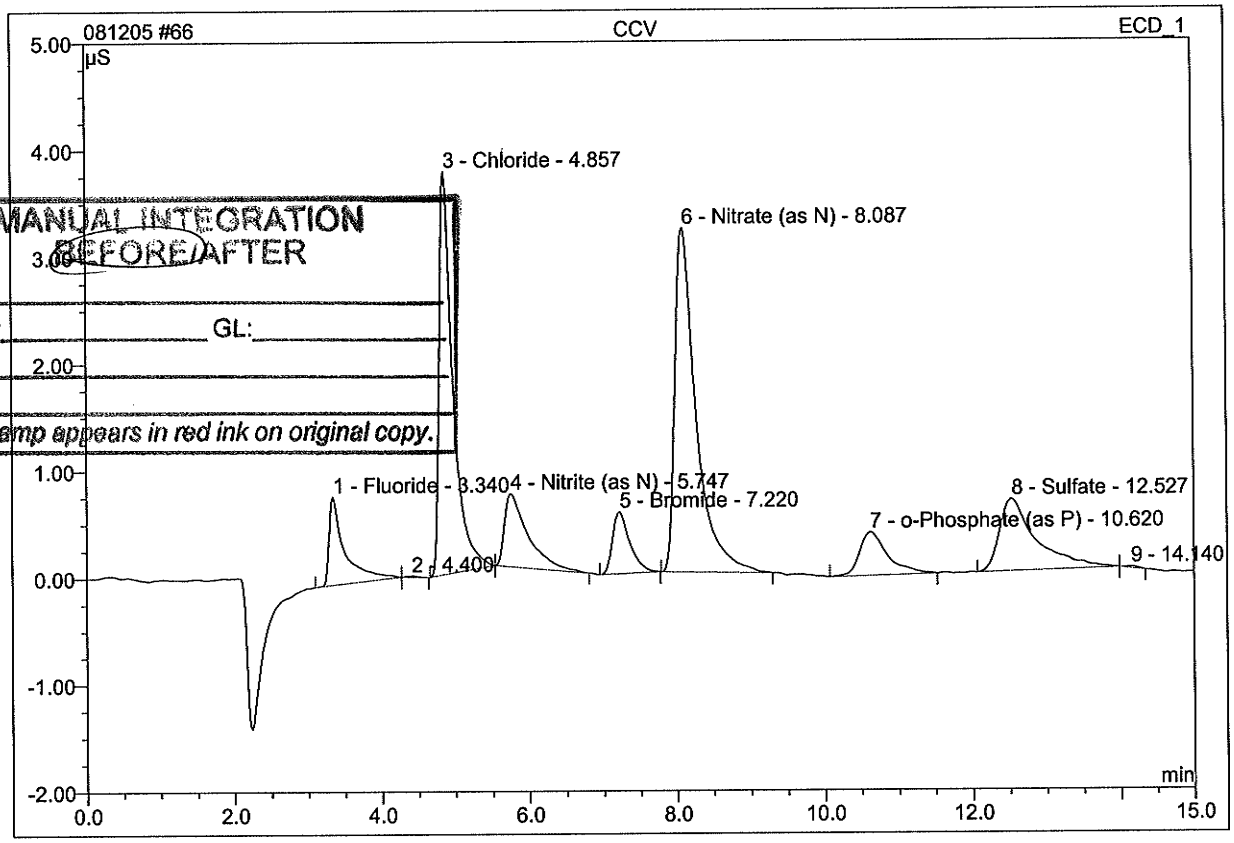
EPA 300.0

Calibration

Operator:Eleo Ng Timebase:ICS_1000 Sequence:081205

66 CCV

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**0**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**AS14 US EPA Method 300_0**	*Bandwidth:*	**n.a.**
Quantif. Method:	**AS14 US EPA Method 300_0**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/6/2008 2:40**	*Sample Weight:*	**1.0000**
Run Time (min):	**15.00**	*Sample Amount:*	**1.0000**



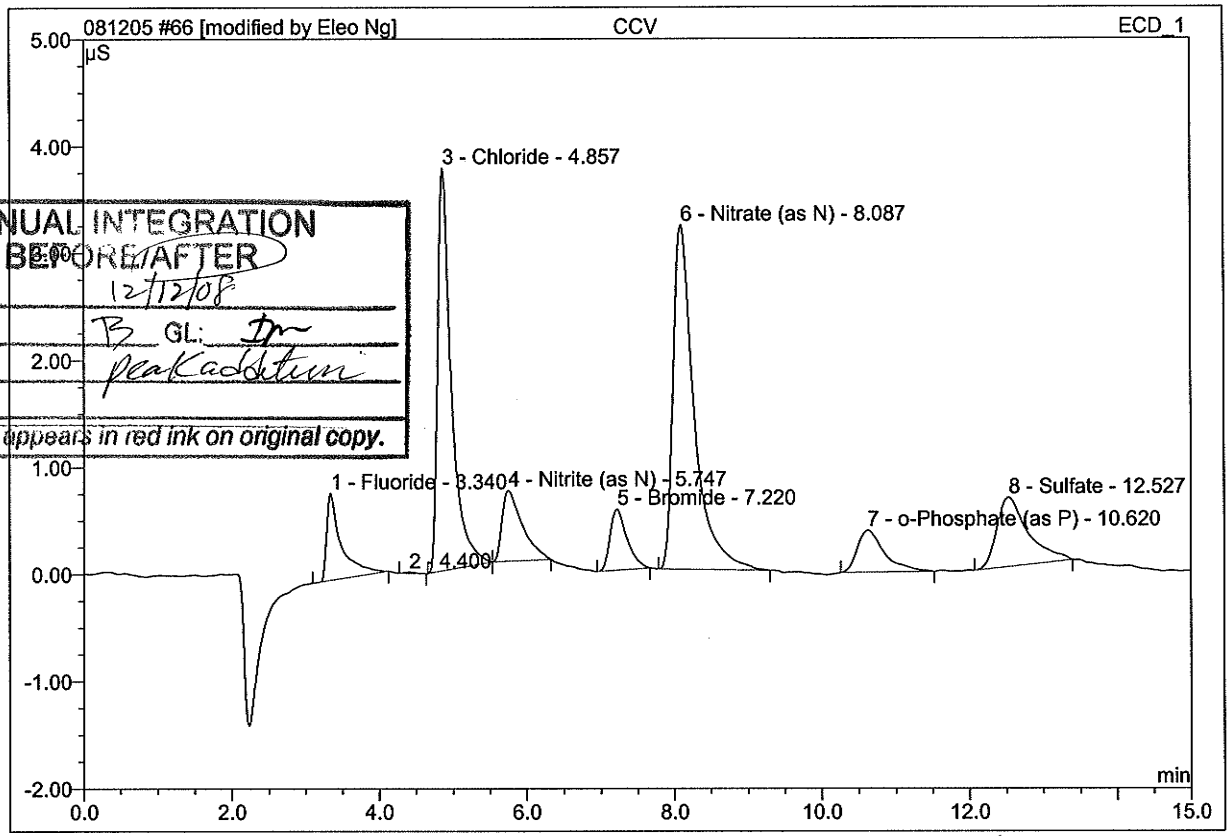
MANUAL INTEGRATION
BEFORE/AFTER
Date:
Chemist: GL:
Reason:
This stamp appears in red ink on original copy.

No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.34	Fluoride	0.821	0.203	6.66	1.180	BMb
2	4.40	n.a.	0.011	0.002	0.06	n.a.	bMB
3	4.86	Chloride	3.765	0.808	26.44	3.843	BMb
4	5.75	Nitrite (as N)	0.680	0.250	8.20	1.423	bMB
5	7.22	Bromide	0.577	0.158	5.18	2.135	BMB
6	8.09	Nitrate (as N)	3.219	1.065	34.87	2.077	BMB
7	10.62	o-Phosphate (as P)	0.405	0.178	5.81	1.174	BMB
8	12.53	Sulfate	0.671	0.387	12.67	4.923	BMB
9	14.14	n.a.	0.016	0.003	0.10	n.a.	bMB
Total:			10.166	3.055	100.00	16.756	

Operator:Eleo Ng Timebase:ICS_1000 Sequence:081205

66 CCV

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**0**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**AS14 US EPA Method 300_0**	*Bandwidth:*	**n.a.**
Quantif. Method:	**AS14 US EPA Method 300_0**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/6/2008 2:40**	*Sample Weight:*	**1.0000**
Run Time (min):	**15.00**	*Sample Amount:*	**1.0000**



MANUAL INTEGRATION
BEFORE/AFTER
Date: 12/12/08
Chemist: B GL: Dm
Reason: peak addition
This stamp appears in red ink on original copy.

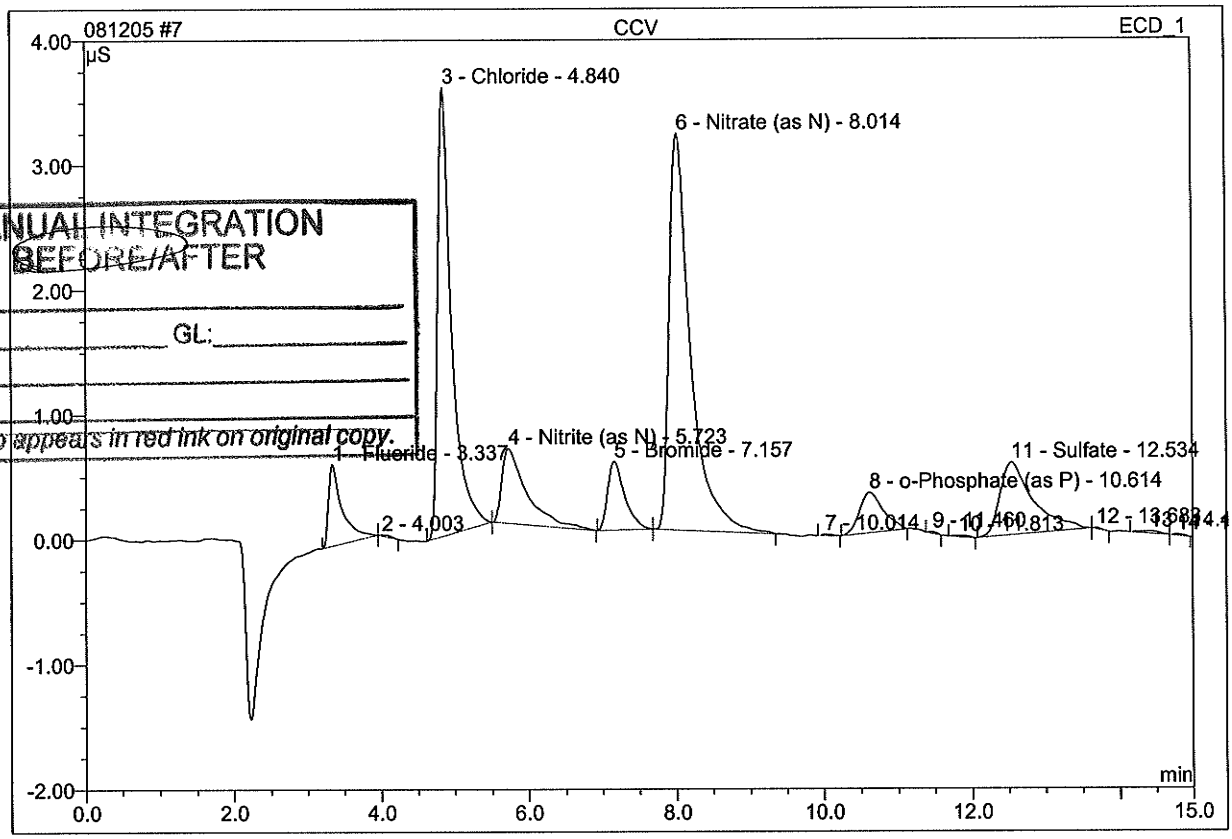
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.34	Fluoride	0.815	0.187	6.42	1.085	BMB*
2	4.40	n.a.	0.011	0.002	0.07	n.a.	BMB*
3	4.86	Chloride	3.765	0.808	27.75	3.843	BMb
4	5.75	Nitrite (as N)	0.661	0.210	7.22	1.195	bMB*
5	7.22	Bromide	0.572	0.153	5.25	2.059	BMB*
6	8.09	Nitrate (as N)	3.219	1.065	36.61	2.077	BMB
7	10.62	o-Phosphate (as P)	0.394	0.166	5.71	1.100	BMB*
8	12.53	Sulfate	0.646	0.319	10.96	4.056	BMB*
Total:			10.083	2.910	100.00	15.415	

Operator:Eleo Ng Timebase:ICS_1000 Sequence:081205

12/12/2008 11:51 AM

7 CCV

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**0**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**AS14 US EPA Method 300_0**	*Bandwidth:*	**n.a.**
Quantif. Method:	**AS14 US EPA Method 300_0**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/5/2008 9:33**	*Sample Weight:*	**1.0000**
Run Time (min):	**15.00**	*Sample Amount:*	**1.0000**



MANUAL INTEGRATION BEFORE/AFTER
Date:
Chemist: GL:
Reason:
This stamp appears in red ink on original copy.

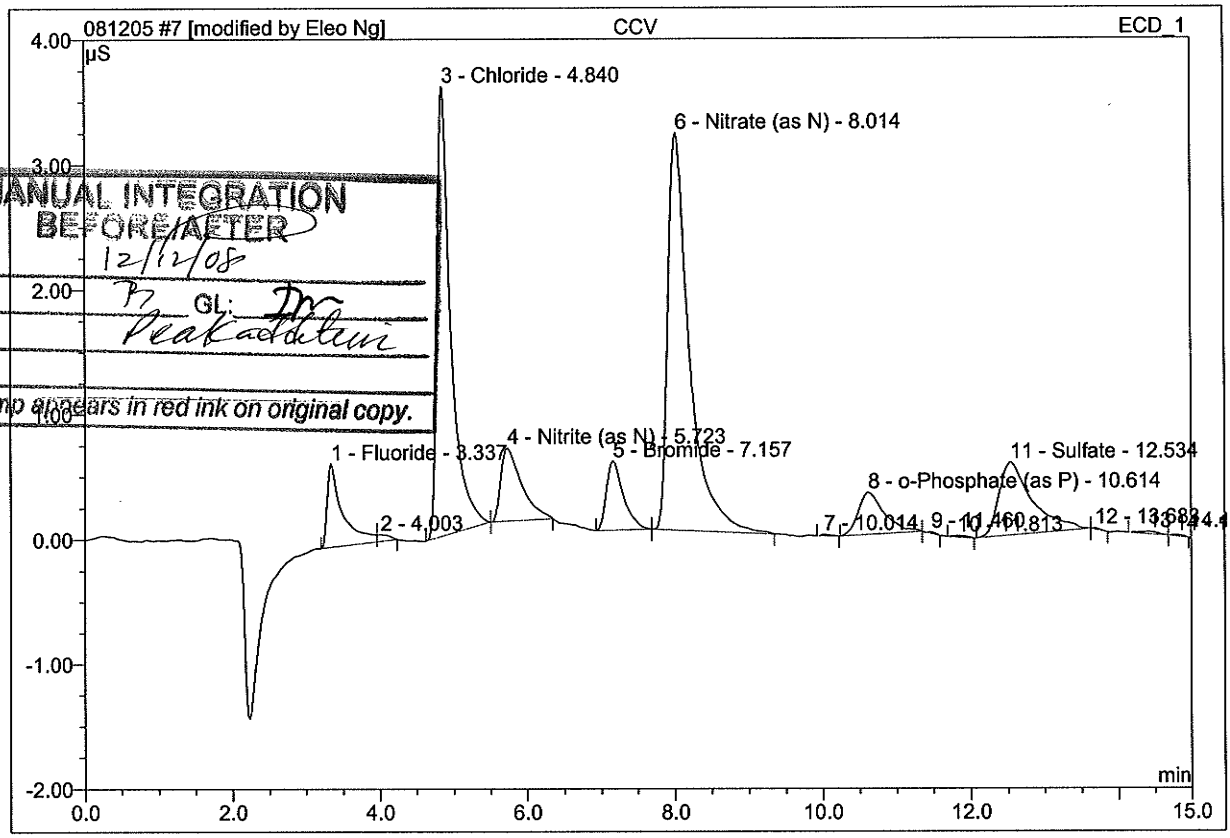
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.34	Fluoride	0.655	0.140	4.97	0.813	BMb
2	4.00	n.a.	0.007	0.002	0.08	n.a.	bMB
3	4.84	Chloride	3.594	0.790	27.99	3.759	BMb
4	5.72	Nitrite (as N)	0.600	0.234	8.30	1.331	bMB
5	7.16	Bromide	0.550	0.146	5.18	1.972	BMb
6	8.01	Nitrate (as N)	3.175	1.068	37.85	2.083	bMB
7	10.01	n.a.	0.011	0.002	0.06	n.a.	BMB
8	10.61	o-Phosphate (as P)	0.324	0.121	4.30	0.802	BMB
9	11.46	n.a.	0.014	0.002	0.06	n.a.	BMB
10	11.81	n.a.	0.012	0.003	0.09	n.a.	BMB
11	12.53	Sulfate	0.584	0.305	10.81	3.880	BMb

12	13.68	n.a.	0.011	0.001	0.05	n.a.	bMB
13	14.42	n.a.	0.018	0.005	0.19	n.a.	BMB
14	14.78	n.a.	0.012	0.002	0.07	n.a.	bMB
Total:			9.568	2.822	100.00	14.639	

Operator:Eleo Ng Timebase:ICS_1000 Sequence:081205

7 CCV

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**0**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**AS14 US EPA Method 300_0**	*Bandwidth:*	**n.a.**
Quantif. Method:	**AS14 US EPA Method 300_0**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/5/2008 9:33**	*Sample Weight:*	**1.0000**
Run Time (min):	**15.00**	*Sample Amount:*	**1.0000**



MANUAL INTEGRATION
BEFORE/AFTER
Date: 12/12/08
Chemist: PJ GL: DM
Reason: Peak addition
This stamp appears in red ink on original copy.

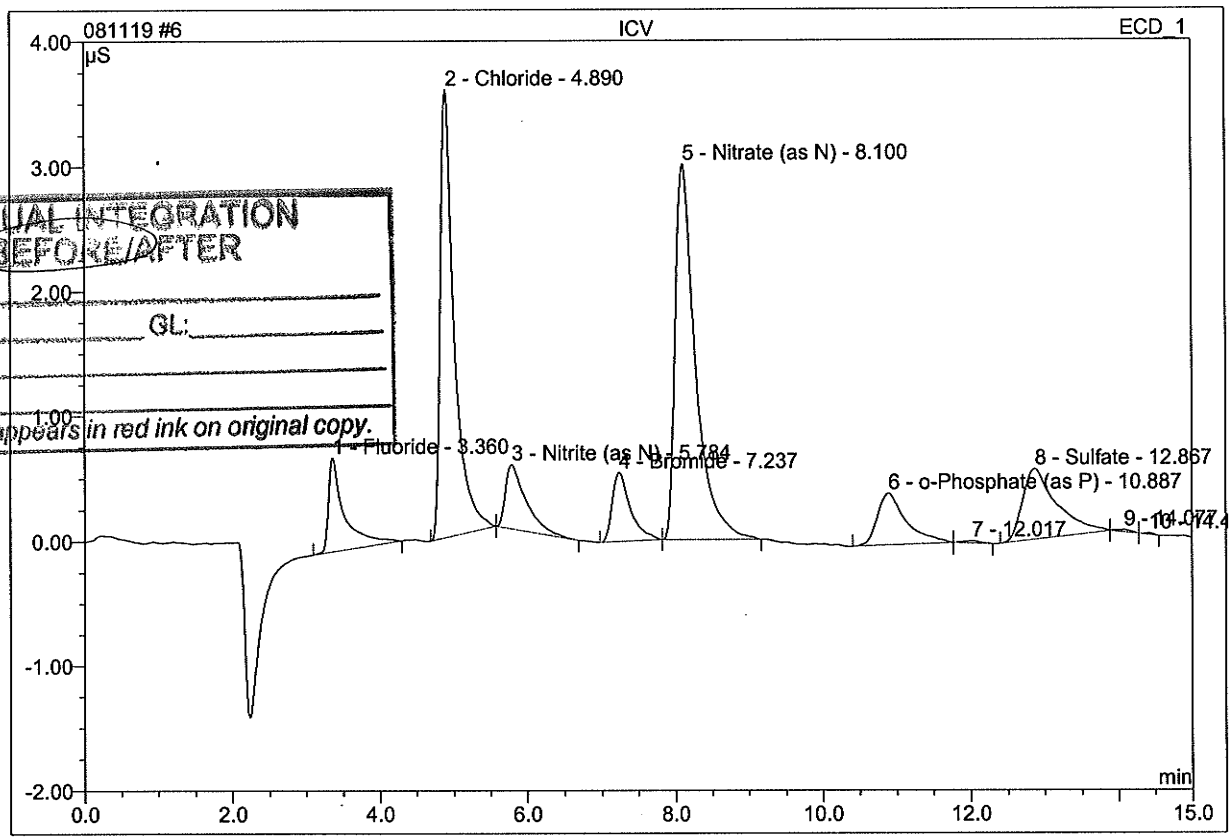
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.34	Fluoride	0.665	0.161	5.72	0.937	BM *
2	4.00	n.a.	0.054	0.010	0.35	n.a.	MB*
3	4.84	Chloride	3.594	0.790	27.98	3.759	BMb
4	5.72	Nitrite (as N)	0.583	0.191	6.77	1.087	bMB*
5	7.16	Bromide	0.550	0.146	5.18	1.972	BMb
6	8.01	Nitrate (as N)	3.175	1.068	37.83	2.083	bMB
7	10.01	n.a.	0.011	0.002	0.06	n.a.	BMB
8	10.61	o-Phosphate (as P)	0.335	0.137	4.85	0.906	BMb*
9	11.46	n.a.	0.012	0.001	0.04	n.a.	bMB*
10	11.81	n.a.	0.012	0.003	0.09	n.a.	BMB
11	12.53	Sulfate	0.584	0.305	10.81	3.880	BMb

12	13.68	n.a.	0.011	0.001	0.05	n.a.	bMB
13	14.42	n.a.	0.018	0.005	0.19	n.a.	BMb*
14	14.78	n.a.	0.012	0.002	0.07	n.a.	bMB
Total:			9.616	2.823	100.00	14.623	

Operator:Eleo Ng Timebase:ICS_1000 Sequence:081119

6 ICV

Sample Name:	**ICV**	*Injection Volume:*	**25.0**
Vial Number:	**0**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**AS14 US EPA Method 300_0**	*Bandwidth:*	**n.a.**
Quantif. Method:	**AS14 US EPA Method 300_0**	*Dilution Factor:*	**1.0000**
Recording Time:	**11/19/2008 10:23**	*Sample Weight:*	**1.0000**
Run Time (min):	**15.00**	*Sample Amount:*	**1.0000**



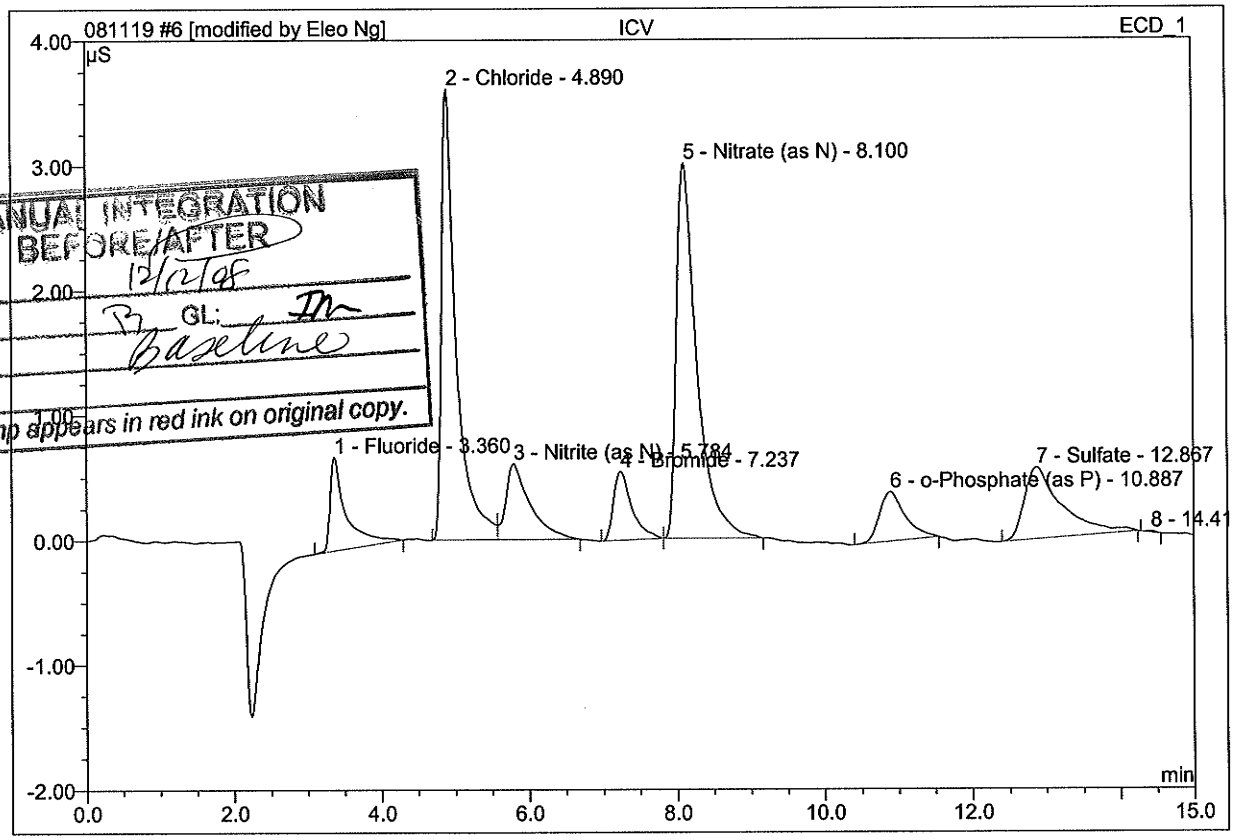
MANUAL INTEGRATION
BEFORE/AFTER
Date:
Chemist: GL:
Reason:
This stamp appears in red ink on original copy.

No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.36	Fluoride	0.748	0.189	6.86	0.967	BMB
2	4.89	Chloride	3.583	0.786	28.51	3.707	BMb
3	5.78	Nitrite (as N)	0.512	0.164	5.96	0.777	bMB
4	7.24	Bromide	0.550	0.158	5.73	2.130	BMB
5	8.10	Nitrate (as N)	3.005	0.964	34.95	1.849	BMB
6	10.89	o-Phosphate (as P)	0.413	0.186	6.73	1.289	BMb
7	12.02	n.a.	0.019	0.005	0.18	n.a.	bMB
8	12.87	Sulfate	0.562	0.301	10.90	3.308	BMb
9	14.08	n.a.	0.017	0.004	0.13	n.a.	bMB
10	14.42	n.a.	0.011	0.001	0.05	n.a.	BMB
Total:			9.420	2.758	100.00	14.028	

Operator:Eleo Ng Timebase:ICS_1000 Sequence:081119

6 ICV

Sample Name:	**ICV**	*Injection Volume:*	**25.0**
Vial Number:	**0**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**AS14 US EPA Method 300_0**	*Bandwidth:*	**n.a.**
Quantif. Method:	**AS14 US EPA Method 300_0**	*Dilution Factor:*	**1.0000**
Recording Time:	**11/19/2008 10:23**	*Sample Weight:*	**1.0000**
Run Time (min):	**15.00**	*Sample Amount:*	**1.0000**



MANUAL INTEGRATION BEFORE/AFTER
Date: 12/12/08
Chemist: B GL: IM
Reason: Baseline
This stamp appears in red ink on original copy.

No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.36	Fluoride	0.748	0.189	6.58	0.967	BMB
2	4.89	Chloride	3.609	0.838	29.14	3.951	BM *
3	5.78	Nitrite (as N)	0.606	0.229	7.98	1.086	MB*
4	7.24	Bromide	0.550	0.158	5.49	2.130	BMB
5	8.10	Nitrate (as N)	3.005	0.964	33.52	1.849	BMB
6	10.89	o-Phosphate (as P)	0.396	0.159	5.54	1.106	BMB*
7	12.87	Sulfate	0.574	0.337	11.72	3.707	BMB*
8	14.42	n.a.	0.011	0.001	0.04	n.a.	BMB
Total:			9.499	2.876	100.00	14.796	

Work Order#: 08-12-0585

Client: WEISS Associates

EPA SM 5310 D Total Organic Carbon

Calibration

TOC 2

Pos/ Vial	Run Type	Rep #	Run Date	Run Time	Data Filename	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (ppm)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (ppm)	TC Area (cts)	TC Mass (ugC)	TC Conc (ppm)	
1	Spl	1	14Oct2008	14:16	1014M001	-	-	-	497	0.289	0.0578	-	-	-	
1	Spl	2	14Oct2008	14:26	1014M002	-	-	-	362	0.133	0.0266				METHOD BLANK
1	Spl	Avg	-	-	-	-	-	-	429	0.211	0.0422				
1	Spl	SDev	-	-	-	-	-	-	95.46	-	-	-	-	-	
1	Spl	%RSD	-	-	-	-	-	-	22.23	-	-	-	-	-	
2	Spl	1	14Oct2008	14:35	1014M003	-	-	-	682	0.503	0.1006	-	-	-	
2	Spl	2	14Oct2008	14:45	1014M004	-	-	-	741	0.571	0.1142				
2	Spl	Avg	-	-	-	-	-	-	711	0.537	0.1074				CCB
2	Spl	SDev	-	-	-	-	-	-	41.72	-	-	-	-	-	
2	Spl	%RSD	-	-	-	-	-	-	5.86	-	-	-	-	-	
3	Std1	1	14Oct2008	14:55	1014M005	-	-	-	2580	2.500	0.5000				0.5 ppm
4	Std2	1	14Oct2008	15:14	1014M006	-	-	-	10521	12.500	2.5000	-	-	-	
4	Std2	2	14Oct2008	15:24	1014M007	-	-	-	10499	12.500	2.5000				
4	Std	Avg	-	-	-	-	-	-	10510	12.500	2.5000				2.5 ppm
4	Std	SDev	-	-	-	-	-	-	15.56	-	-	-	-	-	
4	Std	%RSD	-	-	-	-	-	-	0.15	-	-	-	-	-	
** Calibration:			RF (ugC/k-cnt):		1.2530300 **										
**			R-Squared:		0.9999 **										
5	Std3	1	14Oct2008	15:33	1014M008	-	-	-	21117	25.000	5.0000				5.0 ppm
6	Std4	1	14Oct2008	15:52	1014M009	-	-	-	40867	50.000	10.0000	-	-	-	
6	Std4	2	14Oct2008	16:02	1014M010	-	-	-	40981	50.000	10.0000				
6	Std	Avg	-	-	-	-	-	-	40924	50.000	10.0000				10.0 ppm
6	Std	SDev	-	-	-	-	-	-	80.61	-	-	-	-	-	
6	Std	%RSD	-	-	-	-	-	-	0.20	-	-	-	-	-	
** Calibration:			RF (ugC/k-cnt):		1.2346400 **										
**			R-Squared:		0.9998 **										
7	Std5	1	14Oct2008	16:12	1014M011	-	-	-	82979	100.000	20.0000	-	-	-	
7	Std5	2	14Oct2008	16:21	1014M012	-	-	-	84058	100.000	20.0000				
7	Std	Avg	-	-	-	-	-	-	83518	100.000	20.0000				20.0 ppm
7	Std	SDev	-	-	-	-	-	-	762.97	-	-	-	-	-	
7	Std	%RSD	-	-	-	-	-	-	0.91	-	-	-	-	-	
** Calibration:			RF (ugC/k-cnt):		1.2041799 **										
**			R-Squared:		0.9997 **										
8	Spl	1	14Oct2008	16:31	1014M013	-	-	-	21396	25.467	5.0934	-	-	-	
8	Spl	2	14Oct2008	16:41	1014M014	-	-	-	20931	24.907	4.9814				ICV
8	Spl	Avg	-	-	-	-	-	-	21163	25.187	5.0374				
8	Spl	SDev	-	-	-	-	-	-	328.80	-	-	-	-	-	
8	Spl	%RSD	-	-	-	-	-	-	1.55	-	-	-	-	-	
9	Spl	1	14Oct2008	16:50	1014M015	-	-	-	21103	25.114	5.0229	-	-	-	
9	Spl	2	14Oct2008	17:00	1014M016	-	-	-	20579	24.483	4.8967				
9	Spl	Avg	-	-	-	-	-	-	20841	24.799	4.9598				CCV
9	Spl	SDev	-	-	-	-	-	-	370.52	-	-	-	-	-	
9	Spl	%RSD	-	-	-	-	-	-	1.78	-	-	-	-	-	
10	Spl	1	14Oct2008	17:09	1014M017	-	-	-	21157	25.179	5.0359	-	-	-	
10	Spl	2	14Oct2008	17:19	1014M018	-	-	-	21068	25.072	5.0144				
10	Spl	Avg	-	-	-	-	-	-	21112	25.126	5.0252				LCS
10	Spl	SDev	-	-	-	-	-	-	62.93	-	-	-	-	-	
10	Spl	%RSD	-	-	-	-	-	-	0.30	-	-	-	-	-	

TOC 2

Pos/ Vial	Run Type	Rep #	Run Date	Run Time	Data Filename	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (ppm)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (ppm)	TC Area (cts)	TC Mass (ugC)	TC Conc (ppm)	
1	Spl	1	05Dec2008	17:32	1205N001	-	-	-	1554	1.591	0.3182	-	-	-	
1	Spl	2	05Dec2008	17:41	1205N002	-	-	-	1684	1.747	0.3494	-	-	-	METHOD BLANK
1	Spl	Avg	-	-	-	-	-	-	1619	1.669	0.3338	-	-	-	
1	Spl	SDev	-	-	-	-	-	-	91.92	-	-	-	-	-	
1	Spl	%RSD	-	-	-	-	-	-	5.68	-	-	-	-	-	
2	Spl	1	05Dec2008	17:51	1205N003	-	-	-	837	0.729	0.1457	-	-	-	
2	Spl	2	05Dec2008	18:01	1205N004	-	-	-	656	0.511	0.1022	-	-	-	CCB
2	Spl	Avg	-	-	-	-	-	-	746	0.620	0.1240	-	-	-	
2	Spl	SDev	-	-	-	-	-	-	127.99	-	-	-	-	-	
2	Spl	%RSD	-	-	-	-	-	-	17.14	-	-	-	-	-	
3	Spl	1	05Dec2008	18:10	1205N005	-	-	-	21790	25.923	5.1847	-	-	-	
3	Spl	2	05Dec2008	18:20	1205N006	-	-	-	21735	25.857	5.1714	-	-	-	CCV
3	Spl	Avg	-	-	-	-	-	-	21762	25.890	5.1780	-	-	-	
3	Spl	SDev	-	-	-	-	-	-	38.89	-	-	-	-	-	
3	Spl	%RSD	-	-	-	-	-	-	0.18	-	-	-	-	-	
4	Spl	1	05Dec2008	18:30	1205N007	-	-	-	21722	25.842	5.1683	-	-	-	
4	Spl	2	05Dec2008	18:39	1205N008	-	-	-	21482	25.553	5.1106	-	-	-	CCS
4	Spl	Avg	-	-	-	-	-	-	21602	25.697	5.1394	-	-	-	
4	Spl	SDev	-	-	-	-	-	-	169.71	-	-	-	-	-	
4	Spl	%RSD	-	-	-	-	-	-	0.79	-	-	-	-	-	
5	Spl	1	05Dec2008	18:49	1205N009	-	-	-	21598	25.692	5.1385	-	-	-	
5	Spl	2	05Dec2008	18:59	1205N010	-	-	-	21819	25.958	5.1916	-	-	-	CCSA
5	Spl	Avg	-	-	-	-	-	-	21708	25.825	5.1651	-	-	-	
5	Spl	SDev	-	-	-	-	-	-	156.27	-	-	-	-	-	
5	Spl	%RSD	-	-	-	-	-	-	0.72	-	-	-	-	-	
6	Spl	1	05Dec2008	19:08	1205N011	-	-	-	19908	23.660	4.7321	-	-	-	
6	Spl	2	05Dec2008	19:18	1205N012	-	-	-	19902	23.653	4.7306	-	-	-	05-12 0461-4C 1/10
6	Spl	Avg	-	-	-	-	-	-	19905	23.657	4.7313	-	-	-	
6	Spl	SDev	-	-	-	-	-	-	4.24	-	-	-	-	-	
6	Spl	%RSD	-	-	-	-	-	-	0.02	-	-	-	-	-	
7	Spl	1	05Dec2008	19:27	1205N013	-	-	-	13152	15.537	3.1073	-	-	-	
7	Spl	2	05Dec2008	19:37	1205N014	-	-	-	13038	15.400	3.0799	-	-	-	05-12 0461-7C 20/0
7	Spl	Avg	-	-	-	-	-	-	13095	15.468	3.0936	-	-	-	
7	Spl	SDev	-	-	-	-	-	-	80.61	-	-	-	-	-	
7	Spl	%RSD	-	-	-	-	-	-	0.62	-	-	-	-	-	

BATCH TIME
Time (24 Hr): 0322
Initials:

Pos/ Vial	Run Type	Rep #	Run Date	Run Time	Data Filename	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (ppm)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (ppm)	TC Area (cts)	TC Mass (ugC)	TC Conc (ppm)
8	Spl	1	05Dec2008	20:01	1205N015	-	-	-	60791	72.819	14.5639	-	-	-
8	Spl	2	05Dec2008	20:10	1205N016	-	-	-	61396	73.547	14.7094	08-12-0406-1F 20X		
8	Spl	Avg	-	-	-	-	-	-	61093	73.183	14.6366			
8	Spl	SDev	-	-	-	-	-	-	427.80	-	-	-	-	-
8	Spl	%RSD	-	-	-	-	-	-	0.70	-	-	-	-	-
9	Spl	1	05Dec2008	20:20	1205N017	-	-	-	20247	24.068	4.8136	-	-	-
9	Spl	2	05Dec2008	20:30	1205N018	-	-	-	19950	23.711	4.7422	08-12-0461-1E 10X		
9	Spl	Avg	-	-	-	-	-	-	20098	23.889	4.7779			
9	Spl	SDev	-	-	-	-	-	-	210.01	-	-	-	-	-
9	Spl	%RSD	-	-	-	-	-	-	1.04	-	-	-	-	-
10	Spl	1	05Dec2008	20:39	1205N019	-	-	-	13369	15.798	3.1595	-	-	-
10	Spl	2	05Dec2008	20:49	1205N020	-	-	-	13549	16.014	3.2028	08-12-0461-2E 20X		
10	Spl	Avg	-	-	-	-	-	-	13459	15.906	3.1812			
10	Spl	SDev	-	-	-	-	-	-	127.28	-	-	-	-	-
10	Spl	%RSD	-	-	-	-	-	-	0.95	-	-	-	-	-
11	Spl	1	05Dec2008	20:58	1205N021	-	-	-	25401	30.265	6.0531	-	-	-
11	Spl	2	05Dec2008	21:08	1205N022	-	-	-	29182	34.812	6.9623	08-12-0558-1P		
11	Spl	Avg	-	-	-	-	-	-	27291	32.538	6.5077			
11	Spl	SDev	-	-	-	-	-	-	2673.57	-	-	-	-	-
11	Spl	%RSD	-	-	-	-	-	-	9.80	-	-	-	-	-
12	Spl	1	05Dec2008	21:17	1205N023	-	-	-	17926	21.277	4.2554	-	-	-
12	Spl	2	05Dec2008	21:27	1205N024	-	-	-	19909	23.661	4.7323	08-12-0558-2H2		
12	Spl	Avg	-	-	-	-	-	-	18917	22.469	4.4939			
12	Spl	SDev	-	-	-	-	-	-	1402.19	-	-	-	-	-
12	Spl	%RSD	-	-	-	-	-	-	7.41	-	-	-	-	-
13	Spl	1	05Dec2008	21:37	1205N025	-	-	-	37377	44.666	8.9331	-	-	-
13	Spl	2	05Dec2008	21:46	1205N026	-	-	-	40148	47.998	9.5995	08-12-0558-2J2H2		
13	Spl	Avg	-	-	-	-	-	-	38762	46.332	9.2663			
13	Spl	SDev	-	-	-	-	-	-	1959.39	-	-	-	-	-
13	Spl	%RSD	-	-	-	-	-	-	5.05	-	-	-	-	-
14	Spl	1	05Dec2008	21:56	1205N027	-	-	-	37674	45.023	9.0045	-	-	-
14	Spl	2	05Dec2008	22:06	1205N028	-	-	-	39445	47.152	9.4304	08-12-0558-2J2H2S		
14	Spl	Avg	-	-	-	-	-	-	38559	46.087	9.2175			
14	Spl	SDev	-	-	-	-	-	-	1252.29	-	-	-	-	-
14	Spl	%RSD	-	-	-	-	-	-	3.25	-	-	-	-	-
15	Spl	1	05Dec2008	22:15	1205N029	-	-	-	12642	14.923	2.9847	-	-	-
15	Spl	2	05Dec2008	22:25	1205N030	-	-	-	16166	19.161	3.8322	08-12-0558-8P		
15	Spl	Avg	-	-	-	-	-	-	14404	17.042	3.4084			
15	Spl	SDev	-	-	-	-	-	-	2491.84	-	-	-	-	-
15	Spl	%RSD	-	-	-	-	-	-	17.30	-	-	-	-	-
16	Spl	1	05Dec2008	22:34	1205N031	-	-	-	30699	36.636	7.3272	-	-	-
16	Spl	2	05Dec2008	22:44	1205N032	-	-	-	36307	43.379	8.6758	08-12-0558-4P		
16	Spl	Avg	-	-	-	-	-	-	33503	40.007	8.0015			
16	Spl	SDev	-	-	-	-	-	-	3965.46	-	-	-	-	-
16	Spl	%RSD	-	-	-	-	-	-	11.84	-	-	-	-	-
17	Spl	1	05Dec2008	22:54	1205N033	-	-	-	305278	366.799	73.3598	08-12-0558-8P		
17	Spl	2	05Dec2008	23:03	1205N034	-	-	-	315295	378.844	75.7687			
17	Spl	Avg	-	-	-	-	-	-	310286	372.821	74.5643	-	-	-
17	Spl	SDev	-	-	-	-	-	-	7083.09	-	-	-	-	-
17	Spl	%RSD	-	-	-	-	-	-	2.28	-	-	-	-	-
18	Spl	1	05Dec2008	23:13	1205N035	-	-	-	79649	95.495	19.0990	-	-	-

18	Spl	2	05Dec2008	23:23	1205N036	-	-	-	80978	97.093	19.4186			
18	Spl	Avg	-	-	-	-	-	-	80313	96.294	19.2588			
18	Spl	SDev	-	-	-	-	-	-	939.74	-	-	-	-	-
18	Spl	%RSD	-	-	-	-	-	-	1.17	-	-	-	-	-
19	Spl	1	05Dec2008	23:32	1205N037	-	-	-	305662	367.261	73.4521	-	-	-
19	Spl	2	05Dec2008	23:42	1205N038	-	-	-	313901	377.167	75.4335			
19	Spl	Avg	-	-	-	-	-	-	309781	372.214	74.4428			
19	Spl	SDev	-	-	-	-	-	-	5825.85	-	-	-	-	-
19	Spl	%RSD	-	-	-	-	-	-	1.88	-	-	-	-	-
20	Spl	1	05Dec2008	23:51	1205N039	-	-	-	79411	95.209	19.0417	-	-	-
20	Spl	2	06Dec2008	00:01	1205N040	-	-	-	81286	97.463	19.4927			
20	Spl	Avg	-	-	-	-	-	-	80348	96.336	19.2672	-	-	-
20	Spl	SDev	-	-	-	-	-	-	1325.82	-	-	-	-	-
20	Spl	%RSD	-	-	-	-	-	-	1.65	-	-	-	-	-
21	Spl	1	06Dec2008	00:10	1205N041	-	-	-	11954	14.096	2.8192	-	-	-
21	Spl	2	06Dec2008	00:20	1205N042	-	-	-	13497	15.951	3.1903			
21	Spl	Avg	-	-	-	-	-	-	12725	15.024	3.0048	-	-	-
21	Spl	SDev	-	-	-	-	-	-	1091.07	-	-	-	-	-
21	Spl	%RSD	-	-	-	-	-	-	8.57	-	-	-	-	-
22	Spl	1	06Dec2008	00:30	1205N043	-	-	-	7065	8.217	1.6435			
22	Spl	2	06Dec2008	00:39	1205N044	-	-	-	7942	9.272	1.8544			
22	Spl	Avg	-	-	-	-	-	-	7503	8.745	1.7489	-	-	-
22	Spl	SDev	-	-	-	-	-	-	620.13	-	-	-	-	-
22	Spl	%RSD	-	-	-	-	-	-	8.26	-	-	-	-	-
23	Spl	1	06Dec2008	00:49	1205N045	-	-	-	20847	24.789	4.9579			
23	Spl	2	06Dec2008	00:59	1205N046	-	-	-	22053	26.240	5.2479			
23	Spl	Avg	-	-	-	-	-	-	21450	25.514	5.1029	-	-	-
23	Spl	SDev	-	-	-	-	-	-	852.77	-	-	-	-	-
23	Spl	%RSD	-	-	-	-	-	-	3.98	-	-	-	-	-
24	Spl	1	06Dec2008	01:08	1205N047	-	-	-	5660	6.528	1.3056			
24	Spl	2	06Dec2008	01:18	1205N048	-	-	-	8474	9.912	1.9823	-	-	-
24	Spl	Avg	-	-	-	-	-	-	7067	8.220	1.6440	-	-	-
24	Spl	SDev	-	-	-	-	-	-	1989.80	-	-	-	-	-
24	Spl	%RSD	-	-	-	-	-	-	28.16	-	-	-	-	-
25	Spl	1	06Dec2008	01:27	1205N049	-	-	-	19570	23.254	4.6508	-	-	-
25	Spl	2	06Dec2008	01:37	1205N050	-	-	-	25188	30.009	6.0018			
25	Spl	Avg	-	-	-	-	-	-	22379	26.632	5.3263	-	-	-
25	Spl	SDev	-	-	-	-	-	-	3972.53	-	-	-	-	-
25	Spl	%RSD	-	-	-	-	-	-	17.75	-	-	-	-	-
26	Spl	1	06Dec2008	01:46	1205N051	-	-	-	40733	48.701	9.7402	-	-	-
26	Spl	2	06Dec2008	01:56	1205N052	-	-	-	50893	60.918	12.1835			
26	Spl	Avg	-	-	-	-	-	-	45813	54.809	10.9619	-	-	-
26	Spl	SDev	-	-	-	-	-	-	7184.21	-	-	-	-	-
26	Spl	%RSD	-	-	-	-	-	-	15.68	-	-	-	-	-
27	Spl	1	06Dec2008	02:06	1205N053	-	-	-	17829	21.160	4.2321			
27	Spl	2	06Dec2008	02:15	1205N054	-	-	-	19479	23.144	4.6289			
27	Spl	Avg	-	-	-	-	-	-	18654	22.152	4.4305	-	-	-
27	Spl	SDev	-	-	-	-	-	-	1166.73	-	-	-	-	-
27	Spl	%RSD	-	-	-	-	-	-	6.25	-	-	-	-	-
28	Spl	1	06Dec2008	02:25	1205N055	-	-	-	14281	16.894	3.3788	-	-	-
28	Spl	2	06Dec2008	02:34	1205N056	-	-	-	19377	23.022	4.6044			
28	Spl	Avg	-	-	-	-	-	-	16829	19.958	3.9916	-	-	-
28	Spl	SDev	-	-	-	-	-	-	3603.42	-	-	-	-	-
28	Spl	%RSD	-	-	-	-	-	-	21.41	-	-	-	-	-

29	Spl	1	06Dec2008	02:44	1205N057	-	-	-	76732	91.987	18.3975	-	-	-
29	Spl	2	06Dec2008	02:54	1205N058	-	-	-	81933	98.241	19.6483			
29	Spl	Avg	-	-	-	-	-	-	79332	95.114	19.0229			
29	Spl	SDev	-	-	-	-	-	-	3677.66	-	-	-	-	-
29	Spl	%RSD	-	-	-	-	-	-	4.64	-	-	-	-	-
30	Spl	1	06Dec2008	03:03	1205N059	-	-	-	20209	24.022	4.8044	-	-	-
30	Spl	2	06Dec2008	03:13	1205N060	-	-	-	21393	25.446	5.0892			
30	Spl	Avg	-	-	-	-	-	-	20801	24.734	4.9468			
30	Spl	SDev	-	-	-	-	-	-	837.21	-	-	-	-	-
30	Spl	%RSD	-	-	-	-	-	-	4.02	-	-	-	-	-
31	Spl	1	06Dec2008	03:22	1205N061	-	-	-	14387	17.022	3.4043	-	-	-
31	Spl	2	06Dec2008	03:32	1205N062	-	-	-	21260	25.286	5.0572			
31	Spl	Avg	-	-	-	-	-	-	17823	21.154	4.2308	-	-	-
31	Spl	SDev	-	-	-	-	-	-	4859.94	-	-	-	-	-
31	Spl	%RSD	-	-	-	-	-	-	27.27	-	-	-	-	-
32	Spl	1	06Dec2008	03:41	1205N063	-	-	-	1943	2.059	0.4117	-	-	-
32	Spl	2	06Dec2008	03:51	1205N064	-	-	-	2572	2.815	0.5630	-	-	-
32	Spl	Avg	-	-	-	-	-	-	2257	2.437	0.4873	-	-	-
32	Spl	SDev	-	-	-	-	-	-	444.77	-	-	-	-	-
32	Spl	%RSD	-	-	-	-	-	-	19.70	-	-	-	-	-
33	Spl	1	06Dec2008	04:01	1205N065	-	-	-	21971	26.141	5.2282	-	-	-
33	Spl	2	06Dec2008	04:10	1205N066	-	-	-	22605	26.903	5.3807	-	-	-
33	Spl	Avg	-	-	-	-	-	-	22288	26.522	5.3044	-	-	-
33	Spl	SDev	-	-	-	-	-	-	448.31	-	-	-	-	-
33	Spl	%RSD	-	-	-	-	-	-	2.01	-	-	-	-	-
34	Spl	1	06Dec2008	04:20	1205N067	-	-	-	1148	1.103	0.2205	-	-	-
34	Spl	2	06Dec2008	04:29	1205N068	-	-	-	1500	1.526	0.3052	-	-	-
34	Spl	Avg	-	-	-	-	-	-	1324	1.314	0.2629			
34	Spl	SDev	-	-	-	-	-	-	248.90	-	-	-	-	-
34	Spl	%RSD	-	-	-	-	-	-	18.80	-	-	-	-	-
35	Spl	1	06Dec2008	04:39	1205N069	-	-	-	1101	1.046	0.2092	-	-	-
35	Spl	2	06Dec2008	04:49	1205N070	-	-	-	1216	1.184	0.2369	-	-	-
35	Spl	Avg	-	-	-	-	-	-	1158	1.115	0.2231	-	-	-
35	Spl	SDev	-	-	-	-	-	-	81.32	-	-	-	-	-
35	Spl	%RSD	-	-	-	-	-	-	7.02	-	-	-	-	-
36	Spl	1	06Dec2008	04:58	1205N071	-	-	-	21381	25.431	5.0863	-	-	-
36	Spl	2	06Dec2008	05:08	1205N072	-	-	-	21714	25.832	5.1664	-	-	-
36	Spl	Avg	-	-	-	-	-	-	21547	25.632	5.1263	-	-	-
36	Spl	SDev	-	-	-	-	-	-	235.47	-	-	-	-	-
36	Spl	%RSD	-	-	-	-	-	-	1.09	-	-	-	-	-
37	Spl	1	06Dec2008	05:17	1205N073	-	-	-	21478	25.548	5.1096	-	-	-
37	Spl	2	06Dec2008	05:27	1205N074	-	-	-	21597	25.691	5.1382	-	-	-
37	Spl	Avg	-	-	-	-	-	-	21537	25.620	5.1239	-	-	-
37	Spl	SDev	-	-	-	-	-	-	84.15	-	-	-	-	-
37	Spl	%RSD	-	-	-	-	-	-	0.39	-	-	-	-	-
38	Spl	1	06Dec2008	05:36	1205N075	-	-	-	21406	25.462	5.0923	-	-	-
38	Spl	2	06Dec2008	05:46	1205N076	-	-	-	21481	25.552	5.1103	-	-	-
38	Spl	Avg	-	-	-	-	-	-	21443	25.507	5.1013	-	-	-
38	Spl	SDev	-	-	-	-	-	-	53.03	-	-	-	-	-
38	Spl	%RSD	-	-	-	-	-	-	0.25	-	-	-	-	-
39	Spl	1	06Dec2008	05:56	1205N077	-	-	-	29952	35.738	7.1475	-	-	-
39	Spl	2	06Dec2008	06:05	1205N078	-	-	-	35789	42.756	8.5512	-	-	-
39	Spl	Avg	-	-	-	-	-	-	32870	39.247	7.8494	-	-	-
39	Spl	SDev	-	-	-	-	-	-	4127.38	-	-	-	-	-
39	Spl	%RSD	-	-	-	-	-	-	12.56	-	-	-	-	-

40	Spl	1	06Dec2008	06:15	1205N079	-	-	-	15700	18.600	3.7201	-	-	
40	Spl	2	06Dec2008	06:25	1205N080	-	-	-	18292	21.717	4.3434	-	-	08-12-07161P
40	Spl	Avg	-	-	-	-	-	-	16996	20.159	4.0318	-	-	
40	Spl	SDev	-	-	-	-	-	-	1832.82	-	-	-	-	
40	Spl	%RSD	-	-	-	-	-	-	10.78	-	-	-	-	
41	Spl	1	06Dec2008	06:34	1205N081	-	-	-	21728	25.849	5.1697	-	-	
41	Spl	2	06Dec2008	06:44	1205N082	-	-	-	24676	29.393	5.8787	-	-	08-12-07241P
41	Spl	Avg	-	-	-	-	-	-	23202	27.621	5.5242	-	-	
41	Spl	SDev	-	-	-	-	-	-	2084.55	-	-	-	-	
41	Spl	%RSD	-	-	-	-	-	-	8.98	-	-	-	-	
42	Spl	1	06Dec2008	06:53	1205N083	-	-	-	58617	70.205	14.0411	-	-	
42	Spl	2	06Dec2008	07:03	1205N084	-	-	-	65796	78.838	15.7675	-	-	08-12-07242P
42	Spl	Avg	-	-	-	-	-	-	62206	74.521	14.9043	-	-	
42	Spl	SDev	-	-	-	-	-	-	5076.32	-	-	-	-	
42	Spl	%RSD	-	-	-	-	-	-	8.16	-	-	-	-	
43	Spl	1	06Dec2008	07:12	1205N085	-	-	-	20209	24.022	4.8044	-	-	
43	Spl	2	06Dec2008	07:22	1205N086	-	-	-	21426	25.486	5.0971	-	-	08-12-07243P5X
43	Spl	Avg	-	-	-	-	-	-	20817	24.754	4.9508	-	-	
43	Spl	SDev	-	-	-	-	-	-	860.55	-	-	-	-	
43	Spl	%RSD	-	-	-	-	-	-	4.13	-	-	-	-	
44	Spl	1	06Dec2008	07:32	1205N087	-	-	-	22236	26.460	5.2919	-	-	
44	Spl	2	06Dec2008	07:41	1205N088	-	-	-	23516	27.999	5.5997	-	-	08-12-07244P5X
44	Spl	Avg	-	-	-	-	-	-	22876	27.229	5.4458	-	-	
44	Spl	SDev	-	-	-	-	-	-	905.10	-	-	-	-	
44	Spl	%RSD	-	-	-	-	-	-	3.96	-	-	-	-	
45	Spl	1	06Dec2008	07:51	1205N089	-	-	-	37241	44.502	8.9004	-	-	
45	Spl	2	06Dec2008	08:00	1205N090	-	-	-	43840	52.437	10.4874	-	-	08-12-07245P
45	Spl	Avg	-	-	-	-	-	-	40540	48.470	9.6939	-	-	
45	Spl	SDev	-	-	-	-	-	-	4666.20	-	-	-	-	
45	Spl	%RSD	-	-	-	-	-	-	11.51	-	-	-	-	
46	Spl	1	06Dec2008	08:10	1205N091	-	-	-	37603	44.937	8.9875	-	-	
46	Spl	2	06Dec2008	08:20	1205N092	-	-	-	44314	53.007	10.6014	-	-	08-12-07246P
46	Spl	Avg	-	-	-	-	-	-	40958	48.972	9.7944	-	-	
46	Spl	SDev	-	-	-	-	-	-	4745.39	-	-	-	-	
46	Spl	%RSD	-	-	-	-	-	-	11.59	-	-	-	-	
47	Spl	1	06Dec2008	08:29	1205N093	-	-	-	50155	60.030	12.0061	-	-	
47	Spl	2	06Dec2008	08:39	1205N094	-	-	-	53308	63.822	12.7643	-	-	08-12-07247P
47	Spl	Avg	-	-	-	-	-	-	51731	61.926	12.3852	-	-	
47	Spl	SDev	-	-	-	-	-	-	2229.51	-	-	-	-	
47	Spl	%RSD	-	-	-	-	-	-	4.31	-	-	-	-	
48	Spl	1	06Dec2008	08:49	1205N095	-	-	-	12138	14.317	2.8635	-	-	
48	Spl	2	06Dec2008	08:58	1205N096	-	-	-	13548	16.013	3.2026	-	-	08-12-07248P5X
48	Spl	Avg	-	-	-	-	-	-	12843	15.165	3.0330	-	-	
48	Spl	SDev	-	-	-	-	-	-	997.02	-	-	-	-	
48	Spl	%RSD	-	-	-	-	-	-	7.76	-	-	-	-	
49	Spl	1	06Dec2008	09:08	1205N097	-	-	-	28375	33.841	6.7683	-	-	
49	Spl	2	06Dec2008	09:17	1205N098	-	-	-	34406	41.093	8.2186	-	-	08-12-07249P
49	Spl	Avg	-	-	-	-	-	-	31390	37.467	7.4934	-	-	
49	Spl	SDev	-	-	-	-	-	-	4264.56	-	-	-	-	
49	Spl	%RSD	-	-	-	-	-	-	13.59	-	-	-	-	
50	Spl	1	06Dec2008	09:27	1205N099	-	-	-	50085	59.946	11.9892	-	-	
50	Spl	2	06Dec2008	09:37	1205N100	-	-	-	54232	64.933	12.9865	-	-	08-12-07250P 10S
50	Spl	Avg	-	-	-	-	-	-	52158	62.439	12.4879	-	-	
50	Spl	SDev	-	-	-	-	-	-	2932.37	-	-	-	-	

50	Spl	%RSD	-	-	-	-	-	-	5.62	-	-	-	-	-
51	Spl	1	06Dec2008	09:46	1205N101	-	-	-	49996	59.839	11.9678	-	-	-
51	Spl	2	06Dec2008	09:56	1205N102	-	-	-	53481	64.030	12.8059			
51	Spl	Avg	-	-	-	-	-	-	51738	61.934	12.3869	-	-	-
51	Spl	SDev	-	-	-	-	-	-	2464.27	-	-	-	-	-
51	Spl	%RSD	-	-	-	-	-	-	4.76	-	-	-	-	-
52	Spl	1	06Dec2008	10:05	1205N103	-	-	-	2075	2.217	0.4435	-	-	-
52	Spl	2	06Dec2008	10:15	1205N104	-	-	-	2623	2.876	0.5752	-	-	-
52	Spl	Avg	-	-	-	-	-	-	2349	2.547	0.5094	-	-	-
52	Spl	SDev	-	-	-	-	-	-	387.49	-	-	-	-	-
52	Spl	%RSD	-	-	-	-	-	-	16.50	-	-	-	-	-
53	Spl	1	06Dec2008	10:25	1205N105	-	-	-	21952	26.118	5.2236	-	-	-
53	Spl	2	06Dec2008	10:34	1205N106	-	-	-	22453	26.720	5.3441	-	-	-
53	Spl	Avg	-	-	-	-	-	-	22202	26.419	5.2839			-
53	Spl	SDev	-	-	-	-	-	-	354.26	-	-	-	-	-
53	Spl	%RSD	-	-	-	-	-	-	1.60	-	-	-	-	-

BATCH TIME
Time (24 Hr): 0908
Initials:

Calscience Environmental Laboratories, Inc.

Supplemental Report 1

December 16, 2008

Subcontract analyses are reported as a stand-alone report.

Tim Utterback
Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Subject: **Calscience Work Order No.: 08-12-0585**
Client Reference: UC Davis / 388-1856-2-16

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 12/5/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Virendra R Patel

Calscience Environmental
Laboratories, Inc.
Virendra Patel
Project Manager

Revised COC received on 12/08/08 at 15:24 - VP

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AquaTerra Associates Incorporated, DBA

0585

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5063 Commercial Circle, Suite H
Concord, CA 94520
phone: (925) 689-9022

Project ID: 388-1856-2-16
Protocol No.: ROD

Client Contact		Project Manager: Bob Devany	Sampled by: JMD / KHA	Date: 12/4/08	COC Number: UCD
Weiss Associates		Tel: 510-450-6144	Lab Contact: Micah Smith	Carrier:	Page 2 of 3
5801 Christie Avenue, Suite 600		Analysis Turnaround Time			Job No.
Emeryville, CA 94608		Calendar (C) or Work Days (W) --- 5W			
(510) 450-6000	Phone	TAT if different from Below _____			SDG No.
(510) 547-5043	FAX	☐ 2 weeks			
		☐ 1 week			
Job Name: UC Davis		☐ 2 days			
Address: One Shields Ave, Davis		☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	Carbonate/Bicarbonate (SM2320B)	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
10	GWGW2382A	12/4	1145	L	W	12		X		X	X	X	X		X	X						X	X	Title 22 + Al + Si
11	GWGW2382B	12/4	1145	|	|	12		X		X	X	X	X		X	X						X	X	Title 22 + Al + Si
12	GWGW2377	12/4	1430	|	|	9		X	X	X	X	X										X		
13	TPEF0365	12/4	1350	|	|	9					X	X	X				X		X	X	X	X		Title 22 + Ca, K, Mg, Na
																				X				
14	~~GPTN0365~~																							
	TRU 12/8/08																							
15	~~Travel Blank~~ TBGW0521	0730	12/4	L	W						X													~~HOLD~~ TRU 12/8/08
						Field Filtered	X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For _____ Months*

Special Instructions/QC Requirements & Comments: Level II Reporting with Initial Calibration Curves and Continuing Calibration **Note: Nitrate 48 hour hold time!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	WEISS	1505, 12/4/08	[signature] CEL		12/4/08 1505
[signature] to GSD		12-4-08 1730	[signature]	CEL	12/05/08 1030

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AguaTierra Associates Incorporated, DBA

0585

Calscience Environmental Lab
5063 Commercial Circle, Suite H
Concord, CA 94520
phone: (925) 689-9022

Project ID: 388-1856-2-16
Protocol No.: ROD

Client Contact	
Weiss Associates	
5801 Christie Avenue, Suite 600	
Emeryville, CA 94608	
(510) 450-6000	Phone
(510) 547-5043	FAX
Job Name:	UC Davis
Address:	One Shields Ave, Davis

Project Manager: Bob Devany
Tel: 510-450-6144

Analysis Turnaround Time
Calendar (C) or Work Days (W) --- 5W
TAT if different from Below _____
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sampled by: JmD/KHA
Lab Contact: Micah Smith
Date: 12/4/08
Carrier:
COC Number: UCD
Page 1 of 3
Job No.
SDG No.

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	Carbonate/Bicarbonate (SM2320B)	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
1	GWGW2368A	12/3	1615	L	W	5	X	X	X													X	X	
2	GWGW2368B	12/3	1615			5	X	X	X													X	X	
3	GWGW2383	12/3	1650			1																X		
4	GWGW2378	12/3	1725			12		X		X	X	X	X		X	X						X	X	Al, Si + Title 22 6010B
5	GWGW2379A	12/3	1630			5	X	X	X	X													X	
6	GWGW2379B	12/3	1630			5	X	X	X	X													X	
7	GWGW2373	12/4	1015			9	X	X	X													X	X	
8	GWGW2404	12/4	1110			1																X		
9	GWGW2390	12/4	1035			5	X	X	X	X													X	
						Field Filtered	X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: Level II Reporting with Initial Calibration Curves and Continuing Calibration **Note: Nitrate 48 hour hold time!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	WEISS	1505, 12/4/08	Tom Ompley	CEC	12/4/08 1505
[signature] To CSO		12-4-08 1730	[signature]	CEC	12/5/08 1030
510857382 510857383					

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

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0585

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Project ID: 388-1856-2-16
Protocol No.: ROD

Client Contact	
Weiss Associates	
5801 Christie Avenue, Suite 600	
Emeryville, CA 94608	
(510) 450-6000	Phone
(510) 547-5043	FAX
Job Name:	UC Davis
Address:	One Shields Ave, Davis

Project Manager: Bob Devany
Tel: 510-450-6144

Analysis Turnaround Time
Calendar (C) or Work Days (W) --- 5W
TAT if different from Below _____
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sampled by: JMD / KHA
Lab Contact: Micah Smith
Date: 12/4/08
Carrier:

COC Number: UCD
Page 2 of 3

Job No.

SDG No.

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	Carbonate/Bicarbonate (SM2320B)	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
10	GWGW2382A	12/4	1145	L	W	12		X		X	X	X	X		X	X						X	X	Title 22 + Al + Si
11	GWGW2382B	12/4	1145	|	|	12		X		X	X	X	X		X	X						X	X	Title 22 + Al + Si
12	GWGW2377	12/4	1430	|	|	9		X	X	X	X	X										X		
13	TPEF0365	12/4	1350	|	|	9					X	X	X				X		X	X		X		Title 22 + Ca, K, Mg, Na
																				X				
14	GPTN0365																							
15	Travel Blank	0730	12/4	L	W						X													HOLD
						Field Filtered	X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For _____ Months*

Special Instructions/QC Requirements & Comments: Level II Reporting with Initial Calibration Curves and Continuing Calibration **Note: Nitrate 48 hour hold time!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	WEISS	1505, 12/4/08	Tom O'Malley	CEL	12/4/08 1505
[signature] to GSD		12-4-08 1730	[signature]	CEL	12/05/08 1030

Chain of Custody Record

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Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
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Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

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AquaTerra Associates Incorporated, DBA

0585

Calscience Environmental Lab
5063 Commercial Circle, Suite H
Concord, CA 94520
phone: (925) 689-9022

Project ID: 388-1856-2-16
Protocol No.: ROD

Client Contact		Project Manager: Bob Devany	Sampled by: JMD	Date: 12/4/08	COC Number: UCD
Weiss Associates		Tel: 510-450-6144	Lab Contact: Micah Smith	Carrier:	Page 3 of 3
5801 Christie Avenue, Suite 600		Analysis Turnaround Time			
Emeryville, CA 94608		Calendar (C) or Work Days (W) --- 5W			
(510) 450-6000	Phone	TAT if different from Below _____			
(510) 547-5043	FAX	☐ 2 weeks			
		☐ 1 week			
Job Name: UC Davis		☐ 2 days			
Address: One Shields Ave, Davis		☐ 1 day			

Job No.

SDG No.

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	Carbonate/Bicarbonate (SM2320B)	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
15 TPIN 0365	12/4	1410	W	W	4					X										X			
Field Filtered						X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For _____ Months*

Special Instructions/QC Requirements & Comments: Level II Reporting with Initial Calibration Curves and Continuing Calibration **Note: Nitrate 48 hour hold time!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	WEISS	1505/12/4	[signature]	CEL	12/4/08 1505
[signature] to GSD		12-4-08 1730	[signature]	CEL	12/5/08 1030

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 0 8 - 1 2 - 0 5 0 5

SAMPLE RECEIPT FORM

Cooler 1 of 2

CLIENT: Weiss Associates

DATE: 12/5/08

TEMPERATURE: (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 2.1 °C - 0.2 °C (CF) = 1.9 °C ☑ **Blank** ☐ **Sample**

☐ Sample(s) outside temperature criteria (PM/APM contacted by:_____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only **Initial:** JP

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Initial:** JP

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** WB

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	☑	☐	☐
COC document(s) received complete.....	☑	☐	☐
Sampler's name indicated on COC.....	☑	☐	☐
Sample container label(s) consistent with COC.....	☑	☐	☐
Sample container(s) intact and good condition.....	☑	☐	☐
Correct containers and volume for analyses requested.....	☑	☐	☐
Analyses received within holding time.....	☑	☐	☐
Proper preservation noted on sample label(s).....	☑	☐	☐
Volatile analysis container(s) free of headspace.....	☑	☐	☐
Tedlar bag(s) free of condensation.....	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☑VOAh ☐VOAna$_2$ ☑125AGB ☐125AGBh ☐125AGBpo$_4$ ☐1AGB ☑1AGBna$_2$ ☐1AGBs ☐500AGB ☐500AGBs ☐250CGB ☑250CGBs ☑1PB ☐500PB ☐500PBna ☐250PB ☑250PBn ☑125PB ☐125PBznna ☐100PBsterile ☐100PBna$_2$ ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® ☐_____

Checked/Labeled by: WB

Reviewed by: D.C

Scanned by: WB

Container: C:Clear A:Amber P:Poly/Plastic G:Glass J:Jar B:Bottle

Preservative: h:HCL n:HNO_3 na$_2$:$Na_2S_2O_3$ na:NaOH po$_4$:H_3PO_4 s:H_2SO_4 znna:$ZnAc_2$+NaOH

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 0 8 - 1 2 - 0 5 8 5

SAMPLE RECEIPT FORM

Cooler 2 of 2

CLIENT: Weiss Associates

DATE: 12/5/08

TEMPERATURE: (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 1.7 °C - 0.2 °C (CF) = 1.5 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by:_____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only **Initial:** JP

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Initial:** JP

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** WB

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	☑	☐	☐
COC document(s) received complete.....	☑	☐	☐
Sampler's name indicated on COC.....	☑	☐	☐
Sample container label(s) consistent with COC.....	☑	☐	☐
Sample container(s) intact and good condition.....	☑	☐	☐
Correct containers and volume for analyses requested.....	☑	☐	☐
Analyses received within holding time.....	☑	☐	☐
Proper preservation noted on sample label(s).....	☑	☐	☐
Volatile analysis container(s) free of headspace.....	☑	☐	☐
Tedlar bag(s) free of condensation.....	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☑VOAh ☐VOAna$_2$ ☑125AGB ☐125AGBh ☐125AGBpo$_4$ ☐1AGB ☑1AGBna$_2$ ☐1AGBs ☐500AGB ☐500AGBs ☐250CGB ☑250CGBs ☑1PB ☐500PB ☐500PBna ☐250PB ☑250PBn ☑125PB ☐125PBznna ☐100PBsterile ☐100PBna$_2$ ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® ☐_____

Checked/Labeled by: WB

Reviewed by: D.L

Scanned by: WB

Container: C:Clear A:Amber P:Poly/Plastic G:Glass J:Jar B:Bottle

Preservative: h:HCL n:HNO_3 na$_2$:$Na_2S_2O_3$ na:NaOH po$_4$:H_3PO_4 s:H_2SO_4 znna:$ZnAc_2$+NaOH

Weck Laboratories, Inc.
Analytical Laboratory Services - Since 1964

Report Date: Tuesday, December 16, 2008
Received Date: Friday, December 5, 2008
Received Time: 4:11 pm

Turnaround Time: 6 days

Client: Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Phone: (714) 895-5494
FAX: (714) 894-7501

Attn: Virendra Patel

Project: 08-12-0585

P.O.#:

Certificate of Analysis

Work Order: 8120549-01 **Sample ID: GWGW2368A** **Matrix: Water**

Sampled by: Client **Sampled: 12/03/08 16:15** **Sample Note:**

Analyte	Result	Qualifier	Units	Reporting Limit	Dil	Method	Prepared	Analyzed		Batch
Uranium, Total	**5.9**		ug/l	0.20	1	EPA 200.8	12/11/08	12/11/08	ppy	W8L0704

Work Order: 8120549-02 **Sample ID: GWGW2368B** **Matrix: Water**

Sampled by: Client **Sampled: 12/03/08 16:15** **Sample Note:**

Analyte	Result	Qualifier	Units	Reporting Limit	Dil	Method	Prepared	Analyzed		Batch
Uranium, Total	**6.0**		ug/l	0.20	1	EPA 200.8	12/11/08	12/11/08	ppy	W8L0704

Work Order: 8120549-03 **Sample ID: GWGW2378** **Matrix: Water**

Sampled by: Client **Sampled: 12/03/08 17:25** **Sample Note:**

Analyte	Result	Qualifier	Units	Reporting Limit	Dil	Method	Prepared	Analyzed		Batch
Uranium, Total	**6.8**		ug/l	0.20	1	EPA 200.8	12/11/08	12/11/08	ppy	W8L0704

Work Order: 8120549-04 **Sample ID: GWGW2379A** **Matrix: Water**

Sampled by: Client **Sampled: 12/03/08 16:30** **Sample Note:**

Analyte	Result	Qualifier	Units	Reporting Limit	Dil	Method	Prepared	Analyzed		Batch
Uranium, Total	**1.6**		ug/l	0.20	1	EPA 200.8	12/11/08	12/11/08	ppy	W8L0704

Work Order: 8120549-05 **Sample ID: GWGW2379B** **Matrix: Water**

Sampled by: Client **Sampled: 12/03/08 16:30** **Sample Note:**

Analyte	Result	Qualifier	Units	Reporting Limit	Dil	Method	Prepared	Analyzed		Batch
Uranium, Total	**1.6**		ug/l	0.20	1	EPA 200.8	12/12/08	12/12/08	ppy	W8L0766

Work Order: 8120549-06 **Sample ID: GWGW2373** **Matrix: Water**

14859 East Clark Avenue, City of Industry, California 91745-1396 (626) 336-2139 FAX (626) 336-2634
www.wecklabs.com

Weck Laboratories, Inc.
Analytical Laboratory Services - Since 1964

Certificate of Analysis

Work Order: 8120549-06 **Sample ID: GWGW2373** **Matrix: Water**

Sampled by: Client **Sampled: 12/03/08 10:15** **Sample Note:**

Analyte	Result	Qualifier	Units	Reporting Limit	Dil	Method	Prepared	Analyzed	Batch
Uranium, Total	**6.6**		ug/l	0.20	1	EPA 200.8	12/12/08	12/12/08 ppy	W8L0766

Work Order: 8120549-07 **Sample ID: GWGW2390** **Matrix: Water**

Sampled by: Client **Sampled: 12/03/08 10:35** **Sample Note:**

Analyte	Result	Qualifier	Units	Reporting Limit	Dil	Method	Prepared	Analyzed	Batch
Uranium, Total	**4.8**		ug/l	0.20	1	EPA 200.8	12/12/08	12/12/08 ppy	W8L0766

Work Order: 8120549-08 **Sample ID: GWGW2382A** **Matrix: Water**

Sampled by: Client **Sampled: 12/03/08 11:45** **Sample Note:**

Analyte	Result	Qualifier	Units	Reporting Limit	Dil	Method	Prepared	Analyzed	Batch
Uranium, Total	**7.9**		ug/l	0.20	1	EPA 200.8	12/12/08	12/12/08 ppy	W8L0766

Work Order: 8120549-09 **Sample ID: GWGW2382B** **Matrix: Water**

Sampled by: Client **Sampled: 12/03/08 11:45** **Sample Note:**

Analyte	Result	Qualifier	Units	Reporting Limit	Dil	Method	Prepared	Analyzed	Batch
Uranium, Total	**7.8**		ug/l	0.20	1	EPA 200.8	12/12/08	12/12/08 ppy	W8L0766

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www.wecklabs.com

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Analytical Laboratory Services - Since 1964

Certificate of Analysis

Weck Laboratories, Inc

Metals by EPA 200 Series Methods - Quality Control

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Batch W8L0704 - EPA 200.8									
Blank (W8L0704-BLK1)					Prepared & Analyzed: 12/11/08				
Uranium, Total		ND		ug/l					
LCS (W8L0704-BS1)					Prepared & Analyzed: 12/11/08				
Uranium, Total		47.4		ug/l	50.0	95	85-115		
Calibration Check (W8L0704-CCV1)					Prepared & Analyzed: 12/11/08				
Uranium, Total		47.9		ug/l	50.0	96	90-110		
Calibration Check (W8L0704-CCV2)					Prepared & Analyzed: 12/11/08				
Uranium, Total		48.5		ug/l	50.0	97	90-110		
Matrix Spike (W8L0704-MS1)			Source: 8120526-01		Prepared & Analyzed: 12/11/08				
Uranium, Total	5.62	60.4		ug/l	50.0	110	70-130		
Matrix Spike Dup (W8L0704-MSD1)			Source: 8120526-01		Prepared & Analyzed: 12/11/08				
Uranium, Total	5.62	62.2		ug/l	50.0	113	70-130	3	30
Batch W8L0766 - EPA 200.8									
Blank (W8L0766-BLK1)					Prepared & Analyzed: 12/12/08				
Uranium, Total		ND		ug/l					
LCS (W8L0766-BS1)					Prepared & Analyzed: 12/12/08				
Uranium, Total		44.6		ug/l	50.0	89	85-115		
Calibration Check (W8L0766-CCV1)					Prepared & Analyzed: 12/12/08				
Uranium, Total		45.9		ug/l	50.0	92	90-110		
Calibration Check (W8L0766-CCV2)					Prepared & Analyzed: 12/12/08				
Uranium, Total		46.2		ug/l	50.0	92	90-110		
Calibration Check (W8L0766-CCV3)					Prepared & Analyzed: 12/12/08				
Uranium, Total		46.0		ug/l	50.0	92	90-110		
Matrix Spike (W8L0766-MS1)			Source: 8120549-05		Prepared & Analyzed: 12/12/08				
Uranium, Total	1.58	50.3		ug/l	50.0	97	70-130		
Matrix Spike (W8L0766-MS2)			Source: 8120934-02		Prepared & Analyzed: 12/12/08				
Uranium, Total	6.13	55.9		ug/l	50.0	99	70-130		
Matrix Spike Dup (W8L0766-MSD1)			Source: 8120549-05		Prepared & Analyzed: 12/12/08				

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Weck Laboratories, Inc

Metals by EPA 200 Series Methods - Quality Control

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Batch W8L0766 - EPA 200.8									
Matrix Spike Dup (W8L0766-MSD1)			**Source: 8120549-05**		Prepared & Analyzed: 12/12/08				
Uranium, Total	1.58	50.1		ug/l	50.0	97	70-130	0.3	30
Matrix Spike Dup (W8L0766-MSD2)			**Source: 8120934-02**		Prepared & Analyzed: 12/12/08				
Uranium, Total	6.13	55.4		ug/l	50.0	98	70-130	0.9	30

Notes:
The Chain of Custody document is part of the analytical report.
Any remaining sample(s) for testing will be disposed of one month from the final report date unless other arrangements are made in advance.
All results are expressed on wet weight basis unless otherwise specified.
ND = NOT DETECTED at or above the Reporting Limit. If J-value reported, then NOT DETECTED at or above the Method Detection Limit (MDL).
Sub = Subcontracted analysis, original report enclosed.
Dil = Dilution Factor
MDL = Method Detection Limit
MDA = Minimum Detectable Activity

An Absence of Total Coliform meets the drinking water standards as established by the State of California Department of Health Services.
The Reporting Limit (RL) is referenced as laboratory's Practical Quantitation Limit (PQL).
For Potable water analysis, the Reporting Limit (RL) is referenced as Detection Limit for reporting purposes (DLRs) defined by EPA.

If sample collected by Weck Laboratories, sampled in accordance to lab SOP MIS002

Authorized Signature

Contact: Kim G Tu (Project Manager)

ELAP # 1132
LACSD # 10143
NELAC # 04229CA

The results in this report apply to the samples analyzed in accordance with the chain of custody document. Weck Laboratories certifies that the test results meet all requirements of NELAC unless noted in the Case Narrative. This analytical report must be reproduced in its entirety.

Flags for Data Qualifiers:

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Calscience Environmental Laboratories, Inc.

Supplemental Report 2

December 22, 2008

The original report has been revised/corrected.

Tim Utterback
Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Subject: **Calscience Work Order No.: 08-12-0585**
Client Reference: UC Davis / 388-1856-2-16

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 12/5/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Emma C. Dennison
for

Calscience Environmental
Laboratories, Inc.
Virendra Patel
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	N/A
Emeryville, CA 94608-1939		Method:	RSK-175M

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2368A	**08-12-0585-1-D**	**12/03/08 16:15**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	24000	17.0	0.0547	10		ug/L

GWGW2368B	**08-12-0585-2-D**	**12/03/08 16:15**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	23500	17.0	0.0547	10		ug/L

GWGW2378	**08-12-0585-4-L**	**12/03/08 17:25**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	36800	17.0	0.0547	10		ug/L

GWGW2379A	**08-12-0585-5-D**	**12/03/08 16:30**	**Aqueous**	**GC 14**	**N/A**	**12/08/08 00:00**	**081208L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	4040	1.70	0.00547	1		ug/L

GWGW2379B	**08-12-0585-6-D**	**12/03/08 16:30**	**Aqueous**	**GC 14**	**N/A**	**12/08/08 00:00**	**081208L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	3860	1.70	0.00547	1		ug/L

GWGW2373	**08-12-0585-7-D**	**12/04/08 10:15**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	34100	17.0	0.0547	10		ug/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	N/A
Emeryville, CA 94608-1939		Method:	RSK-175M

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2390	**08-12-0585-9-D**	**12/04/08 10:35**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	15000	17.0	0.0547	10		ug/L

GWGW2382A	**08-12-0585-10-L**	**12/04/08 11:45**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	33400	17.0	0.0547	10		ug/L

GWGW2382B	**08-12-0585-11-K**	**12/04/08 11:45**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	33600	17.0	0.0547	10		ug/L

GWGW2377	**08-12-0585-12-H**	**12/04/08 14:30**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	21600	17.0	0.0547	10		ug/L

Method Blank	**099-12-659-36**	**N/A**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	ND	1.70	0.00547	1		ug/L

Method Blank	**099-12-659-37**	**N/A**	**Aqueous**	**GC 14**	**N/A**	**12/08/08 00:00**	**081208L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	ND	1.70	0.00547	1		ug/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6010B

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2368A	**08-12-0585-1-B**	**12/03/08 16:15**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:12**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	15.0	0.0500	0.0464	1		mg/L

GWGW2368B	**08-12-0585-2-B**	**12/03/08 16:15**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:07**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	15.4	0.0500	0.0464	1		mg/L

GWGW2378	**08-12-0585-4-H**	**12/03/08 17:25**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:14**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	17.1	0.0500	0.0464	1		mg/L

GWGW2379A	**08-12-0585-5-A**	**12/03/08 16:30**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:15**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	14.8	0.0500	0.0464	1		mg/L

GWGW2379B	**08-12-0585-6-A**	**12/03/08 16:30**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:17**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	14.5	0.0500	0.0464	1		mg/L

GWGW2373	**08-12-0585-7-B**	**12/04/08 10:15**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:19**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	17.4	0.0500	0.0464	1		mg/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6010B

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2390	**08-12-0585-9-A**	**12/04/08 10:35**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:24**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	18.0	0.0500	0.0464	1		mg/L

GWGW2382A	**08-12-0585-10-G**	**12/04/08 11:45**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:26**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	17.1	0.0500	0.0464	1		mg/L

GWGW2382B	**08-12-0585-11-G**	**12/04/08 11:45**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:27**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	17.3	0.0500	0.0464	1		mg/L

GWGW2377	**08-12-0585-12-E**	**12/04/08 14:30**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/11/08 16:02**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	17.3	0.0500	0.0464	1		mg/L

Method Blank	**097-01-003-8,893**	**N/A**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:03**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	ND	0.0500	0.0464	1		mg/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6020
		Units:	mg/L
Project: UC Davis / 388-1856-2-16			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2368A	**08-12-0585-1-B**	**12/03/08 16:15**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/11/08 14:09**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	0.00380	0.00200	0.000338	2		Vanadium	0.0128	0.00200	0.0000314	2	
Chromium	0.145	0.00200	0.0000368	2	B	Aluminum	0.00448	0.100	0.00377	2	J

GWGW2368B	**08-12-0585-2-B**	**12/03/08 16:15**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/10/08 19:54**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	0.00356	0.00200	0.000338	2		Vanadium	0.0129	0.00200	0.0000314	2	
Chromium	0.150	0.00200	0.0000368	2	B	Aluminum	0.00497	0.100	0.00377	2	J

GWGW2378	**08-12-0585-4-H**	**12/03/08 17:25**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/10/08 20:12**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	ND	0.00200	0.000158	2		Molybdenum	0.00118	0.00200	0.000560	2	J
Arsenic	0.00377	0.00200	0.000338	2		Nickel	0.00412	0.00200	0.0000468	2	
Barium	0.0567	0.00200	0.0000802	2		Selenium	0.00897	0.00200	0.00157	2	
Beryllium	ND	0.00200	0.000111	2		Silver	ND	0.00200	0.0000366	2	
Cadmium	ND	0.00200	0.0000302	2		Thallium	ND	0.00200	0.0000306	2	
Chromium	0.123	0.00200	0.0000368	2	B	Vanadium	0.0131	0.00200	0.0000314	2	
Cobalt	0.000578	0.00200	0.0000342	2	J	Zinc	0.0122	0.0100	0.000681	2	
Copper	0.00275	0.00200	0.0000362	2		Aluminum	0.00692	0.100	0.00377	2	J
Lead	0.0000959	0.00200	0.0000260	2	J						

GWGW2379A	**08-12-0585-5-A**	**12/03/08 16:30**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/10/08 20:16**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	0.00273	0.00100	0.000169	1		Vanadium	0.0103	0.00100	0.0000157	1	
Chromium	0.0251	0.00100	0.0000184	1	B	Aluminum	0.0168	0.0500	0.00188	1	J

GWGW2379B	**08-12-0585-6-A**	**12/03/08 16:30**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/10/08 20:21**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	0.00266	0.00100	0.000169	1		Vanadium	0.0102	0.00100	0.0000157	1	
Chromium	0.0246	0.00100	0.0000184	1	B	Aluminum	0.0215	0.0500	0.00188	1	J

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6020
		Units:	mg/L
Project: UC Davis / 388-1856-2-16			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2373	**08-12-0585-7-B**	**12/04/08 10:15**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/10/08 20:25**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	0.00347	0.00200	0.000338	2		Vanadium	0.00320	0.00200	0.0000314	2	
Chromium	0.425	0.00200	0.0000368	2	B	Aluminum	0.0237	0.100	0.00377	2	J

GWGW2390	**08-12-0585-9-A**	**12/04/08 10:35**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/10/08 20:30**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	0.00327	0.00200	0.000338	2		Vanadium	0.0118	0.00200	0.0000314	2	
Chromium	0.0460	0.00200	0.0000368	2	B	Aluminum	0.0202	0.100	0.00377	2	J

GWGW2382A	**08-12-0585-10-G**	**12/04/08 11:45**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/10/08 20:35**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	ND	0.00200	0.000158	2		Molybdenum	0.00184	0.00200	0.000560	2	J
Arsenic	0.00342	0.00200	0.000338	2		Nickel	0.00600	0.00200	0.0000468	2	
Barium	0.0491	0.00200	0.0000802	2		Selenium	0.00447	0.00200	0.00157	2	
Beryllium	ND	0.00200	0.000111	2		Silver	ND	0.00200	0.0000366	2	
Cadmium	ND	0.00200	0.0000302	2		Thallium	ND	0.00200	0.0000306	2	
Chromium	0.0695	0.00200	0.0000368	2	B	Vanadium	0.0148	0.00200	0.0000314	2	
Cobalt	0.000506	0.00200	0.0000342	2	J	Zinc	0.0129	0.0100	0.000681	2	
Copper	0.00413	0.00200	0.0000362	2		Aluminum	0.0206	0.100	0.00377	2	J
Lead	0.000116	0.00200	0.0000260	2	J						

GWGW2382B	**08-12-0585-11-G**	**12/04/08 11:45**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/10/08 20:39**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	ND	0.00200	0.000158	2		Molybdenum	0.00176	0.00200	0.000560	2	J
Arsenic	0.00362	0.00200	0.000338	2		Nickel	0.00635	0.00200	0.0000468	2	
Barium	0.0498	0.00200	0.0000802	2		Selenium	0.00488	0.00200	0.00157	2	
Beryllium	ND	0.00200	0.000111	2		Silver	ND	0.00200	0.0000366	2	
Cadmium	ND	0.00200	0.0000302	2		Thallium	ND	0.00200	0.0000306	2	
Chromium	0.0714	0.00200	0.0000368	2	B	Vanadium	0.0158	0.00200	0.0000314	2	
Cobalt	0.000519	0.00200	0.0000342	2	J	Zinc	0.0156	0.0100	0.000681	2	
Copper	0.00437	0.00200	0.0000362	2		Aluminum	0.0239	0.100	0.00377	2	J
Lead	0.000200	0.00200	0.0000260	2	J						

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6020
		Units:	mg/L
Project: UC Davis / 388-1856-2-16			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPEF0365	**08-12-0585-13-G**	**12/04/08 13:50**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/11/08 14:13**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	ND	0.00100	0.0000790	1		Nickel	0.00439	0.00100	0.0000234	1	
Arsenic	0.00237	0.00100	0.000169	1		Selenium	0.00275	0.00100	0.000783	1	
Barium	0.199	0.00100	0.0000401	1		Silver	ND	0.00100	0.0000183	1	
Beryllium	ND	0.00100	0.0000553	1		Thallium	ND	0.00100	0.0000153	1	
Cadmium	ND	0.00100	0.0000151	1		Vanadium	0.0108	0.00100	0.0000157	1	
Chromium	0.0372	0.00100	0.0000184	1	B	Zinc	0.0134	0.00500	0.000340	1	
Cobalt	0.000193	0.00100	0.0000171	1	J	Calcium	46.7	1.00	0.113	10	
Copper	0.0118	0.00100	0.0000181	1		Magnesium	77.8	0.100	0.00163	1	
Lead	0.0000746	0.00100	0.0000130	1	J	Potassium	0.908	1.00	0.0324	10	J
Molybdenum	0.00166	0.00100	0.000280	1		Sodium	47.1	1.00	0.0473	10	

Method Blank	**096-06-003-1,821**	**N/A**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/11/08 13:33**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	ND	0.00100	0.0000790	1		Selenium	ND	0.00100	0.000783	1	
Arsenic	ND	0.00100	0.000169	1		Silver	ND	0.00100	0.0000183	1	
Barium	ND	0.00100	0.0000401	1		Thallium	ND	0.00100	0.0000153	1	
Beryllium	ND	0.00100	0.0000553	1		Vanadium	ND	0.00100	0.0000157	1	
Cadmium	ND	0.00100	0.0000151	1		Zinc	ND	0.00500	0.000340	1	
Chromium	0.00139	0.00100	0.0000184	1		Aluminum	ND	0.0500	0.00188	1	
Cobalt	ND	0.00100	0.0000171	1		Calcium	ND	0.100	0.0113	1	
Copper	ND	0.00100	0.0000181	1		Magnesium	ND	0.100	0.00163	1	
Lead	ND	0.00100	0.0000130	1		Potassium	ND	0.100	0.00324	1	
Molybdenum	ND	0.00100	0.000280	1		Sodium	ND	0.100	0.00473	1	
Nickel	ND	0.00100	0.0000234	1							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 7470A Filt.
Emeryville, CA 94608-1939		Method:	EPA 7470A

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2378	**08-12-0585-4-H**	**12/03/08 17:25**	**Aqueous**	**Mercury**	**12/12/08**	**12/12/08 18:08**	**081212L04A**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Mercury	0.000167	0.000200	0.0000177	1	J	mg/L

GWGW2382A	**08-12-0585-10-G**	**12/04/08 11:45**	**Aqueous**	**Mercury**	**12/12/08**	**12/12/08 18:10**	**081212L04A**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Mercury	0.000125	0.000200	0.0000177	1	J	mg/L

GWGW2382B	**08-12-0585-11-G**	**12/04/08 11:45**	**Aqueous**	**Mercury**	**12/12/08**	**12/12/08 18:12**	**081212L04A**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Mercury	0.0000638	0.000200	0.0000177	1	J	mg/L

TPEF0365	**08-12-0585-13-G**	**12/04/08 13:50**	**Aqueous**	**Mercury**	**12/12/08**	**12/12/08 18:14**	**081212L04A**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Mercury	0.0000926	0.000200	0.0000177	1	J	mg/L

Method Blank	**099-12-457-99**	**N/A**	**Aqueous**	**Mercury**	**12/12/08**	**12/12/08 14:24**	**081212L04A**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Mercury	ND	0.000200	0.0000177	1		mg/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3520C
Emeryville, CA 94608-1939		Method:	EPA 8270C(M) Isotope Dilution
Project: UC Davis / 388-1856-2-16			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2368A	**08-12-0585-1-A**	**12/03/08 16:15**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/12/08 12:19**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	1.4	2.0	0.40	1	J	ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	82	56-123	

GWGW2368B	**08-12-0585-2-A**	**12/03/08 16:15**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/12/08 12:43**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	1.4	2.0	0.40	1	J	ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	82	56-123	

GWGW2383	**08-12-0585-3-A**	**12/03/08 16:50**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/12/08 13:07**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	83	56-123	

GWGW2378	**08-12-0585-4-A**	**12/03/08 17:25**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/12/08 13:31**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	81	56-123	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3520C
Emeryville, CA 94608-1939		Method:	EPA 8270C(M) Isotope Dilution
Project: UC Davis / 388-1856-2-16			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2373	**08-12-0585-7-A**	**12/04/08 10:15**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/12/08 13:55**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	77	56-123	

GWGW2404	**08-12-0585-8-A**	**12/04/08 11:10**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/12/08 14:19**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	73	56-123	

GWGW2382A	**08-12-0585-10-D**	**12/04/08 11:45**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/12/08 14:44**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	5.5	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	82	56-123	

GWGW2382B	**08-12-0585-11-D**	**12/04/08 11:45**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/12/08 15:08**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	5.9	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	76	56-123	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3520C
Emeryville, CA 94608-1939		Method:	EPA 8270C(M) Isotope Dilution
Project: UC Davis / 388-1856-2-16			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2377	**08-12-0585-12-D**	**12/04/08 14:30**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/12/08 15:32**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	76	56-123	

TPEF0365	**08-12-0585-13-D**	**12/04/08 13:50**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/12/08 15:56**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	80	56-123	

Method Blank	**099-09-004-1,156**	**N/A**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/11/08 21:59**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	97	56-123	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3510C
Emeryville, CA 94608-1939		Method:	EPA 8081A
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2378	**08-12-0585-4-E**	**12/03/08 17:25**	**Aqueous**	**GC 41**	**12/09/08**	**12/12/08 13:42**	**081209L16M**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Alpha-BHC	ND	0.050	0.013	1		4,4'-DDE	ND	0.050	0.012	1	
Gamma-BHC	ND	0.050	0.020	1		Endrin	ND	0.050	0.012	1	
Beta-BHC	ND	0.050	0.0082	1		Endrin Aldehyde	ND	0.050	0.0052	1	
Heptachlor	ND	0.050	0.0074	1		4,4'-DDD	ND	0.050	0.012	1	
Delta-BHC	ND	0.050	0.018	1		Endosulfan II	ND	0.050	0.011	1	
Aldrin	ND	0.050	0.010	1		4,4'-DDT	ND	0.050	0.015	1	
Heptachlor Epoxide	ND	0.050	0.023	1		Endosulfan Sulfate	ND	0.050	0.0079	1	
Endosulfan I	ND	0.050	0.0052	1		Chlordane	ND	0.50	0.085	1	
Dieldrin	ND	0.050	0.012	1		Toxaphene	ND	2.0	0.31	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	77	50-135		2,4,5,6-Tetrachloro-m-Xylene	70	50-135	

GWGW2382A	**08-12-0585-10-E**	**12/04/08 11:45**	**Aqueous**	**GC 41**	**12/09/08**	**12/12/08 14:11**	**081209L16M**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Alpha-BHC	ND	0.050	0.013	1		4,4'-DDE	ND	0.050	0.012	1	
Gamma-BHC	ND	0.050	0.020	1		Endrin	ND	0.050	0.012	1	
Beta-BHC	ND	0.050	0.0082	1		Endrin Aldehyde	ND	0.050	0.0052	1	
Heptachlor	ND	0.050	0.0074	1		4,4'-DDD	ND	0.050	0.012	1	
Delta-BHC	ND	0.050	0.018	1		Endosulfan II	ND	0.050	0.011	1	
Aldrin	ND	0.050	0.010	1		4,4'-DDT	ND	0.050	0.015	1	
Heptachlor Epoxide	ND	0.050	0.023	1		Endosulfan Sulfate	ND	0.050	0.0079	1	
Endosulfan I	ND	0.050	0.0052	1		Chlordane	ND	0.50	0.085	1	
Dieldrin	ND	0.050	0.012	1		Toxaphene	ND	2.0	0.31	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	78	50-135		2,4,5,6-Tetrachloro-m-Xylene	75	50-135	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3510C
Emeryville, CA 94608-1939		Method:	EPA 8081A
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2382B	**08-12-0585-11-F**	**12/04/08 11:45**	**Aqueous**	**GC 41**	**12/09/08**	**12/12/08 14:39**	**081209L16M**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Alpha-BHC	ND	0.050	0.013	1		4,4'-DDE	ND	0.050	0.012	1	
Gamma-BHC	ND	0.050	0.020	1		Endrin	ND	0.050	0.012	1	
Beta-BHC	ND	0.050	0.0082	1		Endrin Aldehyde	ND	0.050	0.0052	1	
Heptachlor	ND	0.050	0.0074	1		4,4'-DDD	ND	0.050	0.012	1	
Delta-BHC	ND	0.050	0.018	1		Endosulfan II	ND	0.050	0.011	1	
Aldrin	ND	0.050	0.010	1		4,4'-DDT	ND	0.050	0.015	1	
Heptachlor Epoxide	ND	0.050	0.023	1		Endosulfan Sulfate	ND	0.050	0.0079	1	
Endosulfan I	ND	0.050	0.0052	1		Chlordane	ND	0.50	0.085	1	
Dieldrin	ND	0.050	0.012	1		Toxaphene	ND	2.0	0.31	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	67	50-135		2,4,5,6-Tetrachloro-m-Xylene	67	50-135	

Method Blank	**099-12-525-58**	**N/A**	**Aqueous**	**GC 41**	**12/09/08**	**12/12/08 13:14**	**081209L16M**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Alpha-BHC	ND	0.050	0.013	1		4,4'-DDE	ND	0.050	0.012	1	
Gamma-BHC	ND	0.050	0.020	1		Endrin	ND	0.050	0.012	1	
Beta-BHC	ND	0.050	0.0082	1		Endrin Aldehyde	ND	0.050	0.0052	1	
Heptachlor	ND	0.050	0.0074	1		4,4'-DDD	ND	0.050	0.012	1	
Delta-BHC	ND	0.050	0.018	1		Endosulfan II	ND	0.050	0.011	1	
Aldrin	ND	0.050	0.010	1		4,4'-DDT	ND	0.050	0.015	1	
Heptachlor Epoxide	ND	0.050	0.023	1		Endosulfan Sulfate	ND	0.050	0.0079	1	
Endosulfan I	ND	0.050	0.0052	1		Chlordane	ND	0.50	0.085	1	
Dieldrin	ND	0.050	0.012	1		Toxaphene	ND	2.0	0.31	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	105	50-135		2,4,5,6-Tetrachloro-m-Xylene	91	50-135	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3510C
Emeryville, CA 94608-1939		Method:	EPA 8082
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2378	**08-12-0585-4-E**	**12/03/08 17:25**	**Aqueous**	**GC 16**	**12/09/08**	**12/12/08 12:29**	**081209L05**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Aroclor-1016	ND	0.50	0.077	1		Aroclor-1248	ND	0.50	0.050	1	
Aroclor-1221	ND	0.50	0.050	1		Aroclor-1254	ND	0.50	0.050	1	
Aroclor-1232	ND	0.50	0.050	1		Aroclor-1260	ND	0.50	0.12	1	
Aroclor-1242	ND	0.50	0.050	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
Decachlorobiphenyl	67	50-135		2,4,5,6-Tetrachloro-m-Xylene	53	50-135	

GWGW2382A	**08-12-0585-10-G**	**12/04/08 11:45**	**Aqueous**	**GC 16**	**12/09/08**	**12/12/08 12:48**	**081209L05**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Aroclor-1016	ND	0.50	0.077	1		Aroclor-1248	ND	0.50	0.050	1	
Aroclor-1221	ND	0.50	0.050	1		Aroclor-1254	ND	0.50	0.050	1	
Aroclor-1232	ND	0.50	0.050	1		Aroclor-1260	ND	0.50	0.12	1	
Aroclor-1242	ND	0.50	0.050	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
Decachlorobiphenyl	66	50-135		2,4,5,6-Tetrachloro-m-Xylene	58	50-135	

GWGW2382B	**08-12-0585-11-F**	**12/04/08 11:45**	**Aqueous**	**GC 16**	**12/09/08**	**12/12/08 13:07**	**081209L05**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Aroclor-1016	ND	0.50	0.077	1		Aroclor-1248	ND	0.50	0.050	1	
Aroclor-1221	ND	0.50	0.050	1		Aroclor-1254	ND	0.50	0.050	1	
Aroclor-1232	ND	0.50	0.050	1		Aroclor-1260	ND	0.50	0.12	1	
Aroclor-1242	ND	0.50	0.050	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
Decachlorobiphenyl	62	50-135		2,4,5,6-Tetrachloro-m-Xylene	57	50-135	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3510C
Emeryville, CA 94608-1939		Method:	EPA 8082
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-527-62**	**N/A**	**Aqueous**	**GC 16**	**12/09/08**	**12/11/08 19:10**	**081209L05**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Aroclor-1016	ND	0.50	0.077	1		Aroclor-1248	ND	0.50	0.050	1	
Aroclor-1221	ND	0.50	0.050	1		Aroclor-1254	ND	0.50	0.050	1	
Aroclor-1232	ND	0.50	0.050	1		Aroclor-1260	ND	0.50	0.12	1	
Aroclor-1242	ND	0.50	0.050	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	l Limits	Qual
Decachlorobiphenyl	106	50-135		2,4,5,6-Tetrachloro-m-Xylene	91	50-135	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 1 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2378	**08-12-0585-4-B**	**12/03/08 17:25**	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08 15:11**	**081210L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	5.0	1.5	1		1,1-Dichloroethene	ND	0.50	0.039	1	
Benzene	ND	0.50	0.50	1		c-1,2-Dichloroethene	ND	0.50	0.029	1	
Bromochloromethane	ND	0.50	0.11	1		t-1,2-Dichloroethene	ND	0.50	0.046	1	
Bromodichloromethane	ND	0.50	0.041	1		1,2-Dichloropropane	ND	0.50	0.036	1	
Bromoform	ND	0.50	0.11	1		c-1,3-Dichloropropene	ND	0.50	0.028	1	
Bromomethane	ND	0.50	0.19	1		t-1,3-Dichloropropene	ND	0.50	0.032	1	
2-Butanone	ND	5.0	1.5	1		Ethylbenzene	ND	0.50	0.079	1	
Carbon Disulfide	ND	0.50	0.13	1		2-Hexanone	ND	5.0	1.5	1	
Carbon Tetrachloride	ND	0.50	0.045	1		Methylene Chloride	ND	0.50	0.13	1	
Chlorobenzene	ND	0.50	0.38	1		4-Methyl-2-Pentanone	ND	5.0	1.3	1	
Chloroethane	ND	0.50	0.067	1		Styrene	ND	0.50	0.31	1	
Chloroform	ND	0.50	0.087	1		1,1,2,2-Tetrachloroethane	ND	0.50	0.098	1	
Chloromethane	ND	0.50	0.069	1		Tetrachloroethene	ND	0.50	0.027	1	
Dibromochloromethane	ND	0.50	0.048	1		Toluene	ND	0.50	0.46	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	0.88	1		1,1,1-Trichloroethane	ND	0.50	0.046	1	
1,2-Dibromoethane	ND	0.50	0.12	1		1,1,2-Trichloroethane	ND	0.50	0.086	1	
1,2-Dichlorobenzene	ND	0.50	0.029	1		Trichloroethene	ND	0.50	0.036	1	
1,3-Dichlorobenzene	ND	0.50	0.028	1		Vinyl Chloride	ND	0.50	0.041	1	
1,4-Dichlorobenzene	ND	0.50	0.025	1		p/m-Xylene	ND	0.50	0.13	1	
1,1-Dichloroethane	ND	0.50	0.026	1		o-Xylene	ND	0.50	0.32	1	
1,2-Dichloroethane	ND	0.50	0.080	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	94	73-157		Dibromofluoromethane	101	82-142	
Toluene-d8	91	82-112		1,4-Bromofluorobenzene	91	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 2 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2382A	**08-12-0585-10-B**	**12/04/08 11:45**	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08 15:38**	**081210L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	10	3.0	2		1,1-Dichloroethene	0.56	1.0	0.077	2	J
Benzene	ND	1.0	1.0	2		c-1,2-Dichloroethene	ND	1.0	0.059	2	
Bromochloromethane	ND	1.0	0.21	2		t-1,2-Dichloroethene	ND	1.0	0.092	2	
Bromodichloromethane	ND	1.0	0.083	2		1,2-Dichloropropane	ND	1.0	0.073	2	
Bromoform	ND	1.0	0.21	2		c-1,3-Dichloropropene	ND	1.0	0.055	2	
Bromomethane	ND	1.0	0.38	2		t-1,3-Dichloropropene	ND	1.0	0.065	2	
2-Butanone	ND	10	3.0	2		Ethylbenzene	ND	1.0	0.16	2	
Carbon Disulfide	ND	1.0	0.26	2		2-Hexanone	ND	10	3.0	2	
Carbon Tetrachloride	ND	1.0	0.090	2		Methylene Chloride	ND	1.0	0.25	2	
Chlorobenzene	ND	1.0	0.76	2		4-Methyl-2-Pentanone	ND	10	2.6	2	
Chloroethane	ND	1.0	0.13	2		Styrene	ND	1.0	0.63	2	
Chloroform	48	1.0	0.17	2		1,1,2,2-Tetrachloroethane	ND	1.0	0.20	2	
Chloromethane	ND	1.0	0.14	2		Tetrachloroethene	ND	1.0	0.055	2	
Dibromochloromethane	ND	1.0	0.096	2		Toluene	ND	1.0	0.91	2	
1,2-Dibromo-3-Chloropropane	ND	10	1.8	2		1,1,1-Trichloroethane	ND	1.0	0.093	2	
1,2-Dibromoethane	ND	1.0	0.25	2		1,1,2-Trichloroethane	ND	1.0	0.17	2	
1,2-Dichlorobenzene	ND	1.0	0.059	2		Trichloroethene	ND	1.0	0.073	2	
1,3-Dichlorobenzene	ND	1.0	0.056	2		Vinyl Chloride	ND	1.0	0.082	2	
1,4-Dichlorobenzene	ND	1.0	0.049	2		p/m-Xylene	ND	1.0	0.26	2	
1,1-Dichloroethane	1.1	1.0	0.052	2		o-Xylene	ND	1.0	0.64	2	
1,2-Dichloroethane	ND	1.0	0.16	2							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	91	73-157		Dibromofluoromethane	96	82-142	
Toluene-d8	99	82-112		1,4-Bromofluorobenzene	89	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 3 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2382B	**08-12-0585-11-B**	**12/04/08 11:45**	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08 16:05**	**081210L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	10	3.0	2		1,1-Dichloroethene	0.49	1.0	0.077	2	J
Benzene	ND	1.0	1.0	2		c-1,2-Dichloroethene	ND	1.0	0.059	2	
Bromochloromethane	ND	1.0	0.21	2		t-1,2-Dichloroethene	ND	1.0	0.092	2	
Bromodichloromethane	ND	1.0	0.083	2		1,2-Dichloropropane	ND	1.0	0.073	2	
Bromoform	ND	1.0	0.21	2		c-1,3-Dichloropropene	ND	1.0	0.055	2	
Bromomethane	ND	1.0	0.38	2		t-1,3-Dichloropropene	ND	1.0	0.065	2	
2-Butanone	ND	10	3.0	2		Ethylbenzene	ND	1.0	0.16	2	
Carbon Disulfide	ND	1.0	0.26	2		2-Hexanone	ND	10	3.0	2	
Carbon Tetrachloride	ND	1.0	0.090	2		Methylene Chloride	ND	1.0	0.25	2	
Chlorobenzene	ND	1.0	0.76	2		4-Methyl-2-Pentanone	ND	10	2.6	2	
Chloroethane	ND	1.0	0.13	2		Styrene	ND	1.0	0.63	2	
Chloroform	46	1.0	0.17	2		1,1,2,2-Tetrachloroethane	ND	1.0	0.20	2	
Chloromethane	ND	1.0	0.14	2		Tetrachloroethene	ND	1.0	0.055	2	
Dibromochloromethane	ND	1.0	0.096	2		Toluene	ND	1.0	0.91	2	
1,2-Dibromo-3-Chloropropane	ND	10	1.8	2		1,1,1-Trichloroethane	ND	1.0	0.093	2	
1,2-Dibromoethane	ND	1.0	0.25	2		1,1,2-Trichloroethane	ND	1.0	0.17	2	
1,2-Dichlorobenzene	ND	1.0	0.059	2		Trichloroethene	ND	1.0	0.073	2	
1,3-Dichlorobenzene	ND	1.0	0.056	2		Vinyl Chloride	ND	1.0	0.082	2	
1,4-Dichlorobenzene	ND	1.0	0.049	2		p/m-Xylene	ND	1.0	0.26	2	
1,1-Dichloroethane	1.0	1.0	0.052	2		o-Xylene	ND	1.0	0.64	2	
1,2-Dichloroethane	ND	1.0	0.16	2							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	89	73-157		Dibromofluoromethane	100	82-142	
Toluene-d8	99	82-112		1,4-Bromofluorobenzene	89	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 4 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2377	**08-12-0585-12-B**	**12/04/08 14:30**	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08 16:33**	**081210L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	5.0	1.5	1		1,1-Dichloroethene	ND	0.50	0.039	1	
Benzene	ND	0.50	0.50	1		c-1,2-Dichloroethene	ND	0.50	0.029	1	
Bromochloromethane	ND	0.50	0.11	1		t-1,2-Dichloroethene	ND	0.50	0.046	1	
Bromodichloromethane	ND	0.50	0.041	1		1,2-Dichloropropane	ND	0.50	0.036	1	
Bromoform	ND	0.50	0.11	1		c-1,3-Dichloropropene	ND	0.50	0.028	1	
Bromomethane	ND	0.50	0.19	1		t-1,3-Dichloropropene	ND	0.50	0.032	1	
2-Butanone	ND	5.0	1.5	1		Ethylbenzene	ND	0.50	0.079	1	
Carbon Disulfide	ND	0.50	0.13	1		2-Hexanone	ND	5.0	1.5	1	
Carbon Tetrachloride	ND	0.50	0.045	1		Methylene Chloride	ND	0.50	0.13	1	
Chlorobenzene	ND	0.50	0.38	1		4-Methyl-2-Pentanone	ND	5.0	1.3	1	
Chloroethane	ND	0.50	0.067	1		Styrene	ND	0.50	0.31	1	
Chloroform	0.25	0.50	0.087	1	J	1,1,2,2-Tetrachloroethane	ND	0.50	0.098	1	
Chloromethane	ND	0.50	0.069	1		Tetrachloroethene	ND	0.50	0.027	1	
Dibromochloromethane	ND	0.50	0.048	1		Toluene	ND	0.50	0.46	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	0.88	1		1,1,1-Trichloroethane	ND	0.50	0.046	1	
1,2-Dibromoethane	ND	0.50	0.12	1		1,1,2-Trichloroethane	ND	0.50	0.086	1	
1,2-Dichlorobenzene	ND	0.50	0.029	1		Trichloroethene	ND	0.50	0.036	1	
1,3-Dichlorobenzene	ND	0.50	0.028	1		Vinyl Chloride	ND	0.50	0.041	1	
1,4-Dichlorobenzene	ND	0.50	0.025	1		p/m-Xylene	ND	0.50	0.13	1	
1,1-Dichloroethane	ND	0.50	0.026	1		o-Xylene	ND	0.50	0.32	1	
1,2-Dichloroethane	ND	0.50	0.080	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	97	73-157		Dibromofluoromethane	104	82-142	
Toluene-d8	92	82-112		1,4-Bromofluorobenzene	82	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 5 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPEF0365	**08-12-0585-13-B**	**12/04/08 13:50**	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08 17:00**	**081210L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	5.0	1.5	1		1,1-Dichloroethene	ND	0.50	0.039	1	
Benzene	ND	0.50	0.50	1		c-1,2-Dichloroethene	ND	0.50	0.029	1	
Bromochloromethane	ND	0.50	0.11	1		t-1,2-Dichloroethene	ND	0.50	0.046	1	
Bromodichloromethane	ND	0.50	0.041	1		1,2-Dichloropropane	ND	0.50	0.036	1	
Bromoform	ND	0.50	0.11	1		c-1,3-Dichloropropene	ND	0.50	0.028	1	
Bromomethane	ND	0.50	0.19	1		t-1,3-Dichloropropene	ND	0.50	0.032	1	
2-Butanone	ND	5.0	1.5	1		Ethylbenzene	ND	0.50	0.079	1	
Carbon Disulfide	ND	0.50	0.13	1		2-Hexanone	ND	5.0	1.5	1	
Carbon Tetrachloride	ND	0.50	0.045	1		Methylene Chloride	ND	0.50	0.13	1	
Chlorobenzene	ND	0.50	0.38	1		4-Methyl-2-Pentanone	ND	5.0	1.3	1	
Chloroethane	ND	0.50	0.067	1		Styrene	ND	0.50	0.31	1	
Chloroform	ND	0.50	0.087	1		1,1,2,2-Tetrachloroethane	ND	0.50	0.098	1	
Chloromethane	ND	0.50	0.069	1		Tetrachloroethene	ND	0.50	0.027	1	
Dibromochloromethane	ND	0.50	0.048	1		Toluene	ND	0.50	0.46	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	0.88	1		1,1,1-Trichloroethane	ND	0.50	0.046	1	
1,2-Dibromoethane	ND	0.50	0.12	1		1,1,2-Trichloroethane	ND	0.50	0.086	1	
1,2-Dichlorobenzene	ND	0.50	0.029	1		Trichloroethene	ND	0.50	0.036	1	
1,3-Dichlorobenzene	ND	0.50	0.028	1		Vinyl Chloride	ND	0.50	0.041	1	
1,4-Dichlorobenzene	ND	0.50	0.025	1		p/m-Xylene	ND	0.50	0.13	1	
1,1-Dichloroethane	ND	0.50	0.026	1		o-Xylene	ND	0.50	0.32	1	
1,2-Dichloroethane	ND	0.50	0.080	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	92	73-157		Dibromofluoromethane	100	82-142	
Toluene-d8	84	82-112		1,4-Bromofluorobenzene	87	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 6 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TBGW0521	**08-12-0585-14-B**	**12/04/08 07:30**	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08 17:27**	**081210L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	5.0	1.5	1		1,1-Dichloroethene	ND	0.50	0.039	1	
Benzene	ND	0.50	0.50	1		c-1,2-Dichloroethene	ND	0.50	0.029	1	
Bromochloromethane	ND	0.50	0.11	1		t-1,2-Dichloroethene	ND	0.50	0.046	1	
Bromodichloromethane	ND	0.50	0.041	1		1,2-Dichloropropane	ND	0.50	0.036	1	
Bromoform	ND	0.50	0.11	1		c-1,3-Dichloropropene	ND	0.50	0.028	1	
Bromomethane	ND	0.50	0.19	1		t-1,3-Dichloropropene	ND	0.50	0.032	1	
2-Butanone	ND	5.0	1.5	1		Ethylbenzene	ND	0.50	0.079	1	
Carbon Disulfide	ND	0.50	0.13	1		2-Hexanone	ND	5.0	1.5	1	
Carbon Tetrachloride	ND	0.50	0.045	1		Methylene Chloride	ND	0.50	0.13	1	
Chlorobenzene	ND	0.50	0.38	1		4-Methyl-2-Pentanone	ND	5.0	1.3	1	
Chloroethane	ND	0.50	0.067	1		Styrene	ND	0.50	0.31	1	
Chloroform	ND	0.50	0.087	1		1,1,2,2-Tetrachloroethane	ND	0.50	0.098	1	
Chloromethane	ND	0.50	0.069	1		Tetrachloroethene	ND	0.50	0.027	1	
Dibromochloromethane	ND	0.50	0.048	1		Toluene	ND	0.50	0.46	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	0.88	1		1,1,1-Trichloroethane	ND	0.50	0.046	1	
1,2-Dibromoethane	ND	0.50	0.12	1		1,1,2-Trichloroethane	ND	0.50	0.086	1	
1,2-Dichlorobenzene	ND	0.50	0.029	1		Trichloroethene	ND	0.50	0.036	1	
1,3-Dichlorobenzene	ND	0.50	0.028	1		Vinyl Chloride	ND	0.50	0.041	1	
1,4-Dichlorobenzene	ND	0.50	0.025	1		p/m-Xylene	ND	0.50	0.13	1	
1,1-Dichloroethane	ND	0.50	0.026	1		o-Xylene	ND	0.50	0.32	1	
1,2-Dichloroethane	ND	0.50	0.080	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	89	73-157		Dibromofluoromethane	97	82-142	
Toluene-d8	93	82-112		1,4-Bromofluorobenzene	77	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 7 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPIN 0365	**08-12-0585-15-B**	**12/04/08 14:10**	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08 17:54**	**081210L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	5.0	1.5	1		1,1-Dichloroethene	ND	0.50	0.039	1	
Benzene	ND	0.50	0.50	1		c-1,2-Dichloroethene	ND	0.50	0.029	1	
Bromochloromethane	ND	0.50	0.11	1		t-1,2-Dichloroethene	ND	0.50	0.046	1	
Bromodichloromethane	ND	0.50	0.041	1		1,2-Dichloropropane	ND	0.50	0.036	1	
Bromoform	ND	0.50	0.11	1		c-1,3-Dichloropropene	ND	0.50	0.028	1	
Bromomethane	ND	0.50	0.19	1		t-1,3-Dichloropropene	ND	0.50	0.032	1	
2-Butanone	ND	5.0	1.5	1		Ethylbenzene	ND	0.50	0.079	1	
Carbon Disulfide	ND	0.50	0.13	1		2-Hexanone	ND	5.0	1.5	1	
Carbon Tetrachloride	ND	0.50	0.045	1		Methylene Chloride	ND	0.50	0.13	1	
Chlorobenzene	ND	0.50	0.38	1		4-Methyl-2-Pentanone	ND	5.0	1.3	1	
Chloroethane	ND	0.50	0.067	1		Styrene	ND	0.50	0.31	1	
Chloroform	17	0.50	0.087	1		1,1,2,2-Tetrachloroethane	ND	0.50	0.098	1	
Chloromethane	ND	0.50	0.069	1		Tetrachloroethene	ND	0.50	0.027	1	
Dibromochloromethane	ND	0.50	0.048	1		Toluene	ND	0.50	0.46	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	0.88	1		1,1,1-Trichloroethane	ND	0.50	0.046	1	
1,2-Dibromoethane	ND	0.50	0.12	1		1,1,2-Trichloroethane	ND	0.50	0.086	1	
1,2-Dichlorobenzene	ND	0.50	0.029	1		Trichloroethene	ND	0.50	0.036	1	
1,3-Dichlorobenzene	ND	0.50	0.028	1		Vinyl Chloride	ND	0.50	0.041	1	
1,4-Dichlorobenzene	ND	0.50	0.025	1		p/m-Xylene	ND	0.50	0.13	1	
1,1-Dichloroethane	ND	0.50	0.026	1		o-Xylene	ND	0.50	0.32	1	
1,2-Dichloroethane	ND	0.50	0.080	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	88	73-157		Dibromofluoromethane	100	82-142	
Toluene-d8	89	82-112		1,4-Bromofluorobenzene	93	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 8 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-025-731**	**N/A**	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08 12:56**	**081210L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	5.0	1.5	1		1,1-Dichloroethene	ND	0.50	0.039	1	
Benzene	ND	0.50	0.50	1		c-1,2-Dichloroethene	ND	0.50	0.029	1	
Bromochloromethane	ND	0.50	0.11	1		t-1,2-Dichloroethene	ND	0.50	0.046	1	
Bromodichloromethane	ND	0.50	0.041	1		1,2-Dichloropropane	ND	0.50	0.036	1	
Bromoform	ND	0.50	0.11	1		c-1,3-Dichloropropene	ND	0.50	0.028	1	
Bromomethane	ND	0.50	0.19	1		t-1,3-Dichloropropene	ND	0.50	0.032	1	
2-Butanone	ND	5.0	1.5	1		Ethylbenzene	ND	0.50	0.079	1	
Carbon Disulfide	ND	0.50	0.13	1		2-Hexanone	ND	5.0	1.5	1	
Carbon Tetrachloride	ND	0.50	0.045	1		Methylene Chloride	ND	0.50	0.13	1	
Chlorobenzene	ND	0.50	0.38	1		4-Methyl-2-Pentanone	ND	5.0	1.3	1	
Chloroethane	ND	0.50	0.067	1		Styrene	ND	0.50	0.31	1	
Chloroform	ND	0.50	0.087	1		1,1,2,2-Tetrachloroethane	ND	0.50	0.098	1	
Chloromethane	ND	0.50	0.069	1		Tetrachloroethene	ND	0.50	0.027	1	
Dibromochloromethane	ND	0.50	0.048	1		Toluene	ND	0.50	0.46	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	0.88	1		1,1,1-Trichloroethane	ND	0.50	0.046	1	
1,2-Dibromoethane	ND	0.50	0.12	1		1,1,2-Trichloroethane	ND	0.50	0.086	1	
1,2-Dichlorobenzene	ND	0.50	0.029	1		Trichloroethene	ND	0.50	0.036	1	
1,3-Dichlorobenzene	ND	0.50	0.028	1		Vinyl Chloride	ND	0.50	0.041	1	
1,4-Dichlorobenzene	ND	0.50	0.025	1		p/m-Xylene	ND	0.50	0.13	1	
1,1-Dichloroethane	ND	0.50	0.026	1		o-Xylene	ND	0.50	0.32	1	
1,2-Dichloroethane	ND	0.50	0.080	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	93	73-157		Dibromofluoromethane	98	82-142	
Toluene-d8	86	82-112		1,4-Bromofluorobenzene	87	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Date Received: 12/05/08
Work Order No: 08-12-0585

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date Collected	Matrix
GWGW2378	**08-12-0585-4**	**12/03/08**	**Aqueous**

Comment(s): (24) Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.
(68) Dilution analysis was performed outside the recommended holding time.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrate (as N) (68)	28	1.0	0.28	10		mg/L	N/A	12/06/08	EPA 300.0
Bicarbonate (as CaCO3)	722	5.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B
Carbonate (as CaCO3) (24)	ND	1.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B

GWGW2379A	**08-12-0585-5**	**12/03/08**	**Aqueous**

Comment(s): (24) Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Bicarbonate (as CaCO3)	334	5.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B
Carbonate (as CaCO3) (24)	ND	1.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B

GWGW2379B	**08-12-0585-6**	**12/03/08**	**Aqueous**

Comment(s): (24) Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Bicarbonate (as CaCO3)	338	5.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B
Carbonate (as CaCO3) (24)	ND	1.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B

GWGW2390	**08-12-0585-9**	**12/04/08**	**Aqueous**

Comment(s): (24) Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Bicarbonate (as CaCO3)	546	5.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B
Carbonate (as CaCO3) (24)	ND	1.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B

GWGW2382A	**08-12-0585-10**	**12/04/08**	**Aqueous**

Comment(s): (24) Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.
(68) Dilution analysis was performed outside the recommended holding time.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrate (as N) (68)	12	0.50	0.14	5		mg/L	N/A	12/07/08	EPA 300.0
Bicarbonate (as CaCO3)	746	5.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B
Carbonate (as CaCO3) (24)	ND	1.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Date Received: 12/05/08
Work Order No: 08-12-0585

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date Collected	Matrix
GWGW2382B	**08-12-0585-11**	**12/04/08**	**Aqueous**

Comment(s): (24) Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.
(68) Dilution analysis was performed outside the recommended holding time.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrate (as N) (68)	12	0.50	0.14	5		mg/L	N/A	12/07/08	EPA 300.0
Bicarbonate (as CaCO3)	750	5.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B
Carbonate (as CaCO3) (24)	ND	1.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B

GWGW2377	**08-12-0585-12**	**12/04/08**	**Aqueous**

Comment(s): (24) Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.
(68) Dilution analysis was performed outside the recommended holding time.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrate (as N) (68)	9.5	0.50	0.14	5		mg/L	N/A	12/07/08	EPA 300.0
Bicarbonate (as CaCO3)	646	5.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B
Carbonate (as CaCO3) (24)	ND	1.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B

TPEF0365	**08-12-0585-13**	**12/04/08**	**Aqueous**

Comment(s): (68) Dilution analysis was performed outside the recommended holding time.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chloride	23	5.0	0.27	5		mg/L	N/A	12/07/08	EPA 300.0
Nitrate (as N) (68)	10	0.50	0.14	5		mg/L	N/A	12/07/08	EPA 300.0
Sulfate	60	10	0.69	10		mg/L	N/A	12/07/08	EPA 300.0
Solids, Total Dissolved	542	1.0	1.0	1		mg/L	N/A	12/06/08	SM 2540 C

TPIN 0365	**08-12-0585-15**	**12/04/08**	**Aqueous**

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Carbon, Total Organic	1.6	0.50	0.021	1		mg/L	N/A	12/05/08	SM 5310 D

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Date Received: 12/05/08
Work Order No: 08-12-0585

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date Collected	Matrix
Method Blank		**N/A**	**Aqueous**

Comment(s): (24) Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chloride (24)	ND	1.0	0.055	1		mg/L	N/A	12/05/08	EPA 300.0
Nitrate (as N) (24)	ND	0.10	0.028	1		mg/L	N/A	12/05/08	EPA 300.0
Sulfate (24)	ND	1.0	0.069	1		mg/L	N/A	12/05/08	EPA 300.0
Chloride (24)	ND	1.0	0.055	1		mg/L	N/A	12/06/08	EPA 300.0
Nitrate (as N) (24)	ND	0.10	0.028	1		mg/L	N/A	12/06/08	EPA 300.0
Sulfate (24)	ND	1.0	0.069	1		mg/L	N/A	12/06/08	EPA 300.0
Bicarbonate (as CaCO3)	ND	1.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B
Carbonate (as CaCO3)	ND	1.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B
Solids, Total Dissolved (24)	ND	1.0	1.0	1		mg/L	N/A	12/06/08	SM 2540 C
Carbon, Total Organic (24)	ND	0.50	0.021	1		mg/L	N/A	12/05/08	SM 5310 D

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6010B

Project UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
GWGW2368B	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08**	**081208SA6**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Silicon	4X	4X	24-180	4X	0-15	Q

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6020

Project UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
GWGW2368A	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/11/08**	**081208S04**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	112	108	85-133	4	0-11	
Arsenic	109	110	73-127	1	0-11	
Barium	129	131	74-128	0	0-10	3
Beryllium	105	112	56-122	7	0-11	
Cadmium	108	110	84-114	2	0-8	
Chromium	120	119	73-133	0	0-11	
Cobalt	107	109	79-121	2	0-10	
Copper	106	107	72-108	1	0-10	
Lead	107	108	79-121	1	0-10	
Molybdenum	104	104	83-137	1	0-10	
Nickel	105	105	68-122	0	0-10	
Selenium	104	108	59-125	4	0-12	
Silver	101	104	68-128	3	0-14	
Thallium	104	106	73-121	2	0-11	
Vanadium	117	120	77-137	2	0-15	
Zinc	122	106	43-145	12	0-39	
Aluminum	174	126	47-161	32	0-24	3,4
Calcium	4X	4X	80-120	4X	0-20	Q
Magnesium	4X	4X	63-123	4X	0-32	Q
Potassium	170	169	80-120	0	0-20	3
Sodium	4X	4X	80-120	4X	0-20	Q

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 7470A Total
Emeryville, CA 94608-1939		Method:	EPA 7470A

Project UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-12-1173-1	**Aqueous**	**Mercury**	**12/12/08**	**12/12/08**	**081212S04**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	111	111	66-126	0	0-7	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B

Project UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-12-0410-3	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08**	**081210S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	112	108	86-122	3	0-8	
Carbon Tetrachloride	106	110	78-138	4	0-9	
Chlorobenzene	113	112	90-120	0	0-9	
1,2-Dibromoethane	117	112	70-130	4	0-30	
1,2-Dichlorobenzene	109	109	89-119	1	0-10	
1,1-Dichloroethene	109	114	52-142	5	0-23	
Ethylbenzene	115	115	70-130	0	0-30	
Toluene	118	112	85-127	5	0-12	
Trichloroethene	114	112	78-126	2	0-10	
Vinyl Chloride	111	124	56-140	11	0-21	
Methyl-t-Butyl Ether (MTBE)	107	95	64-136	12	0-28	
Tert-Butyl Alcohol (TBA)	101	124	27-183	21	0-60	
Diisopropyl Ether (DIPE)	102	101	78-126	0	0-16	
Ethyl-t-Butyl Ether (ETBE)	105	103	67-133	2	0-21	
Tert-Amyl-Methyl Ether (TAME)	111	100	63-141	10	0-21	
Ethanol	98	112	11-167	13	0-64	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Date Received: N/A
Work Order No: 08-12-0585

Project: UC Davis / 388-1856-2-16

Matrix: Aqueous

Parameter	Method	Quality Control Sample ID	Date Analyzed	Date Extracted	MS% REC	MSD % REC	%REC CL	RPD	RPD CL	Qualifiers
Chloride	EPA 300.0	08-12-0536-1	12/05/08	N/A	102	101	56-134	1	0-3	
Nitrate (as N)	EPA 300.0	08-12-0536-1	12/05/08	N/A	104	104	58-142	0	0-6	
Sulfate	EPA 300.0	08-12-0536-1	12/05/08	N/A	110	110	49-133	1	0-3	
Chloride	EPA 300.0	GWGW2382A	12/06/08	N/A	99	99	56-134	1	0-3	
Nitrate (as N)	EPA 300.0	GWGW2382A	12/06/08	N/A	99	101	58-142	2	0-6	
Sulfate	EPA 300.0	GWGW2382A	12/06/08	N/A	100	102	49-133	2	0-3	
Carbon, Total Organic	SM 5310 D	08-12-0558-2	12/05/08	N/A	95	94	70-130	1	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Date Received: N/A
Work Order No: 08-12-0585

Project: UC Davis / 388-1856-2-16

Matrix: Aqueous

Parameter	Method	QC Sample ID	Date Analyzed	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Alkalinity, Total (as CaCO3)	SM 2320B	08-12-0558-1	12/11/08	522	520	0	0-25	
Bicarbonate (as CaCO3)	SM 2320B	08-12-0558-1	12/11/08	522	520	0	0-25	
Carbonate (as CaCO3)	SM 2320B	08-12-0558-1	12/11/08	ND	ND	NA	0-25	
Hydroxide (as CaCO3)	SM 2320B	08-12-0558-1	12/11/08	ND	ND	NA	0-25	
Solids, Total Dissolved	SM 2540 C	08-12-0558-2	12/06/08	1700	1690	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	N/A
Emeryville, CA 94608-1939		Method:	RSK-175M

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-659-37	**Aqueous**	**GC 14**	**N/A**	**12/08/08**	**081208L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Carbon Dioxide	96	96	80-120	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	N/A
Emeryville, CA 94608-1939		Method:	RSK-175M

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-659-36	**Aqueous**	**GC 14**	**N/A**	**12/09/08**	**081209L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Carbon Dioxide	95	95	80-120	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6010B

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
097-01-003-8,893	**Aqueous**	**ICP 5300**	**12/09/08**	**081208-la-6**	**081208LA6F**

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Silicon	0.500	0.538	108	80-120	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6020

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
096-06-003-1,821	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/11/08**	**081208L04F**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Antimony	89	90	80-120	73-127	1	0-20	
Arsenic	96	97	80-120	73-127	0	0-20	
Barium	95	97	80-120	73-127	2	0-20	
Beryllium	104	105	80-120	73-127	1	0-20	
Cadmium	100	101	80-120	73-127	1	0-20	
Chromium	98	99	80-120	73-127	1	0-20	
Cobalt	99	97	80-120	73-127	2	0-20	
Copper	102	100	80-120	73-127	2	0-20	
Lead	95	96	80-120	73-127	1	0-20	
Molybdenum	93	93	80-120	73-127	0	0-20	
Nickel	99	97	80-120	73-127	1	0-20	
Selenium	95	96	80-120	73-127	0	0-20	
Silver	102	103	80-120	73-127	2	0-20	
Thallium	93	93	80-120	73-127	0	0-20	
Vanadium	96	97	80-120	73-127	1	0-20	
Zinc	98	98	80-120	73-127	1	0-20	
Aluminum	108	108	80-120	73-127	0	0-20	
Calcium	108	109	80-120	73-127	1	0-20	
Magnesium	110	111	80-120	73-127	1	0-20	
Potassium	97	97	80-120	73-127	0	0-20	
Sodium	99	99	80-120	73-127	0	0-20	

Total number of LCS compounds : 21
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 7470A Filt.
Emeryville, CA 94608-1939		Method:	EPA 7470A

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-457-99	**Aqueous**	**Mercury**	**12/12/08**	**12/12/08**	**081212L04A**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	107	107	90-122	0	0-14	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3520C
Emeryville, CA 94608-1939		Method:	EPA 8270C(M) Isotope Dilution

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-09-004-1,156	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/11/08**	**081209L13D**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
1,4-Dioxane	114	122	50-130	7	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3510C
Emeryville, CA 94608-1939		Method:	EPA 8081A

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-525-58	**Aqueous**	**GC 41**	**12/09/08**	**12/12/08**	**081209L16M**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gamma-BHC	94	90	50-135	3	0-25	
Heptachlor	88	85	50-135	3	0-25	
Endosulfan I	92	89	50-135	3	0-25	
Dieldrin	81	78	50-135	3	0-25	
Endrin	98	95	50-135	3	0-25	
4,4'-DDT	99	97	50-135	2	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3510C
Emeryville, CA 94608-1939		Method:	EPA 8082

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-527-62	**Aqueous**	**GC 16**	**12/09/08**	**12/11/08**	**081209L05**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Aroclor-1260	90	112	50-135	22	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-025-731	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08**	**081210L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	108	107	87-117	82-122	1	0-7	
Carbon Tetrachloride	108	106	78-132	69-141	2	0-8	
Chlorobenzene	110	109	88-118	83-123	2	0-8	
1,2-Dibromoethane	117	106	80-120	73-127	10	0-20	
1,2-Dichlorobenzene	112	110	88-118	83-123	2	0-8	
1,1-Dichloroethene	110	107	71-131	61-141	3	0-14	
Ethylbenzene	110	110	80-120	73-127	0	0-20	
Toluene	114	112	85-127	78-134	2	0-7	
Trichloroethene	113	111	85-121	79-127	2	0-11	
Vinyl Chloride	115	118	64-136	52-148	2	0-10	
Methyl-t-Butyl Ether (MTBE)	106	101	67-133	56-144	5	0-16	
Tert-Butyl Alcohol (TBA)	109	95	34-154	14-174	14	0-19	
Diisopropyl Ether (DIPE)	109	105	80-122	73-129	4	0-8	
Ethyl-t-Butyl Ether (ETBE)	109	107	73-127	64-136	2	0-11	
Tert-Amyl-Methyl Ether (TAME)	110	108	69-135	58-146	3	0-12	
Ethanol	97	88	34-124	19-139	10	0-44	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Date Received: N/A
Work Order No: 08-12-0585

Project: UC Davis / 388-1856-2-16

Matrix: Aqueous

Parameter	Method	Quality Control Sample ID	Date Extracted	Date Analyzed	LCS % REC	LCSD % REC	%REC CL	RPD	RPD CL	Qual
Chloride	EPA 300.0	099-05-118-4,918	N/A	12/05/08	93	92	81-111	2	0-5	
Nitrate (as N)	EPA 300.0	099-05-118-4,918	N/A	12/05/08	104	103	87-111	1	0-12	
Sulfate	EPA 300.0	099-05-118-4,918	N/A	12/05/08	97	99	89-107	1	0-13	
Chloride	EPA 300.0	099-05-118-4,923	N/A	12/06/08	95	97	81-111	2	0-5	
Nitrate (as N)	EPA 300.0	099-05-118-4,923	N/A	12/06/08	103	104	87-111	1	0-12	
Sulfate	EPA 300.0	099-05-118-4,923	N/A	12/06/08	103	100	89-107	2	0-13	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Date Received: N/A
Work Order No: 08-12-0585

Project: UC Davis / 388-1856-2-16

Matrix : Aqueous

Parameter	Method	Quality Control Sample ID	Date Analyzed	Date Extracted	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Carbon, Total Organic	SM 5310 D	099-05-097-3,166	12/05/08	N/A	5.00	5.14	103	80-120	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-12-0585

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Revised COC received on 12/08/08 at 15:24 - VP

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AquaTerra Associates Incorporated, DBA

0585

Calscience Environmental Lab
5063 Commercial Circle, Suite H
Concord, CA 94520
phone: (925) 689-9022

Project ID: 388-1856-2-16
Protocol No.: ROD

Client Contact		Project Manager: Bob Devany	Sampled by: JMD / KHA	Date: 12/4/08	COC Number: UCD
Weiss Associates		Tel: 510-450-6144	Lab Contact: Micah Smith	Carrier:	Page 2 of 3
5801 Christie Avenue, Suite 600		Analysis Turnaround Time			Job No.
Emeryville, CA 94608		Calendar (C) or Work Days (W) --- 5W			
(510) 450-6000	Phone	TAT if different from Below _____			SDG No.
(510) 547-5043	FAX	☐ 2 weeks			
		☐ 1 week			
Job Name: UC Davis		☐ 2 days			
Address: One Shields Ave, Davis		☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	Carbonate/Bicarbonate (SM2320B)	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
10	GWGW2382A	12/4	1145	L	W	12		X		X	X	X	X		X	X					X	X	X	Title 22 + Al + Si
11	GWGW2382B	12/4	1145	|	|	12		X		X	X	X	X		X	X					X	X	X	Title 22 + Al + Si
12	GWGW2377	12/4	1430	|	|	9		X	X	X	X	X									X	X		
13	TPEF0365	12/4	1350	|	|	9					X	X	X				X		X	X	X	X		Title 22 + Ca, K, Mg, Na
																				X				
~~14~~	~~GPTN0365~~																							
	TRU 12/8/08																							
15	~~Travel Blank~~ TBGW0521	0730	12/4	L	W						X													~~HOLD~~ TRU 12/8/08
						Field Filtered	X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For _____ Months*

Special Instructions/QC Requirements & Comments: Level II Reporting with Initial Calibration Curves and Continuing Calibration **Note: Nitrate 48 hour hold time!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	WEISS	1505, 12/4/08	[signature] CEL		12/4/08 1505
[signature] to GSD		12-4-08 1730	[signature]	CEL	12/05/08 1030

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AguaTierra Associates Incorporated, DBA

0585

Calscience Environmental Lab
5063 Commercial Circle, Suite H
Concord, CA 94520
phone: (925) 689-9022

Project ID: 388-1856-2-16
Protocol No.: ROD

Client Contact	
Weiss Associates	
5801 Christie Avenue, Suite 600	
Emeryville, CA 94608	
(510) 450-6000	Phone
(510) 547-5043	FAX
Job Name:	UC Davis
Address:	One Shields Ave, Davis

Project Manager: Bob Devany
Tel: 510-450-6144

Analysis Turnaround Time
Calendar (C) or Work Days (W) --- 5W
TAT if different from Below _____
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sampled by: JmD/KHA
Lab Contact: Micah Smith
Date: 12/4/08
Carrier:
COC Number: UCD
Page 1 of 3
Job No.
SDG No.

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	Carbonate/Bicarbonate (SM2320B)	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
1	GWGW2368A	12/3	1615	L	W	5	X	X	X													X	X	
2	GWGW2368B	12/3	1615			5	X	X	X													X	X	
3	GWGW2383	12/3	1650			1																X		
4	GWGW2378	12/3	1725			12		X		X	X	X	X		X	X						X	X	Al, Si + Title 22 6010B
5	GWGW2379A	12/3	1630			5	X	X	X	X													X	
6	GWGW2379B	12/3	1630			5	X	X	X	X													X	
7	GWGW2373	12/4	1015			9	X	X	X													X	X	
8	GWGW2404	12/4	1110			1																X		
9	GWGW2390	12/4	1035			5	X	X	X	X													X	
						Field Filtered	X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For _____ Months*

Special Instructions/QC Requirements & Comments: Level II Reporting with Initial Calibration Curves and Continuing Calibration **Note: Nitrate 48 hour hold time!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	WEISS	1505, 12/4/08	Tom Oppley	CEC	12/4/08 1505
[signature] To CSO		12-4-08 1730	[signature]	CA	12/5/08 1030
510857382 510857383					

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AguaTierra Associates Incorporated, DBA

0585

Calscience Environmental Lab
5063 Commercial Circle, Suite H
Concord, CA 94520
phone: (925) 689-9022

Project ID: 388-1856-2-16
Protocol No.: ROD

Client Contact	
Weiss Associates	
5801 Christie Avenue, Suite 600	
Emeryville, CA 94608	
(510) 450-6000	Phone
(510) 547-5043	FAX
Job Name:	UC Davis
Address:	One Shields Ave, Davis

Project Manager: Bob Devany
Tel: 510-450-6144

Analysis Turnaround Time
Calendar (C) or Work Days (W) --- 5W
TAT if different from Below _____
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sampled by: JMD / KHA
Lab Contact: Micah Smith
Date: 12/4/08
Carrier:

COC Number: UCD
Page 2 of 3

Job No.

SDG No.

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	Carbonate/Bicarbonate (SM2320B)	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
10	GWGW2382A	12/4	1145	L	W	12		X		X	X	X	X		X	X					X	X	X	Title 22 + Al + Si
11	GWGW2382B	12/4	1145	|	|	12		X		X	X	X	X		X	X					X	X	X	Title 22 + Al + Si
12	GWGW2377	12/4	1430	|	|	9		X	X	X	X	X									X	X		
13	TPEF0365	12/4	1350	|	|	9					X	X	X				X		X	X	X	X		Title 22 + Ca, K, Mg, Na
																				X				
14	GPTN0365																							
15	Travel Blank	0730	12/4	L	W						X													HOLD
						Field Filtered	X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For _____ Months*

Special Instructions/QC Requirements & Comments: Level II Reporting with Initial Calibration Curves and Continuing Calibration **Note: Nitrate 48 hour hold time!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	WEISS	1505, 12/4/08	Tom O'Malley	CEL	12/4/08 1505
[signature] to GSD		12-4-08 1730	[signature]	CEL	12/05/08 1030

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AquaTerra Associates Incorporated, DBA

0585

Calscience Environmental Lab
5063 Commercial Circle, Suite H
Concord, CA 94520
phone: (925) 689-9022

Project ID: 388-1856-2-16
Protocol No.: ROD

Client Contact		Project Manager: Bob Devany	Sampled by: JMD	Date: 12/4/08	COC Number: UCD
Weiss Associates		Tel: 510-450-6144	Lab Contact: Micah Smith	Carrier:	Page 3 of 3
5801 Christie Avenue, Suite 600		Analysis Turnaround Time			
Emeryville, CA 94608		Calendar (C) or Work Days (W) --- 5W			
(510) 450-6000	Phone	TAT if different from Below _____			
(510) 547-5043	FAX	☐ 2 weeks			
		☐ 1 week			
Job Name: UC Davis		☐ 2 days			
Address: One Shields Ave, Davis		☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	Carbonate/Bicarbonate (SM2320B)	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
15 TPIN 0365	12/4	1410	W	W	4					X										X			
Field Filtered						X		X				X	X				X					X	

Job No.
SDG No.

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For _____ Months*

Special Instructions/QC Requirements & Comments: Level II Reporting with Initial Calibration Curves and Continuing Calibration **Note: Nitrate 48 hour hold time!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	WEISS	1505 / 12/4	[signature]	CEL	12/4/08 1505
[signature] to GSD		12-4-08 1730	[signature]	CEL	12/5/08 1030

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 0 8 - 1 2 - 0 5 0 5

SAMPLE RECEIPT FORM

Cooler 1 of 2

CLIENT: Weiss Associates

DATE: 12/5/08

TEMPERATURE: (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 2.1 °C - 0.2 °C (CF) = 1.9 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by:_____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only **Initial:** JP

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Initial:** JP

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** WB

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	☑	☐	☐
COC document(s) received complete.....	☑	☐	☐
Sampler's name indicated on COC.....	☑	☐	☐
Sample container label(s) consistent with COC.....	☑	☐	☐
Sample container(s) intact and good condition.....	☑	☐	☐
Correct containers and volume for analyses requested.....	☑	☐	☐
Analyses received within holding time.....	☑	☐	☐
Proper preservation noted on sample label(s).....	☑	☐	☐
Volatile analysis container(s) free of headspace.....	☑	☐	☐
Tedlar bag(s) free of condensation.....	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☑VOAh ☐VOAna$_2$ ☑125AGB ☐125AGBh ☐125AGBpo$_4$ ☐1AGB ☑1AGBna$_2$ ☐1AGBs ☐500AGB ☐500AGBs ☐250CGB ☑250CGBs ☑1PB ☐500PB ☐500PBna ☐250PB ☑250PBn ☑125PB ☐125PBznna ☐100PBsterile ☐100PBna$_2$ ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® ☐_____

Checked/Labeled by: WB

Reviewed by: D.C

Scanned by: WB

Container: C:Clear A:Amber P:Poly/Plastic G:Glass J:Jar B:Bottle

Preservative: h:HCL n:HNO_3 na$_2$:$Na_2S_2O_3$ na:NaOH po$_4$:H_3PO_4 s:H_2SO_4 znna:$ZnAc_2$+NaOH

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 0 8 - 1 2 - 0 5 8 5

SAMPLE RECEIPT FORM

Cooler 2 of 2

CLIENT: Weiss Associates

DATE: 12/5/08

TEMPERATURE: (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 1.7 °C - 0.2 °C (CF) = 1.5 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by:_____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only **Initial:** JP

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Initial:** JP

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** WB

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	☑	☐	☐
COC document(s) received complete.....	☑	☐	☐
Sampler's name indicated on COC.....	☑	☐	☐
Sample container label(s) consistent with COC.....	☑	☐	☐
Sample container(s) intact and good condition.....	☑	☐	☐
Correct containers and volume for analyses requested.....	☑	☐	☐
Analyses received within holding time.....	☑	☐	☐
Proper preservation noted on sample label(s).....	☑	☐	☐
Volatile analysis container(s) free of headspace.....	☑	☐	☐
Tedlar bag(s) free of condensation.....	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☑VOAh ☐VOAna$_2$ ☑125AGB ☐125AGBh ☐125AGBpo$_4$ ☐1AGB ☑1AGBna$_2$ ☐1AGBs ☐500AGB ☐500AGBs ☐250CGB ☑250CGBs ☑1PB ☐500PB ☐500PBna ☐250PB ☑250PBn ☑125PB ☐125PBznna ☐100PBsterile ☐100PBna$_2$ ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® ☐_____

Checked/Labeled by: WB

Reviewed by: D.L

Scanned by: WB

Container: C:Clear A:Amber P:Poly/Plastic G:Glass J:Jar B:Bottle

Preservative: h:HCL n:HNO_3 na$_2$:$Na_2S_2O_3$ na:NaOH po$_4$:H_3PO_4 s:H_2SO_4 znna:$ZnAc_2$+NaOH

Work Order#: 08-12-0585

Client: WEISS Associates

RSK-175M

Calibration

☐ EPA METHOD 25 ☐ SCAQMD METHOD 25.1
☐ SCAQMD METHOD 25.1M (Low VOCs) ☐ SCAQMD METHOD 25.1M (Non-Condensable Fraction

QUALITY CONTROL DATA SHEET

Work Order Number: 08-12-0585
Instrument ID: GC14
Batch Number (LCS/MS/SA): 08120801

Analyst: _____ Date ___/___/___
QC Review: _____ Date ___/___/___
Date Analyzed: 12/08/08

LCS/LCS Duplicate

Thermal Conductivity Detector (TCD) Analysis ☐ % by Volume ☐ ppm(v/v) ☐ other _____

Analyte	Conc Added	LCS REC	LCS %REC	LCSD REC	LCSD %REC	Control Limit(%REC)	RPD	Control Limit(RPD)
Oxygen	20.0					80-120		0-20
Nitrogen	75.1					80-120		0-20
Carbon Dioxide	4.92					80-120		0-20

Flame Ionization Detector (FID) Analysis ☐ ppm(v/v) ☐ other _____

Methane	99.9	103	103	102	102	80-120	1	0-20
Carbon Monoxide	100	107	107	107	107	80-120	0	0-20
TGNMO (as Methane) (Total Gaseous Non-Methane Organic compounds)	385	404	105	402	104	80-120	0	0-20

Daily Midpoint Calibration Check

Thermal Conductivity Detector (TCD) Analysis ☐ % by Volume ☐ ppm(v/v) ☐ other _____

Analyte	Conc Added	Conc Recovered	% D	Control Limit
Oxygen	3.50			0 - 15
Nitrogen	10.03			0 - 15
Methane	10.03			0 - 15
Carbon Monoxide	9.96			0 - 15
Carbon Dioxide	10.0			0 - 15

Flame Ionization Detector (FID) Analysis ☐ ppm(v/v) ☐ other _____

Analyte	Conc Added	Conc Recovered	% D	Control Limit
Methane	308	317	3	0 - 15
Carbon Monoxide	304	314	3	0 - 15
Carbon Dioxide	302	308	2	0 - 15
TGNMO (as Methane) (Total Gaseous Non-Methane Organic compounds)	918	920	0	0 - 15

Analyst's Comments: _____

☐ EPA METHOD 25 ☐ SCAQMD METHOD 25.1
☐ SCAQMD METHOD 25.1M (Low VOCs) ☐ SCAQMD METHOD 25.1M (Non-Condensable Fraction

QUALITY CONTROL DATA SHEET

Work Order Number: 08-12-0585 Analyst: _____ Date ___/___/___
Instrument ID: GC14 QC Review: _____ Date ___/___/___
Batch Number (LCS/MS/SA): 081209L01 Date Analyzed: 12/09/08

LCS/LCS Duplicate

Thermal Conductivity Detector (TCD) Analysis ☐ % by Volume ☐ ppm(v/v) ☐ other _____

Analyte	Conc Added	LCS REC	LCS %REC	LCSD REC	LCSD %REC	Control Limit(%REC)	RPD	Control Limit(RPD)
Oxygen	20.0					80-120		0-20
Nitrogen	75.1					80-120		0-20
Carbon Dioxide	4.92					80-120		0-20

Flame Ionization Detector (FID) Analysis ☐ ppm(v/v) ☐ other _____

Methane	99.9	101	101	100	100	80-120	1	0-20
Carbon Monoxide	100	106	106	105	105	80-120	1	0-20
TGNMO (as Methane) (Total Gaseous Non-Methane Organic compounds)	385	391	102	398	103	80-120	2	0-20

pc 12/09/08

Daily Midpoint Calibration Check

Thermal Conductivity Detector (TCD) Analysis ☐ % by Volume ☐ ppm(v/v) ☐ other _____

Analyte	Conc Added	Conc Recovered	% D	Control Limit
Oxygen	3.50			0 - 15
Nitrogen	10.03			0 - 15
Methane	10.03			0 - 15
Carbon Monoxide	9.96			0 - 15
Carbon Dioxide	10.0			0 - 15

Flame Ionization Detector (FID) Analysis ☐ ppm(v/v) ☐ other _____

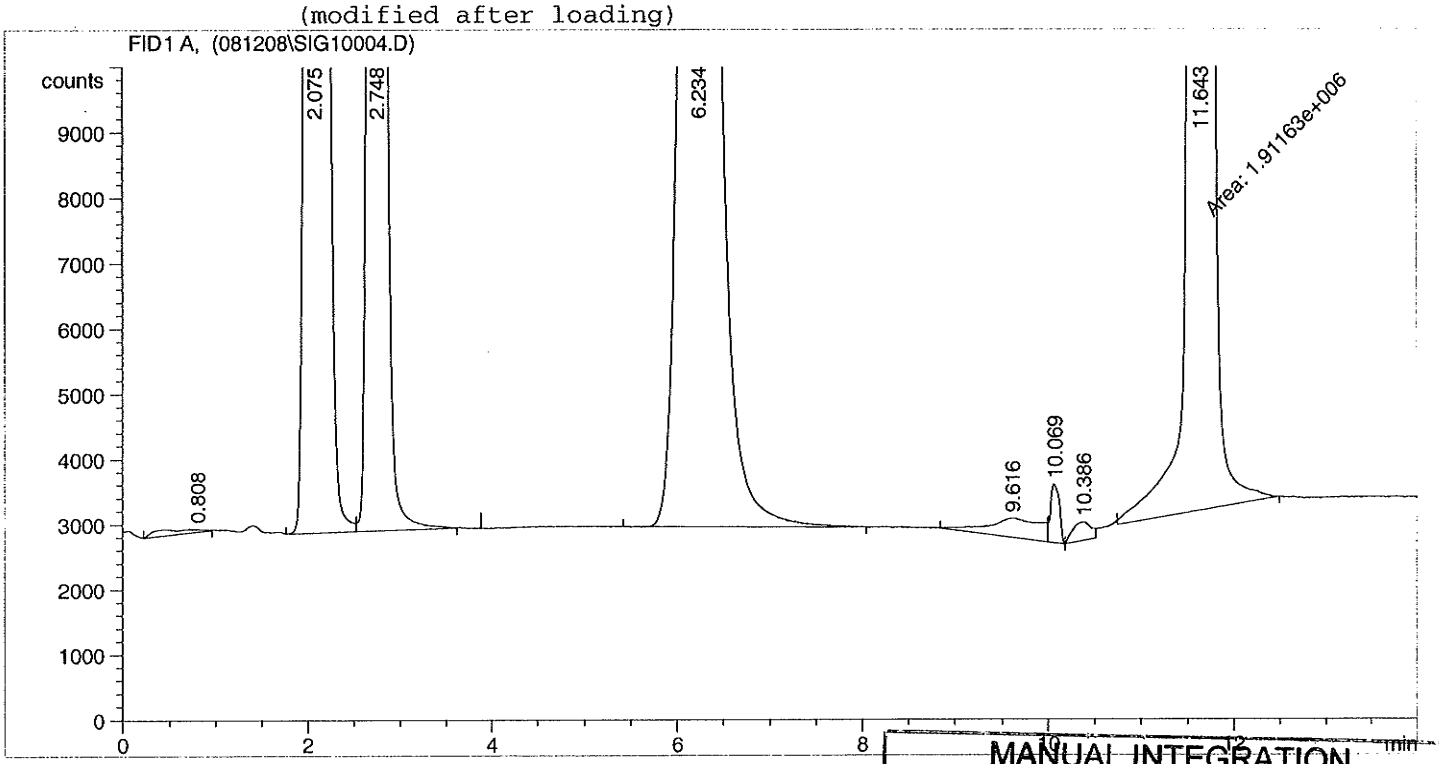
Analyte	Conc Added	Conc Recovered	% D	Control Limit
Methane	308	315	2	0 - 15
Carbon Monoxide	304	312	3	0 - 15
Carbon Dioxide	302	306	1	0 - 15
TGNMO (as Methane) (Total Gaseous Non-Methane Organic compounds)	918	909	1	0 - 15

Analyst's Comments: _____

Data File C:\HPCHEM\2\DATA\081208\SIG10004.D Sample Name: FID CCV 1mL

==========

Injection Date : 12/8/2008 9:36:57 AM
Sample Name : FID CCV 1mL Location : Vial 1
Acq. Operator : GC 14
Inj Volume : Manually
Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 10/3/2008 1:49:33 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M\071908.M
Last changed : 12/8/2008 9:55:16 AM by GC 14
(modified after loading)



MANUAL INTEGRATION
BEFORE / AFTER
Date: 12/08/08
Chemist: JC GL: W
Reason: BASELINE CORR., PEAK ID CORR.
Other :
This stamp appears in red ink on original copy.

==========

External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : 12/8/2008 9:55:13 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.075	PV	6.39802e5	4.91062e-4	314.18242		Carbon Monoxide
2.748	VV	6.40484e5	4.94479e-4	316.70610		Methane
6.234	BV	6.44112e5	4.77635e-4	307.65035		Carbon Dioxide
11.643	MM	1.91163e6	4.81128e-4	919.73904		TGNMO

Totals : 1858.27790

Results obtained with standard integrator!

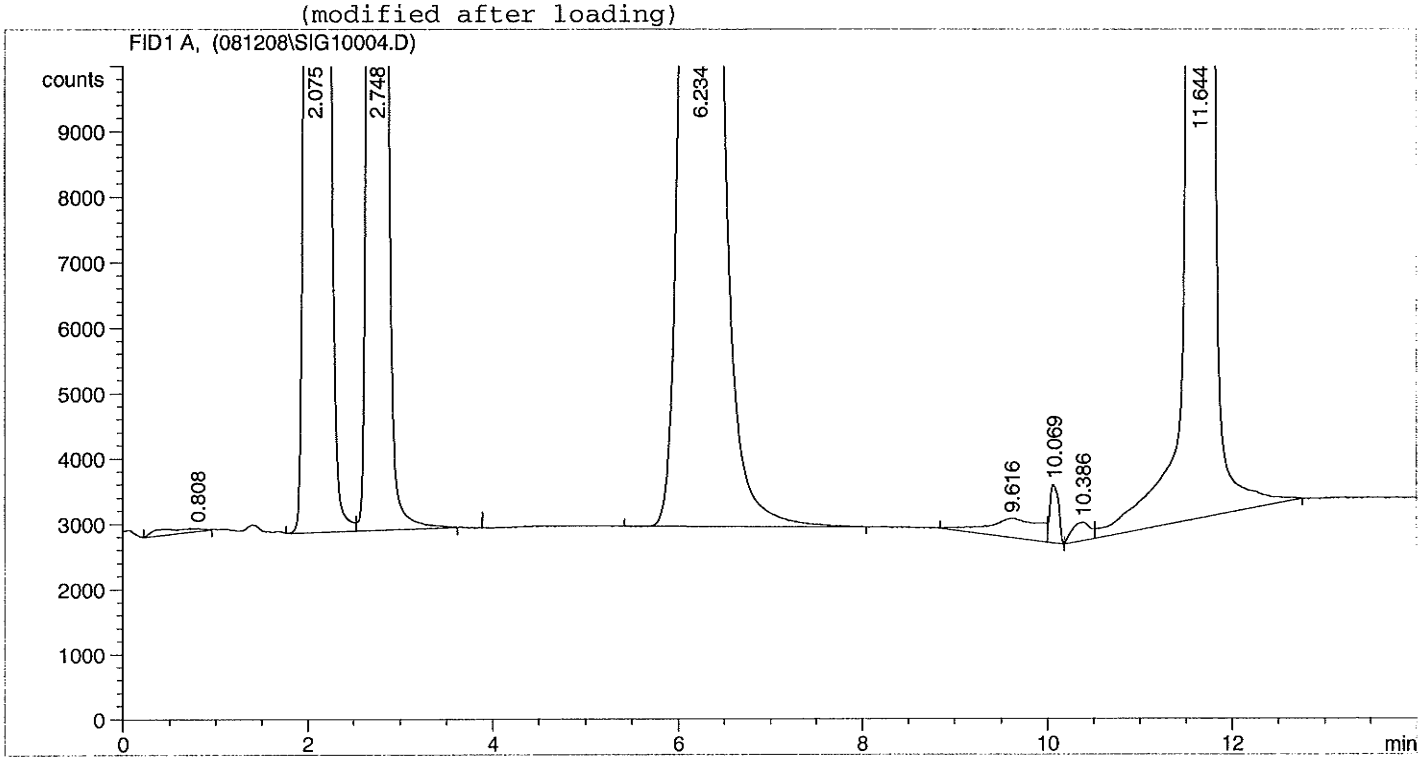
==========

*** End of Report ***

Data File C:\HPCHEM\2\DATA\081208\SIG10004.D Sample Name: FID CCV 1mL

==========

Injection Date : 12/8/2008 9:36:57 AM
Sample Name : FID CCV 1mL Location : Vial 1
Acq. Operator : GC 14
Inj Volume : Manually
Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 10/3/2008 1:49:33 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M\071908.M
Last changed : 12/6/2008 12:34:37 PM by GC 14
(modified after loading)



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External Standard Report

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MANUAL INTEGRATION
BEFORE / AFTER
Date:
Chemist: GL:
Reason: BASELINE CORR., PEAK ID CORR.
Other :
This stamp appears in red ink on original copy.

Sorted By : Signal
Calib. Data Modified : 12/6/2008 12:30:58 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.075	PV	6.39802e5	4.91062e-4	314.18242		Carbon Monoxide
2.748	VV	6.40484e5	4.94479e-4	316.70610		Methane
6.234	BV	6.44112e5	4.77635e-4	307.65035		Carbon Dioxide
11.644	VV	1.92673e6	4.81128e-4	927.00516		TGNMO

Totals : 1865.54402

Results obtained with standard integrator!

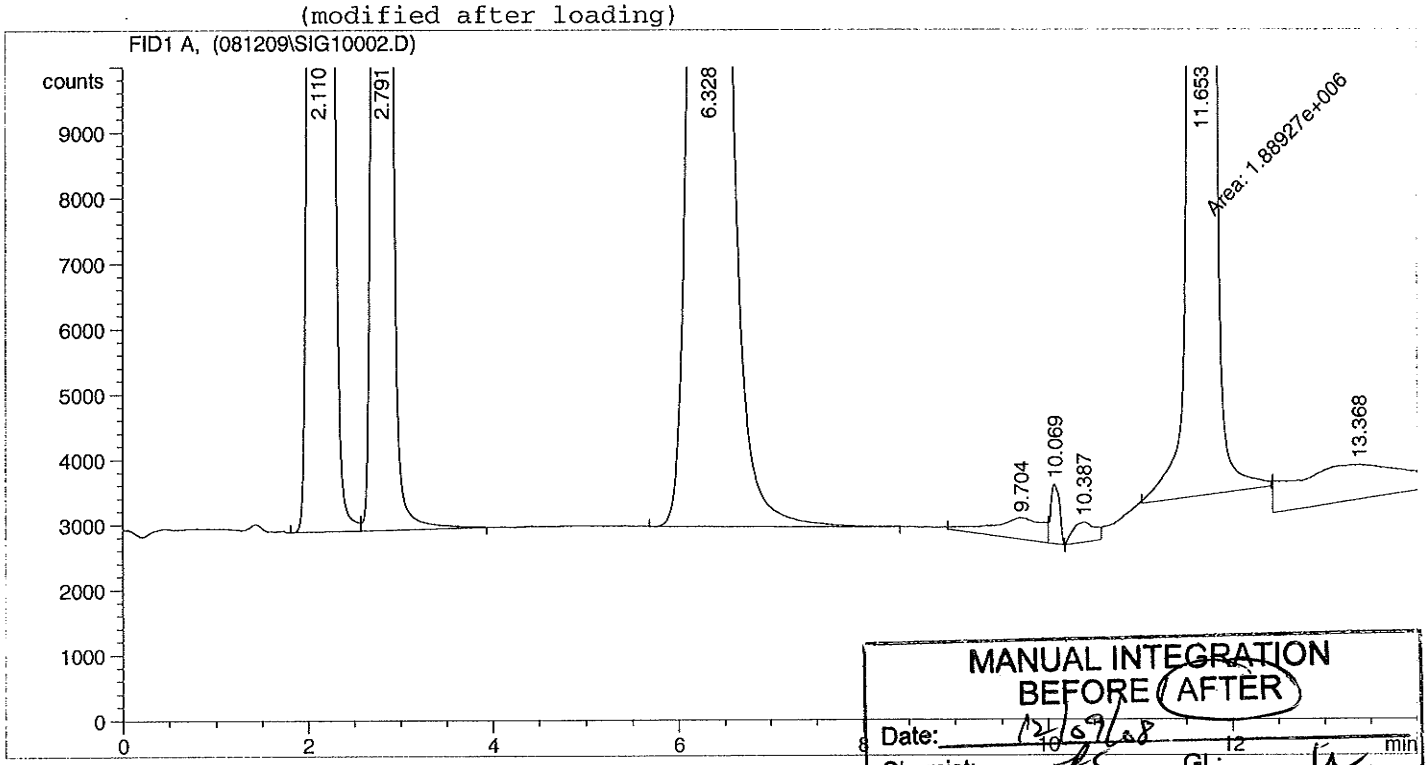
==========

*** End of Report ***

Data File C:\HPCHEM\2\DATA\081209\SIG10002.D Sample Name: FID CCV 1mL

==========

Injection Date : 12/9/2008 9:14:55 AM
Sample Name : FID CCV 1mL Location : Vial 1
Acq. Operator : GC 14
Inj Volume : Manually
Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 10/3/2008 1:49:33 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M\071908.M
Last changed : 12/9/2008 9:36:18 AM by GC 14
(modified after loading)



MANUAL INTEGRATION
BEFORE / AFTER
Date: 12/09/08
Chemist: GL:
Reason: BASELINE CORR., PEAK ID CORR.
Other:
This stamp appears in red ink on original copy.

==========

External Standard Report

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Sorted By : Signal
Calib. Data Modified : 12/9/2008 9:36:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.110	BV	6.34792e5	4.91062e-4	311.72226		Carbon Monoxide
2.791	VB	6.36451e5	4.94479e-4	314.71138		Methane
6.328	BB	6.40763e5	4.77635e-4	306.05075		Carbon Dioxide
11.653	MM	1.88927e6	4.81128e-4	908.97981		TGNMO

Totals : 1841.46419

Results obtained with standard integrator!

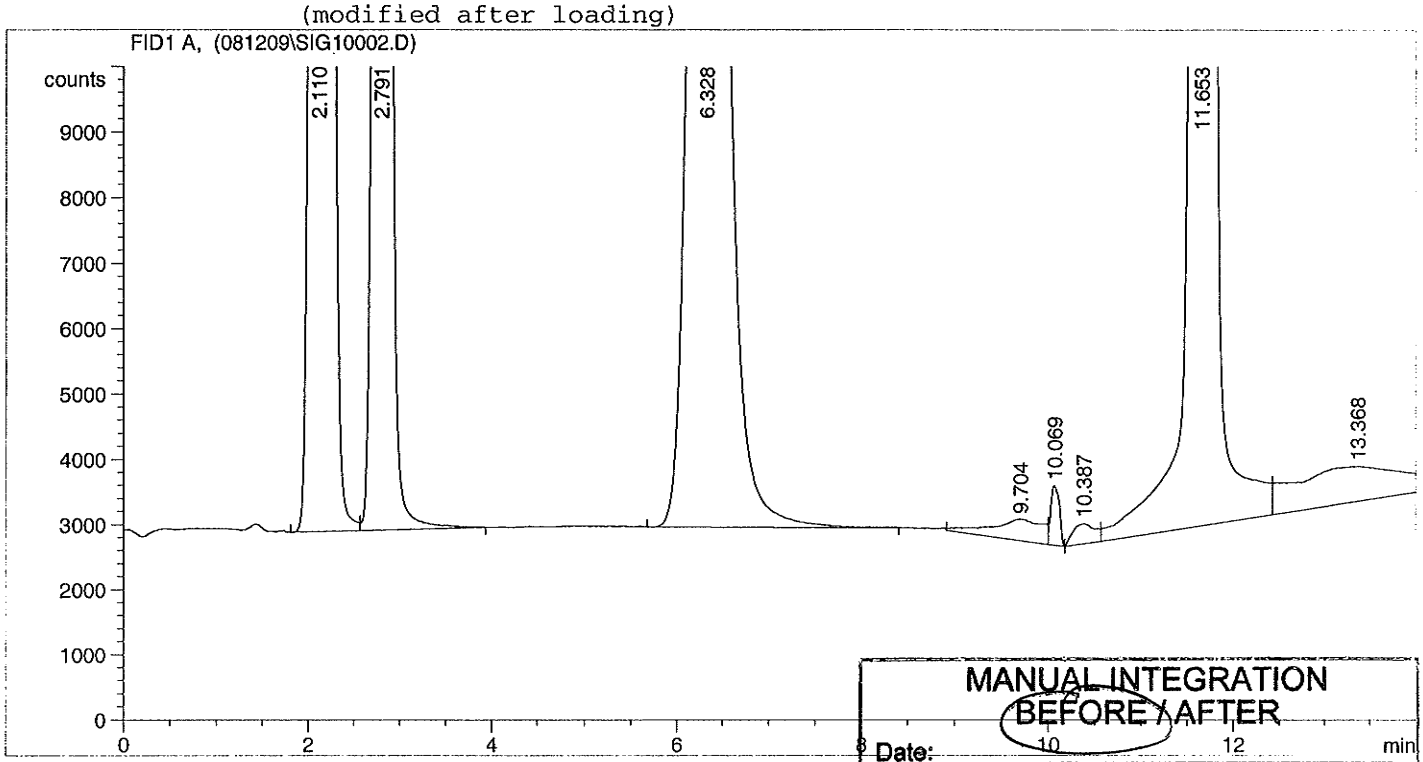
==========

*** End of Report ***

Data File C:\HPCHEM\2\DATA\081209\SIG10002.D Sample Name: FID CCV 1mL

==========

Injection Date : 12/9/2008 9:14:55 AM
Sample Name : FID CCV 1mL Location : Vial 1
Acq. Operator : GC 14
Inj Volume : Manually
Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 10/3/2008 1:49:33 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M\071908.M
Last changed : 12/8/2008 12:45:54 PM by GC 14
(modified after loading)



MANUAL INTEGRATION
BEFORE / AFTER
Date:
Chemist: GL:
Reason: BASELINE CORR., PEAK ID CORR.
Other :
This stamp appears in red ink on original copy.

==========

External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : 12/8/2008 12:45:52 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.110	BV	6.34792e5	4.91062e-4	311.72226		Carbon Monoxide
2.791	VB	6.36451e5	4.94479e-4	314.71138		Methane
6.328	BB	6.40763e5	4.77635e-4	306.05075		Carbon Dioxide
10.387	PV	5033.19775	4.81128e-4	2.42161		TGNMO

Totals : 934.90599

Results obtained with standard integrator!

==========

*** End of Report ***

GC 14 25.1 METHOD 071908
Multipoint Calibration

C0		5ppm	300ppm	5000ppm		Average	SD	RSD
Conc.ppm		5.06	304	5110				
Area		11148	608729	9727630		3449169		
RF		2203.162	2002.398	1903.646		2036.402	152.626	7.494886
Methane	1ppm	5ppm	300ppm	5000ppm				
Conc.ppm	1.01	5.07	308	4950				
Area	2226	9790	612460	9774190		2599667		
RF	2203.96	1930.966	1988.506	1974.584		2024.504	122.1225	6.032217
C02	1ppm	5ppm	300ppm	5000ppm				
Conc.ppm	1.07	5.37	302	4980				
Area	2416	10976	623378	10044400		2670293		
RF	2257.944	2043.948	2064.166	2016.948		2095.751	109.8449	5.241313
TGNMO	1ppm	5ppm	300ppm	5000ppm				
Conc.ppm	3.06	15.3	918	2082				
Area	7467	29582	1772460	4179080		1497147		
RF	2440.196	1933.464	1930.784	2007.243		2077.922	244.1008	11.74735

Air Analysis Logbook

DATE	DIRECTORY	DATA FILE	CEL ID #	TEST METHOD	STANDARD LOT # / ID	LOOP VOL (mL)	ANALYST	COMMENTS
07/18/08	080718	SIG100009	ICAL std #1	TGMNO	01-13-08	200µL	NV	
		10	ICAL std #3		01-13-07	1mL		
		11	ICAL STD #4		01-13-14		NV	
		12	MB		N/A			
		13	MDL #1		01-13-08			
		14	2					
		15	3					
		16	4					
		17	5					
		18	6					
		19	7					
		20	ICAL #4		01-13-09			
07/19/08	080719	SIG1000	BLANK	TGMNO	N/A	1	EY	
		02	ICAL std #3		01-10-15		LL	25.1 300 ppm
		03	blank		NA			
		04	ICAL std #1		01-13-08	200ul		1ppm (~5ppm)
		05	ICAL std #2			1		5 ppm
		06	ICAL std #3		01-10-15			300 ppm
		07	ICAL std ~~#3~~		~~01-10-15~~ 07/19			~~5000~~ 300 ppm LL 07/19/08
		08	ICAL std #3		~~01-13-09~~			5000 ppm
		09	ICAL STD #4					
		10	Blank		NA	1		~~5 ppm~~ LL 07/19
		11	MDL #1		01-13-08		EY	5 ppm
		12	ICAL std #1			200ul		
		13	ICAL std #2			1		
		14	blank		NA		LL	
		15	#10 CCV		01-10-15			
		16	LCS		01-13-07			

Reviewed by: _____ Date ____/____/____

Air Analysis Logbook

DATE	DIRECTORY	DATA FILE	CEL ID #	TEST METHOD	STANDARD LOT # / ID	LOOP VOL (mL)	ANALYST	COMMENTS
07/19/08	080719	SIG100017	LCSD	TGNMO	01-13-07	1	LL	
↓	↓	↓ 18	BLANK	↓	NA	↓	↓	
		19	ICAL STD #1		01-13-08	200µL	LL	
		20	1		↓	↓		
		21	2		~~01-10-15~~			
		22	3		~~01-13-09~~			01-10-15
		23	4		01-13-09			
		24	4		01-13-09			
		25	3		01-10-15			
		26	2		01-13-08			
		27	1		↓	200µL		
		28	1		↓	↓		
		29	4		01-13-09	1		mislabled
		30	4		↓			
		31	2		01-13-08			
		32	2		↓	↓	↓	
07/20/08	080720	SIG100001	Blank	TGNMO	NA	1	NL	
		2	FID CCV		01-10-15		PM	
		3	↓		↓		↓	
		4	LCS		01-13-07		NL	
		5	LCSD		1			
		6	Blank		NA		↓	
		7	08-07-1427-1A		1		LL	
		8	-2A					
		9	-2A					
		10	3A				PM	
		11	4A					
		12	08-07-1431-1A					

Reviewed by: _____ Date ____/____/____

Calibration Table

Calib. Data Modified : Sunday, July 20, 2008 11:10:47 AM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 20.000 %
Abs. Reference Window : 0.000 min
Rel. Non-ref. Window : 20.000 %
Abs. Non-ref. Window : 0.000 min
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times : No, only for identified peaks

Curve Type : Power
Origin : Ignored
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

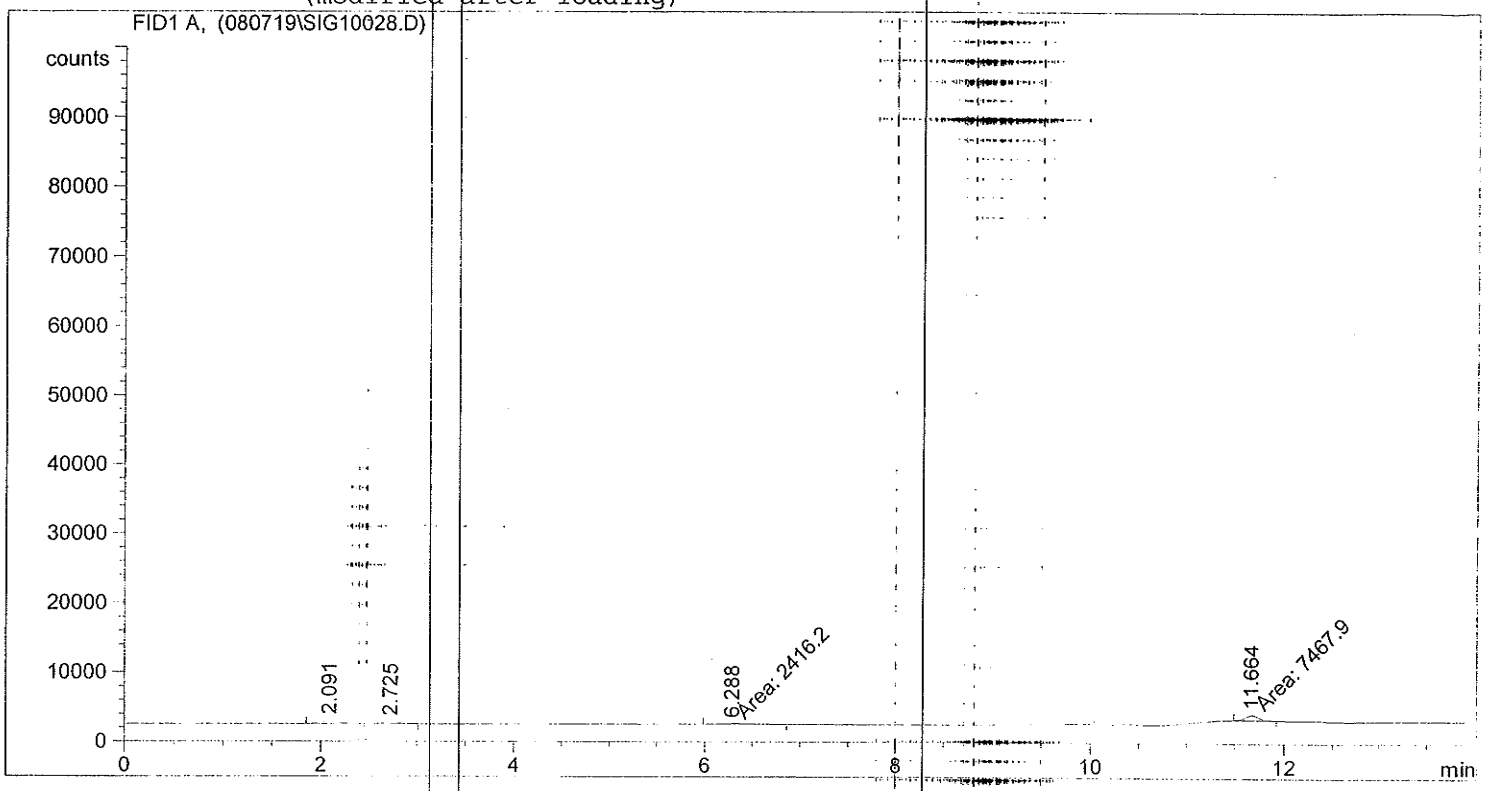
Signal 1: FID1 A,

RetTime [min]	Sig	Lvl	Amount [ppm v/v]	Area	Amt/Area	Ref	Grp	Name
2.218	1	2	5.06000	1.11479e4	4.53898e-4			Carbon Monoxide
		3	304.00000	6.08729e5	4.99401e-4			
		4	5110.00000	9.72763e6	5.25308e-4			
2.817	1	1	1.01400	2226.19580	4.55486e-4			Methane
		2	5.07000	9790.16699	5.17867e-4			
		3	308.00000	6.12460e5	5.02890e-4			
		4	4950.00000	9.77419e6	5.06436e-4			
6.396	1	1	1.07400	2416.20410	4.44499e-4			Carbon Dioxide
		2	5.37000	1.09761e4	4.89244e-4			
		3	302.00000	6.23378e5	4.84457e-4			
		4	4980.00000	1.00444e7	4.95799e-4			
11.667	1	1	3.06000	7467.90234	4.09754e-4			TGNMO
		2	15.30000	2.95820e4	5.17207e-4			
		3	918.00000	1.77246e6	5.17925e-4			
		4	2082.00000	4.17908e6	4.98196e-4			

Peak Sum Table

No Entries in table

Injection Date : 7/19/2008 11:46:49 PM
Sample Name : ICAL #1 200uL Location : Vial 1
Acq. Operator : GC 14
Inj Volume : Manually
Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 10:59:10 AM by GC 14
(modified after loading)



External Standard Report

Sorted By : Signal
Calib. Data Modified : 7/20/2008 10:59:08 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.091	BB	5333.47119	2.20085e-4	1.17382		Carbon Monoxide
2.725	BB	2226.19580	4.81720e-4	1.07240		Methane
6.288	MM	2416.20410	2.55639e-4	6.17675e-1		Carbon Dioxide
11.664	MM	7467.90234	4.72564e-4	3.52906		TGNMO
Totals :				6.39296		

Results obtained with standard integrator!

*** End of Report ***

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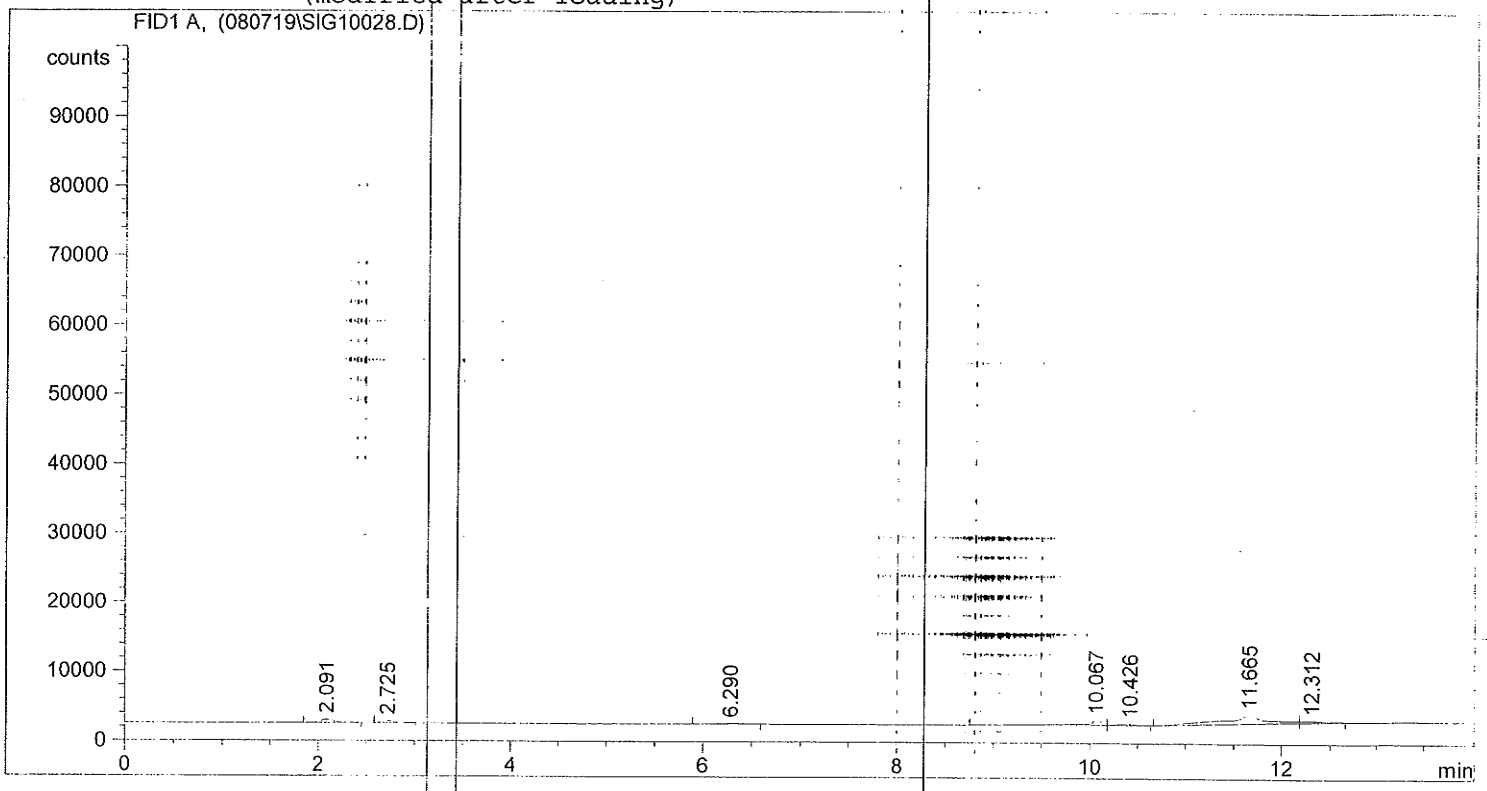
Injection Date : 7/19/2008 11:46:49 PM
Sample Name : ICAL #1 200uL
Acq. Operator : GC 14

Location : Vial 1
Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 10:59:10 AM by GC 14
(modified after loading)



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 7/20/2008 10:59:08 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.091	BB	5333.47119	2.20085e-4	1.17382		Carbon Monoxide
2.725	BB	2226.19580	4.81720e-4	1.07240		Methane
6.290	BB	1793.48889	2.46801e-4	4.42634e-1		Carbon Dioxide
11.665	BV	4.09466e4	5.00967e-4	20.51291		TGNMO

Totals : 23.20177

Results obtained with standard integrator!

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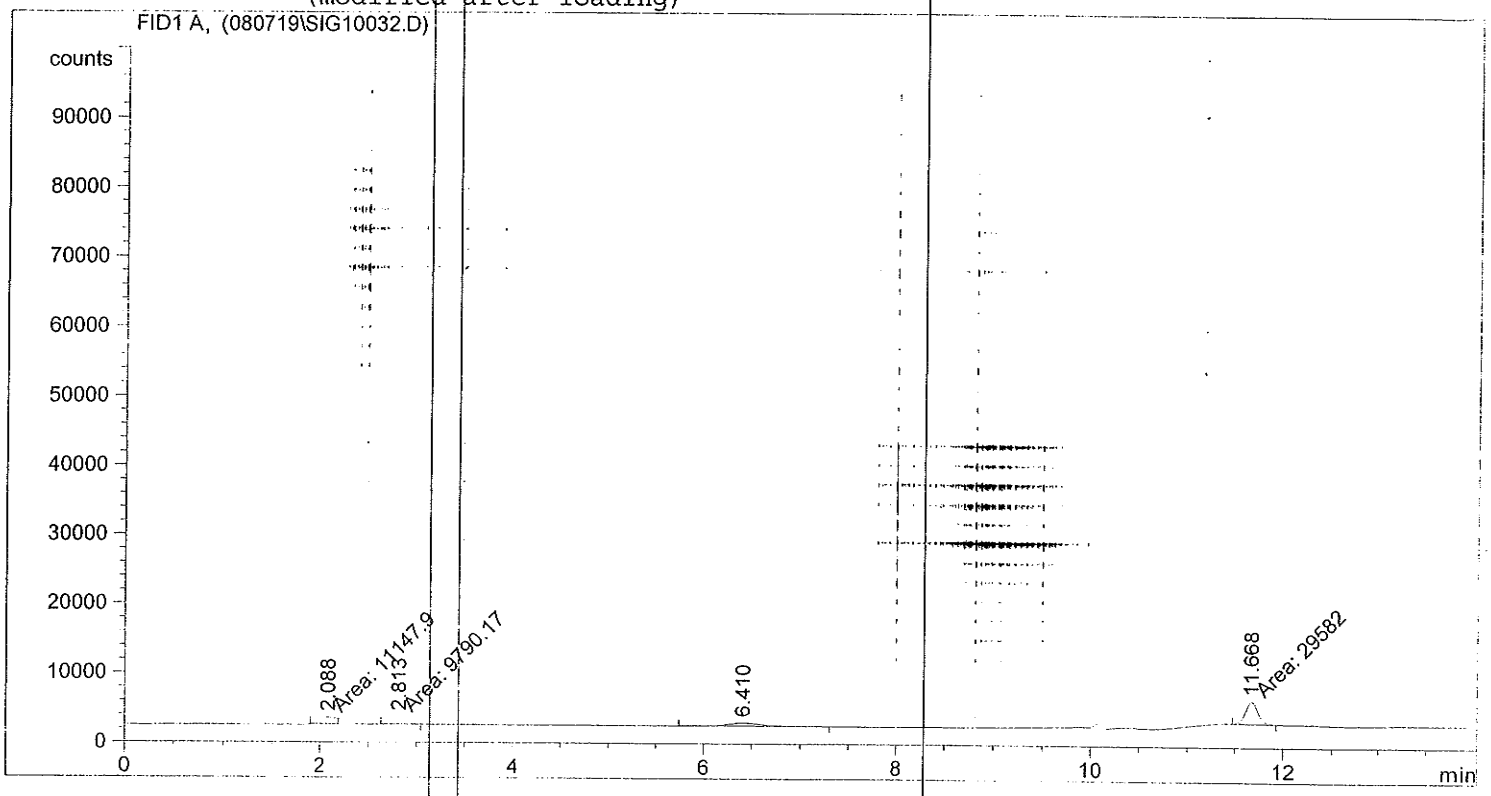
*** End of Report ***

Injection Date : 7/20/2008 1:12:23 AM
Sample Name : ICAL #2 1mL
Acq. Operator : GC 14

Location : Vial 1
Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 11:08:23 AM by GC 14
(modified after loading)



External Standard Report

Sorted By : Signal
Calib. Data Modified : Sunday, July 20, 2008 11:08:23 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.088	MF	1.11479e4	4.34978e-4	4.84908		Carbon Monoxide
2.813	MM	9790.16699	4.86574e-4	4.76364		Methane
6.410	BB	1.09761e4	4.68418e-4	5.14142		Carbon Dioxide
11.668	MM	2.95820e4	4.67871e-4	13.84055		TGNMO

Totals : 28.59469

Results obtained with standard integrator!

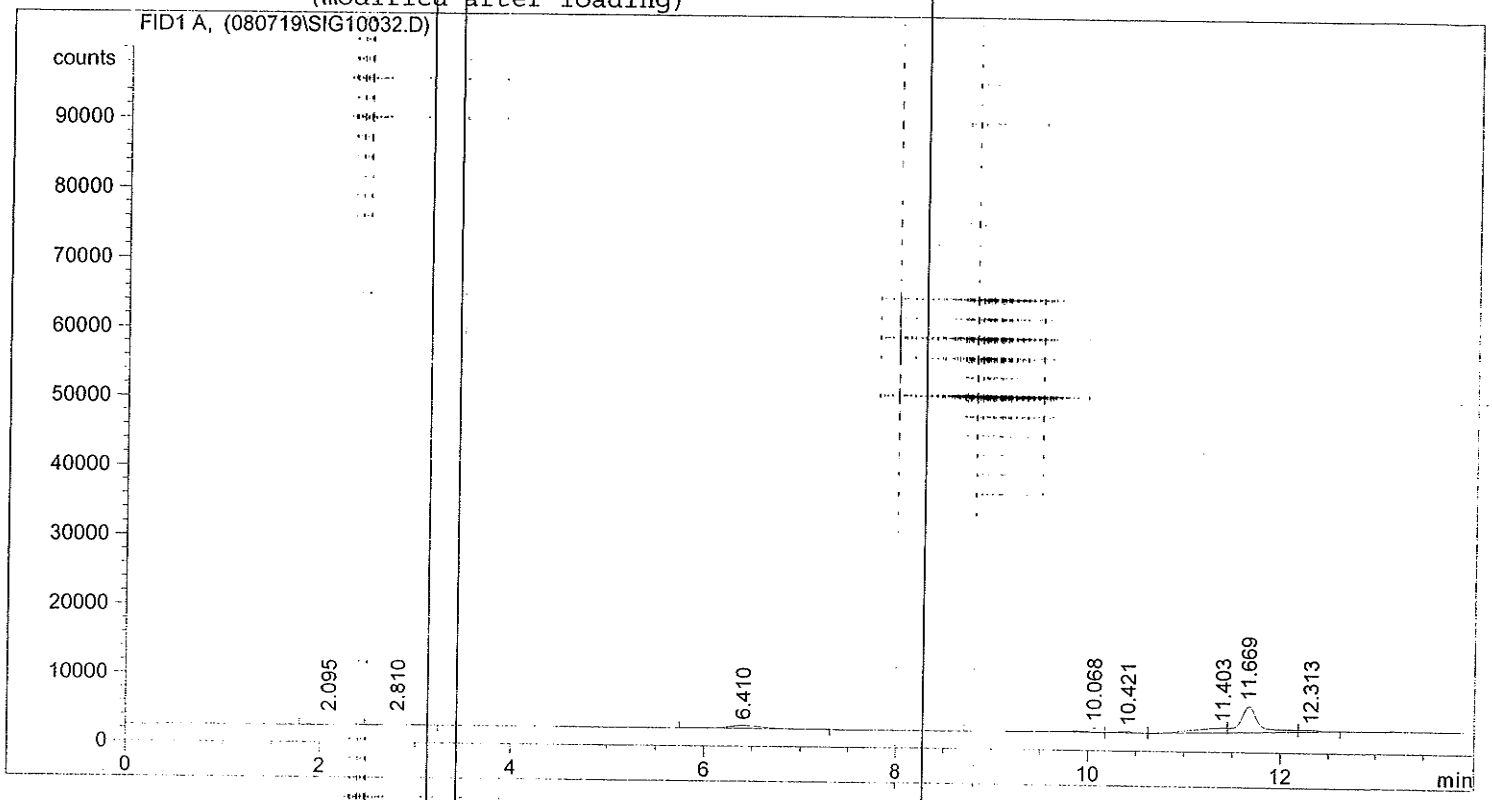
*** End of Report ***

Injection Date : 7/20/2008 1:12:23 AM
Sample Name : ICAL #2 1mL
Acq. Operator : GC 14

Location : Vial 1

Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 11:02:59 AM by GC 14
(modified after loading)



External Standard Report

Sorted By : Signal
Calib. Data Modified : Sunday, July 20, 2008 11:02:59 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.095	BV	1.74076e4	2.66416e-4	4.63767		Carbon Monoxide
2.810	VB	1.16931e4	4.63584e-4	5.42075		Methane
6.410	BB	1.09761e4	4.49500e-4	4.93377		Carbon Dioxide
11.669	VV	4.94595e4	4.66855e-4	23.09040		TGNMO

Totals : 38.08258

Results obtained with standard integrator!

*** End of Report ***

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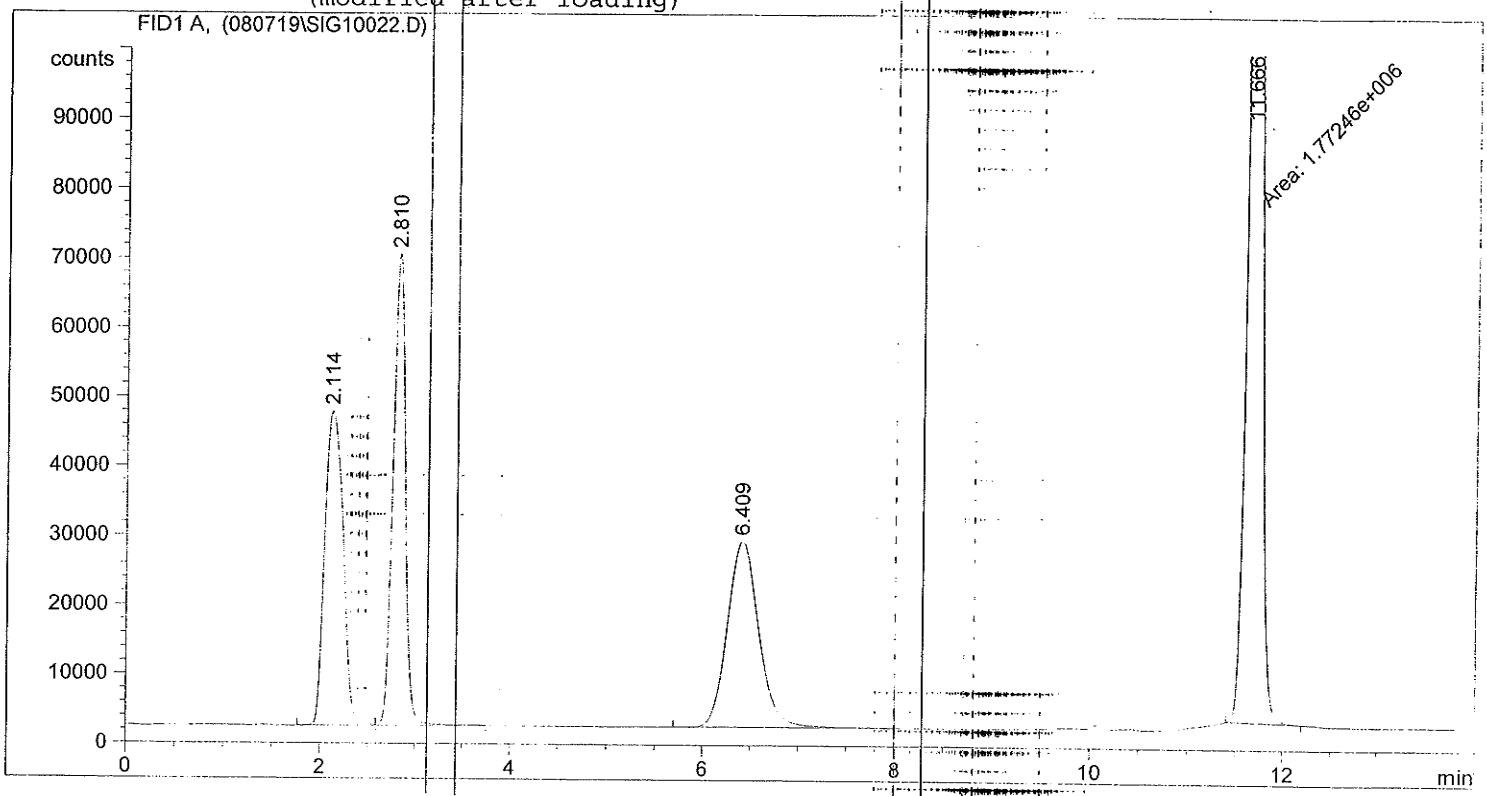
Injection Date : 7/19/2008 7:54:26 PM
Sample Name : ICAL #3 1mL
Acq. Operator : GC 14

Location : Vial 1
Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 10:41:13 AM by GC 14
(modified after loading)



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : Sunday, July 20, 2008 10:41:12 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.114	BV	6.08729e5	5.18394e-4	315.56139		Carbon Monoxide
2.810	VB	6.12460e5	5.51524e-4	337.78630		Methane
6.409	BV	6.23378e5	4.76516e-4	297.04967		Carbon Dioxide
11.666	MM	1.77246e6	5.81475e-4	1030.63989		TGNMO

Totals : 1981.03725

Results obtained with standard integrator!

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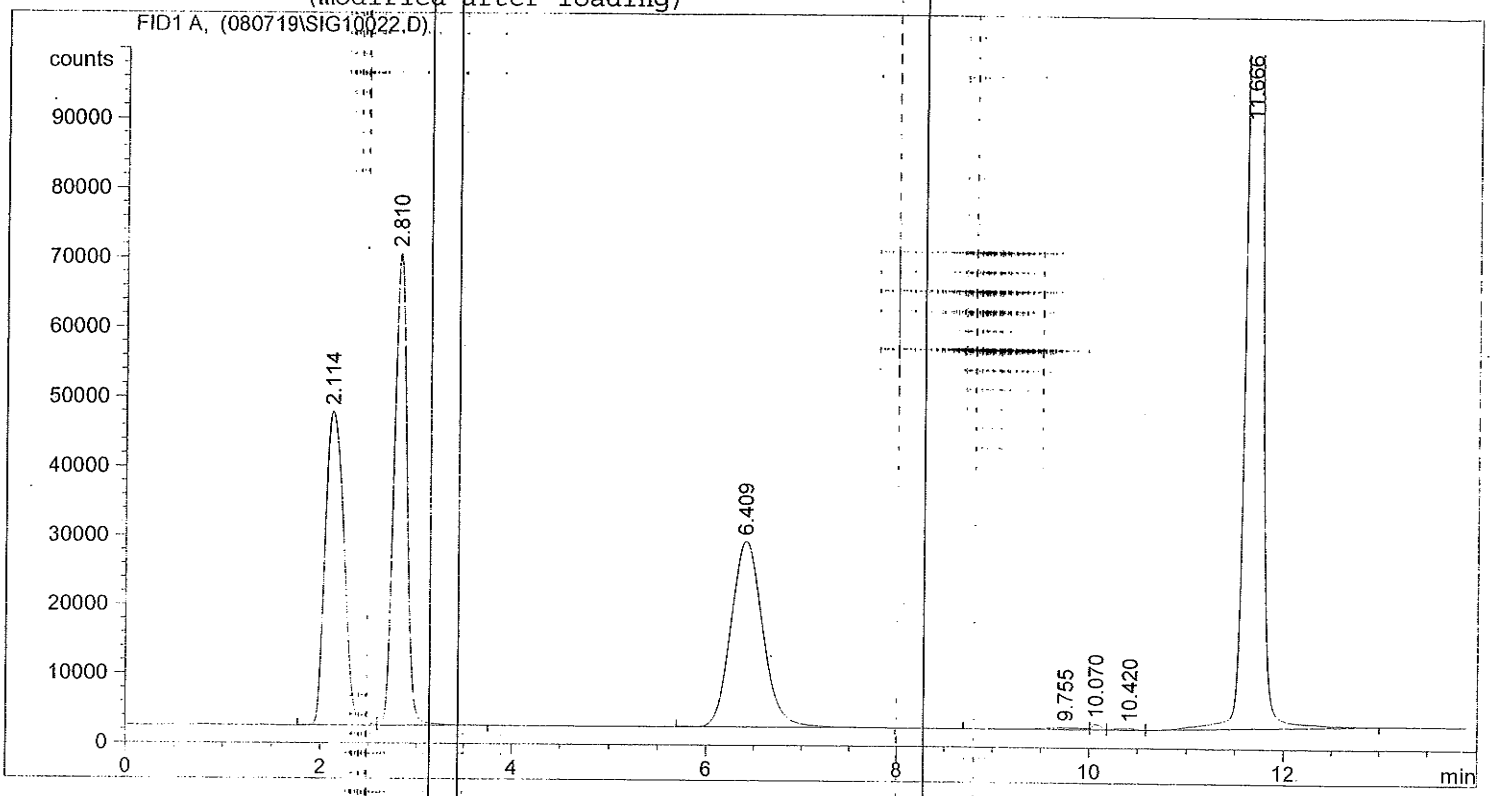
*** End of Report ***

Injection Date : 7/19/2008 7:54:26 PM
Sample Name : ICAL #3 1mL
Acq. Operator : GC 14

Location : Vial 1

Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 10:37:22 AM by GC 14
(modified after loading)



External Standard Report

Sorted By : Signal
Calib. Data Modified : 7/20/2008 10:37:20 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.114	BV	6.08729e5	4.82486e-4	293.70355		Carbon Monoxide
2.810	VB	6.12460e5	5.08124e-4	311.20580		Methane
6.409	BV	6.23378e5	4.39930e-4	274.24266		Carbon Dioxide
11.666	PV	1.84478e6	5.27180e-4	972.53302		TGNMO

Totals : 1851.68502

Results obtained with standard integrator!

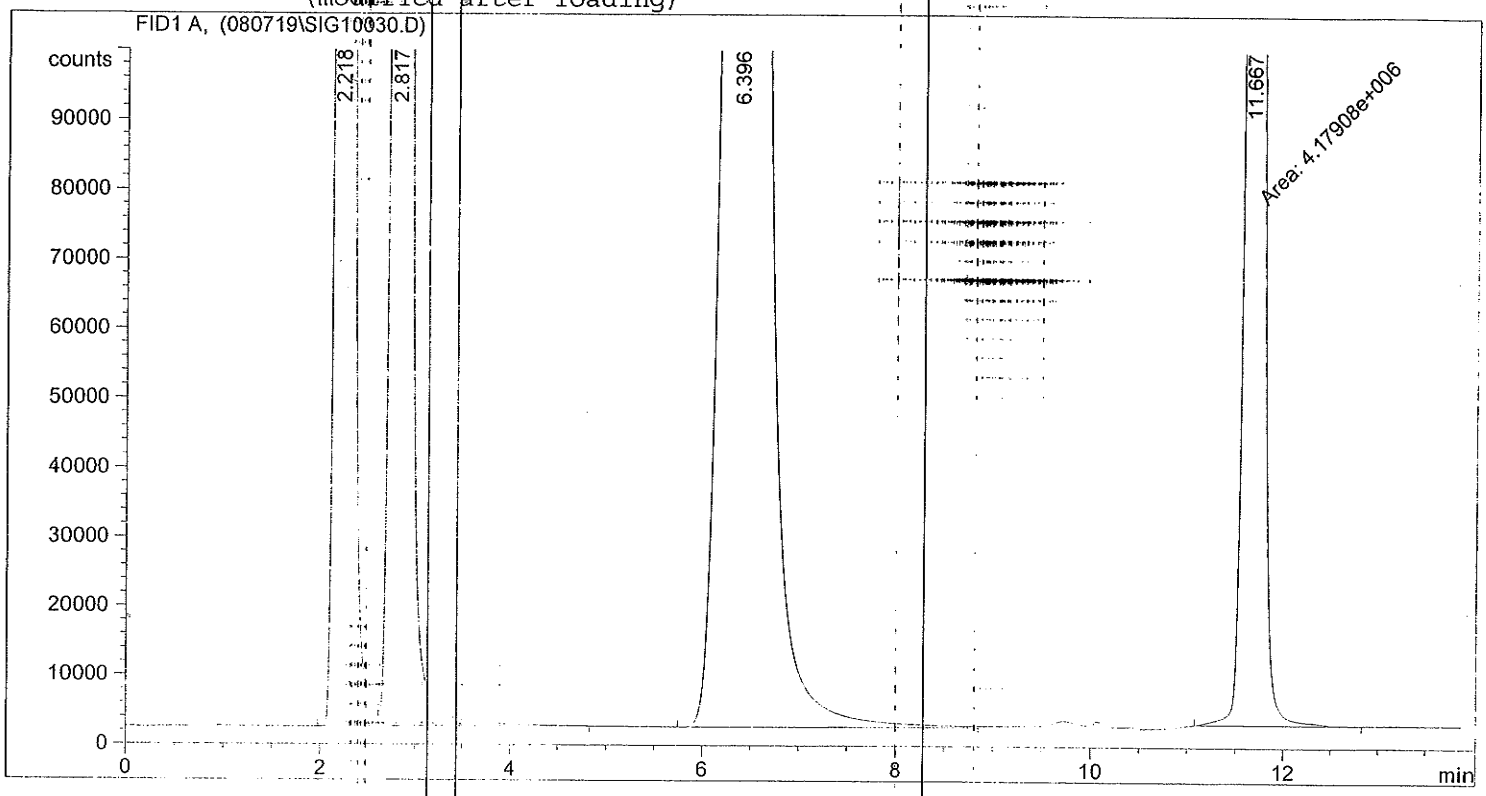
*** End of Report ***

Injection Date : 7/20/2008 12:31:29 AM
Sample Name : ICAL #4 1mL
Acq. Operator : GC 14

Location : Vial 1

Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 11:10:47 AM by GC 14
(modified after loading)



External Standard Report

Sorted By : Signal
Calib. Data Modified : Sunday, July 20, 2008 11:10:47 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.218	BV	9.72763e6	5.27203e-4	5128.43195		Carbon Monoxide
2.817	VB	9.77419e6	5.13222e-4	5016.33247		Methane
6.396	BV	1.00444e7	4.99095e-4	5013.11061		Carbon Dioxide
11.667	MM	4.17908e6	5.19835e-4	2172.43283		TGNMO
Totals :				1.73303e4		

Results obtained with standard integrator!

*** End of Report ***

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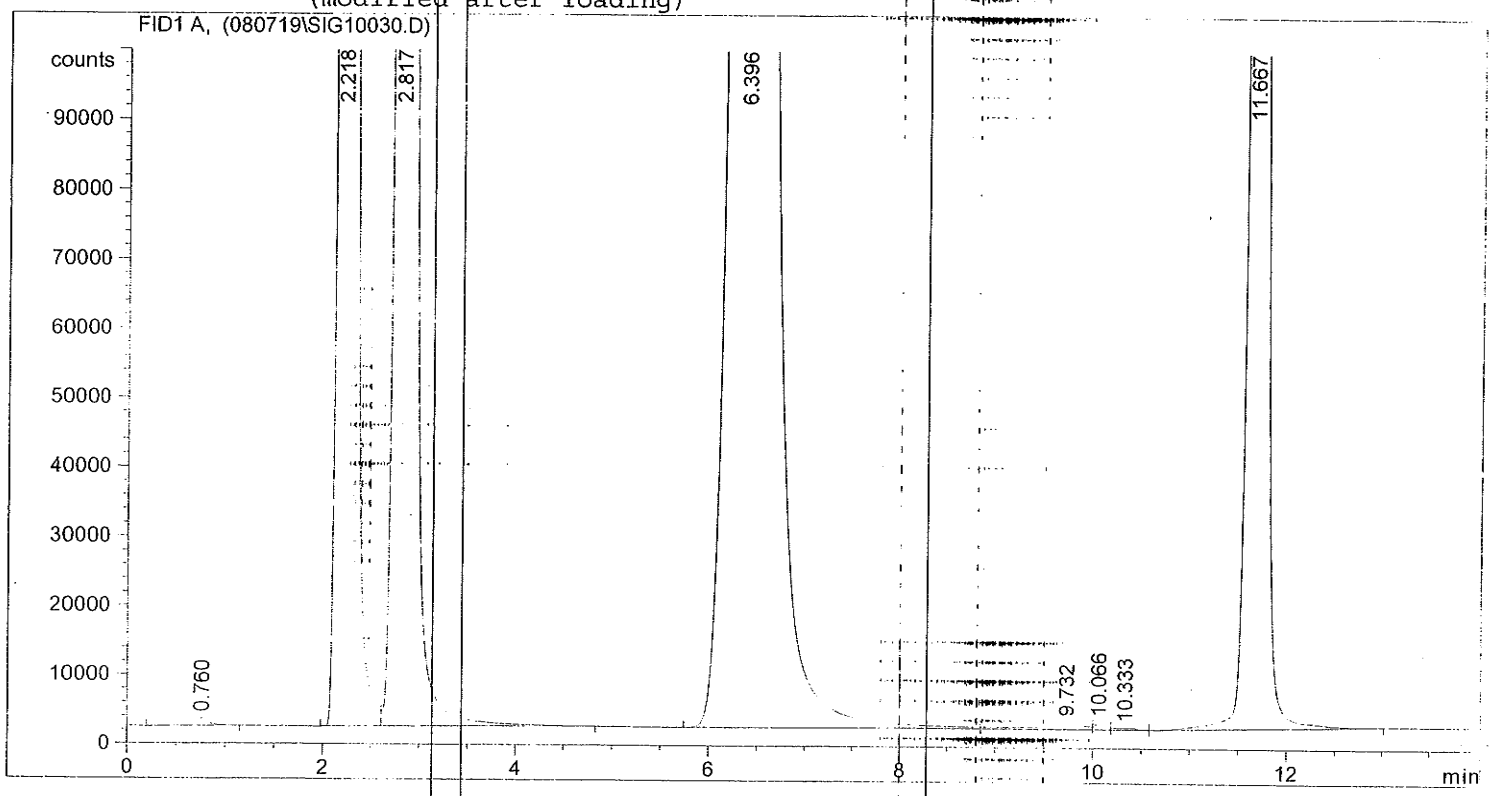
Injection Date : 7/20/2008 12:31:29 AM
Sample Name : ICAL #4 1mL
Acq. Operator : GC 14

Location : Vial 1
Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 11:08:23 AM by GC 14
(modified after loading)



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : Sunday, July 20, 2008 11:08:23 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.218	BV	9.72763e6	6.55749e-4	6378.87873		Carbon Monoxide
2.817	VB	9.77419e6	6.26868e-4	6127.12819		Methane
6.396	BV	1.00444e7	5.94616e-4	5972.55680		Carbon Dioxide
11.667	PV	4.21085e6	6.03754e-4	2542.31342		TGNMO

Totals : 2.10209e4

Results obtained with standard integrator!

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*** End of Report ***

Work Order#: 08-12-0585

Client: WEISS Associates

EPA 6010B

Calibration

Sequence No.: 8
Sample ID: icv si
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:

Autosampler Location: 157
Date Collected: 12/9/2008 10:53:33 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: icv si

Analyte	Back Pressure	Flow
All	170.0 kPa	0.60 L/min

Mean Data: icv si

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ho 339.898	62290.7	5.004	mg/L	0.0778				1.56%
Ho 345.600	102700.9	5.014	mg/L	0.0739				1.47%
Tb 350.917	25310.9	4.991	mg/L	0.0853				1.71%
Tb 384.873	13503.4	4.967	mg/L	0.0891				1.79%
Y 324.227	167530.6	5.015	mg/L	0.1143				2.28%
Y 371.029	271938.4	4.996	mg/L	0.0942				1.89%
Ag 328.068*†	-1.5	0.0000	mg/L	0.00053	0.0000	mg/L	0.00053	>999.9%
Ag 338.289†	76.7	0.0014	mg/L	0.00102	0.0014	mg/L	0.00102	73.66%
Al 308.215*†	374.6	0.0283	mg/L	0.00334	0.0283	mg/L	0.00334	11.83%
Al 396.153†	3081.2	0.0296	mg/L	0.00002	0.0296	mg/L	0.00002	0.08%
As 188.979†	13.2	0.0052	mg/L	0.00001	0.0052	mg/L	0.00001	0.19%
As 193.696*†	8.0	0.0040	mg/L	0.00116	0.0040	mg/L	0.00116	29.08%
B 249.677*†	2183.7	0.0850	mg/L	0.00240	0.0850	mg/L	0.00240	2.83%
B 249.772†	3238.0	0.0839	mg/L	0.00241	0.0839	mg/L	0.00241	2.87%
Ba 455.403†	292.6	0.0020	mg/L	0.00015	0.0020	mg/L	0.00015	7.43%
Ba 233.527*†	216.0	0.0016	mg/L	0.00029	0.0016	mg/L	0.00029	17.94%
Be 313.107†	160.1	0.0001	mg/L	0.00021	0.0001	mg/L	0.00021	184.41%
Be 313.042*†	300.2	0.0001	mg/L	0.00005	0.0001	mg/L	0.00005	43.94%
Bi 190.171†	3.2	0.0021	mg/L	0.00049	0.0021	mg/L	0.00049	23.56%
Bi 223.061*†	5.2	0.0012	mg/L	0.00014	0.0012	mg/L	0.00014	11.14%
Ca 422.673†	209.6	0.0422	mg/L	0.00130	0.0422	mg/L	0.00130	3.08%
Ca 317.933*†	56.3	0.0296	mg/L	0.00755	0.0296	mg/L	0.00755	25.53%
Cd 226.502*†	20.9	0.0003	mg/L	0.00015	0.0003	mg/L	0.00015	50.91%
Cd 228.802†	30.6	0.0004	mg/L	0.00014	0.0004	mg/L	0.00014	34.49%
Co 230.786†	29.1	0.0007	mg/L	0.00027	0.0007	mg/L	0.00027	41.43%
Co 228.616*†	12.8	0.0002	mg/L	0.00003	0.0002	mg/L	0.00003	11.10%
Cr 357.869†	6.9	0.0002	mg/L	0.00137	0.0002	mg/L	0.00137	828.87%
Cr 267.716*†	7.0	0.0001	mg/L	0.00042	0.0001	mg/L	0.00042	284.38%
Cu 324.752*†	182.6	0.0016	mg/L	0.00001	0.0016	mg/L	0.00001	0.84%
Cu 327.393†	150.2	0.0026	mg/L	0.00044	0.0026	mg/L	0.00044	16.80%
Fe 239.562†	3.9	0.0200	mg/L	0.00041	0.0200	mg/L	0.00041	2.05%
Fe 259.939†	7.8	0.0101	mg/L	0.00126	0.0101	mg/L	0.00126	12.46%
Fe 273.955*†	221.1	0.0103	mg/L	0.00718	0.0103	mg/L	0.00718	69.52%
K 766.490*†	46.0	0.0677	mg/L	0.00031	0.0677	mg/L	0.00031	0.47%
Li 610.362*†	197.1	0.0007	mg/L	0.00157	0.0007	mg/L	0.00157	211.33%
Mg 279.077*†	40.8	0.0046	mg/L	0.00401	0.0046	mg/L	0.00401	87.97%
Mg 280.271†	51.3	0.0039	mg/L	0.00002	0.0039	mg/L	0.00002	0.54%
Mn 257.610*†	361.1	0.0006	mg/L	0.00011	0.0006	mg/L	0.00011	19.32%
Mn 259.372†	267.3	0.0005	mg/L	0.00005	0.0005	mg/L	0.00005	9.27%
Mo 202.031*†	2.8	0.0002	mg/L	0.00054	0.0002	mg/L	0.00054	273.56%
Mo 203.845†	7.0	0.0007	mg/L	0.00049	0.0007	mg/L	0.00049	66.94%
Na 589.592*†	235.8	0.0593	mg/L	0.00273	0.0593	mg/L	0.00273	4.61%
Na 330.237†	85.7	0.2820	mg/L	0.08198	0.2820	mg/L	0.08198	29.07%
Ni 231.604*†	-5.4	-0.0002	mg/L	0.00000	-0.0002	mg/L	0.00000	2.28%
Ni 232.003†	-2.5	-0.0001	mg/L	0.00047	-0.0001	mg/L	0.00047	340.43%
P 213.617*†	0.2	0.0001	mg/L	0.00426	0.0001	mg/L	0.00426	>999.9%
P 214.914†	13.5	0.0058	mg/L	0.00032	0.0058	mg/L	0.00032	5.53%
Pb 217.000†	9.4	0.0043	mg/L	0.00580	0.0043	mg/L	0.00580	134.66%
Pb 220.353*†	15.8	0.0020	mg/L	0.00036	0.0020	mg/L	0.00036	17.37%
S 181.975*†	2.3	0.0034	mg/L	0.00379	0.0034	mg/L	0.00379	112.75%
S 180.669†	4.3	0.0050	mg/L	0.00276	0.0050	mg/L	0.00276	55.17%
S 182.563†	-3.0	-0.0097	mg/L	0.00549	-0.0097	mg/L	0.00549	56.78%
Sb 217.582*†	-3.6	-0.0013	mg/L	0.00233	-0.0013	mg/L	0.00233	174.04%
Sb 206.836†	-15.1	-0.0035	mg/L	0.00563	-0.0035	mg/L	0.00563	160.48%
Sb 206†	12.0	0.0033	mg/L	0.00026	0.0033	mg/L	0.00026	7.85%

Se 196.026*†	-3.1	-0.0012 mg/L	0.00078	-0.0012 mg/L	0.00078	65.82%
Se 203.985†	-24.0	-0.0146 mg/L	0.00411	-0.0146 mg/L	0.00411	28.20%
Si 251.611*†	350923.4	10.60 mg/L	0.038	10.60 mg/L	0.038	0.36%
Si 288.158†	103269.0	10.63 mg/L	0.023	10.63 mg/L	0.023	0.21%
Sn 242.170†	-22.8	-0.0081 mg/L	0.02428	-0.0081 mg/L	0.02428	301.26%
Sn 189.927*†	18.8	0.0029 mg/L	0.00075	0.0029 mg/L	0.00075	26.25%
Sr 407.771*†	124.0	0.0003 mg/L	0.00003	0.0003 mg/L	0.00003	11.87%
Sr 421.552†	1331.5	0.0002 mg/L	0.00000	0.0002 mg/L	0.00000	2.34%
Ti 334.940†	109.8	0.0003 mg/L	0.00029	0.0003 mg/L	0.00029	85.14%
Ti 336.121*†	95.6	0.0003 mg/L	0.00011	0.0003 mg/L	0.00011	31.30%
Tl†	16.9	0.0046 mg/L	0.00042	0.0046 mg/L	0.00042	9.13%
Tl 351.924†	6.5	0.0017 mg/L	0.00177	0.0017 mg/L	0.00177	103.11%
Tl 190.801*†	22.3	0.0052 mg/L	0.00037	0.0052 mg/L	0.00037	7.07%
V 310.230†	-50.6	-0.0003 mg/L	0.00095	-0.0003 mg/L	0.00095	323.42%
V 292.402*†	76.9	0.0009 mg/L	0.00026	0.0009 mg/L	0.00026	29.87%
Zn 206.200*†	308.7	0.0052 mg/L	0.00012	0.0052 mg/L	0.00012	2.27%
Zn 213.857*†	331.9	0.0052 mg/L	0.00006	0.0052 mg/L	0.00006	1.19%
Zn 202.548†	411.1	0.0051 mg/L	0.00016	0.0051 mg/L	0.00016	3.12%

Sequence No.: 3
Sample ID: CCV
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/9/2008 5:59:18 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	171.0 kPa	0.60 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ho 339.898	64856.5	5.020	mg/L	0.0175				0.35%
Ho 345.600	106379.0	5.015	mg/L	0.0323				0.64%
Tb 384.873	14474.2	4.813	mg/L	0.0391				0.81%
Tb 350.917	27729.1	5.014	mg/L	0.0377				0.75%
Y 324.227	168353.8	4.932	mg/L	0.0333				0.68%
Y 371.029	297974.5	4.896	mg/L	0.0404				0.82%
Ag 328.068*†	37558.8	0.3822	mg/L	0.00039	0.3822	mg/L	0.00039	0.10%
QC value within limits for Ag 328.068* Recovery = 101.93%								
Ag 338.289†	21731.3	0.3852	mg/L	0.00165	0.3852	mg/L	0.00165	0.43%
Al 308.215*†	181869.9	13.58	mg/L	0.008	13.58	mg/L	0.008	0.06%
QC value within limits for Al 308.215* Recovery = 100.57%								
Al 396.153†	1494826.1	13.95	mg/L	0.284	13.95	mg/L	0.284	2.03%
As 188.979†	10068.2	3.850	mg/L	0.0323	3.850	mg/L	0.0323	0.84%
QC value within limits for As 188.979 Recovery = 102.67%								
As 193.696*†	7951.9	3.835	mg/L	0.0329	3.835	mg/L	0.0329	0.86%
QC value within limits for As 193.696* Recovery = 102.27%								
B 249.677*†	101219.1	3.854	mg/L	0.0103	3.854	mg/L	0.0103	0.27%
QC value within limits for B 249.677* Recovery = 102.77%								
B 249.772†	160555.0	3.849	mg/L	0.0033	3.849	mg/L	0.0033	0.09%
Ba 455.403†	1010749.9	7.687	mg/L	0.0081	7.687	mg/L	0.0081	0.11%
Ba 233.527*†	1120517.0	7.871	mg/L	0.0009	7.871	mg/L	0.0009	0.01%
QC value within limits for Ba 233.527* Recovery = 104.95%								
Be 313.107†	796022.6	0.5796	mg/L	0.00151	0.5796	mg/L	0.00151	0.26%
Be 313.042*†	1591087.3	0.5723	mg/L	0.00021	0.5723	mg/L	0.00021	0.04%
QC value within limits for Be 313.042* Recovery = 101.75%								
Ca 422.673†	168971.2	30.59	mg/L	0.080	30.59	mg/L	0.080	0.26%
Ca 317.933*†	64424.3	31.26	mg/L	0.055	31.26	mg/L	0.055	0.18%
QC value within limits for Ca 317.933* Recovery = 104.19%								
Cd 226.502*†	56728.9	0.7800	mg/L	0.00127	0.7800	mg/L	0.00127	0.16%
QC value within limits for Cd 226.502* Recovery = 104.00%								
Cd 228.802†	57158.6	0.7696	mg/L	0.00196	0.7696	mg/L	0.00196	0.25%
Co 230.786†	89546.3	1.954	mg/L	0.0014	1.954	mg/L	0.0014	0.07%
Co 228.616*†	106994.4	1.951	mg/L	0.0018	1.951	mg/L	0.0018	0.09%
QC value within limits for Co 228.616* Recovery = 104.03%								
Cr 357.869†	25081.5	0.5973	mg/L	0.00035	0.5973	mg/L	0.00035	0.06%
Cr 267.716*†	30214.0	0.6238	mg/L	0.00019	0.6238	mg/L	0.00019	0.03%
QC value within limits for Cr 267.716* Recovery = 103.97%								
Cu 324.752*†	107456.9	0.9575	mg/L	0.00290	0.9575	mg/L	0.00290	0.30%
QC value within limits for Cu 324.752* Recovery = 102.13%								
Cu 327.393†	59004.3	0.9634	mg/L	0.00071	0.9634	mg/L	0.00071	0.07%
Fe 259.939†	3208.9	3.811	mg/L	0.0233	3.811	mg/L	0.0233	0.61%
Fe 273.955*†	83500.9	3.887	mg/L	0.0055	3.887	mg/L	0.0055	0.14%
QC value within limits for Fe 273.955* Recovery = 103.65%								
Fe 239.562†	760.6	3.836	mg/L	0.0532	3.836	mg/L	0.0532	1.39%
K 766.490*†	20139.0	27.99	mg/L	0.271	27.99	mg/L	0.271	0.97%
QC value within limits for K 766.490* Recovery = 103.68%								
Li 610.362*†	885219.2	3.100	mg/L	0.0017	3.100	mg/L	0.0017	0.05%
QC value within limits for Li 610.362* Recovery = 103.35%								
Mg 279.077*†	69014.1	7.786	mg/L	0.0185	7.786	mg/L	0.0185	0.24%
QC value within limits for Mg 279.077* Recovery = 103.81%								
Mg 280.271†	113347.1	7.795	mg/L	0.0293	7.795	mg/L	0.0293	0.38%
Mn 257.610*†	523976.2	0.7772	mg/L	0.00008	0.7772	mg/L	0.00008	0.01%
QC value within limits for Mn 257.610* Recovery = 103.63%								
Mn 259.372†	375275.1	0.7762	mg/L	0.00138	0.7762	mg/L	0.00138	0.18%
Mo 202.031*†	9222.9	0.6163	mg/L	0.00470	0.6163	mg/L	0.00470	0.76%

QC value within limits for Mo 202.031* Recovery = 102.71%							
Mo 203.845†	6293.5	0.6211	mg/L	0.00560	0.6211	mg/L	0.00560	0.90%
Na 589.592*†	146103.1	36.91	mg/L	0.049	36.91	mg/L	0.049	0.13%
QC value within limits for Na 589.592* Recovery = 102.53%							
Na 330.237†	11226.4	33.82	mg/L	0.262	33.82	mg/L	0.262	0.77%
Ni 231.604*†	18108.5	0.6241	mg/L	0.00339	0.6241	mg/L	0.00339	0.54%
QC value within limits for Ni 231.604* Recovery = 104.01%							
Ni 232.003†	11245.8	0.6138	mg/L	0.00656	0.6138	mg/L	0.00656	1.07%
P 213.617*†	16204.1	6.104	mg/L	0.0536	6.104	mg/L	0.0536	0.88%
QC value within limits for P 213.617* Recovery = 101.74%							
P 214.914†	14443.6	6.114	mg/L	0.0598	6.114	mg/L	0.0598	0.98%
Pb 217.000†	8782.1	3.821	mg/L	0.0333	3.821	mg/L	0.0333	0.87%
Pb 220.353*†	31967.6	3.907	mg/L	0.0027	3.907	mg/L	0.0027	0.07%
QC value within limits for Pb 220.353* Recovery = 104.18%							
Sb 206†	16948.5	4.623	mg/L	0.0384	4.623	mg/L	0.0384	0.83%
Sb 217.582*†	13074.4	4.604	mg/L	0.0424	4.604	mg/L	0.0424	0.92%
QC value within limits for Sb 217.582* Recovery = 102.30%							
Sb 206.836†	21160.0	4.623	mg/L	0.0075	4.623	mg/L	0.0075	0.16%
Se 203.985†	2611.1	1.530	mg/L	0.0187	1.530	mg/L	0.0187	1.22%
Se 196.026*†	4299.7	1.545	mg/L	0.0162	1.545	mg/L	0.0162	1.05%
QC value within limits for Se 196.026* Recovery = 102.99%							
Si 288.158†	61326.2	6.310	mg/L	0.0189	6.310	mg/L	0.0189	0.30%
Si 251.611*†	219648.2	6.305	mg/L	0.0004	6.305	mg/L	0.0004	0.01%
QC value within limits for Si 251.611* Recovery = 105.08%							
Sn 189.927*†	21198.4	3.103	mg/L	0.0321	3.103	mg/L	0.0321	1.03%
QC value within limits for Sn 189.927* Recovery = 103.42%							
Sn 242.170†	8957.9	3.064	mg/L	0.0354	3.064	mg/L	0.0354	1.16%
Sr 421.552†	2545803.2	0.3158	mg/L	0.00630	0.3158	mg/L	0.00630	2.00%
Sr 407.771*†	162158.5	0.3070	mg/L	0.00095	0.3070	mg/L	0.00095	0.31%
QC value within limits for Sr 407.771* Recovery = 102.33%							
Ti 336.121*†	179106.8	0.6166	mg/L	0.00055	0.6166	mg/L	0.00055	0.09%
QC value within limits for Ti 336.121* Recovery = 102.76%							
Ti 334.940†	211475.8	0.6161	mg/L	0.00105	0.6161	mg/L	0.00105	0.17%
Tl†	5870.1	1.551	mg/L	0.0115	1.551	mg/L	0.0115	0.74%
Tl 351.924†	5853.1	1.532	mg/L	0.0022	1.532	mg/L	0.0022	0.14%
Tl 190.801*†	6997.7	1.551	mg/L	0.0116	1.551	mg/L	0.0116	0.75%
QC value within limits for Tl 190.801* Recovery = 103.43%							
V 292.402*†	174838.0	1.929	mg/L	0.0004	1.929	mg/L	0.0004	0.02%
QC value within limits for V 292.402* Recovery = 102.86%							
V 310.230†	336156.6	1.925	mg/L	0.0004	1.925	mg/L	0.0004	0.02%
Zn 213.857*†	175783.4	2.581	mg/L	0.0014	2.581	mg/L	0.0014	0.05%
QC value within limits for Zn 213.857* Recovery = 103.23%							
Zn 202.548†	222861.6	2.590	mg/L	0.0015	2.590	mg/L	0.0015	0.06%
Zn 206.200*†	167459.1	2.599	mg/L	0.0014	2.599	mg/L	0.0014	0.05%
QC value within limits for Zn 206.200* Recovery = 103.95%							

All analyte(s) passed QC.

Sequence No.: 11
Sample ID: CCV
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/9/2008 6:20:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	171.0 kPa	0.60 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ho 345.600	106099.6	5.002	mg/L	0.0173				0.34%
Ho 339.898	64814.4	5.016	mg/L	0.0222				0.44%
Tb 384.873	14432.5	4.799	mg/L	0.0269				0.56%
Tb 350.917	27831.6	5.033	mg/L	0.0550				1.09%
Y 324.227	166664.9	4.883	mg/L	0.0326				0.67%
Y 371.029	296873.7	4.878	mg/L	0.0268				0.55%
Si 251.611*†	219744.0	6.308	mg/L	0.0292	6.308	mg/L	0.0292	0.46%
QC value within limits for Si 251.611* Recovery = 105.14%								
Si 288.158	61096.9	6.286	mg/L	0.0374	6.286	mg/L	0.0374	0.60%

All analyte(s) passed QC.

Sequence No.: 23
Sample ID: CCV
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/9/2008 6:41:16 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	171.0 kPa	0.60 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ho 345.600	107892.5	5.087	mg/L	0.0050				0.10%
Ho 339.898	65817.4	5.094	mg/L	0.0075				0.15%
Tb 384.873	14646.5	4.870	mg/L	0.0255				0.52%
Tb 350.917	28378.4	5.132	mg/L	0.0455				0.89%
Y 324.227	169991.8	4.980	mg/L	0.0144				0.29%
Y 371.029	302111.4	4.964	mg/L	0.0140				0.28%
Si 251.611*†	218105.3	6.261	mg/L	0.0454	6.261	mg/L	0.0454	0.73%
QC value within limits for Si 251.611* Recovery = 104.35%								
Si 288.158	61722.4	6.350	mg/L	0.0018	6.350	mg/L	0.0018	0.03%

All analyte(s) passed QC.

Sequence No.: 8
Sample ID: icv-si
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:
User canceled analysis.

Autosampler Location: 157
Date Collected: 12/11/2008 9:40:13 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Sequence No.: 8
Sample ID: icv-si
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:

Autosampler Location: 157
Date Collected: 12/11/2008 9:43:29 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: icv-si

Analyte	Back Pressure	Flow
All	166.0 kPa	0.60 L/min

Mean Data: icv-si

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ho 339.898	63874.7	5.095	mg/L	0.0309				0.61%
Ho 345.600	108902.0	5.135	mg/L	0.0291				0.57%
Tb 350.917	26431.3	5.125	mg/L	0.0456				0.89%
Tb 384.873	14138.1	5.115	mg/L	0.0162				0.32%
Y 324.227	185295.9	5.184	mg/L	0.0420				0.81%
Y 371.029	283284.5	5.108	mg/L	0.0430				0.84%
Ag 328.068*†	-13.2	-0.0001	mg/L	0.00030	-0.0001	mg/L	0.00030	210.52%
Ag 338.289†	-82.0	-0.0015	mg/L	0.00125	-0.0015	mg/L	0.00125	82.62%
Al 308.215*†	39.2	0.0030	mg/L	0.00172	0.0030	mg/L	0.00172	58.04%
Al 396.153†	600.3	0.0059	mg/L	0.00159	0.0059	mg/L	0.00159	27.15%
As 188.979†	5.9	0.0024	mg/L	0.00152	0.0024	mg/L	0.00152	64.71%
As 193.696*†	-0.6	-0.0003	mg/L	0.00226	-0.0003	mg/L	0.00226	734.63%
B 249.677*†	1548.9	0.0610	mg/L	0.00057	0.0610	mg/L	0.00057	0.93%
B 249.772†	2235.8	0.0600	mg/L	0.00035	0.0600	mg/L	0.00035	0.59%
Ba 455.403†	38.4	0.0002	mg/L	0.00021	0.0002	mg/L	0.00021	87.36%
Ba 233.527*†	43.2	0.0003	mg/L	0.00009	0.0003	mg/L	0.00009	27.69%
Be 313.107†	82.3	0.0001	mg/L	0.00015	0.0001	mg/L	0.00015	244.91%
Be 313.042*†	550.0	0.0002	mg/L	0.00002	0.0002	mg/L	0.00002	7.81%
Bi 190.171†	0.1	0.0001	mg/L	0.00733	0.0001	mg/L	0.00733	>999.9%
Bi 223.061*†	15.2	0.0035	mg/L	0.00021	0.0035	mg/L	0.00021	6.06%
Ca 422.673†	19.0	0.0042	mg/L	0.00911	0.0042	mg/L	0.00911	219.54%
Ca 317.933*†	4.2	0.0022	mg/L	0.00390	0.0022	mg/L	0.00390	177.05%
Cd 226.502*†	15.3	0.0002	mg/L	0.00002	0.0002	mg/L	0.00002	8.14%
Cd 228.802†	6.6	0.0001	mg/L	0.00003	0.0001	mg/L	0.00003	32.90%
Co 230.786†	23.2	0.0005	mg/L	0.00013	0.0005	mg/L	0.00013	23.48%
Co 228.616*†	22.1	0.0004	mg/L	0.00003	0.0004	mg/L	0.00003	7.13%
Cr 357.869†	-30.3	-0.0007	mg/L	0.00126	-0.0007	mg/L	0.00126	174.97%
Cr 267.716*†	15.4	0.0003	mg/L	0.00021	0.0003	mg/L	0.00021	62.74%
Cu 324.752*†	5.5	0.0000	mg/L	0.00025	0.0000	mg/L	0.00025	524.74%
Cu 327.393†	50.2	0.0009	mg/L	0.00071	0.0009	mg/L	0.00071	79.36%
Fe 239.562†	1.8	0.0091	mg/L	0.00528	0.0091	mg/L	0.00528	57.82%
Fe 259.939†	-2.0	-0.0027	mg/L	0.00266	-0.0027	mg/L	0.00266	98.95%
Fe 273.955*†	-45.5	-0.0022	mg/L	0.00037	-0.0022	mg/L	0.00037	16.99%
K 766.490*†	11.8	0.0177	mg/L	0.00613	0.0177	mg/L	0.00613	34.69%
Li 610.362*†	461.3	0.0018	mg/L	0.00121	0.0018	mg/L	0.00121	66.98%
Mg 279.077*†	-7.4	-0.0008	mg/L	0.00188	-0.0008	mg/L	0.00188	226.49%
Mg 280.271†	5.1	0.0004	mg/L	0.00008	0.0004	mg/L	0.00008	19.77%
Mn 257.610*†	176.0	0.0003	mg/L	0.00002	0.0003	mg/L	0.00002	7.78%
Mn 259.372†	161.8	0.0003	mg/L	0.00000	0.0003	mg/L	0.00000	0.15%
Mo 202.031*†	3.1	0.0002	mg/L	0.00007	0.0002	mg/L	0.00007	29.23%
Mo 203.845†	-3.9	-0.0004	mg/L	0.00002	-0.0004	mg/L	0.00002	3.98%
Na 589.592*†	-434.2	-0.1094	mg/L	0.02367	-0.1094	mg/L	0.02367	21.64%
Na 330.237†	47.7	0.1602	mg/L	0.18485	0.1602	mg/L	0.18485	115.37%
Ni 231.604*†	14.5	0.0005	mg/L	0.00026	0.0005	mg/L	0.00026	50.34%
Ni 232.003†	-10.5	-0.0006	mg/L	0.00039	-0.0006	mg/L	0.00039	64.50%
P 213.617*†	-9.8	-0.0039	mg/L	0.00050	-0.0039	mg/L	0.00050	12.74%
P 214.914†	8.0	0.0036	mg/L	0.00369	0.0036	mg/L	0.00369	103.92%

Pb 217.000†	-1.5	-0.0007 mg/L	0.00250	-0.0007 mg/L	0.00250	349.58%
Pb 220.353*†	8.9	0.0012 mg/L	0.00105	0.0012 mg/L	0.00105	87.39%
S 181.975*†	-34.9	-0.0492 mg/L	0.01195	-0.0492 mg/L	0.01195	24.29%
S 180.669†	-59.7	-0.0685 mg/L	0.00253	-0.0685 mg/L	0.00253	3.69%
S 182.563†	-21.3	-0.0668 mg/L	0.00847	-0.0668 mg/L	0.00847	12.67%
Sb 217.582*†	-3.5	-0.0013 mg/L	0.00024	-0.0013 mg/L	0.00024	18.09%
Sb 206.836†	10.9	0.0027 mg/L	0.01332	0.0027 mg/L	0.01332	500.35%
Sb 206†	-0.8	-0.0002 mg/L	0.00019	-0.0002 mg/L	0.00019	89.86%
Se 196.026*†	6.2	0.0024 mg/L	0.00142	0.0024 mg/L	0.00142	58.14%
Se 203.985†	-18.4	-0.0115 mg/L	0.00674	-0.0115 mg/L	0.00674	58.54%
Si 251.611*†	334318.2	10.19 mg/L	0.012	10.19 mg/L	0.012	0.12%
Si 288.158†	100865.9	10.25 mg/L	0.003	10.25 mg/L	0.003	0.02%
Sn 242.170†	57.1	0.0205 mg/L	0.00559	0.0205 mg/L	0.00559	27.31%
Sn 189.927*†	12.1	0.0019 mg/L	0.00064	0.0019 mg/L	0.00064	34.23%
Sr 407.771*†	123.6	0.0003 mg/L	0.00008	0.0003 mg/L	0.00008	28.43%
Sr 421.552†	1395.4	0.0002 mg/L	0.00000	0.0002 mg/L	0.00000	1.65%
Ti 334.940†	23.1	0.0001 mg/L	0.00009	0.0001 mg/L	0.00009	120.03%
Ti 336.121*†	35.7	0.0001 mg/L	0.00003	0.0001 mg/L	0.00003	26.64%
Tl†	7.4	0.0021 mg/L	0.00135	0.0021 mg/L	0.00135	63.76%
Tl 351.924†	-53.3	-0.0142 mg/L	0.01001	-0.0142 mg/L	0.01001	70.70%
Tl 190.801*†	13.3	0.0032 mg/L	0.00261	0.0032 mg/L	0.00261	81.11%
V 310.230†	-129.7	-0.0008 mg/L	0.00100	-0.0008 mg/L	0.00100	129.89%
V 292.402*†	65.0	0.0008 mg/L	0.00035	0.0008 mg/L	0.00035	44.89%
Zn 206.200*†	11.6	0.0002 mg/L	0.00011	0.0002 mg/L	0.00011	50.89%
Zn 213.857*†	11.7	0.0002 mg/L	0.00006	0.0002 mg/L	0.00006	28.82%
Zn 202.548†	12.1	0.0002 mg/L	0.00004	0.0002 mg/L	0.00004	22.95%

Sequence No.: 2
Sample ID: CCV
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/11/2008 3:57:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	174.0 kPa	0.60 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ho 339.898	64122.2	5.115	mg/L	0.0427				0.83%
Ho 345.600	110869.5	5.228	mg/L	0.0376				0.72%
Tb 384.873	13624.8	4.929	mg/L	0.0726				1.47%
Tb 350.917	26616.6	5.161	mg/L	0.0796				1.54%
Y 324.227	188118.6	5.263	mg/L	0.0487				0.93%
Y 371.029	275753.5	4.972	mg/L	0.0522				1.05%
Ag 328.068*†	33728.1	0.3589	mg/L	0.00174	0.3589	mg/L	0.00174	0.49%
QC value within limits for Ag 328.068* Recovery = 95.69%								
Ag 338.289†	19462.5	0.3602	mg/L	0.00200	0.3602	mg/L	0.00200	0.56%
Al 308.215*†	174102.1	13.18	mg/L	0.056	13.18	mg/L	0.056	0.43%
QC value within limits for Al 308.215* Recovery = 97.67%								
Al 396.153†	1337394.2	13.04	mg/L	0.201	13.04	mg/L	0.201	1.54%
As 188.979†	9380.6	3.756	mg/L	0.0545	3.756	mg/L	0.0545	1.45%
QC value within limits for As 188.979 Recovery = 100.17%								
As 193.696*†	7341.0	3.744	mg/L	0.0426	3.744	mg/L	0.0426	1.14%
QC value within limits for As 193.696* Recovery = 99.84%								
B 249.677*†	92644.4	3.648	mg/L	0.0002	3.648	mg/L	0.0002	0.01%
QC value within limits for B 249.677* Recovery = 97.27%								
B 249.772†	132562.8	3.558	mg/L	0.0029	3.558	mg/L	0.0029	0.08%
Ba 455.403†	1094314.3	6.950	mg/L	0.0562	6.950	mg/L	0.0562	0.81%
Ba 233.527*†	923530.7	7.221	mg/L	0.1577	7.221	mg/L	0.1577	2.18%
QC value within limits for Ba 233.527* Recovery = 96.28%								
Be 313.107†	760714.7	0.5598	mg/L	0.01349	0.5598	mg/L	0.01349	2.41%
Be 313.042*†	1314189.9	0.5463	mg/L	0.01191	0.5463	mg/L	0.01191	2.18%
QC value within limits for Be 313.042* Recovery = 97.12%								
Ca 422.673†	144386.3	31.59	mg/L	0.396	31.59	mg/L	0.396	1.25%
Ca 317.933*†	54496.3	28.36	mg/L	0.332	28.36	mg/L	0.332	1.17%
QC value within limits for Ca 317.933* Recovery = 94.55%								
Cd 226.502*†	51561.0	0.7520	mg/L	0.00278	0.7520	mg/L	0.00278	0.37%
QC value within limits for Cd 226.502* Recovery = 100.27%								
Cd 228.802†	55253.0	0.7589	mg/L	0.00363	0.7589	mg/L	0.00363	0.48%
Co 230.786†	81545.9	1.900	mg/L	0.0084	1.900	mg/L	0.0084	0.44%
Co 228.616*†	99765.8	1.921	mg/L	0.0058	1.921	mg/L	0.0058	0.30%
QC value within limits for Co 228.616* Recovery = 102.46%								
Cr 357.869†	49859.5	1.184	mg/L	0.0471	1.184	mg/L	0.0471	3.98%
Cr 267.716*†	53429.9	1.181	mg/L	0.0450	1.181	mg/L	0.0450	3.81%
QC value greater than the upper limit for Cr 267.716* Recovery = 196.91%								
Cu 324.752*†	106188.3	0.9310	mg/L	0.00411	0.9310	mg/L	0.00411	0.44%
QC value within limits for Cu 324.752* Recovery = 99.31%								
Cu 327.393†	50787.0	0.9009	mg/L	0.00150	0.9009	mg/L	0.00150	0.17%
Fe 259.939†	2640.9	3.511	mg/L	0.0491	3.511	mg/L	0.0491	1.40%
Fe 273.955*†	80526.3	3.851	mg/L	0.0138	3.851	mg/L	0.0138	0.36%
QC value within limits for Fe 273.955* Recovery = 102.68%								
Fe 239.562†	734.4	3.660	mg/L	0.0372	3.660	mg/L	0.0372	1.02%
K 766.490*†	18042.6	27.03	mg/L	0.401	27.03	mg/L	0.401	1.48%
QC value within limits for K 766.490* Recovery = 100.11%								
Mg 279.077*†	68278.8	7.667	mg/L	0.0104	7.667	mg/L	0.0104	0.14%
QC value within limits for Mg 279.077* Recovery = 102.23%								
Mg 280.271†	96385.7	7.271	mg/L	0.0896	7.271	mg/L	0.0896	1.23%
Mn 257.610*†	451054.3	0.7351	mg/L	0.00217	0.7351	mg/L	0.00217	0.30%
QC value within limits for Mn 257.610* Recovery = 98.02%								
Mn 259.372†	366520.6	0.7600	mg/L	0.00372	0.7600	mg/L	0.00372	0.49%
Mo 202.031*†	8004.4	0.5855	mg/L	0.00735	0.5855	mg/L	0.00735	1.26%
QC value within limits for Mo 202.031* Recovery = 97.58%								
Mo 203.845†	5441.3	0.5871	mg/L	0.00909	0.5871	mg/L	0.00909	1.55%

Na 589.592*†	143455.7	36.13	mg/L	0.340	36.13	mg/L	0.340	0.94%
QC value within limits for Na 589.592* Recovery = 100.37%								
Na 330.237†	9594.3	32.23	mg/L	0.025	32.23	mg/L	0.025	0.08%
Ni 231.604*†	17032.9	0.6053	mg/L	0.00955	0.6053	mg/L	0.00955	1.58%
QC value within limits for Ni 231.604* Recovery = 100.88%								
Ni 232.003†	10871.6	0.6240	mg/L	0.00994	0.6240	mg/L	0.00994	1.59%
Pb 217.000†	7541.0	3.588	mg/L	0.0556	3.588	mg/L	0.0556	1.55%
Pb 220.353*†	27391.8	3.700	mg/L	0.0044	3.700	mg/L	0.0044	0.12%
QC value within limits for Pb 220.353* Recovery = 98.67%								
Sb 206†	16758.9	4.626	mg/L	0.0739	4.626	mg/L	0.0739	1.60%
Sb 217.582*†	11594.4	4.392	mg/L	0.0619	4.392	mg/L	0.0619	1.41%
QC value within limits for Sb 217.582* Recovery = 97.61%								
Sb 206.836†	17497.8	4.257	mg/L	0.0622	4.257	mg/L	0.0622	1.46%
Se 203.985†	2510.9	1.570	mg/L	0.0286	1.570	mg/L	0.0286	1.82%
Se 196.026*†	3779.2	1.485	mg/L	0.0197	1.485	mg/L	0.0197	1.33%
QC value within limits for Se 196.026* Recovery = 98.99%								
Si 288.158†	63685.7	6.474	mg/L	0.0385	6.474	mg/L	0.0385	0.59%
Si 251.611*†	205016.8	6.251	mg/L	0.0318	6.251	mg/L	0.0318	0.51%
QC value within limits for Si 251.611* Recovery = 104.18%								
Tl†	5303.2	1.507	mg/L	0.0197	1.507	mg/L	0.0197	1.31%
Tl 351.924†	5626.6	1.493	mg/L	0.0242	1.493	mg/L	0.0242	1.62%
Tl 190.801*†	6246.6	1.507	mg/L	0.0182	1.507	mg/L	0.0182	1.21%
QC value within limits for Tl 190.801* Recovery = 100.45%								
V 292.402*†	154915.9	1.838	mg/L	0.0096	1.838	mg/L	0.0096	0.52%
QC value within limits for V 292.402* Recovery = 98.05%								
V 310.230†	308351.0	1.831	mg/L	0.0082	1.831	mg/L	0.0082	0.45%
Zn 213.857*†	152069.5	2.471	mg/L	0.0058	2.471	mg/L	0.0058	0.23%
QC value within limits for Zn 213.857* Recovery = 98.85%								
Zn 202.548†	187381.4	2.456	mg/L	0.0027	2.456	mg/L	0.0027	0.11%

QC Failed. Continue with analysis.

Sequence No.: 8
Sample ID: CCV
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/11/2008 4:18:46 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	173.0 kPa	0.60 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ho 339.898	64281.5	5.128	mg/L	0.0796				1.55%
Ho 345.600	110689.4	5.219	mg/L	0.0950				1.82%
Tb 384.873	13670.5	4.946	mg/L	0.1123				2.27%
Tb 350.917	26599.4	5.158	mg/L	0.1131				2.19%
Y 324.227	188138.2	5.264	mg/L	0.1238				2.35%
Y 371.029	276001.0	4.977	mg/L	0.1025				2.06%
Al 308.215*†	173360.6	13.13	mg/L	0.021	13.13	mg/L	0.021	0.16%
QC value within limits for Al 308.215* Recovery = 97.25%								
Al 396.153†	1360824.5	13.27	mg/L	0.120	13.27	mg/L	0.120	0.91%
B 249.677*†	92809.8	3.656	mg/L	0.0068	3.656	mg/L	0.0068	0.18%
QC value within limits for B 249.677* Recovery = 97.49%								
B 249.772†	133001.4	3.570	mg/L	0.0023	3.570	mg/L	0.0023	0.06%
Ba 455.403†	1080456.3	6.862	mg/L	0.1620	6.862	mg/L	0.1620	2.36%
Ba 233.527*†	941859.8	7.366	mg/L	0.1198	7.366	mg/L	0.1198	1.63%
QC value within limits for Ba 233.527* Recovery = 98.21%								
Ca 422.673†	141948.8	31.06	mg/L	0.605	31.06	mg/L	0.605	1.95%
Ca 317.933*†	53874.4	28.04	mg/L	0.261	28.04	mg/L	0.261	0.93%
QC value within limits for Ca 317.933* Recovery = 93.47%								
Fe 259.939†	2652.7	3.527	mg/L	0.0634	3.527	mg/L	0.0634	1.80%
Fe 273.955*†	80484.1	3.849	mg/L	0.0040	3.849	mg/L	0.0040	0.10%
QC value within limits for Fe 273.955* Recovery = 102.63%								
Fe 239.562†	733.9	3.658	mg/L	0.0659	3.658	mg/L	0.0659	1.80%
K 766.490*†	17977.6	26.93	mg/L	0.208	26.93	mg/L	0.208	0.77%
QC value within limits for K 766.490* Recovery = 99.75%								
Mg 279.077*†	68435.2	7.685	mg/L	0.0175	7.685	mg/L	0.0175	0.23%
QC value within limits for Mg 279.077* Recovery = 102.46%								
Mg 280.271†	95614.9	7.213	mg/L	0.0574	7.213	mg/L	0.0574	0.80%
Mn 257.610*†	449923.1	0.7335	mg/L	0.00053	0.7335	mg/L	0.00053	0.07%
QC value within limits for Mn 257.610* Recovery = 97.80%								
Mn 259.372†	365854.8	0.7586	mg/L	0.00003	0.7586	mg/L	0.00003	0.00%
Na 589.592*†	142913.8	36.00	mg/L	0.854	36.00	mg/L	0.854	2.37%
QC value within limits for Na 589.592* Recovery = 99.99%								
Na 330.237†	9465.3	31.79	mg/L	0.110	31.79	mg/L	0.110	0.35%
Si 288.158†	63397.5	6.445	mg/L	0.0021	6.445	mg/L	0.0021	0.03%
Si 251.611*†	204250.5	6.228	mg/L	0.0012	6.228	mg/L	0.0012	0.02%
QC value within limits for Si 251.611* Recovery = 103.80%								

All analyte(s) passed QC.

Work Order#: 08-12-0585

Client: WEISS Associates

EPA 6020

Calibration

SAMPLE INFORMATION

Sample ID: ICV

Sample Description:

Autosampler Position: 6

Sample Date/Time: Wednesday, December 10, 2008 11:25:26

Method File: C:\elandata\Method\cel\CEL_STD_T22_w.mth

Dataset File: C:\elandata\Dataset\Data\08121001\ICV.009

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass		Meas. Intens. Mean	Conc. Mean	Report Unit	Meas. Intens. RSD	Blank Intensity
Li	6		81094		ppb	4.4	88020
Be	9		43873	100.2230	ppb	0.0	40
B	11		61358	110.1604	ppb	0.4	704
B	10		12591	108.6202	ppb	0.1	160
Sc	45	>	1898428		ppb	3.4	1982938
Al	27		1175376	109.3673	ppb	3.9	14309
Mg	24		736307	111.9050	ppb	0.7	2160
Ti	47		159848	97.6812	ppb	0.1	502
Ti	49		132688	97.9597	ppb	1.4	3780
V	51		1796667	97.6420	ppb	0.8	-19899
Cr	52		1704314	100.4829	ppb	0.4	43227
Mn	55		2606275	102.6996	ppb	1.4	2205
Fe	54		196941	111.8693	ppb	0.1	54351
Fe	57		69566	112.1865	ppb	1.7	13851
Co	59		1988937	106.2515	ppb	0.2	131
Ni	60		441243	106.2866	ppb	0.5	195
Cu	65		465936	109.0362	ppb	0.5	513
Ge	74	>	557749		mg/L	2.9	586621
As	75		315381	103.0669	ppb	0.2	-2104
As-1	75		313260	102.8539	ppb	0.4	10720
Se	78		91120	100.7016	ppb	1.4	12816
Se	82		34208	101.7264	ppb	0.8	17
Sr	88		3779979	100.8751	ppb	0.8	834
Zn	66		272423	104.2686	ppb	0.5	2810
Zn	68		198991	104.2636	ppb	0.4	3202
Y	89		3455300		ppb	2.5	3552351
Mo	95		587543	99.8296	ppb	0.4	71
In	115	>	3038503		ppb	3.7	3080988
Ag	107		797393	55.6620	ppb	0.6	304
Cd	111		370537	104.7665	ppb	1.3	2390
Cd	114		789508	105.7231	ppb	1.4	80
Sn	118		957064	103.5962	ppb	0.3	1207
Sb	123		773047	91.9461	ppb	2.9	421
Ba	135		290369	101.8875	ppb	3.1	146
Tb	159		3779277	-210.8499	ppb	3.1	3798289
Tl	203		1143814	97.2613	ppb	0.7	137
Pb	207		4153883	98.7727	ppb	0.3	784
Bi	209	>	2775187		ppb	3.5	2728116

QC Out Of Limits

Mass	Analyte	Out of Limits Message
11	B	
24	Mg	
107	Ag	

SAMPLE INFORMATION

Sample ID: CCV

Sample Description:

Autosampler Position: 4

Sample Date/Time: Wednesday, December 10, 2008 19:02:51

Method File: C:\elandata\Method\cel\CEL_STD_T22_w.mth

Dataset File: C:\elandata\Dataset\Data\08121001\CCV.129

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass		Meas. Intens. Mean	Conc. Mean	Report Unit	Meas. Intens. RSD	Blank Intensity
Li	6		131590		ppb	2.2	148779
Be	9		45057	102.7518	ppb	0.9	22
B	11		147701	249.2632	ppb	2.7	3737
B	10		30685	243.8010	ppb	1.7	790
Sc	45	>	1998801		ppb	2.7	2107484
Al	27		1135598	112.0852	ppb	2.1	13403
Mg	24		33703194	5132.6835	ppb	3.1	3220
Ti	47		151335	99.2001	ppb	0.7	449
Ti	49		124892	99.0106	ppb	1.7	3097
V	51		1674297	100.3889	ppb	2.6	-16701
Cr	52		1579159	102.3538	ppb	1.2	39279
Mn	55		2326646	98.2554	ppb	1.4	2532
Fe	54		5994093	5059.9363	ppb	1.6	51494
Fe	57		2325347	5002.6963	ppb	2.2	12274
Co	59		1735252	98.5993	ppb	0.3	124
Ni	60		376950	99.7505	ppb	0.6	192
Cu	65		383422	100.1778	ppb	1.3	381
Ge	74	>	558711		mg/L	1.1	597288
As	75		269747	97.9685	ppb	0.9	-1890
As-1	75		268682	97.8914	ppb	0.8	9538
Se	78		80484	98.0628	ppb	0.5	11373
Se	82		29919	98.2941	ppb	0.8	-2
Sr	88		3295568	96.4029	ppb	1.5	1308
Zn	66		235373	98.8613	ppb	0.7	2940
Zn	68		172511	99.2105	ppb	1.2	3842
Y	89		3519868		ppb	1.4	3667811
Mo	95		509821	95.8648	ppb	1.5	264
In	115	>	3127741		ppb	1.2	3274247
Ag	107		1302816	99.4052	ppb	2.7	384
Cd	111		317924	96.6037	ppb	1.1	2929
Cd	114		686156	99.0892	ppb	0.8	94
Sn	118		860221	98.9020	ppb	1.2	1361
Sb	123		772837	99.9324	ppb	0.6	509
Ba	135		259184	98.0119	ppb	0.2	170
Tb	159		4155525	171.1931	ppb	1.2	4031559
Tl	203		946642	98.5783	ppb	0.8	867
Pb	207		3410708	98.1246	ppb	0.2	620
Bi	209	>	2561683		ppb	0.7	2553012

QC Out Of Limits

Mass	Analyte	Out of Limits Message
27	Al	

SAMPLE INFORMATION

Sample ID: CCV

Sample Description:

Autosampler Position: 4

Sample Date/Time: Wednesday, December 10, 2008 20:58:16

Method File: C:\elandata\Method\cel\CEL_STD_T22_w.mth

Dataset File: C:\elandata\Dataset\Data\08121001\CCV.154

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass		Meas. Intens. Mean	Conc. Mean	Report Unit	Meas. Intens. RSD	Blank Intensity
Li	6		106222		ppb	5.6	148779
Be	9		38405	103.7873	ppb	0.4	22
B	11		127283	254.7116	ppb	3.1	3737
B	10		26028	245.0937	ppb	2.9	790
Sc	45	>	1686185		ppb	0.6	2107484
Al	27		903966	105.6749	ppb	0.3	13403
Mg	24		25646694	4630.0385	ppb	1.1	3220
Ti	47		122863	95.4145	ppb	0.4	449
Ti	49		102531	96.2692	ppb	0.3	3097
V	51		1363405	96.9334	ppb	0.8	-16701
Cr	52		1344273	103.2723	ppb	0.2	39279
Mn	55		1945656	97.3732	ppb	0.7	2532
Fe	54		4865815	4866.2949	ppb	1.3	51494
Fe	57		1950795	4974.7996	ppb	2.0	12274
Co	59		1497347	96.2030	ppb	0.5	124
Ni	60		325327	97.3440	ppb	0.7	192
Cu	65		332755	98.3073	ppb	0.8	381
Ge	74	>	494089		mg/L	0.2	597288
As	75		235296	96.6394	ppb	0.4	-1890
As-1	75		234285	96.4733	ppb	0.4	9538
Se	78		70136	96.4060	ppb	1.2	11373
Se	82		26102	96.9676	ppb	1.3	-2
Sr	88		2867838	94.8641	ppb	1.4	1308
Zn	66		201601	95.7104	ppb	0.8	2940
Zn	68		147741	96.0119	ppb	0.2	3842
Y	89		3135513		ppb	1.2	3667811
Mo	95		466473	92.6723	ppb	0.8	264
In	115	>	2961555		ppb	2.9	3274247
Ag	107		1220444	98.3989	ppb	0.8	384
Cd	111		297291	95.4364	ppb	1.0	2929
Cd	114		637667	97.2999	ppb	0.7	94
Sn	118		813485	98.8012	ppb	1.5	1361
Sb	123		722489	98.7011	ppb	0.7	509
Ba	135		248705	99.3561	ppb	1.7	170
Tb	159		4262581	-225.6444	ppb	2.4	4031559
Tl	203		1028019	97.9421	ppb	2.3	867
Pb	207		3676124	96.7632	ppb	1.9	620
Bi	209	>	2799873		ppb	2.2	2553012

QC Out Of Limits

Mass	Analyte	Out of Limits Message

SAMPLE INFORMATION

Sample ID: CCV

Sample Description:

Autosampler Position: 4

Sample Date/Time: Wednesday, December 10, 2008 19:59:05

Method File: C:\elandata\Method\cel\CEL_STD_T22_w.mth

Dataset File: C:\elandata\Dataset\Data\08121001\CCV.141

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass		Meas. Intens. Mean	Conc. Mean	Report Unit	Meas. Intens. RSD	Blank Intensity
Li	6		124999		ppb	3.9	148779
Be	9		43137	**104.4355**	ppb	1.9	22
B	11		140046	**250.9985**	ppb	1.0	3737
B	10		29476	**248.7412**	ppb	0.5	790
Sc	45	>	1882382		ppb	0.8	2107484
Al	27		1033072	**108.2094**	ppb	0.7	13403
Mg	24		30236078	**4889.6503**	ppb	1.1	3220
Ti	47		136383	**94.8759**	ppb	0.5	449
Ti	49		113182	**95.1659**	ppb	0.9	3097
V	51		1523672	**97.0372**	ppb	0.7	-16701
Cr	52		1459669	**100.3820**	ppb	0.6	39279
Mn	55		2112189	**94.6881**	ppb	0.8	2532
Fe	54		5420573	**4855.9252**	ppb	1.7	51494
Fe	57		2117597	**4836.0148**	ppb	1.2	12274
Co	59		1605269	**98.2144**	ppb	1.1	124
Ni	60		348861	**99.4076**	ppb	0.5	192
Cu	65		352889	**99.2827**	ppb	1.3	381
Ge	74	>	518848		mg/L	0.5	597288
As	75		247601	**96.8397**	ppb	0.8	-1890
As-1	75		246022	**96.4706**	ppb	1.0	9538
Se	78		73722	**96.5137**	ppb	1.3	11373
Se	82		27626	**97.7350**	ppb	0.8	-2
Sr	88		3053468	**96.1857**	ppb	0.8	1308
Zn	66		216033	**97.6918**	ppb	0.7	2940
Zn	68		157828	**97.7118**	ppb	0.2	3842
Y	89		3319929		ppb	1.1	3667811
Mo	95		481551	**92.8082**	ppb	1.9	264
In	115	>	3051480		ppb	1.3	3274247
Ag	107		1250266	**97.7865**	ppb	1.8	384
Cd	111		307287	**95.7018**	ppb	2.2	2929
Cd	114		662325	**98.0345**	ppb	1.4	94
Sn	118		833132	**98.1811**	ppb	1.1	1361
Sb	123		742804	**98.4477**	ppb	0.9	509
Ba	135		249343	**96.6410**	ppb	1.2	170
Tb	159		4225778	**-72.9019**	ppb	1.6	4031559
Tl	203		964171	**94.9823**	ppb	1.7	867
Pb	207		3504930	**95.3926**	ppb	1.6	620
Bi	209	>	2708204		ppb	2.6	2553012

QC Out Of Limits

Mass	Analyte	Out of Limits Message

Work Order#: 08-12-0585

Client: WEISS Associates

EPA 8270C (M) Isotope Dilution

Calibration

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\081107\
Data File : 07NOV007.D
Acq On : 7 Nov 2008 2:05 pm
Operator :
Sample : ICV S101308G
ALS Vial : 8 Sample Multiplier: 1
InstName : GCMS AAA

Quant Time: Nov 07 17:57:53 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Fri Nov 07 17:56:50 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M

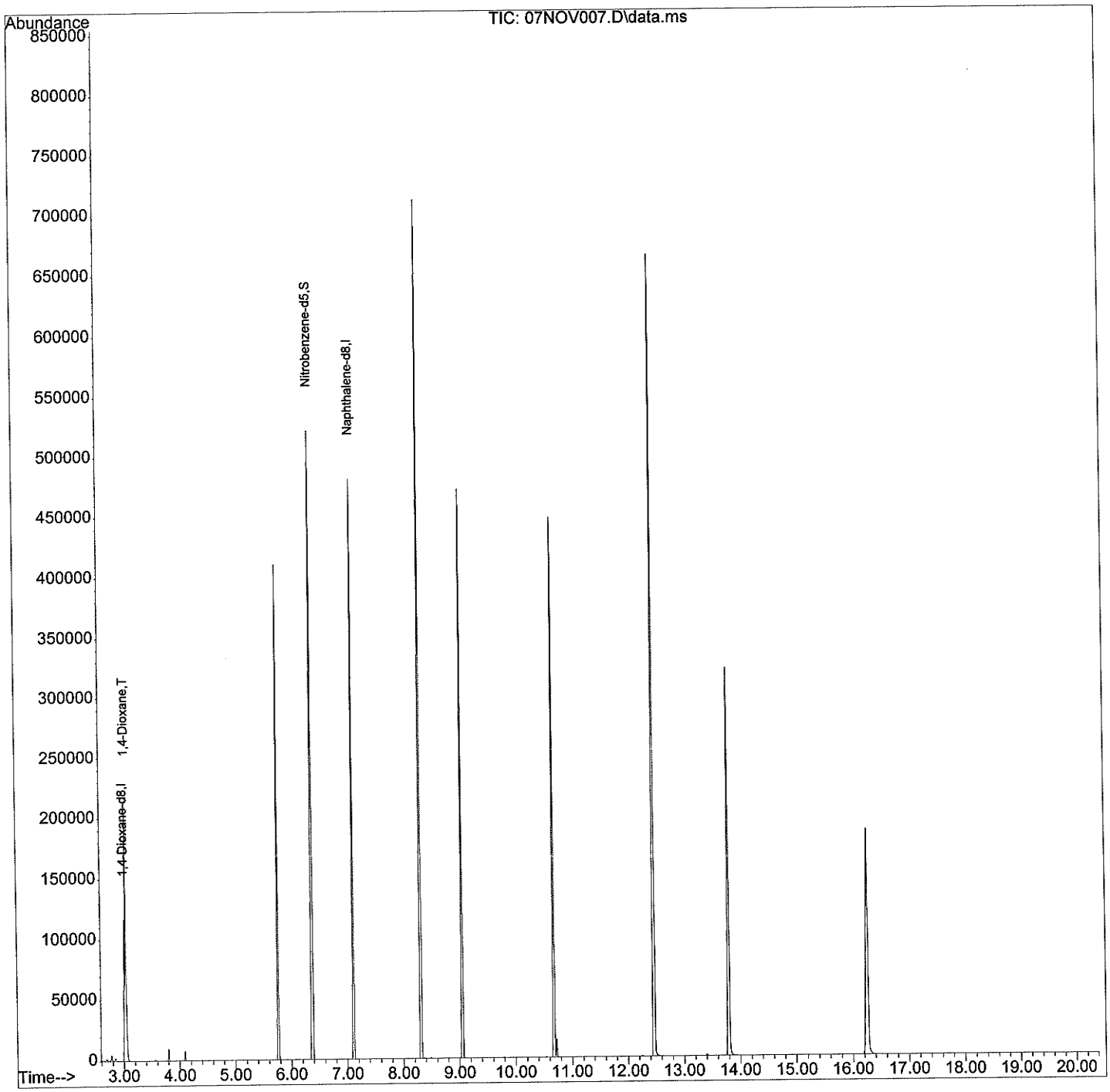
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dioxane-d8	3.010	96	46060	40.00 mg/l	# 0.00
3) Naphthalene-d8	7.112	136	226354	40.00 mg/l	# 0.00
System Monitoring Compounds					
4) Nitrobenzene-d5	6.379	82	274608	79.29 mg/l	0.00
Target Compounds					Qvalue
2) 1,4-Dioxane	3.036	88	86006	73.61 mg/l #	71

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\081107\
Data File : 07NOV007.D
Acq On : 7 Nov 2008 2:05 pm
Operator :
Sample : ICV S101308G
ALS Vial : 8 Sample Multiplier: 1
InstName : GCMS AAA

Quant Time: Nov 07 17:57:53 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Fri Nov 07 17:56:50 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\081212\
Data File : 12dec002.D
Acq On : 12 Dec 2008 9:55 am
Operator :
Sample : DIOX-80 S101308D
ALS Vial : 2 Sample Multiplier: 1
InstName : GCMS AAA

Quant Time: Dec 12 10:18:56 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Wed Nov 19 09:17:53 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M

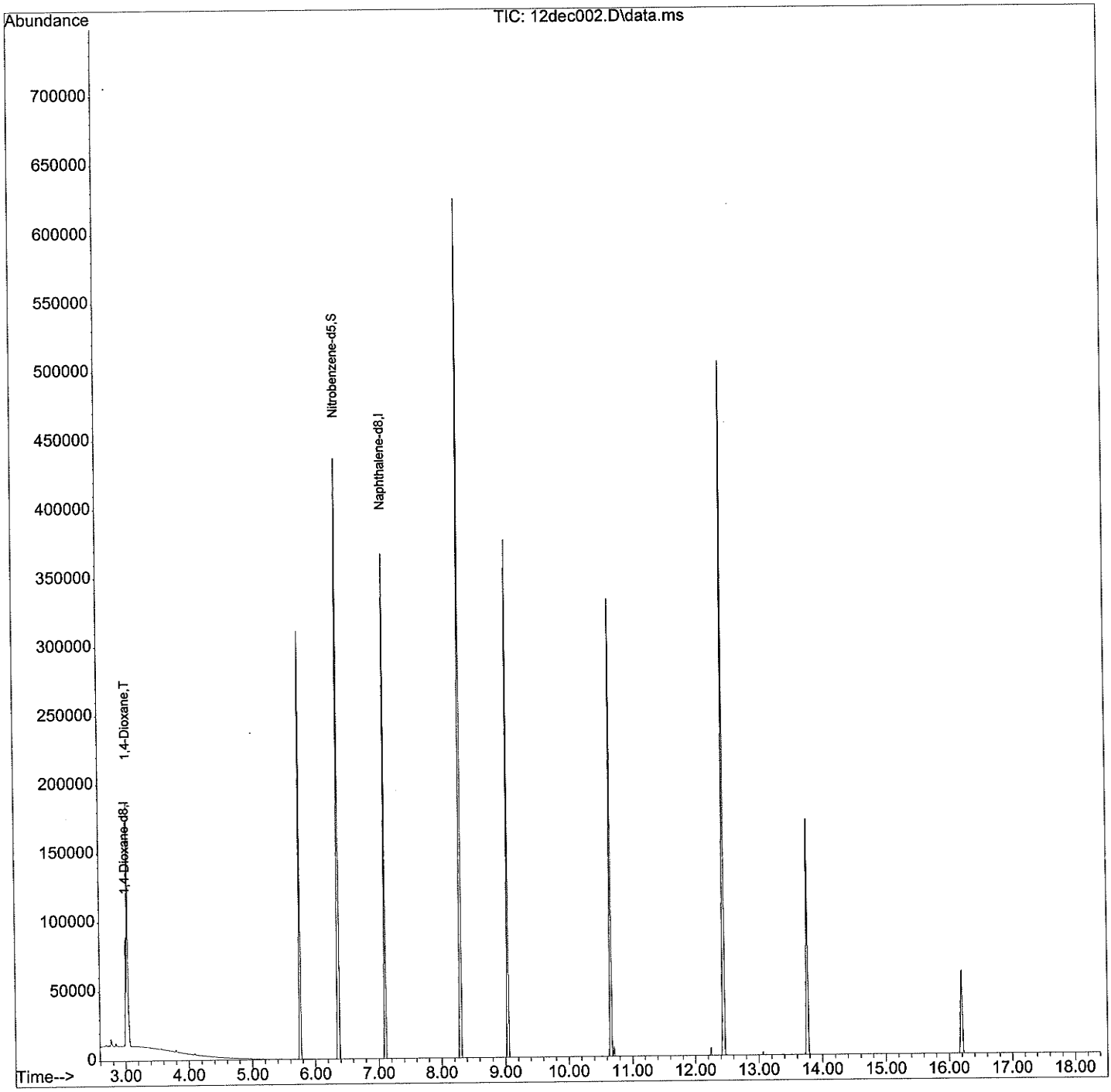
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dioxane-d8	3.004	96	28021	40.00 mg/l	# 0.00
3) Naphthalene-d8	7.101	136	151463	40.00 mg/l	# 0.00
System Monitoring Compounds					
4) Nitrobenzene-d5	6.374	82	194665	84.00 mg/l	0.00
Target Compounds					Qvalue
2) 1,4-Dioxane	3.031	88	57980	81.57 mg/l #	45

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\081212\
Data File : 12dec002.D
Acq On : 12 Dec 2008 9:55 am
Operator :
Sample : DIOX-80 S101308D
ALS Vial : 2 Sample Multiplier: 1
InstName : GCMS AAA

Quant Time: Dec 12 10:18:56 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Wed Nov 19 09:17:53 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\081107\
Data File : 07NOV004.D
Acq On : 7 Nov 2008 12:46 pm
Operator :
Sample : DIOX 80PPM S101308D
ALS Vial : 4 Sample Multiplier: 1
InstName : GCMS AAA

Quant Time: Nov 07 17:55:21 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Fri Nov 07 17:55:11 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M

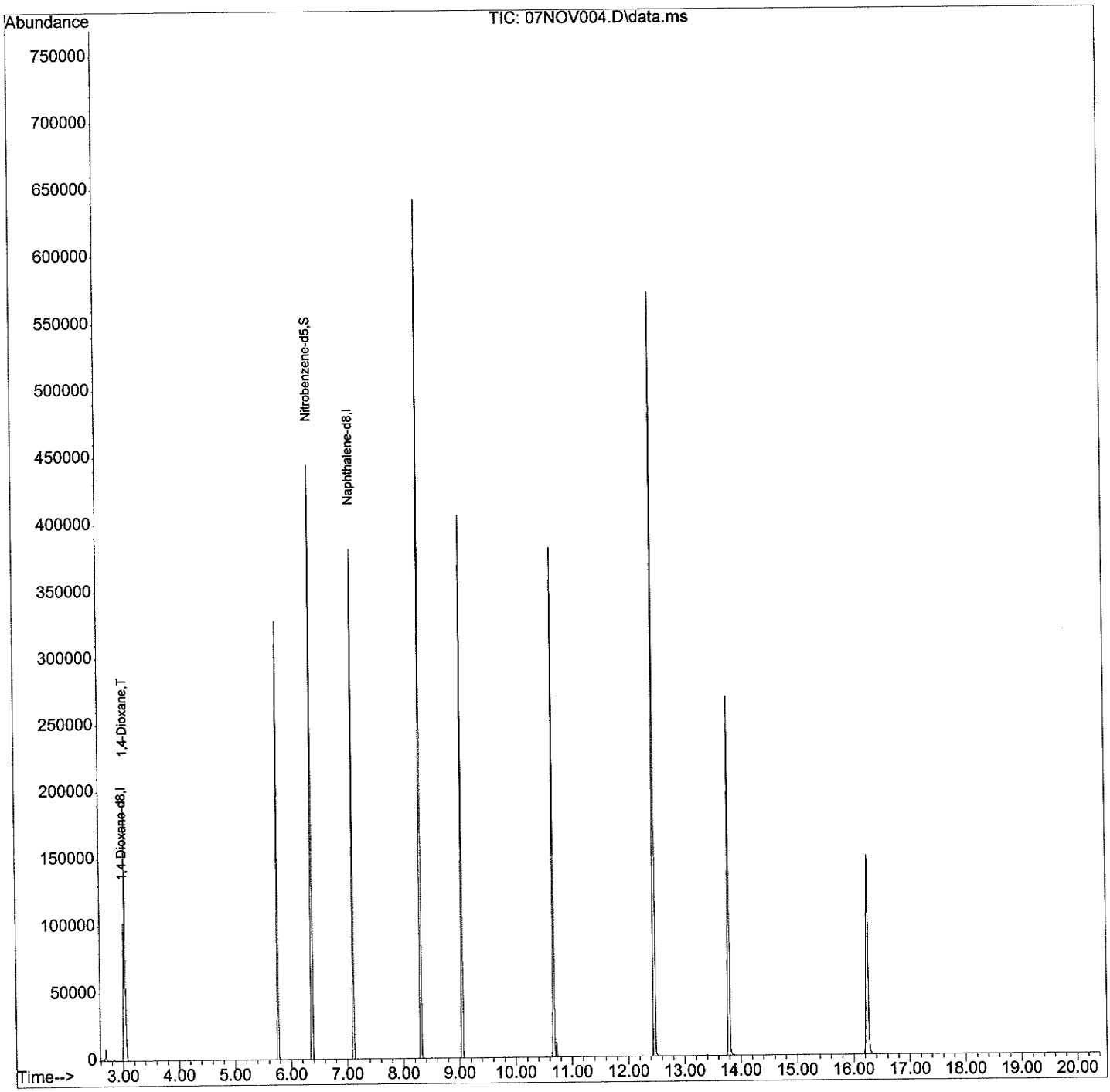
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dioxane-d8	3.009	96	39293	40.00 mg/l	# 0.00
3) Naphthalene-d8	7.112	136	178255	40.00 mg/l	# 0.00
System Monitoring Compounds					
4) Nitrobenzene-d5	6.374	82	215387	81.07 mg/l	0.00
Target Compounds					Qvalue
2) 1,4-Dioxane	3.036	88	76923	76.08 mg/l #	70

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\081107\
Data File : 07NOV004.D
Acq On : 7 Nov 2008 12:46 pm
Operator :
Sample : DIOX 80PPM S101308D
ALS Vial : 4 Sample Multiplier: 1
InstName : GCMS AAA

Quant Time: Nov 07 17:55:21 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Fri Nov 07 17:55:11 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M



Work Order#: 08-12-0585

Client: WEISS Associates

EPA 7470A

Calibration

==========

Analysis Begun

Logged In Analyst: Xue-Wen Xu
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-400, S/N B050-9560
Autosampler Model: AS-90

Sample Information File: C:\data-AA\xue-wen xu\Sample Information\081212D1.sif
Batch ID: 081212D1
Results Data Set: 081212D1
Results Library: C:\data-AA\xue-wen xu\Results\Results.mdb

==========

Method Loaded
Method Name: Hg
Method Last Saved: 12/12/2008 10:23:39 AM
Method Description:

==========

Sequence No.: 1
Autosampler Location: 6
Sample ID: Calib blank 1
Date Collected: 12/12/2008 11:22:40 AM
Analyst:
Data Type: Original

Replicate Data: Calib blank 1

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	-0.0000	-0.0026	-0.0000	11:23:46	Yes
2		[0.00]	0.0000	-0.0012	0.0000	11:24:30	Yes
Mean:		[0.00]	0.0000				
SD:		0.00	0.0000				
%RSD:		0.00	187.90				

Auto-zero performed.

==========

Sequence No.: 2
Autosampler Location: 1
Sample ID: 0.25ppb
Date Collected: 12/12/2008 11:24:56 AM
Analyst:
Data Type: Original

Replicate Data: 0.25ppb

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.250000]	0.0010	0.0019	0.0010	11:26:00	Yes
2		[0.250000]	0.0009	0.0018	0.0009	11:26:44	Yes
Mean:		[0.250000]	0.0009				
SD:		0.000000	0.0001				
%RSD:		0.000000	7.51				

Standard number 1 applied. [0.250000]
Correlation Coef.: 1.000000 Slope: 0.00374 Intercept: 0.00000

==========

Sequence No.: 3
Autosampler Location: 2
Sample ID: 1.00ppb
Date Collected: 12/12/2008 11:27:08 AM
Analyst:
Data Type: Original

Replicate Data: 1.00ppb

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[1.000000]	0.0039	0.0120	0.0039	11:28:11	Yes
2		[1.000000]	0.0039	0.0115	0.0039	11:28:55	Yes
Mean:		[1.000000]	0.0039				
SD:		0.000000	0.0000				
%RSD:		0.000000	0.27				

Standard number 2 applied. [1.000000]
Correlation Coef.: 0.999950 Slope: 0.00389 Intercept: -0.00002

==========

Sequence No.: 4
Autosampler Location: 3
Sample ID: 2.00ppb
Date Collected: 12/12/2008 11:29:20 AM
Analyst:
Data Type: Original

Replicate Data: 2.00ppb

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.000000]	0.0075	0.0241	0.0075	11:30:24	Yes
2		[2.000000]	0.0076	0.0243	0.0076	11:31:08	Yes
Mean:		[2.000000]	0.0075				
SD:		0.000000	0.0001				
%RSD:		0.000000	1.18				

Standard number 3 applied. [2.000000]
Correlation Coef.: 0.999867 Slope: 0.00378 Intercept: 0.00002

Sequence No.: 5 **Autosampler Location: 4**
Sample ID: 5.00ppb **Date Collected: 12/12/2008 11:31:33 AM**
Analyst: **Data Type: Original**

Replicate Data: 5.00ppb

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.000000]	0.0191	0.0641	0.0191	11:32:38	Yes
2		[5.000000]	0.0191	0.0638	0.0191	11:33:22	Yes
Mean:		[5.000000]	0.0191				
SD:		0.000000	0.0000				
%RSD:		0.000000	0.16				

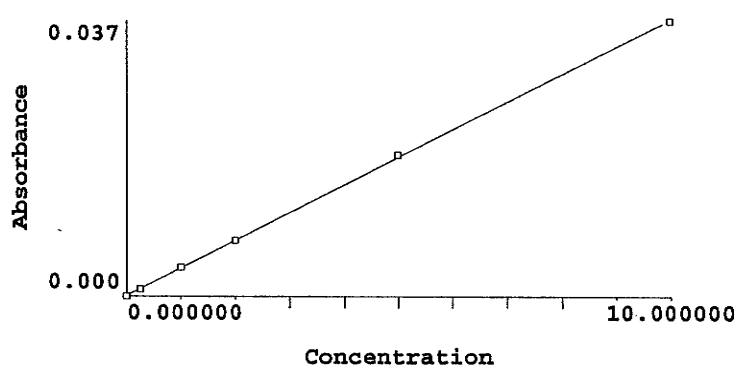
Standard number 4 applied. [5.000000]
Correlation Coef.: 0.999973 Slope: 0.00382 Intercept: -0.00001

Sequence No.: 6 **Autosampler Location: 5**
Sample ID: 10.00ppb **Date Collected: 12/12/2008 11:33:47 AM**
Analyst: **Data Type: Original**

Replicate Data: 10.00ppb

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.00000]	0.0374	0.1232	0.0374	11:34:53	Yes
2		[10.00000]	0.0373	0.1242	0.0373	11:35:37	Yes
Mean:		[10.00000]	0.0374				
SD:		0.00000	0.0001				
%RSD:		0.00000	0.16				

Standard number 5 applied. [10.00000]
Correlation Coef.: 0.999934 Slope: 0.00374 Intercept: 0.00009



Calibration data for Hg 253.7 **Equation: Linear, Calculated Intercept**

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib blank 1	0.0000	0	-0.023539	0.00	187.9
0.25ppb	0.0009	0.250000	0.225976	0.00	7.5
1.00ppb	0.0039	1.000000	1.013407	0.00	0.3
2.00ppb	0.0075	2.000000	1.992018	0.00	1.2
5.00ppb	0.0191	5.000000	5.082562	0.00	0.2
10.00ppb	0.0374	10.00000	9.959575	0.00	0.2

Correlation Coef.: 0.999934 Slope: 0.00374 Intercept: 0.00009

==========

Analysis Begun

Logged In Analyst: Xue-Wen Xu
Spectrometer Model: FIMS-400, S/N B050-9560

Technique: AA FIMS-MHS
Autosampler Model: AS-90

Sample Information File: C:\data-AA\xue-wen xu\Sample Information\081212D1.sif
Batch ID: 081212D1
Results Data Set: 081212D1
Results Library: C:\data-AA\xue-wen xu\Results\Results.mdb

==========

Method Loaded
Method Name: Hg
Method Description:

Method Last Saved: 12/12/2008 10:23:39 AM

==========

Sequence No.: 1
Sample ID: ICV
Analyst:

Autosampler Location: 7
Date Collected: 12/12/2008 11:37:09 AM
Data Type: Original

Replicate Data: ICV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00504	5.04	0.0190	0.0631	0.0190	11:38:15	Yes
2	0.00506	5.06	0.0190	0.0631	0.0190	11:38:59	Yes
Mean:	0.00505	5.05	0.0190				
SD:	0.000013	0.0130	0.0000				
%RSD:	0.257	0.257	0.26				

QC value within limits for Hg 253.7 Recovery = 101.07%
All analyte(s) passed QC.

==========

Sequence No.: 2
Sample ID: ICB
Analyst:

Autosampler Location: 6
Date Collected: 12/12/2008 11:39:26 AM
Data Type: Original

Replicate Data: ICB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.000024	-0.0239	-0.0000	-0.0016	0.0000	11:40:32	Yes
2	-0.000027	-0.0272	-0.0000	-0.0020	-0.0000	11:41:16	Yes
Mean:	-0.000026	-0.0255	-0.0000				
SD:	0.000002	0.00235	0.0000				
%RSD:	9.20	9.20	118.03				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 3
Sample ID: CRDL 0.50 PPB
Analyst:

Autosampler Location: 9
Date Collected: 12/12/2008 11:41:42 AM
Data Type: Original

Replicate Data: CRDL 0.50 PPB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000479	0.479	0.0019	0.0046	0.0019	11:42:45	Yes
2	0.000523	0.523	0.0020	0.0055	0.0020	11:43:29	Yes
Mean:	0.000501	0.501	0.0020				
SD:	0.000031	0.0308	0.0001				
%RSD:	6.14	6.14	5.87				

==========

Sequence No.: 4
Sample ID: CCV
Analyst:

Autosampler Location: 3
Date Collected: 12/12/2008 11:43:53 AM
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00196	1.96	0.0074	0.0235	0.0074	11:44:58	Yes
2	0.00201	2.01	0.0076	0.0243	0.0076	11:45:42	Yes
Mean:	0.00198	1.98	0.0075				
SD:	0.000034	0.0343	0.0001				
%RSD:	1.73	1.73	1.71				

QC value within limits for Hg 253.7 Recovery = 99.15%
All analyte(s) passed QC.

==========

Sequence No.: 5
Sample ID: CCB
Analyst:

Autosampler Location: 6
Date Collected: 12/12/2008 11:46:06 AM
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.000023	-0.0234	0.0000	-0.0015	0.0000	11:47:12	Yes
2	-0.000020	-0.0200	0.0000	-0.0015	0.0000	11:47:57	Yes
Mean:	-0.000022	-0.0217	0.0000				
SD:	0.000002	0.00244	0.0000				
%RSD:	11.2	11.2	130.88				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Analysis Begun

Logged In Analyst: Xue-Wen Xu
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-400, S/N B050-9560
Autosampler Model: AS-90

Sample Information File: C:\data-AA\xue-wen xu\Sample Information\081212D1.sif
Batch ID: 081212D1
Results Data Set: 081212D1
Results Library: C:\data-AA\xue-wen xu\Results\Results.mdb

==========

Sequence No.: 1
Autosampler Location: 3
Sample ID: CCV
Date Collected: 12/12/2008 5:59:28 PM
Analyst:
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00219	2.19	0.0083	0.0230	0.0083	18:00:32	Yes
2	0.00213	2.13	0.0080	0.0285	0.0081	18:01:17	Yes
Mean:	0.00216	2.16	0.0082				
SD:	0.000047	0.0471	0.0002				
%RSD:	2.18	2.18	2.16				

QC value within limits for Hg 253.7 Recovery = 107.96%
All analyte(s) passed QC.

==========

Sequence No.: 2
Autosampler Location: 6
Sample ID: CCB
Date Collected: 12/12/2008 6:01:41 PM
Analyst:
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000004	0.00397	0.0001	0.0006	0.0001	18:02:47	Yes
2	0.000707	0.707	0.0027	-0.0255	0.0027	18:03:31	Yes
Mean:	0.000356	0.356	0.0014				
SD:	0.000497	0.497	0.0019				
%RSD:	140	140	131.16				

QC value greater than the upper limit for Hg 253.7 Recovery = Not calculated
QC Failed. Continue with analysis.
User canceled analysis.

==========

Analysis Begun

Logged In Analyst: Xue-Wen Xu
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-400, S/N B050-9560
Autosampler Model: AS-90

Sample Information File: C:\data-AA\xue-wen xu\Sample Information\081212D1.sif
Batch ID: 081212D1
Results Data Set: 081212D1
Results Library: C:\data-AA\xue-wen xu\Results\Results.mdb

==========

Sequence No.: 2
Autosampler Location: 6
Sample ID: CCB
Date Collected: 12/12/2008 6:04:28 PM
Analyst:
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.000008	-0.00759	0.0001	0.0007	0.0001	18:05:20	Yes
2	-0.000006	-0.00643	0.0001	0.0005	0.0001	18:06:04	Yes
Mean:	-0.000007	-0.00701	0.0001				
SD:	0.000001	0.000821	0.0000				
%RSD:	11.7	11.7	4.96				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 3
Sample ID: 08-12-0585-4
Analyst:
Autosampler Location: 81
Date Collected: 12/12/2008 6:06:31 PM
Data Type: Original

Replicate Data: 08-12-0585-4

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000159	0.0793	0.0004	0.0014	0.0004	18:07:34	Yes
2	0.000174	0.0872	0.0004	0.0020	0.0004	18:08:18	Yes
Mean:	0.000167	0.0833	0.0004				
SD:	0.000011	0.00556	0.0000				
%RSD:	6.67	6.67	5.20				

Sequence No.: 4
Sample ID: 08-12-0585-10
Analyst:
Autosampler Location: 82
Date Collected: 12/12/2008 6:08:41 PM
Data Type: Original

Replicate Data: 08-12-0585-10

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000147	0.0736	0.0004	0.0028	0.0004	18:09:44	Yes
2	0.000102	0.0511	0.0003	0.0014	0.0003	18:10:29	Yes
Mean:	0.000125	0.0623	0.0003				
SD:	0.000032	0.0159	0.0001				
%RSD:	25.4	25.4	18.47				

Sequence No.: 5
Sample ID: 08-12-0585-11
Analyst:
Autosampler Location: 83
Date Collected: 12/12/2008 6:10:52 PM
Data Type: Original

Replicate Data: 08-12-0585-11

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000066	0.0332	0.0002	0.0009	0.0002	18:11:56	Yes
2	0.000061	0.0306	0.0002	0.0010	0.0002	18:12:40	Yes
Mean:	0.000064	0.0319	0.0002				
SD:	0.000004	0.00182	0.0000				
%RSD:	5.72	5.72	3.29				

Sequence No.: 6
Sample ID: 08-12-0585-13
Analyst:
Autosampler Location: 84
Date Collected: 12/12/2008 6:13:04 PM
Data Type: Original

Replicate Data: 08-12-0585-13

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000096	0.0480	0.0003	0.0012	0.0003	18:14:08	Yes
2	0.000089	0.0445	0.0003	0.0003	0.0003	18:14:51	Yes
Mean:	0.000093	0.0463	0.0003				
SD:	0.000005	0.00242	0.0000				
%RSD:	5.24	5.24	3.47				

Sequence No.: 7
Sample ID: CCV
Analyst:
Autosampler Location: 3
Date Collected: 12/12/2008 6:15:16 PM
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	0.00316	3.16	0.0119	0.0426	0.0119	18:16:20	Yes
2	0.00318	3.18	0.0120	0.0433	0.0120	18:17:04	Yes
Mean:	0.00317	3.17	0.0120				
SD:	0.000018	0.0177	0.0001				
%RSD:	0.557	0.557	0.55				

QC value greater than the upper limit for Hg 253.7 Recovery = 158.62%
QC Failed. Retry.

==========

Sequence No.: 8
Sample ID: CCV
Analyst:

Autosampler Location: 3
Date Collected: 12/12/2008 6:17:29 PM
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00277	2.77	0.0105	0.0452	0.0105	18:18:33	Yes
2	0.00216	2.16	0.0082	0.0422	0.0082	18:19:17	Yes
Mean:	0.00247	2.47	0.0093				
SD:	0.000430	0.430	0.0016				
%RSD:	17.4	17.4	17.26				

QC value greater than the upper limit for Hg 253.7 Recovery = 123.33%
QC Failed. Continue with analysis.
User canceled analysis.

==========

Analysis Begun

Logged In Analyst: Xue-Wen Xu
Spectrometer Model: FIMS-400, S/N B050-9560

Technique: AA FIMS-MHS
Autosampler Model: AS-90

Sample Information File: C:\data-AA\xue-wen xu\Sample Information\081212D1.sif
Batch ID: 081212D1
Results Data Set: 081212D1
Results Library: C:\data-AA\xue-wen xu\Results\Results.mdb

==========

Sequence No.: 8
Sample ID: CCV
Analyst:

Autosampler Location: 3
Date Collected: 12/12/2008 6:19:58 PM
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00206	2.06	0.0078	0.0409	0.0078	18:21:02	Yes
2	0.00209	2.09	0.0079	0.0412	0.0079	18:21:46	Yes
Mean:	0.00208	2.08	0.0079				
SD:	0.000019	0.0186	0.0001				
%RSD:	0.897	0.897	0.89				

QC value within limits for Hg 253.7 Recovery = 103.78%
All analyte(s) passed QC.

==========

Sequence No.: 9
Sample ID: CCB
Analyst:

Autosampler Location: 6
Date Collected: 12/12/2008 6:22:11 PM
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.000017	-0.0169	0.0000	0.0000	0.0000	18:23:17	Yes
2	-0.000008	-0.00797	0.0001	0.0002	0.0001	18:24:01	Yes
Mean:	-0.000012	-0.0124	0.0000				
SD:	0.000006	0.00631	0.0000				
%RSD:	50.8	50.8	56.87				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Work Order#: 08-12-0585

Client: WEISS Associates

EPA 8081A

Calibration

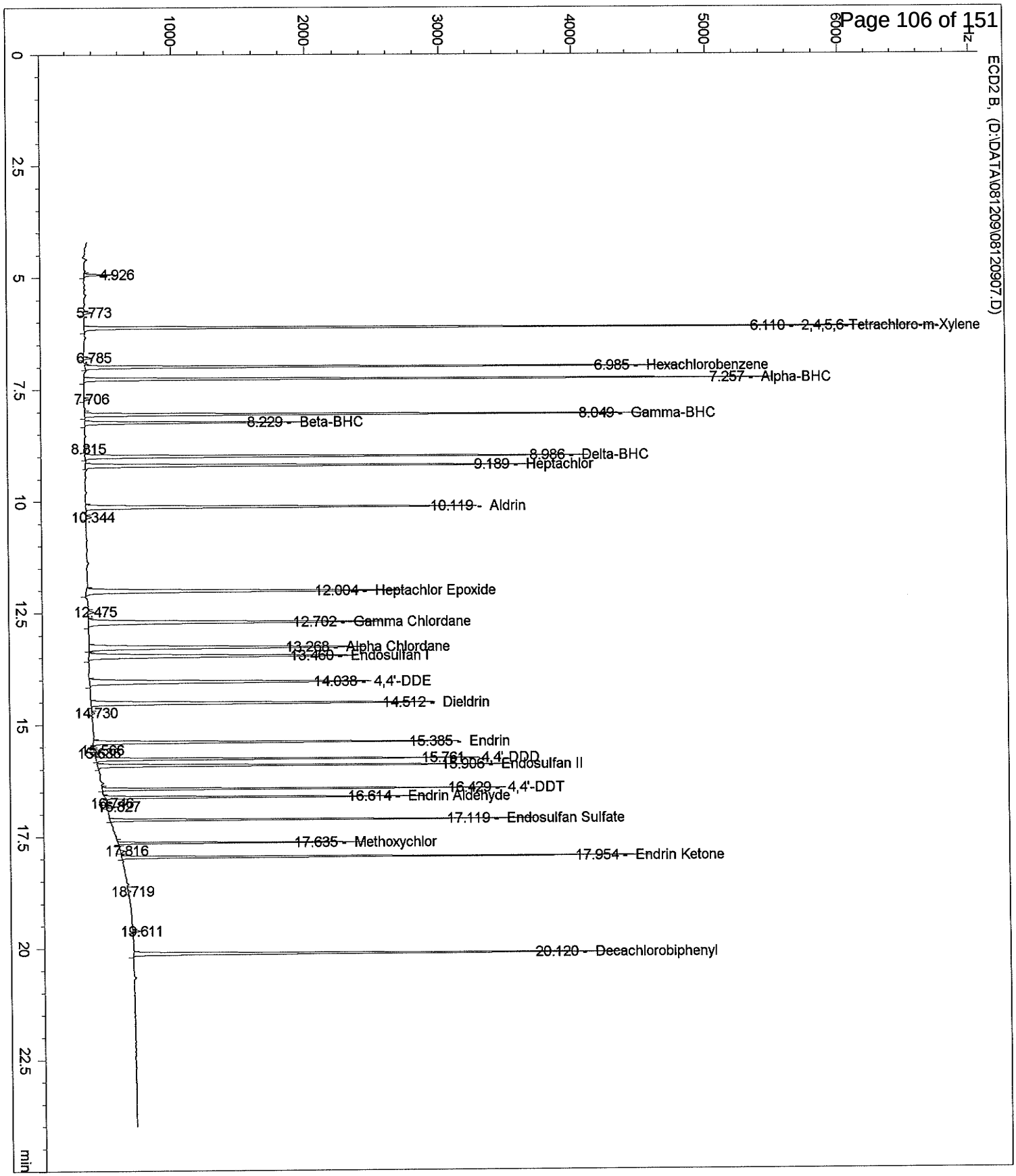
External Standard Report

Data File Name : D:\DATA\081209\08120907.D
Operator :
Instrument : GC 41
Sample Name : PEST 40 ICV
Run Time Bar Code:
Acquired on : 12/9/2008 1:30:49 PM
Report Created on: 12 Dec 08 02:34 pm
Calibrated on : 22 Aug 03 05:56 pm
Analysis Method : C:\CHEM32\1\METHODS\PEST081209R.M

Page Number :
Vial Number : Vial 7
Injection Number : 1
Sequence Line : 7
Instrument Method: D:\DATA\081209\8081.M
Sample Amount :
Last Modified on : 12Dec08

Sig. ECD2B, D:\DATA\081209\08120907.D

Ret Time	Area	Type	Width	Ref #	ppb	Name
6.110	11579.5	BB	0.028		82.753	2,4,5,6-Tetrachloro-m-Xylene
6.985	9018.7	VB	0.032		40.799	Hexachlorobenzene
7.257	10204.7	BB	0.031		42.107	Alpha-BHC
8.049	9246.9	VB	0.035		42.044	Gamma-BHC
8.229	3806.3	BB	0.036		41.472	Beta-BHC
8.986	9286.7	VB	0.039		42.316	Delta-BHC
9.189	8451.6	BB	0.040		41.644	Heptachlor
10.119	8011.2	BB	0.043		41.189	Aldrin
12.004	7817.0	BV	0.050		41.418	Heptachlor Epoxide
12.702	7517.4	BB	0.053		39.444	Gamma Chlordane
13.268	7304.4	BV	0.053		41.278	Alpha Chlordane
13.460	7196.5	VB	0.055		41.198	Endosulfan I
14.038	7439.7	BB	0.055		41.283	4,4'-DDE
14.512	7650.2	BB	0.047		41.656	Dieldrin
15.385	6484.3	BB	0.037		42.131	Endrin
15.761	5925.1	VB	0.033		41.762	4,4'-DDD
15.906	6543.3	BB	0.033		41.884	Endosulfan II
16.429	5455.5	BB	0.028		42.203	4,4'-DDT
16.614	4503.5	BB	0.030		40.370	Endrin Aldehyde
17.119	5540.4	BB	0.027		41.763	Endosulfan Sulfate
17.635	2826.3	BB	0.025		42.036	Methoxychlor
17.954	6679.9	VB	0.027		41.963	Endrin Ketone
20.120	8267.7	BB	0.035		81.647	Decachlorobiphenyl
0.000	0.0		0.000		0.000	Chlordane
0.000	0.0		0.000		0.000	Toxaphene


ECD2 B, (D:\DATA\081209\08120907.D)
4.926
5.773
6.110 - 2,4,5,6-Tetrachloro-m-Xylene
6.785
6.985 - Hexachlorobenzene
7.257 - Alpha-BHC
7.706
8.049 - Gamma-BHC
8.229 - Beta-BHC
8.815
8.986 - Delta-BHC
9.189 - Heptachlor
10.119 - Aldrin
10.344
12.004 - Heptachlor Epoxide
12.475
12.702 - Gamma Chlordane
13.268 - Alpha Chlordane
13.460 - Endosulfan I
14.038 - 4,4'-DDE
14.512 - Dieldrin
14.730
15.385 - Endrin
15.586
15.761 - 4,4'-DDD
15.906 - Endosulfan II
16.429 - 4,4'-DDT
16.614 - Endrin Aldehyde
16.827
17.119 - Endosulfan Sulfate
17.635 - Methoxychlor
17.816
17.954 - Endrin Ketone
18.719
19.611
20.120 - Decachlorobiphenyl

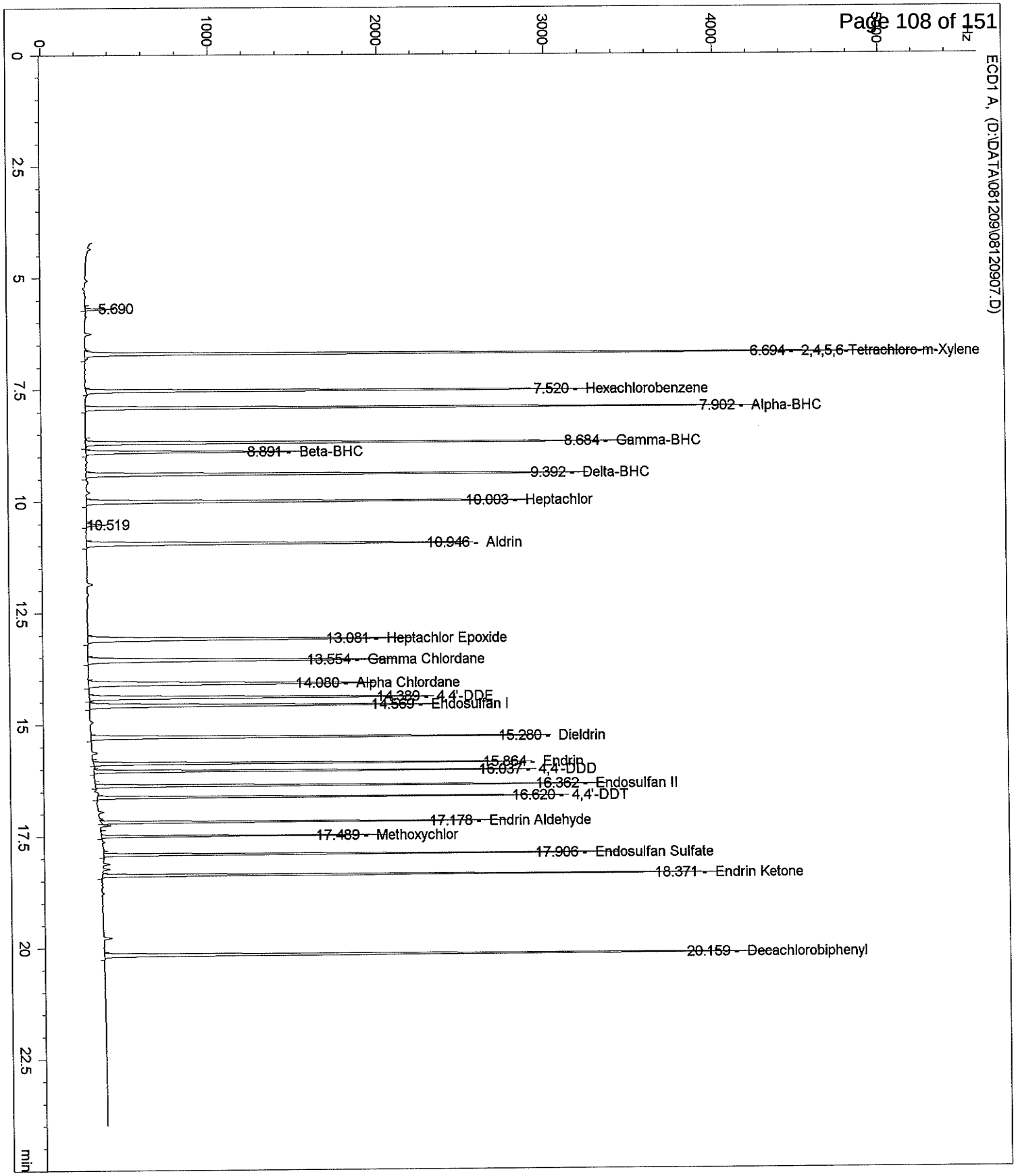
External Standard Report

Data File Name : D:\DATA\081209\08120907.D
Operator :
Instrument : GC 41
Sample Name : PEST 40 ICV
Run Time Bar Code:
Acquired on : 12/9/2008 1:30:49 PM
Report Created on: 12 Dec 08 02:34 pm
Calibrated on : 22 Aug 03 05:56 pm
Analysis Method : C:\CHEM32\1\METHODS\PEST081209F.M

Page Number :
Vial Number : Vial 7
Injection Number : 1
Sequence Line : 7
Instrument Method: D:\DATA\081209\8081.M
Sample Amount :
Last Modified on : 09Dec08

Sig. ECD1 A, D:\DATA\081209\08120907.D

Ret Time	Area	Type	Width	Ref #	ppb	Name
6.694	10590.5	VB	0.033		83.908	2,4,5,6-Tetrachloro-m-Xylene
7.520	7229.6	BB	0.036		41.033	Hexachlorobenzene
7.902	8852.9	BB	0.035		43.119	Alpha-BHC
8.684	8009.4	BB	0.039		43.198	Gamma-BHC
8.891	3307.1	BB	0.040		42.105	Beta-BHC
9.392	7825.4	BB	0.041		43.356	Delta-BHC
10.003	7304.9	BB	0.044		41.939	Heptachlor
10.946	6831.8	BB	0.046		42.465	Aldrin
13.081	6738.7	BB	0.054		40.565	Heptachlor Epoxide
13.554	6376.7	BB	0.053		42.333	Gamma Chlordane
14.080	6155.9	BB	0.056		41.467	Alpha Chlordane
14.389	6140.0	BB	0.047		42.976	4,4'-DDE
14.569	6272.0	BB	0.048		42.417	Endosulfan I
15.280	6833.6	BB	0.039		42.906	Dieldrin
15.864	5840.6	BB	0.035		43.167	Endrin
16.037	5449.5	BB	0.033		43.249	4,4'-DDD
16.362	6272.9	BB	0.032		42.721	Endosulfan II
16.620	5235.6	BB	0.030		43.240	4,4'-DDT
17.178	4533.4	BB	0.029		40.855	Endrin Aldehyde
17.489	2825.4	BB	0.027		42.041	Methoxychlor
17.906	5657.6	BB	0.029		42.583	Endosulfan Sulfate
18.371	7074.5	BB	0.030		42.456	Endrin Ketone
20.159	9553.2	BB	0.038		82.456	Decachlorobiphenyl
0.000	0.0		0.000		0.000	Chlordane
0.000	0.0		0.000		0.000	Toxaphene


ECD1 A, (D:\DATA\081209\08120907.D)
Hz
0
1000
2000
3000
4000
5000
min
0
2.5
5
7.5
10
12.5
15
17.5
20
22.5
5.690
6.694 - 2,4,5,6-Tetrachloro-m-Xylene
7.520 - Hexachlorobenzene
7.902 - Alpha-BHC
8.684 - Gamma-BHC
8.891 - Beta-BHC
9.392 - Delta-BHC
10.003 - Heptachlor
10.519
10.946 - Aldrin
13.081 - Heptachlor Epoxide
13.554 - Gamma Chlordane
14.080 - Alpha Chlordane
14.389 - 4,4'-DDE
14.569 - Endosulfan I
15.280 - Dieldrin
15.864 - Endrin
16.037 - 4,4'-DDD
16.362 - Endosulfan II
16.620 - 4,4'-DDT
17.178 - Endrin Aldehyde
17.489 - Methoxychlor
17.906 - Endosulfan Sulfate
18.371 - Endrin Ketone
20.159 - Decachlorobiphenyl

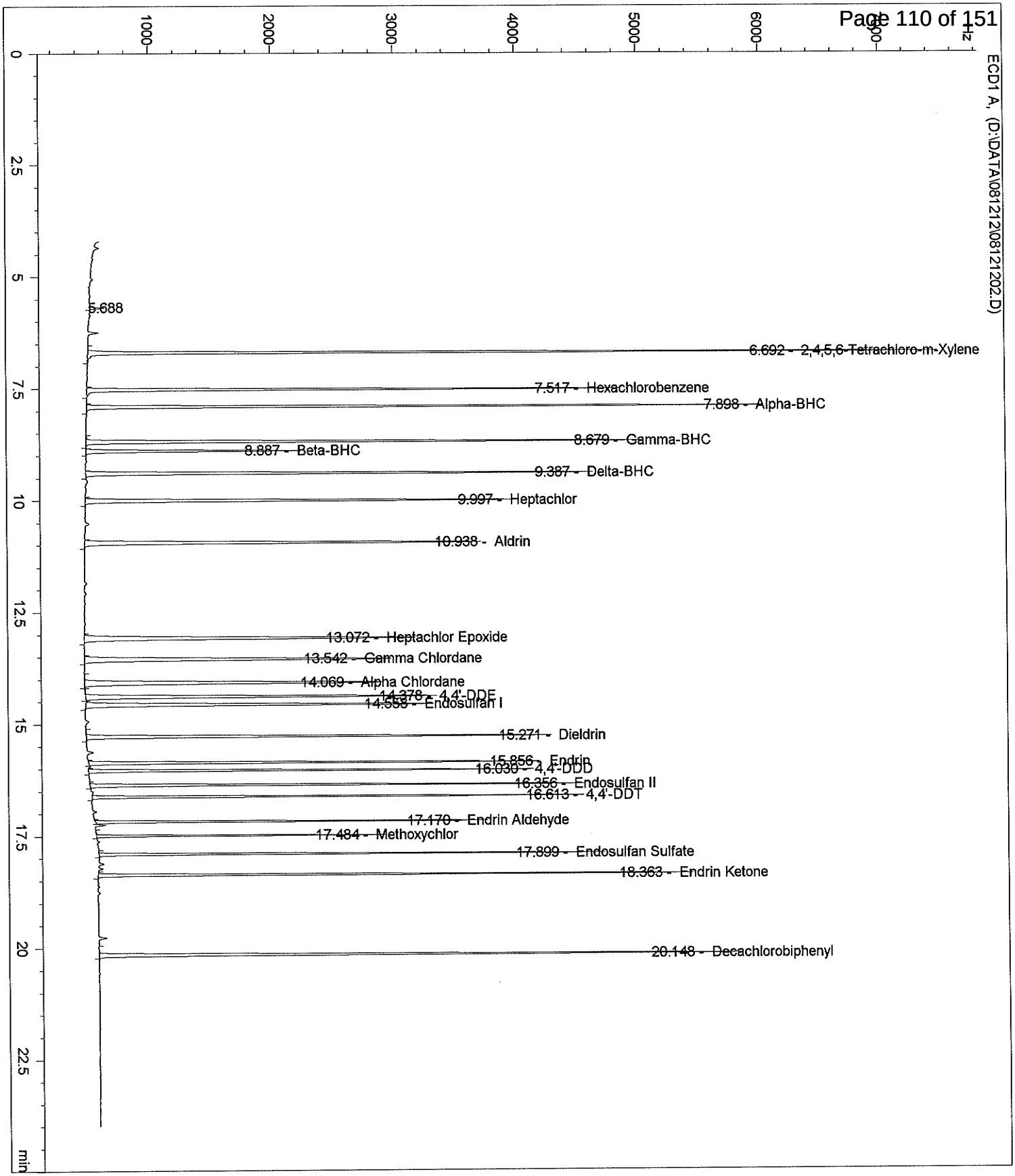
External Standard Report

Data File Name : D:\DATA\081212\08121202.D
Operator :
Instrument : GC 41
Sample Name : PEST 60
Run Time Bar Code:
Acquired on : 12/12/2008 11:21:52 AM
Report Created on: 12 Dec 08 02:32 pm
Calibrated on : 22 Aug 03 05:56 pm
Analysis Method : C:\CHEM32\1\METHODS\PEST081209F.M

Page Number :
Vial Number : Vial 2
Injection Number : 1
Sequence Line : 4
Instrument Method: D:\DATA\081212\8081.M
Sample Amount :
Last Modified on : 09Dec08

Sig. ECD1 A, D:\DATA\081212\08121202.D

Ret Time	Area	Type	Width	Ref #	ppb	Name
6.692	14683.7	BB	0.033		116.339	2,4,5,6-Tetrachloro-m-Xylene
7.517	10122.1	BB	0.036		57.451	Hexachlorobenzene
7.898	12690.6	BB	0.036		61.811	Alpha-BHC
8.679	11408.6	BB	0.039		61.531	Gamma-BHC
8.887	4600.9	BB	0.041		58.577	Beta-BHC
9.387	11091.9	BB	0.042		61.455	Delta-BHC
9.997	9917.0	BB	0.045		56.936	Heptachlor
10.938	9923.4	BB	0.048		61.681	Aldrin
13.072	9613.4	BB	0.056		57.869	Heptachlor Epoxide
13.542	9087.5	BB	0.057		60.330	Gamma Chlordane
14.069	8981.7	BB	0.057		60.502	Alpha Chlordane
14.378	8762.4	BB	0.049		61.331	4,4'-DDE
14.558	8860.8	BB	0.048		59.925	Endosulfan I
15.271	9741.7	BB	0.040		61.165	Dieldrin
15.856	8436.7	BB	0.036		62.355	Endrin
16.030	7534.0	BB	0.031		59.793	4,4'-DDD
16.356	8530.2	BB	0.033		58.094	Endosulfan II
16.613	7628.4	BB	0.029		63.002	4,4'-DDT
17.170	5985.4	BB	0.029		53.940	Endrin Aldehyde
17.484	3995.3	BB	0.027		59.448	Methoxychlor
17.899	7486.3	BB	0.028		56.347	Endosulfan Sulfate
18.363	9491.2	BB	0.030		56.959	Endrin Ketone
20.148	12584.2	BB	0.038		108.618	Decachlorobiphenyl
0.000	0.0		0.000		0.000	Chlordane
0.000	0.0		0.000		0.000	Toxaphene


ECD1 A, (D:\DATA\08121212\08121202.D)
5.688
6.692 - 2,4,5,6-Tetrachloro-m-Xylene
7.517 - Hexachlorobenzene
7.898 - Alpha-BHC
8.679 - Gamma-BHC
8.887 - Beta-BHC
9.387 - Delta-BHC
9.997 - Heptachlor
10.938 - Aldrin
13.072 - Heptachlor Epoxide
13.542 - Gamma Chlordane
14.069 - Alpha Chlordane
14.378 - 4,4'-DDE
14.558 - Endosulfan I
15.271 - Dieldrin
15.856 - Endrin
16.030 - 4,4'-DDD
16.356 - Endosulfan II
16.613 - 4,4'-DDT
17.170 - Endrin Aldehyde
17.484 - Methoxychlor
17.899 - Endosulfan Sulfate
18.363 - Endrin Ketone
20.148 - Decachlorobiphenyl
min

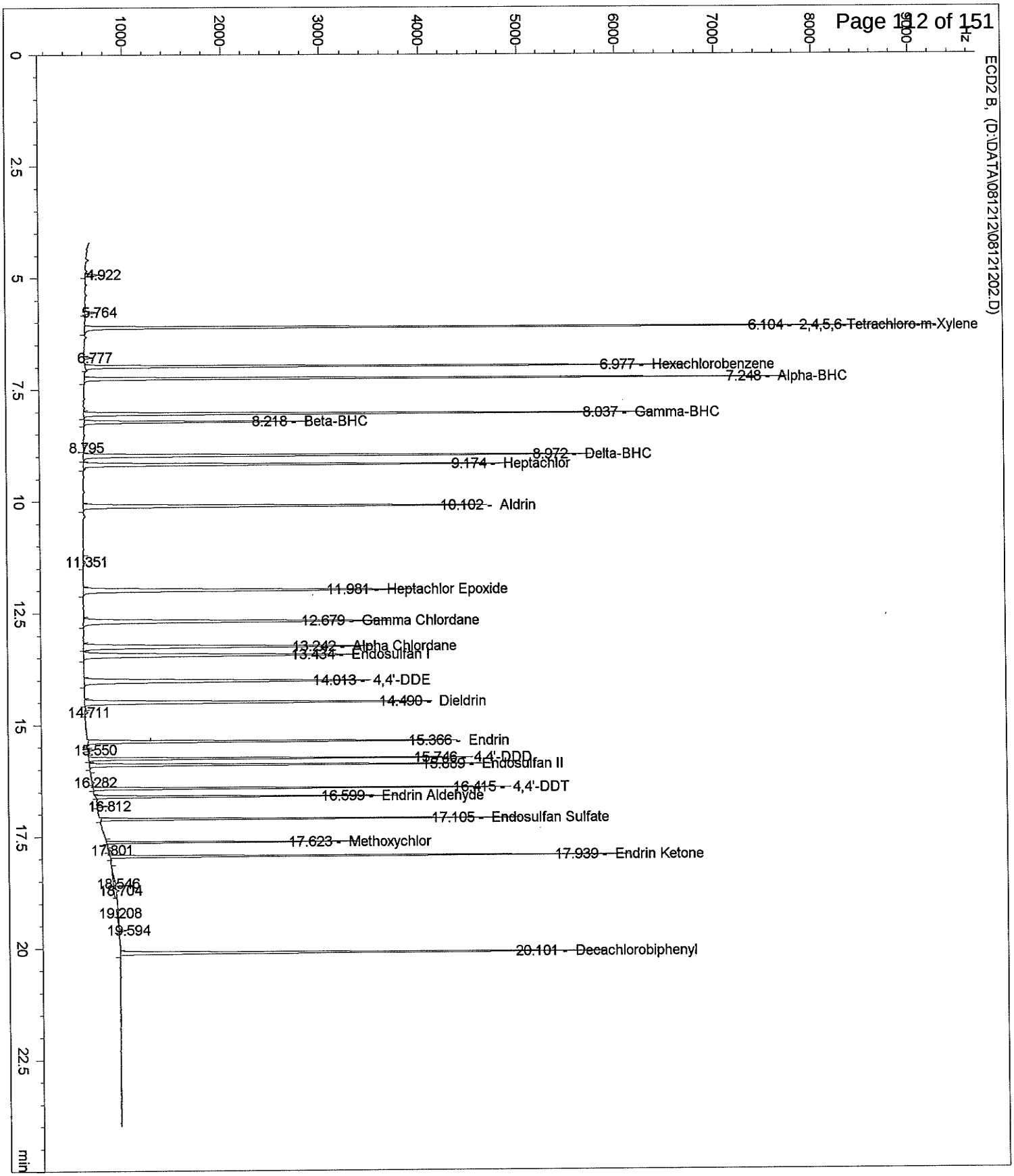
External Standard Report

Data File Name : D:\DATA\081212\08121202.D
Operator :
Instrument : GC 41
Sample Name : PEST 60
Run Time Bar Code:
Acquired on : 12/12/2008 11:21:52 AM
Report Created on: 12 Dec 08 02:32 pm
Calibrated on : 22 Aug 03 05:56 pm
Analysis Method : C:\CHEM32\1\METHODS\PEST081209R.M

Page Number :
Vial Number : Vial 2
Injection Number : 1
Sequence Line : 4
Instrument Method: D:\DATA\081212\8081.M
Sample Amount :
Last Modified on : 12Dec08

Sig. ECD2 B, D:\DATA\081212\08121202.D

Ret Time	Area	Type	Width	Ref #	ppb	Name
6.104	15992.4	BB	0.029		114.290	2,4,5,6-Tetrachloro-m-Xylene
6.977	12429.0	VB	0.032		56.227	Hexachlorobenzene
7.248	14339.4	BB	0.032		59.168	Alpha-BHC
8.037	12980.0	VB	0.035		59.018	Gamma-BHC
8.218	5212.0	BB	0.036		56.788	Beta-BHC
8.972	12920.5	BV	0.038		58.874	Delta-BHC
9.174	11100.3	VB	0.040		54.696	Heptachlor
10.102	11467.4	BB	0.045		58.958	Aldrin
11.981	10956.9	BB	0.051		58.055	Heptachlor Epoxide
12.679	10639.1	BB	0.053		55.823	Gamma Chlordane
13.242	10312.2	BV	0.055		58.276	Alpha Chlordane
13.434	10167.4	VB	0.056		58.205	Endosulfan I
14.013	10395.8	BB	0.057		57.687	4,4'-DDE
14.490	10789.5	BV	0.048		58.749	Dieldrin
15.366	9034.4	BV	0.038		58.700	Endrin
15.746	8018.0	VV	0.032		56.513	4,4'-DDD
15.889	8814.0	VB	0.034		56.419	Endosulfan II
16.415	7690.0	BB	0.028		59.489	4,4'-DDT
16.599	5867.9	BB	0.030		52.601	Endrin Aldehyde
17.105	7296.5	BB	0.027		55.001	Endosulfan Sulfate
17.623	3902.6	BV	0.024		58.045	Methoxychlor
17.939	8830.0	VB	0.026		55.471	Endrin Ketone
20.101	10997.4	BB	0.035		108.604	Decachlorobiphenyl
0.000	0.0		0.000		0.000	Chlordane
0.000	0.0		0.000		0.000	Toxaphene


ECD2 B, (D:\DATA\081212\08121202.D)
4.922
5.764
6.104 - 2,4,5,6-Tetrachloro-m-Xylene
6.777
6.977 - Hexachlorobenzene
7.248 - Alpha-BHC
8.037 - Gamma-BHC
8.218 - Beta-BHC
8.795
8.972 - Delta-BHC
9.174 - Heptachlor
10.102 - Aldrin
11.351
11.981 - Heptachlor Epoxide
12.679 - Gamma Chlordane
13.242 - Alpha Chlordane
13.434 - Endosulfan I
14.013 - 4,4'-DDE
14.490 - Dieldrin
14.711
15.366 - Endrin
15.550
15.746 - 4,4'-DDD
15.889 - Endosulfan II
16.282
16.415 - 4,4'-DDT
16.599 - Endrin Aldehyde
16.812
17.105 - Endosulfan Sulfate
17.623 - Methoxychlor
17.801
17.939 - Endrin Ketone
18.546
18.704
19.208
19.594
20.101 - Decachlorobiphenyl
min

Work Order#: 08-12-0585

Client: WEISS Associates

EPA 8082

Calibration

External Standard Report

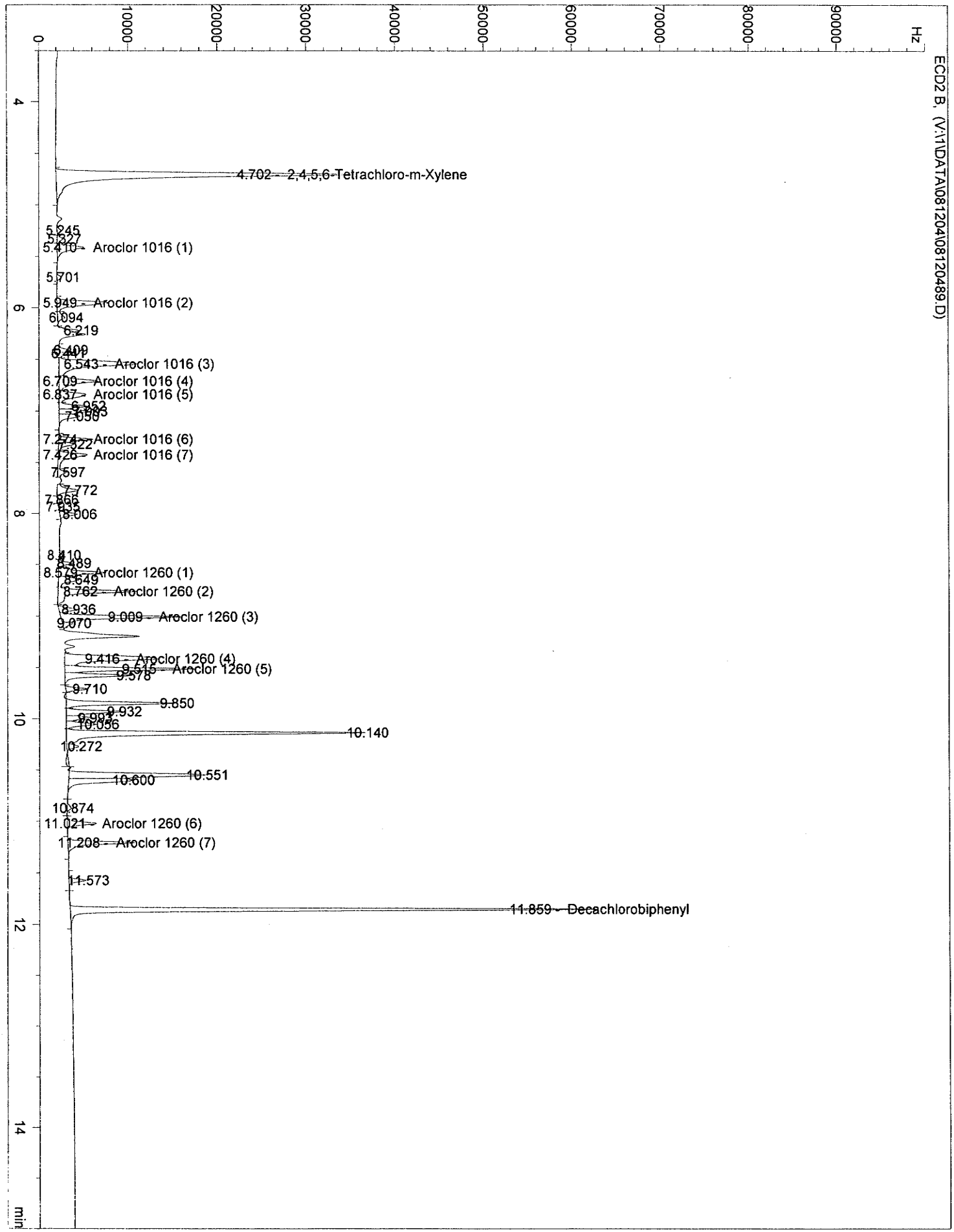
Data File Name : V:\1\DATA\081204\08120489.D
Operator :
Instrument : GC 31
Sample Name : PCB 500 1cv
Run Time Bar Code: Winr
Acquired on : 12/4/2008 9:01:07 PM
Report Created on: 05 Dec 08 11:46 am
Calibrated on : 24 Sep 04 04:14 pm
Analysis Method : V:\1\METHODS\081204R.M\P101660R.M

Page Number :
Vial Number : Vial 1
Injection Number : 1
Sequence Line : 12
Instrument Method: 8082.M
Sample Amount :
Last Modified on : 05Dec08

Sig. ECD2 B, V:\1\DATA\081204\08120489.D

Ret Time	Area	Type	Width	Ref #	ppb	Name
4.702	108826.9	BB	0.046		95.536	2,4,5,6-Tetrachloro-m-Xylene
5.410	9362.0	VB	0.043		0.000	Aroclor 1016 (1)
5.949	17431.3	BV	0.048		0.000	Aroclor 1016 (2)
6.543	32932.1	VV	0.053		0.000	Aroclor 1016 (3)
6.709	14399.5	VV	0.047		0.000	Aroclor 1016 (4)
6.837	10574.4	VV	0.049		0.000	Aroclor 1016 (5)
7.274	7924.0	BV	0.031		0.000	Aroclor 1016 (6)
7.426	11153.8	VV	0.048		0.000	Aroclor 1016 (7)
8.579	12957.5	VV	0.035		0.000	Aroclor 1260 (1)
8.762	21311.6	VV	0.036		0.000	Aroclor 1260 (2)
9.009	28400.5	VV	0.032		0.000	Aroclor 1260 (3)
9.416	35562.3	VV	0.054		0.000	Aroclor 1260 (4)
9.515	28094.4	VV	0.030		0.000	Aroclor 1260 (5)
11.021	7437.3	PV	0.033		0.000	Aroclor 1260 (6)
11.208	16430.2	BB	0.033		0.000	Aroclor 1260 (7)
11.859	106796.2	BB	0.028		101.293	Decachlorobiphenyl
0.000	0.0		0.000		0.000	Aroclor-1016
0.000	0.0		0.000		0.000	Aroclor-1221
0.000	0.0		0.000		0.000	Aroclor-1232
0.000	0.0		0.000		0.000	Aroclor-1242
0.000	0.0		0.000		0.000	Aroclor-1248
0.000	0.0		0.000		0.000	Aroclor-1254
0.000	0.0		0.000		0.000	Aroclor-1260
0.000	0.0		0.000		0.000	Aroclor-1262
0.000	0.0		0.000		0.000	Aroclor-1268

Area Sum	Comp. Group Nam
103777.1	Aroclor 1016
150193.8	Aroclor 1260


ECD2 B, (V:\1\DATA\081204\08120489.D)
Hz
0
10000
20000
30000
40000
50000
60000
70000
80000
90000
4.702 - 2,4,5,6-Tetrachloro-m-Xylene
5.245
5.327
5.410 - Aroclor 1016 (1)
5.701
5.949 - Aroclor 1016 (2)
6.094
6.219
6.409
6.441
6.543 - Aroclor 1016 (3)
6.709 - Aroclor 1016 (4)
6.837 - Aroclor 1016 (5)
6.952
7.050
7.274 - Aroclor 1016 (6)
7.322
7.426 - Aroclor 1016 (7)
7.597
7.772
7.866
7.935
8.006
8.410
8.489
8.579 - Aroclor 1260 (1)
8.649
8.762 - Aroclor 1260 (2)
8.936
9.009 - Aroclor 1260 (3)
9.070
9.416 - Aroclor 1260 (4)
9.515 - Aroclor 1260 (5)
9.578
9.710
9.850
9.932
9.993
10.056
10.140
10.272
10.551
10.600
10.874
11.021 - Aroclor 1260 (6)
11.208 - Aroclor 1260 (7)
11.573
11.859 - Decachlorobiphenyl
4
6
8
10
12
14
min

PCB CCV Calculations GC 31

Calculations: ***500PPB***

Components	Total Area	RF	Ave RF	%D(<15%)	Pass?
Aroclor-1016-R	**103777.1**	207.6	206	0.9	YES
Aroclor-1260R	**150193.8**	300.4	291	3.2	YES

External Standard Report

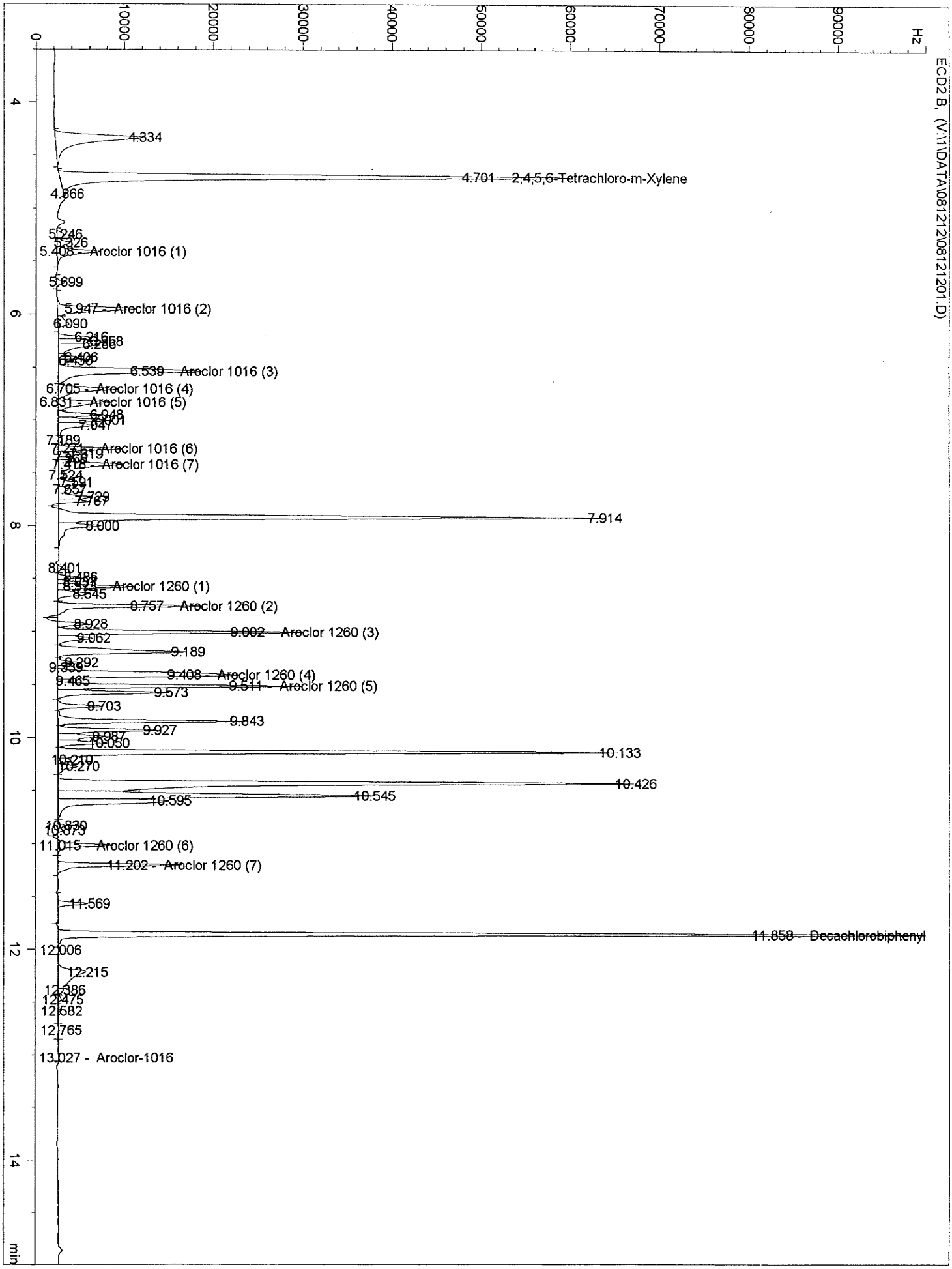
Data File Name : V:\1\DATA\081212\08121201.D
Operator :
Instrument : GC 31
Sample Name : PCB 750
Run Time Bar Code:
Acquired on : 12/12/2008 12:10:35 PM
Report Created on: 12 Dec 08 03:24 pm
Calibrated on : 24 Sep 04 04:14 pm
Analysis Method : V:\1\METHODS\081204R.M\P101660R.M

Page Number :
Vial Number : Vial 1
Injection Number : 1
Sequence Line : 2
Instrument Method: 8082.M
Sample Amount :
Last Modified on : 05Dec08

Sig. ECD2B, V:\1\DATA\081212\08121201.D

Ret Time	Area	Type	Width	Ref #	ppb	Name
4.701	160651.2	BV	0.040		138.613	2,4,5,6-Tetrachloro-m-Xylene
5.408	14013.1	VB	0.041		0.000	Aroclor 1016 (1)
5.947	26126.9	BV	0.047		0.000	Aroclor 1016 (2)
6.539	53966.3	VV	0.055		0.000	Aroclor 1016 (3)
6.705	20226.2	VV	0.050		0.000	Aroclor 1016 (4)
6.831	16881.0	VV	0.048		0.000	Aroclor 1016 (5)
7.271	13669.9	VV	0.031		0.000	Aroclor 1016 (6)
7.418	21492.9	VV	0.048		0.000	Aroclor 1016 (7)
8.573	16151.5	VV	0.031		0.000	Aroclor 1260 (1)
8.757	31060.6	VV	0.032		0.000	Aroclor 1260 (2)
9.002	49680.8	VV	0.030		0.000	Aroclor 1260 (3)
9.408	60203.7	VV	0.049		0.000	Aroclor 1260 (4)
9.511	48067.2	VV	0.029		0.000	Aroclor 1260 (5)
11.015	12668.3	VV	0.034		0.000	Aroclor 1260 (6)
11.202	26269.0	VV	0.031		0.000	Aroclor 1260 (7)
11.858	175499.7	VV	0.028		161.209	Decachlorobiphenyl
13.027	361.7	VM	0.106		0.000	Aroclor-1016
0.000	0.0		0.000		0.000	Aroclor-1221
0.000	0.0		0.000		0.000	Aroclor-1232
0.000	0.0		0.000		0.000	Aroclor-1242
0.000	0.0		0.000		0.000	Aroclor-1248
0.000	0.0		0.000		0.000	Aroclor-1254
0.000	0.0		0.000		0.000	Aroclor-1260
0.000	0.0		0.000		0.000	Aroclor-1262
0.000	0.0		0.000		0.000	Aroclor-1268

Area Sum	Comp. Group Nam
166376.3	Aroclor 1016
244101.2	Aroclor 1260


ECD2 B, (V:\1\DATA\081212\08121201.D)
Hz
min
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4.701 - 2,4,5,6-Tetrachloro-m-Xylene
4.866
5.246
5.326
5.408 - Aroclor 1016 (1)
5.699
5.947 - Aroclor 1016 (2)
6.090
6.216
6.406
6.539 - Aroclor 1016 (3)
6.705 - Aroclor 1016 (4)
6.831 - Aroclor 1016 (5)
7.047
7.189
7.319 - Aroclor 1016 (6)
7.418 - Aroclor 1016 (7)
7.524
7.591
7.729
7.767
7.914
8.000
8.401
8.645
8.757 - Aroclor 1260 (1)
8.928
9.002 - Aroclor 1260 (2)
9.062
9.189
9.292
9.408 - Aroclor 1260 (3)
9.465
9.511 - Aroclor 1260 (4)
9.573
9.703
9.843
9.927
9.987
10.050
10.133
10.219
10.270
10.426
10.545
10.595
10.839
10.879
11.015 - Aroclor 1260 (6)
11.202 - Aroclor 1260 (7)
11.569
11.858 - Decachlorobiphenyl
12.006
12.215
12.386
12.475
12.582
12.765
13.027 - Aroclor-1016

PCB CCV Calculations GC 31

Calculations: ***750PPB***

Components	Total Area	RF	Ave RF	%D(<15%)	Pass?
Aroclor-1016-R	**166376.3**	222	206	7.9	YES
Aroclor-1260-R	**244101.2**	325	291	11.8	YES

Work Order#: 08-12-0585

Client: WEISS Associates

EPA 8260B

Calibration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D
Acq On : 3 Dec 2008 3:12 pm
Sample : ICV/LCS V111908D/V112608B
Misc : V120308A
MS Integration Params: RTEINT.P
Quant Time: Dec 03 15:47:56 2008

Vial: 24
Operator:
Inst : GCMS_L
Multiplr: 1.00
Quant Results File: 081203_BP.RES

Quant Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Tert-Butyl Alcohol-d9	3.8865	65	28844	50.0000 ug/l	-0
4) Pentafluorobenzene	6.4012	168	424065	10.0000 ug/l	0
47) 1,4-Difluorobenzene	7.3265	114	545475	10.0000 ug/l	0
63) Chlorobenzene-d5	10.9182	117	422275	10.0000 ug/l	0
87) 1,4-Dichlorobenzene-d4	13.7936	152	223638	10.0000 ug/l	0

System Monitoring Compounds					
41) Dibromofluoromethane	6.3018	113	161198	9.64 ug/l	0.0
Spiked Amount 10.000	Range 53 - 141		Recovery	= 96.40%	
46) 1,2-Dichloroethane-d4	6.7305	65	144382	8.92 ug/l	0.0
Spiked Amount 10.000	Range 50 - 150		Recovery	= 89.20%	
60) Toluene-d8	9.1616	98	605274	10.45 ug/l	0.0
Spiked Amount 10.000	Range 69 - 134		Recovery	= 104.50%	
80) 1,4-Bromofluorobenzene	12.3611	95	174937	10.50 ug/l	0.0
Spiked Amount 10.000	Range 51 - 152		Recovery	= 105.00%	

Target Compounds					Qvalue
2) Ethanol	2.7520	45	8955	98.7768 ug/l	
3) Tert-Butyl Alcohol (TBA)	4.0224	59	27037	43.2509 ug/l	
5) Dichlorodifluoromethane	1.5600	85	262525	10.7621 ug/l	
6) Chloromethane	1.7273	50	280280	10.7022 ug/l	
7) Vinyl Chloride	1.8423	62	283358	10.8929 ug/l	
8) Bromomethane	2.1770	94	177331	10.2001 ug/l	
9) Chloroethane	2.2867	64	163810	10.7455 ug/l	
10) Trichlorofluoromethane	2.5690	101	404509	9.7828 ug/l	
11) Diethyl Ether	2.8984	45	75134	9.1520 ug/l	
12) Acetone	3.2173	43	18271	9.2761 ug/l	
13) Iodomethane	3.3428	142	244361	14.3479 ug/l	
14) 1,1-Dichloroethene	3.1650	61	313070	10.2122 ug/l	
15) 1,1,2-Trichloro-1,2,2-Trif	3.1807	101	211509	10.4074 ug/l	
16) Carbon Disulfide	3.4317	76	585329	10.5179 ug/l	
17) Acetonitrile	3.6303	41	355436	10.3171 ug/l	
18) Acrylonitrile	4.1531	53	22568	8.7847 ug/l #	
19) Allyl Chloride	3.6303	41	349482	10.1325 ug/l	
20) Acrolein	3.0291	56	15606	21.1622 ug/l	
21) Methyl Acetate	3.6721	43	56058	8.4071 ug/l	
22) Methylene Chloride	3.7976	84	168631	9.6228 ug/l	
23) t-1,2-Dichloroethene	4.2211	96	208398	10.0213 ug/l	
24) Isobutyl Alcohol	3.6721	43	56058	8.9841 ug/l	
25) Methyl-t-Butyl Ether (MTBE	4.2577	73	294560	9.0958 ug/l	
26) Hexane	4.6602	57	323382	10.4897 ug/l	
27) 1,1-Dichloroethane	4.8275	63	365742	9.5512 ug/l	

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D
Acq On : 3 Dec 2008 3:12 pm
Sample : ICV/LCS V111908D/V112608B
Misc : V120308A
MS Integration Params: RTEINT.P
Quant Time: Dec 03 15:47:56 2008

Vial: 24
Operator:
Inst : GCMS_L
Multiplr: 1.00
Quant Results File: 081203_BP.RES

Quant Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
28) Vinyl Acetate	4.9478	86	18568	9.3596	ug/l	#
29) Diisopropyl Ether (DIPE)	4.9948	45	548039	9.6932	ug/l	
30) Chloroprene	4.9687	53	370046	10.1898	ug/l	
31) Ethyl-t-Butyl Ether (ETBE)	5.5124	59	372778	9.4608	ug/l	
32) c-1,2-Dichloroethene	5.6536	96	201268	9.8534	ug/l	
33) 2,2-Dichloropropane	5.6431	77	326271	9.6253	ug/l	
34) 2-Butanone	5.6902	43	30132	9.4451	ug/l	
35) Propionitrile	5.7372	54	8138	9.9047	ug/l	
36) Methacrylonitrile	5.9568	41	47181	9.2983	ug/l	
37) Propanedinitrile	5.9620	66	8361	8.8060	ug/l	
38) Bromochloromethane	5.9725	130	93788	9.5125	ug/l	
39) Tetrahydrofuran	6.0614	42	18570	9.1903	ug/l	
40) Chloroform	6.0927	83	335188	9.5025	ug/l	
42) 1,1,1-Trichloroethane	6.3332	97	318154	9.5310	ug/l	
43) Cyclohexane	6.4116	84	307782	9.4906	ug/l	
44) 1,1-Dichloropropene	6.5528	75	279671	10.0255	ug/l	
45) Carbon Tetrachloride	6.5580	117	279041	9.8157	ug/l	
48) Benzene	6.8142	78	740847	10.0458	ug/l	
49) 1,2-Dichloroethane	6.8299	62	170972	8.9862	ug/l	
50) Tert-Amyl-Methyl Ether (TA	7.0129	73	273087	9.3398	ug/l	
51) Thiophene	7.0808	84	319546	9.9647	ug/l	
52) Trichloroethene	7.6507	95	186590	10.0765	ug/l	
53) 1,2-Dichloropropane	7.9173	63	153740	9.3217	ug/l	
54) Methylcyclohexane	7.9016	83	328562	10.0874	ug/l	
55) Dibromomethane	8.0585	93	55892	9.3092	ug/l	
56) Methyl Methacrylate	8.1107	69	40865	9.5124	ug/l	
57) Bromodichloromethane	8.2623	83	190955	9.2961	ug/l	
58) 2-Chloroethyl Vinyl Ether	8.6649	63	44517	8.5468	ug/l	
59) c-1,3-Dichloropropene	8.8270	75	206053	9.6417	ug/l	
61) Toluene	9.2400	91	697614	10.1924	ug/l	
62) 4-Methyl-2-Pentanone	9.1563	58	4915	14.6828	ug/l	
64) t-1,3-Dichloropropene	9.5118	75	156814	9.9286	ug/l	
65) Ethyl Methacrylate	9.6478	69	84497	9.7639	ug/l	
66) 1,1,2-Trichloroethane	9.7262	83	68520	9.7461	ug/l	
67) Tetrachloroethene	9.9248	166	242385	10.1024	ug/l	
68) 1,3-Dichloropropane	9.9301	76	157836	9.6435	ug/l	
69) 2-Hexanone	10.0556	58	13507	9.3630	ug/l	
70) Dibromochloromethane	10.2072	129	105738	10.0363	ug/l	
71) 1,2-Dibromoethane	10.3379	107	77450	9.6633	ug/l	
72) Chlorobenzene	10.9548	112	417096	9.8661	ug/l	
73) 1,1,1,2-Tetrachloroethane	11.0541	131	154180	10.1227	ug/l	

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D
Acq On : 3 Dec 2008 3:12 pm
Sample : ICV/LCS V111908D/V112608B
Misc : V120308A
MS Integration Params: RTEINT.P
Quant Time: Dec 03 15:47:56 2008

Vial: 24
Operator:
Inst : GCMS_L
Multiplr: 1.00
Quant Results File: 081203_BP.RES

Quant Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
74) Ethylbenzene	11.1011	91	785840	10.7903 ug/l	
75) p/m-Xylene	11.2475	91	1165099	21.0150 ug/l	
76) o-Xylene	11.7285	91	568688	10.6254 ug/l	
77) Styrene	11.7442	104	438553	10.7030 ug/l	
78) Bromoform	11.9533	173	50945	11.3184 ug/l	
79) Isopropylbenzene	12.1886	105	782745	11.1343 ug/l	
81) 1,2,3-Trichloropropane	12.5859	75	96128	10.2239 ug/l	
82) Bromobenzene	12.5441	156	171066	10.4499 ug/l	
83) n-Propylbenzene	12.6957	91	885137	10.8359 ug/l	
84) t-1,4-Dichloro-2-Butene	12.6120	53	21407	10.4142 ug/l	
85) 2-Chlorotoluene	12.7950	91	492077	10.6585 ug/l	
86) 1,3,5-Trimethylbenzene	12.9153	105	614940	10.9102 ug/l	
88) 4-Chlorotoluene	12.9257	91	584602	10.6378 ug/l	
89) 1,1,2,2-Tetrachloroethane	12.5336	83	76613	9.6235 ug/l	
90) 1,2,4-Trimethylbenzene	13.3753	105	598219	10.8114 ug/l	
91) tert-Butylbenzene	13.3231	119	624166	10.8272 ug/l	
92) p-Isopropyltoluene	13.7727	119	723823	10.8584 ug/l	
93) sec-Butylbenzene	13.5949	105	856394	11.1148 ug/l	
94) 1,3-Dichlorobenzene	13.7152	146	347034	10.4040 ug/l	
95) 1,4-Dichlorobenzene	13.8249	146	334057	9.7335 ug/l	
96) 1,2-Dichlorobenzene	14.2798	146	273914	9.8216 ug/l	
97) n-Butylbenzene	14.2850	91	637311	10.7920 ug/l	
98) 1,2-Dibromo-3-Chloropropan	15.2417	75	9509	9.8117 ug/l	
99) 1,2,4-Trichlorobenzene	16.2873	180	204087	10.0816 ug/l	
100) Hexachloro-1,3-Butadiene	16.5226	225	177288	10.1949 ug/l	
101) Naphthalene	16.5853	128	213858	9.3894 ug/l	
102) 1,2,3-Trichlorobenzene	16.2873	180	204087	10.0805 ug/l	

(#) = qualifier out of range (m) = manual integration

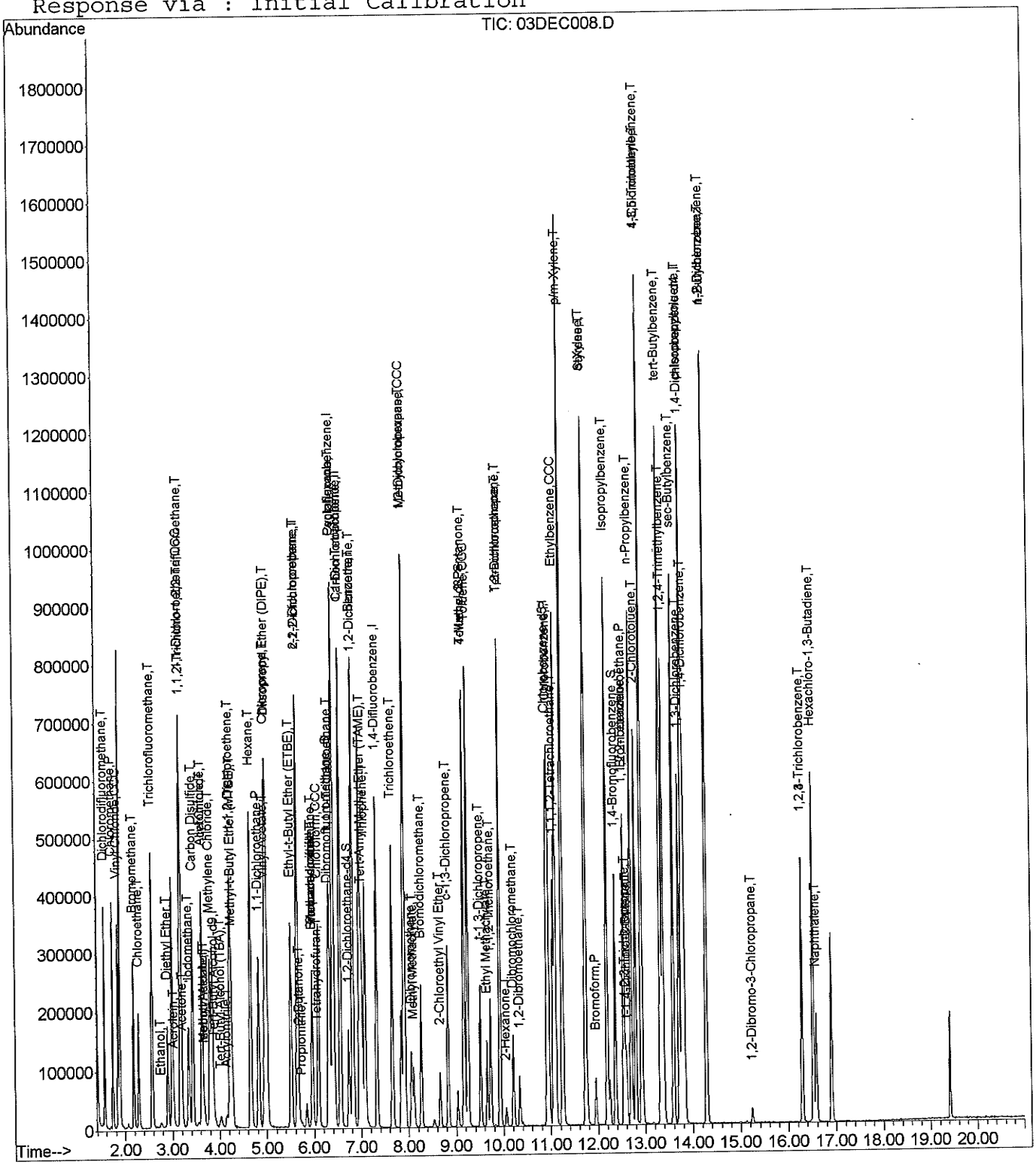
Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D
Acq On : 3 Dec 2008 3:12 pm
Sample : ICV/LCS V111908D/V112608B
Misc : V120308A
MS Integration Params: RTEINT.P
Quant Time: Dec 3 15:47 2008

Vial: 24
Operator:
Inst : GCMS_L
Multiplr: 1.00

Quant Results File: 081203_BP.

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D
Acq On : 3 Dec 2008 3:12 pm
Sample : ICV/LCS V111908D/V112608B
Misc : V120308A
MS Integration Params: RTEINT.P

Vial: 24
Operator:
Inst : GCMS_L
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Tert-Butyl Alcohol-d9	1.000	1.000	0.0	106	-0.01
2	T	Ethanol	0.157	0.155	1.3	113	0.00
3	T	Tert-Butyl Alcohol (TBA)	1.084	0.937	13.6	99	0.00
4	I	Pentafluorobenzene	1.000	1.000	0.0	115	0.00
5	T	Dichlorodifluoromethane	0.575	0.619	-7.7	125	0.00
6	P	Chloromethane	0.618	0.661	-7.0	121	0.00
7	CCC	Vinyl Chloride	0.613	0.668	-9.0	123	0.00
8	T	Bromomethane	0.410	0.418	-2.0	122	0.00
9	T	Chloroethane	0.359	0.386	-7.5	124	0.00
10	T	Trichlorofluoromethane	0.975	0.954	2.2	111	0.00
11	T	Diethyl Ether	0.194	0.177	8.8	102	0.00
12	T	Acetone	0.046	0.043#	6.5	114	0.00
13	T	Iodomethane	0.402	0.576	-43.3#	146	0.00
14	CCC	1,1-Dichloroethene	0.723	0.738	-2.1	113	0.00
15	T	1,1,2-Trichloro-1,2,2-Trifl	0.479	0.499	-4.2	116	0.00
16	T	Carbon Disulfide	1.312	1.380	-5.2	113	0.00
17	T	Acetonitrile	0.812	0.838	-3.2	116	0.00
18	T	Acrylonitrile	0.061	0.053#	13.1	102	0.00
19	T	Allyl Chloride	0.813	0.824	-1.4	114	0.00
20	T	Acrolein	0.017	0.018#	-5.9	115	0.00
21	T	Methyl Acetate	0.157	0.132	15.9	102	0.00
22	T	Methylene Chloride	0.413	0.398	3.6	107	0.00
23	T	t-1,2-Dichloroethene	0.490	0.491	-0.2	112	0.00
24	T	Isobutyl Alcohol	0.147	0.132	10.2	102	0.00
25	T	Methyl-t-Butyl Ether (MTBE)	0.764	0.695	9.0	103	0.00
26	T	Hexane	0.727	0.763	-5.0	118	0.00
27	P	1,1-Dichloroethane	0.903	0.862	4.5	108	0.00
28	T	Vinyl Acetate	0.047	0.044#	6.4	106	0.00
29	T	Diisopropyl Ether (DIPE)	1.333	1.292	3.1	110	0.00
30	T	Chloroprene	0.856	0.873	-2.0	110	0.00
31	T	Ethyl-t-Butyl Ether (ETBE)	0.929	0.879	5.4	104	0.00
32	T	c-1,2-Dichloroethene	0.482	0.475	1.5	111	0.00
33	T	2,2-Dichloropropane	0.799	0.769	3.8	111	0.00
34	T	2-Butanone	0.075	0.071#	5.3	123	-0.01
35	T	Propionitrile	0.019	0.019#	0.0	99	-0.01
36	T	Methacrylonitrile	0.120	0.111	7.5	105	0.00
37	T	Propanedinitrile	0.022	0.020#	9.1	104	0.00
38	T	Bromochloromethane	0.232	0.221	4.7	104	0.00
39	T	Tetrahydrofuran	0.048	0.044#	8.3	113	0.00
40	CCC	Chloroform	0.832	0.790	5.0	106	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D
Acq On : 3 Dec 2008 3:12 pm
Sample : ICV/LCS V111908D/V112608B
Misc : V120308A
MS Integration Params: RTEINT.P

Vial: 24
Operator:
Inst : GCMS_L
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	S	Dibromofluoromethane	0.394	0.380	3.6	107	0.00
42	T	1,1,1-Trichloroethane	0.787	0.750	4.7	106	0.00
43	T	Cyclohexane	0.765	0.726	5.1	112	0.00
44	T	1,1-Dichloropropene	0.658	0.660	-0.3	110	0.00
45	T	Carbon Tetrachloride	0.670	0.658	1.8	108	0.00
46	S	1,2-Dichloroethane-d4	0.381	0.340	10.8	100	0.00
47	I	1,4-Difluorobenzene	1.000	1.000	0.0	109	0.00
48	T	Benzene	1.352	1.358	-0.4	107	0.00
49	T	1,2-Dichloroethane	0.349	0.313	10.3	97	0.00
50	T	Tert-Amyl-Methyl Ether (TAM	0.536	0.501	6.5	97	0.00
51	T	Thiophene	0.588	0.586	0.3	105	0.00
52	T	Trichloroethene	0.339	0.342	-0.9	105	0.00
53	CCC	1,2-Dichloropropane	0.302	0.282	6.6	99	0.00
54	T	Methylcyclohexane	0.597	0.602	-0.8	109	0.00
55	T	Dibromomethane	0.110	0.102	7.3	96	0.00
56	T	Methyl Methacrylate	0.079	0.075#	5.1	101	0.00
57	T	Bromodichloromethane	0.377	0.350	7.2	102	0.00
58	T	2-Chloroethyl Vinyl Ether	0.095	0.082#	13.7	101	0.00
59	T	c-1,3-Dichloropropene	0.392	0.378	3.6	104	0.00
60	S	Toluene-d8	1.062	1.110	-4.5	113	0.00
61	CCC	Toluene	1.255	1.279	-1.9	105	0.00
62	T	4-Methyl-2-Pentanone	0.006	0.009#	-50.0#	207#	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	106	0.00
64	T	t-1,3-Dichloropropene	0.374	0.371	0.8	101	0.00
65	T	Ethyl Methacrylate	0.205	0.200	2.4	96	0.00
66	T	1,1,2-Trichloroethane	0.166	0.162	2.4	97	0.00
67	T	Tetrachloroethene	0.568	0.574	-1.1	108	0.00
68	T	1,3-Dichloropropane	0.388	0.374	3.6	96	0.00
69	T	2-Hexanone	0.034	0.032#	5.9	97	0.00
70	T	Dibromochloromethane	0.249	0.250	-0.4	105	0.00
71	T	1,2-Dibromoethane	0.190	0.183	3.7	100	0.00
72	P	Chlorobenzene	1.001	0.988	1.3	102	0.00
73	T	1,1,1,2-Tetrachloroethane	0.361	0.365	-1.1	104	0.00
74	CCC	Ethylbenzene	1.725	1.861	-7.9	109	0.00
75	T	p/m-Xylene	1.313	1.380	-5.1	106	0.00
76	T	o-Xylene	1.267	1.347	-6.3	105	0.00
77	T	Styrene	0.970	1.039	-7.1	103	0.00
78	P	Bromoform	0.107	0.121	-13.1	98	0.00
79	T	Isopropylbenzene	1.665	1.854	-11.4	108	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D
Acq On : 3 Dec 2008 3:12 pm
Sample : ICV/LCS V111908D/V112608B
Misc : V120308A
MS Integration Params: RTEINT.P

Vial: 24
Operator:
Inst : GCMS_L
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
80	S	1,4-Bromofluorobenzene	0.395	0.414	-4.8	107	0.00
81	T	1,2,3-Trichloropropane	0.223	0.228	-2.2	95	0.00
82	T	Bromobenzene	0.388	0.405	-4.4	103	0.00
83	T	n-Propylbenzene	1.934	2.096	-8.4	105	0.00
84	T	t-1,4-Dichloro-2-Butene	0.049	0.051#	-4.1	97	0.00
85	T	2-Chlorotoluene	1.093	1.165	-6.6	107	0.00
86	T	1,3,5-Trimethylbenzene	1.335	1.456	-9.1	107	0.00
87	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	0.00
88	T	4-Chlorotoluene	2.457	2.614	-6.4	106	0.00
89	P	1,1,2,2-Tetrachloroethane	0.356	0.343	3.7	97	0.00
90	T	1,2,4-Trimethylbenzene	2.474	2.675	-8.1	105	0.00
91	T	tert-Butylbenzene	2.578	2.791	-8.3	105	0.00
92	T	p-Isopropyltoluene	2.981	3.237	-8.6	108	0.00
93	T	sec-Butylbenzene	3.445	3.829	-11.1	110	0.00
94	T	1,3-Dichlorobenzene	1.492	1.552	-4.0	103	0.00
95	T	1,4-Dichlorobenzene	1.535	1.494	2.7	99	0.00
96	T	1,2-Dichlorobenzene	1.247	1.225	1.8	98	0.00
97	T	n-Butylbenzene	2.641	2.850	-7.9	107	0.00
98	T	1,2-Dibromo-3-Chloropropane	0.043	0.043#	0.0	104	0.00
99	T	1,2,4-Trichlorobenzene	0.905	0.913	-0.9	101	0.00
100	T	Hexachloro-1,3-Butadiene	0.778	0.793	-1.9	106	0.00
101	T	Naphthalene	1.018	0.956	6.1	89	0.00
102	T	1,2,3-Trichlorobenzene	0.905	0.913	-0.9	101	0.00

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\081210\10DEC002.D Vial: 17
Acq On : 10 Dec 2008 11:08 am Operator:
Sample : CCV 10PPB V120408A/V120508A Inst : GCMS_L
Misc : V120308A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 10 11:33:20 2008 Quant Results File: 081203_BP.RES

Quant Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Tert-Butyl Alcohol-d9	3.9052	65	25587	50.0000 ug/l	0
4) Pentafluorobenzene	6.3990	168	335115	10.0000 ug/l	0
47) 1,4-Difluorobenzene	7.3348	114	423751	10.0000 ug/l	0
63) Chlorobenzene-d5	10.9212	117	311193	10.0000 ug/l	0
87) 1,4-Dichlorobenzene-d4	13.7966	152	178836	10.0000 ug/l	0

System Monitoring Compounds					
41) Dibromofluoromethane	6.2996	113	122206	9.25 ug/l	0.0
Spiked Amount 10.000	Range 53 - 141		Recovery	= 92.50%	
46) 1,2-Dichloroethane-d4	6.7388	65	113353	8.87 ug/l	0.0
Spiked Amount 10.000	Range 50 - 150		Recovery	= 88.70%	
60) Toluene-d8	9.1646	98	430312	9.56 ug/l	0.0
Spiked Amount 10.000	Range 69 - 134		Recovery	= 95.60%	
80) 1,4-Bromofluorobenzene	12.3641	95	126218	10.28 ug/l	0.0
Spiked Amount 10.000	Range 51 - 152		Recovery	= 102.80%	

Target Compounds				Qvalue
2) Ethanol	2.7655	45	7292	90.6718 ug/l
3) Tert-Butyl Alcohol (TBA)	4.0307	59	25561	46.0946 ug/l
5) Dichlorodifluoromethane	1.5579	85	187758	9.7401 ug/l
6) Chloromethane	1.7304	50	201811	9.7513 ug/l
7) Vinyl Chloride	1.8402	62	237613	11.5589 ug/l
8) Bromomethane	2.1748	94	142581	10.3781 ug/l
9) Chloroethane	2.2845	64	120217	9.9791 ug/l
10) Trichlorofluoromethane	2.5721	101	306865	9.3912 ug/l
11) Diethyl Ether	2.9015	45	65452	10.0888 ug/l
12) Acetone	3.2151	43	13892	8.9249 ug/l
13) Iodomethane	3.3458	142	196241	14.5809 ug/l
14) 1,1-Dichloroethene	3.1681	61	263710	10.8854 ug/l
15) 1,1,2-Trichloro-1,2,2-Trif	3.1837	101	185267	11.5359 ug/l
16) Carbon Disulfide	3.4347	76	516116	11.7358 ug/l
17) Acetonitrile	3.6334	41	277535	10.1942 ug/l
18) Acrylonitrile	4.1509	53	21307	10.4953 ug/l
19) Allyl Chloride	3.6334	41	273501	10.0344 ug/l
20) Acrolein	3.0269	56	16883	28.9705 ug/l
21) Methyl Acetate	3.6804	43	50942	9.6677 ug/l
22) Methylene Chloride	3.8007	84	146730	10.5955 ug/l
23) t-1,2-Dichloroethene	4.2241	96	171436	10.4321 ug/l
24) Isobutyl Alcohol	3.6804	43	50940	10.3308 ug/l
25) Methyl-t-Butyl Ether (MTBE	4.2555	73	266879	10.4284 ug/l
26) Hexane	4.6581	57	263581	10.8193 ug/l
27) 1,1-Dichloroethane	4.8254	63	305965	10.1109 ug/l

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\081210\10DEC002.D Vial: 17
Acq On : 10 Dec 2008 11:08 am Operator:
Sample : CCV 10PPB V120408A/V120508A Inst : GCMS_L
Misc : V120308A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 10 11:33:20 2008 Quant Results File: 081203_BP.RES

Quant Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
28) Vinyl Acetate	4.9404	86	16875	10.7640 ug/l	#
29) Diisopropyl Ether (DIPE)	5.0031	45	428836	9.5981 ug/l	
30) Chloroprene	4.9665	53	300107	10.4574 ug/l	
31) Ethyl-t-Butyl Ether (ETBE)	5.5155	59	318961	10.2436 ug/l	
32) c-1,2-Dichloroethene	5.6514	96	171479	10.6234 ug/l	
33) 2,2-Dichloropropane	5.6461	77	273892	10.2248 ug/l	
34) 2-Butanone	5.7036	43	24188	9.5944 ug/l	
35) Propionitrile	5.7455	54	6412	9.8754 ug/l	
36) Methacrylonitrile	5.9650	41	40018	9.9800 ug/l	
37) Propanedinitrile	5.9546	66	7643	10.1865 ug/l	#
38) Bromochloromethane	5.9650	130	82765	10.6227 ug/l	
39) Tetrahydrofuran	6.0644	42	16107	10.0872 ug/l	
40) Chloroform	6.0957	83	278701	9.9983 ug/l	
42) 1,1,1-Trichloroethane	6.3362	97	268168	10.1659 ug/l	
43) Cyclohexane	6.4147	84	269780	10.5269 ug/l	
44) 1,1-Dichloropropene	6.5558	75	228751	10.3767 ug/l	
45) Carbon Tetrachloride	6.5558	117	235555	10.4853 ug/l	
48) Benzene	6.8172	78	621764	10.8529 ug/l	
49) 1,2-Dichloroethane	6.8329	62	149508	10.1153 ug/l	
50) Tert-Amyl-Methyl Ether (TA	7.0159	73	248470	10.9389 ug/l	
51) Thiophene	7.0786	84	274905	11.0351 ug/l	
52) Trichloroethene	7.6537	95	160710	11.1719 ug/l	
53) 1,2-Dichloropropane	7.9203	63	132931	10.3753 ug/l	
54) Methylcyclohexane	7.9046	83	278941	11.0240 ug/l	
55) Dibromomethane	8.0615	93	52139	11.1787 ug/l	
56) Methyl Methacrylate	8.1137	69	38370	11.4972 ug/l	
57) Bromodichloromethane	8.2706	83	159086	9.9693 ug/l	
58) 2-Chloroethyl Vinyl Ether	8.6627	63	37867	9.3585 ug/l	
59) c-1,3-Dichloropropene	8.8300	75	165126	9.9461 ug/l	
61) Toluene	9.2482	91	583606	10.9760 ug/l	
62) 4-Methyl-2-Pentanone	9.1698	58	3363	12.9323 ug/l	
64) t-1,3-Dichloropropene	9.5096	75	130194	11.1856 ug/l	
65) Ethyl Methacrylate	9.6560	69	72346	11.3438 ug/l	
66) 1,1,2-Trichloroethane	9.7292	83	61513	11.8726 ug/l	
67) Tetrachloroethene	9.9227	166	210458	11.9028 ug/l	
68) 1,3-Dichloropropane	9.9279	76	133474	11.0660 ug/l	
69) 2-Hexanone	10.0586	58	11229	10.5625 ug/l	
70) Dibromochloromethane	10.2102	129	92316	11.8900 ug/l	
71) 1,2-Dibromoethane	10.3409	107	67568	11.4396 ug/l	
72) Chlorobenzene	10.9578	112	362758	11.6437 ug/l	
73) 1,1,1,2-Tetrachloroethane	11.0624	131	129381	11.5267 ug/l	

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\081210\10DEC002.D
Acq On : 10 Dec 2008 11:08 am
Sample : CCV 10PPB V120408A/V120508A
Misc : V120308A
MS Integration Params: RTEINT.P
Quant Time: Dec 10 11:33:20 2008

Vial: 17
Operator:
Inst : GCMS_L
Multiplr: 1.00
Quant Results File: 081203_BP.RES

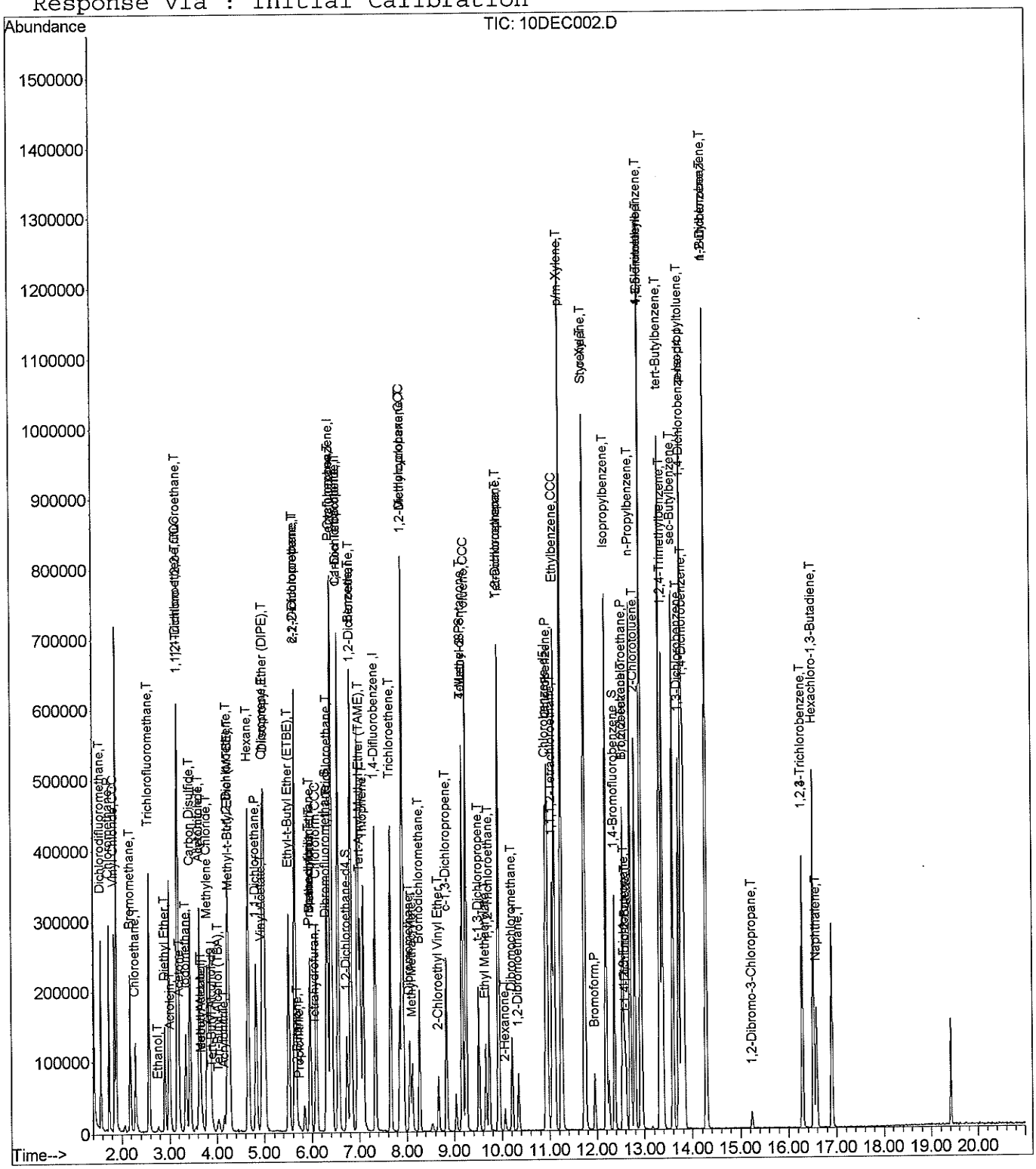
Quant Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
74)	Ethylbenzene	11.1042	91	631907	11.7739 ug/l	
75)	p/m-Xylene	11.2506	91	953370	23.3342 ug/l	
76)	o-Xylene	11.7315	91	460012	11.6628 ug/l	
77)	Styrene	11.7472	104	374121	12.3897 ug/l	
78)	Bromoform	11.9511	173	50177	15.1270 ug/l	
79)	Isopropylbenzene	12.1916	105	618066	11.9301 ug/l	
81)	1,2,3-Trichloropropane	12.5889	75	88507	12.7735 ug/l	
82)	Bromobenzene	12.5471	156	151282	12.5401 ug/l	
83)	n-Propylbenzene	12.6987	91	734261	12.1975 ug/l	
84)	t-1,4-Dichloro-2-Butene	12.6098	53	18976	12.5268 ug/l	
85)	2-Chlorotoluene	12.7928	91	405626	11.9221 ug/l	
86)	1,3,5-Trimethylbenzene	12.9183	105	537705	12.9453 ug/l	
88)	4-Chlorotoluene	12.9288	91	504687	11.4843 ug/l	
89)	1,1,2,2-Tetrachloroethane	12.5419	83	71796	11.2778 ug/l	
90)	1,2,4-Trimethylbenzene	13.3783	105	489621	11.0656 ug/l	
91)	tert-Butylbenzene	13.3209	119	519769	11.2750 ug/l	
92)	p-Isopropyltoluene	13.7757	119	602030	11.2938 ug/l	
93)	sec-Butylbenzene	13.5927	105	685621	11.1277 ug/l	
94)	1,3-Dichlorobenzene	13.7182	146	304618	11.4202 ug/l	
95)	1,4-Dichlorobenzene	13.8227	146	297425	10.8372 ug/l	
96)	1,2-Dichlorobenzene	14.2828	146	249400	11.1829 ug/l	
97)	n-Butylbenzene	14.2828	91	511087	10.8228 ug/l	
98)	1,2-Dibromo-3-Chloropropan	15.2448	75	8402	10.8413 ug/l	
99)	1,2,4-Trichlorobenzene	16.2904	180	179832	11.1089 ug/l	
100)	Hexachloro-1,3-Butadiene	16.5204	225	147562	10.6113 ug/l	
101)	Naphthalene	16.5883	128	199053	10.9287 ug/l	
102)	1,2,3-Trichlorobenzene	16.2904	180	179832	11.1078 ug/l	

(#) = qualifier out of range (m) = manual integration

Data File : C:\MSDCHEM\1\DATA\081210\10DEC002.D Vial: 17
Acq On : 10 Dec 2008 11:08 am Operator:
Sample : CCV 10PPB V120408A/V120508A Inst : GCMS_L
Misc : V120308A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 10 11:33 2008 Quant Results File: 081203_BP.

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\081210\10DEC002.D
Acq On : 10 Dec 2008 11:08 am
Sample : CCV 10PPB V120408A/V120508A
Misc : V120308A
MS Integration Params: RTEINT.P

Vial: 17
Operator:
Inst : GCMS_L
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Tert-Butyl Alcohol-d9	1.000	1.000	0.0	94	0.00
2	T	Ethanol	0.157	0.142	9.6	92	0.00
3	T	Tert-Butyl Alcohol (TBA)	1.084	0.999	7.8	93	0.00
4	I	Pentafluorobenzene	1.000	1.000	0.0	91	0.00
5	T	Dichlorodifluoromethane	0.575	0.560	2.6	90	0.00
6	P	Chloromethane	0.618	0.602	2.6	87	0.00
7	CCC	Vinyl Chloride	0.613	0.709	-15.7	103	0.00
8	T	Bromomethane	0.410	0.425	-3.7	98	0.00
9	T	Chloroethane	0.359	0.359	0.0	91	0.00
10	T	Trichlorofluoromethane	0.975	0.916	6.1	84	0.00
11	T	Diethyl Ether	0.194	0.195	-0.5	89	0.00
12	T	Acetone	0.046	0.041#	10.9	87	0.00
13	T	Iodomethane	0.402	0.586	-45.8#	117	0.00
14	CCC	1,1-Dichloroethene	0.723	0.787	-8.9	95	0.00
15	T	1,1,2-Trichloro-1,2,2-Trifl	0.479	0.553	-15.4	101	0.00
16	T	Carbon Disulfide	1.312	1.540	-17.4	99	0.00
17	T	Acetonitrile	0.812	0.828	-2.0	90	0.00
18	T	Acrylonitrile	0.061	0.064#	-4.9	97	-0.01
19	T	Allyl Chloride	0.813	0.816	-0.4	89	0.00
20	T	Acrolein	0.017	0.025#	-47.1#	125	0.00
21	T	Methyl Acetate	0.157	0.152	3.2	93	0.00
22	T	Methylene Chloride	0.413	0.438	-6.1	93	0.00
23	T	t-1,2-Dichloroethene	0.490	0.512	-4.5	92	0.00
24	T	Isobutyl Alcohol	0.147	0.152	-3.4	93	0.00
25	T	Methyl-t-Butyl Ether (MTBE)	0.764	0.796	-4.2	93	0.00
26	T	Hexane	0.727	0.787	-8.3	96	0.00
27	P	1,1-Dichloroethane	0.903	0.913	-1.1	91	0.00
28	T	Vinyl Acetate	0.047	0.050#	-6.4	96	0.00
29	T	Diisopropyl Ether (DIPE)	1.333	1.280	4.0	86	0.00
30	T	Chloroprene	0.856	0.896	-4.7	89	0.00
31	T	Ethyl-t-Butyl Ether (ETBE)	0.929	0.952	-2.5	89	0.00
32	T	c-1,2-Dichloroethene	0.482	0.512	-6.2	94	0.00
33	T	2,2-Dichloropropane	0.799	0.817	-2.3	93	0.00
34	T	2-Butanone	0.075	0.072#	4.0	99	0.00
35	T	Propionitrile	0.019	0.019#	0.0	78	0.00
36	T	Methacrylonitrile	0.120	0.119	0.8	89	0.00
37	T	Propanedinitrile	0.022	0.023#	-4.5	95	0.00
38	T	Bromochloromethane	0.232	0.247	-6.5	92	0.00
39	T	Tetrahydrofuran	0.048	0.048#	0.0	98	0.00
40	CCC	Chloroform	0.832	0.832	0.0	88	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\081210\10DEC002.D
Acq On : 10 Dec 2008 11:08 am
Sample : CCV 10PPB V120408A/V120508A
Misc : V120308A
MS Integration Params: RTEINT.P

Vial: 17
Operator:
Inst : GCMS_L
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	S	Dibromofluoromethane	0.394	0.365	7.4	81	0.00
42	T	1,1,1-Trichloroethane	0.787	0.800	-1.7	90	0.00
43	T	Cyclohexane	0.765	0.805	-5.2	98	0.00
44	T	1,1-Dichloropropene	0.658	0.683	-3.8	90	0.00
45	T	Carbon Tetrachloride	0.670	0.703	-4.9	91	0.00
46	S	1,2-Dichloroethane-d4	0.381	0.338	11.3	79	0.00
47	I	1,4-Difluorobenzene	1.000	1.000	0.0	84	0.00
48	T	Benzene	1.352	1.467	-8.5	90	0.00
49	T	1,2-Dichloroethane	0.349	0.353	-1.1	84	0.00
50	T	Tert-Amyl-Methyl Ether (TAM	0.536	0.586	-9.3	88	0.00
51	T	Thiophene	0.588	0.649	-10.4	91	0.00
52	T	Trichloroethene	0.339	0.379	-11.8	91	0.00
53	CCC	1,2-Dichloropropane	0.302	0.314	-4.0	85	0.00
54	T	Methylcyclohexane	0.597	0.658	-10.2	92	0.00
55	T	Dibromomethane	0.110	0.123	-11.8	90	0.00
56	T	Methyl Methacrylate	0.079	0.091#	-15.2	95	0.00
57	T	Bromodichloromethane	0.377	0.375	0.5	85	0.00
58	T	2-Chloroethyl Vinyl Ether	0.095	0.089#	6.3	86	0.00
59	T	c-1,3-Dichloropropene	0.392	0.390	0.5	83	0.00
60	S	Toluene-d8	1.062	1.015	4.4	80	0.00
61	CCC	Toluene	1.255	1.377	-9.7	88	0.00
62	T	4-Methyl-2-Pentanone	0.006	0.008#	-33.3#	141	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	78	0.00
64	T	t-1,3-Dichloropropene	0.374	0.418	-11.8	84	0.00
65	T	Ethyl Methacrylate	0.205	0.232	-13.2	83	0.00
66	T	1,1,2-Trichloroethane	0.166	0.198	-19.3	87	0.00
67	T	Tetrachloroethene	0.568	0.676	-19.0	93	0.00
68	T	1,3-Dichloropropane	0.388	0.429	-10.6	81	0.00
69	T	2-Hexanone	0.034	0.036#	-5.9	80	0.00
70	T	Dibromochloromethane	0.249	0.297	-19.3	92	0.00
71	T	1,2-Dibromoethane	0.190	0.217	-14.2	88	0.00
72	P	Chlorobenzene	1.001	1.166	-16.5	89	0.00
73	T	1,1,1,2-Tetrachloroethane	0.361	0.416	-15.2	87	0.00
74	CCC	Ethylbenzene	1.725	2.031	-17.7	88	0.00
75	T	p/m-Xylene	1.313	1.532	-16.7	87	0.00
76	T	o-Xylene	1.267	1.478	-16.7	85	0.00
77	T	Styrene	0.970	1.202	-23.9#	88	0.00
78	P	Bromoform	0.107	0.161	-50.5#	96	0.00
79	T	Isopropylbenzene	1.665	1.986	-19.3	86	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\081210\10DEC002.D
Acq On : 10 Dec 2008 11:08 am
Sample : CCV 10PPB V120408A/V120508A
Misc : V120308A
MS Integration Params: RTEINT.P

Vial: 17
Operator:
Inst : GCMS_L
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
80	S	1,4-Bromofluorobenzene	0.395	0.406	-2.8	77	0.00
81	T	1,2,3-Trichloropropane	0.223	0.284	-27.4#	87	0.00
82	T	Bromobenzene	0.388	0.486	-25.3#	91	0.00
83	T	n-Propylbenzene	1.934	2.360	-22.0#	87	0.00
84	T	t-1,4-Dichloro-2-Butene	0.049	0.061#	-24.5#	86	0.00
85	T	2-Chlorotoluene	1.093	1.303	-19.2	88	0.00
86	T	1,3,5-Trimethylbenzene	1.335	1.728	-29.4#	93	0.00
87	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	81	0.00
88	T	4-Chlorotoluene	2.457	2.822	-14.9	91	0.00
89	P	1,1,2,2-Tetrachloroethane	0.356	0.401	-12.6	91	0.00
90	T	1,2,4-Trimethylbenzene	2.474	2.738	-10.7	86	0.00
91	T	tert-Butylbenzene	2.578	2.906	-12.7	87	0.00
92	T	p-Isopropyltoluene	2.981	3.366	-12.9	89	0.00
93	T	sec-Butylbenzene	3.445	3.834	-11.3	88	0.00
94	T	1,3-Dichlorobenzene	1.492	1.703	-14.1	90	0.00
95	T	1,4-Dichlorobenzene	1.535	1.663	-8.3	88	0.00
96	T	1,2-Dichlorobenzene	1.247	1.395	-11.9	89	0.00
97	T	n-Butylbenzene	2.641	2.858	-8.2	85	0.00
98	T	1,2-Dibromo-3-Chloropropane	0.043	0.047#	-9.3	92	0.00
99	T	1,2,4-Trichlorobenzene	0.905	1.006	-11.2	89	0.00
100	T	Hexachloro-1,3-Butadiene	0.778	0.825	-6.0	88	0.00
101	T	Naphthalene	1.018	1.113	-9.3	82	0.00
102	T	1,2,3-Trichlorobenzene	0.905	1.006	-11.2	89	0.00

Work Order#: 08-12-0585

Client: WEISS Associates

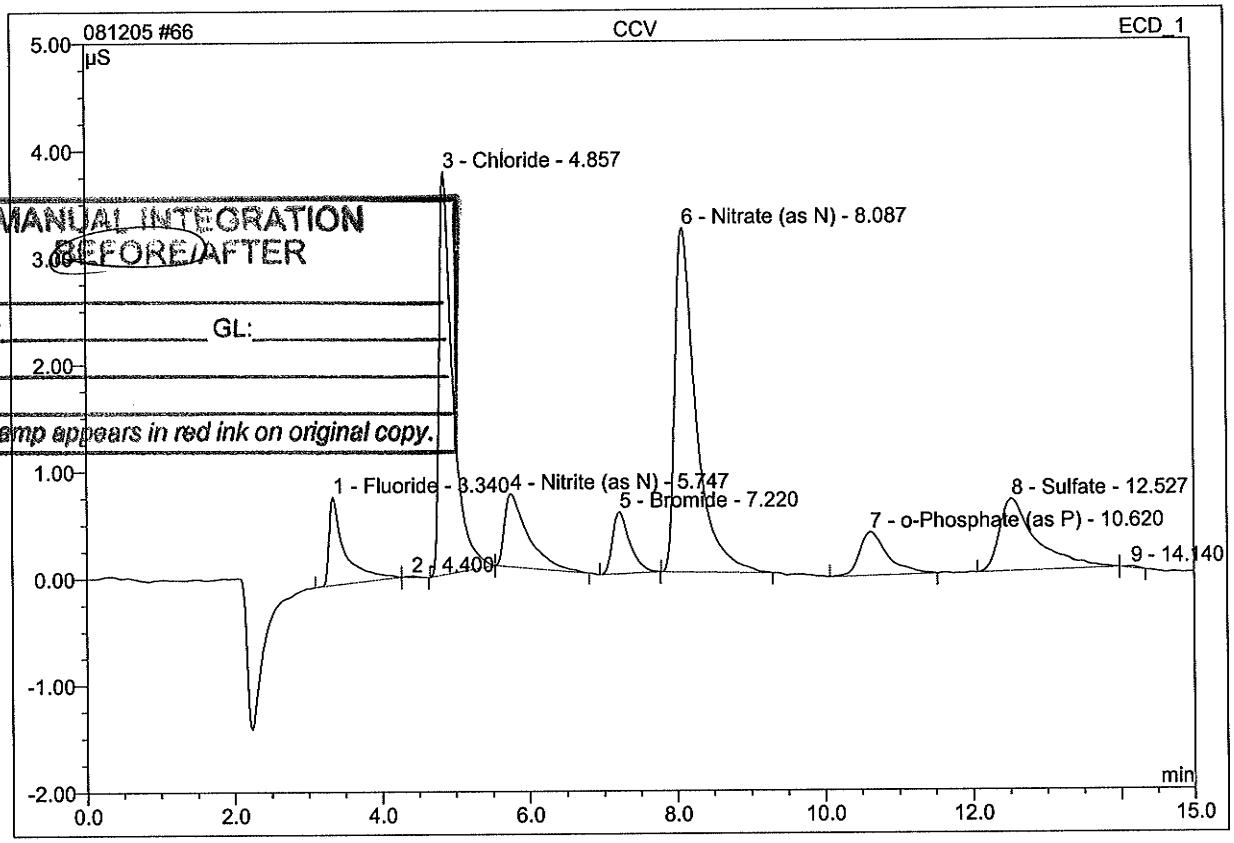
EPA 300.0

Calibration

Operator:Eleo Ng Timebase:ICS_1000 Sequence:081205

66 CCV

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**0**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**AS14 US EPA Method 300_0**	*Bandwidth:*	**n.a.**
Quantif. Method:	**AS14 US EPA Method 300_0**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/6/2008 2:40**	*Sample Weight:*	**1.0000**
Run Time (min):	**15.00**	*Sample Amount:*	**1.0000**



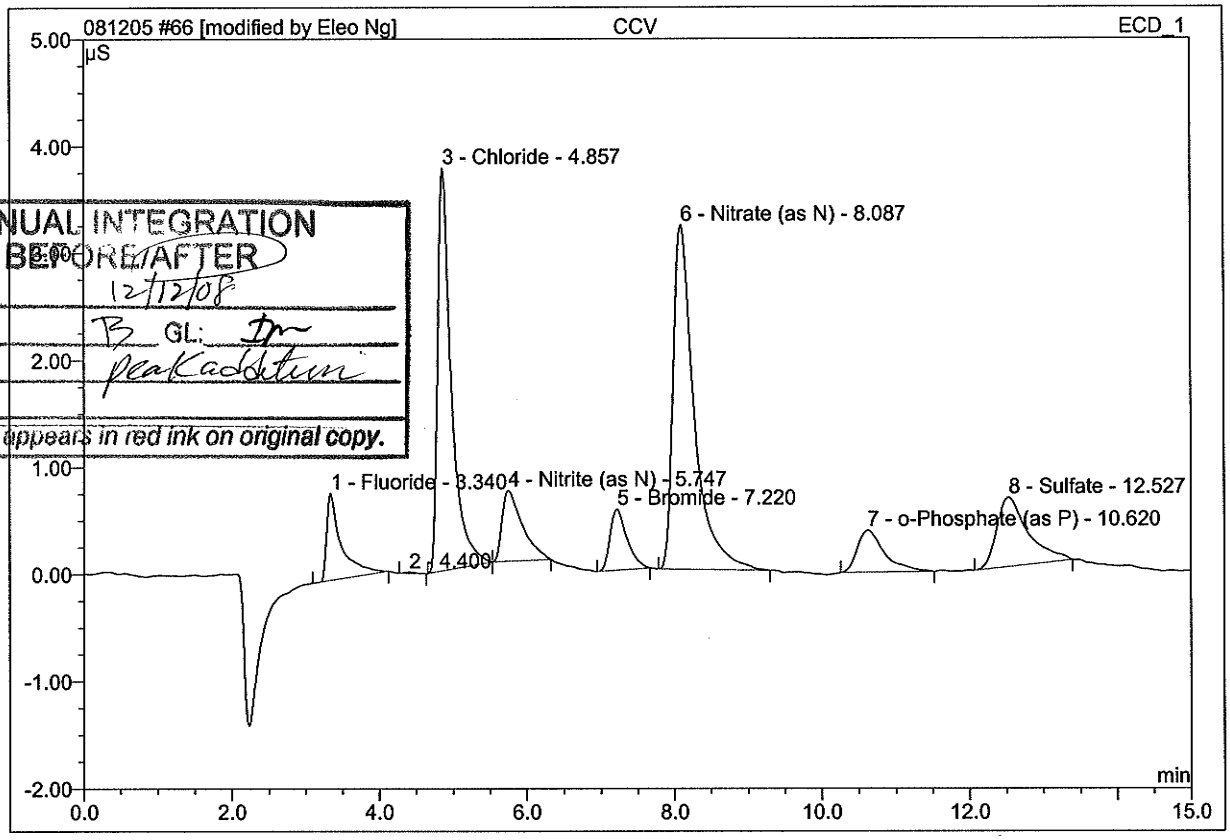
MANUAL INTEGRATION
BEFORE/AFTER
Date:
Chemist: GL:
Reason:
This stamp appears in red ink on original copy.

No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.34	Fluoride	0.821	0.203	6.66	1.180	BMb
2	4.40	n.a.	0.011	0.002	0.06	n.a.	bMB
3	4.86	Chloride	3.765	0.808	26.44	3.843	BMb
4	5.75	Nitrite (as N)	0.680	0.250	8.20	1.423	bMB
5	7.22	Bromide	0.577	0.158	5.18	2.135	BMB
6	8.09	Nitrate (as N)	3.219	1.065	34.87	2.077	BMB
7	10.62	o-Phosphate (as P)	0.405	0.178	5.81	1.174	BMB
8	12.53	Sulfate	0.671	0.387	12.67	4.923	BMB
9	14.14	n.a.	0.016	0.003	0.10	n.a.	bMB
Total:			10.166	3.055	100.00	16.756	

Operator:Eleo Ng Timebase:ICS_1000 Sequence:081205

66 CCV

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**0**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**AS14 US EPA Method 300_0**	*Bandwidth:*	**n.a.**
Quantif. Method:	**AS14 US EPA Method 300_0**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/6/2008 2:40**	*Sample Weight:*	**1.0000**
Run Time (min):	**15.00**	*Sample Amount:*	**1.0000**



MANUAL INTEGRATION
BEFORE/AFTER
Date: 12/12/08
Chemist: B GL: Dm
Reason: peak addition
This stamp appears in red ink on original copy.

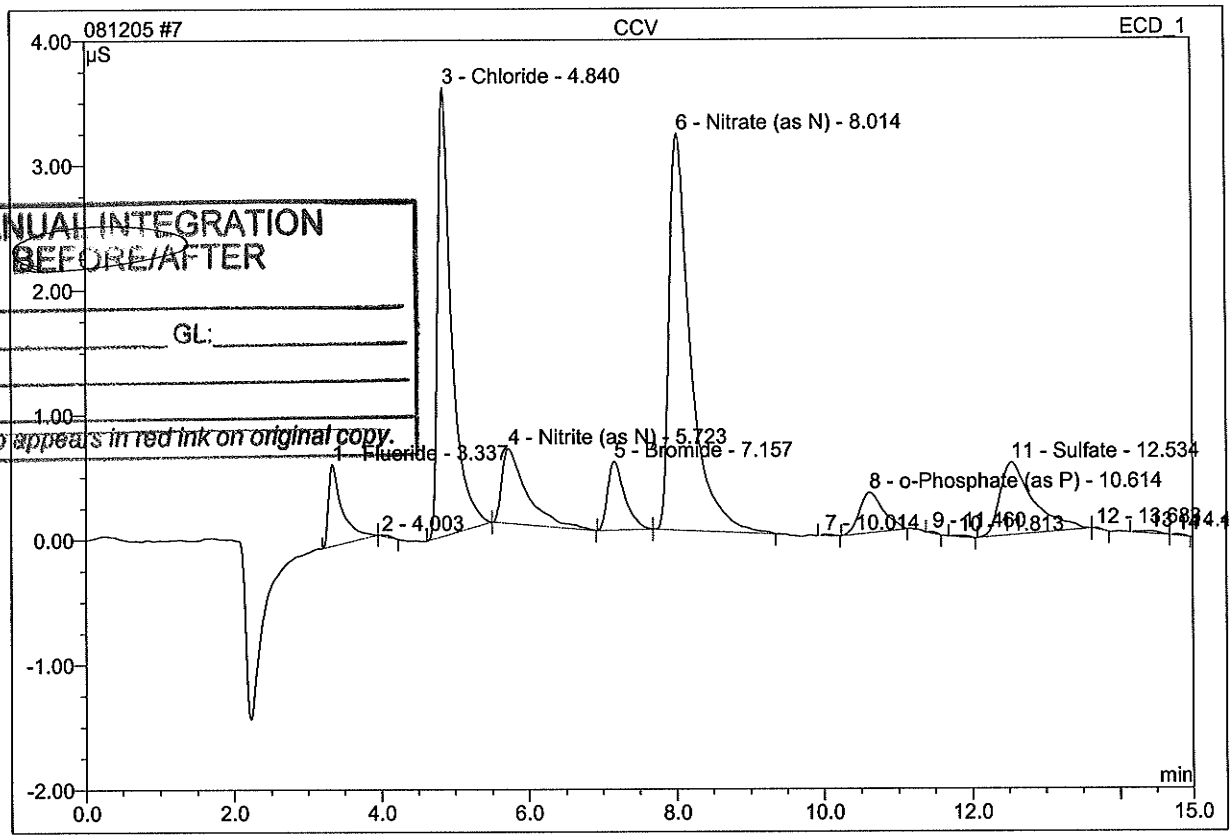
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.34	Fluoride	0.815	0.187	6.42	1.085	BMB*
2	4.40	n.a.	0.011	0.002	0.07	n.a.	BMB*
3	4.86	Chloride	3.765	0.808	27.75	3.843	BMb
4	5.75	Nitrite (as N)	0.661	0.210	7.22	1.195	bMB*
5	7.22	Bromide	0.572	0.153	5.25	2.059	BMB*
6	8.09	Nitrate (as N)	3.219	1.065	36.61	2.077	BMB
7	10.62	o-Phosphate (as P)	0.394	0.166	5.71	1.100	BMB*
8	12.53	Sulfate	0.646	0.319	10.96	4.056	BMB*
Total:			10.083	2.910	100.00	15.415	

Operator:Eleo Ng Timebase:ICS_1000 Sequence:081205

12/12/2008 11:51 AM

7 CCV

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**0**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**AS14 US EPA Method 300_0**	*Bandwidth:*	**n.a.**
Quantif. Method:	**AS14 US EPA Method 300_0**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/5/2008 9:33**	*Sample Weight:*	**1.0000**
Run Time (min):	**15.00**	*Sample Amount:*	**1.0000**



MANUAL INTEGRATION BEFORE/AFTER
Date:
Chemist: GL:
Reason:
This stamp appears in red ink on original copy.

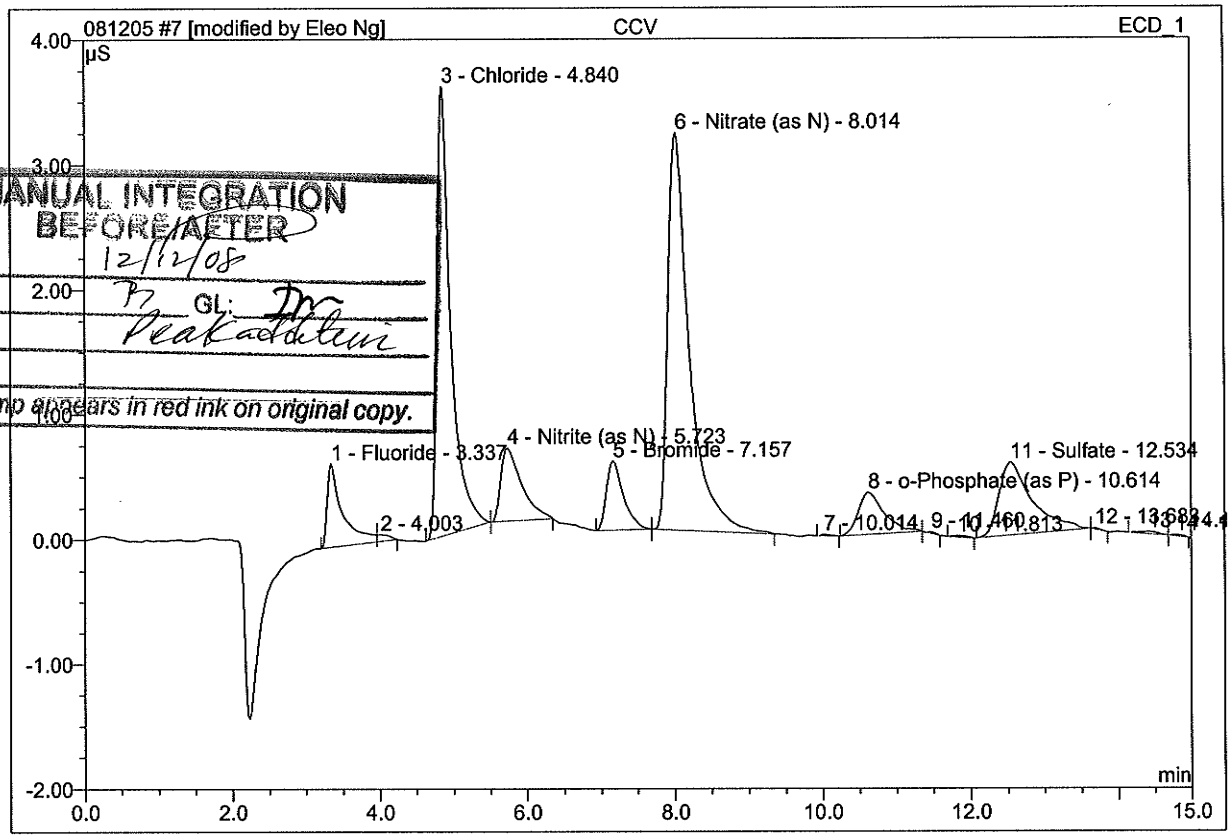
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.34	Fluoride	0.655	0.140	4.97	0.813	BMb
2	4.00	n.a.	0.007	0.002	0.08	n.a.	bMB
3	4.84	Chloride	3.594	0.790	27.99	3.759	BMb
4	5.72	Nitrite (as N)	0.600	0.234	8.30	1.331	bMB
5	7.16	Bromide	0.550	0.146	5.18	1.972	BMb
6	8.01	Nitrate (as N)	3.175	1.068	37.85	2.083	bMB
7	10.01	n.a.	0.011	0.002	0.06	n.a.	BMB
8	10.61	o-Phosphate (as P)	0.324	0.121	4.30	0.802	BMB
9	11.46	n.a.	0.014	0.002	0.06	n.a.	BMB
10	11.81	n.a.	0.012	0.003	0.09	n.a.	BMB
11	12.53	Sulfate	0.584	0.305	10.81	3.880	BMb

12	13.68	n.a.	0.011	0.001	0.05	n.a.	bMB
13	14.42	n.a.	0.018	0.005	0.19	n.a.	BMB
14	14.78	n.a.	0.012	0.002	0.07	n.a.	bMB
Total:			9.568	2.822	100.00	14.639	

Operator:Eleo Ng Timebase:ICS_1000 Sequence:081205

7 CCV

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**0**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**AS14 US EPA Method 300_0**	*Bandwidth:*	**n.a.**
Quantif. Method:	**AS14 US EPA Method 300_0**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/5/2008 9:33**	*Sample Weight:*	**1.0000**
Run Time (min):	**15.00**	*Sample Amount:*	**1.0000**



MANUAL INTEGRATION
BEFORE/AFTER
Date: 12/12/08
Chemist: PJ GL: DM
Reason: Peak addition
This stamp appears in red ink on original copy.

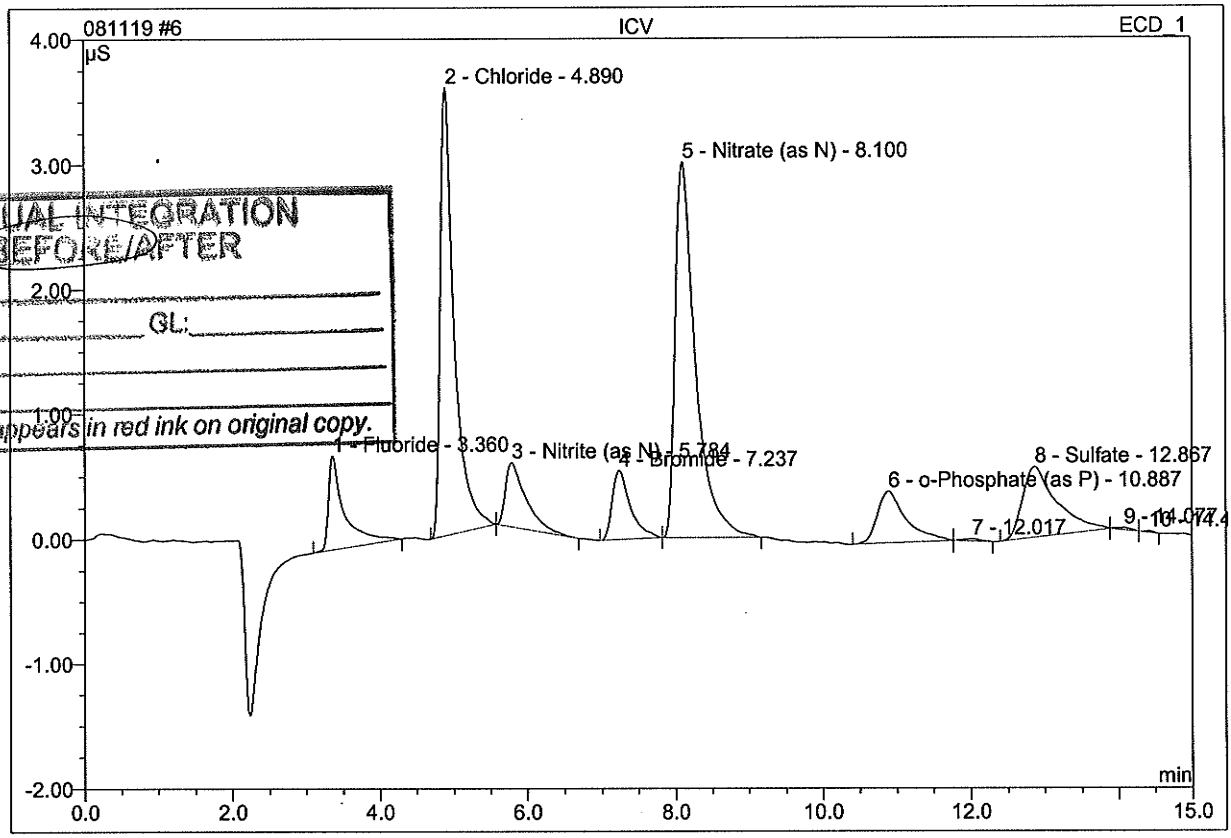
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.34	Fluoride	0.665	0.161	5.72	0.937	BM *
2	4.00	n.a.	0.054	0.010	0.35	n.a.	MB*
3	4.84	Chloride	3.594	0.790	27.98	3.759	BMb
4	5.72	Nitrite (as N)	0.583	0.191	6.77	1.087	bMB*
5	7.16	Bromide	0.550	0.146	5.18	1.972	BMb
6	8.01	Nitrate (as N)	3.175	1.068	37.83	2.083	bMB
7	10.01	n.a.	0.011	0.002	0.06	n.a.	BMB
8	10.61	o-Phosphate (as P)	0.335	0.137	4.85	0.906	BMb*
9	11.46	n.a.	0.012	0.001	0.04	n.a.	bMB*
10	11.81	n.a.	0.012	0.003	0.09	n.a.	BMB
11	12.53	Sulfate	0.584	0.305	10.81	3.880	BMb

12	13.68	n.a.	0.011	0.001	0.05	n.a.	bMB
13	14.42	n.a.	0.018	0.005	0.19	n.a.	BMb*
14	14.78	n.a.	0.012	0.002	0.07	n.a.	bMB
Total:			9.616	2.823	100.00	14.623	

Operator:Eleo Ng Timebase:ICS_1000 Sequence:081119

6 ICV

Sample Name:	**ICV**	*Injection Volume:*	**25.0**
Vial Number:	**0**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**AS14 US EPA Method 300_0**	*Bandwidth:*	**n.a.**
Quantif. Method:	**AS14 US EPA Method 300_0**	*Dilution Factor:*	**1.0000**
Recording Time:	**11/19/2008 10:23**	*Sample Weight:*	**1.0000**
Run Time (min):	**15.00**	*Sample Amount:*	**1.0000**



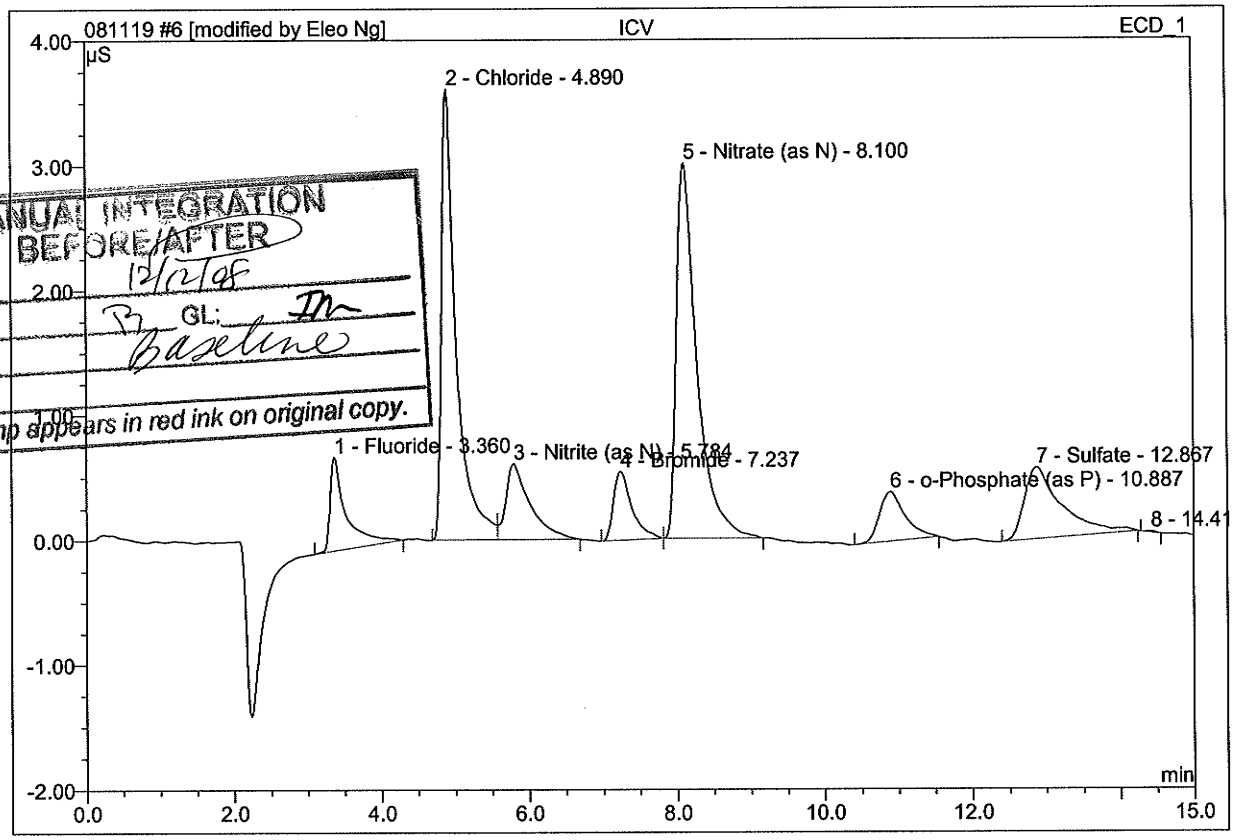
MANUAL INTEGRATION
BEFORE/AFTER
Date:
Chemist: GL:
Reason:
This stamp appears in red ink on original copy.

No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.36	Fluoride	0.748	0.189	6.86	0.967	BMB
2	4.89	Chloride	3.583	0.786	28.51	3.707	BMb
3	5.78	Nitrite (as N)	0.512	0.164	5.96	0.777	bMB
4	7.24	Bromide	0.550	0.158	5.73	2.130	BMB
5	8.10	Nitrate (as N)	3.005	0.964	34.95	1.849	BMB
6	10.89	o-Phosphate (as P)	0.413	0.186	6.73	1.289	BMb
7	12.02	n.a.	0.019	0.005	0.18	n.a.	bMB
8	12.87	Sulfate	0.562	0.301	10.90	3.308	BMb
9	14.08	n.a.	0.017	0.004	0.13	n.a.	bMB
10	14.42	n.a.	0.011	0.001	0.05	n.a.	BMB
Total:			9.420	2.758	100.00	14.028	

Operator:Eleo Ng Timebase:ICS_1000 Sequence:081119

6 ICV

Sample Name:	**ICV**	*Injection Volume:*	**25.0**
Vial Number:	**0**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**AS14 US EPA Method 300_0**	*Bandwidth:*	**n.a.**
Quantif. Method:	**AS14 US EPA Method 300_0**	*Dilution Factor:*	**1.0000**
Recording Time:	**11/19/2008 10:23**	*Sample Weight:*	**1.0000**
Run Time (min):	**15.00**	*Sample Amount:*	**1.0000**



MANUAL INTEGRATION BEFORE/AFTER
Date: 12/12/08
Chemist: B GL: JM
Reason: Baseline
This stamp appears in red ink on original copy.

No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.36	Fluoride	0.748	0.189	6.58	0.967	BMB
2	4.89	Chloride	3.609	0.838	29.14	3.951	BM *
3	5.78	Nitrite (as N)	0.606	0.229	7.98	1.086	MB*
4	7.24	Bromide	0.550	0.158	5.49	2.130	BMB
5	8.10	Nitrate (as N)	3.005	0.964	33.52	1.849	BMB
6	10.89	o-Phosphate (as P)	0.396	0.159	5.54	1.106	BMB*
7	12.87	Sulfate	0.574	0.337	11.72	3.707	BMB*
8	14.42	n.a.	0.011	0.001	0.04	n.a.	BMB
Total:			9.499	2.876	100.00	14.796	

Work Order#: 08-12-0585

Client: WEISS Associates

EPA SM 5310 D Total Organic Carbon

Calibration

TOC 2

Pos/ Vial	Run Type	Rep #	Run Date	Run Time	Data Filename	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (ppm)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (ppm)	TC Area (cts)	TC Mass (ugC)	TC Conc (ppm)	
1	Spl	1	14Oct2008	14:16	1014M001	-	-	-	497	0.289	0.0578	-	-	-	
1	Spl	2	14Oct2008	14:26	1014M002	-	-	-	362	0.133	0.0266				METHOD BLANK
1	Spl	Avg	-	-	-	-	-	-	429	0.211	0.0422				
1	Spl	SDev	-	-	-	-	-	-	95.46	-	-	-	-	-	
1	Spl	%RSD	-	-	-	-	-	-	22.23	-	-	-	-	-	
2	Spl	1	14Oct2008	14:35	1014M003	-	-	-	682	0.503	0.1006	-	-	-	
2	Spl	2	14Oct2008	14:45	1014M004	-	-	-	741	0.571	0.1142				
2	Spl	Avg	-	-	-	-	-	-	711	0.537	0.1074				CCB
2	Spl	SDev	-	-	-	-	-	-	41.72	-	-	-	-	-	
2	Spl	%RSD	-	-	-	-	-	-	5.86	-	-	-	-	-	
3	Std1	1	14Oct2008	14:55	1014M005	-	-	-	2580	2.500	0.5000				0.5 ppm
4	Std2	1	14Oct2008	15:14	1014M006	-	-	-	10521	12.500	2.5000	-	-	-	
4	Std2	2	14Oct2008	15:24	1014M007	-	-	-	10499	12.500	2.5000				
4	Std	Avg	-	-	-	-	-	-	10510	12.500	2.5000				2.5 ppm
4	Std	SDev	-	-	-	-	-	-	15.56	-	-	-	-	-	
4	Std	%RSD	-	-	-	-	-	-	0.15	-	-	-	-	-	
** Calibration:			RF (ugC/k-cnt):		1.2530300 **										
**			R-Squared:		0.9999 **										
5	Std3	1	14Oct2008	15:33	1014M008	-	-	-	21117	25.000	5.0000				5.0 ppm
6	Std4	1	14Oct2008	15:52	1014M009	-	-	-	40867	50.000	10.0000	-	-	-	
6	Std4	2	14Oct2008	16:02	1014M010	-	-	-	40981	50.000	10.0000				10.0 ppm
6	Std	Avg	-	-	-	-	-	-	40924	50.000	10.0000	-	-	-	
6	Std	SDev	-	-	-	-	-	-	80.61	-	-	-	-	-	
6	Std	%RSD	-	-	-	-	-	-	0.20	-	-	-	-	-	
** Calibration:			RF (ugC/k-cnt):		1.2346400 **										
**			R-Squared:		0.9998 **										
7	Std5	1	14Oct2008	16:12	1014M011	-	-	-	82979	100.000	20.0000	-	-	-	
7	Std5	2	14Oct2008	16:21	1014M012	-	-	-	84058	100.000	20.0000				20.0 ppm
7	Std	Avg	-	-	-	-	-	-	83518	100.000	20.0000	-	-	-	
7	Std	SDev	-	-	-	-	-	-	762.97	-	-	-	-	-	
7	Std	%RSD	-	-	-	-	-	-	0.91	-	-	-	-	-	
** Calibration:			RF (ugC/k-cnt):		1.2041799 **										
**			R-Squared:		0.9997 **										
8	Spl	1	14Oct2008	16:31	1014M013	-	-	-	21396	25.467	5.0934	-	-	-	
8	Spl	2	14Oct2008	16:41	1014M014	-	-	-	20931	24.907	4.9814				ICV
8	Spl	Avg	-	-	-	-	-	-	21163	25.187	5.0374	-	-	-	
8	Spl	SDev	-	-	-	-	-	-	328.80	-	-	-	-	-	
8	Spl	%RSD	-	-	-	-	-	-	1.55	-	-	-	-	-	
9	Spl	1	14Oct2008	16:50	1014M015	-	-	-	21103	25.114	5.0229	-	-	-	
9	Spl	2	14Oct2008	17:00	1014M016	-	-	-	20579	24.483	4.8967				
9	Spl	Avg	-	-	-	-	-	-	20841	24.799	4.9598				CCV
9	Spl	SDev	-	-	-	-	-	-	370.52	-	-	-	-	-	
9	Spl	%RSD	-	-	-	-	-	-	1.78	-	-	-	-	-	
10	Spl	1	14Oct2008	17:09	1014M017	-	-	-	21157	25.179	5.0359	-	-	-	
10	Spl	2	14Oct2008	17:19	1014M018	-	-	-	21068	25.072	5.0144				
10	Spl	Avg	-	-	-	-	-	-	21112	25.126	5.0252				LCS
10	Spl	SDev	-	-	-	-	-	-	62.93	-	-	-	-	-	
10	Spl	%RSD	-	-	-	-	-	-	0.30	-	-	-	-	-	

TOC 2

Pos/ Vial	Run Type	Rep #	Run Date	Run Time	Data Filename	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (ppm)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (ppm)	TC Area (cts)	TC Mass (ugC)	TC Conc (ppm)	
1	Spl	1	05Dec2008	17:32	1205N001	-	-	-	1554	1.591	0.3182	-	-	-	
1	Spl	2	05Dec2008	17:41	1205N002	-	-	-	1684	1.747	0.3494	-	-	-	METHOD BLANK
1	Spl	Avg	-	-	-	-	-	-	1619	1.669	0.3338	-	-	-	
1	Spl	SDev	-	-	-	-	-	-	91.92	-	-	-	-	-	
1	Spl	%RSD	-	-	-	-	-	-	5.68	-	-	-	-	-	
2	Spl	1	05Dec2008	17:51	1205N003	-	-	-	837	0.729	0.1457	-	-	-	
2	Spl	2	05Dec2008	18:01	1205N004	-	-	-	656	0.511	0.1022	-	-	-	CCB
2	Spl	Avg	-	-	-	-	-	-	746	0.620	0.1240	-	-	-	
2	Spl	SDev	-	-	-	-	-	-	127.99	-	-	-	-	-	
2	Spl	%RSD	-	-	-	-	-	-	17.14	-	-	-	-	-	
3	Spl	1	05Dec2008	18:10	1205N005	-	-	-	21790	25.923	5.1847	-	-	-	
3	Spl	2	05Dec2008	18:20	1205N006	-	-	-	21735	25.857	5.1714	-	-	-	CCV
3	Spl	Avg	-	-	-	-	-	-	21762	25.890	5.1780	-	-	-	
3	Spl	SDev	-	-	-	-	-	-	38.89	-	-	-	-	-	
3	Spl	%RSD	-	-	-	-	-	-	0.18	-	-	-	-	-	
4	Spl	1	05Dec2008	18:30	1205N007	-	-	-	21722	25.842	5.1683	-	-	-	
4	Spl	2	05Dec2008	18:39	1205N008	-	-	-	21482	25.553	5.1106	-	-	-	CCS
4	Spl	Avg	-	-	-	-	-	-	21602	25.697	5.1394	-	-	-	
4	Spl	SDev	-	-	-	-	-	-	169.71	-	-	-	-	-	
4	Spl	%RSD	-	-	-	-	-	-	0.79	-	-	-	-	-	
5	Spl	1	05Dec2008	18:49	1205N009	-	-	-	21598	25.692	5.1385	-	-	-	
5	Spl	2	05Dec2008	18:59	1205N010	-	-	-	21819	25.958	5.1916	-	-	-	CCSA
5	Spl	Avg	-	-	-	-	-	-	21708	25.825	5.1651	-	-	-	
5	Spl	SDev	-	-	-	-	-	-	156.27	-	-	-	-	-	
5	Spl	%RSD	-	-	-	-	-	-	0.72	-	-	-	-	-	
6	Spl	1	05Dec2008	19:08	1205N011	-	-	-	19908	23.660	4.7321	-	-	-	
6	Spl	2	05Dec2008	19:18	1205N012	-	-	-	19902	23.653	4.7306	-	-	-	08-12 0461-4C 1/10
6	Spl	Avg	-	-	-	-	-	-	19905	23.657	4.7313	-	-	-	
6	Spl	SDev	-	-	-	-	-	-	4.24	-	-	-	-	-	
6	Spl	%RSD	-	-	-	-	-	-	0.02	-	-	-	-	-	
7	Spl	1	05Dec2008	19:27	1205N013	-	-	-	13152	15.537	3.1073	-	-	-	
7	Spl	2	05Dec2008	19:37	1205N014	-	-	-	13038	15.400	3.0799	-	-	-	08-12 0461-7C 20/0
7	Spl	Avg	-	-	-	-	-	-	13095	15.468	3.0936	-	-	-	
7	Spl	SDev	-	-	-	-	-	-	80.61	-	-	-	-	-	
7	Spl	%RSD	-	-	-	-	-	-	0.62	-	-	-	-	-	

BATCH TIME
Time (24 Hr): 0322
Initials:

Pos/ Vial	Run Type	Rep #	Run Date	Run Time	Data Filename	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (ppm)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (ppm)	TC Area (cts)	TC Mass (ugC)	TC Conc (ppm)
8	Spl	1	05Dec2008	20:01	1205N015	-	-	-	60791	72.819	14.5639	-	-	-
8	Spl	2	05Dec2008	20:10	1205N016	-	-	-	61396	73.547	14.7094	08-12-0406-1F 20X		
8	Spl	Avg	-	-	-	-	-	-	61093	73.183	14.6366			
8	Spl	SDev	-	-	-	-	-	-	427.80	-	-	-	-	-
8	Spl	%RSD	-	-	-	-	-	-	0.70	-	-	-	-	-
9	Spl	1	05Dec2008	20:20	1205N017	-	-	-	20247	24.068	4.8136	-	-	-
9	Spl	2	05Dec2008	20:30	1205N018	-	-	-	19950	23.711	4.7422	08-12-0406-1E 10X		
9	Spl	Avg	-	-	-	-	-	-	20098	23.889	4.7779			
9	Spl	SDev	-	-	-	-	-	-	210.01	-	-	-	-	-
9	Spl	%RSD	-	-	-	-	-	-	1.04	-	-	-	-	-
10	Spl	1	05Dec2008	20:39	1205N019	-	-	-	13369	15.798	3.1595	-	-	-
10	Spl	2	05Dec2008	20:49	1205N020	-	-	-	13549	16.014	3.2028	08-12-0406-2E 20X		
10	Spl	Avg	-	-	-	-	-	-	13459	15.906	3.1812			
10	Spl	SDev	-	-	-	-	-	-	127.28	-	-	-	-	-
10	Spl	%RSD	-	-	-	-	-	-	0.95	-	-	-	-	-
11	Spl	1	05Dec2008	20:58	1205N021	-	-	-	25401	30.265	6.0531	-	-	-
11	Spl	2	05Dec2008	21:08	1205N022	-	-	-	29182	34.812	6.9623	08-12-0558-1P		
11	Spl	Avg	-	-	-	-	-	-	27291	32.538	6.5077			
11	Spl	SDev	-	-	-	-	-	-	2673.57	-	-	-	-	-
11	Spl	%RSD	-	-	-	-	-	-	9.80	-	-	-	-	-
12	Spl	1	05Dec2008	21:17	1205N023	-	-	-	17926	21.277	4.2554	-	-	-
12	Spl	2	05Dec2008	21:27	1205N024	-	-	-	19909	23.661	4.7323	08-12-0558-2H2		
12	Spl	Avg	-	-	-	-	-	-	18917	22.469	4.4939			
12	Spl	SDev	-	-	-	-	-	-	1402.19	-	-	-	-	-
12	Spl	%RSD	-	-	-	-	-	-	7.41	-	-	-	-	-
13	Spl	1	05Dec2008	21:37	1205N025	-	-	-	37377	44.666	8.9331	-	-	-
13	Spl	2	05Dec2008	21:46	1205N026	-	-	-	40148	47.998	9.5995	08-12-0558-2J2H2		
13	Spl	Avg	-	-	-	-	-	-	38762	46.332	9.2663			
13	Spl	SDev	-	-	-	-	-	-	1959.39	-	-	-	-	-
13	Spl	%RSD	-	-	-	-	-	-	5.05	-	-	-	-	-
14	Spl	1	05Dec2008	21:56	1205N027	-	-	-	37674	45.023	9.0045	-	-	-
14	Spl	2	05Dec2008	22:06	1205N028	-	-	-	39445	47.152	9.4304	08-12-0558-2J2H2S		
14	Spl	Avg	-	-	-	-	-	-	38559	46.087	9.2175			
14	Spl	SDev	-	-	-	-	-	-	1252.29	-	-	-	-	-
14	Spl	%RSD	-	-	-	-	-	-	3.25	-	-	-	-	-
15	Spl	1	05Dec2008	22:15	1205N029	-	-	-	12642	14.923	2.9847	-	-	-
15	Spl	2	05Dec2008	22:25	1205N030	-	-	-	16166	19.161	3.8322	08-12-0558-8P		
15	Spl	Avg	-	-	-	-	-	-	14404	17.042	3.4084			
15	Spl	SDev	-	-	-	-	-	-	2491.84	-	-	-	-	-
15	Spl	%RSD	-	-	-	-	-	-	17.30	-	-	-	-	-
16	Spl	1	05Dec2008	22:34	1205N031	-	-	-	30699	36.636	7.3272	-	-	-
16	Spl	2	05Dec2008	22:44	1205N032	-	-	-	36307	43.379	8.6758	08-12-0558-4P		
16	Spl	Avg	-	-	-	-	-	-	33503	40.007	8.0015			
16	Spl	SDev	-	-	-	-	-	-	3965.46	-	-	-	-	-
16	Spl	%RSD	-	-	-	-	-	-	11.84	-	-	-	-	-
17	Spl	1	05Dec2008	22:54	1205N033	-	-	-	305278	366.799	73.3598	08-12-0558-8P		
17	Spl	2	05Dec2008	23:03	1205N034	-	-	-	315295	378.844	75.7687			
17	Spl	Avg	-	-	-	-	-	-	310286	372.821	74.5643	-	-	-
17	Spl	SDev	-	-	-	-	-	-	7083.09	-	-	-	-	-
17	Spl	%RSD	-	-	-	-	-	-	2.28	-	-	-	-	-
18	Spl	1	05Dec2008	23:13	1205N035	-	-	-	79649	95.495	19.0990	-	-	-

18	Spl	2	05Dec2008	23:23	1205N036	-	-	-	80978	97.093	19.4186			08-12-0588-5P50
18	Spl	Avg	-	-	-	-	-	-	80313	96.294	19.2588	-	-	-
18	Spl	SDev	-	-	-	-	-	-	939.74	-	-	-	-	-
18	Spl	%RSD	-	-	-	-	-	-	1.17	-	-	-	-	-
19	Spl	1	05Dec2008	23:32	1205N037	-	-	-	305662	367.261	73.4521	-	-	-
19	Spl	2	05Dec2008	23:42	1205N038	-	-	-	313901	377.167	75.4335			08-12-0588-6P
19	Spl	Avg	-	-	-	-	-	-	309781	372.214	74.4428	-	-	-
19	Spl	SDev	-	-	-	-	-	-	5825.85	-	-	-	-	-
19	Spl	%RSD	-	-	-	-	-	-	1.88	-	-	-	-	-
20	Spl	1	05Dec2008	23:51	1205N039	-	-	-	79411	95.209	19.0417	-	-	-
20	Spl	2	06Dec2008	00:01	1205N040	-	-	-	81286	97.463	19.4927			08-12-0588-6P50
20	Spl	Avg	-	-	-	-	-	-	80348	96.336	19.2672	-	-	-
20	Spl	SDev	-	-	-	-	-	-	1325.82	-	-	-	-	-
20	Spl	%RSD	-	-	-	-	-	-	1.65	-	-	-	-	-
21	Spl	1	06Dec2008	00:10	1205N041	-	-	-	11954	14.096	2.8192	-	-	-
21	Spl	2	06Dec2008	00:20	1205N042	-	-	-	13497	15.951	3.1903			08-12-0588-7P50
21	Spl	Avg	-	-	-	-	-	-	12725	15.024	3.0048	-	-	-
21	Spl	SDev	-	-	-	-	-	-	1091.07	-	-	-	-	-
21	Spl	%RSD	-	-	-	-	-	-	8.57	-	-	-	-	-
22	Spl	1	06Dec2008	00:30	1205N043	-	-	-	7065	8.217	1.6435			08-12-0588-7P100
22	Spl	2	06Dec2008	00:39	1205N044	-	-	-	7942	9.272	1.8544	-	-	-
22	Spl	Avg	-	-	-	-	-	-	7503	8.745	1.7489	-	-	-
22	Spl	SDev	-	-	-	-	-	-	620.13	-	-	-	-	-
22	Spl	%RSD	-	-	-	-	-	-	8.26	-	-	-	-	-
23	Spl	1	06Dec2008	00:49	1205N045	-	-	-	20847	24.789	4.9579	-	-	-
23	Spl	2	06Dec2008	00:59	1205N046	-	-	-	22053	26.240	5.2479			08-12-0588-9P
23	Spl	Avg	-	-	-	-	-	-	21450	25.514	5.1029	-	-	-
23	Spl	SDev	-	-	-	-	-	-	852.77	-	-	-	-	-
23	Spl	%RSD	-	-	-	-	-	-	3.98	-	-	-	-	-
24	Spl	1	06Dec2008	01:08	1205N047	-	-	-	5660	6.528	1.3056			08-12-0585-KSL
24	Spl	2	06Dec2008	01:18	1205N048	-	-	-	8474	9.912	1.9823	-	-	-
24	Spl	Avg	-	-	-	-	-	-	7067	8.220	1.6440	-	-	-
24	Spl	SDev	-	-	-	-	-	-	1989.80	-	-	-	-	-
24	Spl	%RSD	-	-	-	-	-	-	28.16	-	-	-	-	-
25	Spl	1	06Dec2008	01:27	1205N049	-	-	-	19570	23.254	4.6508	-	-	-
25	Spl	2	06Dec2008	01:37	1205N050	-	-	-	25188	30.009	6.0018			08-12-0565-1C
25	Spl	Avg	-	-	-	-	-	-	22379	26.632	5.3263	-	-	-
25	Spl	SDev	-	-	-	-	-	-	3972.53	-	-	-	-	-
25	Spl	%RSD	-	-	-	-	-	-	17.75	-	-	-	-	-
26	Spl	1	06Dec2008	01:46	1205N051	-	-	-	40733	48.701	9.7402	-	-	-
26	Spl	2	06Dec2008	01:56	1205N052	-	-	-	50893	60.918	12.1835			08-12-0565-2C
26	Spl	Avg	-	-	-	-	-	-	45813	54.809	10.9619	-	-	-
26	Spl	SDev	-	-	-	-	-	-	7184.21	-	-	-	-	-
26	Spl	%RSD	-	-	-	-	-	-	15.68	-	-	-	-	-
27	Spl	1	06Dec2008	02:06	1205N053	-	-	-	17829	21.160	4.2321			08-12-0565-2C5
27	Spl	2	06Dec2008	02:15	1205N054	-	-	-	19479	23.144	4.6289	-	-	-
27	Spl	Avg	-	-	-	-	-	-	18654	22.152	4.4305	-	-	-
27	Spl	SDev	-	-	-	-	-	-	1166.73	-	-	-	-	-
27	Spl	%RSD	-	-	-	-	-	-	6.25	-	-	-	-	-
28	Spl	1	06Dec2008	02:25	1205N055	-	-	-	14281	16.894	3.3788	-	-	-
28	Spl	2	06Dec2008	02:34	1205N056	-	-	-	19377	23.022	4.6044			08-12-0565-3C
28	Spl	Avg	-	-	-	-	-	-	16829	19.958	3.9916	-	-	-
28	Spl	SDev	-	-	-	-	-	-	3603.42	-	-	-	-	-
28	Spl	%RSD	-	-	-	-	-	-	21.41	-	-	-	-	-

29	Spl	1	06Dec2008	02:44	1205N057	-	-	-	76732	91.987	18.3975	-	-	-
29	Spl	2	06Dec2008	02:54	1205N058	-	-	-	81933	98.241	19.6483			
29	Spl	Avg	-	-	-	-	-	-	79332	95.114	19.0229			
29	Spl	SDev	-	-	-	-	-	-	3677.66	-	-	-	-	-
29	Spl	%RSD	-	-	-	-	-	-	4.64	-	-	-	-	-
30	Spl	1	06Dec2008	03:03	1205N059	-	-	-	20209	24.022	4.8044	-	-	-
30	Spl	2	06Dec2008	03:13	1205N060	-	-	-	21393	25.446	5.0892			
30	Spl	Avg	-	-	-	-	-	-	20801	24.734	4.9468			
30	Spl	SDev	-	-	-	-	-	-	837.21	-	-	-	-	-
30	Spl	%RSD	-	-	-	-	-	-	4.02	-	-	-	-	-
31	Spl	1	06Dec2008	03:22	1205N061	-	-	-	14387	17.022	3.4043	-	-	-
31	Spl	2	06Dec2008	03:32	1205N062	-	-	-	21260	25.286	5.0572			
31	Spl	Avg	-	-	-	-	-	-	17823	21.154	4.2308	-	-	-
31	Spl	SDev	-	-	-	-	-	-	4859.94	-	-	-	-	-
31	Spl	%RSD	-	-	-	-	-	-	27.27	-	-	-	-	-
32	Spl	1	06Dec2008	03:41	1205N063	-	-	-	1943	2.059	0.4117	-	-	-
32	Spl	2	06Dec2008	03:51	1205N064	-	-	-	2572	2.815	0.5630	-	-	-
32	Spl	Avg	-	-	-	-	-	-	2257	2.437	0.4873	-	-	-
32	Spl	SDev	-	-	-	-	-	-	444.77	-	-	-	-	-
32	Spl	%RSD	-	-	-	-	-	-	19.70	-	-	-	-	-
33	Spl	1	06Dec2008	04:01	1205N065	-	-	-	21971	26.141	5.2282	-	-	-
33	Spl	2	06Dec2008	04:10	1205N066	-	-	-	22605	26.903	5.3807	-	-	-
33	Spl	Avg	-	-	-	-	-	-	22288	26.522	5.3044	-	-	-
33	Spl	SDev	-	-	-	-	-	-	448.31	-	-	-	-	-
33	Spl	%RSD	-	-	-	-	-	-	2.01	-	-	-	-	-
34	Spl	1	06Dec2008	04:20	1205N067	-	-	-	1148	1.103	0.2205	-	-	-
34	Spl	2	06Dec2008	04:29	1205N068	-	-	-	1500	1.526	0.3052	-	-	-
34	Spl	Avg	-	-	-	-	-	-	1324	1.314	0.2629			
34	Spl	SDev	-	-	-	-	-	-	248.90	-	-	-	-	-
34	Spl	%RSD	-	-	-	-	-	-	18.80	-	-	-	-	-
35	Spl	1	06Dec2008	04:39	1205N069	-	-	-	1101	1.046	0.2092	-	-	-
35	Spl	2	06Dec2008	04:49	1205N070	-	-	-	1216	1.184	0.2369	-	-	-
35	Spl	Avg	-	-	-	-	-	-	1158	1.115	0.2231	-	-	-
35	Spl	SDev	-	-	-	-	-	-	81.32	-	-	-	-	-
35	Spl	%RSD	-	-	-	-	-	-	7.02	-	-	-	-	-
36	Spl	1	06Dec2008	04:58	1205N071	-	-	-	21381	25.431	5.0863	-	-	-
36	Spl	2	06Dec2008	05:08	1205N072	-	-	-	21714	25.832	5.1664	-	-	-
36	Spl	Avg	-	-	-	-	-	-	21547	25.632	5.1263	-	-	-
36	Spl	SDev	-	-	-	-	-	-	235.47	-	-	-	-	-
36	Spl	%RSD	-	-	-	-	-	-	1.09	-	-	-	-	-
37	Spl	1	06Dec2008	05:17	1205N073	-	-	-	21478	25.548	5.1096	-	-	-
37	Spl	2	06Dec2008	05:27	1205N074	-	-	-	21597	25.691	5.1382	-	-	-
37	Spl	Avg	-	-	-	-	-	-	21537	25.620	5.1239	-	-	-
37	Spl	SDev	-	-	-	-	-	-	84.15	-	-	-	-	-
37	Spl	%RSD	-	-	-	-	-	-	0.39	-	-	-	-	-
38	Spl	1	06Dec2008	05:36	1205N075	-	-	-	21406	25.462	5.0923	-	-	-
38	Spl	2	06Dec2008	05:46	1205N076	-	-	-	21481	25.552	5.1103	-	-	-
38	Spl	Avg	-	-	-	-	-	-	21443	25.507	5.1013	-	-	-
38	Spl	SDev	-	-	-	-	-	-	53.03	-	-	-	-	-
38	Spl	%RSD	-	-	-	-	-	-	0.25	-	-	-	-	-
39	Spl	1	06Dec2008	05:56	1205N077	-	-	-	29952	35.738	7.1475	-	-	-
39	Spl	2	06Dec2008	06:05	1205N078	-	-	-	35789	42.756	8.5512	-	-	-
39	Spl	Avg	-	-	-	-	-	-	32870	39.247	7.8494	-	-	-
39	Spl	SDev	-	-	-	-	-	-	4127.38	-	-	-	-	-
39	Spl	%RSD	-	-	-	-	-	-	12.56	-	-	-	-	-

40	Spl	1	06Dec2008	06:15	1205N079	-	-	-	15700	18.600	3.7201	-	-	
40	Spl	2	06Dec2008	06:25	1205N080	-	-	-	18292	21.717	4.3434	-	-	08-12-07161P
40	Spl	Avg	-	-	-	-	-	-	16996	20.159	4.0318	-	-	
40	Spl	SDev	-	-	-	-	-	-	1832.82	-	-	-	-	
40	Spl	%RSD	-	-	-	-	-	-	10.78	-	-	-	-	
41	Spl	1	06Dec2008	06:34	1205N081	-	-	-	21728	25.849	5.1697	-	-	
41	Spl	2	06Dec2008	06:44	1205N082	-	-	-	24676	29.393	5.8787	-	-	08-12-07241P
41	Spl	Avg	-	-	-	-	-	-	23202	27.621	5.5242	-	-	
41	Spl	SDev	-	-	-	-	-	-	2084.55	-	-	-	-	
41	Spl	%RSD	-	-	-	-	-	-	8.98	-	-	-	-	
42	Spl	1	06Dec2008	06:53	1205N083	-	-	-	58617	70.205	14.0411	-	-	
42	Spl	2	06Dec2008	07:03	1205N084	-	-	-	65796	78.838	15.7675	-	-	08-12-07242P
42	Spl	Avg	-	-	-	-	-	-	62206	74.521	14.9043	-	-	
42	Spl	SDev	-	-	-	-	-	-	5076.32	-	-	-	-	
42	Spl	%RSD	-	-	-	-	-	-	8.16	-	-	-	-	
43	Spl	1	06Dec2008	07:12	1205N085	-	-	-	20209	24.022	4.8044	-	-	
43	Spl	2	06Dec2008	07:22	1205N086	-	-	-	21426	25.486	5.0971	-	-	08-12-07243P5X
43	Spl	Avg	-	-	-	-	-	-	20817	24.754	4.9508	-	-	
43	Spl	SDev	-	-	-	-	-	-	860.55	-	-	-	-	
43	Spl	%RSD	-	-	-	-	-	-	4.13	-	-	-	-	
44	Spl	1	06Dec2008	07:32	1205N087	-	-	-	22236	26.460	5.2919	-	-	
44	Spl	2	06Dec2008	07:41	1205N088	-	-	-	23516	27.999	5.5997	-	-	08-12-07244P5X
44	Spl	Avg	-	-	-	-	-	-	22876	27.229	5.4458	-	-	
44	Spl	SDev	-	-	-	-	-	-	905.10	-	-	-	-	
44	Spl	%RSD	-	-	-	-	-	-	3.96	-	-	-	-	
45	Spl	1	06Dec2008	07:51	1205N089	-	-	-	37241	44.502	8.9004	-	-	
45	Spl	2	06Dec2008	08:00	1205N090	-	-	-	43840	52.437	10.4874	-	-	08-12-07245P
45	Spl	Avg	-	-	-	-	-	-	40540	48.470	9.6939	-	-	
45	Spl	SDev	-	-	-	-	-	-	4666.20	-	-	-	-	
45	Spl	%RSD	-	-	-	-	-	-	11.51	-	-	-	-	
46	Spl	1	06Dec2008	08:10	1205N091	-	-	-	37603	44.937	8.9875	-	-	
46	Spl	2	06Dec2008	08:20	1205N092	-	-	-	44314	53.007	10.6014	-	-	08-12-07246P
46	Spl	Avg	-	-	-	-	-	-	40958	48.972	9.7944	-	-	
46	Spl	SDev	-	-	-	-	-	-	4745.39	-	-	-	-	
46	Spl	%RSD	-	-	-	-	-	-	11.59	-	-	-	-	
47	Spl	1	06Dec2008	08:29	1205N093	-	-	-	50155	60.030	12.0061	-	-	
47	Spl	2	06Dec2008	08:39	1205N094	-	-	-	53308	63.822	12.7643	-	-	08-12-07247P
47	Spl	Avg	-	-	-	-	-	-	51731	61.926	12.3852	-	-	
47	Spl	SDev	-	-	-	-	-	-	2229.51	-	-	-	-	
47	Spl	%RSD	-	-	-	-	-	-	4.31	-	-	-	-	
48	Spl	1	06Dec2008	08:49	1205N095	-	-	-	12138	14.317	2.8635	-	-	
48	Spl	2	06Dec2008	08:58	1205N096	-	-	-	13548	16.013	3.2026	-	-	08-12-07248P5X
48	Spl	Avg	-	-	-	-	-	-	12843	15.165	3.0330	-	-	
48	Spl	SDev	-	-	-	-	-	-	997.02	-	-	-	-	
48	Spl	%RSD	-	-	-	-	-	-	7.76	-	-	-	-	
49	Spl	1	06Dec2008	09:08	1205N097	-	-	-	28375	33.841	6.7683	-	-	
49	Spl	2	06Dec2008	09:17	1205N098	-	-	-	34406	41.093	8.2186	-	-	08-12-07249P
49	Spl	Avg	-	-	-	-	-	-	31390	37.467	7.4934	-	-	
49	Spl	SDev	-	-	-	-	-	-	4264.56	-	-	-	-	
49	Spl	%RSD	-	-	-	-	-	-	13.59	-	-	-	-	
50	Spl	1	06Dec2008	09:27	1205N099	-	-	-	50085	59.946	11.9892	-	-	
50	Spl	2	06Dec2008	09:37	1205N100	-	-	-	54232	64.933	12.9865	-	-	08-12-07250P 1/5
50	Spl	Avg	-	-	-	-	-	-	52158	62.439	12.4879	-	-	
50	Spl	SDev	-	-	-	-	-	-	2932.37	-	-	-	-	

50	Spl	%RSD	-	-	-	-	-	-	5.62	-	-	-	-	-
51	Spl	1	06Dec2008	09:46	1205N101	-	-	-	49996	59.839	11.9678	-	-	-
51	Spl	2	06Dec2008	09:56	1205N102	-	-	-	53481	64.030	12.8059			
51	Spl	Avg	-	-	-	-	-	-	51738	61.934	12.3869	-	-	-
51	Spl	SDev	-	-	-	-	-	-	2464.27	-	-	-	-	-
51	Spl	%RSD	-	-	-	-	-	-	4.76	-	-	-	-	-
52	Spl	1	06Dec2008	10:05	1205N103	-	-	-	2075	2.217	0.4435	-	-	-
52	Spl	2	06Dec2008	10:15	1205N104	-	-	-	2623	2.876	0.5752	-	-	-
52	Spl	Avg	-	-	-	-	-	-	2349	2.547	0.5094	-	-	-
52	Spl	SDev	-	-	-	-	-	-	387.49	-	-	-	-	-
52	Spl	%RSD	-	-	-	-	-	-	16.50	-	-	-	-	-
53	Spl	1	06Dec2008	10:25	1205N105	-	-	-	21952	26.118	5.2236	-	-	-
53	Spl	2	06Dec2008	10:34	1205N106	-	-	-	22453	26.720	5.3441	-	-	-
53	Spl	Avg	-	-	-	-	-	-	22202	26.419	5.2839			-
53	Spl	SDev	-	-	-	-	-	-	354.26	-	-	-	-	-
53	Spl	%RSD	-	-	-	-	-	-	1.60	-	-	-	-	-

BATCH TIME
Time (24 Hr): 0908
Initials:

Calscience Environmental Laboratories, Inc.

December 17, 2008

Tim Utterback
Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Subject: **Calscience Work Order No.: 08-12-0749**
Client Reference: UC Davis / 388-1856-2-16

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 12/6/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Emma C. Dennison
for

Calscience Environmental
Laboratories, Inc.
Virendra Patel
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/06/08
5801 Christie Avenue		Work Order No:	08-12-0749
Suite 600		Preparation:	N/A
Emeryville, CA 94608-1939		Method:	RSK-175M

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2376	**08-12-0749-1-B**	**12/04/08 16:25**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	7020	17.0	0.0547	10		ug/L

GWGW2386	**08-12-0749-4-D**	**12/05/08 09:50**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	10000	17.0	0.0547	10		ug/L

GWGW2375	**08-12-0749-6-B**	**12/05/08 09:50**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	13500	17.0	0.0547	10		ug/L

GWGW2387	**08-12-0749-7-B**	**12/05/08 11:30**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	18300	17.0	0.0547	10		ug/L

GWGW2384	**08-12-0749-8-B**	**12/05/08 11:15**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	11500	17.0	0.0547	10		ug/L

GWGW2389	**08-12-0749-11-B**	**12/05/08 14:15**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	13000	17.0	0.0547	10		ug/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/06/08
5801 Christie Avenue		Work Order No:	08-12-0749
Suite 600		Preparation:	N/A
Emeryville, CA 94608-1939		Method:	RSK-175M

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2388	**08-12-0749-12-B**	**12/05/08 14:50**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	12200	17.0	0.0547	10		ug/L

Method Blank	**099-12-659-36**	**N/A**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	ND	1.70	0.00547	1		ug/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/06/08
5801 Christie Avenue		Work Order No:	08-12-0749
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6010B

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2376	**08-12-0749-1-D**	**12/04/08 16:25**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:31**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	18.0	0.0500	0.0464	1		mg/L

GWGW2386	**08-12-0749-4-G**	**12/05/08 09:50**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:32**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	16.8	0.0500	0.0464	1		mg/L

GWGW2375	**08-12-0749-6-D**	**12/05/08 09:50**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:34**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	15.0	0.0500	0.0464	1		mg/L

GWGW2387	**08-12-0749-7-C**	**12/05/08 11:30**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:36**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	18.0	0.0500	0.0464	1		mg/L

GWGW2384	**08-12-0749-8-D**	**12/05/08 11:15**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:37**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	18.0	0.0500	0.0464	1		mg/L

EBGW0017	**08-12-0749-10-I**	**12/05/08 12:25**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:39**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	ND	0.0500	0.0464	1		mg/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/06/08
5801 Christie Avenue		Work Order No:	08-12-0749
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6010B

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2389	**08-12-0749-11-D**	**12/05/08 14:15**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:44**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	18.1	0.0500	0.0464	1		mg/L

GWGW2388	**08-12-0749-12-D**	**12/05/08 14:50**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:46**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	17.4	0.0500	0.0464	1		mg/L

Method Blank	**097-01-003-8,893**	**N/A**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:03**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	ND	0.0500	0.0464	1		mg/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/06/08
5801 Christie Avenue		Work Order No:	08-12-0749
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6020
		Units:	mg/L
Project: UC Davis / 388-1856-2-16			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2376	**08-12-0749-1-D**	**12/04/08 16:25**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/15/08 17:03**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	0.00402	0.00100	0.000169	1		Vanadium	0.0111	0.00100	0.0000157	1	
Chromium	0.0641	0.00100	0.0000184	1	B	Aluminum	0.0270	0.0500	0.00188	1	J

GWGW2386	**08-12-0749-4-G**	**12/05/08 09:50**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/10/08 17:54**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	0.00260	0.00100	0.000169	1		Vanadium	0.0112	0.00100	0.0000157	1	
Chromium	0.0322	0.00100	0.0000184	1	B	Aluminum	0.00446	0.0500	0.00188	1	J

GWGW2375	**08-12-0749-6-D**	**12/05/08 09:50**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/10/08 17:58**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	0.00409	0.00100	0.000169	1		Vanadium	0.0172	0.00100	0.0000157	1	
Chromium	0.0415	0.00100	0.0000184	1	B	Aluminum	0.0157	0.0500	0.00188	1	J

GWGW2387	**08-12-0749-7-C**	**12/05/08 11:30**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/10/08 18:03**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	0.00287	0.00100	0.000169	1		Vanadium	0.0109	0.00100	0.0000157	1	
Chromium	0.0921	0.00100	0.0000184	1	B	Aluminum	0.0137	0.0500	0.00188	1	J

GWGW2384	**08-12-0749-8-D**	**12/05/08 11:15**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/10/08 18:07**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	0.00233	0.00100	0.000169	1		Vanadium	0.0109	0.00100	0.0000157	1	
Chromium	0.0467	0.00100	0.0000184	1	B	Aluminum	0.0169	0.0500	0.00188	1	J

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/06/08
5801 Christie Avenue		Work Order No:	08-12-0749
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6020
		Units:	mg/L
Project: UC Davis / 388-1856-2-16			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EBGW0017	**08-12-0749-10-E**	**12/05/08 12:25**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/10/08 18:12**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	ND	0.00100	0.0000790	1		Molybdenum	ND	0.00100	0.000280	1	
Arsenic	0.000406	0.00100	0.000169	1	J	Nickel	ND	0.00100	0.0000234	1	
Barium	0.000526	0.00100	0.0000401	1	J	Selenium	ND	0.00100	0.000783	1	
Beryllium	ND	0.00100	0.0000553	1		Silver	ND	0.00100	0.0000183	1	
Cadmium	ND	0.00100	0.0000151	1		Thallium	ND	0.00100	0.0000153	1	
Chromium	ND	0.00100	0.0000184	1		Vanadium	0.00130	0.00100	0.0000157	1	
Cobalt	ND	0.00100	0.0000171	1		Zinc	ND	0.00500	0.000340	1	
Copper	0.0000218	0.00100	0.0000181	1	J	Aluminum	0.00406	0.0500	0.00188	1	J
Lead	0.0000281	0.00100	0.0000130	1	J						

GWGW2389	**08-12-0749-11-D**	**12/05/08 14:15**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/10/08 18:17**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	0.00225	0.00100	0.000169	1		Vanadium	0.0102	0.00100	0.0000157	1	
Chromium	0.0587	0.00100	0.0000184	1	B	Aluminum	0.0268	0.0500	0.00188	1	J

GWGW2388	**08-12-0749-12-D**	**12/05/08 14:50**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/10/08 18:21**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	0.00255	0.00100	0.000169	1		Vanadium	0.0108	0.00100	0.0000157	1	
Chromium	0.0457	0.00100	0.0000184	1	B	Aluminum	0.00650	0.0500	0.00188	1	J

Method Blank	**096-06-003-1,821**	**N/A**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/11/08 13:33**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	ND	0.00100	0.0000790	1		Molybdenum	ND	0.00100	0.000280	1	
Arsenic	ND	0.00100	0.000169	1		Nickel	ND	0.00100	0.0000234	1	
Barium	ND	0.00100	0.0000401	1		Selenium	ND	0.00100	0.000783	1	
Beryllium	ND	0.00100	0.0000553	1		Silver	ND	0.00100	0.0000183	1	
Cadmium	ND	0.00100	0.0000151	1		Thallium	ND	0.00100	0.0000153	1	
Chromium	0.00139	0.00100	0.0000184	1		Vanadium	ND	0.00100	0.0000157	1	
Cobalt	ND	0.00100	0.0000171	1		Zinc	ND	0.00500	0.000340	1	
Copper	ND	0.00100	0.0000181	1		Aluminum	ND	0.0500	0.00188	1	
Lead	ND	0.00100	0.0000130	1							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/06/08
5801 Christie Avenue		Work Order No:	08-12-0749
Suite 600		Preparation:	EPA 7470A Filt.
Emeryville, CA 94608-1939		Method:	EPA 7470A

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EBGW0017	**08-12-0749-10-E**	**12/05/08 12:25**	**Aqueous**	**Mercury**	**12/08/08**	**12/08/08 15:58**	**081208L02F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Mercury	ND	0.000200	0.0000177	1		mg/L

Method Blank	**099-12-457-97**	**N/A**	**Aqueous**	**Mercury**	**12/08/08**	**12/08/08 15:29**	**081208L02F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Mercury	ND	0.000200	0.0000177	1		mg/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/06/08
5801 Christie Avenue		Work Order No:	08-12-0749
Suite 600		Preparation:	EPA 3520C
Emeryville, CA 94608-1939		Method:	EPA 8270C(M) Isotope Dilution

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2403	**08-12-0749-2-A**	**12/04/08 16:30**	**Aqueous**	**GC/MS AAA**	**12/08/08**	**12/11/08 23:11**	**081208L14D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	1.3	2.0	0.40	1	J	ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	96	56-123	

GWGW2370	**08-12-0749-3-A**	**12/04/08 15:45**	**Aqueous**	**GC/MS AAA**	**12/08/08**	**12/11/08 23:35**	**081208L14D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	2.2	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	97	56-123	

GWGW2374	**08-12-0749-5-A**	**12/05/08 11:50**	**Aqueous**	**GC/MS AAA**	**12/08/08**	**12/12/08 00:00**	**081208L14D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	0.71	2.0	0.40	1	J	ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	90	56-123	

GWGW2384	**08-12-0749-8-A**	**12/05/08 11:15**	**Aqueous**	**GC/MS AAA**	**12/08/08**	**12/12/08 00:24**	**081208L14D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	96	56-123	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/06/08
5801 Christie Avenue		Work Order No:	08-12-0749
Suite 600		Preparation:	EPA 3520C
Emeryville, CA 94608-1939		Method:	EPA 8270C(M) Isotope Dilution

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EBGW0017	**08-12-0749-10-D**	**12/05/08 12:25**	**Aqueous**	**GC/MS AAA**	**12/08/08**	**12/12/08 00:49**	**081208L14D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	88	56-123	

Method Blank	**099-09-004-1,158**	**N/A**	**Aqueous**	**GC/MS AAA**	**12/08/08**	**12/10/08 13:35**	**081208L14D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	95	56-123	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/06/08
5801 Christie Avenue		Work Order No:	08-12-0749
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2386	**08-12-0749-4-A**	**12/05/08 09:50**	**Aqueous**	**GC/MS L**	**12/08/08**	**12/09/08 06:23**	**081208L02**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	5.0	1.5	1		1,1-Dichloroethene	ND	0.50	0.039	1	
Benzene	ND	0.50	0.50	1		c-1,2-Dichloroethene	ND	0.50	0.029	1	
Bromochloromethane	ND	0.50	0.11	1		t-1,2-Dichloroethene	ND	0.50	0.046	1	
Bromodichloromethane	ND	0.50	0.041	1		1,2-Dichloropropane	ND	0.50	0.036	1	
Bromoform	ND	0.50	0.11	1		c-1,3-Dichloropropene	ND	0.50	0.028	1	
Bromomethane	ND	0.50	0.19	1		t-1,3-Dichloropropene	ND	0.50	0.032	1	
2-Butanone	ND	5.0	1.5	1		Ethylbenzene	ND	0.50	0.079	1	
Carbon Disulfide	ND	0.50	0.13	1		2-Hexanone	ND	5.0	1.5	1	
Carbon Tetrachloride	ND	0.50	0.045	1		Methylene Chloride	ND	0.50	0.13	1	
Chlorobenzene	ND	0.50	0.38	1		4-Methyl-2-Pentanone	ND	5.0	1.3	1	
Chloroethane	ND	0.50	0.067	1		Styrene	ND	0.50	0.31	1	
Chloroform	0.71	0.50	0.087	1		1,1,2,2-Tetrachloroethane	ND	0.50	0.098	1	
Chloromethane	ND	0.50	0.069	1		Tetrachloroethene	ND	0.50	0.027	1	
Dibromochloromethane	ND	0.50	0.048	1		Toluene	ND	0.50	0.46	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	0.88	1		1,1,1-Trichloroethane	ND	0.50	0.046	1	
1,2-Dibromoethane	ND	0.50	0.12	1		1,1,2-Trichloroethane	ND	0.50	0.086	1	
1,2-Dichlorobenzene	ND	0.50	0.029	1		Trichloroethene	ND	0.50	0.036	1	
1,3-Dichlorobenzene	ND	0.50	0.028	1		Vinyl Chloride	ND	0.50	0.041	1	
1,4-Dichlorobenzene	ND	0.50	0.025	1		p/m-Xylene	ND	0.50	0.13	1	
1,1-Dichloroethane	ND	0.50	0.026	1		o-Xylene	ND	0.50	0.32	1	
1,2-Dichloroethane	ND	0.50	0.080	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	92	73-157		Dibromofluoromethane	100	82-142	
Toluene-d8	86	82-112		1,4-Bromofluorobenzene	92	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/06/08
5801 Christie Avenue		Work Order No:	08-12-0749
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 2 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TBGW0522	**08-12-0749-9-A**	**12/05/08 07:00**	**Aqueous**	**GC/MS L**	**12/08/08**	**12/09/08 05:29**	**081208L02**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	5.0	1.5	1		1,1-Dichloroethene	ND	0.50	0.039	1	
Benzene	ND	0.50	0.50	1		c-1,2-Dichloroethene	ND	0.50	0.029	1	
Bromochloromethane	ND	0.50	0.11	1		t-1,2-Dichloroethene	ND	0.50	0.046	1	
Bromodichloromethane	ND	0.50	0.041	1		1,2-Dichloropropane	ND	0.50	0.036	1	
Bromoform	ND	0.50	0.11	1		c-1,3-Dichloropropene	ND	0.50	0.028	1	
Bromomethane	ND	0.50	0.19	1		t-1,3-Dichloropropene	ND	0.50	0.032	1	
2-Butanone	ND	5.0	1.5	1		Ethylbenzene	ND	0.50	0.079	1	
Carbon Disulfide	ND	0.50	0.13	1		2-Hexanone	ND	5.0	1.5	1	
Carbon Tetrachloride	ND	0.50	0.045	1		Methylene Chloride	ND	0.50	0.13	1	
Chlorobenzene	ND	0.50	0.38	1		4-Methyl-2-Pentanone	ND	5.0	1.3	1	
Chloroethane	ND	0.50	0.067	1		Styrene	ND	0.50	0.31	1	
Chloroform	ND	0.50	0.087	1		1,1,2,2-Tetrachloroethane	ND	0.50	0.098	1	
Chloromethane	ND	0.50	0.069	1		Tetrachloroethene	ND	0.50	0.027	1	
Dibromochloromethane	ND	0.50	0.048	1		Toluene	ND	0.50	0.46	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	0.88	1		1,1,1-Trichloroethane	ND	0.50	0.046	1	
1,2-Dibromoethane	ND	0.50	0.12	1		1,1,2-Trichloroethane	ND	0.50	0.086	1	
1,2-Dichlorobenzene	ND	0.50	0.029	1		Trichloroethene	ND	0.50	0.036	1	
1,3-Dichlorobenzene	ND	0.50	0.028	1		Vinyl Chloride	ND	0.50	0.041	1	
1,4-Dichlorobenzene	ND	0.50	0.025	1		p/m-Xylene	ND	0.50	0.13	1	
1,1-Dichloroethane	ND	0.50	0.026	1		o-Xylene	ND	0.50	0.32	1	
1,2-Dichloroethane	ND	0.50	0.080	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	90	73-157		Dibromofluoromethane	98	82-142	
Toluene-d8	87	82-112		1,4-Bromofluorobenzene	92	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/06/08
5801 Christie Avenue		Work Order No:	08-12-0749
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EBGW0017	**08-12-0749-10-A**	**12/05/08 12:25**	**Aqueous**	**GC/MS L**	**12/08/08**	**12/09/08 05:56**	**081208L02**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	12	5.0	1.5	1		1,1-Dichloroethene	ND	0.50	0.039	1	
Benzene	ND	0.50	0.50	1		c-1,2-Dichloroethene	ND	0.50	0.029	1	
Bromochloromethane	ND	0.50	0.11	1		t-1,2-Dichloroethene	ND	0.50	0.046	1	
Bromodichloromethane	ND	0.50	0.041	1		1,2-Dichloropropane	ND	0.50	0.036	1	
Bromoform	ND	0.50	0.11	1		c-1,3-Dichloropropene	ND	0.50	0.028	1	
Bromomethane	ND	0.50	0.19	1		t-1,3-Dichloropropene	ND	0.50	0.032	1	
2-Butanone	ND	5.0	1.5	1		Ethylbenzene	ND	0.50	0.079	1	
Carbon Disulfide	ND	0.50	0.13	1		2-Hexanone	ND	5.0	1.5	1	
Carbon Tetrachloride	ND	0.50	0.045	1		Methylene Chloride	ND	0.50	0.13	1	
Chlorobenzene	ND	0.50	0.38	1		4-Methyl-2-Pentanone	ND	5.0	1.3	1	
Chloroethane	ND	0.50	0.067	1		Styrene	ND	0.50	0.31	1	
Chloroform	ND	0.50	0.087	1		1,1,2,2-Tetrachloroethane	ND	0.50	0.098	1	
Chloromethane	ND	0.50	0.069	1		Tetrachloroethene	ND	0.50	0.027	1	
Dibromochloromethane	ND	0.50	0.048	1		Toluene	ND	0.50	0.46	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	0.88	1		1,1,1-Trichloroethane	ND	0.50	0.046	1	
1,2-Dibromoethane	ND	0.50	0.12	1		1,1,2-Trichloroethane	ND	0.50	0.086	1	
1,2-Dichlorobenzene	ND	0.50	0.029	1		Trichloroethene	ND	0.50	0.036	1	
1,3-Dichlorobenzene	ND	0.50	0.028	1		Vinyl Chloride	ND	0.50	0.041	1	
1,4-Dichlorobenzene	ND	0.50	0.025	1		p/m-Xylene	ND	0.50	0.13	1	
1,1-Dichloroethane	ND	0.50	0.026	1		o-Xylene	ND	0.50	0.32	1	
1,2-Dichloroethane	ND	0.50	0.080	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	96	73-157		Dibromofluoromethane	103	82-142	
Toluene-d8	84	82-112		1,4-Bromofluorobenzene	88	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/06/08
5801 Christie Avenue		Work Order No:	08-12-0749
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-025-729**	**N/A**	**Aqueous**	**GC/MS L**	**12/08/08**	**12/09/08 00:58**	**081208L02**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	5.0	1.5	1		1,1-Dichloroethene	ND	0.50	0.039	1	
Benzene	ND	0.50	0.50	1		c-1,2-Dichloroethene	ND	0.50	0.029	1	
Bromochloromethane	ND	0.50	0.11	1		t-1,2-Dichloroethene	ND	0.50	0.046	1	
Bromodichloromethane	ND	0.50	0.041	1		1,2-Dichloropropane	ND	0.50	0.036	1	
Bromoform	ND	0.50	0.11	1		c-1,3-Dichloropropene	ND	0.50	0.028	1	
Bromomethane	ND	0.50	0.19	1		t-1,3-Dichloropropene	ND	0.50	0.032	1	
2-Butanone	ND	5.0	1.5	1		Ethylbenzene	ND	0.50	0.079	1	
Carbon Disulfide	ND	0.50	0.13	1		2-Hexanone	ND	5.0	1.5	1	
Carbon Tetrachloride	ND	0.50	0.045	1		Methylene Chloride	ND	0.50	0.13	1	
Chlorobenzene	ND	0.50	0.38	1		4-Methyl-2-Pentanone	ND	5.0	1.3	1	
Chloroethane	ND	0.50	0.067	1		Styrene	ND	0.50	0.31	1	
Chloroform	ND	0.50	0.087	1		1,1,2,2-Tetrachloroethane	ND	0.50	0.098	1	
Chloromethane	ND	0.50	0.069	1		Tetrachloroethene	ND	0.50	0.027	1	
Dibromochloromethane	ND	0.50	0.048	1		Toluene	ND	0.50	0.46	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	0.88	1		1,1,1-Trichloroethane	ND	0.50	0.046	1	
1,2-Dibromoethane	ND	0.50	0.12	1		1,1,2-Trichloroethane	ND	0.50	0.086	1	
1,2-Dichlorobenzene	ND	0.50	0.029	1		Trichloroethene	ND	0.50	0.036	1	
1,3-Dichlorobenzene	ND	0.50	0.028	1		Vinyl Chloride	ND	0.50	0.041	1	
1,4-Dichlorobenzene	ND	0.50	0.025	1		p/m-Xylene	ND	0.50	0.13	1	
1,1-Dichloroethane	ND	0.50	0.026	1		o-Xylene	ND	0.50	0.32	1	
1,2-Dichloroethane	ND	0.50	0.080	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	100	73-157		Dibromofluoromethane	106	82-142	
Toluene-d8	100	82-112		1,4-Bromofluorobenzene	81	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Date Received: 12/06/08
Work Order No: 08-12-0749

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date Collected	Matrix
GWGW2389	**08-12-0749-11**	**12/05/08**	**Aqueous**

Comment(s): (24) Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Bicarbonate (as CaCO3)	525	5.0	0.85	1		mg/L	N/A	12/12/08	SM 2320B
Carbonate (as CaCO3) (24)	ND	1.0	0.85	1		mg/L	N/A	12/12/08	SM 2320B

GWGW2388	**08-12-0749-12**	**12/05/08**	**Aqueous**

Comment(s): (24) Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Bicarbonate (as CaCO3)	495	5.0	0.85	1		mg/L	N/A	12/12/08	SM 2320B
Carbonate (as CaCO3) (24)	ND	1.0	0.85	1		mg/L	N/A	12/12/08	SM 2320B

Method Blank	**N/A**	**Aqueous**

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Bicarbonate (as CaCO3)	ND	1.0	0.85	1		mg/L	N/A	12/12/08	SM 2320B
Carbonate (as CaCO3)	ND	1.0	0.85	1		mg/L	N/A	12/12/08	SM 2320B

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Weiss Associates		Date Received:	12/06/08
5801 Christie Avenue		Work Order No:	08-12-0749
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6010B

Project UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-12-0585-2	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08**	**081208SA6**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Silicon	4X	4X	24-180	4X	0-15	Q

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Weiss Associates		Date Received:	12/06/08
5801 Christie Avenue		Work Order No:	08-12-0749
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6020

Project UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-12-0585-1	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/11/08**	**081208S04**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	112	108	85-133	4	0-11	
Arsenic	109	110	73-127	1	0-11	
Barium	129	131	74-128	0	0-10	3
Beryllium	105	112	56-122	7	0-11	
Cadmium	108	110	84-114	2	0-8	
Chromium	120	119	73-133	0	0-11	
Cobalt	107	109	79-121	2	0-10	
Copper	106	107	72-108	1	0-10	
Lead	107	108	79-121	1	0-10	
Molybdenum	104	104	83-137	1	0-10	
Nickel	105	105	68-122	0	0-10	
Selenium	104	108	59-125	4	0-12	
Silver	101	104	68-128	3	0-14	
Thallium	104	106	73-121	2	0-11	
Vanadium	117	120	77-137	2	0-15	
Zinc	122	106	43-145	12	0-39	
Aluminum	174	126	47-161	32	0-24	3,4

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Weiss Associates		Date Received:	12/06/08
5801 Christie Avenue		Work Order No:	08-12-0749
Suite 600		Preparation:	EPA 7470A Total
Emeryville, CA 94608-1939		Method:	EPA 7470A

Project UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-12-0691-2	**Aqueous**	**Mercury**	**12/08/08**	**12/08/08**	**081208S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	109	109	66-126	0	0-7	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Weiss Associates		Date Received:	12/06/08
5801 Christie Avenue		Work Order No:	08-12-0749
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B

Project UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-12-0405-16	**Aqueous**	**GC/MS L**	**12/08/08**	**12/09/08**	**081208S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	105	105	86-122	1	0-8	
Carbon Tetrachloride	109	105	78-138	3	0-9	
Chlorobenzene	111	109	90-120	1	0-9	
1,2-Dibromoethane	123	112	70-130	9	0-30	
1,2-Dichlorobenzene	114	106	89-119	7	0-10	
1,1-Dichloroethene	109	75	52-142	37	0-23	4
Ethylbenzene	110	111	70-130	1	0-30	
Toluene	105	111	85-127	5	0-12	
Trichloroethene	97	105	78-126	8	0-10	
Vinyl Chloride	116	115	56-140	1	0-21	
Methyl-t-Butyl Ether (MTBE)	116	97	64-136	9	0-28	
Tert-Butyl Alcohol (TBA)	112	83	27-183	30	0-60	
Diisopropyl Ether (DIPE)	105	105	78-126	0	0-16	
Ethyl-t-Butyl Ether (ETBE)	113	104	67-133	8	0-21	
Tert-Amyl-Methyl Ether (TAME)	106	103	63-141	2	0-21	
Ethanol	93	85	11-167	10	0-64	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Date Received: N/A
Work Order No: 08-12-0749

Project: UC Davis / 388-1856-2-16

Matrix: Aqueous

Parameter	Method	QC Sample ID	Date Analyzed	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Alkalinity, Total (as CaCO3)	SM 2320B	08-12-1271-2	12/12/08	876	874	0	0-25	
Bicarbonate (as CaCO3)	SM 2320B	08-12-1271-2	12/12/08	876	874	0	0-25	
Carbonate (as CaCO3)	SM 2320B	08-12-1271-2	12/12/08	ND	ND	NA	0-25	
Hydroxide (as CaCO3)	SM 2320B	08-12-1271-2	12/12/08	ND	ND	NA	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0749
Suite 600		Preparation:	N/A
Emeryville, CA 94608-1939		Method:	RSK-175M

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-659-36	**Aqueous**	**GC 14**	**N/A**	**12/09/08**	**081209L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Carbon Dioxide	95	95	80-120	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0749
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6010B

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
097-01-003-8,893	**Aqueous**	**ICP 5300**	**12/09/08**	**081208-la-6**	**081208LA6F**

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Silicon	0.500	0.538	108	80-120	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0749
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6020

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
096-06-003-1,821	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/11/08**	**081208L04F**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Antimony	89	90	80-120	73-127	1	0-20	
Arsenic	96	97	80-120	73-127	0	0-20	
Barium	95	97	80-120	73-127	2	0-20	
Beryllium	104	105	80-120	73-127	1	0-20	
Cadmium	100	101	80-120	73-127	1	0-20	
Chromium	98	99	80-120	73-127	1	0-20	
Cobalt	99	97	80-120	73-127	2	0-20	
Copper	102	100	80-120	73-127	2	0-20	
Lead	95	96	80-120	73-127	1	0-20	
Molybdenum	93	93	80-120	73-127	0	0-20	
Nickel	99	97	80-120	73-127	1	0-20	
Selenium	95	96	80-120	73-127	0	0-20	
Silver	102	103	80-120	73-127	2	0-20	
Thallium	93	93	80-120	73-127	0	0-20	
Vanadium	96	97	80-120	73-127	1	0-20	
Zinc	98	98	80-120	73-127	1	0-20	
Aluminum	108	108	80-120	73-127	0	0-20	

Total number of LCS compounds : 17
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0749
Suite 600		Preparation:	EPA 7470A Filt.
Emeryville, CA 94608-1939		Method:	EPA 7470A

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-457-97	**Aqueous**	**Mercury**	**12/08/08**	**12/08/08**	**081208L02F**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	108	109	90-122	1	0-14	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0749
Suite 600		Preparation:	EPA 3520C
Emeryville, CA 94608-1939		Method:	EPA 8270C(M) Isotope Dilution

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-09-004-1,158	**Aqueous**	**GC/MS AAA**	**12/08/08**	**12/10/08**	**081208L14D**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
1,4-Dioxane	115	118	50-130	2	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0749
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-025-729	**Aqueous**	**GC/MS L**	**12/08/08**	**12/08/08**	**081208L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	99	103	87-117	82-122	3	0-7	
Carbon Tetrachloride	106	113	78-132	69-141	6	0-8	
Chlorobenzene	109	112	88-118	83-123	3	0-8	
1,2-Dibromoethane	109	110	80-120	73-127	1	0-20	
1,2-Dichlorobenzene	105	106	88-118	83-123	1	0-8	
1,1-Dichloroethene	110	111	71-131	61-141	0	0-14	
Ethylbenzene	110	115	80-120	73-127	5	0-20	
Toluene	103	101	85-127	78-134	1	0-7	
Trichloroethene	103	104	85-121	79-127	1	0-11	
Vinyl Chloride	117	120	64-136	52-148	2	0-10	
Methyl-t-Butyl Ether (MTBE)	99	98	67-133	56-144	1	0-16	
Tert-Butyl Alcohol (TBA)	99	94	34-154	14-174	5	0-19	
Diisopropyl Ether (DIPE)	103	102	80-122	73-129	0	0-8	
Ethyl-t-Butyl Ether (ETBE)	101	102	73-127	64-136	1	0-11	
Tert-Amyl-Methyl Ether (TAME)	91	95	69-135	58-146	4	0-12	
Ethanol	106	87	34-124	19-139	20	0-44	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-12-0749

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Revised COC received on 12/08/08 at 15:24 - VP

Chain of Custody Record

0749

Calscience Environmental Lab
5063 Commercial Circle, Suite H
Concord, CA 94520
phone: (925) 689-9022

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

Project ID: 388-1856-2-16
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AquaTerra Associates Incorporated, DBA

Client Contact
Weiss Associates
5801 Christie Avenue, Suite 600
Emeryville, CA 94608
(510) 450-6000 Phone
(510) 547-5043 FAX

Job Name: UC Davis
Address: One Shields Ave, Davis

Project Manager: Bob Devany
Tel: 510-450-6144

Analysis Turnaround Time
Calendar (C) or Work Days (W) --- 5W
TAT if different from Below 10 days
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sampled by: JMD/KHA
Date: 12/5/08
Lab Contact: Micah Smith
Carrier:

COC Number: UCD
Page 1 of ____
Job No.
SDG No.

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	Carbonate/Bicarbonate (SM2320B)	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
1	GWGW2376	12/4	1625	L	W	4	X	X	X														X	
2	GWGW2403	12/4	1630			1																X		
3	GWGW2370	12/4	1545			1																X		
4	GWGW2386	12/5	0950			7	X	X	X	X	X												X	
5	GWGW2374	12/5	1180			1																X		
6	GWGW2375	12/5	0950			4	X	X	X														X	
7	GWGW2387	12/5	1130			4	X	X	X														X	
8	GWGW2384	1115 12/5				5	X	X	X													X	X	
9	~~Travel Blank~~ TBGW0522	12/5	0700			1					X													~~HOLD~~ TRU 12/8/08
	TRU 12/8/08																							
						Field Filtered	X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: Level II Reporting with Initial Calibration Curves and Continuing Calibration **Note: Nitrate 48 hour hold time!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
(ALP)	WEISS	12/5, 1505	Tom O'Malley CEL	CALSCIENCE	12/5/08 1505
Tom O'Malley TO GSO	CALSCIENCE	12/5/08 1730			
GSO 5708658 18		12/6/08 10:00	D Dunyle CEL	CEL	12/6/08 10:00

Chain of Custody Record

0749

Calscience Environmental Lab
5063 Commercial Circle, Suite H
Concord, CA 94520
phone: (925) 689-9022

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

Project ID: 388-1856-2-16
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AguaTierra Associates Incorporated, DBA

Client Contact
Weiss Associates
5801 Christie Avenue, Suite 600
Emeryville, CA 94608
(510) 450-6000 Phone
(510) 547-5043 FAX

Job Name: UC Davis
Address: One Shields Ave, Davis

Project Manager: Bob Devany
Tel: 510-450-6144

Analysis Turnaround Time
Calendar (C) or Work Days (W) --- 5W
TAT if different from Below 10 days
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sampled by: JMD/KHA **Date:** 12/5/08
Lab Contact: Micah Smith **Carrier:**

COC Number: UCD
Page 1 of ____

Job No.
SDG No.

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	~~Carbonate/Bicarbonate (SM2320B)~~	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
1	GWGW2376	12/4	1625	L	W	4	X	X	X														X	
2	GWGW2403	12/4	1630			1																X		
3	GWGW2370	12/4	1545			1																X		
4	GWGW2386	12/5	0950			7	X	X	X		X												X	
5	GWGW2374	12/5	1180			1																X		
6	GWGW2375	12/5	0950			4	X	X	X														X	
7	GWGW2387	12/5	1130			4	X	X	X														X	
8	GWGW2384	1115 12/5				5	X	X	X													X	X	
9	Travel Blank	12/5	0700			1					X													HOLD
						Field Filtered	X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **Level II Reporting with Initial Calibration Curves and Continuing Calibration** **Note: Nitrate 48 hour hold time!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
(ALP)	WEISS	12/5 1505	Tom O'Malley CEL	CALSCIENCE	12/5/08 1505
Tom O'Malley TO GSO	CALSCIENCE	12/5/08 1730			
GSO 5708658 18		12/6/08 10:00	Dannyle CEL	CEL	12/6/08 10:00

0749

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AguaTierra Associates Incorporated, DBA

Calscience Environmental Lab
5063 Commercial Circle, Suite H
Concord, CA 94520
phone: (925) 689-9022

Project ID: 388-1856-2-16
Protocol No.: ROD

Client Contact		Project Manager: Bob Devany	Sampled by: KJA / JMD	Date: 12/5/08	COC Number: UCD
Weiss Associates		Tel: 510-450-6144	Lab Contact: Micah Smith	Carrier:	Page 2 of ____
5801 Christie Avenue, Suite 600		Analysis Turnaround Time			Job No.
Emeryville, CA 94608		Calendar (C) or Work Days (W) --- 5W			
(510) 450-6000	Phone	TAT if different from Below 10 days			SDG No.
(510) 547-5043	FAX	☐ 2 weeks			
		☐ 1 week			
Job Name: UC Davis		☐ 2 days			
Address: One Shields Ave, Davis		☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	Carbonate/Bicarbonate (SM2320B)	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
10	EBGW0017	12/5	1225	L	W	5					X		X									X		Title 22 + Al + Si
11	GWGW2389	12/5	1415				X	X	X	X													X	
12	GWGW2388						X	X	X	X													X	
						Field Filtered	X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: Level II Reporting with Initial Calibration Curves and Continuing Calibration **Note: Nitrate 48 hour hold time!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature] (ALP)	WEISS	12/5, 1505	Jon O'Malley CEL	CALScience	12/5/08 1505
Jon O'Malley TO GSO	CALScience	12/5/08 1730			
GSO 5108658 18		12/6/08 10:00	Dannyle CEL	CEL	12/6/08 10:00

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 0 8 - 1 2 - 0 7 4 9

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Weiss Associates

DATE: 12/06/08

TEMPERATURE: (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 3.4 °C - 0.2 °C (CF) = 3.2 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by:_____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only **Initial:** D.L

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Initial:** D.L

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** TD

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	☑	☐	☐
COC document(s) received complete.....	☐	☑	☐
Sampler's name indicated on COC.....	☑	☐	☐
Sample container label(s) consistent with COC.....	☑	☐	☐
Sample container(s) intact and good condition.....	☑	☐	☐
Correct containers and volume for analyses requested.....	☑	☐	☐
Analyses received within holding time.....	☑	☐	☐
Proper preservation noted on sample label(s).....	☑	☐	☐
Volatile analysis container(s) free of headspace.....	☑	☐	☐
Tedlar bag(s) free of condensation.....	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☑VOAh ☐VOAna$_2$ ☑125AGB 2 ☐125AGBh ☐125AGBpo$_4$ ☐1AGB ☑1AGBna$_2$ 2

☐1AGBs ☐500AGB ☐500AGBs ☐250CGB ☐250CGBs ☐1PB ☐500PB ☐500PBna ☐250PB

☑250PBn 2 ☑125PB 4 ☐125PBznna ☐100PBsterile ☐100PBna$_2$ ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® ☐_____

Checked/Labeled by: TD

Reviewed by: D.L

Scanned by: TD

Container: C:Clear A:Amber P:Poly/Plastic G:Glass J:Jar B:Bottle

Preservative: h:HCL n:HNO_3 na$_2$:$Na_2S_2O_3$ na:NaOH po$_4$:H_3PO_4 s:H_2SO_4 znna:$ZnAc_2$+NaOH

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08-12-0749

SAMPLE ANOMALY FORM

CHAIN OF CUSTODY (COC):

- ☐ **Not relinquished by client – no signature**
- ☐ **No date/time relinquished**
- ☐ **COC not received with samples** – notify PM
- ☑ **Incomplete information regarding samples, tests, etc.**

Comments:

(-11) & (-12) received 5 containers. 2x125 AGB, 2x250 PBn, 1x125 PB (-12) sample date: 12/5 @ 14:50.

SAMPLES - CONTAINERS & LABELS:

- ☐ **Samples NOT RECEIVED but listed on COC**
- ☐ **Samples received but NOT LISTED on COC**
- ☐ **Holding time expired** – list sample ID(s) and test
- ☐ **Insufficient quantities for analysis** – list test
- ☐ **Improper container(s) used** – list test
- ☐ **No preservative noted on label** – list test and notify lab
- ☐ **Sample labels illegible** – note test/container type
- ☐ **Sample labels do not match COC** – Note in comments
  - ☐ **Sample ID**
  - ☐ **Date and Time Collected**
  - ☐ **Project Information**
  - ☐ **# of containers**
- ☐ **Sample containers compromised** – Note in comments
  - ☐ **Leaking**
  - ☐ **Broken**
  - ☐ **Without Labels**
- ☐ **Other:** _____

Comments:

HEADSPACE – Containers with Bubble > 6mm or ¼ inch:

Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of RSK or CO_2 or DO or Organic Lead Received

Comments: _____

Initial / Date TP 12/6/08

Work Order#: 08-12-0749

Client: WEISS Associates

RSK-175M

Calibration

☐ EPA METHOD 25 ☐ SCAQMD METHOD 25.1
☐ SCAQMD METHOD 25.1M (Low VOCs) ☐ SCAQMD METHOD 25.1M (Non-Condensable Fraction

QUALITY CONTROL DATA SHEET

Work Order Number: 08-12-0749 Analyst: u Date 12 / 12 / 08
Instrument ID: GC14 QC Review: m Date 12 / 12 / 8
Batch Number (LCS/MS/SA): 081209L01 Date Analyzed: 12/09/08

LCS/LCS Duplicate

Thermal Conductivity Detector (TCD) Analysis ☐ % by Volume ☐ ppm(v/v) ☐ other _____

Analyte	Conc Added	LCS REC	LCS %REC	LCSD REC	LCSD %REC	Control Limit(%REC)	RPD	Control Limit(RPD)
Oxygen	20.0					80-120		0-20
Nitrogen	75.1					80-120		0-20
Carbon Dioxide	4.92					80-120		0-20

Flame Ionization Detector (FID) Analysis ☐ ppm(v/v) ☐ other _____

Methane	99.9	101	101	100	100	80-120	1	0-20
Carbon Monoxide	100	106	106	105	105	80-120	1	0-20
TGNMO (as Methane) (Total Gaseous Non-Methane Organic compounds)	385	391	102	398	103	80-120	2	0-20

pc 12/09/08

Daily Midpoint Calibration Check

Thermal Conductivity Detector (TCD) Analysis ☐ % by Volume ☐ ppm(v/v) ☐ other _____

Analyte	Conc Added	Conc Recovered	% D	Control Limit
Oxygen	3.50			0 - 15
Nitrogen	10.03			0 - 15
Methane	10.03			0 - 15
Carbon Monoxide	9.96			0 - 15
Carbon Dioxide	10.0			0 - 15

Flame Ionization Detector (FID) Analysis ☐ ppm(v/v) ☐ other _____

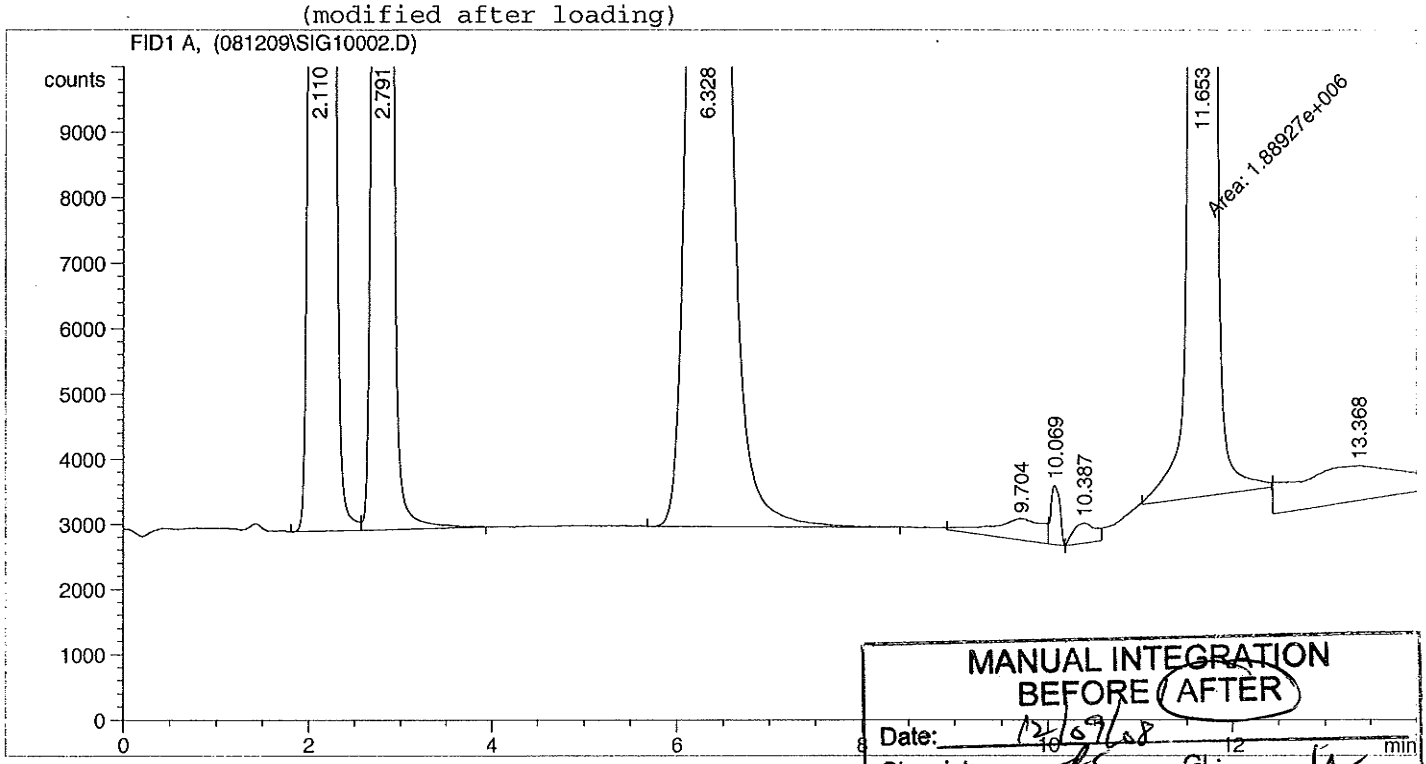
Analyte	Conc Added	Conc Recovered	% D	Control Limit
Methane	308	315	2	0 - 15
Carbon Monoxide	304	312	3	0 - 15
Carbon Dioxide	302	306	1	0 - 15
TGNMO (as Methane) (Total Gaseous Non-Methane Organic compounds)	918	909	1	0 - 15

Analyst's Comments: _____

Data File C:\HPCHEM\2\DATA\081209\SIG10002.D Sample Name: FID CCV 1mL

==========

Injection Date : 12/9/2008 9:14:55 AM
Sample Name : FID CCV 1mL Location : Vial 1
Acq. Operator : GC 14
Inj Volume : Manually
Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 10/3/2008 1:49:33 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M\071908.M
Last changed : 12/9/2008 9:36:18 AM by GC 14
(modified after loading)



MANUAL INTEGRATION
BEFORE / AFTER
Date: 12/09/08
Chemist: GL:
Reason: BASELINE CORR., PEAK ID CORR.
Other:
This stamp appears in red ink on original copy.

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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 12/9/2008 9:36:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.110	BV	6.34792e5	4.91062e-4	311.72226		Carbon Monoxide
2.791	VB	6.36451e5	4.94479e-4	314.71138		Methane
6.328	BB	6.40763e5	4.77635e-4	306.05075		Carbon Dioxide
11.653	MM	1.88927e6	4.81128e-4	908.97981		TGNMO

Totals : 1841.46419

Results obtained with standard integrator!

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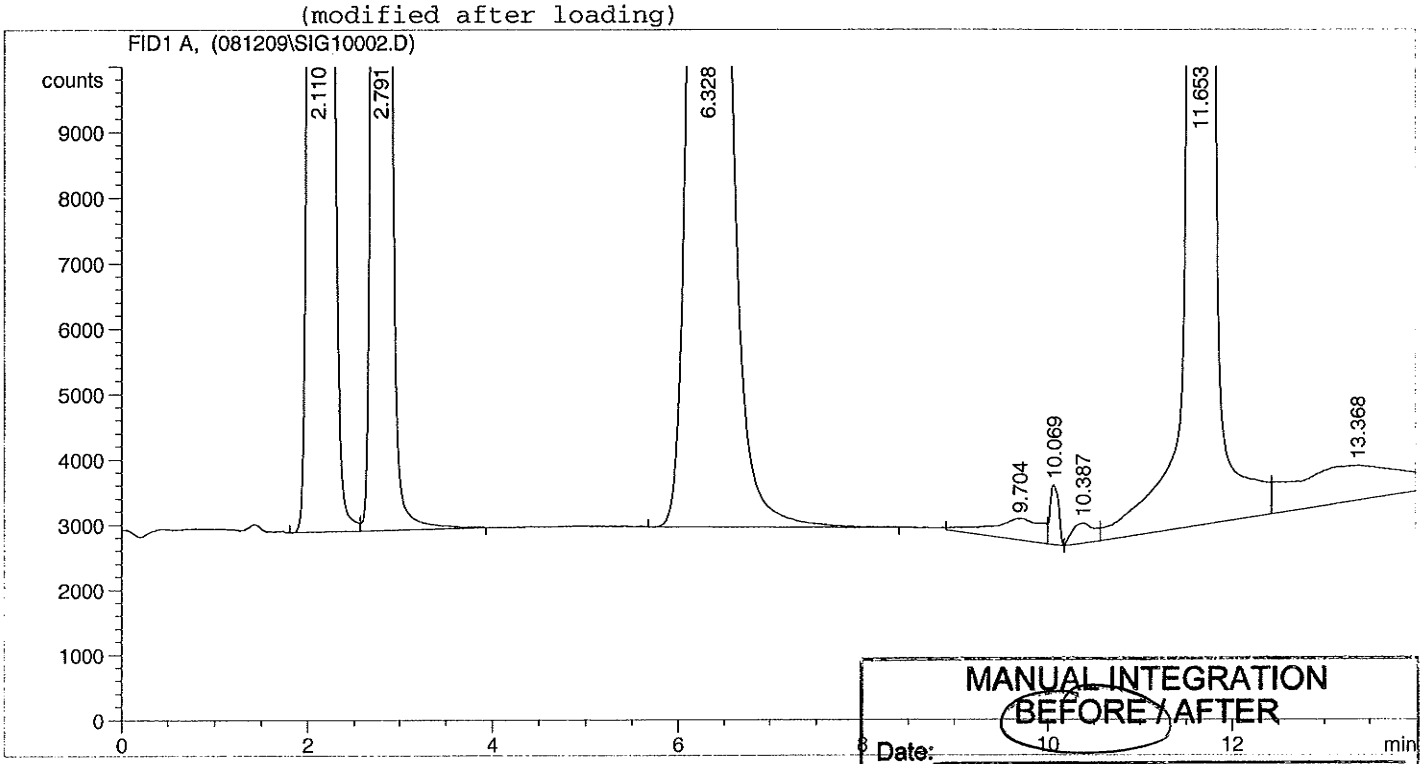
*** End of Report ***

Data File C:\HPCHEM\2\DATA\081209\SIG10002.D Sample Name: FID CCV 1mL

==========

Injection Date : 12/9/2008 9:14:55 AM
Sample Name : FID CCV 1mL Location : Vial 1
Acq. Operator : GC 14
Inj Volume : Manually
Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 10/3/2008 1:49:33 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M\071908.M
Last changed : 12/8/2008 12:45:54 PM by GC 14
(modified after loading)



MANUAL INTEGRATION
BEFORE / AFTER
Date:
Chemist: GL:
Reason: BASELINE CORR., PEAK ID CORR.
Other :
This stamp appears in red ink on original copy.

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External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : 12/8/2008 12:45:52 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.110	BV	6.34792e5	4.91062e-4	311.72226		Carbon Monoxide
2.791	VB	6.36451e5	4.94479e-4	314.71138		Methane
6.328	BB	6.40763e5	4.77635e-4	306.05075		Carbon Dioxide
10.387	PV	5033.19775	4.81128e-4	2.42161		TGNMO

Totals : 934.90599

Results obtained with standard integrator!

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*** End of Report ***

GC 14 25.1 METHOD 071908

Multipoint Calibration

C0		5ppm	300ppm	5000ppm		Average	SD	RSD
Conc.ppm		5.06	304	5110				
Area		11148	608729	9727630		3449169		
RF		2203.162	2002.398	1903.646		2036.402	152.626	7.494886
Methane	1ppm	5ppm	300ppm	5000ppm				
Conc.ppm	1.01	5.07	308	4950				
Area	2226	9790	612460	9774190		2599667		
RF	2203.96	1930.966	1988.506	1974.584		2024.504	122.1225	6.032217
C02	1ppm	5ppm	300ppm	5000ppm				
Conc.ppm	1.07	5.37	302	4980				
Area	2416	10976	623378	10044400		2670293		
RF	2257.944	2043.948	2064.166	2016.948		2095.751	109.8449	5.241313
TGNMO	1ppm	5ppm	300ppm	5000ppm				
Conc.ppm	3.06	15.3	918	2082				
Area	7467	29582	1772460	4179080		1497147		
RF	2440.196	1933.464	1930.784	2007.243		2077.922	244.1008	11.74735

Air Analysis Logbook

DATE	DIRECTORY	DATA FILE	CEL ID #	TEST METHOD	STANDARD LOT # / ID	LOOP VOL (mL)	ANALYST	COMMENTS
07/18/08	080718	SIG100009	ICAL std #1	TGMNO	01-13-08	200µL	NV	
		10	ICAL std #3		01-13-07	1mL		
		11	ICAL STD #4		01-13-14			
		12	MB		N/A			
		13	MDL #1		01-13-08			
		14	2					
		15	3					
		16	4					
		17	5					
		18	6					
		19	7					
		20	ICAL #4		01-13-09			
07/19/08	080719	SIG10001	BLANK	TGMNO	N/A	1	EY	
		02	ICAL std #3		01-10-15		LL	25.1 300 ppm
		03	blank		NA			
		04	ICAL std #1		01-13-08	200µl		1ppm (~5ppm)
		05	ICAL std #2			1		5 ppm
		06	ICAL std #3		01-10-15			300 ppm
		07	ICAL std #3		01-10-15 ~~01-13-09~~ 07/19			~~3000~~ ppm. LL 07/19/08
		08	ICAL std #3					5000 ppm
		09	ICAL STD #4					
		10	Blank		NA	1		~~5 ppm~~. LL 07/19
		11	MDL #1		01-13-08		EY	5 ppm
		12	ICAL std #1			200µl		
		13	ICAL std #2			1		
		14	blank		NA		LL	
		15	#10 CCV		01-10-15			
		16	LCS		01-13-07			

Reviewed by: _____ Date ____/____/____

Air Analysis Logbook

DATE	DIRECTORY	DATA FILE	CEL ID #	TEST METHOD	STANDARD LOT # / ID	LOOP VOL (mL)	ANALYST	COMMENTS
07/19/08	080719	~~SIG~~ 100017	LCSD	TGNMO	01-13-07	1	LL	
		18	BLANK		NA			
		19	ICAL STD #1		01-13-08	200µL	HF	
		20	1					
		21	2		~~01-10-15~~			
		22	3		~~01-13-09~~ dlr 07/19/08			01-10-15
		23	4		01-13-09			
		24	4		01-13-09			
		25	3		01-10-15			
		26	2		01-13-08			
		27	1			200µL		
		28	1					
		29	4		01-13-09	1		mislabled
		30	4					
		31	2		01-1308			
		32	2					
07/20/08	080720	SIG 100081	Blank	TGNMO	NA	1	NL	
		2	FID CCV		01-10-15		M	
		3						
		4	LCS		01-13-07		M	
		5	LCSD		1			
		6	Blank		NA			
		7	08-07-1427-1A		1		LL	
		8	-2A					
		9	-2A					
		10	3A				M	
		11	4A					
		12	08-07-1431-1A					

Reviewed by: _____ Date ____/____/____

Calibration Table

Calib. Data Modified : Sunday, July 20, 2008 11:10:47 AM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 20.000 %
Abs. Reference Window : 0.000 min
Rel. Non-ref. Window : 20.000 %
Abs. Non-ref. Window : 0.000 min
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times : No, only for identified peaks

Curve Type : Power
Origin : Ignored
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: FID1 A,

RetTime [min]	Sig	Lvl	Amount [ppm v/v]	Area	Amt/Area	Ref	Grp	Name
2.218	1	2	5.06000	1.11479e4	4.53898e-4			Carbon Monoxide
		3	304.00000	6.08729e5	4.99401e-4			
		4	5110.00000	9.72763e6	5.25308e-4			
2.817	1	1	1.01400	2226.19580	4.55486e-4			Methane
		2	5.07000	9790.16699	5.17867e-4			
		3	308.00000	6.12460e5	5.02890e-4			
		4	4950.00000	9.77419e6	5.06436e-4			
6.396	1	1	1.07400	2416.20410	4.44499e-4			Carbon Dioxide
		2	5.37000	1.09761e4	4.89244e-4			
		3	302.00000	6.23378e5	4.84457e-4			
		4	4980.00000	1.00444e7	4.95799e-4			
11.667	1	1	3.06000	7467.90234	4.09754e-4			TGNMO
		2	15.30000	2.95820e4	5.17207e-4			
		3	918.00000	1.77246e6	5.17925e-4			
		4	2082.00000	4.17908e6	4.98196e-4			

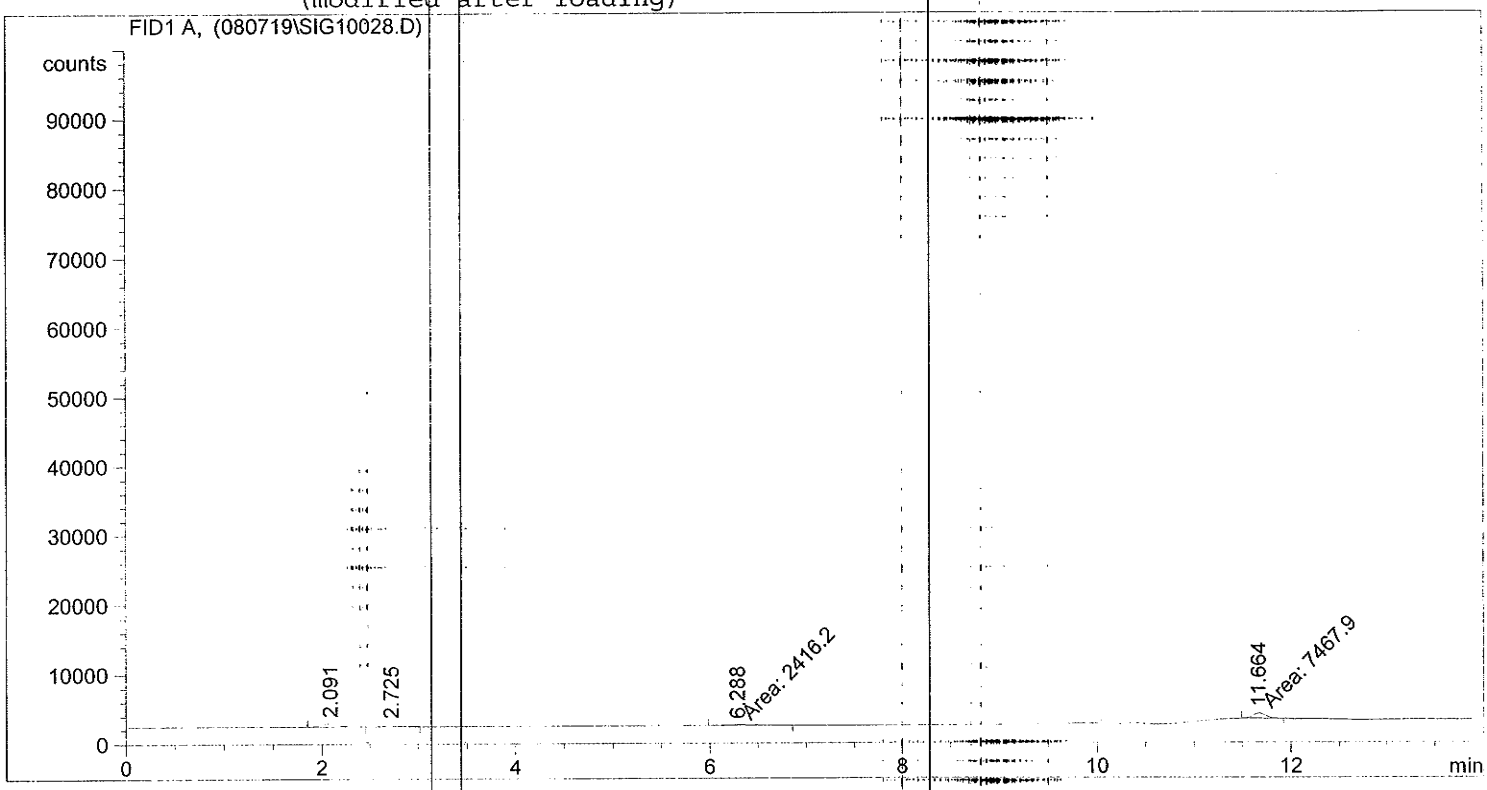
Peak Sum Table

No Entries in table

==========

Injection Date : 7/19/2008 11:46:49 PM
Sample Name : ICAL #1 200uL Location : Vial 1
Acq. Operator : GC 14 Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 10:59:10 AM by GC 14
(modified after loading)



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 7/20/2008 10:59:08 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.091	BB	5333.47119	2.20085e-4	1.17382		Carbon Monoxide
2.725	BB	2226.19580	4.81720e-4	1.07240		Methane
6.288	MM	2416.20110	2.55639e-4	6.17675e-1		Carbon Dioxide
11.664	MM	7467.90234	4.72564e-4	3.52906		TGNMO
Totals :				6.39296		

Results obtained with standard integrator!

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*** End of Report ***

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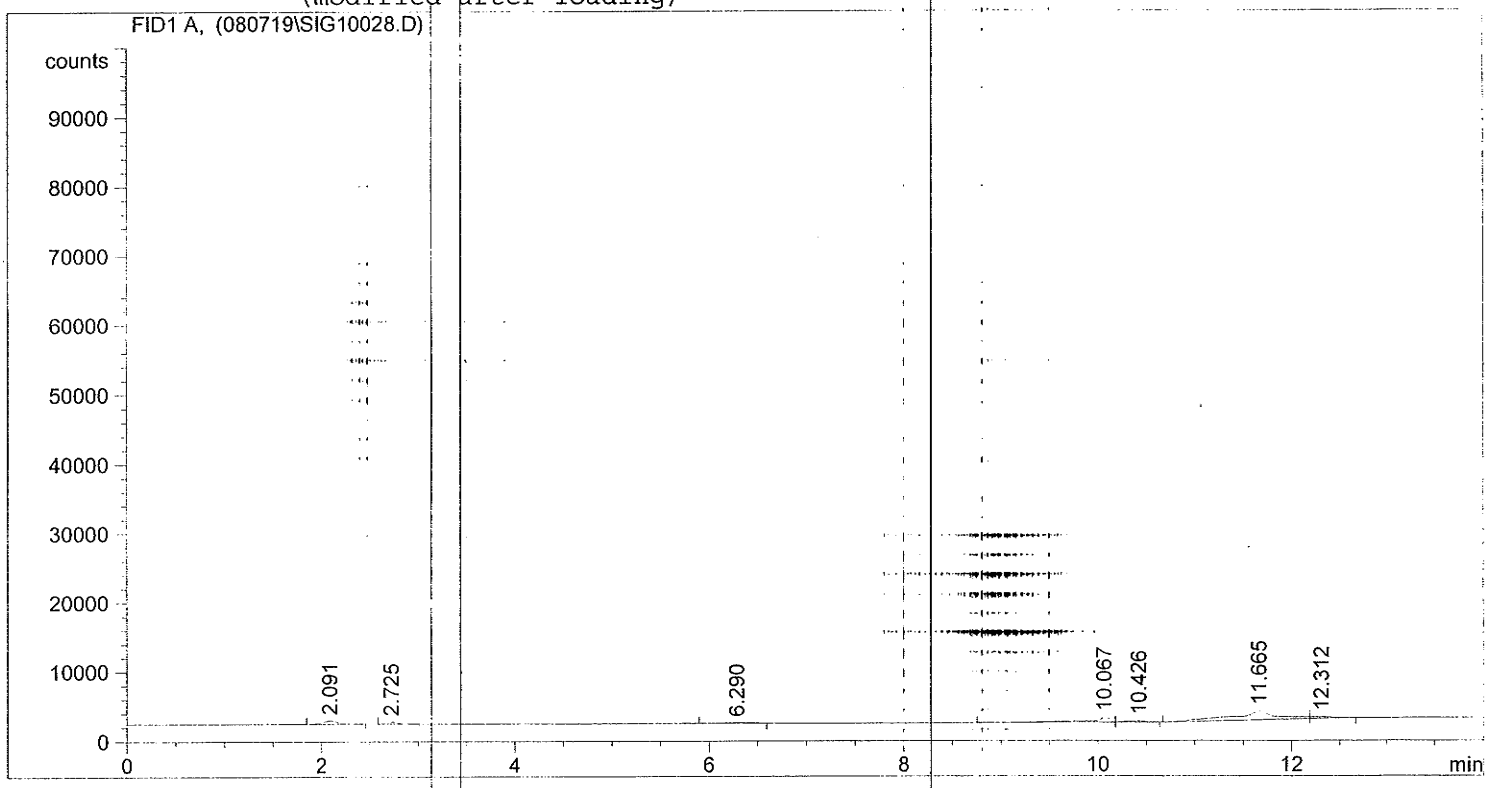
Injection Date : 7/19/2008 11:46:49 PM
Sample Name : ICAL #1 200uL Location : Vial 1
Acq. Operator : GC 14
Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 10:59:10 AM by GC 14
(modified after loading)



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 7/20/2008 10:59:08 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.091	BB	5333.47119	2.20085e-4	1.17382		Carbon Monoxide
2.725	BB	2226.19580	4.81720e-4	1.07240		Methane
6.290	BB	1793.48889	2.46801e-4	4.42634e-1		Carbon Dioxide
11.665	BV	4.09466e4	5.00967e-4	20.51291		TGNMO
Totals :				23.20177		

Results obtained with standard integrator!

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*** End of Report ***

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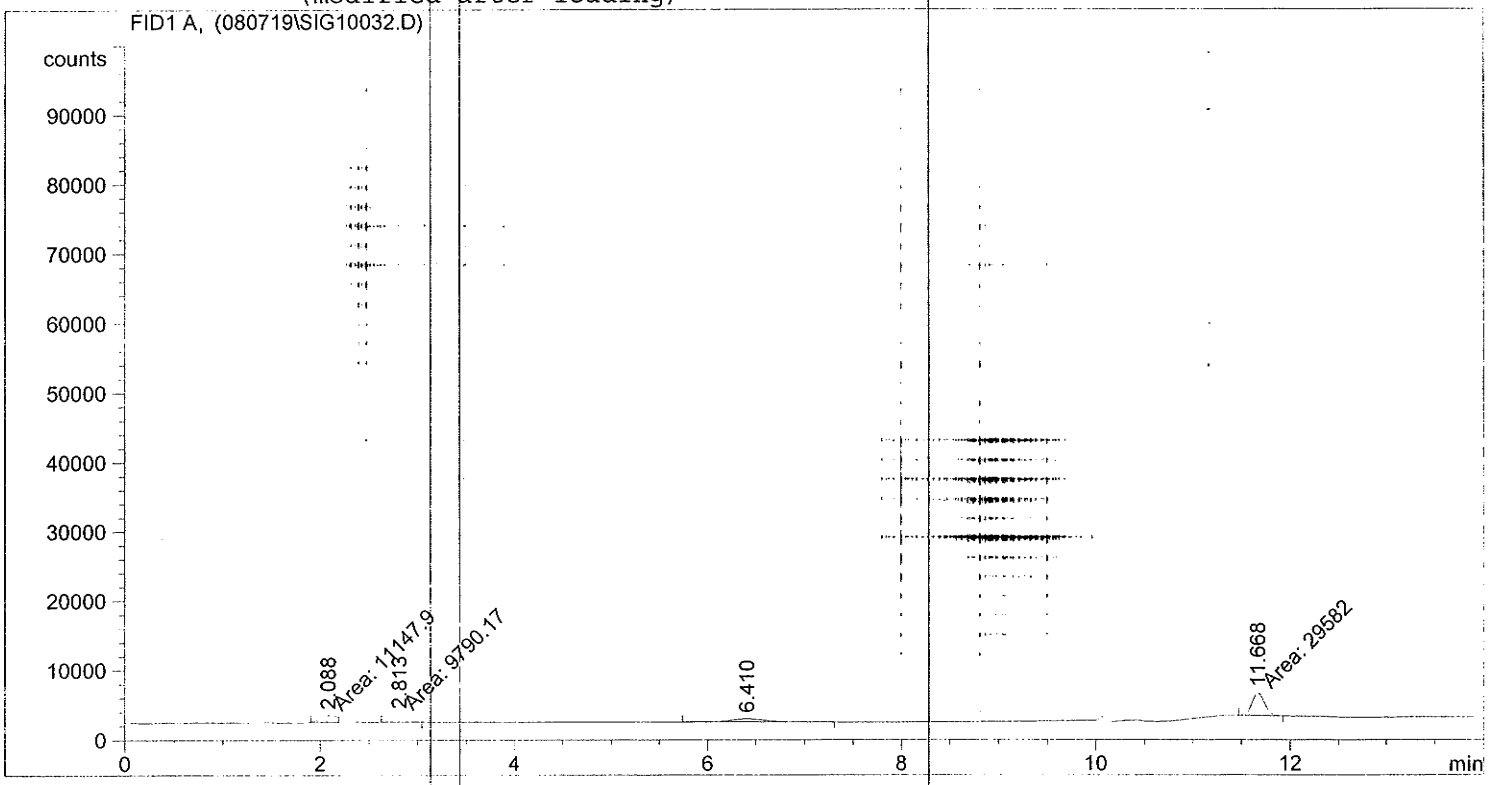
Injection Date : 7/20/2008 1:12:23 AM
Sample Name : ICAL #2 1mL Location : Vial 1
Acq. Operator : GC 14
Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 11:08:23 AM by GC 14
(modified after loading)



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : Sunday, July 20, 2008 11:08:23 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.088	MF	1.11479e4	4.34978e-4	4.84908		Carbon Monoxide
2.813	MM	9790.16699	4.86574e-4	4.76364		Methane
6.410	BB	1.09761e4	4.68418e-4	5.14142		Carbon Dioxide
11.668	MM	2.95820e4	4.67871e-4	13.84055		TGNMO

Totals : 28.59469

Results obtained with standard integrator!

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*** End of Report ***

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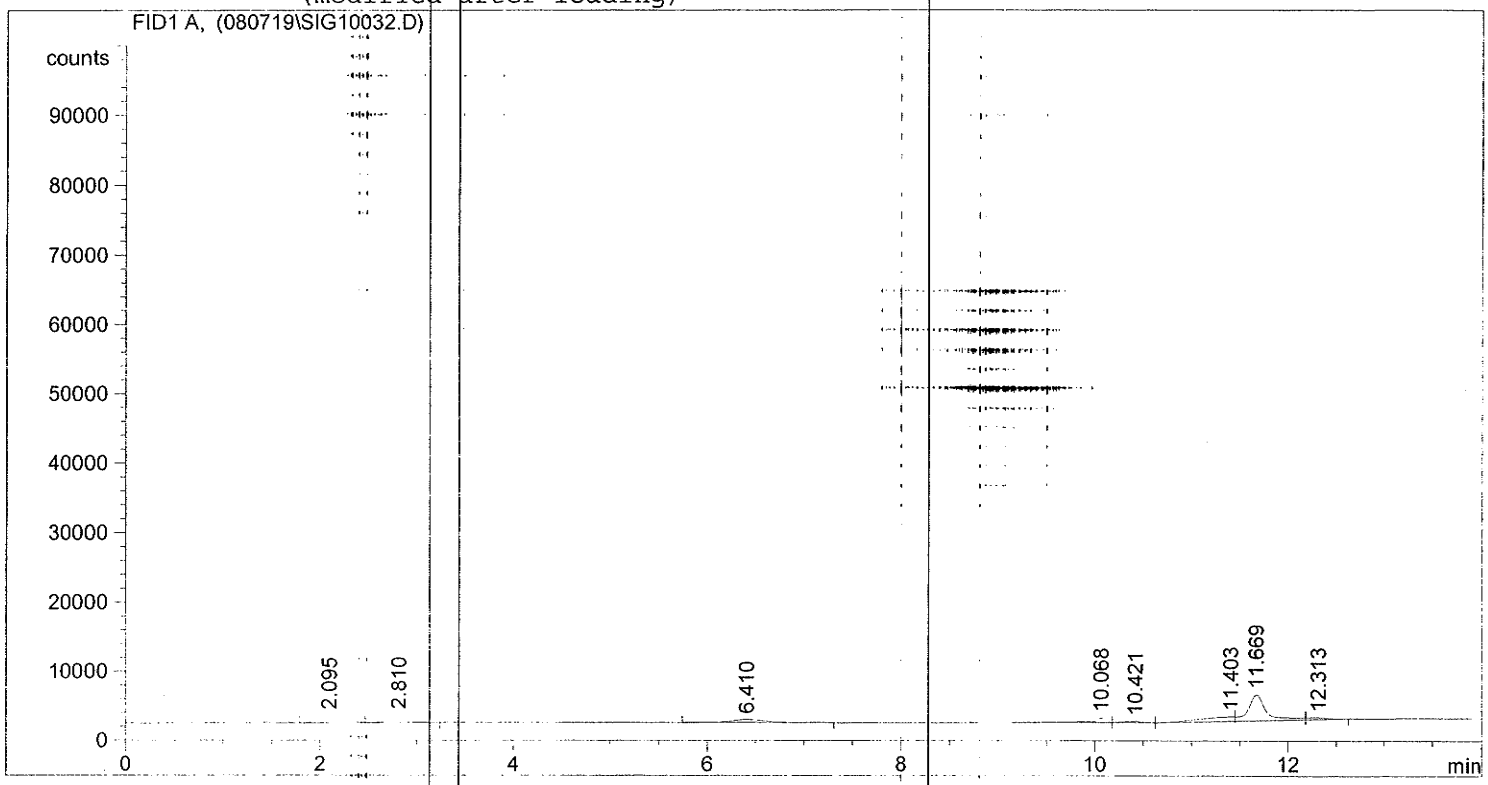
Injection Date : 7/20/2008 1:12:23 AM
Sample Name : ICAL #2 1mL Location : Vial 1
Acq. Operator : GC 14
Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 11:02:59 AM by GC 14
(modified after loading)



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : Sunday, July 20, 2008 11:02:59 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.095	BV	1.74076e4	2.66416e-4	4.63767		Carbon Monoxide
2.810	VB	1.16931e4	4.63584e-4	5.42075		Methane
6.410	BB	1.09761e4	4.49500e-4	4.93377		Carbon Dioxide
11.669	VV	4.94595e4	4.66855e-4	23.09040		TGNMO

Totals : 38.08258

Results obtained with standard integrator!

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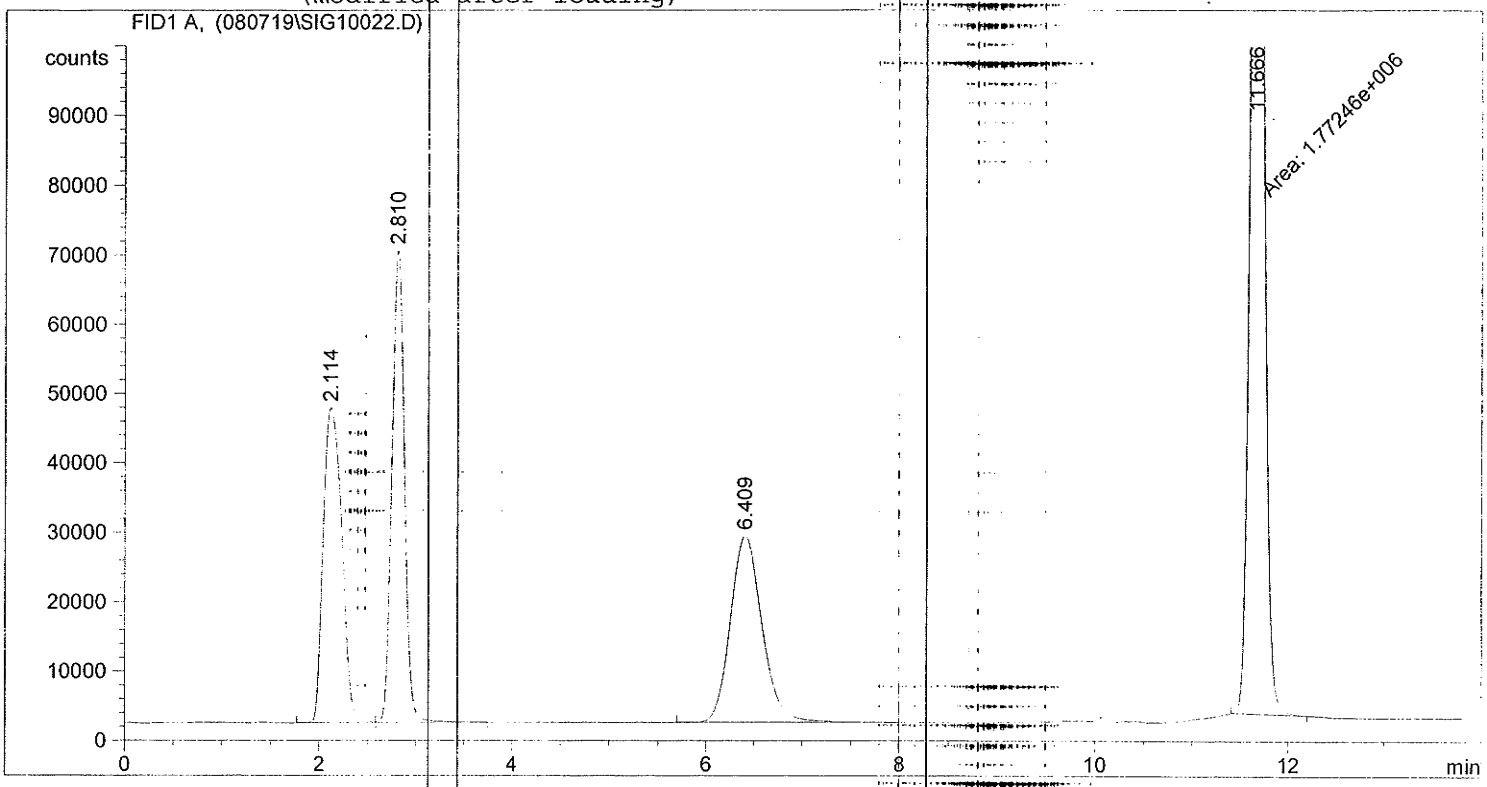
*** End of Report ***

Injection Date : 7/19/2008 7:54:26 PM
Sample Name : ICAL #3 1mL Location : Vial 1
Acq. Operator : GC 14
Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 10:41:13 AM by GC 14
(modified after loading)



External Standard Report

Sorted By : Signal
Calib. Data Modified : Sunday, July 20, 2008 10:41:12 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.114	BV	6.08729e5	5.18394e-4	315.56139		Carbon Monoxide
2.810	VB	6.12460e5	5.51524e-4	337.78630		Methane
6.409	BV	6.23378e5	4.76516e-4	297.04967		Carbon Dioxide
11.666	MM	1.77246e6	5.81475e-4	1030.63989		TGNMO

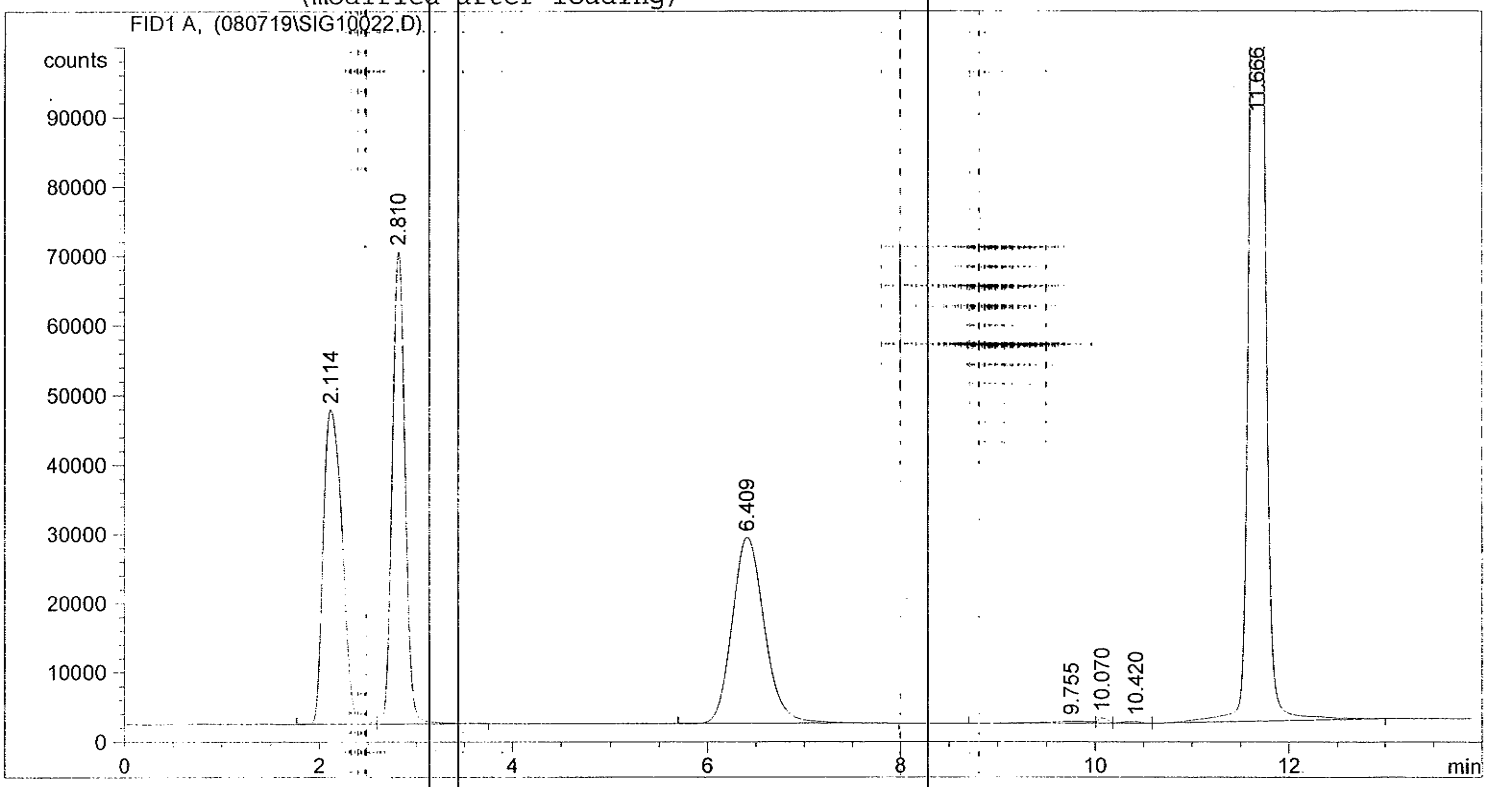
Totals : 1981.03725

Results obtained with standard integrator!

*** End of Report ***

Injection Date : 7/19/2008 7:54:26 PM
Sample Name : ICAL #3 1mL Location : Vial 1
Acq. Operator : GC 14
Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 10:37:22 AM by GC 14
(modified after loading)



External Standard Report

Sorted By : Signal
Calib. Data Modified : 7/20/2008 10:37:20 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.114	BV	6.08729e5	4.82486e-4	293.70355		Carbon Monoxide
2.810	VB	6.12460e5	5.08124e-4	311.20580		Methane
6.409	BV	6.23378e5	4.39930e-4	274.24266		Carbon Dioxide
11.666	PV	1.84478e6	5.27180e-4	972.53302		TGNMO

Totals : 1851.68502

Results obtained with standard integrator!

*** End of Report ***

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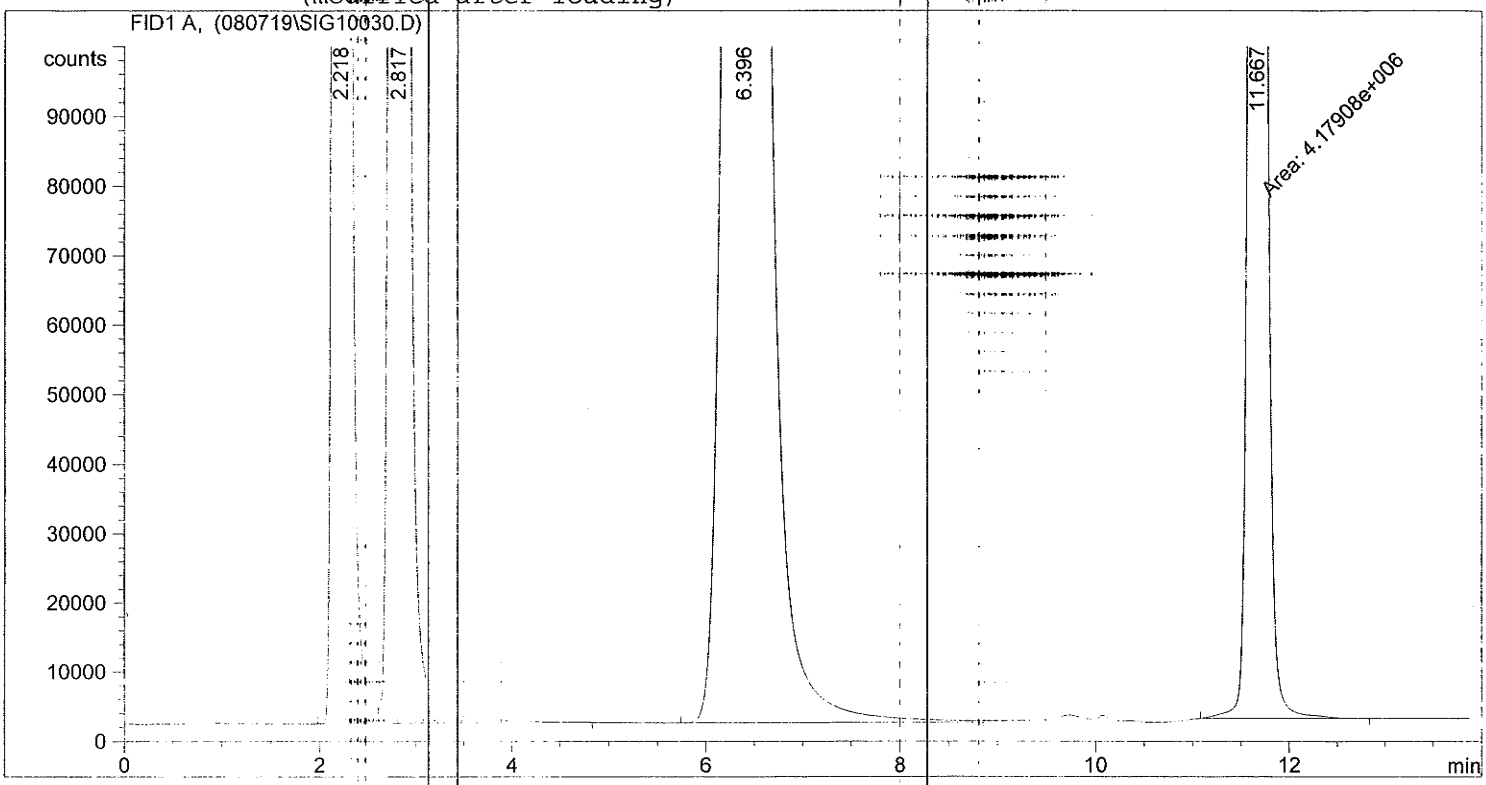
Injection Date : 7/20/2008 12:31:29 AM
Sample Name : ICAL #4 1mL Location : Vial 1
Acq. Operator : GC 14
Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 11:10:47 AM by GC 14
(modified after loading)



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : Sunday, July 20, 2008 11:10:47 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.218	BV	9.72763e6	5.27203e-4	5128.43195		Carbon Monoxide
2.817	VB	9.77419e6	5.13222e-4	5016.33247		Methane
6.396	BV	1.00444e7	4.99095e-4	5013.11061		Carbon Dioxide
11.667	MM	4.17908e6	5.19835e-4	2172.43283		TGNMO
Totals :				1.73303e4		

Results obtained with standard integrator!

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*** End of Report ***

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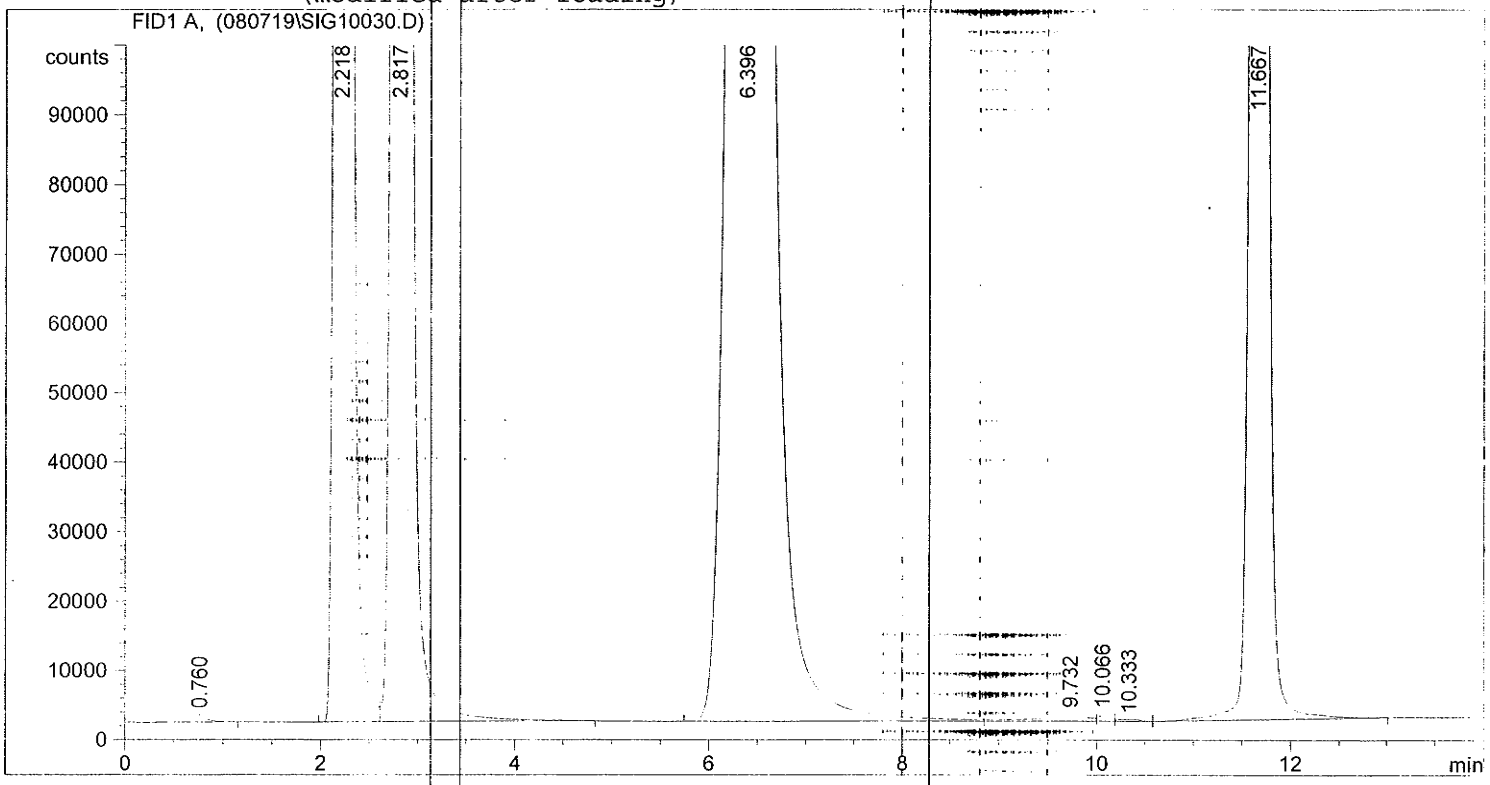
Injection Date : 7/20/2008 12:31:29 AM
Sample Name : ICAL #4 1mL Location : Vial 1
Acq. Operator : GC 14
Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 11:08:23 AM by GC 14
(modified after loading)



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : Sunday, July 20, 2008 11:08:23 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.218	BV	9.72763e6	6.55749e-4	6378.87873		Carbon Monoxide
2.817	VB	9.77419e6	6.26868e-4	6127.12819		Methane
6.396	BV	1.00444e7	5.94616e-4	5972.55680		Carbon Dioxide
11.667	PV	4.21085e6	6.03754e-4	2542.31342		TGNMO

Totals : 2.10209e4

Results obtained with standard integrator!

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*** End of Report ***

Work Order#: 08-12-0749

Client: WEISS Associates

EPA 6010B

Calibration

Sequence No.: 8
Sample ID: icv si
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:

Autosampler Location: 157
Date Collected: 12/9/2008 10:53:33 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: icv si

Analyte	Back Pressure	Flow
All	170.0 kPa	0.60 L/min

Mean Data: icv si

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ho 339.898	62290.7	5.004	mg/L	0.0778				1.56%
Ho 345.600	102700.9	5.014	mg/L	0.0739				1.47%
Tb 350.917	25310.9	4.991	mg/L	0.0853				1.71%
Tb 384.873	13503.4	4.967	mg/L	0.0891				1.79%
Y 324.227	167530.6	5.015	mg/L	0.1143				2.28%
Y 371.029	271938.4	4.996	mg/L	0.0942				1.89%
Ag 328.068*†	-1.5	0.0000	mg/L	0.00053	0.0000	mg/L	0.00053	>999.9%
Ag 338.289†	76.7	0.0014	mg/L	0.00102	0.0014	mg/L	0.00102	73.66%
Al 308.215*†	374.6	0.0283	mg/L	0.00334	0.0283	mg/L	0.00334	11.83%
Al 396.153†	3081.2	0.0296	mg/L	0.00002	0.0296	mg/L	0.00002	0.08%
As 188.979†	13.2	0.0052	mg/L	0.00001	0.0052	mg/L	0.00001	0.19%
As 193.696*†	8.0	0.0040	mg/L	0.00116	0.0040	mg/L	0.00116	29.08%
B 249.677*†	2183.7	0.0850	mg/L	0.00240	0.0850	mg/L	0.00240	2.83%
B 249.772†	3238.0	0.0839	mg/L	0.00241	0.0839	mg/L	0.00241	2.87%
Ba 455.403†	292.6	0.0020	mg/L	0.00015	0.0020	mg/L	0.00015	7.43%
Ba 233.527*†	216.0	0.0016	mg/L	0.00029	0.0016	mg/L	0.00029	17.94%
Be 313.107†	160.1	0.0001	mg/L	0.00021	0.0001	mg/L	0.00021	184.41%
Be 313.042*†	300.2	0.0001	mg/L	0.00005	0.0001	mg/L	0.00005	43.94%
Bi 190.171†	3.2	0.0021	mg/L	0.00049	0.0021	mg/L	0.00049	23.56%
Bi 223.061*†	5.2	0.0012	mg/L	0.00014	0.0012	mg/L	0.00014	11.14%
Ca 422.673†	209.6	0.0422	mg/L	0.00130	0.0422	mg/L	0.00130	3.08%
Ca 317.933*†	56.3	0.0296	mg/L	0.00755	0.0296	mg/L	0.00755	25.53%
Cd 226.502*†	20.9	0.0003	mg/L	0.00015	0.0003	mg/L	0.00015	50.91%
Cd 228.802†	30.6	0.0004	mg/L	0.00014	0.0004	mg/L	0.00014	34.49%
Co 230.786†	29.1	0.0007	mg/L	0.00027	0.0007	mg/L	0.00027	41.43%
Co 228.616*†	12.8	0.0002	mg/L	0.00003	0.0002	mg/L	0.00003	11.10%
Cr 357.869†	6.9	0.0002	mg/L	0.00137	0.0002	mg/L	0.00137	828.87%
Cr 267.716*†	7.0	0.0001	mg/L	0.00042	0.0001	mg/L	0.00042	284.38%
Cu 324.752*†	182.6	0.0016	mg/L	0.00001	0.0016	mg/L	0.00001	0.84%
Cu 327.393†	150.2	0.0026	mg/L	0.00044	0.0026	mg/L	0.00044	16.80%
Fe 239.562†	3.9	0.0200	mg/L	0.00041	0.0200	mg/L	0.00041	2.05%
Fe 259.939†	7.8	0.0101	mg/L	0.00126	0.0101	mg/L	0.00126	12.46%
Fe 273.955*†	221.1	0.0103	mg/L	0.00718	0.0103	mg/L	0.00718	69.52%
K 766.490*†	46.0	0.0677	mg/L	0.00031	0.0677	mg/L	0.00031	0.47%
Li 610.362*†	197.1	0.0007	mg/L	0.00157	0.0007	mg/L	0.00157	211.33%
Mg 279.077*†	40.8	0.0046	mg/L	0.00401	0.0046	mg/L	0.00401	87.97%
Mg 280.271†	51.3	0.0039	mg/L	0.00002	0.0039	mg/L	0.00002	0.54%
Mn 257.610*†	361.1	0.0006	mg/L	0.00011	0.0006	mg/L	0.00011	19.32%
Mn 259.372†	267.3	0.0005	mg/L	0.00005	0.0005	mg/L	0.00005	9.27%
Mo 202.031*†	2.8	0.0002	mg/L	0.00054	0.0002	mg/L	0.00054	273.56%
Mo 203.845†	7.0	0.0007	mg/L	0.00049	0.0007	mg/L	0.00049	66.94%
Na 589.592*†	235.8	0.0593	mg/L	0.00273	0.0593	mg/L	0.00273	4.61%
Na 330.237†	85.7	0.2820	mg/L	0.08198	0.2820	mg/L	0.08198	29.07%
Ni 231.604*†	-5.4	-0.0002	mg/L	0.00000	-0.0002	mg/L	0.00000	2.28%
Ni 232.003†	-2.5	-0.0001	mg/L	0.00047	-0.0001	mg/L	0.00047	340.43%
P 213.617*†	0.2	0.0001	mg/L	0.00426	0.0001	mg/L	0.00426	>999.9%
P 214.914†	13.5	0.0058	mg/L	0.00032	0.0058	mg/L	0.00032	5.53%
Pb 217.000†	9.4	0.0043	mg/L	0.00580	0.0043	mg/L	0.00580	134.66%
Pb 220.353*†	15.8	0.0020	mg/L	0.00036	0.0020	mg/L	0.00036	17.37%
S 181.975*†	2.3	0.0034	mg/L	0.00379	0.0034	mg/L	0.00379	112.75%
S 180.669†	4.3	0.0050	mg/L	0.00276	0.0050	mg/L	0.00276	55.17%
S 182.563†	-3.0	-0.0097	mg/L	0.00549	-0.0097	mg/L	0.00549	56.78%
Sb 217.582*†	-3.6	-0.0013	mg/L	0.00233	-0.0013	mg/L	0.00233	174.04%
Sb 206.836†	-15.1	-0.0035	mg/L	0.00563	-0.0035	mg/L	0.00563	160.48%
Sb 206†	12.0	0.0033	mg/L	0.00026	0.0033	mg/L	0.00026	7.85%

Se 196.026*†	-3.1	-0.0012 mg/L	0.00078	-0.0012 mg/L	0.00078	65.82%
Se 203.985†	-24.0	-0.0146 mg/L	0.00411	-0.0146 mg/L	0.00411	28.20%
Si 251.611*†	350923.4	10.60 mg/L	0.038	10.60 mg/L	0.038	0.36%
Si 288.158†	103269.0	10.63 mg/L	0.023	10.63 mg/L	0.023	0.21%
Sn 242.170†	-22.8	-0.0081 mg/L	0.02428	-0.0081 mg/L	0.02428	301.26%
Sn 189.927*†	18.8	0.0029 mg/L	0.00075	0.0029 mg/L	0.00075	26.25%
Sr 407.771*†	124.0	0.0003 mg/L	0.00003	0.0003 mg/L	0.00003	11.87%
Sr 421.552†	1331.5	0.0002 mg/L	0.00000	0.0002 mg/L	0.00000	2.34%
Ti 334.940†	109.8	0.0003 mg/L	0.00029	0.0003 mg/L	0.00029	85.14%
Ti 336.121*†	95.6	0.0003 mg/L	0.00011	0.0003 mg/L	0.00011	31.30%
Tl†	16.9	0.0046 mg/L	0.00042	0.0046 mg/L	0.00042	9.13%
Tl 351.924†	6.5	0.0017 mg/L	0.00177	0.0017 mg/L	0.00177	103.11%
Tl 190.801*†	22.3	0.0052 mg/L	0.00037	0.0052 mg/L	0.00037	7.07%
V 310.230†	-50.6	-0.0003 mg/L	0.00095	-0.0003 mg/L	0.00095	323.42%
V 292.402*†	76.9	0.0009 mg/L	0.00026	0.0009 mg/L	0.00026	29.87%
Zn 206.200*†	308.7	0.0052 mg/L	0.00012	0.0052 mg/L	0.00012	2.27%
Zn 213.857*†	331.9	0.0052 mg/L	0.00006	0.0052 mg/L	0.00006	1.19%
Zn 202.548†	411.1	0.0051 mg/L	0.00016	0.0051 mg/L	0.00016	3.12%

Sequence No.: 11
Sample ID: CCV
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/9/2008 6:20:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	171.0 kPa	0.60 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ho 345.600	106099.6	5.002	mg/L	0.0173				0.34%
Ho 339.898	64814.4	5.016	mg/L	0.0222				0.44%
Tb 384.873	14432.5	4.799	mg/L	0.0269				0.56%
Tb 350.917	27831.6	5.033	mg/L	0.0550				1.09%
Y 324.227	166664.9	4.883	mg/L	0.0326				0.67%
Y 371.029	296873.7	4.878	mg/L	0.0268				0.55%
Si 251.611*†	219744.0	6.308	mg/L	0.0292	6.308	mg/L	0.0292	0.46%
QC value within limits for Si 251.611* Recovery = 105.14%								
Si 288.158	61096.9	6.286	mg/L	0.0374	6.286	mg/L	0.0374	0.60%

All analyte(s) passed QC.

Sequence No.: 23
Sample ID: CCV
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/9/2008 6:41:16 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	171.0 kPa	0.60 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ho 345.600	107892.5	5.087	mg/L	0.0050				0.10%
Ho 339.898	65817.4	5.094	mg/L	0.0075				0.15%
Tb 384.873	14646.5	4.870	mg/L	0.0255				0.52%
Tb 350.917	28378.4	5.132	mg/L	0.0455				0.89%
Y 324.227	169991.8	4.980	mg/L	0.0144				0.29%
Y 371.029	302111.4	4.964	mg/L	0.0140				0.28%
Si 251.611*†	218105.3	6.261	mg/L	0.0454	6.261	mg/L	0.0454	0.73%
QC value within limits for Si 251.611* Recovery = 104.35%								
Si 288.158	61722.4	6.350	mg/L	0.0018	6.350	mg/L	0.0018	0.03%

All analyte(s) passed QC.

Sequence No.: 29
Sample ID: CCV
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/9/2008 6:51:22 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	172.0 kPa	0.60 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ho 345.600	106833.8	5.037	mg/L	0.0134				0.27%
Ho 339.898	65184.4	5.045	mg/L	0.0104				0.21%
Tb 384.873	14520.8	4.828	mg/L	0.0272				0.56%
Tb 350.917	28111.4	5.083	mg/L	0.0221				0.43%
Y 324.227	167939.0	4.920	mg/L	0.0126				0.26%
Y 371.029	299285.3	4.917	mg/L	0.0151				0.31%
Si 251.611*†	218724.6	6.279	mg/L	0.0070	6.279	mg/L	0.0070	0.11%
QC value within limits for Si 251.611* Recovery = 104.65%								
Si 288.158	61225.0	6.299	mg/L	0.0339	6.299	mg/L	0.0339	0.54%

All analyte(s) passed QC.

Work Order#: 08-12-0749

Client: WEISS Associates

EPA 6020

Calibration

SAMPLE INFORMATION

Sample ID: ICV

Sample Description:

Autosampler Position: 6

Sample Date/Time: Wednesday, December 10, 2008 11:25:26

Method File: C:\elandata\Method\cel\cel_std_t22.mth

Dataset File: C:\elandata\Dataset\Data\08121001\ICV.009

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass		Meas. Intens. Mean	Conc. Mean	Report Unit	Meas. Intens. RSD	Blank Intensity
Li	6		81094		ppb	4.4	88020
Be	9		43873	100.2230	ppb	0.0	40
B	11		61358	110.1604	ppb	0.4	704
B	10		12591	108.6202	ppb	0.1	160
Sc	45	>	1898428		ppb	3.4	1982938
Al	27		1175376	109.3673	ppb	3.9	14309
Mg	24		736307	111.9050	ppb	0.7	2160
Ti	47		159848	97.8667	ppb	0.1	502
Ti	49		132688	98.0988	ppb	1.4	3780
V	51		1796667	97.8592	ppb	0.8	-19899
Cr	52		1704314	100.6645	ppb	0.4	43227
Mn	55		2606275	102.9125	ppb	1.4	2205
Fe	54		196941	110.8896	ppb	0.1	54351
Fe	57		69566	111.6358	ppb	1.7	13851
Co	59		1988937	104.9409	ppb	0.2	131
Ni	60		441243	104.9735	ppb	0.5	195
Cu	65		465936	107.6933	ppb	0.5	513
Ge	74		557749		mg/L	2.9	586621
As	75		315381	101.8120	ppb	0.2	-2104
As-1	75		313260	101.5013	ppb	0.4	10720
Se	78		91120	99.0730	ppb	1.4	12816
Se	82		34208	100.4686	ppb	0.8	17
Sr	88		3779979	99.6254	ppb	0.8	834
Zn	66		272423	102.9584	ppb	0.5	2810
Zn	68		198991	102.9355	ppb	0.4	3202
Y	89		3455300		ppb	2.5	3552351
Mo	95		587543	99.8296	ppb	0.4	71
In	115	>	3038503		ppb	3.7	3080988
Ag	107		797393	55.6620	ppb	0.6	304
Cd	111		370537	104.7665	ppb	1.3	2390
Cd	114		789508	105.7231	ppb	1.4	80
Sn	118		957064	103.5962	ppb	0.3	1207
Sb	123		773047	91.9461	ppb	2.9	421
Ba	135		290369	101.8875	ppb	3.1	146
Tb	159	>	3779277		ppb	3.1	3798289
Tl	203		1143814	101.4758	ppb	0.7	137
Pb	207		4153883	103.0572	ppb	0.3	784
Bi	209		2775187		ppb	3.5	2728116

QC Out Of Limits

Mass	Analyte	Out of Limits Message
11	B	
24	Mg	
107	Ag	

SAMPLE INFORMATION

Sample ID: ICV

Sample Description:

Autosampler Position: 6

Sample Date/Time: Monday, December 15, 2008 16:21:27

Method File: C:\elandata\Method\cel\New\CEL_T22_new.mth

Dataset File: C:\elandata\Dataset\Data\08121501\ICV.072

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass		Meas. Intens. Mean	Conc. Mean	Report Unit	Meas. Intens. RSD	Blank Intensity
Li	6		115115		ppb	3.9	117377
Be	9		43944	101.5472	ppb	4.6	10
B	11		58932	101.8043	ppb	5.0	2199
Sc	45	>	954780		ppb	2.1	973273
B	10		12624	101.3285	ppb	11.4	485
Sc-1	45	>	954780		ppb	2.1	973273
Al	27		805520	100.3335	ppb	3.9	4549
Mg	24		551686	107.2332	ppb	4.2	1306
Ti	47		97918	94.1481	ppb	2.4	181
Ti	49		79155	93.3754	ppb	2.7	800
V	51		1176627	99.5887	ppb	2.2	-8271
Cr	52		1038984	98.0723	ppb	1.3	12458
Mn	55		1633556	96.1078	ppb	3.7	761
Fe	54		118520	113.1203	ppb	2.2	24321
Fe	56		2965111	110.5561	ppb	1.6	1504757
Fe	57		41256	103.9097	ppb	1.5	7190
Co	59		1207009	101.3799	ppb	2.4	60
Ni	60		250828	102.5463	ppb	2.9	83
Cu	65		262738	105.8566	ppb	1.4	262
Ge	74		254665		mg/L	0.5	256849
As	75		182599	98.7603	ppb	0.9	-665
As-1	75		182677	99.8703	ppb	1.0	6746
Se	78		59343	100.1349	ppb	2.6	7405
Se	82		21744	96.7451	ppb	4.4	9
Sr	88		2592019	96.2874	ppb	1.5	415
Zn	66		159321	101.4143	ppb	3.1	932
Zn	68		117846	101.5003	ppb	2.9	1353
Y	89	>	1717257		ppb	2.8	1711689
Mo	95		352443	99.1242	ppb	2.3	112
In	115		1515255		ppb	0.8	1536518
Ag	107		469405	52.9217	ppb	2.5	152
Cd	111		243602	103.1599	ppb	0.6	1031
Cd	114		529482	104.8597	ppb	1.5	38
Sn	118		634405	98.8893	ppb	0.6	440
Sb	123		488182	89.9344	ppb	4.9	205
Sb	121		643126	90.2213	ppb	4.2	285
Ba	135		162056	95.6886	ppb	1.1	49
Tb	159		1314576		ppb	0.9	1316523
Tl	203		476094	90.9880	ppb	6.5	136
Pb	207		1706521	94.8550	ppb	2.8	193
Bi	209	>	811625		ppb	7.2	794913

QC Out Of Limits

Mass	Analyte	Out of Limits Message
54	Fe	
123	Sb	

SAMPLE INFORMATION

Sample ID: CCV

Sample Description:

Autosampler Position: 4

Sample Date/Time: Wednesday, December 10, 2008 17:33:32

Method File: C:\elandata\Method\cel\CEL_STD_T22.mth

Dataset File: C:\elandata\Dataset\Data\08121001\CCV.109

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass		Meas. Intens. Mean	Conc. Mean	Report Unit	Meas. Intens. RSD	Blank Intensity
Li	6		168259		ppb	0.4	148779
Be	9		45894	95.6102	ppb	0.8	22
B	11		147781	227.3622	ppb	1.5	3737
B	10		31745	230.0906	ppb	1.8	790
Sc	45	>	2187242		ppb	1.4	2107484
Al	27		1138700	102.0739	ppb	0.9	13403
Mg	24		34162760	4754.8686	ppb	0.7	3220
Ti	47		161917	98.9835	ppb	0.9	449
Ti	49		132372	97.8965	ppb	0.4	3097
V	51		1810209	101.2319	ppb	1.3	-16701
Cr	52		1681689	101.6804	ppb	0.4	39279
Mn	55		2521432	99.3223	ppb	0.3	2532
Fe	54		6519246	5133.9694	ppb	1.1	51494
Fe	57		2522029	5062.1144	ppb	0.8	12274
Co	59		1858543	100.4215	ppb	0.3	124
Ni	60		406712	102.3036	ppb	0.8	192
Cu	65		416545	103.4688	ppb	0.3	381
Ge	74		595654		mg/L	0.4	597288
As	75		291527	100.6283	ppb	0.3	-1890
As-1	75		291153	100.9479	ppb	0.2	9538
Se	78		87500	101.8749	ppb	0.6	11373
Se	82		32241	100.6792	ppb	1.0	-2
Sr	88		3524876	98.0294	ppb	0.9	1308
Zn	66		252198	100.7163	ppb	1.6	2940
Zn	68		185040	101.2120	ppb	1.0	3842
Y	89		3713733		ppb	0.2	3667811
Mo	95		541017	99.1164	ppb	0.1	264
In	115	>	3210582		ppb	1.2	3274247
Ag	107		1377169	102.3838	ppb	0.1	384
Cd	111		331325	98.0959	ppb	0.3	2929
Cd	114		714330	100.4970	ppb	0.6	94
Sn	118		873970	97.8942	ppb	0.0	1361
Sb	123		785116	98.9021	ppb	0.1	509
Ba	135		260145	95.8363	ppb	0.4	170
Tb	159	>	3850431		ppb	4.3	4031559
Tl	203		855299	96.5848	ppb	2.4	867
Pb	207		3145799	98.1582	ppb	1.4	620
Bi	209		2342961		ppb	0.5	2553012

QC Out Of Limits

Mass	Analyte	Out of Limits Message

SAMPLE INFORMATION

Sample ID: CCV

Sample Description:

Autosampler Position: 4

Sample Date/Time: Wednesday, December 10, 2008 18:35:47

Method File: C:\elandata\Method\cel\CEL_STD_T22.mth

Dataset File: C:\elandata\Dataset\Data\08121001\CCV.123

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass		Meas. Intens. Mean	Conc. Mean	Report Unit	Meas. Intens. RSD	Blank Intensity
Li	6		130430		ppb	2.9	175570
Be	9		44410	103.6382	ppb	0.2	25
B	11		144364	253.6339	ppb	1.0	1168
B	10		30472	252.0936	ppb	3.1	256
Sc	45	>	1952843		ppb	1.9	2112582
Al	27		1097370	110.1996	ppb	1.8	14226
Mg	24		31831654	4963.4282	ppb	1.1	3224
Ti	47		146051	93.9939	ppb	1.4	411
Ti	49		118994	93.0262	ppb	0.2	2367
V	51		1576473	93.3351	ppb	0.7	-24449
Cr	52		1533710	97.5668	ppb	0.2	37899
Mn	55		2201855	91.2898	ppb	2.6	2371
Fe	54		5661558	4690.4100	ppb	2.1	49931
Fe	57		2202652	4649.3554	ppb	1.6	13352
Co	59		1663050	94.5954	ppb	0.1	122
Ni	60		359914	95.3109	ppb	0.4	172
Cu	65		367886	96.2042	ppb	0.1	333
Ge	74		535784		mg/L	0.3	594636
As	75		257174	93.4967	ppb	0.0	-1855
As-1	75		256640	93.5117	ppb	0.1	9122
Se	78		76851	93.2602	ppb	0.4	11005
Se	82		28393	93.2466	ppb	0.8	28
Sr	88		3149123	92.1925	ppb	2.0	1204
Zn	66		224115	94.1475	ppb	0.0	2894
Zn	68		164555	94.7452	ppb	0.3	3544
Y	89		3366778		ppb	0.8	3613634
Mo	95		491944	94.8949	ppb	0.1	148
In	115	>	3049735		ppb	0.9	3210212
Ag	107		1287732	100.7838	ppb	0.7	374
Cd	111		311751	97.2903	ppb	0.8	2421
Cd	114		670302	99.2810	ppb	0.2	67
Sn	118		851002	100.3438	ppb	2.9	1274
Sb	123		754894	100.0974	ppb	0.4	571
Ba	135		253005	98.1221	ppb	1.1	167
Tb	159	>	4102690		ppb	1.0	3644675
Tl	203		932514	98.8156	ppb	0.6	589
Pb	207		3382160	98.9961	ppb	1.8	520
Bi	209		2543774		ppb	2.0	2252706

QC Out Of Limits

Mass	Analyte	Out of Limits Message
27	Al	

SAMPLE INFORMATION

Sample ID: CCV

Sample Description:

Autosampler Position: 4

Sample Date/Time: Monday, December 15, 2008 16:26:08

Method File: C:\elandata\Method\cel\New\CEL_T22_new.mth

Dataset File: C:\elandata\Dataset\Data\08121501\CCV.073

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass		Meas. Intens. Mean	Conc. Mean	Report Unit	Meas. Intens. RSD	Blank Intensity
Li	6		110894		ppb	6.6	117377
Be	9		43546	99.6588	ppb	2.8	10
B	11		141124	246.7969	ppb	9.1	2199
Sc	45	>	964577		ppb	1.6	973273
B	10		31166	253.8372	ppb	11.4	485
Sc-1	45	>	964577		ppb	1.6	973273
Al	27		797048	98.2152	ppb	2.2	4549
Mg	24		25866711	4985.1194	ppb	3.5	1306
Ti	47		103621	98.6451	ppb	0.7	181
Ti	49		84662	98.9422	ppb	2.3	800
V	51		1237838	103.7029	ppb	3.2	-8271
Cr	52		1074327	100.3741	ppb	1.1	12458
Mn	55		1681667	97.9826	ppb	1.7	761
Fe	54		4289572	5045.1841	ppb	2.1	24321
Fe	56		70488868	5072.2726	ppb	5.0	1504757
Fe	57		1694548	5073.2458	ppb	3.4	7190
Co	59		1184200	100.8686	ppb	2.6	60
Ni	60		248000	102.8190	ppb	2.6	83
Cu	65		252977	103.3460	ppb	1.4	262
Ge	74		256415		mg/L	2.6	256849
As	75		187813	103.0045	ppb	2.9	-665
As-1	75		185357	102.8756	ppb	1.4	6746
Se	78		60183	103.3707	ppb	1.7	7405
Se	82		22978	103.6839	ppb	5.4	9
Sr	88		2638943	99.4168	ppb	2.9	415
Zn	66		163971	105.8744	ppb	2.9	932
Zn	68		120725	105.5229	ppb	4.7	1353
Y	89	>	1693482		ppb	2.7	1711689
Mo	95		356335	101.6035	ppb	3.0	112
In	115		1514471		ppb	1.8	1536518
Ag	107		925765	105.8284	ppb	1.1	152
Cd	111		238864	102.5797	ppb	1.5	1031
Cd	114		518516	104.1311	ppb	1.5	38
Sn	118		649897	102.7005	ppb	1.4	440
Sb	123		554205	103.5173	ppb	0.9	205
Sb	121		726718	103.3707	ppb	1.5	285
Ba	135		168743	101.0118	ppb	1.2	49
Tb	159		1354022		ppb	1.5	1316523
Tl	203		505920	99.3200	ppb	2.9	136
Pb	207		1741880	99.6281	ppb	3.5	193
Bi	209	>	786537		ppb	3.8	794913

QC Out Of Limits

Mass	Analyte	Out of Limits Message

SAMPLE INFORMATION

Sample ID: CCV

Sample Description:

Autosampler Position: 4

Sample Date/Time: Monday, December 15, 2008 17:25:23

Method File: C:\elandata\Method\cel\New\CEL_T22_new.mth

Dataset File: C:\elandata\Dataset\Data\08121501\CCV.086

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass		Meas. Intens. Mean	Conc. Mean	Report Unit	Meas. Intens. RSD	Blank Intensity
Li	6		93542		ppb	9.4	117377
Be	9		40271	111.2478	ppb	8.4	10
B	11		128246	272.1683	ppb	14.3	2199
Sc	45	>	798195		ppb	3.3	973273
B	10		28016	275.9742	ppb	3.6	485
Sc-1	45	>	798195		ppb	3.3	973273
Al	27		664425	99.0254	ppb	6.2	4549
Mg	24		20436604	4769.2943	ppb	8.9	1306
Ti	47		86325	99.2961	ppb	3.1	181
Ti	49		70732	99.9356	ppb	1.6	800
V	51		1046963	106.0810	ppb	3.2	-8271
Cr	52		933164	105.5224	ppb	2.3	12458
Mn	55		1425195	100.3247	ppb	2.9	761
Fe	54		3635117	5166.4084	ppb	4.3	24321
Fe	56		59347370	5163.8152	ppb	0.5	1504757
Fe	57		1493622	5409.6908	ppb	2.8	7190
Co	59		1066331	89.6164	ppb	3.2	60
Ni	60		222951	91.2568	ppb	1.6	83
Cu	65		227102	91.6067	ppb	1.7	262
Ge	74		242165		mg/L	1.7	256849
As	75		173452	93.9136	ppb	0.5	-665
As-1	75		171696	93.7471	ppb	0.2	6746
Se	78		57240	96.3112	ppb	4.9	7405
Se	82		21643	96.4180	ppb	4.7	9
Sr	88		2549407	94.7214	ppb	4.5	415
Zn	66		148790	94.7576	ppb	2.3	932
Zn	68		110317	94.9682	ppb	1.3	1353
Y	89	>	1716272		ppb	3.7	1711689
Mo	95		354371	99.7694	ppb	1.9	112
In	115		1592373		ppb	1.9	1536518
Ag	107		922930	104.1832	ppb	2.7	152
Cd	111		247277	104.7691	ppb	2.4	1031
Cd	114		540175	107.0444	ppb	3.0	38
Sn	118		669456	104.4981	ppb	2.2	440
Sb	123		579751	106.9135	ppb	0.5	205
Sb	121		755763	106.1505	ppb	0.5	285
Ba	135		191035	112.8668	ppb	1.1	49
Tb	159		1778901		ppb	1.6	1316523
Tl	203		617023	93.3025	ppb	4.7	136
Pb	207		2141725	94.3405	ppb	1.1	193
Bi	209	>	1019956		ppb	2.4	794913

QC Out Of Limits

Mass	Analyte	Out of Limits Message

Work Order#: 08-12-0749

Client: WEISS Associates

EPA 7470A

Calibration

==========

Analysis Begun

Logged In Analyst: Xue-Wen Xu
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-400, S/N B050-9560
Autosampler Model: AS-90

Sample Information File: C:\data-AA\xue-wen xu\Sample Information\081208D1.sif
Batch ID: 081208D1
Results Data Set: 081208D1
Results Library: C:\data-AA\xue-wen xu\Results\Results.mdb

==========

Method Loaded
Method Name: Hg
Method Last Saved: 12/8/2008 10:38:40 AM
Method Description:

==========

Sequence No.: 1
Autosampler Location: 7
Sample ID: ICV
Date Collected: 12/8/2008 11:35:11 AM
Analyst:
Data Type: Original

Replicate Data: ICV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00539	5.39	0.0204	0.0790	0.0204	11:36:18	Yes
2	0.00540	5.40	0.0204	0.0768	0.0205	11:37:02	Yes
Mean:	0.00540	5.40	0.0204				
SD:	0.000008	0.00754	0.0000				
%RSD:	0.140	0.140	0.14				

QC value within limits for Hg 253.7 Recovery = 107.93%
All analyte(s) passed QC.

==========

Sequence No.: 2
Autosampler Location: 6
Sample ID: ICB
Date Collected: 12/8/2008 11:37:29 AM
Analyst:
Data Type: Original

Replicate Data: ICB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.000097	-0.0966	-0.0000	-0.0013	0.0000	11:38:34	Yes
2	-0.000092	-0.0925	0.0000	-0.0005	0.0000	11:39:18	Yes
Mean:	-0.000095	-0.0945	-0.0000				
SD:	0.000003	0.00292	0.0000				
%RSD:	3.09	3.09	160.09				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 3
Autosampler Location: 9
Sample ID: CRDL 0.50 PPB
Date Collected: 12/8/2008 11:39:44 AM
Analyst:
Data Type: Original

Replicate Data: CRDL 0.50 PPB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000397	0.397	0.0018	0.0058	0.0018	11:40:48	Yes
2	0.000381	0.381	0.0018	0.0065	0.0018	11:41:32	Yes
Mean:	0.000389	0.389	0.0018				
SD:	0.000011	0.0109	0.0000				
%RSD:	2.81	2.81	2.27				

==========

Sequence No.: 4
Autosampler Location: 3
Sample ID: CCV
Date Collected: 12/8/2008 11:41:56 AM
Analyst:
Data Type: Original

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.000133	-0.0665	0.0001	0.0006	0.0001	15:46:40	Yes
2	-0.000110	-0.0550	0.0001	0.0017	0.0002	15:47:25	Yes
Mean:	-0.000122	-0.0608	0.0001				
SD:	0.000016	0.00810	0.0000				
%RSD:	13.3	13.3	25.35				

==========

Sequence No.: 10 **Autosampler Location: 62**
Sample ID: 08-12-0691-5 **Date Collected: 12/8/2008 3:47:51 PM**
Analyst: **Data Type: Original**

Replicate Data: 08-12-0691-5

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.000133	-0.0663	0.0001	0.0005	0.0001	15:48:57	Yes
2	-0.000113	-0.0564	0.0001	0.0009	0.0002	15:49:41	Yes
Mean:	-0.000123	-0.0613	0.0001				
SD:	0.000014	0.00706	0.0000				
%RSD:	11.5	11.5	22.51				

==========

Sequence No.: 11 **Autosampler Location: 3**
Sample ID: CCV **Date Collected: 12/8/2008 3:50:07 PM**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00206	2.06	0.0080	0.0275	0.0080	15:51:12	Yes
2	0.00217	2.17	0.0084	0.0276	0.0085	15:51:56	Yes
Mean:	0.00212	2.12	0.0082				
SD:	0.000076	0.0765	0.0003				
%RSD:	3.61	3.61	3.46				

QC value within limits for Hg 253.7 Recovery = 105.89%
All analyte(s) passed QC.

==========

Sequence No.: 12 **Autosampler Location: 6**
Sample ID: CCB **Date Collected: 12/8/2008 3:52:20 PM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.000038	-0.0378	0.0002	0.0008	0.0002	15:53:26	Yes
2	-0.000071	-0.0705	0.0001	0.0006	0.0001	15:54:10	Yes
Mean:	-0.000054	-0.0542	0.0001				
SD:	0.000023	0.0231	0.0001				
%RSD:	42.7	42.7	60.05				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 13 **Autosampler Location: 63**
Sample ID: 08-12-0691-6 **Date Collected: 12/8/2008 3:54:36 PM**
Analyst: **Data Type: Original**

Replicate Data: 08-12-0691-6

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.000106	-0.0531	0.0001	0.0007	0.0002	15:55:39	Yes
2	-0.000069	-0.0344	0.0002	0.0017	0.0002	15:56:23	Yes
Mean:	-0.000088	-0.0438	0.0002				
SD:	0.000026	0.0132	0.0000				
%RSD:	30.3	30.3	27.05				

Sequence No.: 14
Sample ID: 08-12-0749-10
Analyst:
Autosampler Location: 64
Date Collected: 12/8/2008 3:56:46 PM
Data Type: Original

Replicate Data: 08-12-0749-10

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000004	0.00212	0.0004	0.0020	0.0004	15:57:49	Yes
2	-0.000012	-0.00611	0.0003	0.0007	0.0003	15:58:33	Yes
Mean:	-0.000004	-0.00200	0.0003				
SD:	0.000012	0.00582	0.0000				
%RSD:	291	291	6.42				

Sequence No.: 15
Sample ID: 08-12-0728-f-2
Analyst:
Autosampler Location: 65
Date Collected: 12/8/2008 3:58:56 PM
Data Type: Original

Replicate Data: 08-12-0728-f-2

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.000171	-0.0856	0.0000	-0.0000	0.0001	15:59:59	Yes
2	-0.000168	-0.0840	0.0000	-0.0001	0.0001	16:00:43	Yes
Mean:	-0.000170	-0.0848	0.0000				
SD:	0.000002	0.00113	0.0000				
%RSD:	1.33	1.33	14.23				

Sequence No.: 16
Sample ID: 08-12-0239-1
Analyst:
Autosampler Location: 66
Date Collected: 12/8/2008 4:01:07 PM
Data Type: Original

Replicate Data: 08-12-0239-1

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.000145	-0.0727	0.0001	-0.0002	0.0001	16:02:10	Yes
2	-0.000133	-0.0663	0.0001	0.0002	0.0001	16:02:54	Yes
Mean:	-0.000139	-0.0695	0.0001				
SD:	0.000009	0.00451	0.0000				
%RSD:	6.48	6.48	19.44				

Sequence No.: 17
Sample ID: 08-12-0239-2
Analyst:
Autosampler Location: 67
Date Collected: 12/8/2008 4:03:18 PM
Data Type: Original

Replicate Data: 08-12-0239-2

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.000143	-0.0714	0.0001	-0.0001	0.0001	16:04:21	Yes
2	-0.000102	-0.0512	0.0002	0.0011	0.0002	16:05:05	Yes
Mean:	-0.000123	-0.0613	0.0001				
SD:	0.000029	0.0143	0.0001				
%RSD:	23.3	23.3	45.49				

Sequence No.: 18
Sample ID: 08-12-0239-3
Analyst:
Autosampler Location: 68
Date Collected: 12/8/2008 4:05:29 PM
Data Type: Original

Replicate Data: 08-12-0239-3

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.000123	-0.0617	0.0001	0.0003	0.0001	16:06:33	Yes
2	-0.000129	-0.0643	0.0001	0.0001	0.0001	16:07:17	Yes
Mean:	-0.000126	-0.0630	0.0001				

SD:	0.000004	0.00189	0.0000
%RSD:	3.01	3.01	6.37

Sequence No.: 19
Sample ID: 081208-b-st-a-1
Analyst:
Autosampler Location: 69
Date Collected: 12/8/2008 4:07:41 PM
Data Type: Original

Replicate Data: 081208-b-st-a-1

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.000189	-0.0947	-0.0000	-0.0002	0.0000	16:08:45	Yes
2	-0.000167	-0.0835	0.0000	0.0005	0.0001	16:09:29	Yes
Mean:	-0.000178	-0.0891	0.0000				
SD:	0.000016	0.00793	0.0000				
%RSD:	8.90	8.90	220.06				

Sequence No.: 20
Sample ID: 081208-1-st-a-1
Analyst:
Autosampler Location: 70
Date Collected: 12/8/2008 4:09:53 PM
Data Type: Original

Replicate Data: 081208-1-st-a-1

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0106	5.30	0.0201	0.0672	0.0201	16:10:57	Yes
2	0.0112	5.59	0.0211	0.0710	0.0212	16:11:41	Yes
Mean:	0.0109	5.45	0.0206				
SD:	0.000406	0.203	0.0008				
%RSD:	3.73	3.73	3.67				

Sequence No.: 21
Sample ID: 081208-1-st-a-1d
Analyst:
Autosampler Location: 71
Date Collected: 12/8/2008 4:12:06 PM
Data Type: Original

Replicate Data: 081208-1-st-a-1d

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0106	5.32	0.0201	0.0666	0.0202	16:13:10	Yes
2	0.0113	5.67	0.0214	0.0744	0.0215	16:13:55	Yes
Mean:	0.0110	5.49	0.0208				
SD:	0.000490	0.245	0.0009				
%RSD:	4.46	4.46	4.38				

Sequence No.: 22
Sample ID: 08-12-0643-ms-1
Analyst:
Autosampler Location: 72
Date Collected: 12/8/2008 4:14:19 PM
Data Type: Original

Replicate Data: 08-12-0643-ms-1

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00863	4.31	0.0164	0.0536	0.0164	16:15:24	Yes
2	0.00893	4.46	0.0169	0.0568	0.0170	16:16:08	Yes
Mean:	0.00878	4.39	0.0167				
SD:	0.000209	0.105	0.0004				
%RSD:	2.38	2.38	2.33				

Sequence No.: 23
Sample ID: CCV
Analyst:
Autosampler Location: 3
Date Collected: 12/8/2008 4:16:33 PM
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	0.00222	2.22	0.0086	0.0278	0.0086	16:17:38	Yes
2	0.00215	2.15	0.0083	0.0286	0.0084	16:18:22	Yes
Mean:	0.00218	2.18	0.0085				
SD:	0.000049	0.0493	0.0002				
%RSD:	2.26	2.26	2.17				

QC value within limits for Hg 253.7 Recovery = 109.03%
All analyte(s) passed QC.

Sequence No.: 24
Sample ID: CCB
Analyst:

Autosampler Location: 6
Date Collected: 12/8/2008 4:18:47 PM
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.000048	-0.0483	0.0002	-0.0005	0.0002	16:19:53	Yes
2	-0.000071	-0.0708	0.0001	0.0008	0.0001	16:20:37	Yes
Mean:	-0.000060	-0.0596	0.0001				
SD:	0.000016	0.0159	0.0001				
%RSD:	26.8	26.8	48.07				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 25
Sample ID: 08-12-0643-ms-1d
Analyst:

Autosampler Location: 73
Date Collected: 12/8/2008 4:21:03 PM
Data Type: Original

Replicate Data: 08-12-0643-ms-1d

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00830	4.15	0.0158	0.0533	0.0158	16:22:08	Yes
2	0.00895	4.47	0.0170	0.0566	0.0170	16:22:52	Yes
Mean:	0.00862	4.31	0.0164				
SD:	0.000460	0.230	0.0009				
%RSD:	5.34	5.34	5.22				

Sequence No.: 26
Sample ID: 08-12-0643--1
Analyst:

Autosampler Location: 74
Date Collected: 12/8/2008 4:23:17 PM
Data Type: Original

Replicate Data: 08-12-0643--1

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000051	0.0255	0.0004	0.0018	0.0005	16:24:22	Yes
2	-0.000139	-0.0697	0.0001	0.0004	0.0001	16:25:07	Yes
Mean:	-0.000044	-0.0221	0.0003				
SD:	0.000135	0.0674	0.0003				
%RSD:	305	305	95.40				

Sequence No.: 27
Sample ID: CCV
Analyst:

Autosampler Location: 3
Date Collected: 12/8/2008 4:25:32 PM
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00198	1.98	0.0077	0.0258	0.0077	16:26:37	Yes
2	0.00215	2.15	0.0083	0.0284	0.0084	16:27:21	Yes
Mean:	0.00206	2.06	0.0080				
SD:	0.000121	0.121	0.0005				
%RSD:	5.88	5.88	5.63				

QC value within limits for Hg 253.7 Recovery = 103.16%
All analyte(s) passed QC.

Work Order#: 08-12-0749

Client: WEISS Associates

EPA 8270C (M) Isotope Dilution

Calibration

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\081107\
Data File : 07NOV007.D
Acq On : 7 Nov 2008 2:05 pm
Operator :
Sample : ICV S101308G
ALS Vial : 8 Sample Multiplier: 1
InstName : GCMS AAA

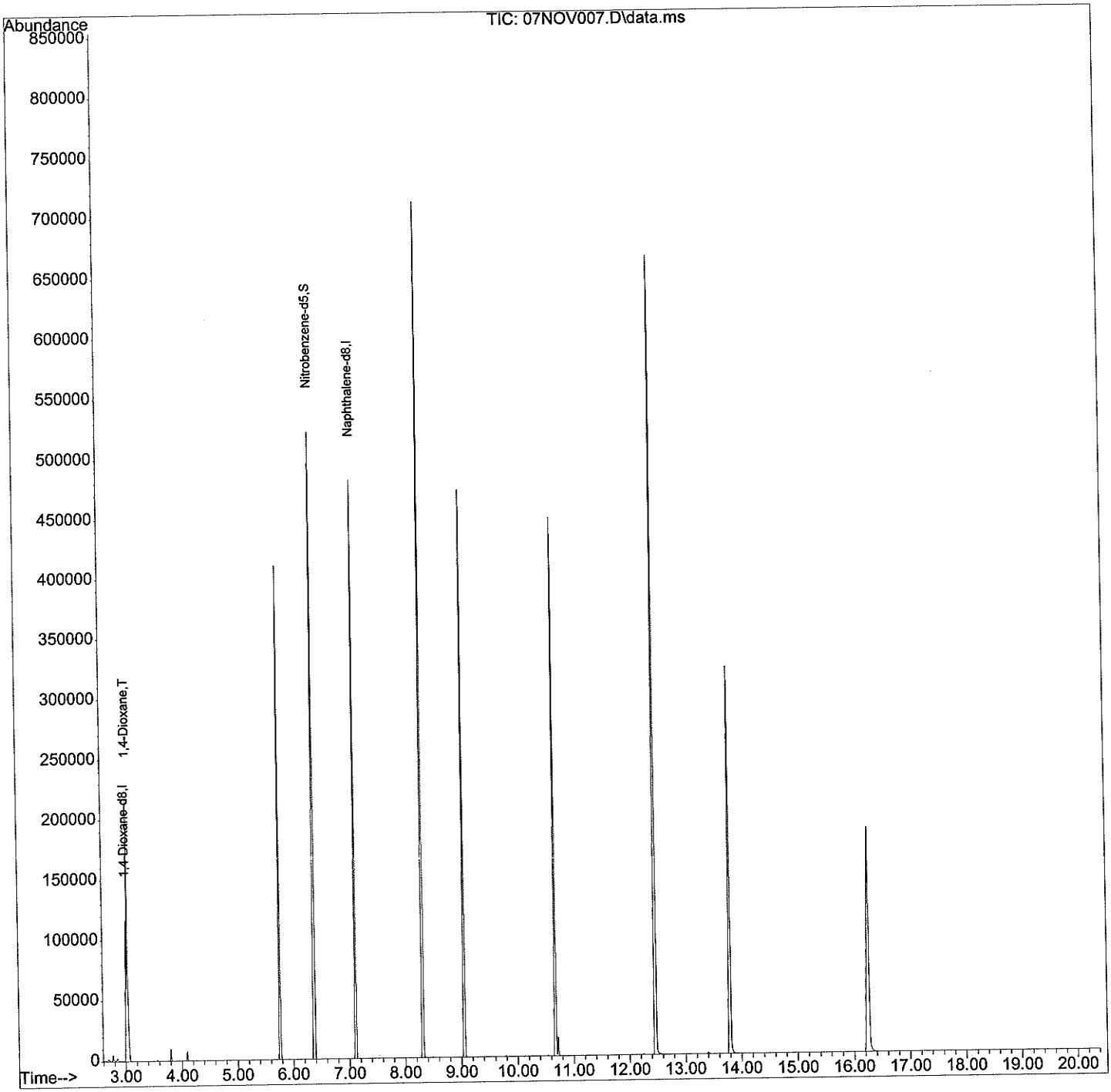
Quant Time: Nov 07 17:57:53 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Fri Nov 07 17:56:50 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dioxane-d8	3.010	96	46060	40.00 mg/l	# 0.00
3) Naphthalene-d8	7.112	136	226354	40.00 mg/l	# 0.00
System Monitoring Compounds					
4) Nitrobenzene-d5	6.379	82	274608	79.29 mg/l	0.00
Target Compounds					Qvalue
2) 1,4-Dioxane	3.036	88	86006	73.61 mg/l #	71

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\MSDCHEM\1\DATA\081107\
Data File : 07NOV007.D
Acq On : 7 Nov 2008 2:05 pm
Operator :
Sample : ICV S101308G
ALS Vial : 8 Sample Multiplier: 1
InstName : GCMS AAA

Quant Time: Nov 07 17:57:53 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Fri Nov 07 17:56:50 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\081211\
Data File : 11DEC032.D
Acq On : 11 Dec 2008 9:35 pm
Operator :
Sample : DIOX-80 S101308D
ALS Vial : 2 Sample Multiplier: 1
InstName : GCMS AAA

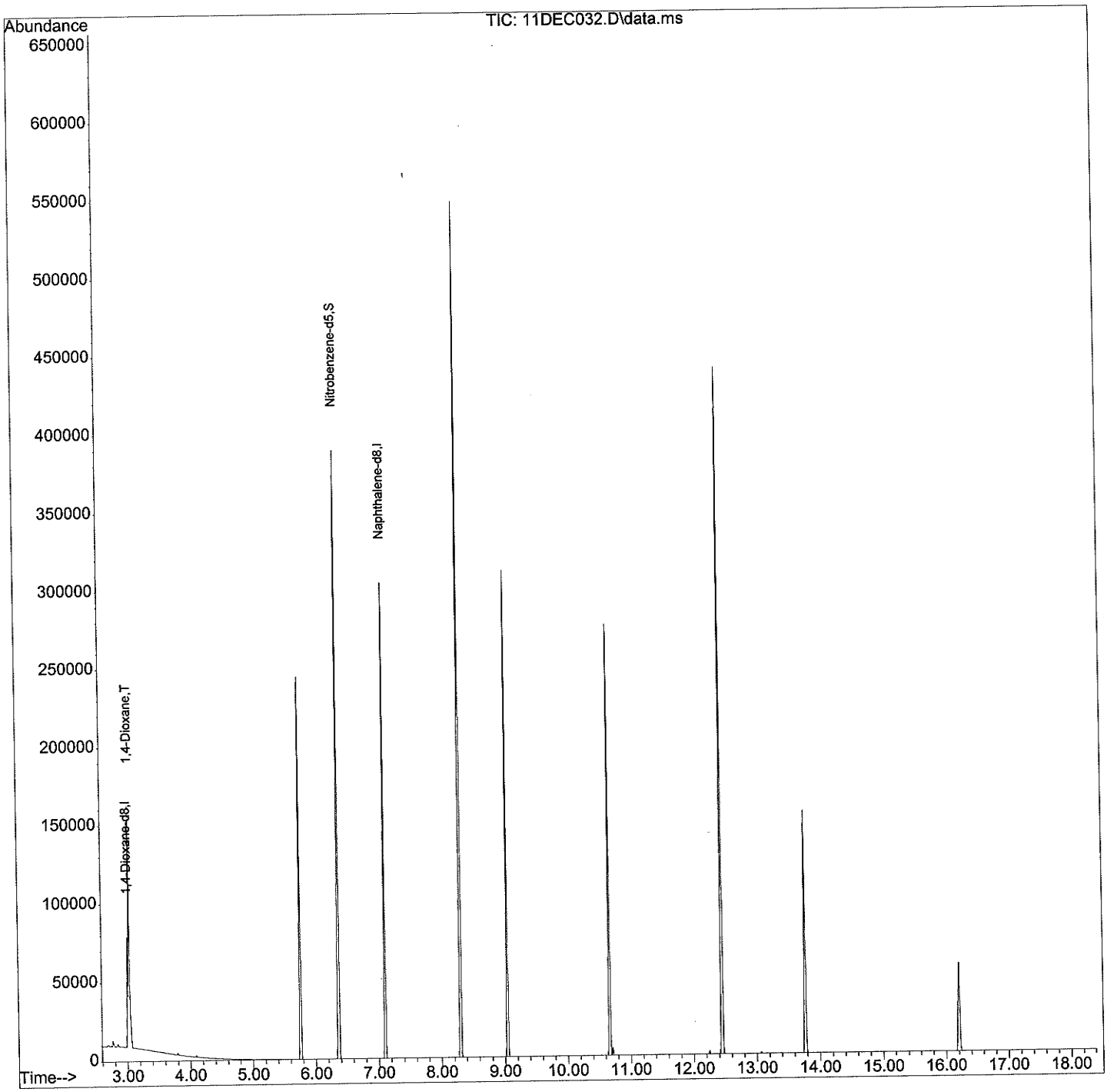
Quant Time: Dec 12 08:41:46 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Wed Nov 19 09:17:53 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dioxane-d8	3.004	96	24252	40.00 mg/l	# 0.00
3) Naphthalene-d8	7.101	136	124988	40.00 mg/l	# 0.00
System Monitoring Compounds					
4) Nitrobenzene-d5	6.368	82	157284	82.25 mg/l	0.00
Target Compounds					Qvalue
2) 1,4-Dioxane	3.031	88	50008	81.29 mg/l #	45

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\MSDCHEM\1\DATA\081211\
Data File : 11DEC032.D
Acq On : 11 Dec 2008 9:35 pm
Operator :
Sample : DIOX-80 S101308D
ALS Vial : 2 Sample Multiplier: 1
InstName : GCMS AAA

Quant Time: Dec 12 08:41:46 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Wed Nov 19 09:17:53 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\081107\
Data File : 07NOV004.D
Acq On : 7 Nov 2008 12:46 pm
Operator :
Sample : DIOX 80PPM S101308D
ALS Vial : 4 Sample Multiplier: 1
InstName : GCMS AAA

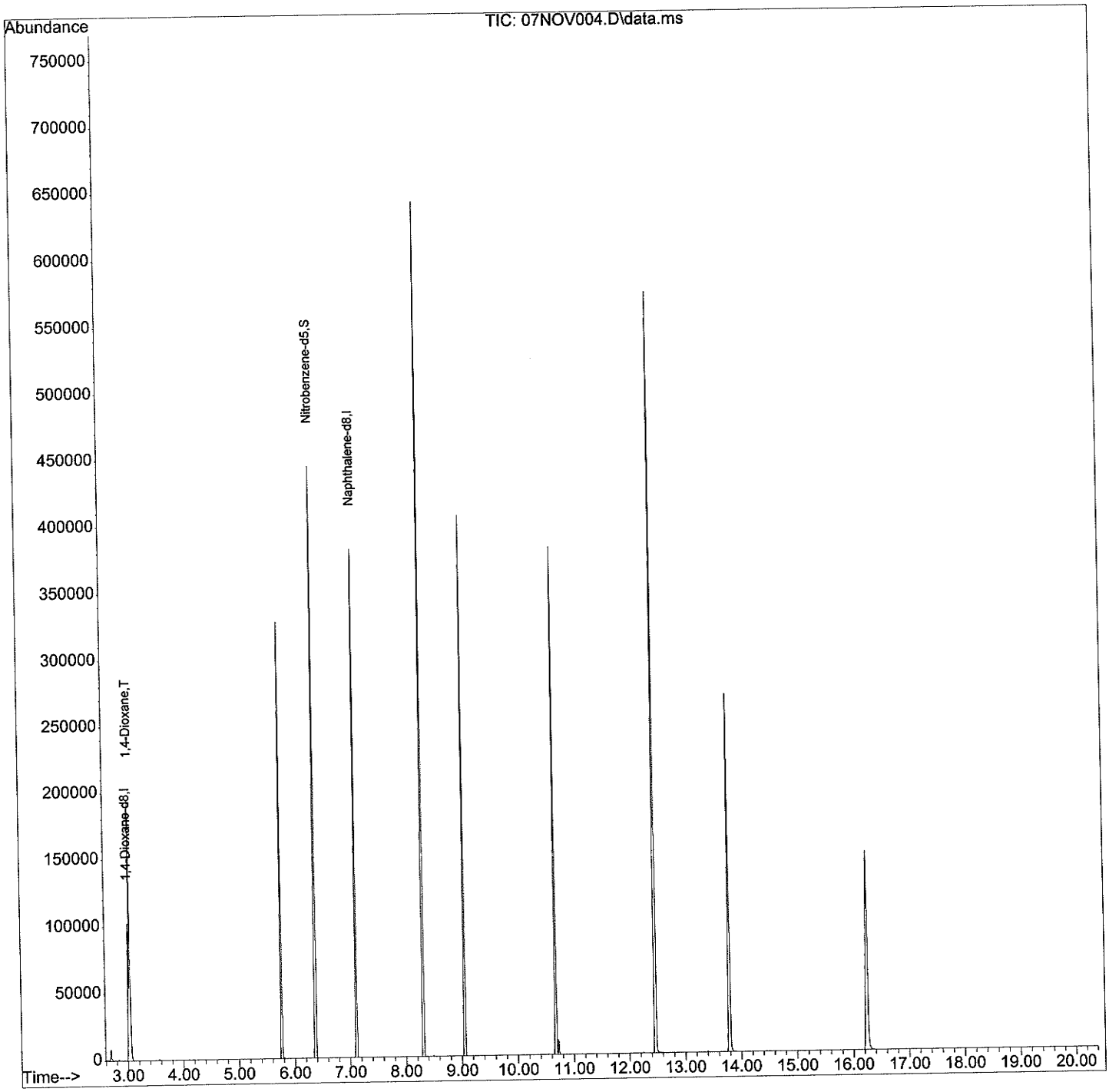
Quant Time: Nov 07 17:55:21 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Fri Nov 07 17:55:11 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dioxane-d8	3.009	96	39293	40.00 mg/l	# 0.00
3) Naphthalene-d8	7.112	136	178255	40.00 mg/l	# 0.00
System Monitoring Compounds					
4) Nitrobenzene-d5	6.374	82	215387	81.07 mg/l	0.00
Target Compounds					Qvalue
2) 1,4-Dioxane	3.036	88	76923	76.08 mg/l #	70

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\MSDCHEM\1\DATA\081107\
Data File : 07NOV004.D
Acq On : 7 Nov 2008 12:46 pm
Operator :
Sample : DIOX 80PPM S101308D
ALS Vial : 4 Sample Multiplier: 1
InstName : GCMS AAA

Quant Time: Nov 07 17:55:21 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Fri Nov 07 17:55:11 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M



Work Order#: 08-12-0749

Client: WEISS Associates

EPA 8260B

Calibration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D Vial: 24
Acq On : 3 Dec 2008 3:12 pm Operator:
Sample : ICV/LCS V111908D/V112608B Inst : GCMS_L
Misc : V120308A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 03 15:47:56 2008 Quant Results File: 081203_BP.RES

Quant Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Tert-Butyl Alcohol-d9	3.8865	65	28844	50.0000 ug/l	-0
4) Pentafluorobenzene	6.4012	168	424065	10.0000 ug/l	0
47) 1,4-Difluorobenzene	7.3265	114	545475	10.0000 ug/l	0
63) Chlorobenzene-d5	10.9182	117	422275	10.0000 ug/l	0
87) 1,4-Dichlorobenzene-d4	13.7936	152	223638	10.0000 ug/l	0

System Monitoring Compounds					
41) Dibromofluoromethane	6.3018	113	161198	9.64 ug/l	0.0
Spiked Amount 10.000	Range 53 - 141		Recovery	= 96.40%	
46) 1,2-Dichloroethane-d4	6.7305	65	144382	8.92 ug/l	0.0
Spiked Amount 10.000	Range 50 - 150		Recovery	= 89.20%	
60) Toluene-d8	9.1616	98	605274	10.45 ug/l	0.0
Spiked Amount 10.000	Range 69 - 134		Recovery	= 104.50%	
80) 1,4-Bromofluorobenzene	12.3611	95	174937	10.50 ug/l	0.0
Spiked Amount 10.000	Range 51 - 152		Recovery	= 105.00%	

Target Compounds				Qvalue
2) Ethanol	2.7520	45	8955	98.7768 ug/l
3) Tert-Butyl Alcohol (TBA)	4.0224	59	27037	43.2509 ug/l
5) Dichlorodifluoromethane	1.5600	85	262525	10.7621 ug/l
6) Chloromethane	1.7273	50	280280	10.7022 ug/l
7) Vinyl Chloride	1.8423	62	283358	10.8929 ug/l
8) Bromomethane	2.1770	94	177331	10.2001 ug/l
9) Chloroethane	2.2867	64	163810	10.7455 ug/l
10) Trichlorofluoromethane	2.5690	101	404509	9.7828 ug/l
11) Diethyl Ether	2.8984	45	75134	9.1520 ug/l
12) Acetone	3.2173	43	18271	9.2761 ug/l
13) Iodomethane	3.3428	142	244361	14.3479 ug/l
14) 1,1-Dichloroethene	3.1650	61	313070	10.2122 ug/l
15) 1,1,2-Trichloro-1,2,2-Trif	3.1807	101	211509	10.4074 ug/l
16) Carbon Disulfide	3.4317	76	585329	10.5179 ug/l
17) Acetonitrile	3.6303	41	355436	10.3171 ug/l
18) Acrylonitrile	4.1531	53	22568	8.7847 ug/l #
19) Allyl Chloride	3.6303	41	349482	10.1325 ug/l
20) Acrolein	3.0291	56	15606	21.1622 ug/l
21) Methyl Acetate	3.6721	43	56058	8.4071 ug/l
22) Methylene Chloride	3.7976	84	168631	9.6228 ug/l
23) t-1,2-Dichloroethene	4.2211	96	208398	10.0213 ug/l
24) Isobutyl Alcohol	3.6721	43	56058	8.9841 ug/l
25) Methyl-t-Butyl Ether (MTBE	4.2577	73	294560	9.0958 ug/l
26) Hexane	4.6602	57	323382	10.4897 ug/l
27) 1,1-Dichloroethane	4.8275	63	365742	9.5512 ug/l

(#) = qualifier out of range (m) = manual integration

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D Vial: 24
Acq On : 3 Dec 2008 3:12 pm Operator:
Sample : ICV/LCS V111908D/V112608B Inst : GCMS_L
Misc : V120308A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 03 15:47:56 2008 Quant Results File: 081203_BP.RES

Quant Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
28) Vinyl Acetate	4.9478	86	18568	9.3596	ug/l	#
29) Diisopropyl Ether (DIPE)	4.9948	45	548039	9.6932	ug/l	
30) Chloroprene	4.9687	53	370046	10.1898	ug/l	
31) Ethyl-t-Butyl Ether (ETBE)	5.5124	59	372778	9.4608	ug/l	
32) c-1,2-Dichloroethene	5.6536	96	201268	9.8534	ug/l	
33) 2,2-Dichloropropane	5.6431	77	326271	9.6253	ug/l	
34) 2-Butanone	5.6902	43	30132	9.4451	ug/l	
35) Propionitrile	5.7372	54	8138	9.9047	ug/l	
36) Methacrylonitrile	5.9568	41	47181	9.2983	ug/l	
37) Propanedinitrile	5.9620	66	8361	8.8060	ug/l	
38) Bromochloromethane	5.9725	130	93788	9.5125	ug/l	
39) Tetrahydrofuran	6.0614	42	18570	9.1903	ug/l	
40) Chloroform	6.0927	83	335188	9.5025	ug/l	
42) 1,1,1-Trichloroethane	6.3332	97	318154	9.5310	ug/l	
43) Cyclohexane	6.4116	84	307782	9.4906	ug/l	
44) 1,1-Dichloropropene	6.5528	75	279671	10.0255	ug/l	
45) Carbon Tetrachloride	6.5580	117	279041	9.8157	ug/l	
48) Benzene	6.8142	78	740847	10.0458	ug/l	
49) 1,2-Dichloroethane	6.8299	62	170972	8.9862	ug/l	
50) Tert-Amyl-Methyl Ether (TA	7.0129	73	273087	9.3398	ug/l	
51) Thiophene	7.0808	84	319546	9.9647	ug/l	
52) Trichloroethene	7.6507	95	186590	10.0765	ug/l	
53) 1,2-Dichloropropane	7.9173	63	153740	9.3217	ug/l	
54) Methylcyclohexane	7.9016	83	328562	10.0874	ug/l	
55) Dibromomethane	8.0585	93	55892	9.3092	ug/l	
56) Methyl Methacrylate	8.1107	69	40865	9.5124	ug/l	
57) Bromodichloromethane	8.2623	83	190955	9.2961	ug/l	
58) 2-Chloroethyl Vinyl Ether	8.6649	63	44517	8.5468	ug/l	
59) c-1,3-Dichloropropene	8.8270	75	206053	9.6417	ug/l	
61) Toluene	9.2400	91	697614	10.1924	ug/l	
62) 4-Methyl-2-Pentanone	9.1563	58	4915	14.6828	ug/l	
64) t-1,3-Dichloropropene	9.5118	75	156814	9.9286	ug/l	
65) Ethyl Methacrylate	9.6478	69	84497	9.7639	ug/l	
66) 1,1,2-Trichloroethane	9.7262	83	68520	9.7461	ug/l	
67) Tetrachloroethene	9.9248	166	242385	10.1024	ug/l	
68) 1,3-Dichloropropane	9.9301	76	157836	9.6435	ug/l	
69) 2-Hexanone	10.0556	58	13507	9.3630	ug/l	
70) Dibromochloromethane	10.2072	129	105738	10.0363	ug/l	
71) 1,2-Dibromoethane	10.3379	107	77450	9.6633	ug/l	
72) Chlorobenzene	10.9548	112	417096	9.8661	ug/l	
73) 1,1,1,2-Tetrachloroethane	11.0541	131	154180	10.1227	ug/l	

(#) = qualifier out of range (m) = manual integration

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D Vial: 24
Acq On : 3 Dec 2008 3:12 pm Operator:
Sample : ICV/LCS V111908D/V112608B Inst : GCMS_L
Misc : V120308A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 03 15:47:56 2008 Quant Results File: 081203_BP.RES

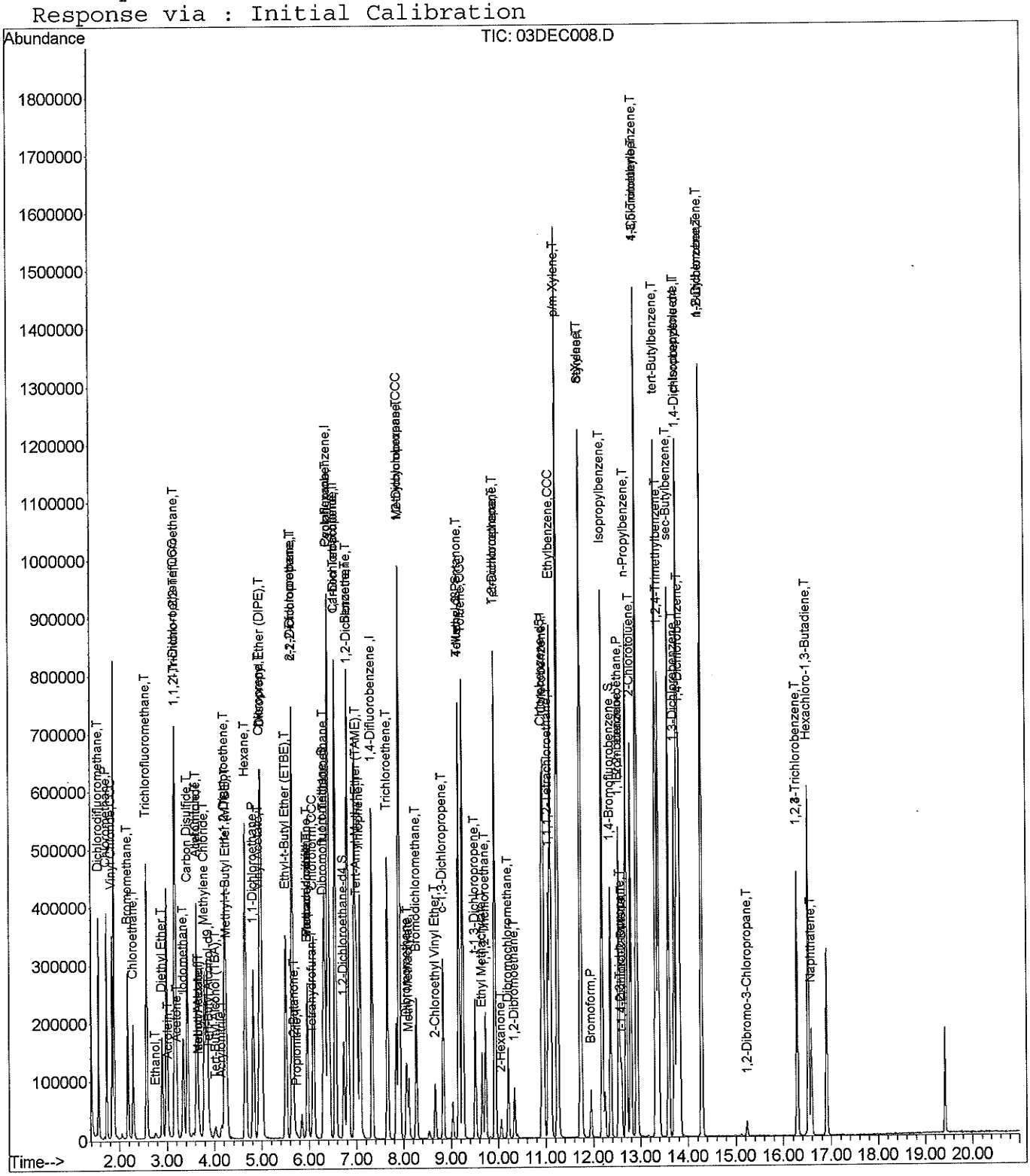
Quant Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
74)	Ethylbenzene	11.1011	91	785840	10.7903	ug/l	
75)	p/m-Xylene	11.2475	91	1165099	21.0150	ug/l	
76)	o-Xylene	11.7285	91	568688	10.6254	ug/l	
77)	Styrene	11.7442	104	438553	10.7030	ug/l	
78)	Bromoform	11.9533	173	50945	11.3184	ug/l	
79)	Isopropylbenzene	12.1886	105	782745	11.1343	ug/l	
81)	1,2,3-Trichloropropane	12.5859	75	96128	10.2239	ug/l	
82)	Bromobenzene	12.5441	156	171066	10.4499	ug/l	
83)	n-Propylbenzene	12.6957	91	885137	10.8359	ug/l	
84)	t-1,4-Dichloro-2-Butene	12.6120	53	21407	10.4142	ug/l	
85)	2-Chlorotoluene	12.7950	91	492077	10.6585	ug/l	
86)	1,3,5-Trimethylbenzene	12.9153	105	614940	10.9102	ug/l	
88)	4-Chlorotoluene	12.9257	91	584602	10.6378	ug/l	
89)	1,1,2,2-Tetrachloroethane	12.5336	83	76613	9.6235	ug/l	
90)	1,2,4-Trimethylbenzene	13.3753	105	598219	10.8114	ug/l	
91)	tert-Butylbenzene	13.3231	119	624166	10.8272	ug/l	
92)	p-Isopropyltoluene	13.7727	119	723823	10.8584	ug/l	
93)	sec-Butylbenzene	13.5949	105	856394	11.1148	ug/l	
94)	1,3-Dichlorobenzene	13.7152	146	347034	10.4040	ug/l	
95)	1,4-Dichlorobenzene	13.8249	146	334057	9.7335	ug/l	
96)	1,2-Dichlorobenzene	14.2798	146	273914	9.8216	ug/l	
97)	n-Butylbenzene	14.2850	91	637311	10.7920	ug/l	
98)	1,2-Dibromo-3-Chloropropan	15.2417	75	9509	9.8117	ug/l	
99)	1,2,4-Trichlorobenzene	16.2873	180	204087	10.0816	ug/l	
100)	Hexachloro-1,3-Butadiene	16.5226	225	177288	10.1949	ug/l	
101)	Naphthalene	16.5853	128	213858	9.3894	ug/l	
102)	1,2,3-Trichlorobenzene	16.2873	180	204087	10.0805	ug/l	

(#) = qualifier out of range (m) = manual integration

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D Vial: 24
Acq On : 3 Dec 2008 3:12 pm Operator:
Sample : ICV/LCS V111908D/V112608B Inst : GCMS_L
Misc : V120308A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 3 15:47 2008 Quant Results File: 081203_BP.

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D
Acq On : 3 Dec 2008 3:12 pm
Sample : ICV/LCS V111908D/V112608B
Misc : V120308A
MS Integration Params: RTEINT.P

Vial: 24
Operator:
Inst : GCMS_L
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Tert-Butyl Alcohol-d9	1.000	1.000	0.0	106	-0.01
2	T	Ethanol	0.157	0.155	1.3	113	0.00
3	T	Tert-Butyl Alcohol (TBA)	1.084	0.937	13.6	99	0.00
4	I	Pentafluorobenzene	1.000	1.000	0.0	115	0.00
5	T	Dichlorodifluoromethane	0.575	0.619	-7.7	125	0.00
6	P	Chloromethane	0.618	0.661	-7.0	121	0.00
7	CCC	Vinyl Chloride	0.613	0.668	-9.0	123	0.00
8	T	Bromomethane	0.410	0.418	-2.0	122	0.00
9	T	Chloroethane	0.359	0.386	-7.5	124	0.00
10	T	Trichlorofluoromethane	0.975	0.954	2.2	111	0.00
11	T	Diethyl Ether	0.194	0.177	8.8	102	0.00
12	T	Acetone	0.046	0.043#	6.5	114	0.00
13	T	Iodomethane	0.402	0.576	-43.3#	146	0.00
14	CCC	1,1-Dichloroethene	0.723	0.738	-2.1	113	0.00
15	T	1,1,2-Trichloro-1,2,2-Trifl	0.479	0.499	-4.2	116	0.00
16	T	Carbon Disulfide	1.312	1.380	-5.2	113	0.00
17	T	Acetonitrile	0.812	0.838	-3.2	116	0.00
18	T	Acrylonitrile	0.061	0.053#	13.1	102	0.00
19	T	Allyl Chloride	0.813	0.824	-1.4	114	0.00
20	T	Acrolein	0.017	0.018#	-5.9	115	0.00
21	T	Methyl Acetate	0.157	0.132	15.9	102	0.00
22	T	Methylene Chloride	0.413	0.398	3.6	107	0.00
23	T	t-1,2-Dichloroethene	0.490	0.491	-0.2	112	0.00
24	T	Isobutyl Alcohol	0.147	0.132	10.2	102	0.00
25	T	Methyl-t-Butyl Ether (MTBE)	0.764	0.695	9.0	103	0.00
26	T	Hexane	0.727	0.763	-5.0	118	0.00
27	P	1,1-Dichloroethane	0.903	0.862	4.5	108	0.00
28	T	Vinyl Acetate	0.047	0.044#	6.4	106	0.00
29	T	Diisopropyl Ether (DIPE)	1.333	1.292	3.1	110	0.00
30	T	Chloroprene	0.856	0.873	-2.0	110	0.00
31	T	Ethyl-t-Butyl Ether (ETBE)	0.929	0.879	5.4	104	0.00
32	T	c-1,2-Dichloroethene	0.482	0.475	1.5	111	0.00
33	T	2,2-Dichloropropane	0.799	0.769	3.8	111	0.00
34	T	2-Butanone	0.075	0.071#	5.3	123	-0.01
35	T	Propionitrile	0.019	0.019#	0.0	99	-0.01
36	T	Methacrylonitrile	0.120	0.111	7.5	105	0.00
37	T	Propanedinitrile	0.022	0.020#	9.1	104	0.00
38	T	Bromochloromethane	0.232	0.221	4.7	104	0.00
39	T	Tetrahydrofuran	0.048	0.044#	8.3	113	0.00
40	CCC	Chloroform	0.832	0.790	5.0	106	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D
Acq On : 3 Dec 2008 3:12 pm
Sample : ICV/LCS V111908D/V112608B
Misc : V120308A
MS Integration Params: RTEINT.P

Vial: 24
Operator:
Inst : GCMS_L
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	S	Dibromofluoromethane	0.394	0.380	3.6	107	0.00
42	T	1,1,1-Trichloroethane	0.787	0.750	4.7	106	0.00
43	T	Cyclohexane	0.765	0.726	5.1	112	0.00
44	T	1,1-Dichloropropene	0.658	0.660	-0.3	110	0.00
45	T	Carbon Tetrachloride	0.670	0.658	1.8	108	0.00
46	S	1,2-Dichloroethane-d4	0.381	0.340	10.8	100	0.00
47	I	1,4-Difluorobenzene	1.000	1.000	0.0	109	0.00
48	T	Benzene	1.352	1.358	-0.4	107	0.00
49	T	1,2-Dichloroethane	0.349	0.313	10.3	97	0.00
50	T	Tert-Amyl-Methyl Ether (TAM	0.536	0.501	6.5	97	0.00
51	T	Thiophene	0.588	0.586	0.3	105	0.00
52	T	Trichloroethene	0.339	0.342	-0.9	105	0.00
53	CCC	1,2-Dichloropropane	0.302	0.282	6.6	99	0.00
54	T	Methylcyclohexane	0.597	0.602	-0.8	109	0.00
55	T	Dibromomethane	0.110	0.102	7.3	96	0.00
56	T	Methyl Methacrylate	0.079	0.075#	5.1	101	0.00
57	T	Bromodichloromethane	0.377	0.350	7.2	102	0.00
58	T	2-Chloroethyl Vinyl Ether	0.095	0.082#	13.7	101	0.00
59	T	c-1,3-Dichloropropene	0.392	0.378	3.6	104	0.00
60	S	Toluene-d8	1.062	1.110	-4.5	113	0.00
61	CCC	Toluene	1.255	1.279	-1.9	105	0.00
62	T	4-Methyl-2-Pentanone	0.006	0.009#	-50.0#	207#	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	106	0.00
64	T	t-1,3-Dichloropropene	0.374	0.371	0.8	101	0.00
65	T	Ethyl Methacrylate	0.205	0.200	2.4	96	0.00
66	T	1,1,2-Trichloroethane	0.166	0.162	2.4	97	0.00
67	T	Tetrachloroethene	0.568	0.574	-1.1	108	0.00
68	T	1,3-Dichloropropane	0.388	0.374	3.6	96	0.00
69	T	2-Hexanone	0.034	0.032#	5.9	97	0.00
70	T	Dibromochloromethane	0.249	0.250	-0.4	105	0.00
71	T	1,2-Dibromoethane	0.190	0.183	3.7	100	0.00
72	P	Chlorobenzene	1.001	0.988	1.3	102	0.00
73	T	1,1,1,2-Tetrachloroethane	0.361	0.365	-1.1	104	0.00
74	CCC	Ethylbenzene	1.725	1.861	-7.9	109	0.00
75	T	p/m-Xylene	1.313	1.380	-5.1	106	0.00
76	T	o-Xylene	1.267	1.347	-6.3	105	0.00
77	T	Styrene	0.970	1.039	-7.1	103	0.00
78	P	Bromoform	0.107	0.121	-13.1	98	0.00
79	T	Isopropylbenzene	1.665	1.854	-11.4	108	0.00

(#) = Out of Range

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D Vial: 24
Acq On : 3 Dec 2008 3:12 pm Operator:
Sample : ICV/LCS V111908D/V112608B Inst : GCMS_L
Misc : V120308A Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
80	S	1,4-Bromofluorobenzene	0.395	0.414	-4.8	107	0.00
81	T	1,2,3-Trichloropropane	0.223	0.228	-2.2	95	0.00
82	T	Bromobenzene	0.388	0.405	-4.4	103	0.00
83	T	n-Propylbenzene	1.934	2.096	-8.4	105	0.00
84	T	t-1,4-Dichloro-2-Butene	0.049	0.051#	-4.1	97	0.00
85	T	2-Chlorotoluene	1.093	1.165	-6.6	107	0.00
86	T	1,3,5-Trimethylbenzene	1.335	1.456	-9.1	107	0.00
87	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	0.00
88	T	4-Chlorotoluene	2.457	2.614	-6.4	106	0.00
89	P	1,1,2,2-Tetrachloroethane	0.356	0.343	3.7	97	0.00
90	T	1,2,4-Trimethylbenzene	2.474	2.675	-8.1	105	0.00
91	T	tert-Butylbenzene	2.578	2.791	-8.3	105	0.00
92	T	p-Isopropyltoluene	2.981	3.237	-8.6	108	0.00
93	T	sec-Butylbenzene	3.445	3.829	-11.1	110	0.00
94	T	1,3-Dichlorobenzene	1.492	1.552	-4.0	103	0.00
95	T	1,4-Dichlorobenzene	1.535	1.494	2.7	99	0.00
96	T	1,2-Dichlorobenzene	1.247	1.225	1.8	98	0.00
97	T	n-Butylbenzene	2.641	2.850	-7.9	107	0.00
98	T	1,2-Dibromo-3-Chloropropane	0.043	0.043#	0.0	104	0.00
99	T	1,2,4-Trichlorobenzene	0.905	0.913	-0.9	101	0.00
100	T	Hexachloro-1,3-Butadiene	0.778	0.793	-1.9	106	0.00
101	T	Naphthalene	1.018	0.956	6.1	89	0.00
102	T	1,2,3-Trichlorobenzene	0.905	0.913	-0.9	101	0.00

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\081208\08DEC028.D Vial: 12
Acq On : 8 Dec 2008 10:43 pm Operator:
Sample : CCV 10PPB V120408A/V120508A Inst : GCMS_L
Misc : V120308A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 09 09:54:31 2008 Quant Results File: 081203_BP.RES

Quant Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Tert-Butyl Alcohol-d9	3.9101	65	18252	50.0000 ug/l	0
4) Pentafluorobenzene	6.4039	168	318258	10.0000 ug/l	0
47) 1,4-Difluorobenzene	7.3345	114	438997	10.0000 ug/l	0
63) Chlorobenzene-d5	10.9209	117	318642	10.0000 ug/l	0
87) 1,4-Dichlorobenzene-d4	13.7963	152	173957	10.0000 ug/l	0

System Monitoring Compounds					
41) Dibromofluoromethane	6.3045	113	126876	10.11 ug/l	0.0
Spiked Amount 10.000	Range 53 - 141		Recovery	= 101.10%	
46) 1,2-Dichloroethane-d4	6.7385	65	112170	9.24 ug/l	0.0
Spiked Amount 10.000	Range 50 - 150		Recovery	= 92.40%	
60) Toluene-d8	9.1642	98	434685	9.32 ug/l	0.0
Spiked Amount 10.000	Range 69 - 134		Recovery	= 93.20%	
80) 1,4-Bromofluorobenzene	12.3638	95	125009	9.94 ug/l	0.0
Spiked Amount 10.000	Range 51 - 152		Recovery	= 99.40%	

Target Compounds					Qvalue
2) Ethanol	2.7652	45	4507	78.5637 ug/l	
3) Tert-Butyl Alcohol (TBA)	4.0513	59	18843	47.6356 ug/l	
5) Dichlorodifluoromethane	1.5628	85	184845	10.0969 ug/l	
6) Chloromethane	1.7300	50	186289	9.4781 ug/l	
7) Vinyl Chloride	1.8451	62	217561	11.1441 ug/l	
8) Bromomethane	2.1797	94	115891	8.8822 ug/l	
9) Chloroethane	2.2894	64	119890	10.4791 ug/l	
10) Trichlorofluoromethane	2.5718	101	318770	10.2723 ug/l	
11) Diethyl Ether	2.9011	45	56814	9.2212 ug/l	
12) Acetone	3.2200	43	15252	10.3177 ug/l	
13) Iodomethane	3.3403	142	225312	17.6276 ug/l	
14) 1,1-Dichloroethene	3.1677	61	253722	11.0278 ug/l	
15) 1,1,2-Trichloro-1,2,2-Trif	3.1834	101	177150	11.6147 ug/l	
16) Carbon Disulfide	3.4344	76	498586	11.9377 ug/l	
17) Acetonitrile	3.6330	41	258545	9.9997 ug/l	
18) Acrylonitrile	4.1663	53	18459	9.5740 ug/l	
19) Allyl Chloride	3.6330	41	258545	9.9881 ug/l	
20) Acrolein	3.0214	56	14132	25.5344 ug/l	
21) Methyl Acetate	3.6853	43	42507	8.4942 ug/l	
22) Methylene Chloride	3.8003	84	141317	10.7452 ug/l	
23) t-1,2-Dichloroethene	4.2238	96	166521	10.6697 ug/l	
24) Isobutyl Alcohol	3.6853	43	42507	9.0772 ug/l	
25) Methyl-t-Butyl Ether (MTBE	4.2656	73	225715	9.2871 ug/l	
26) Hexane	4.6682	57	260822	11.2732 ug/l	
27) 1,1-Dichloroethane	4.8355	63	300837	10.4681 ug/l	

(#) = qualifier out of range (m) = manual integration

Data File : C:\MSDCHEM\1\DATA\081208\08DEC028.D Vial: 12
Acq On : 8 Dec 2008 10:43 pm Operator:
Sample : CCV 10PPB V120408A/V120508A Inst : GCMS_L
Misc : V120308A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 09 09:54:31 2008 Quant Results File: 081203_BP.RES

Quant Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
28) Vinyl Acetate	4.9505	86	14418	9.6839 ug/l	#
29) Diisopropyl Ether (DIPE)	5.0028	45	429451	10.1210 ug/l	
30) Chloroprene	4.9766	53	288402	10.5818 ug/l	
31) Ethyl-t-Butyl Ether (ETBE)	5.5203	59	299212	10.1184 ug/l	
32) c-1,2-Dichloroethene	5.6510	96	170792	11.1412 ug/l	
33) 2,2-Dichloropropane	5.6563	77	220138	8.6534 ug/l	
34) 2-Butanone	5.6981	43	22032	9.2021 ug/l	
35) Propionitrile	5.7399	54	5489	8.9016 ug/l	#
36) Methacrylonitrile	5.9595	41	32751	8.6003 ug/l	
37) Propanedinitrile	5.9647	66	6422	9.0125 ug/l	
38) Bromochloromethane	5.9699	130	81897	11.0680 ug/l	
39) Tetrahydrofuran	6.0588	42	13463	8.8780 ug/l	
40) Chloroform	6.1006	83	285521	10.7855 ug/l	
42) 1,1,1-Trichloroethane	6.3359	97	268724	10.7265 ug/l	
43) Cyclohexane	6.4196	84	264577	10.8707 ug/l	
44) 1,1-Dichloropropene	6.5607	75	224391	10.7181 ug/l	
45) Carbon Tetrachloride	6.5659	117	227989	10.6861 ug/l	
48) Benzene	6.8221	78	622724	10.4922 ug/l	
49) 1,2-Dichloroethane	6.8378	62	141238	9.2239 ug/l	
50) Tert-Amyl-Methyl Ether (TA	7.0156	73	226378	9.6202 ug/l	
51) Thiophene	7.0888	84	279302	10.8222 ug/l	
52) Trichloroethene	7.6586	95	154255	10.3508 ug/l	
53) 1,2-Dichloropropane	7.9200	63	134533	10.1357 ug/l	
54) Methylcyclohexane	7.9095	83	275817	10.5220 ug/l	
55) Dibromomethane	8.0611	93	49887	10.3244 ug/l	
56) Methyl Methacrylate	8.1134	69	34142	9.8751 ug/l	
57) Bromodichloromethane	8.2703	83	159364	9.6399 ug/l	
58) 2-Chloroethyl Vinyl Ether	8.6676	63	33093	7.8946 ug/l	
59) c-1,3-Dichloropropene	8.8297	75	160199	9.3142 ug/l	
61) Toluene	9.2479	91	570601	10.3588 ug/l	
62) 4-Methyl-2-Pentanone	9.1747	58	2857	10.6050 ug/l	
64) t-1,3-Dichloropropene	9.5093	75	121481	10.1931 ug/l	
65) Ethyl Methacrylate	9.6557	69	67086	10.2732 ug/l	
66) 1,1,2-Trichloroethane	9.7289	83	57742	10.8842 ug/l	
67) Tetrachloroethene	9.9223	166	204691	11.3060 ug/l	
68) 1,3-Dichloropropane	9.9328	76	132514	10.7296 ug/l	
69) 2-Hexanone	10.0530	58	10793	9.9150 ug/l	
70) Dibromochloromethane	10.2099	129	84200	10.5912 ug/l	
71) 1,2-Dibromoethane	10.3353	107	65062	10.7578 ug/l	
72) Chlorobenzene	10.9575	112	346825	10.8721 ug/l	
73) 1,1,1,2-Tetrachloroethane	11.0516	131	130490	11.3538 ug/l	

(#) = qualifier out of range (m) = manual integration

Data File : C:\MSDCHEM\1\DATA\081208\08DEC028.D Vial: 12
Acq On : 8 Dec 2008 10:43 pm Operator:
Sample : CCV 10PPB V120408A/V120508A Inst : GCMS_L
Misc : V120308A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 09 09:54:31 2008 Quant Results File: 081203_BP.RES

Quant Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration
DataAcq Meth : 8260

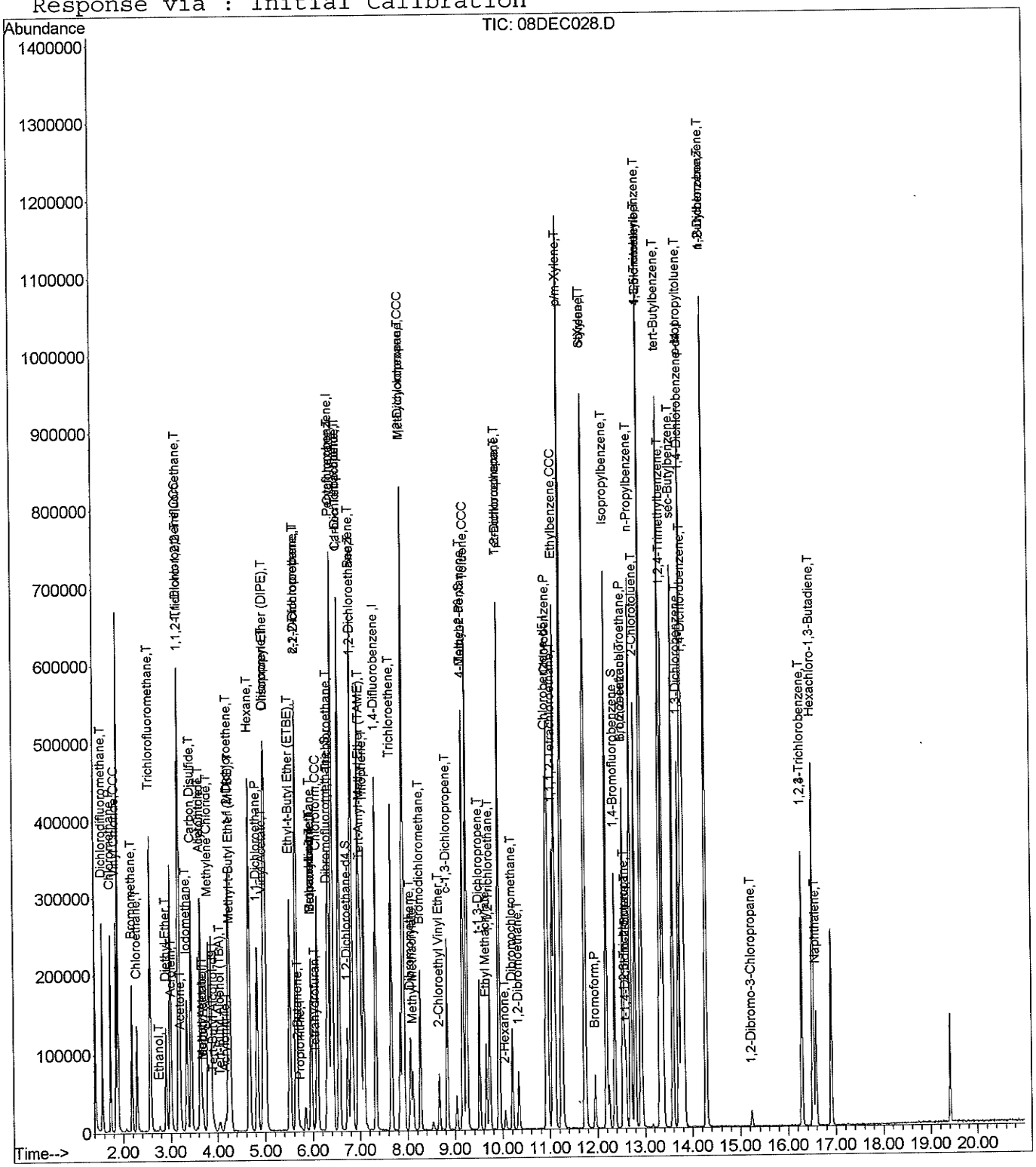
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
74) Ethylbenzene	11.1039	91	610140	11.1026 ug/l	
75) p/m-Xylene	11.2502	91	924774	22.1052 ug/l	
76) o-Xylene	11.7312	91	446483	11.0552 ug/l	
77) Styrene	11.7417	104	343559	11.1116 ug/l	
78) Bromoform	11.9508	173	44306	13.0448 ug/l	
79) Isopropylbenzene	12.1913	105	601975	11.3478 ug/l	
81) 1,2,3-Trichloropropane	12.5834	75	77959	10.9882 ug/l	
82) Bromobenzene	12.5468	156	146463	11.8568 ug/l	
83) n-Propylbenzene	12.6984	91	730152	11.8457 ug/l	
84) t-1,4-Dichloro-2-Butene	12.6095	53	14816	9.5520 ug/l	
85) 2-Chlorotoluene	12.7925	91	403715	11.5886 ug/l	
86) 1,3,5-Trimethylbenzene	12.9180	105	488237	11.4795 ug/l	
88) 4-Chlorotoluene	12.9232	91	464630	10.8693 ug/l	
89) 1,1,2,2-Tetrachloroethane	12.5363	83	64076	10.3474 ug/l	
90) 1,2,4-Trimethylbenzene	13.3780	105	467682	10.8662 ug/l	
91) tert-Butylbenzene	13.3205	119	490497	10.9385 ug/l	
92) p-Isopropyltoluene	13.7754	119	564965	10.8957 ug/l	
93) sec-Butylbenzene	13.5924	105	655768	10.9417 ug/l	
94) 1,3-Dichlorobenzene	13.7126	146	282974	10.9063 ug/l	
95) 1,4-Dichlorobenzene	13.8224	146	276162	10.3447 ug/l	
96) 1,2-Dichlorobenzene	14.2825	146	226279	10.4308 ug/l	
97) n-Butylbenzene	14.2825	91	475957	10.3615 ug/l	
98) 1,2-Dibromo-3-Chloropropan	15.2392	75	6697	8.8837 ug/l	
99) 1,2,4-Trichlorobenzene	16.2848	180	164475	10.4452 ug/l	
100) Hexachloro-1,3-Butadiene	16.5201	225	139555	10.3169 ug/l	
101) Naphthalene	16.5828	128	168253	9.4968 ug/l	
102) 1,2,3-Trichlorobenzene	16.2848	180	164475	10.4441 ug/l	

(#) = qualifier out of range (m) = manual integration

Data File : C:\MSDCHEM\1\DATA\081208\08DEC028.D
Acq On : 8 Dec 2008 10:43 pm
Sample : CCV 10PPB V120408A/V120508A
Misc : V120308A
MS Integration Params: RTEINT.P
Quant Time: Dec 9 9:54 2008

Vial: 12
Operator:
Inst : GCMS_L
Multiplr: 1.00
Quant Results File: 081203_BP.

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\081208\08DEC028.D
Acq On : 8 Dec 2008 10:43 pm
Sample : CCV 10PPB V120408A/V120508A
Misc : V120308A
MS Integration Params: RTEINT.P

Vial: 12
Operator:
Inst : GCMS_L
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Tert-Butyl Alcohol-d9	1.000	1.000	0.0	67	0.00
2	T	Ethanol	0.157	0.123	21.7#	57	0.00
3	T	Tert-Butyl Alcohol (TBA)	1.084	1.032	4.8	69	0.02
4	I	Pentafluorobenzene	1.000	1.000	0.0	86	0.00
5	T	Dichlorodifluoromethane	0.575	0.581	-1.0	88	0.00
6	P	Chloromethane	0.618	0.585	5.3	81	0.00
7	CCC	Vinyl Chloride	0.613	0.684	-11.6	95	0.00
8	T	Bromomethane	0.410	0.364	11.2	80	0.00
9	T	Chloroethane	0.359	0.377	-5.0	91	0.00
10	T	Trichlorofluoromethane	0.975	1.002	-2.8	87	0.00
11	T	Diethyl Ether	0.194	0.179	7.7	77	0.00
12	T	Acetone	0.046	0.048#	-4.3	95	0.00
13	T	Iodomethane	0.402	0.708	-76.1#	134	0.00
14	CCC	1,1-Dichloroethene	0.723	0.797	-10.2	92	0.00
15	T	1,1,2-Trichloro-1,2,2-Trifl	0.479	0.557	-16.3	97	0.00
16	T	Carbon Disulfide	1.312	1.567	-19.4	96	0.00
17	T	Acetonitrile	0.812	0.812	0.0	84	0.00
18	T	Acrylonitrile	0.061	0.058#	4.9	84	0.00
19	T	Allyl Chloride	0.813	0.812	0.1	84	0.00
20	T	Acrolein	0.017	0.022#	-29.4#	105	0.00
21	T	Methyl Acetate	0.157	0.134	14.6	78	0.00
22	T	Methylene Chloride	0.413	0.444	-7.5	89	0.00
23	T	t-1,2-Dichloroethene	0.490	0.523	-6.7	89	0.00
24	T	Isobutyl Alcohol	0.147	0.134	8.8	78	0.00
25	T	Methyl-t-Butyl Ether (MTBE)	0.764	0.709	7.2	79	0.00
26	T	Hexane	0.727	0.820	-12.8	95	0.00
27	P	1,1-Dichloroethane	0.903	0.945	-4.7	89	0.00
28	T	Vinyl Acetate	0.047	0.045#	4.3	82	0.00
29	T	Diisopropyl Ether (DIPE)	1.333	1.349	-1.2	86	0.00
30	T	Chloroprene	0.856	0.906	-5.8	86	0.00
31	T	Ethyl-t-Butyl Ether (ETBE)	0.929	0.940	-1.2	84	0.00
32	T	c-1,2-Dichloroethene	0.482	0.537	-11.4	94	0.00
33	T	2,2-Dichloropropane	0.799	0.692	13.4	75	0.00
34	T	2-Butanone	0.075	0.069#	8.0	90	0.00
35	T	Propionitrile	0.019	0.017#	10.5	67	-0.01
36	T	Methacrylonitrile	0.120	0.103	14.2	73	0.00
37	T	Propanedinitrile	0.022	0.020#	9.1	80	0.00
38	T	Bromochloromethane	0.232	0.257	-10.8	91	0.00
39	T	Tetrahydrofuran	0.048	0.042#	12.5	82	-0.01
40	CCC	Chloroform	0.832	0.897	-7.8	90	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\081208\08DEC028.D
Acq On : 8 Dec 2008 10:43 pm
Sample : CCV 10PPB V120408A/V120508A
Misc : V120308A
MS Integration Params: RTEINT.P

Vial: 12
Operator:
Inst : GCMS_L
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	S	Dibromofluoromethane	0.394	0.399	-1.3	84	0.00
42	T	1,1,1-Trichloroethane	0.787	0.844	-7.2	90	0.00
43	T	Cyclohexane	0.765	0.831	-8.6	96	0.00
44	T	1,1-Dichloropropene	0.658	0.705	-7.1	88	0.00
45	T	Carbon Tetrachloride	0.670	0.716	-6.9	88	0.00
46	S	1,2-Dichloroethane-d4	0.381	0.352	7.6	78	0.00
47	I	1,4-Difluorobenzene	1.000	1.000	0.0	87	0.00
48	T	Benzene	1.352	1.419	-5.0	90	0.00
49	T	1,2-Dichloroethane	0.349	0.322	7.7	80	0.00
50	T	Tert-Amyl-Methyl Ether (TAM	0.536	0.516	3.7	80	0.00
51	T	Thiophene	0.588	0.636	-8.2	92	0.00
52	T	Trichloroethene	0.339	0.351	-3.5	87	0.00
53	CCC	1,2-Dichloropropane	0.302	0.306	-1.3	86	0.00
54	T	Methylcyclohexane	0.597	0.628	-5.2	91	0.00
55	T	Dibromomethane	0.110	0.114	-3.6	86	0.00
56	T	Methyl Methacrylate	0.079	0.078#	1.3	85	0.00
57	T	Bromodichloromethane	0.377	0.363	3.7	85	0.00
58	T	2-Chloroethyl Vinyl Ether	0.095	0.075#	21.1#	75	0.00
59	T	c-1,3-Dichloropropene	0.392	0.365	6.9	81	0.00
60	S	Toluene-d8	1.062	0.990	6.8	81	0.00
61	CCC	Toluene	1.255	1.300	-3.6	86	0.00
62	T	4-Methyl-2-Pentanone	0.006	0.007#	-16.7	120	0.01
63	I	Chlorobenzene-d5	1.000	1.000	0.0	80	0.00
64	T	t-1,3-Dichloropropene	0.374	0.381	-1.9	78	0.00
65	T	Ethyl Methacrylate	0.205	0.211	-2.9	77	0.00
66	T	1,1,2-Trichloroethane	0.166	0.181	-9.0	82	0.00
67	T	Tetrachloroethene	0.568	0.642	-13.0	91	0.00
68	T	1,3-Dichloropropane	0.388	0.416	-7.2	81	0.00
69	T	2-Hexanone	0.034	0.034#	0.0	77	0.00
70	T	Dibromochloromethane	0.249	0.264	-6.0	84	0.00
71	T	1,2-Dibromoethane	0.190	0.204	-7.4	84	0.00
72	P	Chlorobenzene	1.001	1.088	-8.7	85	0.00
73	T	1,1,1,2-Tetrachloroethane	0.361	0.410	-13.6	88	0.00
74	CCC	Ethylbenzene	1.725	1.915	-11.0	85	0.00
75	T	p/m-Xylene	1.313	1.451	-10.5	84	0.00
76	T	o-Xylene	1.267	1.401	-10.6	82	0.00
77	T	Styrene	0.970	1.078	-11.1	81	0.00
78	P	Bromoform	0.107	0.139	-29.9#	85	0.00
79	T	Isopropylbenzene	1.665	1.889	-13.5	83	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\081208\08DEC028.D
Acq On : 8 Dec 2008 10:43 pm
Sample : CCV 10PPB V120408A/V120508A
Misc : V120308A
MS Integration Params: RTEINT.P

Vial: 12
Operator:
Inst : GCMS_L
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
80	S	1,4-Bromofluorobenzene	0.395	0.392	0.8	76	0.00
81	T	1,2,3-Trichloropropane	0.223	0.245	-9.9	77	0.00
82	T	Bromobenzene	0.388	0.460	-18.6	88	0.00
83	T	n-Propylbenzene	1.934	2.291	-18.5	87	0.00
84	T	t-1,4-Dichloro-2-Butene	0.049	0.046#	6.1	67	0.00
85	T	2-Chlorotoluene	1.093	1.267	-15.9	88	0.00
86	T	1,3,5-Trimethylbenzene	1.335	1.532	-14.8	85	0.00
87	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	79	0.00
88	T	4-Chlorotoluene	2.457	2.671	-8.7	84	0.00
89	P	1,1,2,2-Tetrachloroethane	0.356	0.368	-3.4	81	0.00
90	T	1,2,4-Trimethylbenzene	2.474	2.688	-8.6	82	0.00
91	T	tert-Butylbenzene	2.578	2.820	-9.4	82	0.00
92	T	p-Isopropyltoluene	2.981	3.248	-9.0	84	0.00
93	T	sec-Butylbenzene	3.445	3.770	-9.4	84	0.00
94	T	1,3-Dichlorobenzene	1.492	1.627	-9.0	84	0.00
95	T	1,4-Dichlorobenzene	1.535	1.588	-3.5	81	0.00
96	T	1,2-Dichlorobenzene	1.247	1.301	-4.3	81	0.00
97	T	n-Butylbenzene	2.641	2.736	-3.6	80	0.00
98	T	1,2-Dibromo-3-Chloropropane	0.043	0.038#	11.6	73	0.00
99	T	1,2,4-Trichlorobenzene	0.905	0.945	-4.4	81	0.00
100	T	Hexachloro-1,3-Butadiene	0.778	0.802	-3.1	83	0.00
101	T	Naphthalene	1.018	0.967	5.0	70	0.00
102	T	1,2,3-Trichlorobenzene	0.905	0.945	-4.4	81	0.00

Calscience Environmental Laboratories, Inc.

Supplemental Report 1

December 17, 2008

Additional requested analyses are reported as a stand-alone report.

Tim Utterback
Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Subject: **Calscience Work Order No.: 08-12-0749**
Client Reference: UC Davis / 388-1856-2-16

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 12/6/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Emma C. Dennison
for

Calscience Environmental
Laboratories, Inc.
Virendra Patel
Project Manager

Revised COC received on 12/08/08 at 15:24 - VP

Chain of Custody Record

0749

Calscience Environmental Lab
5063 Commercial Circle, Suite H
Concord, CA 94520
phone: (925) 689-9022

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

Project ID: 388-1856-2-16
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AquaTerra Associates Incorporated, DBA

Client Contact
Weiss Associates
5801 Christie Avenue, Suite 600
Emeryville, CA 94608
(510) 450-6000 Phone
(510) 547-5043 FAX

Job Name: UC Davis
Address: One Shields Ave, Davis

Project Manager: Bob Devany
Tel: 510-450-6144

Analysis Turnaround Time
Calendar (C) or Work Days (W) --- 5W
TAT if different from Below 10 days
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sampled by: JMD/KHA
Date: 12/5/08
Lab Contact: Micah Smith
Carrier:

COC Number: UCD
Page 1 of ____
Job No.
SDG No.

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	Carbonate/Bicarbonate (SM2320B)	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
1	GWGW2376	12/4	1625	L	W	4	X	X	X														X	
2	GWGW2403	12/4	1630			1																X		
3	GWGW2370	12/4	1545			1																X		
4	GWGW2386	12/5	0950			7	X	X	X	X	X												X	
5	GWGW2374	12/5	1180			1																X		
6	GWGW2375	12/5	0950			4	X	X	X														X	
7	GWGW2387	12/5	1130			4	X	X	X														X	
8	GWGW2384	1115 12/5				5	X	X	X													X	X	
9	~~Travel Blank~~ TBGW0522	12/5	0700			1					X													~~HOLD~~ TRU 12/8/08
	TRU 12/8/08																							
						Field Filtered	X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: Level II Reporting with Initial Calibration Curves and Continuing Calibration

Note: Nitrate 48 hour hold time!

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
(ALP)	WEISS	12/5, 1505	Tom O'Malley CEL	CALSCIENCE	12/5/08 1505
Tom O'Malley TO GSO	CALSCIENCE	12/5/08 1730			
GSO 5708658 18		12/6/08 10:00	D Dunyle CEL	CEL	12/6/08 10:00

Chain of Custody Record

0749

Calscience Environmental Lab
5063 Commercial Circle, Suite H
Concord, CA 94520
phone: (925) 689-9022

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

Project ID: 388-1856-2-16
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AguaTierra Associates Incorporated, DBA

Client Contact
Weiss Associates
5801 Christie Avenue, Suite 600
Emeryville, CA 94608
(510) 450-6000 Phone
(510) 547-5043 FAX

Job Name: UC Davis
Address: One Shields Ave, Davis

Project Manager: Bob Devany
Tel: 510-450-6144

Analysis Turnaround Time
Calendar (C) or Work Days (W) --- 5W
TAT if different from Below 10 days
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sampled by: JMD/KHA **Date:** 12/5/08
Lab Contact: Micah Smith **Carrier:**

COC Number: UCD
Page 1 of ____

Job No.

SDG No.

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	~~Carbonate/Bicarbonate (SM2320B)~~	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
1	GWGW2376	12/4	1625	L	W	4	X	X	X														X	
2	GWGW2403	12/4	1630			1																X		
3	GWGW2370	12/4	1545			1																X		
4	GWGW2386	12/5	0950			7	X	X	X		X												X	
5	GWGW2374	12/5	1180			1																X		
6	GWGW2375	12/5	0950			4	X	X	X														X	
7	GWGW2387	12/5	1130			4	X	X	X														X	
8	GWGW2384	1115 12/5				5	X	X	X													X	X	
9	Travel Blank	12/5	0700			1					X													HOLD
						Field Filtered	X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For _____ Months*

Special Instructions/QC Requirements & Comments: **Level II Reporting with Initial Calibration Curves and Continuing Calibration** **Note: Nitrate 48 hour hold time!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
(ALP)	WEISS	12/5 1505	Tom O'Malley CEL	CALSCIENCE	12/5/08 1505
Tom O'Malley TO GSO	CALSCIENCE	12/5/08 1730			
GSO 5708658 18		12/6/08 10:00	Dannyle CEL	CEL	12/6/08 10:00

0749

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
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Phone: 510-450-6000 Fax: 510-547-5043
AguaTierra Associates Incorporated, DBA

Calscience Environmental Lab
5063 Commercial Circle, Suite H
Concord, CA 94520
phone: (925) 689-9022

Project ID: 388-1856-2-16
Protocol No.: ROD

Client Contact		Project Manager: Bob Devany	Sampled by: KJA / JMD	Date: 12/5/08	COC Number: UCD
Weiss Associates		Tel: 510-450-6144	Lab Contact: Micah Smith	Carrier:	Page 2 of ____
5801 Christie Avenue, Suite 600		Analysis Turnaround Time			Job No.
Emeryville, CA 94608		Calendar (C) or Work Days (W) --- 5W			
(510) 450-6000	Phone	TAT if different from Below 10 days			SDG No.
(510) 547-5043	FAX	☐ 2 weeks			
		☐ 1 week			
Job Name: UC Davis		☐ 2 days			
Address: One Shields Ave, Davis		☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	Carbonate/Bicarbonate (SM2320B)	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
10	EBGW0017	12/5	1225	L	W	5					X		X									X		Title 22 + Al + Si
11	GWGW2389	12/5	1415				X	X	X	X													X	
12	GWGW2388						X	X	X	X													X	
						Field Filtered	X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For _____ Months*

Special Instructions/QC Requirements & Comments: Level II Reporting with Initial Calibration Curves and Continuing Calibration **Note: Nitrate 48 hour hold time!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature] (ALP)	WEISS	12/5, 1505	Jon O'Malley CEL	CALScience	12/5/08 1505
Relinquished by: Jon O'Malley TO GSO	Company: CALScience	Date/Time: 12/5/08 1730	Received by:	Company:	Date/Time:
Relinquished by: GSO 5108658 18	Company:	Date/Time: 12/6/08 10:00	Received by: Dannyle CEL	Company: CEL	Date/Time: 12/6/08 10:00

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 0 8 - 1 2 - 0 7 4 9

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Weiss Associates

DATE: 12/06/08

TEMPERATURE: (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 3.4 °C - 0.2 °C (CF) = 3.2 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by:_____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only **Initial:** D.L

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Initial:** D.L

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** TD

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	☑	☐	☐
COC document(s) received complete.....	☐	☑	☐
Sampler's name indicated on COC.....	☑	☐	☐
Sample container label(s) consistent with COC.....	☑	☐	☐
Sample container(s) intact and good condition.....	☑	☐	☐
Correct containers and volume for analyses requested.....	☑	☐	☐
Analyses received within holding time.....	☑	☐	☐
Proper preservation noted on sample label(s).....	☑	☐	☐
Volatile analysis container(s) free of headspace.....	☑	☐	☐
Tedlar bag(s) free of condensation.....	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☑VOAh ☐VOAna$_2$ ☑125AGB 2 ☐125AGBh ☐125AGBpo$_4$ ☐1AGB ☑1AGBna$_2$ 2

☐1AGBs ☐500AGB ☐500AGBs ☐250CGB ☐250CGBs ☐1PB ☐500PB ☐500PBna ☐250PB

☑250PBn 2 ☑125PB 4 ☐125PBznna ☐100PBsterile ☐100PBna$_2$ ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® ☐_____

Checked/Labeled by: TD

Reviewed by: D.L

Scanned by: TD

Container: C:Clear A:Amber P:Poly/Plastic G:Glass J:Jar B:Bottle

Preservative: h:HCL n:HNO_3 na$_2$:$Na_2S_2O_3$ na:NaOH po$_4$:H_3PO_4 s:H_2SO_4 znna:$ZnAc_2$+NaOH

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08-1 2-0 7 4 9

SAMPLE ANOMALY FORM

CHAIN OF CUSTODY (COC):

- ☐ **Not relinquished by client – no signature**
- ☐ **No date/time relinquished**
- ☐ **COC not received with samples** – notify PM
- ☑ **Incomplete information regarding samples, tests, etc.**

Comments:

(-11) & (-12) received 5 containers. 2x125 AGB, 2x250 PBn, 1x125 PB (-12) sample date: 12/5 @ 14:50.

SAMPLES - CONTAINERS & LABELS:

- ☐ **Samples NOT RECEIVED but listed on COC**
- ☐ **Samples received but NOT LISTED on COC**
- ☐ **Holding time expired** – list sample ID(s) and test
- ☐ **Insufficient quantities for analysis** – list test
- ☐ **Improper container(s) used** – list test
- ☐ **No preservative noted on label** – list test and notify lab
- ☐ **Sample labels illegible** – note test/container type
- ☐ **Sample labels do not match COC** – Note in comments
  - ☐ **Sample ID**
  - ☐ **Date and Time Collected**
  - ☐ **Project Information**
  - ☐ **# of containers**
- ☐ **Sample containers compromised** – Note in comments
  - ☐ **Leaking**
  - ☐ **Broken**
  - ☐ **Without Labels**
- ☐ **Other:** _____

Comments:

HEADSPACE – Containers with Bubble > 6mm or ¼ inch:

Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of RSK or CO_2 or DO or Organic Lead Received

Comments: _____

Initial / Date TP 12/6/08

Weck Laboratories, Inc.
Analytical Laboratory Services - Since 1964

Report Date: Tuesday, December 16, 2008
Received Date: Monday, December 8, 2008
Received Time: 11:28 am

Turnaround Time: 7 days

Client: Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Phone: (714) 895-5494
FAX: (714) 894-7501

Attn: Virendra Patel

Project: 08-12-0749

P.O.#:

Certificate of Analysis

Work Order: 8120816-01 **Sample ID: GWGW2376** **Matrix: Water**
Sampled by: Client **Sampled: 12/04/08 16:25** **Sample Note:**

Analyte	Result	Qualifier	Units	Reporting Limit	Dil	Method	Prepared	Analyzed		Batch
Uranium, Total	**3.5**		ug/l	0.20	1	EPA 200.8	12/12/08	12/12/08	ppy	W8L0766

Work Order: 8120816-02 **Sample ID: GWGW2386** **Matrix: Water**
Sampled by: Client **Sampled: 12/05/08 09:50** **Sample Note:**

Analyte	Result	Qualifier	Units	Reporting Limit	Dil	Method	Prepared	Analyzed		Batch
Uranium, Total	**3.4**		ug/l	0.20	1	EPA 200.8	12/12/08	12/12/08	ppy	W8L0766

Work Order: 8120816-03 **Sample ID: GWGW2375** **Matrix: Water**
Sampled by: Client **Sampled: 12/05/08 09:50** **Sample Note:**

Analyte	Result	Qualifier	Units	Reporting Limit	Dil	Method	Prepared	Analyzed		Batch
Uranium, Total	**4.3**		ug/l	0.20	1	EPA 200.8	12/12/08	12/12/08	ppy	W8L0766

Work Order: 8120816-04 **Sample ID: GWGW2387** **Matrix: Water**
Sampled by: Client **Sampled: 12/05/08 11:30** **Sample Note:**

Analyte	Result	Qualifier	Units	Reporting Limit	Dil	Method	Prepared	Analyzed		Batch
Uranium, Total	**5.1**		ug/l	0.20	1	EPA 200.8	12/12/08	12/12/08	ppy	W8L0766

Work Order: 8120816-05 **Sample ID: GWGW2384** **Matrix: Water**
Sampled by: Client **Sampled: 12/05/08 11:15** **Sample Note:**

Analyte	Result	Qualifier	Units	Reporting Limit	Dil	Method	Prepared	Analyzed		Batch
Uranium, Total	**4.0**		ug/l	0.20	1	EPA 200.8	12/12/08	12/12/08	ppy	W8L0766

Work Order: 8120816-06 **Sample ID: GWGW2389** **Matrix: Water**

14859 East Clark Avenue, City of Industry, California 91745-1396 (626) 336-2139 FAX (626) 336-2634
www.wecklabs.com

Weck Laboratories, Inc.
Analytical Laboratory Services - Since 1964

Certificate of Analysis

Work Order: 8120816-06 **Sample ID: GWGW2389** **Matrix: Water**

Sampled by: Client **Sampled: 12/05/08 14:15** **Sample Note:**

Analyte	Result	Qualifier	Units	Reporting Limit	Dil	Method	Prepared	Analyzed		Batch
Uranium, Total	**4.7**		ug/l	0.20	1	EPA 200.8	12/12/08	12/12/08	ppy	W8L0766

Work Order: 8120816-07 **Sample ID: GWGW2388** **Matrix: Water**

Sampled by: Client **Sampled: 12/05/08 14:50** **Sample Note:**

Analyte	Result	Qualifier	Units	Reporting Limit	Dil	Method	Prepared	Analyzed		Batch
Uranium, Total	**4.4**		ug/l	0.20	1	EPA 200.8	12/12/08	12/12/08	ppy	W8L0766

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Certificate of Analysis

Weck Laboratories, Inc

Metals by EPA 200 Series Methods - Quality Control

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Batch W8L0766 - EPA 200.8									
Blank (W8L0766-BLK1)					Prepared & Analyzed: 12/12/08				
Uranium, Total		ND		ug/l					
LCS (W8L0766-BS1)					Prepared & Analyzed: 12/12/08				
Uranium, Total		44.6		ug/l	50.0	89	85-115		
Calibration Check (W8L0766-CCV1)					Prepared & Analyzed: 12/12/08				
Uranium, Total		45.9		ug/l	50.0	92	90-110		
Calibration Check (W8L0766-CCV2)					Prepared & Analyzed: 12/12/08				
Uranium, Total		46.2		ug/l	50.0	92	90-110		
Calibration Check (W8L0766-CCV3)					Prepared & Analyzed: 12/12/08				
Uranium, Total		46.0		ug/l	50.0	92	90-110		
Matrix Spike (W8L0766-MS1)			Source: 8120549-05		Prepared & Analyzed: 12/12/08				
Uranium, Total	1.58	50.3		ug/l	50.0	97	70-130		
Matrix Spike (W8L0766-MS2)			Source: 8120934-02		Prepared & Analyzed: 12/12/08				
Uranium, Total	6.13	55.9		ug/l	50.0	99	70-130		
Matrix Spike Dup (W8L0766-MSD1)			Source: 8120549-05		Prepared & Analyzed: 12/12/08				
Uranium, Total	1.58	50.1		ug/l	50.0	97	70-130	0.3	30
Matrix Spike Dup (W8L0766-MSD2)			Source: 8120934-02		Prepared & Analyzed: 12/12/08				
Uranium, Total	6.13	55.4		ug/l	50.0	98	70-130	0.9	30

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www.wecklabs.com

Weck Laboratories, Inc.
Analytical Laboratory Services - Since 1964

Certificate of Analysis

Notes:
The Chain of Custody document is part of the analytical report.
Any remaining sample(s) for testing will be disposed of one month from the final report date unless other arrangements are made in advance.
All results are expressed on wet weight basis unless otherwise specified.
ND = NOT DETECTED at or above the Reporting Limit. If J-value reported, then NOT DETECTED at or above the Method Detection Limit (MDL).
Sub = Subcontracted analysis, original report enclosed.
Dil = Dilution Factor
MDL = Method Detection Limit
MDA = Minimum Detectable Activity

An Absence of Total Coliform meets the drinking water standards as established by the State of California Department of Health Services.
The Reporting Limit (RL) is referenced as laboratory's Practical Quantitation Limit (PQL).
For Potable water analysis, the Reporting Limit (RL) is referenced as Detection Limit for reporting purposes (DLRs) defined by EPA.

If sample collected by Weck Laboratories, sampled in accordance to lab SOP MIS002

Authorized Signature

Contact: Kim G Tu (Project Manager)

ELAP # 1132
LACSD # 10143
NELAC # 04229CA

The results in this report apply to the samples analyzed in accordance with the chain of custody document. Weck Laboratories certifies that the test results meet all requirements of NELAC unless noted in the Case Narrative. This analytical report must be reproduced in its entirety.

Flags for Data Qualifiers:

14859 East Clark Avenue, City of Industry, California 91745-1396 (626) 336-2139 FAX (626) 336-2634
www.wecklabs.com

Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

TO: WECK

8120816

CHAIN OF CUSTODY RECORD

DATE: 12/08/08
PAGE: 1 OF 1

LABORATORY CLIENT: Calscience Environmental Laboratories, Inc.
ADDRESS: 7440 Lincoln Way
CITY: Garden Grove, CA 92841-1427
TEL: (714) 895-5494
E-MAIL: vpatel@calscience.com

CLIENT PROJECT NAME / NUMBER: 08-12-0749
PROJECT CONTACT: Virendra Patel
SAMPLER(S): (PRINT)

P.O. NO.: 08-12-0749
QUOTE NO.:
LAB USE ONLY

TURNAROUND TIME
☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☐ 5 DAYS [X] 7 Days

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ____/____/____

SPECIAL INSTRUCTIONS
7 Days TAT a must. Please call if you will be delayed.

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	Matrix	#Cont	Uranium (EPA 200.8)	Units -- ug/L	ICV/CCV required with final report in PDF format	Standard Excel EDD	Field Filtered
	GWGW2376	12/04/08	1625	W	1	X	X	X	X	X
	GWGW2386	12/05/08	0950	W	1	X	X	X	X	X
	GWGW2375	12/05/08	0950	W	1	X	X	X	X	X
	GWGW2387	12/05/08	1130	W	1	X	X	X	X	X
	GWGW2384	12/05/08	1115	W	1	X	X	X	X	X
	GWGW2389	12/05/08	1415	W	1	X	X	X	X	X
	GWGW2388	12/5/08	1450	W	1	X	X	X	X	X

Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
(CALSCIENCE)	12/8/08 @ 11:28	12/08/08	
Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:

3.6°C

Calscience Environmental Laboratories, Inc.

December 17, 2008

Tim Utterback
Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Subject: **Calscience Work Order No.: 08-12-0870**
Client Reference: UC Davis / 388-1856-2-16

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 12/9/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Emma C. Dennison
for

Calscience Environmental
Laboratories, Inc.
Virendra Patel
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/09/08
5801 Christie Avenue		Work Order No:	08-12-0870
Suite 600		Preparation:	N/A
Emeryville, CA 94608-1939		Method:	RSK-175M

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2371	**08-12-0870-2-A**	**12/05/08 15:05**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	8120	17.0	0.0547	10		ug/L

GWGW2385	**08-12-0870-3-A**	**12/05/08 13:35**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	15400	17.0	0.0547	10		ug/L

Method Blank	**099-12-659-36**	**N/A**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	ND	1.70	0.00547	1		ug/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/09/08
5801 Christie Avenue		Work Order No:	08-12-0870
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6010B

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2371	**08-12-0870-2-D**	**12/05/08 15:05**	**Aqueous**	**ICP 5300**	**12/10/08**	**12/11/08 16:14**	**081210LA3F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	16.5	0.0500	0.0464	1		mg/L

GWGW2385	**08-12-0870-3-D**	**12/05/08 13:35**	**Aqueous**	**ICP 5300**	**12/10/08**	**12/11/08 16:16**	**081210LA3F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	19.5	0.0500	0.0464	1		mg/L

Method Blank	**097-01-003-8,909**	**N/A**	**Aqueous**	**ICP 5300**	**12/10/08**	**12/11/08 13:23**	**081210LA3F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	ND	0.0500	0.0464	1		mg/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/09/08
5801 Christie Avenue		Work Order No:	08-12-0870
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6020
		Units:	mg/L
Project: UC Davis / 388-1856-2-16			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2371	**08-12-0870-2-D**	**12/05/08 15:05**	**Aqueous**	**ICP/MS A**	**12/10/08**	**12/11/08 17:42**	**081210L05F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	0.00279	0.00100	0.000169	1		Vanadium	0.0130	0.00100	0.0000157	1	B
Chromium	0.00701	0.00100	0.0000184	1		Aluminum	0.00421	0.0500	0.00188	1	J

GWGW2385	**08-12-0870-3-D**	**12/05/08 13:35**	**Aqueous**	**ICP/MS A**	**12/10/08**	**12/11/08 17:46**	**081210L05F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	0.00309	0.00100	0.000169	1		Vanadium	0.0111	0.00100	0.0000157	1	B
Chromium	0.0631	0.00100	0.0000184	1		Aluminum	0.00462	0.0500	0.00188	1	J

Method Blank	**096-06-003-1,823**	**N/A**	**Aqueous**	**ICP/MS A**	**12/10/08**	**12/11/08 18:15**	**081210L05F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	ND	0.00100	0.000169	1		Vanadium	0.000262	0.00100	0.0000157	1	J
Chromium	ND	0.00100	0.0000184	1		Aluminum	ND	0.0500	0.00188	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/09/08
5801 Christie Avenue		Work Order No:	08-12-0870
Suite 600		Preparation:	EPA 3520C
Emeryville, CA 94608-1939		Method:	EPA 8270C(M) Isotope Dilution

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2372	**08-12-0870-1-A**	**12/05/08 16:30**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/12/08 01:13**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	85	56-123	

Method Blank	**099-09-004-1,156**	**N/A**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/11/08 21:59**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	97	56-123	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Weiss Associates		Date Received:	12/09/08
5801 Christie Avenue		Work Order No:	08-12-0870
Suite 600		Preparation:	EPA 3010A Total
Emeryville, CA 94608-1939		Method:	EPA 6010B

Project UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-12-0961-4	**Aqueous**	**ICP 5300**	**12/10/08**	**12/11/08**	**081210SA3**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Silicon	4X	4X	24-180	4X	0-15	Q

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Weiss Associates		Date Received:	12/09/08
5801 Christie Avenue		Work Order No:	08-12-0870
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6020

Project UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
GWGW2371	**Aqueous**	**ICP/MS A**	**12/10/08**	**12/11/08**	**081210S05**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Arsenic	83	86	73-127	3	0-11	
Chromium	78	81	73-133	3	0-11	
Vanadium	84	86	77-137	2	0-15	
Aluminum	85	88	47-161	4	0-24	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0870
Suite 600		Preparation:	N/A
Emeryville, CA 94608-1939		Method:	RSK-175M

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-659-36	**Aqueous**	**GC 14**	**N/A**	**12/09/08**	**081209L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Carbon Dioxide	95	95	80-120	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0870
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6010B

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-003-8,909	**Aqueous**	**ICP 5300**	**12/10/08**	**12/11/08**	**081210LA3F**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Silicon	105	105	80-120	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0870
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6020

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
096-06-003-1,823	**Aqueous**	**ICP/MS A**	**12/10/08**	**12/11/08**	**081210L05F**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Arsenic	101	101	80-120	0	0-20	
Chromium	100	102	80-120	1	0-20	
Vanadium	105	106	80-120	1	0-20	
Aluminum	103	103	80-120	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0870
Suite 600		Preparation:	EPA 3520C
Emeryville, CA 94608-1939		Method:	EPA 8270C(M) Isotope Dilution

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-09-004-1,156	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/11/08**	**081209L13D**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
1,4-Dioxane	114	122	50-130	7	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-12-0870

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Revised COC received on 12/10/08 at 11:03 - VP

Chain of Custody Record

0870

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AquaTerra Associates Incorporated, DBA

Calscience Environmental Lab
5063 Commercial Circle, Suite H
Concord, CA 94520
phone: (925) 689-9022

Project ID: 388-1856-2-16
Protocol No.: ROD

Client Contact	
Weiss Associates	
5801 Christie Avenue, Suite 600	
Emeryville, CA 94608	
(510) 450-6000	Phone
(510) 547-5043	FAX
Job Name:	UC Davis
Address:	One Shields Ave, Davis

Project Manager: Bob Devany
Tel: 510-450-6144

Analysis Turnaround Time
Calendar (C) or Work Days (W) --- 5W
TAT if different from Below _____
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sampled by: JMD / KHA
Date: 12/5/08
Lab Contact: ~~[illegible]~~
Carrier:

COC Number: UCD
Page 1 of 2

Job No.

SDG No.

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	Carbonate/Bicarbonate (SM2320B)	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
1	GWGW2372	12/5/08	1630		W	1																X		
2	GWGW2371	↓	1505		W	4	X	X	X	TRU													X	
3	GWGW2385	↓	1335		W	4	X	X	X	12/10/08													X	
	Field Filtered						X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: Level II Reporting with Initial Calibration Curves and Continuing Calibration **Note: Nitrate 48 hour hold time!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
JMD	Weiss	12/5/08 1845	Tom O'Malley	CEL	12/8/08 1251
Tom O'Malley TO GSO	CEL	12/8/08 1730			
GSO510872753	GSO	12/9/08 1030	Wchatu CEL	CEL	12/9/08 1030

Chain of Custody Record

0870

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AquaTierra Associates Incorporated, DBA

Calscience Environmental Lab
5063 Commercial Circle, Suite H
Concord, CA 94520
phone: (925) 689-9022

Project ID: 388-1856-2-16
Protocol No.: ROD

Client Contact		Project Manager: Bob Devany	Sampled by: JMD / KHA	Date: 12/5/08	COC Number: UCD
Weiss Associates		Tel: 510-450-6144	Lab Contact: ~~Michael Smith~~	Carrier:	Page 1 of 1
5801 Christie Avenue, Suite 600		Analysis Turnaround Time			
Emeryville, CA 94608		Calendar (C) or Work Days (W) --- 5W			
(510) 450-6000	Phone	TAT if different from Below _____			
(510) 547-5043	FAX	☐ 2 weeks			
		☐ 1 week			
Job Name: UC Davis		☐ 2 days			
Address: One Shields Ave, Davis		☐ 1 day			

Job No.

SDG No.

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	Carbonate/Bicarbonate (SM2320B)	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
1	GWGW2372	12/5/08	1630		W	1																X		
2	GWGW2371	↓	1505		W	4	X	X															X	
3	GWGW2385	↓	1335		W	4	X	X															X	
						Field Filtered	X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **Level II Reporting with Initial Calibration Curves and Continuing Calibration** **Note: Nitrate 48 hour hold time!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
JMD	Weiss	12/5/08 1845	Tom O'Malley	CEL	12/8/08 1251
Tom O'Malley TO GSO	CEL	12/8/08 1730			
GS0510872753	GSO	12/9/08 1030	Wbatu CEL	CEL	12/9/08 1030

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 0 8 - 1 2 - 0 8 7 0

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Weiss Asso.

DATE: 12 / 9 / 08

TEMPERATURE: (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 4.5 °C - 0.2 °C (CF) = 4.3 °C ☐ Blank ☑ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by:_____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only **Initial:** WB

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Initial:** WB

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** WSC

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	☑	☐	☐
COC document(s) received complete.....	☑	☐	☐
Sampler's name indicated on COC.....	☑	☐	☐
Sample container label(s) consistent with COC.....	☑	☐	☐
Sample container(s) intact and good condition.....	☑	☐	☐
Correct containers and volume for analyses requested.....	☑	☐	☐
Analyses received within holding time.....	☑	☐	☐
Proper preservation noted on sample label(s).....	☑	☐	☐
Volatile analysis container(s) free of headspace.....	☐	☐	☑
Tedlar bag(s) free of condensation.....	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☐VOAh ☐VOAna_2 ☑125AGB ☐125AGBh ☐125AGBpo_4 ☐1AGB ☑1AGBna_2 ☐1AGBs ☐500AGB ☐500AGBs ☐250CGB ☐250CGBs ☐1PB ☐500PB ☐500PBna ☐250PB ☑250PBn ☐125PB ☐125PBznna ☐100PBsterile ☐100PBna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® ☐_____

Checked/Labeled by: WSC

Container: C:Clear A:Amber P:Poly/Plastic G:Glass J:Jar B:Bottle

Reviewed by: YL

Preservative: h:HCL n:HNO_3 na_2:$Na_2S_2O_3$ na:NaOH po_4:H_3PO_4 s:H_2SO_4 znna:$ZnAc_2$+NaOH

Scanned by: WSC

Work Order#: 08-12-0870

Client: WEISS Associates

RSK-175M

Calibration

☐ EPA METHOD 25 ☐ SCAQMD METHOD 25.1
☐ SCAQMD METHOD 25.1M (Low VOCs) ☐ SCAQMD METHOD 25.1M (Non-Condensable Fraction

QUALITY CONTROL DATA SHEET

Work Order Number: 08-12-0870
Instrument ID: GC14
Batch Number (LCS/MS/SA): 081209L01

Analyst: u
QC Review: m
Date Analyzed: 12/09/08

Date 12/13/08
Date 12/15/8

LCS/LCS Duplicate

Thermal Conductivity Detector (TCD) Analysis ☐ % by Volume ☐ ppm(v/v) ☐ other _____

Analyte	Conc Added	LCS REC	LCS %REC	LCSD REC	LCSD %REC	Control Limit(%REC)	RPD	Control Limit(RPD)
Oxygen	20.0					80-120		0-20
Nitrogen	75.1					80-120		0-20
Carbon Dioxide	4.92					80-120		0-20

Flame Ionization Detector (FID) Analysis ☐ ppm(v/v) ☐ other _____

Methane	99.9	101	101	100	100	80-120	1	0-20
Carbon Monoxide	100	106	106	105	105	80-120	1	0-20
TGNMO (as Methane) (Total Gaseous Non-Methane Organic compounds)	385	391	102	398	103	80-120	2	0-20

pc 12/09/08

Daily Midpoint Calibration Check

Thermal Conductivity Detector (TCD) Analysis ☐ % by Volume ☐ ppm(v/v) ☐ other _____

Analyte	Conc Added	Conc Recovered	% D	Control Limit
Oxygen	3.50			0 - 15
Nitrogen	10.03			0 - 15
Methane	10.03			0 - 15
Carbon Monoxide	9.96			0 - 15
Carbon Dioxide	10.0			0 - 15

Flame Ionization Detector (FID) Analysis ☐ ppm(v/v) ☐ other _____

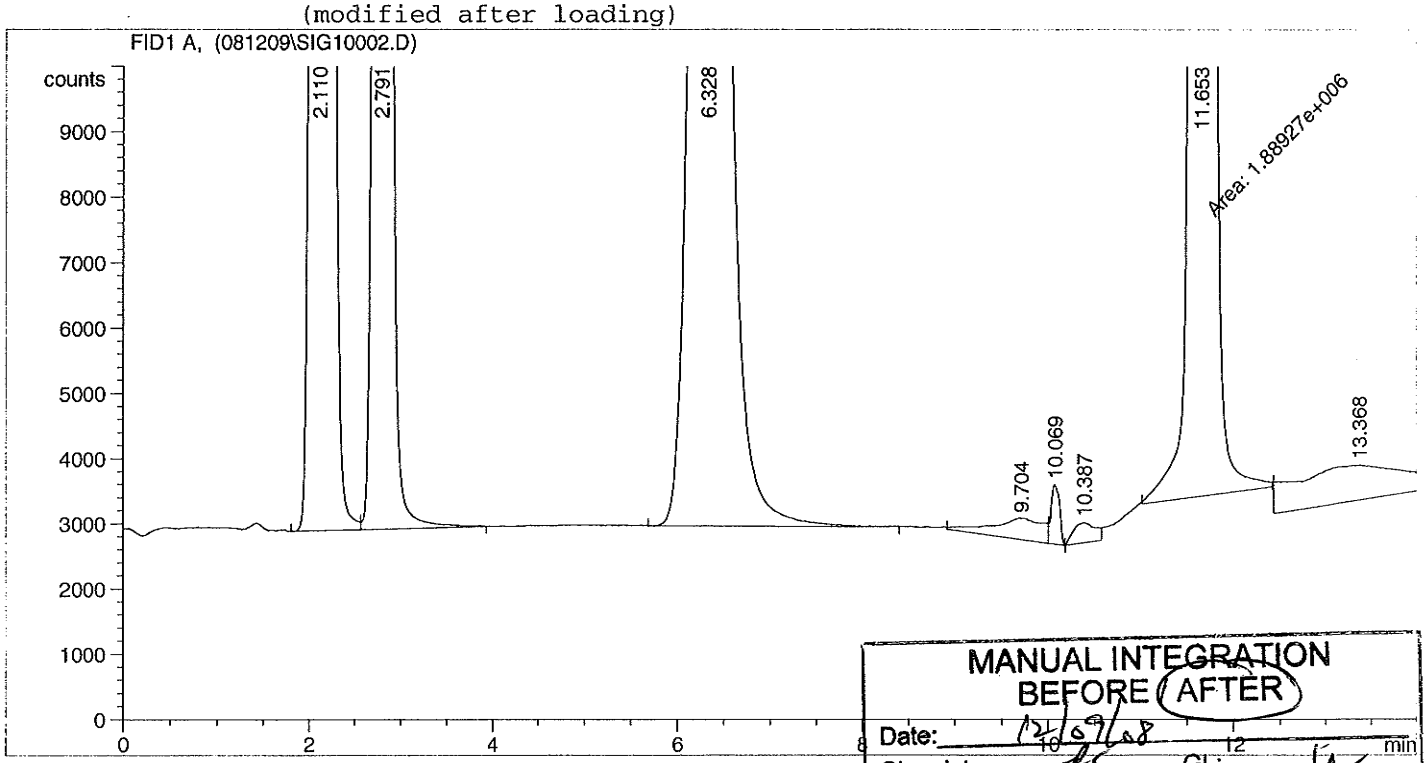
Analyte	Conc Added	Conc Recovered	% D	Control Limit
Methane	308	315	2	0 - 15
Carbon Monoxide	304	312	3	0 - 15
Carbon Dioxide	302	306	1	0 - 15
TGNMO (as Methane) (Total Gaseous Non-Methane Organic compounds)	918	909	1	0 - 15

Analyst's Comments: _____

Data File C:\HPCHEM\2\DATA\081209\SIG10002.D Sample Name: FID CCV 1mL

==========

Injection Date : 12/9/2008 9:14:55 AM
Sample Name : FID CCV 1mL Location : Vial 1
Acq. Operator : GC 14
Inj Volume : Manually
Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 10/3/2008 1:49:33 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M\071908.M
Last changed : 12/9/2008 9:36:18 AM by GC 14
(modified after loading)



MANUAL INTEGRATION
BEFORE / AFTER
Date: 12/09/08
Chemist: GL:
Reason: BASELINE CORR., PEAK ID CORR.
Other
This stamp appears in red ink on original copy.

==========

External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : 12/9/2008 9:36:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.110	BV	6.34792e5	4.91062e-4	311.72226		Carbon Monoxide
2.791	VB	6.36451e5	4.94479e-4	314.71138		Methane
6.328	BB	6.40763e5	4.77635e-4	306.05075		Carbon Dioxide
11.653	MM	1.88927e6	4.81128e-4	908.97981		TGNMO

Totals : 1841.46419

Results obtained with standard integrator!

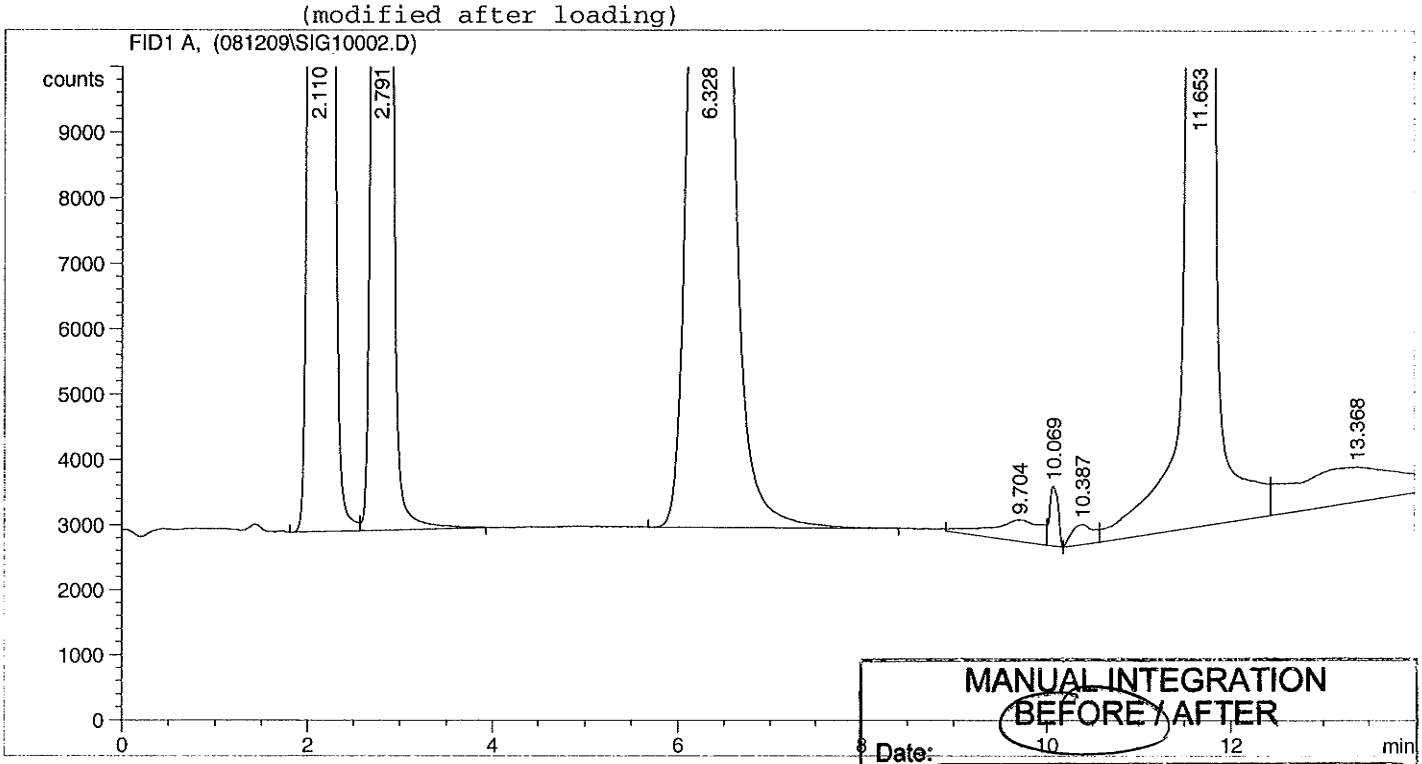
==========

*** End of Report ***

Data File C:\HPCHEM\2\DATA\081209\SIG10002.D Sample Name: FID CCV 1mL

==========

Injection Date : 12/9/2008 9:14:55 AM
Sample Name : FID CCV 1mL Location : Vial 1
Acq. Operator : GC 14
Inj Volume : Manually
Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 10/3/2008 1:49:33 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M\071908.M
Last changed : 12/8/2008 12:45:54 PM by GC 14
(modified after loading)



MANUAL INTEGRATION
BEFORE / AFTER
Date:
Chemist: GL:
Reason: BASELINE CORR., PEAK ID CORR.
Other :
This stamp appears in red ink on original copy.

==========

External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : 12/8/2008 12:45:52 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.110	BV	6.34792e5	4.91062e-4	311.72226		Carbon Monoxide
2.791	VB	6.36451e5	4.94479e-4	314.71138		Methane
6.328	BB	6.40763e5	4.77635e-4	306.05075		Carbon Dioxide
10.387	PV	5033.19775	4.81128e-4	2.42161		TGNMO

Totals : 934.90599

Results obtained with standard integrator!

==========

*** End of Report ***

GC 14 25.1 METHOD 071908
Multipoint Calibration

C0		5ppm	300ppm	5000ppm		Average	SD	RSD
Conc.ppm		5.06	304	5110				
Area		11148	608729	9727630		3449169		
RF		2203.162	2002.398	1903.646		2036.402	152.626	7.494886
Methane	1ppm	5ppm	300ppm	5000ppm				
Conc.ppm	1.01	5.07	308	4950				
Area	2226	9790	612460	9774190		2599667		
RF	2203.96	1930.966	1988.506	1974.584		2024.504	122.1225	6.032217
C02	1ppm	5ppm	300ppm	5000ppm				
Conc.ppm	1.07	5.37	302	4980				
Area	2416	10976	623378	10044400		2670293		
RF	2257.944	2043.948	2064.166	2016.948		2095.751	109.8449	5.241313
TGNMO	1ppm	5ppm	300ppm	5000ppm				
Conc.ppm	3.06	15.3	918	2082				
Area	7467	29582	1772460	4179080		1497147		
RF	2440.196	1933.464	1930.784	2007.243		2077.922	244.1008	11.74735

Air Analysis Logbook

DATE	DIRECTORY	DATA FILE	CEL ID #	TEST METHOD	STANDARD LOT # / ID	LOOP VOL (mL)	ANALYST	COMMENTS
07/18/08	080718	SIG100009	ICAL std #1	TGMMD	01-13-08	200uL	MV	
		10	ICAL std #3		01-13-07	1mL		
		11	ICAL STD #4		01-13-14			
		12	MB		N/A			
		13	MDL #1		01-13-08			
		14	2					
		15	3					
		16	4					
		17	5					
		18	6					
		19	7					
		20	ICAL #4		01-13-09			
07/19/08	080719	SIG1000 1	BLANK	TGMMO	N/A	1	EY	
		02	ICAL std #3		01-10-15			25.1 300 ppm
		03	blank		NA			
		04	ICAL std #1		01-13-08	200ul		1ppm (~5ppm)
		05	ICAL std #2			1		5 ppm
		06	ICAL std #3		01-10-15			300 ppm
		07	ICAL std #3		01-10-15 07/19			~~5000~~ 300 ppm. LL 07/19/08
		08	ICAL std #3		~~01-13-09~~			5000 ppm
		09	ICAL STD #4					
		10	Blank		NA			~~5 ppm~~. LL 07/19
		11	MDL #1		01-13-08		EY	5 ppm
		12	ICAL std #1			200ul		
		13	ICAL std #2			1		
		14	blank		NA		LL	
		15	#10 CCV		01-10-15			
		16	LCS		01-13-07			

Reviewed by: _____ Date ____/____/____

10/19/06 Revision

Air Analysis Logbook

DATE	DIRECTORY	DATA FILE	CEL ID #	TEST METHOD	STANDARD LOT # / ID	LOOP VOL (mL)	ANALYST	COMMENTS
07/19/08	080719	SSE100017	LCSD	TENMO	01-13-07	1	LL	
↓	↓	↓ 18	BLANK	↓	NA	↓	↓	
		19	ICAL STD #1		01-13-08	200µL	HF	
		20	1		↓	↓		
		21	2		~~01-10-15~~ HF 07/19/08			
		22	3		~~01-13-09~~			01-10-15
		23	4		01-13-09			
		24	4		01-13-09			
		25	3		01-10-15			
		26	2		01-13-08	↓		
		27	1		↓	200µL		
		28	1		↓	↓		
		29	4		01-13-09	1		mislabled
		30	4		↓			
		31	2		01-13-08			
↓	↓	↓ 32	↓ 2	↓	↓	↓	↓	
07/20/08	080720	SIG10001	Blank	TGMNO	NA	1	NL	
		2	FID CCV		01-10-15		M	
		3	↓		↓		↓	
		4	LCS		01-13-07		M	
		5	LCSD		1			
		6	Blank		NA		↓	
		7	08-07-1437-1A		1		LL	
		8	-2A					
		9	-2A					
		10	3A				M	
		11	4A					
↓	↓	↓ 12	08-07-1431-1A	↓	↓	↓	↓	

Reviewed by: _____ Date _____ / _____ / _____

10/19/06 Revision

Calibration Table

Calib. Data Modified : Sunday, July 20, 2008 11:10:47 AM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 20.000 %
Abs. Reference Window : 0.000 min
Rel. Non-ref. Window : 20.000 %
Abs. Non-ref. Window : 0.000 min
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times : No, only for identified peaks

Curve Type : Power
Origin : Ignored
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: FID1 A,

RetTime [min]	Sig	Lvl	Amount [ppm v/v]	Area	Amt/Area	Ref	Grp	Name
2.218	1	2	5.06000	1.11479e4	4.53898e-4			Carbon Monoxide
		3	304.00000	6.08729e5	4.99401e-4			
		4	5110.00000	9.72763e6	5.25308e-4			
2.817	1	1	1.01400	2226.19580	4.55486e-4			Methane
		2	5.07000	9790.16699	5.17867e-4			
		3	308.00000	6.12460e5	5.02890e-4			
		4	4950.00000	9.77419e6	5.06436e-4			
6.396	1	1	1.07400	2416.20410	4.44499e-4			Carbon Dioxide
		2	5.37000	1.09761e4	4.89244e-4			
		3	302.00000	6.23378e5	4.84457e-4			
		4	4980.00000	1.00444e7	4.95799e-4			
11.667	1	1	3.06000	7467.90234	4.09754e-4			TGNMO
		2	15.30000	2.95820e4	5.17207e-4			
		3	918.00000	1.77246e6	5.17925e-4			
		4	2082.00000	4.17908e6	4.98196e-4			

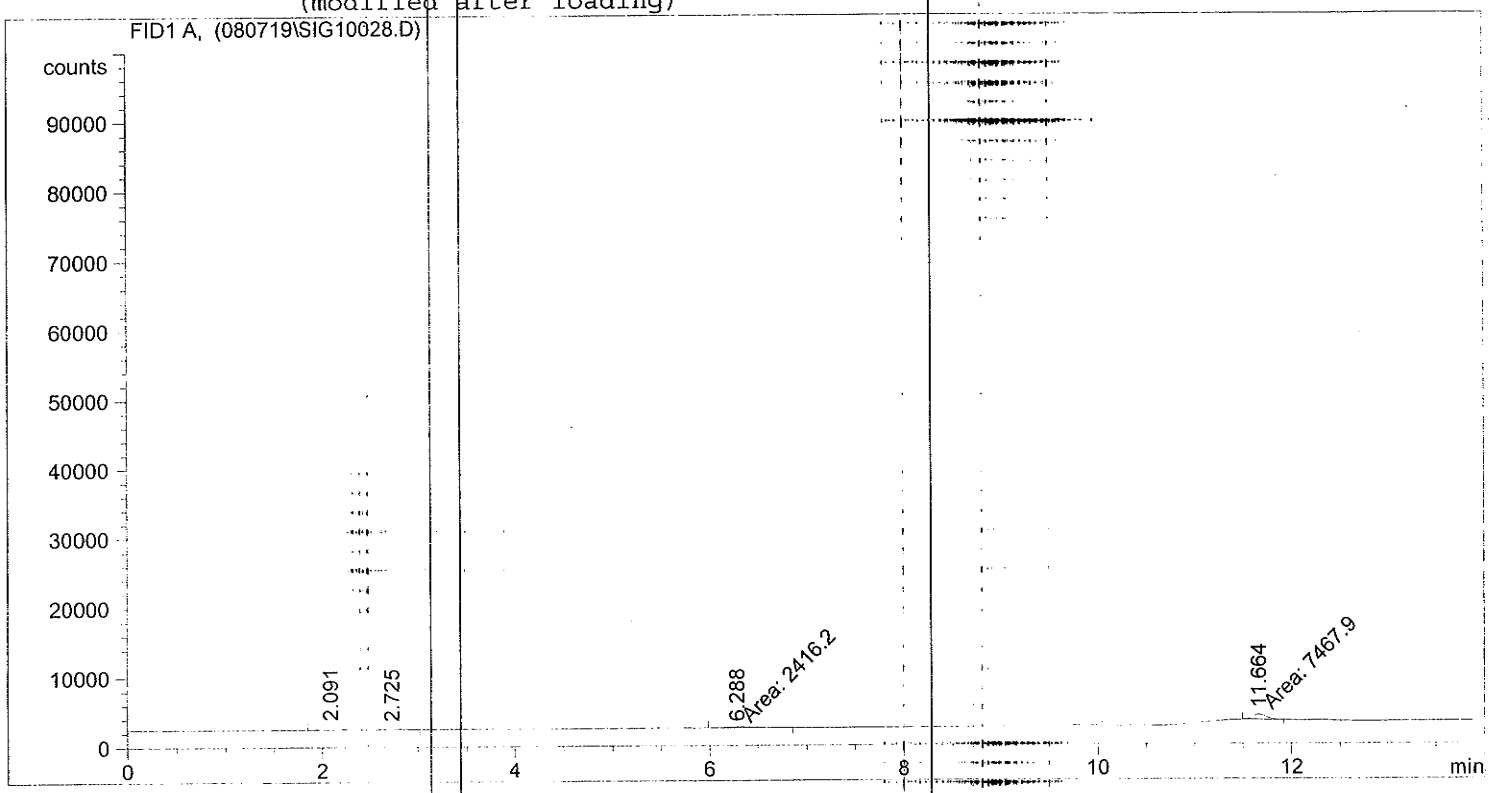
Peak Sum Table

No Entries in table

==========

Injection Date : 7/19/2008 11:46:49 PM
Sample Name : ICAL #1 200uL Location : Vial 1
Acq. Operator : GC 14 Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 10:59:10 AM by GC 14
(modified after loading)



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 7/20/2008 10:59:08 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.091	BB	5333.47119	2.20085e-4	1.17382		Carbon Monoxide
2.725	BB	2226.19580	4.81720e-4	1.07240		Methane
6.288	MM	2416.20410	2.55639e-4	6.17675e-1		Carbon Dioxide
11.664	MM	7467.90234	4.72564e-4	3.52906		TGNMO
Totals :				6.39296		

Results obtained with standard integrator!

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*** End of Report ***

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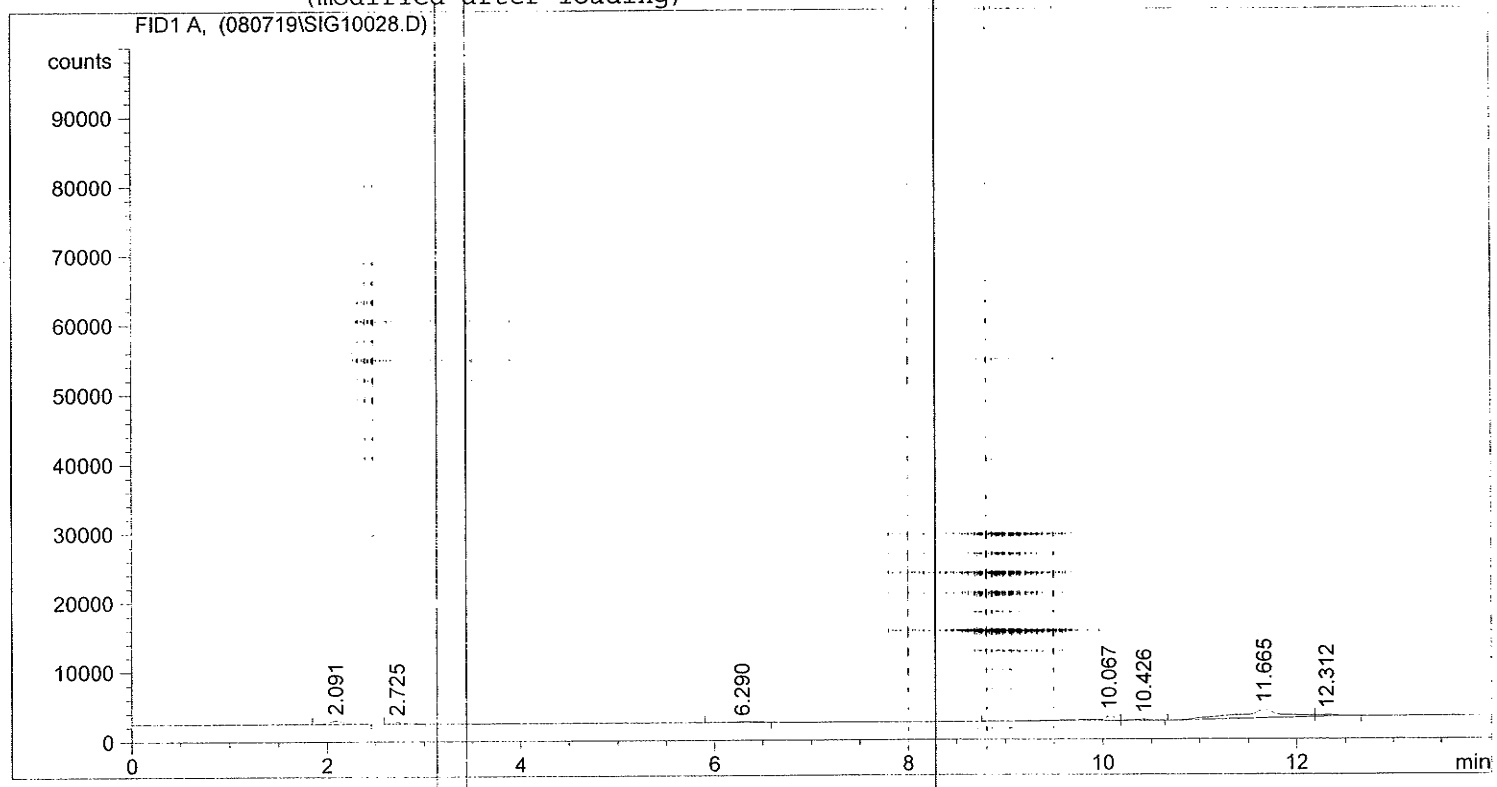
Injection Date : 7/19/2008 11:46:49 PM
Sample Name : ICAL #1 200uL Location : Vial 1
Acq. Operator : GC 14 Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 10:59:10 AM by GC 14
(modified after loading)



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 7/20/2008 10:59:08 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.091	BB	5333.47119	2.20085e-4	1.17382		Carbon Monoxide
2.725	BB	2226.19580	4.81720e-4	1.07240		Methane
6.290	BB	1793.48889	2.46801e-4	4.42634e-1		Carbon Dioxide
11.665	BV	4.09466e4	5.00967e-4	20.51291		TGNMO

Totals : 23.20177

Results obtained with standard integrator!

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*** End of Report ***

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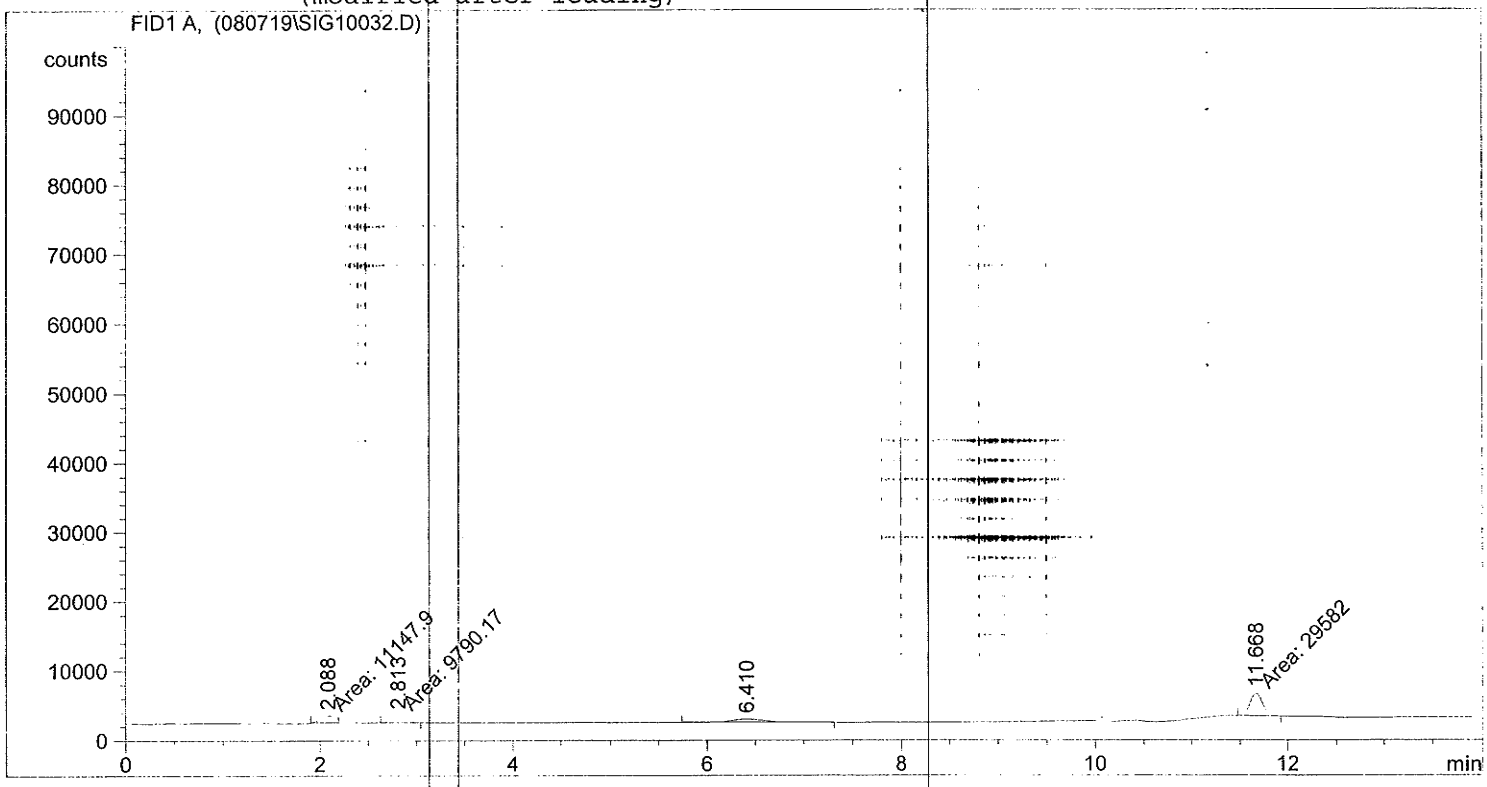
Injection Date : 7/20/2008 1:12:23 AM
Sample Name : ICAL #2 1mL Location : Vial 1
Acq. Operator : GC 14
Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 11:08:23 AM by GC 14
(modified after loading)



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : Sunday, July 20, 2008 11:08:23 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.088	MF	1.11479e4	4.34978e-4	4.84908		Carbon Monoxide
2.813	MM	9790.16699	4.86574e-4	4.76364		Methane
6.410	BB	1.09761e4	4.68418e-4	5.14142		Carbon Dioxide
11.668	MM	2.95820e4	4.67871e-4	13.84055		TGNMO

Totals : 28.59469

Results obtained with standard integrator!

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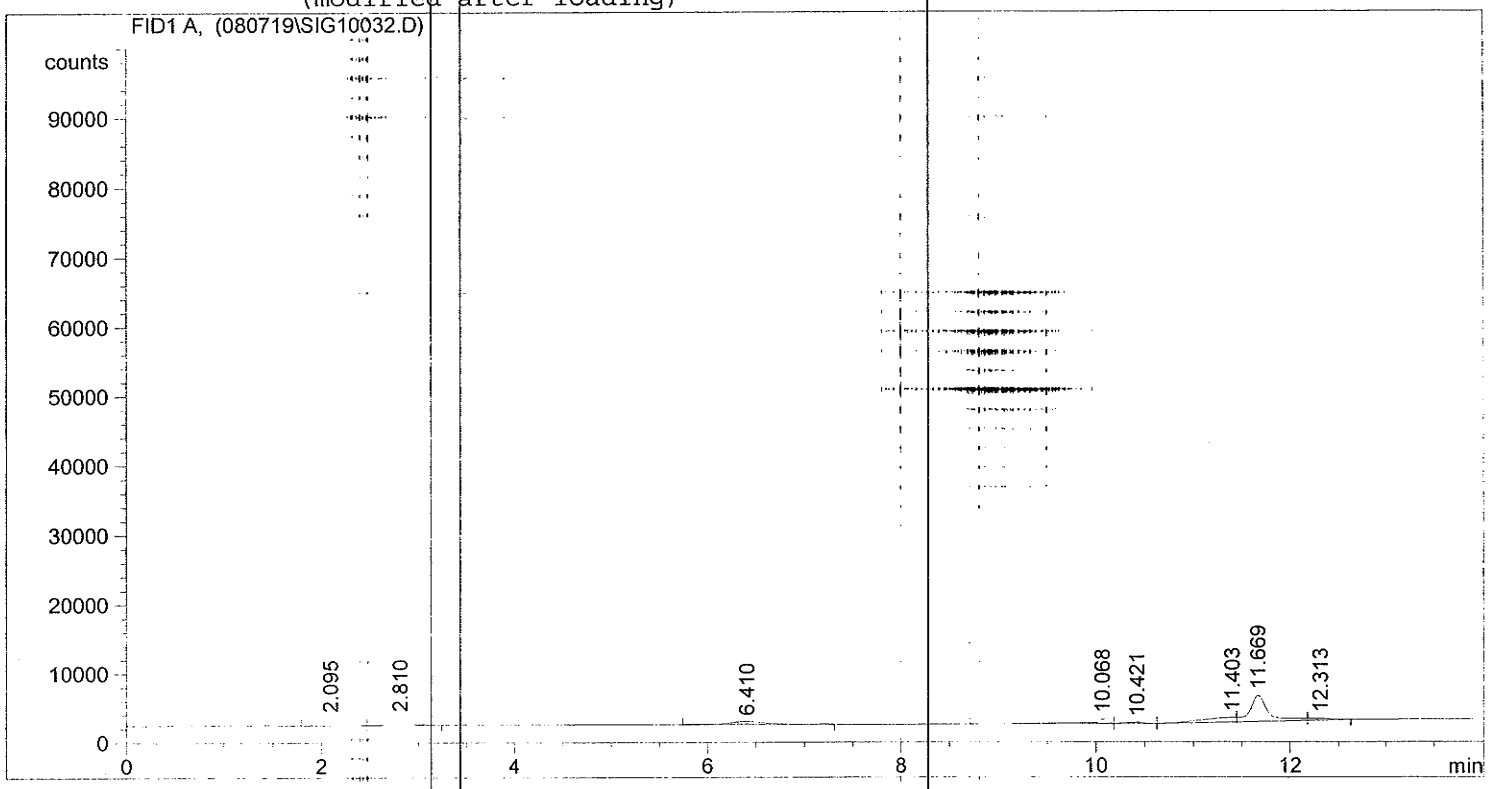
*** End of Report ***

==========

Injection Date : 7/20/2008 1:12:23 AM
Sample Name : ICAL #2 1mL Location : Vial 1
Acq. Operator : GC 14
Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 11:02:59 AM by GC 14
(modified after loading)



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : Sunday, July 20, 2008 11:02:59 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.095	BV	1.74076e4	2.66416e-4	4.63767		Carbon Monoxide
2.810	VB	1.16931e4	4.63584e-4	5.42075		Methane
6.410	BB	1.09761e4	4.49500e-4	4.93377		Carbon Dioxide
11.669	VV	4.94595e4	4.66855e-4	23.09040		TGNMO

Totals : 38.08258

Results obtained with standard integrator!

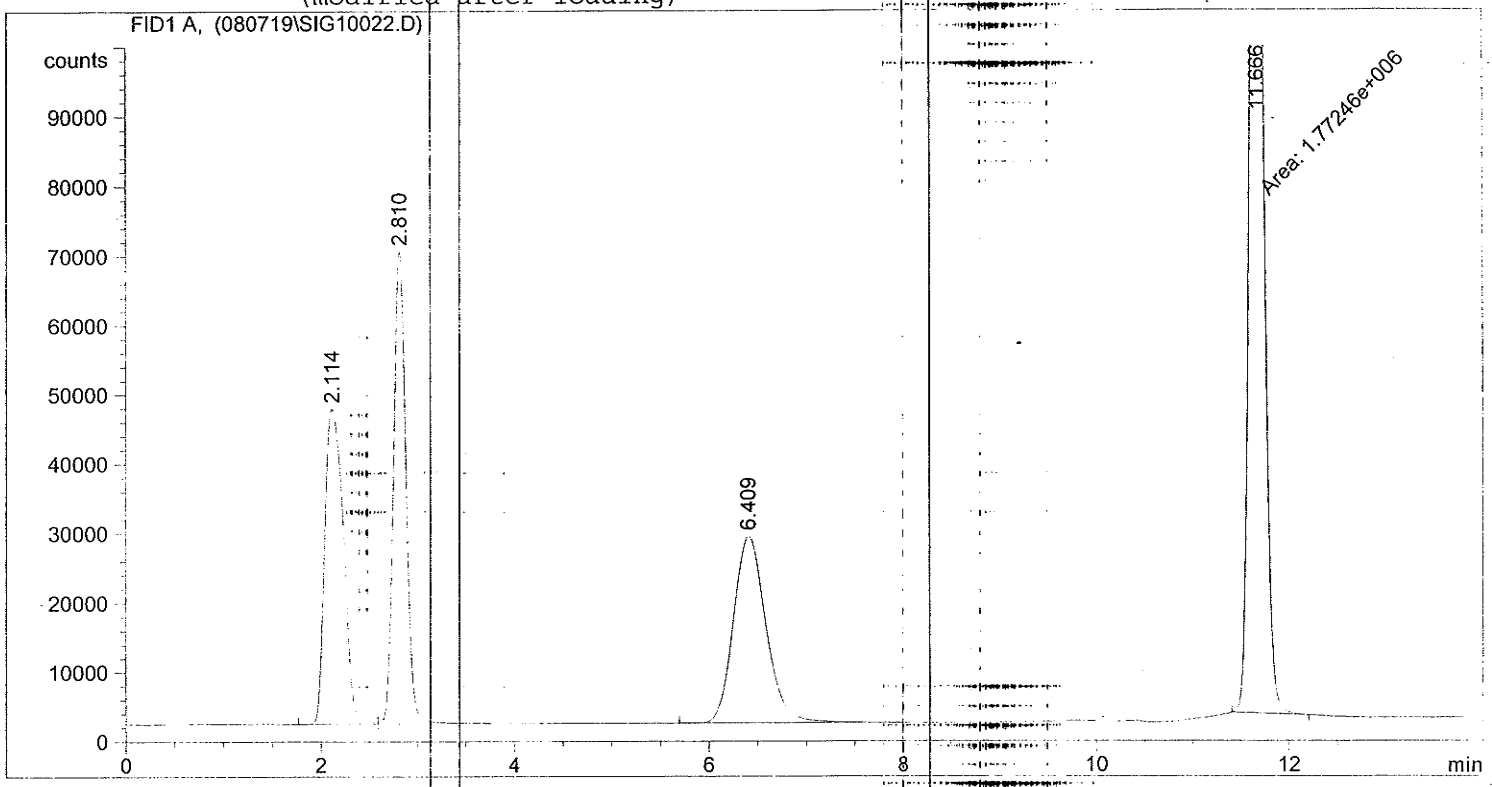
==========

*** End of Report ***

==========

Injection Date : 7/19/2008 7:54:26 PM
Sample Name : ICAL #3 1mL Location : Vial 1
Acq. Operator : GC 14
Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 10:41:13 AM by GC 14
(modified after loading)



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : Sunday, July 20, 2008 10:41:12 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.114	BV	6.08729e5	5.18394e-4	315.56139		Carbon Monoxide
2.810	VB	6.12460e5	5.51524e-4	337.78630		Methane
6.409	BV	6.23378e5	4.76516e-4	297.04967		Carbon Dioxide
11.666	MM	1.77246e6	5.81475e-4	1030.63989		TGNMO

Totals : 1981.03725

Results obtained with standard integrator!

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*** End of Report ***

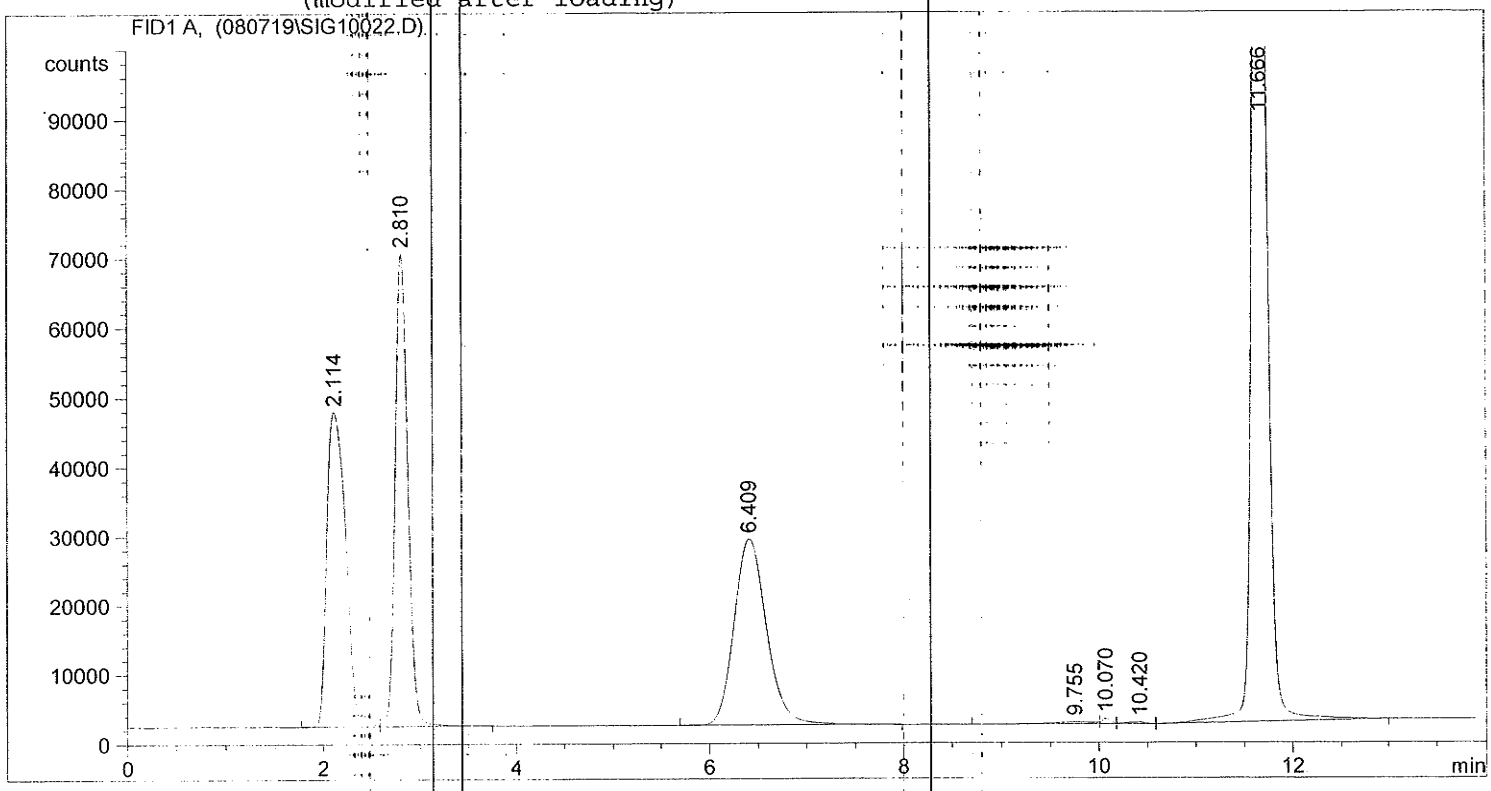
==========

Injection Date : 7/19/2008 7:54:26 PM
Sample Name : ICAL #3 1mL
Acq. Operator : GC 14

Location : Vial 1

Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 10:37:22 AM by GC 14
(modified after loading)



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 7/20/2008 10:37:20 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.114	BV	6.08729e5	4.82486e-4	293.70355		Carbon Monoxide
2.810	VB	6.12460e5	5.08124e-4	311.20580		Methane
6.409	BV	6.23378e5	4.39930e-4	274.24266		Carbon Dioxide
11.666	PV	1.84478e6	5.27180e-4	972.53302		TGNMO

Totals : 1851.68502

Results obtained with standard integrator!

==========

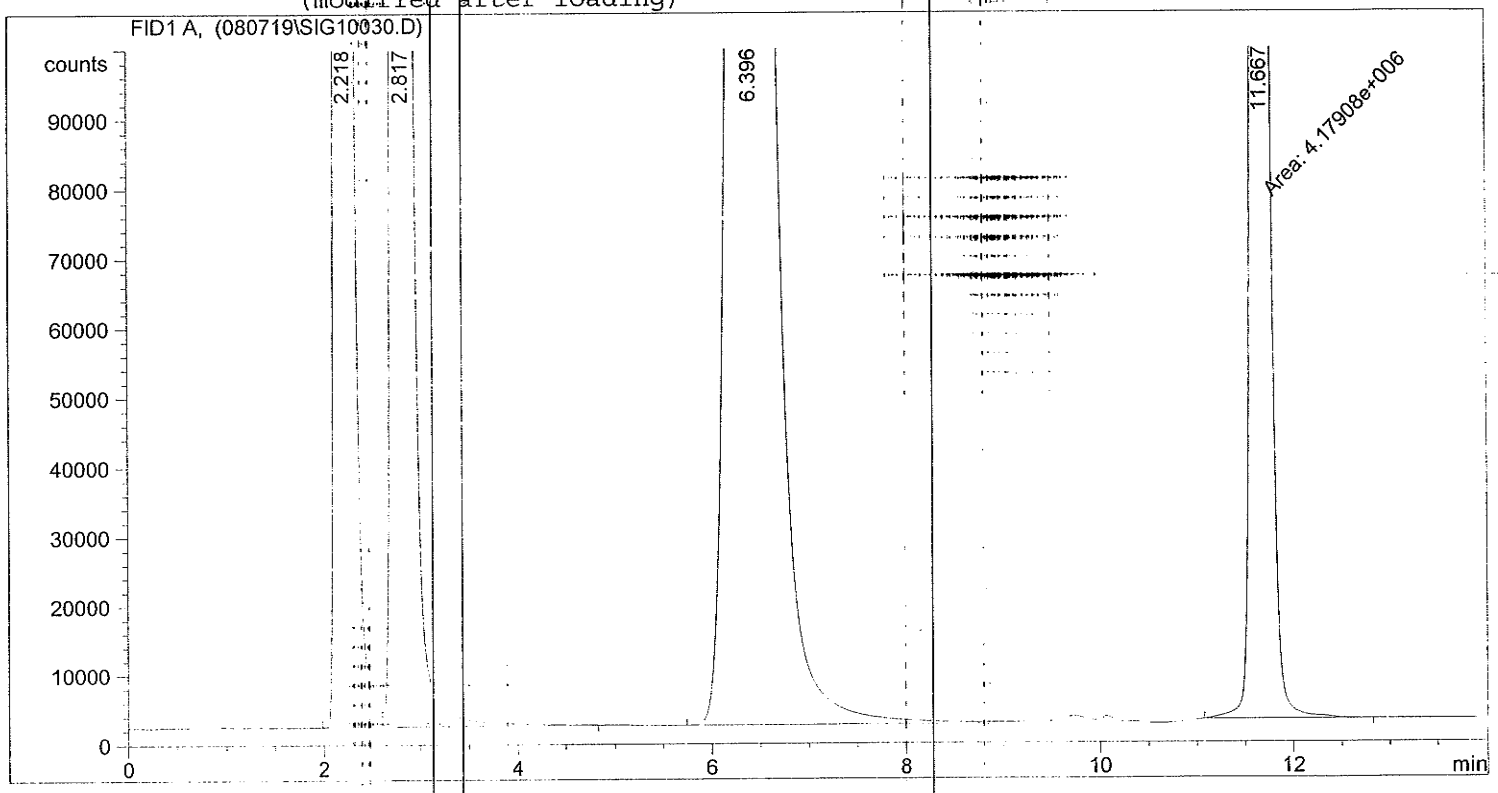
*** End of Report ***

Injection Date : 7/20/2008 12:31:29 AM
Sample Name : ICAL #4 1mL
Acq. Operator : GC 14

Location : Vial 1

Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 11:10:47 AM by GC 14
(modified after loading)



External Standard Report

Sorted By : Signal
Calib. Data Modified : Sunday, July 20, 2008 11:10:47 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.218	BV	9.72763e6	5.27203e-4	5128.43195		Carbon Monoxide
2.817	VB	9.77419e6	5.13222e-4	5016.33247		Methane
6.396	BV	1.00444e7	4.99095e-4	5013.11061		Carbon Dioxide
11.667	MM	4.17908e6	5.19835e-4	2172.43283		TGNMO
Totals :				1.73303e4		

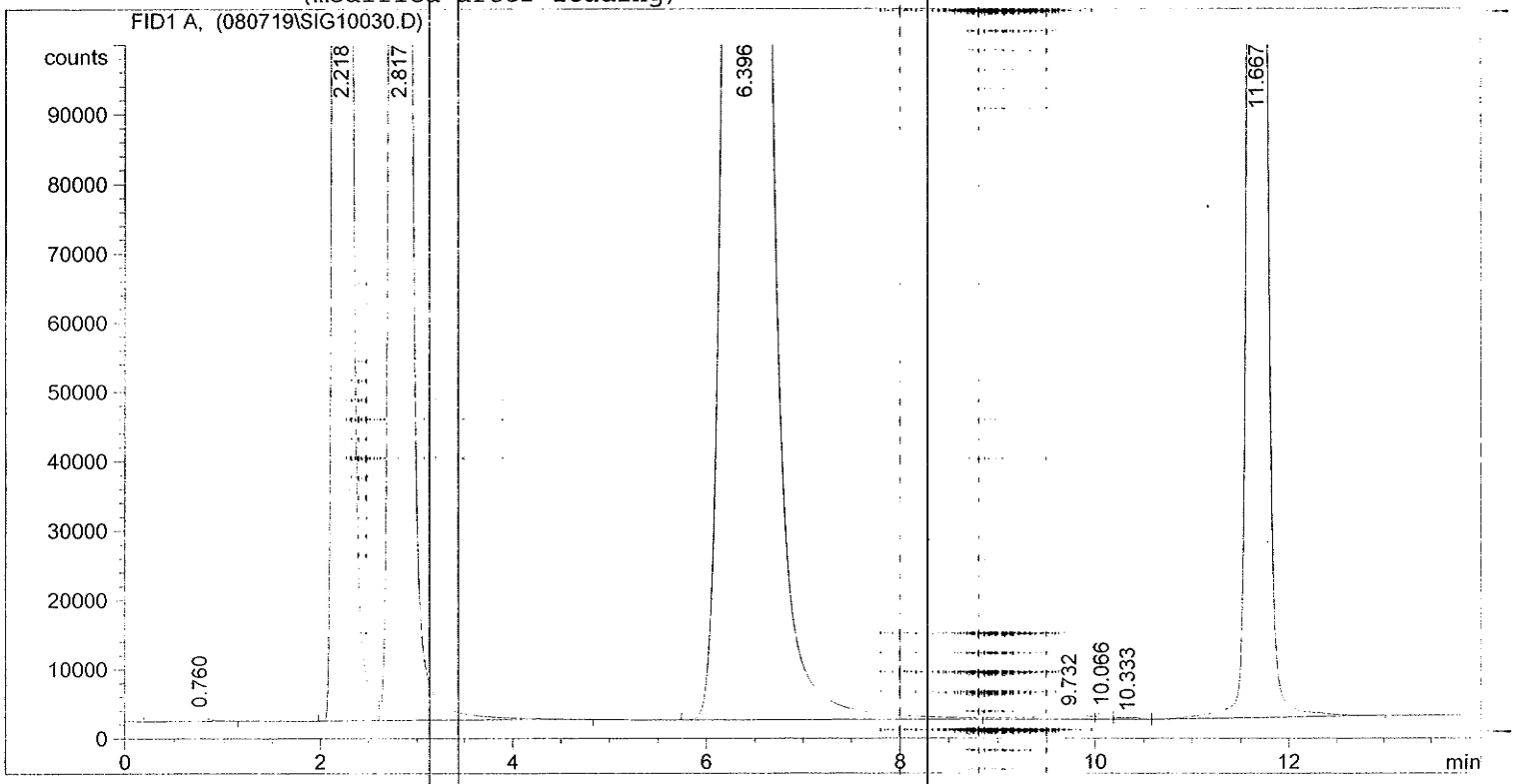
Results obtained with standard integrator!

*** End of Report ***

==========

Injection Date : 7/20/2008 12:31:29 AM
Sample Name : ICAL #4 1mL Location : Vial 1
Acq. Operator : GC 14
Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 11:08:23 AM by GC 14
(modified after loading)



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : Sunday, July 20, 2008 11:08:23 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.218	BV	9.72763e6	6.55749e-4	6378.87873		Carbon Monoxide
2.817	VB	9.77419e6	6.26868e-4	6127.12819		Methane
6.396	BV	1.00444e7	5.94616e-4	5972.55680		Carbon Dioxide
11.667	PV	4.21085e6	6.03754e-4	2542.31342		TGNMO

Totals : 2.10209e4

Results obtained with standard integrator!

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*** End of Report ***

Work Order#: 08-12-0870

Client: WEISS Associates

EPA 6010B

Calibration

==========

Sequence No.: 8
Sample ID: icv-si
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:
User canceled analysis.

Autosampler Location: 157
Date Collected: 12/11/2008 9:40:13 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

==========

Sequence No.: 8
Sample ID: icv-si
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:

Autosampler Location: 157
Date Collected: 12/11/2008 9:43:29 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: icv-si

Analyte	Back Pressure	Flow
All	166.0 kPa	0.60 L/min

Mean Data: icv-si

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ho 339.898	63874.7	5.095	mg/L	0.0309				0.61%
Ho 345.600	108902.0	5.135	mg/L	0.0291				0.57%
Tb 350.917	26431.3	5.125	mg/L	0.0456				0.89%
Tb 384.873	14138.1	5.115	mg/L	0.0162				0.32%
Y 324.227	185295.9	5.184	mg/L	0.0420				0.81%
Y 371.029	283284.5	5.108	mg/L	0.0430				0.84%
Ag 328.068*†	-13.2	-0.0001	mg/L	0.00030	-0.0001	mg/L	0.00030	210.52%
Ag 338.289†	-82.0	-0.0015	mg/L	0.00125	-0.0015	mg/L	0.00125	82.62%
Al 308.215*†	39.2	0.0030	mg/L	0.00172	0.0030	mg/L	0.00172	58.04%
Al 396.153†	600.3	0.0059	mg/L	0.00159	0.0059	mg/L	0.00159	27.15%
As 188.979†	5.9	0.0024	mg/L	0.00152	0.0024	mg/L	0.00152	64.71%
As 193.696*†	-0.6	-0.0003	mg/L	0.00226	-0.0003	mg/L	0.00226	734.63%
B 249.677*†	1548.9	0.0610	mg/L	0.00057	0.0610	mg/L	0.00057	0.93%
B 249.772†	2235.8	0.0600	mg/L	0.00035	0.0600	mg/L	0.00035	0.59%
Ba 455.403†	38.4	0.0002	mg/L	0.00021	0.0002	mg/L	0.00021	87.36%
Ba 233.527*†	43.2	0.0003	mg/L	0.00009	0.0003	mg/L	0.00009	27.69%
Be 313.107†	82.3	0.0001	mg/L	0.00015	0.0001	mg/L	0.00015	244.91%
Be 313.042*†	550.0	0.0002	mg/L	0.00002	0.0002	mg/L	0.00002	7.81%
Bi 190.171†	0.1	0.0001	mg/L	0.00733	0.0001	mg/L	0.00733	>999.9%
Bi 223.061*†	15.2	0.0035	mg/L	0.00021	0.0035	mg/L	0.00021	6.06%
Ca 422.673†	19.0	0.0042	mg/L	0.00911	0.0042	mg/L	0.00911	219.54%
Ca 317.933*†	4.2	0.0022	mg/L	0.00390	0.0022	mg/L	0.00390	177.05%
Cd 226.502*†	15.3	0.0002	mg/L	0.00002	0.0002	mg/L	0.00002	8.14%
Cd 228.802†	6.6	0.0001	mg/L	0.00003	0.0001	mg/L	0.00003	32.90%
Co 230.786†	23.2	0.0005	mg/L	0.00013	0.0005	mg/L	0.00013	23.48%
Co 228.616*†	22.1	0.0004	mg/L	0.00003	0.0004	mg/L	0.00003	7.13%
Cr 357.869†	-30.3	-0.0007	mg/L	0.00126	-0.0007	mg/L	0.00126	174.97%
Cr 267.716*†	15.4	0.0003	mg/L	0.00021	0.0003	mg/L	0.00021	62.74%
Cu 324.752*†	5.5	0.0000	mg/L	0.00025	0.0000	mg/L	0.00025	524.74%
Cu 327.393†	50.2	0.0009	mg/L	0.00071	0.0009	mg/L	0.00071	79.36%
Fe 239.562†	1.8	0.0091	mg/L	0.00528	0.0091	mg/L	0.00528	57.82%
Fe 259.939†	-2.0	-0.0027	mg/L	0.00266	-0.0027	mg/L	0.00266	98.95%
Fe 273.955*†	-45.5	-0.0022	mg/L	0.00037	-0.0022	mg/L	0.00037	16.99%
K 766.490*†	11.8	0.0177	mg/L	0.00613	0.0177	mg/L	0.00613	34.69%
Li 610.362*†	461.3	0.0018	mg/L	0.00121	0.0018	mg/L	0.00121	66.98%
Mg 279.077*†	-7.4	-0.0008	mg/L	0.00188	-0.0008	mg/L	0.00188	226.49%
Mg 280.271†	5.1	0.0004	mg/L	0.00008	0.0004	mg/L	0.00008	19.77%
Mn 257.610*†	176.0	0.0003	mg/L	0.00002	0.0003	mg/L	0.00002	7.78%
Mn 259.372†	161.8	0.0003	mg/L	0.00000	0.0003	mg/L	0.00000	0.15%
Mo 202.031*†	3.1	0.0002	mg/L	0.00007	0.0002	mg/L	0.00007	29.23%
Mo 203.845†	-3.9	-0.0004	mg/L	0.00002	-0.0004	mg/L	0.00002	3.98%
Na 589.592*†	-434.2	-0.1094	mg/L	0.02367	-0.1094	mg/L	0.02367	21.64%
Na 330.237†	47.7	0.1602	mg/L	0.18485	0.1602	mg/L	0.18485	115.37%
Ni 231.604*†	14.5	0.0005	mg/L	0.00026	0.0005	mg/L	0.00026	50.34%
Ni 232.003†	-10.5	-0.0006	mg/L	0.00039	-0.0006	mg/L	0.00039	64.50%
P 213.617*†	-9.8	-0.0039	mg/L	0.00050	-0.0039	mg/L	0.00050	12.74%
P 214.914†	8.0	0.0036	mg/L	0.00369	0.0036	mg/L	0.00369	103.92%

Pb 217.000†	-1.5	-0.0007 mg/L	0.00250	-0.0007 mg/L	0.00250	349.58%
Pb 220.353*†	8.9	0.0012 mg/L	0.00105	0.0012 mg/L	0.00105	87.39%
S 181.975*†	-34.9	-0.0492 mg/L	0.01195	-0.0492 mg/L	0.01195	24.29%
S 180.669†	-59.7	-0.0685 mg/L	0.00253	-0.0685 mg/L	0.00253	3.69%
S 182.563†	-21.3	-0.0668 mg/L	0.00847	-0.0668 mg/L	0.00847	12.67%
Sb 217.582*†	-3.5	-0.0013 mg/L	0.00024	-0.0013 mg/L	0.00024	18.09%
Sb 206.836†	10.9	0.0027 mg/L	0.01332	0.0027 mg/L	0.01332	500.35%
Sb 206†	-0.8	-0.0002 mg/L	0.00019	-0.0002 mg/L	0.00019	89.86%
Se 196.026*†	6.2	0.0024 mg/L	0.00142	0.0024 mg/L	0.00142	58.14%
Se 203.985†	-18.4	-0.0115 mg/L	0.00674	-0.0115 mg/L	0.00674	58.54%
Si 251.611*†	334318.2	10.19 mg/L	0.012	10.19 mg/L	0.012	0.12%
Si 288.158†	100865.9	10.25 mg/L	0.003	10.25 mg/L	0.003	0.02%
Sn 242.170†	57.1	0.0205 mg/L	0.00559	0.0205 mg/L	0.00559	27.31%
Sn 189.927*†	12.1	0.0019 mg/L	0.00064	0.0019 mg/L	0.00064	34.23%
Sr 407.771*†	123.6	0.0003 mg/L	0.00008	0.0003 mg/L	0.00008	28.43%
Sr 421.552†	1395.4	0.0002 mg/L	0.00000	0.0002 mg/L	0.00000	1.65%
Ti 334.940†	23.1	0.0001 mg/L	0.00009	0.0001 mg/L	0.00009	120.03%
Ti 336.121*†	35.7	0.0001 mg/L	0.00003	0.0001 mg/L	0.00003	26.64%
Tl†	7.4	0.0021 mg/L	0.00135	0.0021 mg/L	0.00135	63.76%
Tl 351.924†	-53.3	-0.0142 mg/L	0.01001	-0.0142 mg/L	0.01001	70.70%
Tl 190.801*†	13.3	0.0032 mg/L	0.00261	0.0032 mg/L	0.00261	81.11%
V 310.230†	-129.7	-0.0008 mg/L	0.00100	-0.0008 mg/L	0.00100	129.89%
V 292.402*†	65.0	0.0008 mg/L	0.00035	0.0008 mg/L	0.00035	44.89%
Zn 206.200*†	11.6	0.0002 mg/L	0.00011	0.0002 mg/L	0.00011	50.89%
Zn 213.857*†	11.7	0.0002 mg/L	0.00006	0.0002 mg/L	0.00006	28.82%
Zn 202.548†	12.1	0.0002 mg/L	0.00004	0.0002 mg/L	0.00004	22.95%

Sequence No.: 2
Sample ID: CCV
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/11/2008 3:57:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	174.0 kPa	0.60 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Ho 339.898	64122.2	5.115	mg/L	0.0427				0.83%
Ho 345.600	110869.5	5.228	mg/L	0.0376				0.72%
Tb 384.873	13624.8	4.929	mg/L	0.0726				1.47%
Tb 350.917	26616.6	5.161	mg/L	0.0796				1.54%
Y 324.227	188118.6	5.263	mg/L	0.0487				0.93%
Y 371.029	275753.5	4.972	mg/L	0.0522				1.05%
Ag 328.068*†	33728.1	0.3589	mg/L	0.00174	0.3589	mg/L	0.00174	0.49%
QC value within limits for Ag 328.068* Recovery = 95.69%								
Ag 338.289†	19462.5	0.3602	mg/L	0.00200	0.3602	mg/L	0.00200	0.56%
Al 308.215*†	174102.1	13.18	mg/L	0.056	13.18	mg/L	0.056	0.43%
QC value within limits for Al 308.215* Recovery = 97.67%								
Al 396.153†	1337394.2	13.04	mg/L	0.201	13.04	mg/L	0.201	1.54%
As 188.979†	9380.6	3.756	mg/L	0.0545	3.756	mg/L	0.0545	1.45%
QC value within limits for As 188.979 Recovery = 100.17%								
As 193.696*†	7341.0	3.744	mg/L	0.0426	3.744	mg/L	0.0426	1.14%
QC value within limits for As 193.696* Recovery = 99.84%								
B 249.677*†	92644.4	3.648	mg/L	0.0002	3.648	mg/L	0.0002	0.01%
QC value within limits for B 249.677* Recovery = 97.27%								
B 249.772†	132562.8	3.558	mg/L	0.0029	3.558	mg/L	0.0029	0.08%
Ba 455.403†	1094314.3	6.950	mg/L	0.0562	6.950	mg/L	0.0562	0.81%
Ba 233.527*†	923530.7	7.221	mg/L	0.1577	7.221	mg/L	0.1577	2.18%
QC value within limits for Ba 233.527* Recovery = 96.28%								
Be 313.107†	760714.7	0.5598	mg/L	0.01349	0.5598	mg/L	0.01349	2.41%
Be 313.042*†	1314189.9	0.5463	mg/L	0.01191	0.5463	mg/L	0.01191	2.18%
QC value within limits for Be 313.042* Recovery = 97.12%								
Ca 422.673†	144386.3	31.59	mg/L	0.396	31.59	mg/L	0.396	1.25%
Ca 317.933*†	54496.3	28.36	mg/L	0.332	28.36	mg/L	0.332	1.17%
QC value within limits for Ca 317.933* Recovery = 94.55%								
Cd 226.502*†	51561.0	0.7520	mg/L	0.00278	0.7520	mg/L	0.00278	0.37%
QC value within limits for Cd 226.502* Recovery = 100.27%								
Cd 228.802†	55253.0	0.7589	mg/L	0.00363	0.7589	mg/L	0.00363	0.48%
Co 230.786†	81545.9	1.900	mg/L	0.0084	1.900	mg/L	0.0084	0.44%
Co 228.616*†	99765.8	1.921	mg/L	0.0058	1.921	mg/L	0.0058	0.30%
QC value within limits for Co 228.616* Recovery = 102.46%								
Cr 357.869†	49859.5	1.184	mg/L	0.0471	1.184	mg/L	0.0471	3.98%
Cr 267.716*†	53429.9	1.181	mg/L	0.0450	1.181	mg/L	0.0450	3.81%
QC value greater than the upper limit for Cr 267.716* Recovery = 196.91%								
Cu 324.752*†	106188.3	0.9310	mg/L	0.00411	0.9310	mg/L	0.00411	0.44%
QC value within limits for Cu 324.752* Recovery = 99.31%								
Cu 327.393†	50787.0	0.9009	mg/L	0.00150	0.9009	mg/L	0.00150	0.17%
Fe 259.939†	2640.9	3.511	mg/L	0.0491	3.511	mg/L	0.0491	1.40%
Fe 273.955*†	80526.3	3.851	mg/L	0.0138	3.851	mg/L	0.0138	0.36%
QC value within limits for Fe 273.955* Recovery = 102.68%								
Fe 239.562†	734.4	3.660	mg/L	0.0372	3.660	mg/L	0.0372	1.02%
K 766.490*†	18042.6	27.03	mg/L	0.401	27.03	mg/L	0.401	1.48%
QC value within limits for K 766.490* Recovery = 100.11%								
Mg 279.077*†	68278.8	7.667	mg/L	0.0104	7.667	mg/L	0.0104	0.14%
QC value within limits for Mg 279.077* Recovery = 102.23%								
Mg 280.271†	96385.7	7.271	mg/L	0.0896	7.271	mg/L	0.0896	1.23%
Mn 257.610*†	451054.3	0.7351	mg/L	0.00217	0.7351	mg/L	0.00217	0.30%
QC value within limits for Mn 257.610* Recovery = 98.02%								
Mn 259.372†	366520.6	0.7600	mg/L	0.00372	0.7600	mg/L	0.00372	0.49%
Mo 202.031*†	8004.4	0.5855	mg/L	0.00735	0.5855	mg/L	0.00735	1.26%
QC value within limits for Mo 202.031* Recovery = 97.58%								
Mo 203.845†	5441.3	0.5871	mg/L	0.00909	0.5871	mg/L	0.00909	1.55%

Na 589.592*†	143455.7	36.13	mg/L	0.340	36.13	mg/L	0.340	0.94%
QC value within limits for Na 589.592* Recovery = 100.37%								
Na 330.237†	9594.3	32.23	mg/L	0.025	32.23	mg/L	0.025	0.08%
Ni 231.604*†	17032.9	0.6053	mg/L	0.00955	0.6053	mg/L	0.00955	1.58%
QC value within limits for Ni 231.604* Recovery = 100.88%								
Ni 232.003†	10871.6	0.6240	mg/L	0.00994	0.6240	mg/L	0.00994	1.59%
Pb 217.000†	7541.0	3.588	mg/L	0.0556	3.588	mg/L	0.0556	1.55%
Pb 220.353*†	27391.8	3.700	mg/L	0.0044	3.700	mg/L	0.0044	0.12%
QC value within limits for Pb 220.353* Recovery = 98.67%								
Sb 206†	16758.9	4.626	mg/L	0.0739	4.626	mg/L	0.0739	1.60%
Sb 217.582*†	11594.4	4.392	mg/L	0.0619	4.392	mg/L	0.0619	1.41%
QC value within limits for Sb 217.582* Recovery = 97.61%								
Sb 206.836†	17497.8	4.257	mg/L	0.0622	4.257	mg/L	0.0622	1.46%
Se 203.985†	2510.9	1.570	mg/L	0.0286	1.570	mg/L	0.0286	1.82%
Se 196.026*†	3779.2	1.485	mg/L	0.0197	1.485	mg/L	0.0197	1.33%
QC value within limits for Se 196.026* Recovery = 98.99%								
Si 288.158†	63685.7	6.474	mg/L	0.0385	6.474	mg/L	0.0385	0.59%
Si 251.611*†	205016.8	6.251	mg/L	0.0318	6.251	mg/L	0.0318	0.51%
QC value within limits for Si 251.611* Recovery = 104.18%								
Tl†	5303.2	1.507	mg/L	0.0197	1.507	mg/L	0.0197	1.31%
Tl 351.924†	5626.6	1.493	mg/L	0.0242	1.493	mg/L	0.0242	1.62%
Tl 190.801*†	6246.6	1.507	mg/L	0.0182	1.507	mg/L	0.0182	1.21%
QC value within limits for Tl 190.801* Recovery = 100.45%								
V 292.402*†	154915.9	1.838	mg/L	0.0096	1.838	mg/L	0.0096	0.52%
QC value within limits for V 292.402* Recovery = 98.05%								
V 310.230†	308351.0	1.831	mg/L	0.0082	1.831	mg/L	0.0082	0.45%
Zn 213.857*†	152069.5	2.471	mg/L	0.0058	2.471	mg/L	0.0058	0.23%
QC value within limits for Zn 213.857* Recovery = 98.85%								
Zn 202.548†	187381.4	2.456	mg/L	0.0027	2.456	mg/L	0.0027	0.11%

QC Failed. Continue with analysis.

Sequence No.: 8
Sample ID: CCV
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/11/2008 4:18:46 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	173.0 kPa	0.60 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ho 339.898	64281.5	5.128	mg/L	0.0796				1.55%
Ho 345.600	110689.4	5.219	mg/L	0.0950				1.82%
Tb 384.873	13670.5	4.946	mg/L	0.1123				2.27%
Tb 350.917	26599.4	5.158	mg/L	0.1131				2.19%
Y 324.227	188138.2	5.264	mg/L	0.1238				2.35%
Y 371.029	276001.0	4.977	mg/L	0.1025				2.06%
Al 308.215*†	173360.6	13.13	mg/L	0.021	13.13	mg/L	0.021	0.16%
QC value within limits for Al 308.215* Recovery = 97.25%								
Al 396.153†	1360824.5	13.27	mg/L	0.120	13.27	mg/L	0.120	0.91%
B 249.677*†	92809.8	3.656	mg/L	0.0068	3.656	mg/L	0.0068	0.18%
QC value within limits for B 249.677* Recovery = 97.49%								
B 249.772†	133001.4	3.570	mg/L	0.0023	3.570	mg/L	0.0023	0.06%
Ba 455.403†	1080456.3	6.862	mg/L	0.1620	6.862	mg/L	0.1620	2.36%
Ba 233.527*†	941859.8	7.366	mg/L	0.1198	7.366	mg/L	0.1198	1.63%
QC value within limits for Ba 233.527* Recovery = 98.21%								
Ca 422.673†	141948.8	31.06	mg/L	0.605	31.06	mg/L	0.605	1.95%
Ca 317.933*†	53874.4	28.04	mg/L	0.261	28.04	mg/L	0.261	0.93%
QC value within limits for Ca 317.933* Recovery = 93.47%								
Fe 259.939†	2652.7	3.527	mg/L	0.0634	3.527	mg/L	0.0634	1.80%
Fe 273.955*†	80484.1	3.849	mg/L	0.0040	3.849	mg/L	0.0040	0.10%
QC value within limits for Fe 273.955* Recovery = 102.63%								
Fe 239.562†	733.9	3.658	mg/L	0.0659	3.658	mg/L	0.0659	1.80%
K 766.490*†	17977.6	26.93	mg/L	0.208	26.93	mg/L	0.208	0.77%
QC value within limits for K 766.490* Recovery = 99.75%								
Mg 279.077*†	68435.2	7.685	mg/L	0.0175	7.685	mg/L	0.0175	0.23%
QC value within limits for Mg 279.077* Recovery = 102.46%								
Mg 280.271†	95614.9	7.213	mg/L	0.0574	7.213	mg/L	0.0574	0.80%
Mn 257.610*†	449923.1	0.7335	mg/L	0.00053	0.7335	mg/L	0.00053	0.07%
QC value within limits for Mn 257.610* Recovery = 97.80%								
Mn 259.372†	365854.8	0.7586	mg/L	0.00003	0.7586	mg/L	0.00003	0.00%
Na 589.592*†	142913.8	36.00	mg/L	0.854	36.00	mg/L	0.854	2.37%
QC value within limits for Na 589.592* Recovery = 99.99%								
Na 330.237†	9465.3	31.79	mg/L	0.110	31.79	mg/L	0.110	0.35%
Si 288.158†	63397.5	6.445	mg/L	0.0021	6.445	mg/L	0.0021	0.03%
Si 251.611*†	204250.5	6.228	mg/L	0.0012	6.228	mg/L	0.0012	0.02%
QC value within limits for Si 251.611* Recovery = 103.80%								

All analyte(s) passed QC.

Work Order#: 08-12-0870

Client: WEISS Associates

EPA 6020

Calibration

SAMPLE INFORMATION

Sample ID: ICV

Sample Description: water

Autosampler Position: 6

Sample Date/Time: Thursday, December 11, 2008 17:34:34

Method File: C:\elandata\Method\cel\CEL_STD_T22_w.mth

Dataset File: C:\elandata\Dataset\Data\08121101\ICV.117

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass		Meas. Intens. Mean	Conc. Mean	Report Unit	Meas. Intens. RSD	Blank Intensity
Li	6	>	123360		ppb	1.6	134118
Be	9		45179	105.5307	ppb	1.4	20
B	11		63868	112.7935	ppb	1.9	722
B	10		13700	113.9163	ppb	5.1	167
Sc	45	>	1047724		ppb	1.2	1065491
Al	27		881184	105.3047	ppb	1.4	9871
Mg	24		590621	114.5735	ppb	1.8	2085
Ti	47		109255	96.5248	ppb	0.9	239
Ti	49		89026	96.4789	ppb	1.6	1804
V	51		1321483	106.9464	ppb	1.1	-12758
Cr	52		1177662	102.8927	ppb	0.8	20313
Mn	55		1782824	101.4785	ppb	1.2	1649
Fe	54		128194	109.8314	ppb	0.7	31487
Fe	57		45301	109.7118	ppb	1.4	7987
Co	59		1368152	103.3402	ppb	1.2	72
Ni	60		289930	101.7001	ppb	1.1	82
Cu	65		314142	106.3710	ppb	0.2	217
Ge	74	>	285113		mg/L	0.5	292130
As	75		217080	101.2379	ppb	0.7	-1083
As-1	75		214568	101.2138	ppb	0.7	6124
Se	78		64799	98.3455	ppb	1.3	7225
Se	82		24693	98.8148	ppb	1.1	18
Sr	88		2712184	97.5012	ppb	1.1	763
Zn	66		187238	101.8082	ppb	0.4	1228
Zn	68		139506	102.5621	ppb	0.3	1956
Y	89		1886273		ppb	0.2	1937110
Mo	95		399235	99.7203	ppb	1.2	92
In	115	>	1586966		ppb	1.1	1623300
Ag	107		505342	54.9606	ppb	1.9	178
Cd	111		250662	104.8070	ppb	1.1	1265
Cd	114		558473	105.5534	ppb	1.0	64
Sn	118		665262	99.6841	ppb	1.6	842
Sb	123		554558	93.4883	ppb	4.0	184
Ba	135		187635	96.7553	ppb	1.5	90
Tb	159		1630808	-7.2238	ppb	2.0	1650884
Tl	203		615257	90.4047	ppb	1.0	227
Pb	207		2276669	95.4921	ppb	1.7	344
Bi	209	>	1122578		ppb	1.8	1130866

QC Out Of Limits

Mass	Analyte	Out of Limits Message

SAMPLE INFORMATION

Sample ID: CCV

Sample Description:

Autosampler Position: 4

Sample Date/Time: Thursday, December 11, 2008 17:00:22

Method File: C:\elandata\Method\cel\CEL_STD_T22_w.mth

Dataset File: C:\elandata\Dataset\Data\08121101\CCV.109

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass		Meas. Intens. Mean	Conc. Mean	Report Unit	Meas. Intens. RSD	Blank Intensity
Li	6	⌈>	126016		ppb	1.0	134118
Be	9	|	45399	103.7843	ppb	2.0	20
B	11	|	150018	260.8380	ppb	1.5	722
B	10	⌊	32221	263.8131	ppb	1.9	167
Sc	45	⌈>	1099298		ppb	1.3	1065491
Al	27	|	905407	103.0936	ppb	1.4	9871
Mg	24	|	27684886	5136.1199	ppb	1.2	2085
Ti	47	|	119776	100.8655	ppb	0.9	239
Ti	49	|	96249	99.4717	ppb	1.3	1804
V	51	|	1392633	107.4027	ppb	1.3	-12758
Cr	52	|	1247329	103.8800	ppb	1.0	20313
Mn	55	|	1852510	100.4980	ppb	1.2	1649
Fe	54	|	4735773	5063.1455	ppb	1.5	31487
Fe	57	⌊	1900748	5284.6647	ppb	1.2	7987
Co	59	⌈	1380761	100.8512	ppb	0.7	72
Ni	60	|	297629	100.9619	ppb	0.2	82
Cu	65	|	308224	100.9204	ppb	0.9	217
Ge	74	|>	294837		mg/L	0.7	292130
As	75	|	219133	98.8367	ppb	0.7	-1083
As-1	75	|	216093	98.4964	ppb	0.3	6124
Se	78	|	67574	99.2731	ppb	0.9	7225
Se	82	|	25904	100.2398	ppb	2.5	18
Sr	88	|	2821347	98.0772	ppb	1.8	763
Zn	66	|	192198	101.0511	ppb	1.0	1228
Zn	68	|	141308	100.4287	ppb	1.2	1956
Y	89	⌊	1942195		ppb	0.9	1937110
Mo	95	⌈	414849	98.7418	ppb	0.5	92
In	115	|>	1665361		ppb	0.6	1623300
Ag	107	|	992939	102.9120	ppb	1.8	178
Cd	111	|	251401	100.1405	ppb	0.4	1265
Cd	114	|	567068	102.1299	ppb	0.8	64
Sn	118	|	706477	100.8748	ppb	1.9	842
Sb	123	|	626226	100.6123	ppb	1.5	184
Ba	135	⌊	201342	98.9373	ppb	1.6	90
Tb	159	⌈	1808712	137.6202	ppb	0.8	1650884
Tl	203	|	659147	95.7584	ppb	1.1	227
Pb	207	|	2355627	97.6752	ppb	2.7	344
Bi	209	⌊>	1135330		ppb	1.5	1130866

QC Out Of Limits

Mass	Analyte	Out of Limits Message

SAMPLE INFORMATION

Sample ID: CCV

Sample Description:

Autosampler Position: 4

Sample Date/Time: Thursday, December 11, 2008 17:50:43

Method File: C:\elandata\Method\cel\CEL_STD_T22_w.mth

Dataset File: C:\elandata\Dataset\Data\08121101\CCV.121

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass		Meas. Intens. Mean	Conc. Mean	Report Unit	Meas. Intens. RSD	Blank Intensity
Li	6	>	125738		ppb	1.8	134118
Be	9		45424	104.0915	ppb	0.7	20
B	11		154199	268.8002	ppb	0.9	722
B	10		33142	272.0629	ppb	2.1	167
Sc	45	>	1072215		ppb	1.1	1065491
Al	27		885731	103.4062	ppb	0.9	9871
Mg	24		27390925	5209.9072	ppb	1.2	2085
Ti	47		115837	100.0114	ppb	0.7	239
Ti	49		94336	99.9679	ppb	1.1	1804
V	51		1349543	106.7155	ppb	1.1	-12758
Cr	52		1212945	103.5638	ppb	0.6	20313
Mn	55		1814992	100.9511	ppb	1.0	1649
Fe	54		4643613	5090.1703	ppb	1.7	31487
Fe	57		1844840	5258.8432	ppb	0.8	7987
Co	59		1323354	100.9036	ppb	1.0	72
Ni	60		285833	101.2129	ppb	0.9	82
Cu	65		296916	101.4833	ppb	1.0	217
Ge	74	>	282446		mg/L	1.0	292130
As	75		210471	99.0933	ppb	1.0	-1083
As-1	75		207804	98.8832	ppb	1.0	6124
Se	78		65344	100.3171	ppb	1.5	7225
Se	82		24949	100.7830	ppb	1.6	18
Sr	88		2764425	100.3176	ppb	1.3	763
Zn	66		185188	101.6384	ppb	1.5	1228
Zn	68		136327	101.1537	ppb	0.7	1956
Y	89		1893005		ppb	1.3	1937110
Mo	95		399480	99.0043	ppb	1.7	92
In	115	>	1599474		ppb	1.6	1623300
Ag	107		961686	103.7868	ppb	1.2	178
Cd	111		244691	101.4939	ppb	1.1	1265
Cd	114		547026	102.5852	ppb	1.2	64
Sn	118		675942	100.4905	ppb	1.9	842
Sb	123		600143	100.3954	ppb	1.7	184
Ba	135		191990	98.2299	ppb	1.4	90
Tb	159		1738180	101.8967	ppb	1.6	1650884
Tl	203		658201	97.3592	ppb	2.1	227
Pb	207		2313722	97.6807	ppb	1.1	344
Bi	209	>	1115205		ppb	1.2	1130866

QC Out Of Limits

Mass	Analyte	Out of Limits Message

Work Order#: 08-12-0870

Client: WEISS Associates

EPA 8270C (M) Isotope Dilution

Calibration

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\081107\
Data File : 07NOV007.D
Acq On : 7 Nov 2008 2:05 pm
Operator :
Sample : ICV S101308G
ALS Vial : 8 Sample Multiplier: 1
InstName : GCMS AAA

Quant Time: Nov 07 17:57:53 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Fri Nov 07 17:56:50 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dioxane-d8	3.010	96	46060	40.00 mg/l	# 0.00
3) Naphthalene-d8	7.112	136	226354	40.00 mg/l	# 0.00
System Monitoring Compounds					
4) Nitrobenzene-d5	6.379	82	274608	79.29 mg/l	0.00
Target Compounds					Qvalue
2) 1,4-Dioxane	3.036	88	86006	73.61 mg/l #	71

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\MSDCHEM\1\DATA\081107\
Data File : 07NOV007.D
Acq On : 7 Nov 2008 2:05 pm
Operator :
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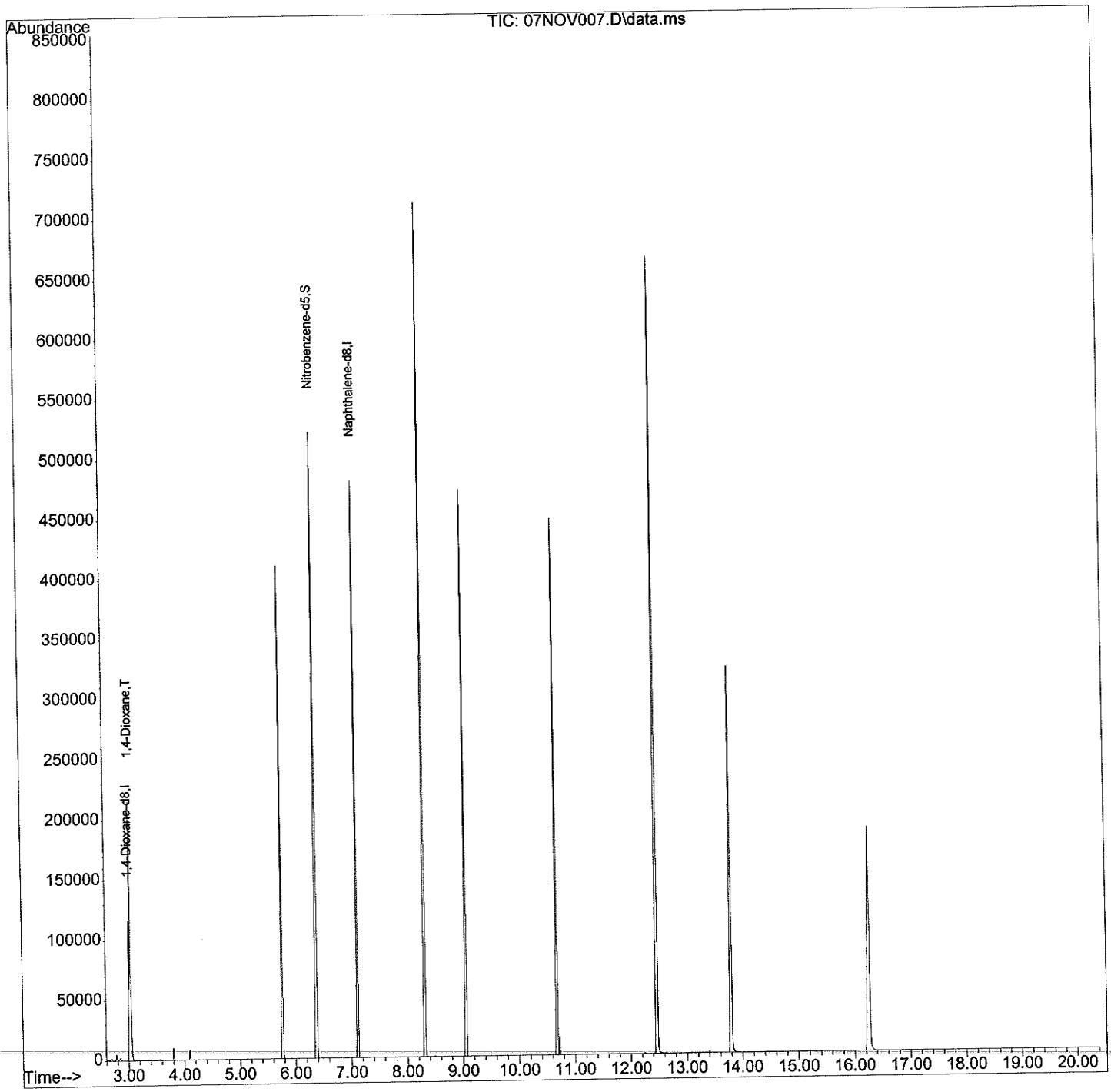
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Fri Nov 07 17:56:50 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M



Data Path : C:\MSDCHEM\1\DATA\081211\
Data File : 11DEC032.D
Acq On : 11 Dec 2008 9:35 pm
Operator :
Sample : DIOX-80 S101308D
ALS Vial : 2 Sample Multiplier: 1
InstName : GCMS AAA

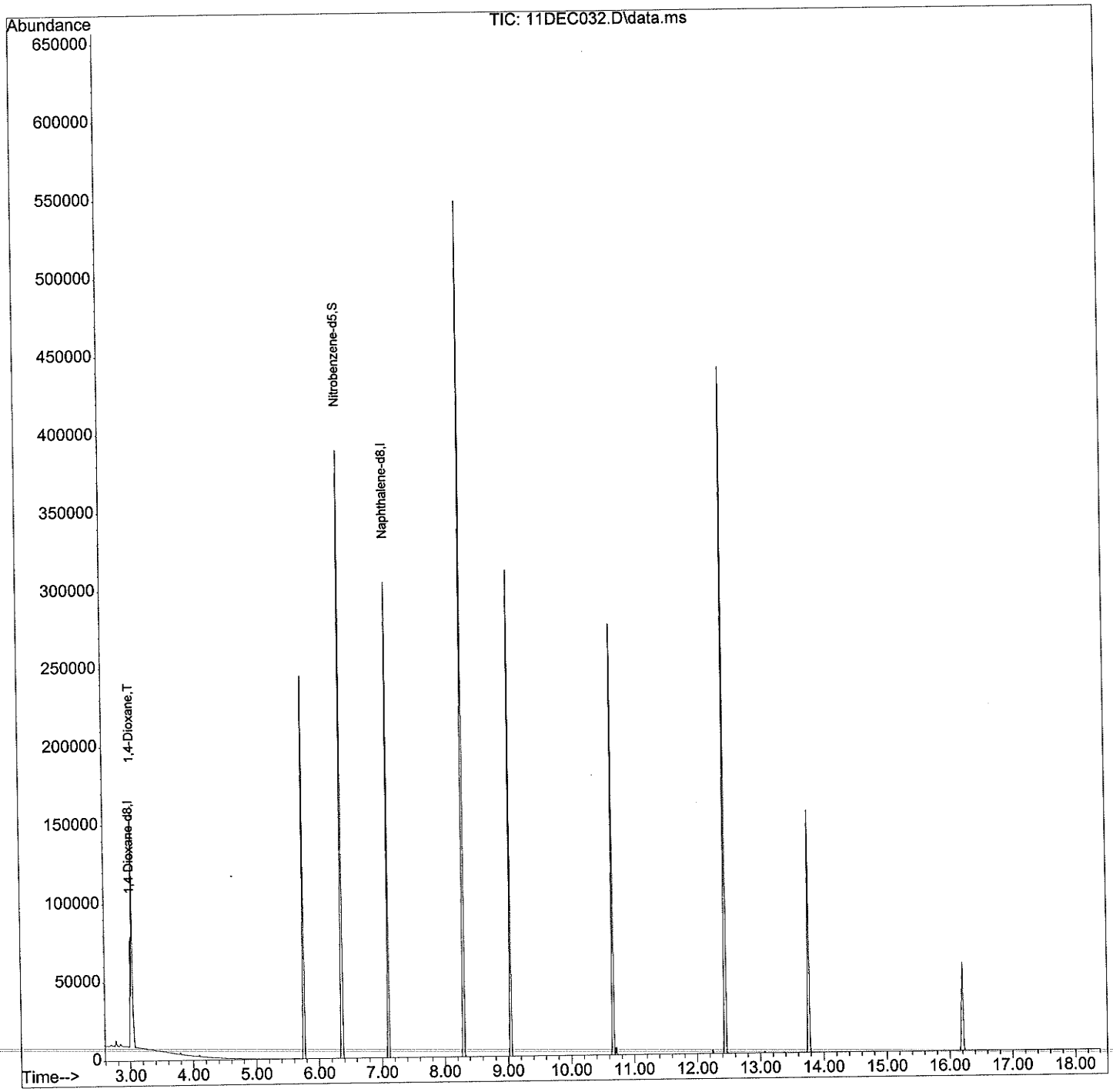
Quant Time: Dec 12 08:41:46 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Wed Nov 19 09:17:53 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dioxane-d8	3.004	96	24252	40.00 mg/l	# 0.00
3) Naphthalene-d8	7.101	136	124988	40.00 mg/l	# 0.00
System Monitoring Compounds					
4) Nitrobenzene-d5	6.368	82	157284	82.25 mg/l	0.00
Target Compounds					Qvalue
2) 1,4-Dioxane	3.031	88	50008	81.29 mg/l	# 45

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\MSDCHEM\1\DATA\081211\
Data File : 11DEC032.D
Acq On : 11 Dec 2008 9:35 pm
Operator :
Sample : DIOX-80 S101308D
ALS Vial : 2 Sample Multiplier: 1
InstName : GCMS AAA

Quant Time: Dec 12 08:41:46 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Wed Nov 19 09:17:53 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\081107\
Data File : 07NOV004.D
Acq On : 7 Nov 2008 12:46 pm
Operator :
Sample : DIOX 80PPM S101308D
ALS Vial : 4 Sample Multiplier: 1
InstName : GCMS AAA

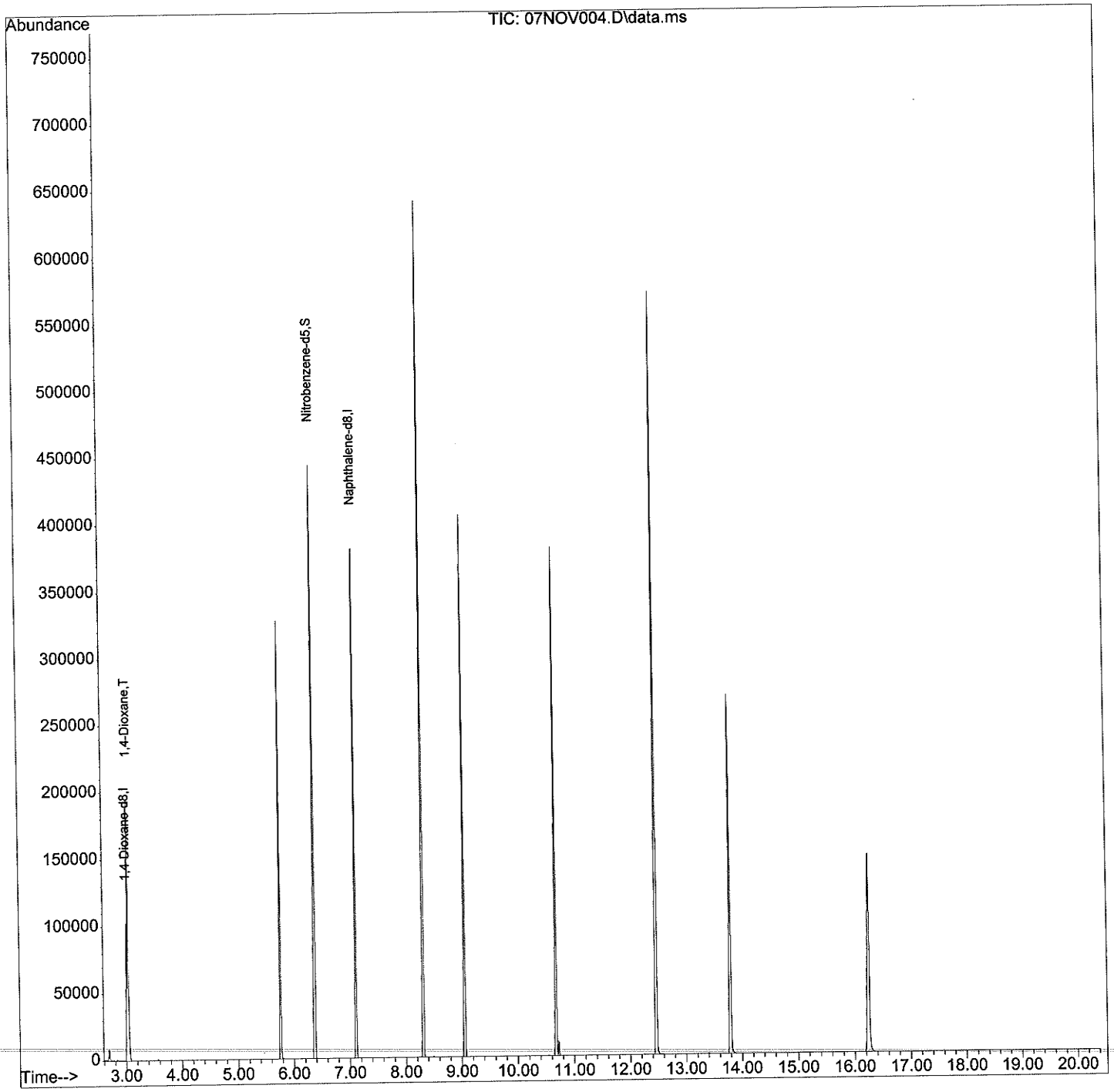
Quant Time: Nov 07 17:55:21 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Fri Nov 07 17:55:11 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dioxane-d8	3.009	96	39293	40.00 mg/l	# 0.00
3) Naphthalene-d8	7.112	136	178255	40.00 mg/l	# 0.00
System Monitoring Compounds					
4) Nitrobenzene-d5	6.374	82	215387	81.07 mg/l	0.00
Target Compounds					Qvalue
2) 1,4-Dioxane	3.036	88	76923	76.08 mg/l #	70

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\MSDCHEM\1\DATA\081107\
Data File : 07NOV004.D
Acq On : 7 Nov 2008 12:46 pm
Operator :
Sample : DIOX 80PPM S101308D
ALS Vial : 4 Sample Multiplier: 1
InstName : GCMS AAA

Quant Time: Nov 07 17:55:21 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Fri Nov 07 17:55:11 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M



Calscience Environmental Laboratories, Inc.

Supplemental Report 1

December 19, 2008

Additional requested analyses are reported as a stand-alone report.

Tim Utterback
Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Subject: **Calscience Work Order No.: 08-12-0870**
Client Reference: UC Davis / 388-1856-2-16

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 12/9/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Emma C. Dennison
for

Calscience Environmental
Laboratories, Inc.
Virendra Patel
Project Manager

Revised COC received on 12/10/08 at 11:03 - VP

Chain of Custody Record

0870

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AquaTerra Associates Incorporated, DBA

Calscience Environmental Lab
5063 Commercial Circle, Suite H
Concord, CA 94520
phone: (925) 689-9022

Project ID: 388-1856-2-16
Protocol No.: ROD

Client Contact	
Weiss Associates	
5801 Christie Avenue, Suite 600	
Emeryville, CA 94608	
(510) 450-6000	Phone
(510) 547-5043	FAX
Job Name:	UC Davis
Address:	One Shields Ave, Davis

Project Manager: Bob Devany
Tel: 510-450-6144

Analysis Turnaround Time
Calendar (C) or Work Days (W) --- 5W
TAT if different from Below _____
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sampled by: JMD / KHA
Date: 12/5/08
Lab Contact: ~~[illegible]~~
Carrier:
COC Number: UCD
Page 1 of 2
Job No.
SDG No.

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO3 (dissolved) (RSK-175)	Si (6010B)	Carbonate/Bicarbonate (SM2320B)	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
1	GWGW2372	12/5/08	1630		W	1																X		
2	GWGW2371	↓	1505		W	4	X	X	X	TRU													X	
3	GWGW2385	↓	1335		W	4	X	X	X	12/10/08													X	
	Field Filtered						X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: Level II Reporting with Initial Calibration Curves and Continuing Calibration **Note: Nitrate 48 hour hold time!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
JMD	Weiss	12/5/08 1845	Tom O'Malley	CEL	12/8/08 1251
Tom O'Malley TO GSO	CEL	12/8/08 1730			
GSO510872753	GSO	12/9/08 1030	Wchatu CEL	CEL	12/9/08 1030

Chain of Custody Record

0870

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AquaTierra Associates Incorporated, DBA

Calscience Environmental Lab
5063 Commercial Circle, Suite H
Concord, CA 94520
phone: (925) 689-9022

Project ID: 388-1856-2-16
Protocol No.: ROD

Client Contact		Project Manager: Bob Devany	Sampled by: JMD / KHA	Date: 12/5/08	COC Number: UCD
Weiss Associates		Tel: 510-450-6144	Lab Contact: ~~Michael Smith~~	Carrier:	Page 1 of 1
5801 Christie Avenue, Suite 600		Analysis Turnaround Time			
Emeryville, CA 94608		Calendar (C) or Work Days (W) --- 5W			
(510) 450-6000	Phone	TAT if different from Below _____			
(510) 547-5043	FAX	☐ 2 weeks			
		☐ 1 week			
Job Name: UC Davis		☐ 2 days			
Address: One Shields Ave, Davis		☐ 1 day			

Job No.

SDG No.

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	Carbonate/Bicarbonate (SM2320B)	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
1	GWGW2372	12/5/08	1630		W	1																X		
2	GWGW2371	↓	1505		W	4	X	X															X	
3	GWGW2385	↓	1335		W	4	X	X															X	
						Field Filtered	X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **Level II Reporting with Initial Calibration Curves and Continuing Calibration** **Note: Nitrate 48 hour hold time!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
JMD	Weiss	12/5/08 1845	Tom O'Malley	CEL	12/8/08 1251
Tom O'Malley TO GSO	CEL	12/8/08 1730			
GS0510872753	GSO	12/9/08 1030	Wbatu CEL	CEL	12/9/08 1030

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 0 8 - 1 2 - 0 8 7 0

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Weiss Asso.

DATE: 12 / 9 / 08

TEMPERATURE: (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 4.5 °C - 0.2 °C (CF) = 4.3 °C ☐ Blank ☑ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by:_____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only **Initial:** WB

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Initial:** WB

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** WSC

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	☑	☐	☐
COC document(s) received complete.....	☑	☐	☐
Sampler's name indicated on COC.....	☑	☐	☐
Sample container label(s) consistent with COC.....	☑	☐	☐
Sample container(s) intact and good condition.....	☑	☐	☐
Correct containers and volume for analyses requested.....	☑	☐	☐
Analyses received within holding time.....	☑	☐	☐
Proper preservation noted on sample label(s).....	☑	☐	☐
Volatile analysis container(s) free of headspace.....	☐	☐	☑
Tedlar bag(s) free of condensation.....	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☐VOAh ☐VOAna_2 ☑125AGB ☐125AGBh ☐125AGBpo_4 ☐1AGB ☑1AGBna_2 ☐1AGBs ☐500AGB ☐500AGBs ☐250CGB ☐250CGBs ☐1PB ☐500PB ☐500PBna ☐250PB ☑250PBn ☐125PB ☐125PBznna ☐100PBsterile ☐100PBna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® ☐_____

Checked/Labeled by: WSC

Container: C:Clear A:Amber P:Poly/Plastic G:Glass J:Jar B:Bottle

Reviewed by: YL

Preservative: h:HCL n:HNO_3 na_2:$Na_2S_2O_3$ na:NaOH po_4:H_3PO_4 s:H_2SO_4 znna:$ZnAc_2$+NaOH

Scanned by: WSC

Weck Laboratories, Inc.
Analytical Laboratory Services - Since 1964

Report Date: Tuesday, December 16, 2008
Received Date: Tuesday, December 9, 2008
Received Time: 3:00 pm

Turnaround Time: 7 days

Client: Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Phone: (714) 895-5494
FAX: (714) 894-7501

Attn: Virendra Patel

Project: 08-12-0870

P.O.#:

Certificate of Analysis

Work Order: 8120934-01 **Sample ID: GWGW2371** **Matrix: Water**

Sampled by: Client **Sampled: 12/05/08 15:05** **Sample Note:**

Analyte	Result	Qualifier	Units	Reporting Limit	Dil	Method	Prepared	Analyzed	Batch
Uranium, Total	**1.4**		ug/l	0.20	1	EPA 200.8	12/12/08	12/12/08 ppy	W8L0766

Work Order: 8120934-02 **Sample ID: GWGW2385** **Matrix: Water**

Sampled by: Client **Sampled: 12/05/08 13:35** **Sample Note:**

Analyte	Result	Qualifier	Units	Reporting Limit	Dil	Method	Prepared	Analyzed	Batch
Uranium, Total	**6.1**		ug/l	0.20	1	EPA 200.8	12/12/08	12/12/08 ppy	W8L0766

14859 East Clark Avenue, City of Industry, California 91745-1396 (626) 336-2139 FAX (626) 336-2634
www.wecklabs.com

Weck Laboratories, Inc.
Analytical Laboratory Services - Since 1964

Certificate of Analysis

Weck Laboratories, Inc

Metals by EPA 200 Series Methods - Quality Control

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Batch W8L0766 - EPA 200.8									
Blank (W8L0766-BLK1)					Prepared & Analyzed: 12/12/08				
Uranium, Total		ND		ug/l					
LCS (W8L0766-BS1)					Prepared & Analyzed: 12/12/08				
Uranium, Total		44.6		ug/l	50.0	89	85-115		
Calibration Check (W8L0766-CCV1)					Prepared & Analyzed: 12/12/08				
Uranium, Total		45.9		ug/l	50.0	92	90-110		
Calibration Check (W8L0766-CCV2)					Prepared & Analyzed: 12/12/08				
Uranium, Total		46.2		ug/l	50.0	92	90-110		
Calibration Check (W8L0766-CCV3)					Prepared & Analyzed: 12/12/08				
Uranium, Total		46.0		ug/l	50.0	92	90-110		
Matrix Spike (W8L0766-MS1)			Source: 8120549-05		Prepared & Analyzed: 12/12/08				
Uranium, Total	1.58	50.3		ug/l	50.0	97	70-130		
Matrix Spike (W8L0766-MS2)			Source: 8120934-02		Prepared & Analyzed: 12/12/08				
Uranium, Total	6.13	55.9		ug/l	50.0	99	70-130		
Matrix Spike Dup (W8L0766-MSD1)			Source: 8120549-05		Prepared & Analyzed: 12/12/08				
Uranium, Total	1.58	50.1		ug/l	50.0	97	70-130	0.3	30
Matrix Spike Dup (W8L0766-MSD2)			Source: 8120934-02		Prepared & Analyzed: 12/12/08				
Uranium, Total	6.13	55.4		ug/l	50.0	98	70-130	0.9	30

14859 East Clark Avenue, City of Industry, California 91745-1396 (626) 336-2139 FAX (626) 336-2634
www.wecklabs.com

Weck Laboratories, Inc.
Analytical Laboratory Services - Since 1964

Certificate of Analysis

Notes:
The Chain of Custody document is part of the analytical report.
Any remaining sample(s) for testing will be disposed of one month from the final report date unless other arrangements are made in advance.
All results are expressed on wet weight basis unless otherwise specified.
ND = NOT DETECTED at or above the Reporting Limit. If J-value reported, then NOT DETECTED at or above the Method Detection Limit (MDL).
Sub = Subcontracted analysis, original report enclosed.
Dil = Dilution Factor
MDL = Method Detection Limit
MDA = Minimum Detectable Activity

An Absence of Total Coliform meets the drinking water standards as established by the State of California Department of Health Services.
The Reporting Limit (RL) is referenced as laboratory's Practical Quantitation Limit (PQL).
For Potable water analysis, the Reporting Limit (RL) is referenced as Detection Limit for reporting purposes (DLRs) defined by EPA.

If sample collected by Weck Laboratories, sampled in accordance to lab SOP MIS002

Authorized Signature

Contact: Kim G Tu (Project Manager)

ELAP # 1132
LACSD # 10143
NELAC # 04229CA

The results in this report apply to the samples analyzed in accordance with the chain of custody document. Weck Laboratories certifies that the test results meet all requirements of NELAC unless noted in the Case Narrative. This analytical report must be reproduced in its entirety.

Flags for Data Qualifiers:

14859 East Clark Avenue, City of Industry, California 91745-1396 (626) 336-2139 FAX (626) 336-2634
www.wecklabs.com

Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

TO: WECK

CHAIN OF CUSTODY RECORD

DATE: 12/09/08
PAGE: 1 OF 1

8/20 93

LABORATORY CLIENT: Calscience Environmental Laboratories, Inc.
ADDRESS: 7440 Lincoln Way
CITY: Garden Grove, CA 92841-1427
TEL: (714) 895-5494
E-MAIL: vpatel@calscience.com

CLIENT PROJECT NAME / NUMBER: 08-12-0870
PROJECT CONTACT: Virendra Patel
SAMPLER(S): (PRINT)

P.O. NO.: 08-12-0870
QUOTE NO.:
LAB USE ONLY

TURNAROUND TIME
☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☐ 5 DAYS ☒ 7 Days

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___/___/___

SPECIAL INSTRUCTIONS
7 Days TAT a must. Please call if you will be delayed.

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	Matrix	#Cont	Uranium (EPA 200.8)	Units -- ug/L	ICV/CCV required with final report in PDF format	Standard Excel EDD	Field Filtered
	GWGW2371	12/05/08	1505	W	1	X	X	X	X	X
	GWGW2385	12/05/08	1335	W	1	X	X	X	X	X

Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
Alex Mugyom (CALSCIENCE)	12/9/08 @ 15:00	12/09/08	
Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:

2.9.C.

205602

Chain of Custody Record

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com) 510 450 6160
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-16
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
A geoTerra Associates Incorporated DBA

Client Contact		Project Manager: Bob Devany	Sampled by:	Date:	COC Number: UCD080827
Weiss Associates		Tel: 510-450-6144	Lab Contact:	Carrier:	1 of 1 COCs
5801 Christie Avenue, Suite 600		Analysis Turnaround Time			Job No. 388-1856-1-16
Emeryville, CA 94608		Calendar (C) or Work Days (W) --- 24 hrs			
(510) 450-6000	Phone	TAT if different from Below _____			SDG No.
(510) 547-5043	FAX	☐ 2 weeks			
		☐ 1 week			
Job Name: UC Davis		☐ 2 days			
Address: One Shields Ave, Davis		☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Hexavalent Chromium (Method 7199)	Sample Specific Notes:
GWGW2267						X	X	Note: 24 hrs hold time
GWGW2268						X	X	Note: 24 hrs hold time
GWGW2269						X	X	Note: 24 hrs hold time
-1 GWGW2270	08/27/08	1310		W	1	X	X	Note: 24 hrs hold time
-2 GWGW2271		1213		W	1	X	X	Note: 24 hrs hold time
-3 GWGW2272		1138		W	1	X	X	Note: 24 hrs hold time
-4 TBGW0508		0530		W	1	X	X	Note: 24 hrs hold time
							1	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **Note: Cr(VI) has a hold time of 24 hrs!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	WEAS	08/27/08 1315		CET	8/27/08 3:45pm
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

cold, intact

CURTIS & TOMPKINS, LTD. BERKELEY LOGIN CHANGE FORM

Reason for change: ____X___ Client Request By: Anja Verce
_____ Login Review _____Data Review

Date/Time: 8/27/2008 17:21 Initials: MRS
Client: **Weiss**

Current Lab ID	Client ID		Matrix	Add/Cancel	Analysis	Duedate
205602-001	GWGW2270		Filtrate	Change	CR IV to CR	9/4/2008
205602-002	GWGW2271		Filtrate	Change	CR IV to CR	9/4/2008
205602-003	GWGW2272		Filtrate	Change	CR IV to CR	9/4/2008

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 205602 Date Received 8/27/08 Number of coolers 1
Client WEISS Project UC Davis

Date Opened 8/27 By (print) K Wellbrock (sign) K Wellbrock
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc)? ..... YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? ..... YES NO (N/A)
3. Were custody papers dry and intact when received? ..... (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? ..... (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ..... (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) _____

☒ Samples Received on ice & cold without a temperature blank

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ..... YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? ..... (YES) NO
10. Are samples in the appropriate containers for indicated tests? ..... (YES) NO
11. Are sample labels present, in good condition and complete? ..... (YES) NO
12. Do the sample labels agree with custody papers? ..... (YES) NO
13. Was sufficient amount of sample sent for tests requested? ..... (YES) NO
14. Are the samples appropriately preserved? ..... (YES) NO N/A
15. Are bubbles > 6mm absent in VOA samples? ..... (YES) NO N/A
16. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

Sent 1 VOA for TBlank – Sample ID says hold – LOGGED IN ON HOLD per MRS

Curtis & Tompkins, Ltd.

Dissolved Chromium

Lab #:	205602	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Chromium	Sampled:	08/27/08
Units:	ug/L	Received:	08/27/08
Diln Fac:	1.000	Prepared:	08/28/08
Batch#:	141932	Analyzed:	08/28/08

Field ID	Type	Lab ID	Matrix	Result	RL
GWGW2270	SAMPLE	205602-001	Filtrate	33	5.0
GWGW2271	SAMPLE	205602-002	Filtrate	26	5.0
GWGW2272	SAMPLE	205602-003	Filtrate	31	5.0
	BLANK	QC457878	Water	ND	5.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Chromium

Lab #:	205602	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Chromium	Batch#:	141932
Field ID:	ZZZZZZZZZZ	Sampled:	08/27/08
MSS Lab ID:	205609-003	Received:	08/27/08
Matrix:	Water	Prepared:	08/28/08
Units:	ug/L	Analyzed:	08/28/08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC457879		200.0	194.7	97	80-120		
BSD	QC457880		200.0	200.6	100	80-120	3	20
MS	QC457881	24.64	200.0	218.0	97	78-120		
MSD	QC457882		200.0	224.0	100	78-120	3	20

RPD= Relative Percent Difference

205641

Chain of Custody Record

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com) 510 450 6160
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-16
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
A GeoTrack Associates Incorporation, DBA

Client Contact		Project Manager: Bob Devany	Sampled by:	Date: 08/28/08	COC Number: UCD080828
Weiss Associates		Tel: 510-450-6144	Lab Contact:	Carrier:	____ of ____ COCs
5801 Christie Avenue, Suite 600		Analysis Turnaround Time			Job No.
Emeryville, CA 94608		Calendar (C) or Work Days (W) --- 5W			
(510) 450-6000	Phone	TAT if different from Below _____			SDG No.
(510) 547-5043	FAX	☐ 2 weeks			
		☐ 1 week			
Job Name: UC Davis		☐ 2 days			
Address: One Shields Ave, Davis		☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Total Chromium (Method 6010B)	Sample Specific Notes:
1 GWGW2267	08/28/08	1135		W	1	X	X	
2 GWGW2268	↓	1164		↓	1	X	X	
3 GWGW2269	↓	1029		↓	1	X	X	
							4	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For _____ Months*

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	WEISS	08/28/08 1545	[signature]	CTT	8/28/08 1545
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

WET ICE

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 205641 Date Received 8/28/08 Number of coolers 1
Client Weiss Project UC Davis

Date Opened 8/28 By (print) K Wellbrock (sign) K Wellbrock
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc)? ..... YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? ..... YES NO (N/A)
3. Were custody papers dry and intact when received? ..... (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? ..... (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ..... (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) _____

☒ Samples Received on ice & cold without a temperature blank

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ..... YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? ..... (YES) NO
10. Are samples in the appropriate containers for indicated tests? ..... (YES) NO
11. Are sample labels present, in good condition and complete? ..... (YES) NO
12. Do the sample labels agree with custody papers? ..... (YES) NO
13. Was sufficient amount of sample sent for tests requested? ..... (YES) NO
14. Are the samples appropriately preserved? ..... (YES) NO N/A
15. Are bubbles > 6mm absent in VOA samples? ..... YES NO (N/A)
16. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

Curtis & Tompkins, Ltd.

Dissolved Chromium

Lab #:	205641	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Chromium	Sampled:	08/28/08
Units:	ug/L	Received:	08/28/08
Diln Fac:	1.000	Prepared:	08/29/08
Batch#:	141973	Analyzed:	08/29/08

Field ID	Type	Lab ID	Matrix	Result	RL
GWGW2267	SAMPLE	205641-001	Filtrate	57	5.0
GWGW2268	SAMPLE	205641-002	Filtrate	46	5.0
GWGW2269	SAMPLE	205641-003	Filtrate	47	5.0
	BLANK	QC458056	Water	ND	5.0

ND= Not Detected
RL= Reporting Limit

2.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Chromium

Lab #:	205641	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Chromium	Batch#:	141973
Field ID:	ZZZZZZZZZZ	Sampled:	08/28/08
MSS Lab ID:	205639-001	Received:	08/28/08
Matrix:	Water	Prepared:	08/29/08
Units:	ug/L	Analyzed:	08/29/08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC458057		200.0	200.7	100	80-120		
BSD	QC458058		200.0	203.3	102	80-120	1	20
MS	QC458059	<0.4838	200.0	197.9	99	78-120		
MSD	QC458060		200.0	205.6	103	78-120	4	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	TPIN 0361	Batch#:	142113
Lab ID:	205664-001	Sampled:	08/29/08
Matrix:	Water	Received:	08/29/08
Units:	ug/L	Analyzed:	09/04/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	14	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	TPIN 0361	Batch#:	142113
Lab ID:	205664-001	Sampled:	08/29/08
Matrix:	Water	Received:	08/29/08
Units:	ug/L	Analyzed:	09/04/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-125
1,2-Dichloroethane-d4	101	80-137
Toluene-d8	107	80-120
Bromofluorobenzene	100	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	TPEF 0361	Batch#:	142113
Lab ID:	205664-002	Sampled:	08/29/08
Matrix:	Water	Received:	08/29/08
Units:	ug/L	Analyzed:	09/04/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	TPEF 0361	Batch#:	142113
Lab ID:	205664-002	Sampled:	08/29/08
Matrix:	Water	Received:	08/29/08
Units:	ug/L	Analyzed:	09/04/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	104	80-137
Toluene-d8	106	80-120
Bromofluorobenzene	92	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	142113
Units:	ug/L	Analyzed:	09/04/08
Diln Fac:	1.000		

Type: BS Lab ID: QC458642

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	26.64	107	73-133
Benzene	25.00	28.17	113	80-120
Trichloroethene	25.00	29.00	116	80-120
Toluene	25.00	27.36	109	80-120
Chlorobenzene	25.00	25.27	101	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	97	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	94	80-122

Type: BSD Lab ID: QC458643

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	24.79	99	73-133	7	20
Benzene	25.00	26.06	104	80-120	8	20
Trichloroethene	25.00	27.93	112	80-120	4	20
Toluene	25.00	26.35	105	80-120	4	20
Chlorobenzene	25.00	25.54	102	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	91	80-125
1,2-Dichloroethane-d4	97	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	95	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC458644	Batch#:	142113
Matrix:	Water	Analyzed:	09/04/08
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC458644	Batch#:	142113
Matrix:	Water	Analyzed:	09/04/08
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	88	80-125
1,2-Dichloroethane-d4	99	80-137
Toluene-d8	105	80-120
Bromofluorobenzene	95	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Metals Analytical Report

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 6020
Field ID:	TPEF 0361	Sampled:	08/29/08
Matrix:	Water	Received:	08/29/08
Units:	ug/L	Prepared:	09/03/08
Batch#:	142089		

Type:	SAMPLE	Diln Fac:	5.000
Lab ID:	205664-002	Analyzed:	09/10/08

Analyte	Result	RL
Calcium	45,000	50
Magnesium	76,000	50
Potassium	1,300	50
Sodium	40,000	60

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC458554	Analyzed:	09/09/08

Analyte	Result	RL
Calcium	ND	50
Magnesium	ND	50
Potassium	ND	50
Sodium	ND	50

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 6020
Matrix:	Water	Batch#:	142089
Units:	ug/L	Prepared:	09/03/08
Diln Fac:	1.000	Analyzed:	09/09/08

Type: BS Lab ID: QC458555

Analyte	Spiked	Result	%REC	Limits
Calcium	10,000	10,350	104	80-120
Magnesium	10,000	10,160	102	80-120
Potassium	10,000	10,260	103	80-120
Sodium	10,000	10,280	103	80-120

Type: BSD Lab ID: QC458556

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Calcium	10,000	10,320	103	80-120	0	20
Magnesium	10,000	10,100	101	80-120	1	20
Potassium	10,000	10,140	101	80-120	1	20
Sodium	10,000	10,380	104	80-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Batch#:	142089
MSS Lab ID:	205614-001	Sampled:	08/27/08
Matrix:	Water	Received:	08/28/08
Units:	ug/L	Prepared:	09/03/08
Diln Fac:	5.000		

Type: MS Analyzed: 09/09/08
Lab ID: QC458557

Analyte	MSS Result	Spiked	Result	%REC	Limits
Calcium	172,500	10,000	181,100 >LR	87 NM	64-132
Magnesium	52,850	10,000	61,200	84 NM	67-125
Potassium	3,156	10,000	12,500	93	74-122
Sodium	90,550	10,000	99,350	88 NM	65-128

Type: MSD Analyzed: 09/10/08
Lab ID: QC458558

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Calcium	10,000	189,300 >LR	169 NM	64-132	NC	28
Magnesium	10,000	64,700	119 NM	67-125	6	20
Potassium	10,000	12,740	96	74-122	2	20
Sodium	10,000	104,300 >LR	137 NM	65-128	NC	20

NC= Not Calculated
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Diln Fac:	25.00
Type:	Serial Dilution	Batch#:	142089
MSS Lab ID:	205532-001	Sampled:	08/22/08
Lab ID:	QC458559	Received:	08/22/08
Matrix:	Water	Analyzed:	09/10/08
Units:	ug/L		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim
Calcium	287.5	50.00	ND	250.0	NC	10
Magnesium	107.1	50.00	62.35 J	250.0	NC	10
Potassium	2,431	50.03	2,443	250.2	0	10
Sodium	1,084	60.33	658.8	301.6	39 *	10

*= Value outside of QC limits; see narrative
J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	205664	Project#:	STANDARD
Client:	Weiss Associates	Location:	UC Davis
Field ID:	TPEF 0361	Units:	ug/L
Lab ID:	205664-002	Sampled:	08/29/08
Matrix:	Water	Received:	08/29/08

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	1.0	5.000	142089	09/03/08	09/10/08	EPA 200.8	EPA 6020
Arsenic	2.2	1.0	5.000	142089	09/03/08	09/10/08	EPA 200.8	EPA 6020
Barium	180	1.0	5.000	142089	09/03/08	09/10/08	EPA 200.8	EPA 6020
Beryllium	ND	1.0	5.000	142089	09/03/08	09/10/08	EPA 200.8	EPA 6020
Cadmium	ND	1.0	5.000	142089	09/03/08	09/10/08	EPA 200.8	EPA 6020
Chromium	36	1.0	5.000	142089	09/03/08	09/10/08	EPA 200.8	EPA 6020
Cobalt	ND	1.0	5.000	142089	09/03/08	09/10/08	EPA 200.8	EPA 6020
Copper	3.6	1.0	5.000	142089	09/03/08	09/10/08	EPA 200.8	EPA 6020
Lead	ND	1.0	5.000	142089	09/03/08	09/10/08	EPA 200.8	EPA 6020
Mercury	ND	0.20	1.000	142161	09/05/08	09/05/08	METHOD	EPA 7470A
Molybdenum	1.2	1.0	5.000	142089	09/03/08	09/10/08	EPA 200.8	EPA 6020
Nickel	ND	1.0	5.000	142089	09/03/08	09/10/08	EPA 200.8	EPA 6020
Selenium	2.9	1.0	5.000	142089	09/03/08	09/10/08	EPA 200.8	EPA 6020
Silver	ND	1.0	5.000	142089	09/03/08	09/10/08	EPA 200.8	EPA 6020
Thallium	ND	1.0	5.000	142089	09/03/08	09/10/08	EPA 200.8	EPA 6020
Vanadium	9.8	1.0	5.000	142089	09/03/08	09/10/08	EPA 200.8	EPA 6020
Zinc	14	5.0	5.000	142089	09/03/08	09/10/08	EPA 200.8	EPA 6020

ND= Not Detected
RL= Reporting Limit

18.0

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC458554	Batch#:	142089
Matrix:	Water	Prepared:	09/03/08
Units:	ug/L		

Analyte	Result	RL	Analyzed
Antimony	ND	1.0	09/09/08
Arsenic	ND	1.0	09/09/08
Barium	ND	1.0	09/10/08
Beryllium	ND	1.0	09/09/08
Cadmium	ND	1.0	09/09/08
Chromium	ND	1.0	09/09/08
Cobalt	ND	1.0	09/09/08
Copper	ND	1.0	09/09/08
Lead	ND	1.0	09/09/08
Molybdenum	ND	1.0	09/09/08
Nickel	ND	1.0	09/09/08
Selenium	ND	1.0	09/09/08
Silver	ND	1.0	09/09/08
Thallium	ND	1.0	09/09/08
Vanadium	ND	1.0	09/09/08
Zinc	ND	5.0	09/09/08

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 6020
Matrix:	Water	Batch#:	142089
Units:	ug/L	Prepared:	09/03/08
Diln Fac:	1.000		

Type: BS Lab ID: QC458555

Analyte	Spiked	Result	%REC	Limits	Analyzed
Antimony	100.0	104.3	104	80-120	09/09/08
Arsenic	100.0	96.80	97	80-120	09/09/08
Barium	100.0	94.65	95	80-120	09/10/08
Beryllium	100.0	99.65	100	80-120	09/09/08
Cadmium	100.0	97.50	98	80-120	09/09/08
Chromium	100.0	102.7	103	80-120	09/09/08
Cobalt	100.0	102.8	103	80-120	09/09/08
Copper	100.0	99.44	99	80-120	09/09/08
Lead	100.0	101.5	102	80-120	09/09/08
Molybdenum	100.0	101.8	102	80-120	09/09/08
Nickel	100.0	102.2	102	80-120	09/09/08
Selenium	100.0	91.92	92	80-120	09/09/08
Silver	100.0	105.9	106	75-120	09/09/08
Thallium	50.00	51.07	102	80-120	09/09/08
Vanadium	100.0	102.6	103	80-120	09/09/08
Zinc	100.0	96.86	97	80-120	09/09/08

Type: BSD Lab ID: QC458556

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
Antimony	100.0	104.0	104	80-120	0	20	09/09/08
Arsenic	100.0	99.19	99	80-120	2	20	09/09/08
Barium	100.0	93.63	94	80-120	1	20	09/10/08
Beryllium	100.0	102.5	103	80-120	3	20	09/09/08
Cadmium	100.0	97.25	97	80-120	0	20	09/09/08
Chromium	100.0	103.3	103	80-120	1	20	09/09/08
Cobalt	100.0	103.6	104	80-120	1	20	09/09/08
Copper	100.0	99.93	100	80-120	0	20	09/09/08
Lead	100.0	101.2	101	80-120	0	20	09/09/08
Molybdenum	100.0	101.4	101	80-120	0	20	09/09/08
Nickel	100.0	103.2	103	80-120	1	20	09/09/08
Selenium	100.0	93.64	94	80-120	2	20	09/09/08
Silver	100.0	104.1	104	75-120	2	20	09/09/08
Thallium	50.00	50.01	100	80-120	2	20	09/09/08
Vanadium	100.0	103.3	103	80-120	1	20	09/09/08
Zinc	100.0	101.0	101	80-120	4	20	09/09/08

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Batch#:	142089
MSS Lab ID:	205614-001	Sampled:	08/27/08
Matrix:	Water	Received:	08/28/08
Units:	ug/L	Prepared:	09/03/08
Diln Fac:	5.000		

Type: MS Lab ID: QC458557

Analyte	MSS Result	Spiked	Result	%REC	Limits	Analyzed
Antimony	0.4510	100.0	87.10	87	73-120	09/09/08
Arsenic	49.64	100.0	141.4	92	79-120	09/09/08
Barium	478.1	100.0	563.0	85 NM	71-123	09/10/08
Beryllium	0.2450	100.0	93.15	93	76-120	09/09/08
Cadmium	0.2190	100.0	91.25	91	77-120	09/09/08
Chromium	0.6365	100.0	94.05	93	74-120	09/09/08
Cobalt	3.762	100.0	96.10	92	75-120	09/09/08
Copper	2.517	100.0	89.55	87	66-126	09/09/08
Lead	0.3210	100.0	84.10	84	75-120	09/09/08
Molybdenum	0.4610	100.0	85.40	85	72-120	09/09/08
Nickel	1.580	100.0	93.75	92	69-125	09/09/08
Selenium	0.4250	100.0	90.30	90	72-127	09/09/08
Silver	0.1405	100.0	86.50	86	61-120	09/09/08
Thallium	0.2090	50.00	40.47	81	70-120	09/09/08
Vanadium	1.011	100.0	94.75	94	78-120	09/09/08
Zinc	8.910	100.0	94.90	86	61-131	09/09/08

Type: MSD Analyzed: 09/10/08
Lab ID: QC458558

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	100.0	89.75	89	73-120	3	20
Arsenic	100.0	145.7	96	79-120	3	20
Barium	100.0	589.5	111 NM	71-123	5	20
Beryllium	100.0	93.30	93	76-120	0	20
Cadmium	100.0	94.05	94	77-120	3	20
Chromium	100.0	96.70	96	74-120	3	20
Cobalt	100.0	98.05	94	75-120	2	20
Copper	100.0	91.80	89	66-126	2	29
Lead	100.0	85.80	85	75-120	2	20
Molybdenum	100.0	88.05	88	72-120	3	20
Nickel	100.0	95.50	94	69-125	2	20
Selenium	100.0	91.90	91	72-127	2	20
Silver	100.0	88.30	88	61-120	2	20
Thallium	50.00	41.19	82	70-120	2	20
Vanadium	100.0	97.55	97	78-120	3	20
Zinc	100.0	91.85	83	61-131	3	32

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Diln Fac:	25.00
Type:	Serial Dilution	Batch#:	142089
MSS Lab ID:	205532-001	Sampled:	08/22/08
Lab ID:	QC458559	Received:	08/22/08
Matrix:	Water	Analyzed:	09/10/08
Units:	ug/L		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim
Antimony	0.1885	1.000	ND	2.500	NC	10
Arsenic	0.3570	1.000	0.6025 J	2.500	NC	10
Barium	0.7425	1.000	1.010 J	2.500	NC	10
Beryllium	0.1275	1.000	ND	2.500	NC	10
Cadmium	0.1195	1.000	ND	2.500	NC	10
Chromium	0.1105	1.000	ND	2.500	NC	10
Cobalt	0.1550	1.000	ND	2.500	NC	10
Copper	393.8	1.000	369.5	2.704	6	10
Lead	0.09500	1.000	ND	2.500	NC	10
Molybdenum	ND	1.000	ND	2.634	NC	10
Nickel	ND	1.000	ND	2.500	NC	10
Selenium	0.08600	1.000	ND	2.500	NC	10
Silver	0.09700	1.000	ND	2.500	NC	10
Thallium	0.06500	1.000	ND	1.250	NC	10
Vanadium	0.4055	1.000	0.6350 J	2.500	NC	10
Zinc	2.851	5.000	ND	24.08	NC	10

J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

23.0

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	142161
Lab ID:	QC458861	Prepared:	09/05/08
Matrix:	Water	Analyzed:	09/05/08
Units:	ug/L		

Result	RL
ND	0.20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	142161
Matrix:	Water	Prepared:	09/05/08
Units:	ug/L	Analyzed:	09/05/08
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC458862	5.000	4.900	98	80-120		
BSD	QC458863	5.000	5.110	102	80-120	4	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	142161
MSS Lab ID:	205625-001	Sampled:	08/27/08
Lab ID:	QC458867	Received:	08/28/08
Matrix:	Water	Analyzed:	09/05/08

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	142161
Field ID:	ZZZZZZZZZZ	Sampled:	08/27/08
MSS Lab ID:	205625-001	Received:	08/28/08
Matrix:	Water	Prepared:	09/05/08
Units:	ug/L	Analyzed:	09/05/08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC458868	<0.04502	5.000	4.960	99	71-124		
MSD	QC458869		5.000	4.970	99	71-124	0	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Field ID:	TPEF 0361	Batch#:	141965
Matrix:	Water	Sampled:	08/29/08 09:55
Units:	mg/L	Received:	08/29/08

Type: SAMPLE Lab ID: 205664-002

Analyte	Result	RL	Diln Fac	Analyzed
Chloride	20	0.20	1.000	08/29/08 14:43
Nitrogen, Nitrate	10	0.25	5.000	08/29/08 15:00
Sulfate	48	0.50	1.000	08/29/08 14:43

Type: BLANK Diln Fac: 1.000
Lab ID: QC458014 Analyzed: 08/29/08 10:27

Analyte	Result	RL
Chloride	ND	0.20
Nitrogen, Nitrate	ND	0.05
Sulfate	ND	0.50

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Matrix:	Water	Diln Fac:	1.000
Units:	mg/L	Batch#:	141965

Type: BS Analyzed: 08/29/08 10:44
Lab ID: QC458015

Analyte	Spiked	Result	%REC	Limits
Chloride	4.000	4.017	100	80-120
Nitrogen, Nitrate	1.000	1.011	101	80-120
Sulfate	10.00	9.831	98	80-120

Type: BSD Analyzed: 08/29/08 11:02
Lab ID: QC458016

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Chloride	4.000	4.010	100	80-120	0	20
Nitrogen, Nitrate	1.000	0.9820	98	80-120	3	20
Sulfate	10.00	9.758	98	80-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Field ID:	ZZZZZZZZZZ	Diln Fac:	25.00
MSS Lab ID:	205662-002	Batch#:	141965
Matrix:	Water	Sampled:	08/28/08 09:24
Units:	mg/L	Received:	08/29/08

Type: MS Analyzed: 08/29/08 15:56
Lab ID: QC458017

Analyte	MSS Result	Spiked	Result	%REC	Limits
Chloride	167.4	50.00	216.3	98	80-120
Nitrogen, Nitrate	0.01601	12.50	12.61	101	80-120
Sulfate	60.12	125.0	183.9	99	80-120

Type: MSD Analyzed: 08/29/08 16:14
Lab ID: QC458018

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Chloride	50.00	216.3	98	80-120	0	20
Nitrogen, Nitrate	12.50	12.52	100	80-120	1	20
Sulfate	125.0	185.1	100	80-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM2320B
Field ID:	TPEF 0361	Sampled:	08/29/08
Matrix:	Water	Received:	08/29/08
Units:	mg/L	Analyzed:	09/04/08
Batch#:	142140		

Type: SAMPLE Diln Fac: 6.700
Lab ID: 205664-002

Analyte	Result	RL
Alkalinity, Bicarbonate	440	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	440	6.7

Type: BLANK Diln Fac: 1.000
Lab ID: QC458752

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	4.000
Lab ID:	QC458753	Batch#:	142140
Matrix:	Water	Analyzed:	09/04/08

Spiked	Result	%REC	Limits
200.0	190.4	95	90-110

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	4.000
Field ID:	ZZZZZZZZZZ	Batch#:	142140
MSS Lab ID:	205736-006	Sampled:	09/03/08
Matrix:	Water	Received:	09/03/08
Units:	mg/L	Analyzed:	09/04/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC458754	433.3	200.0	610.0	88	80-120		
MSD	QC458755		200.0	606.8	87	80-120	1	25

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM2540C
Analyte:	Total Dissolved Solids	Sampled:	08/29/08
Field ID:	TPEF 0361	Received:	08/29/08
Matrix:	Water	Prepared:	08/29/08
Units:	mg/L	Analyzed:	09/04/08
Batch#:	141983		

Type	Lab ID	Result	RL	Diln Fac
SAMPLE	205664-002	570	11	1.111
BLANK	QC458090	ND	10	1.000

ND= Not Detected
RL= Reporting Limit

5.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Dissolved Solids (TDS)

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM2540C
Analyte:	Total Dissolved Solids	Batch#:	141983
Field ID:	ZZZZZZZZZZ	Sampled:	08/26/08
MSS Lab ID:	205613-001	Received:	08/28/08
Matrix:	Water	Prepared:	08/29/08
Units:	mg/L	Analyzed:	09/04/08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim
BS	QC458091		104.0	92.00		88	73-120		
BSD	QC458092		104.0	94.00		90	73-120	2	22
SDUP	QC458093	104.0		90.00	10.00			14	20

RL= Reporting Limit
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Organic Carbon (TOC)

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Diln Fac:	1.000
Field ID:	TPIN 0361	Batch#:	142124
Matrix:	Water	Sampled:	08/29/08
Units:	mg/L	Received:	08/29/08

Type	Lab ID	Result	RL	Analyzed
SAMPLE	205664-001	0.95	0.50	09/05/08
BLANK	QC458685	ND	0.50	09/04/08

ND= Not Detected
RL= Reporting Limit

15.1

Curtis & Tompkins, Ltd.

Batch QC Report

Total Organic Carbon (TOC)

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Batch#:	142124
Field ID:	ZZZZZZZZZZ	Sampled:	08/21/08
MSS Lab ID:	205509-001	Received:	08/22/08
Matrix:	Water	Analyzed:	09/04/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
LCS	QC458686		10.00	10.05	101	90-110			1.000
MS	QC458687	3.573	10.00	13.33	98	62-124			2.000
MSD	QC458688		10.00	13.41	98	62-124	1	20	2.000

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	GWGW2278	Batch#:	142527
Lab ID:	205942-006	Sampled:	09/10/08
Matrix:	Water	Received:	09/11/08
Units:	ug/L	Analyzed:	09/16/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	3.1	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	GWGW2278	Batch#:	142527
Lab ID:	205942-006	Sampled:	09/10/08
Matrix:	Water	Received:	09/11/08
Units:	ug/L	Analyzed:	09/16/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-125
1,2-Dichloroethane-d4	110	80-137
Toluene-d8	93	80-120
Bromofluorobenzene	102	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	GWGW2284	Batch#:	142527
Lab ID:	205942-007	Sampled:	09/09/08
Matrix:	Water	Received:	09/11/08
Units:	ug/L	Analyzed:	09/16/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	18	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	GWGW2284	Batch#:	142527
Lab ID:	205942-007	Sampled:	09/09/08
Matrix:	Water	Received:	09/11/08
Units:	ug/L	Analyzed:	09/16/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	111	80-125
1,2-Dichloroethane-d4	113	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	101	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	TRIP BLANK	Batch#:	142527
Lab ID:	205942-008	Sampled:	09/09/08
Matrix:	Water	Received:	09/11/08
Units:	ug/L	Analyzed:	09/16/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	TRIP BLANK	Batch#:	142527
Lab ID:	205942-008	Sampled:	09/09/08
Matrix:	Water	Received:	09/11/08
Units:	ug/L	Analyzed:	09/16/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-125
1,2-Dichloroethane-d4	108	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	100	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC460388	Batch#:	142527
Matrix:	Water	Analyzed:	09/16/08
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	26.34	105	73-133
Benzene	25.00	23.58	94	80-120
Trichloroethene	25.00	22.46	90	80-120
Toluene	25.00	23.72	95	80-120
Chlorobenzene	25.00	22.52	90	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	108	80-125
1,2-Dichloroethane-d4	109	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	94	80-122

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC460389	Batch#:	142527
Matrix:	Water	Analyzed:	09/16/08
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC460389	Batch#:	142527
Matrix:	Water	Analyzed:	09/16/08
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	112	80-125
1,2-Dichloroethane-d4	110	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	101	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC460390	Batch#:	142527
Matrix:	Water	Analyzed:	09/16/08
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC460390	Batch#:	142527
Matrix:	Water	Analyzed:	09/16/08
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-125
1,2-Dichloroethane-d4	108	80-137
Toluene-d8	94	80-120
Bromofluorobenzene	103	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	142527
MSS Lab ID:	205929-001	Sampled:	09/10/08
Matrix:	Water	Received:	09/10/08
Units:	ug/L	Analyzed:	09/16/08
Diln Fac:	1.000		

Type: MS Lab ID: QC460391

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.1516	25.00	27.25	109	76-133
Benzene	<0.1000	25.00	24.82	99	80-121
Trichloroethene	<0.1320	25.00	24.19	97	74-129
Toluene	<0.1047	25.00	24.59	98	80-120
Chlorobenzene	<0.1000	25.00	24.15	97	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	108	80-125
1,2-Dichloroethane-d4	107	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	95	80-122

Type: MSD Lab ID: QC460392

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	26.85	107	76-133	1	20
Benzene	25.00	23.74	95	80-121	4	20
Trichloroethene	25.00	23.87	95	74-129	1	20
Toluene	25.00	24.95	100	80-120	1	20
Chlorobenzene	25.00	22.20	89	80-120	8	20

Surrogate	%REC	Limits
Dibromofluoromethane	108	80-125
1,2-Dichloroethane-d4	108	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	91	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8270C
Field ID:	GWGW2278	Batch#:	142510
Lab ID:	205942-006	Sampled:	09/10/08
Matrix:	Water	Received:	09/11/08
Units:	ug/L	Prepared:	09/15/08
Diln Fac:	1.000	Analyzed:	09/17/08

Analyte	Result	RL
N-Nitrosodimethylamine	ND	9.7
Phenol	ND	9.7
bis(2-Chloroethyl)ether	ND	9.7
2-Chlorophenol	ND	9.7
1,3-Dichlorobenzene	ND	9.7
1,4-Dichlorobenzene	ND	9.7
Benzyl alcohol	ND	9.7
1,2-Dichlorobenzene	ND	9.7
2-Methylphenol	ND	9.7
bis(2-Chloroisopropyl) ether	ND	9.7
4-Methylphenol	ND	9.7
N-Nitroso-di-n-propylamine	ND	9.7
Hexachloroethane	ND	9.7
Nitrobenzene	ND	9.7
Isophorone	ND	9.7
2-Nitrophenol	ND	19
2,4-Dimethylphenol	ND	9.7
Benzoic acid	ND	49
bis(2-Chloroethoxy)methane	ND	9.7
2,4-Dichlorophenol	ND	9.7
1,2,4-Trichlorobenzene	ND	9.7
Naphthalene	ND	9.7
4-Chloroaniline	ND	9.7
Hexachlorobutadiene	ND	9.7
4-Chloro-3-methylphenol	ND	9.7
2-Methylnaphthalene	ND	9.7
Hexachlorocyclopentadiene	ND	19
2,4,6-Trichlorophenol	ND	9.7
2,4,5-Trichlorophenol	ND	9.7
2-Chloronaphthalene	ND	9.7
2-Nitroaniline	ND	19
Dimethylphthalate	ND	9.7
Acenaphthylene	ND	9.7
2,6-Dinitrotoluene	ND	9.7
3-Nitroaniline	ND	19
Acenaphthene	ND	9.7
2,4-Dinitrophenol	ND	19
4-Nitrophenol	ND	19
Dibenzofuran	ND	9.7
2,4-Dinitrotoluene	ND	9.7
Diethylphthalate	ND	9.7
Fluorene	ND	9.7
4-Chlorophenyl-phenylether	ND	9.7
4-Nitroaniline	ND	19
4,6-Dinitro-2-methylphenol	ND	19
N-Nitrosodiphenylamine	ND	9.7
Azobenzene	ND	9.7
4-Bromophenyl-phenylether	ND	9.7
Hexachlorobenzene	ND	9.7
Pentachlorophenol	ND	19
Phenanthrene	ND	9.7
Anthracene	ND	9.7
Di-n-butylphthalate	ND	9.7
Fluoranthene	ND	9.7

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8270C
Field ID:	GWGW2278	Batch#:	142510
Lab ID:	205942-006	Sampled:	09/10/08
Matrix:	Water	Received:	09/11/08
Units:	ug/L	Prepared:	09/15/08
Diln Fac:	1.000	Analyzed:	09/17/08

Analyte	Result	RL
Pyrene	ND	9.7
Butylbenzylphthalate	ND	9.7
3,3'-Dichlorobenzidine	ND	19
Benzo(a)anthracene	ND	9.7
Chrysene	ND	9.7
bis(2-Ethylhexyl)phthalate	ND	9.7
Di-n-octylphthalate	ND	9.7
Benzo(b)fluoranthene	ND	9.7
Benzo(k)fluoranthene	ND	9.7
Benzo(a)pyrene	ND	9.7
Indeno(1,2,3-cd)pyrene	ND	9.7
Dibenz(a,h)anthracene	ND	9.7
Benzo(g,h,i)perylene	ND	9.7

Surrogate	%REC	Limits
2-Fluorophenol	75	40-120
Phenol-d5	82	43-120
2,4,6-Tribromophenol	86	40-122
Nitrobenzene-d5	81	56-120
2-Fluorobiphenyl	84	55-120
Terphenyl-d14	37	34-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC460334	Batch#:	142510
Matrix:	Water	Prepared:	09/15/08
Units:	ug/L	Analyzed:	09/17/08

Analyte	Result	RL
N-Nitrosodimethylamine	ND	10
Phenol	ND	10
bis(2-Chloroethyl)ether	ND	10
2-Chlorophenol	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
Benzyl alcohol	ND	10
1,2-Dichlorobenzene	ND	10
2-Methylphenol	ND	10
bis(2-Chloroisopropyl) ether	ND	10
4-Methylphenol	ND	10
N-Nitroso-di-n-propylamine	ND	10
Hexachloroethane	ND	10
Nitrobenzene	ND	10
Isophorone	ND	10
2-Nitrophenol	ND	20
2,4-Dimethylphenol	ND	10
Benzoic acid	ND	50
bis(2-Chloroethoxy)methane	ND	10
2,4-Dichlorophenol	ND	10
1,2,4-Trichlorobenzene	ND	10
Naphthalene	ND	10
4-Chloroaniline	ND	10
Hexachlorobutadiene	ND	10
4-Chloro-3-methylphenol	ND	10
2-Methylnaphthalene	ND	10
Hexachlorocyclopentadiene	ND	20
2,4,6-Trichlorophenol	ND	10
2,4,5-Trichlorophenol	ND	10
2-Chloronaphthalene	ND	10
2-Nitroaniline	ND	20
Dimethylphthalate	ND	10
Acenaphthylene	ND	10
2,6-Dinitrotoluene	ND	10
3-Nitroaniline	ND	20
Acenaphthene	ND	10
2,4-Dinitrophenol	ND	20
4-Nitrophenol	ND	20
Dibenzofuran	ND	10
2,4-Dinitrotoluene	ND	10
Diethylphthalate	ND	10
Fluorene	ND	10
4-Chlorophenyl-phenylether	ND	10
4-Nitroaniline	ND	20
4,6-Dinitro-2-methylphenol	ND	20
N-Nitrosodiphenylamine	ND	10
Azobenzene	ND	10
4-Bromophenyl-phenylether	ND	10
Hexachlorobenzene	ND	10
Pentachlorophenol	ND	20
Phenanthrene	ND	10
Anthracene	ND	10
Di-n-butylphthalate	ND	10
Fluoranthene	ND	10

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC460334	Batch#:	142510
Matrix:	Water	Prepared:	09/15/08
Units:	ug/L	Analyzed:	09/17/08

Analyte	Result	RL
Pyrene	ND	10
Butylbenzylphthalate	ND	10
3,3'-Dichlorobenzidine	ND	20
Benzo(a)anthracene	ND	10
Chrysene	ND	10
bis(2-Ethylhexyl)phthalate	ND	10
Di-n-octylphthalate	ND	10
Benzo(b)fluoranthene	ND	10
Benzo(k)fluoranthene	ND	10
Benzo(a)pyrene	ND	10
Indeno(1,2,3-cd)pyrene	ND	10
Dibenz(a,h)anthracene	ND	10
Benzo(g,h,i)perylene	ND	10

Surrogate	%REC	Limits
2-Fluorophenol	64	40-120
Phenol-d5	70	43-120
2,4,6-Tribromophenol	51	40-122
Nitrobenzene-d5	70	56-120
2-Fluorobiphenyl	76	55-120
Terphenyl-d14	69	34-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8270C
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC460335	Batch#:	142510
Matrix:	Water	Prepared:	09/15/08
Units:	ug/L	Analyzed:	09/16/08

Analyte	Spiked	Result	%REC	Limits
Phenol	80.00	71.82	90	45-120
2-Chlorophenol	80.00	72.99	91	52-120
1,4-Dichlorobenzene	80.00	70.57	88	47-120
N-Nitroso-di-n-propylamine	80.00	57.57	72	38-120
1,2,4-Trichlorobenzene	80.00	65.33	82	46-120
4-Chloro-3-methylphenol	80.00	70.09	88	55-120
Acenaphthene	30.00	26.15	87	54-120
4-Nitrophenol	80.00	64.18	80	46-120
2,4-Dinitrotoluene	80.00	78.66	98	56-120
Pentachlorophenol	80.00	57.99	72	50-121
Pyrene	30.00	28.26	94	54-120

Surrogate	%REC	Limits
2-Fluorophenol	85	40-120
Phenol-d5	91	43-120
2,4,6-Tribromophenol	104	40-122
Nitrobenzene-d5	86	56-120
2-Fluorobiphenyl	91	55-120
Terphenyl-d14	84	34-120

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8270C
Field ID:	ZZZZZZZZZZ	Batch#:	142510
MSS Lab ID:	205951-016	Sampled:	09/10/08
Matrix:	Water	Received:	09/11/08
Units:	ug/L	Prepared:	09/15/08
Diln Fac:	1.000	Analyzed:	09/17/08

Type: MS Lab ID: QC460336

Analyte	MSS Result	Spiked	Result	%REC	Limits
Phenol	<2.530	75.47	67.30	89	43-120
2-Chlorophenol	<1.642	75.47	68.78	91	48-120
1,4-Dichlorobenzene	<0.6584	75.47	62.89	83	48-120
N-Nitroso-di-n-propylamine	<1.591	75.47	54.78	73	42-120
1,2,4-Trichlorobenzene	<0.7071	75.47	61.90	82	47-120
4-Chloro-3-methylphenol	<2.488	75.47	68.49	91	51-120
Acenaphthene	<0.6245	28.30	25.19	89	49-120
4-Nitrophenol	<1.644	75.47	62.69	83	46-120
2,4-Dinitrotoluene	<0.5789	75.47	73.17	97	50-120
Pentachlorophenol	<3.838	75.47	63.66	84	48-127
Pyrene	<0.5894	28.30	28.06	99	50-120

Surrogate	%REC	Limits
2-Fluorophenol	85	40-120
Phenol-d5	90	43-120
2,4,6-Tribromophenol	107	40-122
Nitrobenzene-d5	88	56-120
2-Fluorobiphenyl	92	55-120
Terphenyl-d14	57	34-120

Type: MSD Lab ID: QC460337

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Phenol	75.47	70.69	94	43-120	5	20
2-Chlorophenol	75.47	71.07	94	48-120	3	20
1,4-Dichlorobenzene	75.47	66.19	88	48-120	5	20
N-Nitroso-di-n-propylamine	75.47	56.45	75	42-120	3	25
1,2,4-Trichlorobenzene	75.47	62.62	83	47-120	1	24
4-Chloro-3-methylphenol	75.47	71.21	94	51-120	4	20
Acenaphthene	28.30	25.73	91	49-120	2	21
4-Nitrophenol	75.47	69.78	92	46-120	11	25
2,4-Dinitrotoluene	75.47	75.59	100	50-120	3	22
Pentachlorophenol	75.47	65.56	87	48-127	3	24
Pyrene	28.30	29.00	102	50-120	3	22

Surrogate	%REC	Limits
2-Fluorophenol	90	40-120
Phenol-d5	94	43-120
2,4,6-Tribromophenol	111	40-122
Nitrobenzene-d5	91	56-120
2-Fluorobiphenyl	95	55-120
Terphenyl-d14	80	34-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8081A
Field ID:	GWGW2278	Batch#:	142441
Lab ID:	205942-006	Sampled:	09/10/08
Matrix:	Water	Received:	09/11/08
Units:	ug/L	Prepared:	09/12/08
Diln Fac:	1.000	Analyzed:	09/17/08

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND	0.09
Endrin aldehyde	ND	0.09
4,4'-DDT	ND	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	64	37-120
Decachlorobiphenyl	27 *	29-141

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC460056	Batch#:	142441
Matrix:	Water	Prepared:	09/12/08
Units:	ug/L	Analyzed:	09/16/08

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
Endrin aldehyde	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	87	37-120
Decachlorobiphenyl	76	29-141

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8081A
Matrix:	Water	Batch#:	142441
Units:	ug/L	Prepared:	09/12/08
Diln Fac:	1.000	Analyzed:	09/16/08

Type: BS Lab ID: QC460057

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	0.2000	0.1771	89	63-126
Heptachlor	0.2000	0.1887	94	48-127
Aldrin	0.2000	0.1556	78	45-127
Dieldrin	0.4000	0.3249	81	61-135
Endrin	0.4000	0.3367	84	56-142
4,4'-DDT	0.4000	0.3139	78	49-140

Surrogate	%REC	Limits
TCMX	86	37-120
Decachlorobiphenyl	86	29-141

Type: BSD Lab ID: QC460058

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.2000	0.1849	92	63-126	4	20
Heptachlor	0.2000	0.1936	97	48-127	3	30
Aldrin	0.2000	0.1606	80	45-127	3	28
Dieldrin	0.4000	0.3353	84	61-135	3	23
Endrin	0.4000	0.3193	80	56-142	5	31
4,4'-DDT	0.4000	0.2970	74	49-140	6	29

Surrogate	%REC	Limits
TCMX	92	37-120
Decachlorobiphenyl	82	29-141

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8082
Field ID:	GWGW2278	Sampled:	09/10/08
Matrix:	Water	Received:	09/11/08
Units:	ug/L	Prepared:	09/12/08
Diln Fac:	1.000	Analyzed:	09/16/08
Batch#:	142440		

Type: SAMPLE Cleanup Method: EPA 3665A
Lab ID: 205942-006

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	61	53-124
Decachlorobiphenyl	23	23-120

Type: BLANK Cleanup Method: EPA 3665A
Lab ID: QC460053

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	81	53-124
Decachlorobiphenyl	42	23-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8082
Matrix:	Water	Batch#:	142440
Units:	ug/L	Prepared:	09/12/08
Diln Fac:	1.000	Analyzed:	09/16/08

Type: BS Cleanup Method: EPA 3665A
Lab ID: QC460054

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	5.000	5.210	104	71-139
Aroclor-1260	5.000	4.713	94	75-141

Surrogate	%REC	Limits
TCMX	88	53-124
Decachlorobiphenyl	79	23-120

Type: BSD Cleanup Method: EPA 3665A
Lab ID: QC460055

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	5.000	4.780	96	71-139	9	24
Aroclor-1260	5.000	4.234	85	75-141	11	27

Surrogate	%REC	Limits
TCMX	76	53-124
Decachlorobiphenyl	84	23-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Chromium

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	STANDARD	Analysis:	EPA 6010B
Analyte:	Chromium	Batch#:	142547
Matrix:	Filtrate	Received:	09/11/08
Units:	ug/L	Prepared:	09/16/08
Diln Fac:	1.000	Analyzed:	09/16/08

Field ID	Type	Lab ID	Result	RL	Sampled
GWGW2273	SAMPLE	205942-001	60	5.0	09/03/08
GWGW2274	SAMPLE	205942-002	71	5.0	09/05/08
GWGW2275	SAMPLE	205942-003	38	5.0	09/05/08
GWGW2277	SAMPLE	205942-005	130	5.0	09/10/08
GWGW2278	SAMPLE	205942-006	6.0	5.0	09/10/08
	BLANK	QC460474	ND	5.0	

ND= Not Detected
RL= Reporting Limit

5.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Chromium

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	STANDARD	Analysis:	EPA 6010B
Analyte:	Chromium	Batch#:	142547
Field ID:	GWGW2273	Sampled:	09/03/08
MSS Lab ID:	205942-001	Received:	09/11/08
Matrix:	Filtrate	Prepared:	09/16/08
Units:	ug/L	Analyzed:	09/16/08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC460475		200.0	199.7	100	80-120		
BSD	QC460476		200.0	199.1	100	80-120	0	20
MS	QC460477	60.14	200.0	261.3	101	78-120		
MSD	QC460478		200.0	267.7	104	78-120	2	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Chromium

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	STANDARD	Analysis:	EPA 6010B
Analyte:	Chromium	Units:	ug/L
Field ID:	GWGW2273	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	142547
MSS Lab ID:	205942-001	Sampled:	09/03/08
Lab ID:	QC460514	Received:	09/11/08
Matrix:	Filtrate	Analyzed:	09/16/08

MSS Result	MSS RL	Result	RL	% Diff	Lim
60.14	5.000	55.47	25.00	8	10

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Chromium

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	STANDARD	Analysis:	EPA 6010B
Analyte:	Chromium	Units:	ug/L
Field ID:	GWGW2273	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	142547
MSS Lab ID:	205942-001	Sampled:	09/03/08
Lab ID:	QC460515	Received:	09/11/08
Matrix:	Filtrate	Analyzed:	09/16/08

MSS Result	Spiked	Result	%REC	Limits
60.14	200.0	251.3	96	75-125

Curtis & Tompkins, Ltd.

Dissolved Copper

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	STANDARD	Analysis:	EPA 6010B
Analyte:	Copper	Batch#:	142547
Matrix:	Filtrate	Received:	09/11/08
Units:	ug/L	Prepared:	09/16/08
Diln Fac:	1.000	Analyzed:	09/16/08

Field ID	Type	Lab ID	Result	RL	Sampled
GWGW2273	SAMPLE	205942-001	8.3	5.0	09/03/08
GWGW2274	SAMPLE	205942-002	ND	5.0	09/05/08
GWGW2275	SAMPLE	205942-003	5.2	5.0	09/05/08
GWGW2277	SAMPLE	205942-005	11	5.0	09/10/08
GWGW2278	SAMPLE	205942-006	5.5	5.0	09/10/08
	BLANK	QC460474	ND	5.0	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Copper

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	STANDARD	Analysis:	EPA 6010B
Analyte:	Copper	Batch#:	142547
Field ID:	GWGW2273	Sampled:	09/03/08
MSS Lab ID:	205942-001	Received:	09/11/08
Matrix:	Filtrate	Prepared:	09/16/08
Units:	ug/L	Analyzed:	09/16/08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC460475		250.0	240.5	96	80-120		
BSD	QC460476		250.0	239.6	96	80-120	0	20
MS	QC460477	8.325	250.0	258.8	100	75-120		
MSD	QC460478		250.0	266.7	103	75-120	3	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Copper

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	STANDARD	Analysis:	EPA 6010B
Analyte:	Copper	Units:	ug/L
Field ID:	GWGW2273	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	142547
MSS Lab ID:	205942-001	Sampled:	09/03/08
Lab ID:	QC460514	Received:	09/11/08
Matrix:	Filtrate	Analyzed:	09/16/08

MSS Result	MSS RL	Result	RL	% Diff	Lim
8.325	5.000	ND	25.00	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Copper

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	STANDARD	Analysis:	EPA 6010B
Analyte:	Copper	Units:	ug/L
Field ID:	GWGW2273	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	142547
MSS Lab ID:	205942-001	Sampled:	09/03/08
Lab ID:	QC460515	Received:	09/11/08
Matrix:	Filtrate	Analyzed:	09/16/08

MSS Result	Spiked	Result	%REC	Limits
8.325	250.0	246.6	95	75-125

Curtis & Tompkins, Ltd.

Dissolved Selenium

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	STANDARD	Analysis:	EPA 6010B
Analyte:	Selenium	Batch#:	142547
Matrix:	Filtrate	Received:	09/11/08
Units:	ug/L	Prepared:	09/16/08
Diln Fac:	1.000	Analyzed:	09/16/08

Field ID	Type	Lab ID	Result	RL	Sampled
GWGW2273	SAMPLE	205942-001	13	10	09/03/08
GWGW2274	SAMPLE	205942-002	15	10	09/05/08
GWGW2275	SAMPLE	205942-003	15	10	09/05/08
GWGW2277	SAMPLE	205942-005	13	10	09/10/08
GWGW2278	SAMPLE	205942-006	ND	10	09/10/08
	BLANK	QC460474	ND	10	

ND= Not Detected
RL= Reporting Limit

13.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Selenium

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	STANDARD	Analysis:	EPA 6010B
Analyte:	Selenium	Batch#:	142547
Field ID:	GWGW2273	Sampled:	09/03/08
MSS Lab ID:	205942-001	Received:	09/11/08
Matrix:	Filtrate	Prepared:	09/16/08
Units:	ug/L	Analyzed:	09/16/08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC460475		100.0	102.9	103	80-120		
BSD	QC460476		100.0	103.0	103	80-120	0	20
MS	QC460477	12.56	100.0	121.0	108	73-125		
MSD	QC460478		100.0	124.8	112	73-125	3	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Selenium

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	STANDARD	Analysis:	EPA 6010B
Analyte:	Selenium	Units:	ug/L
Field ID:	GWGW2273	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	142547
MSS Lab ID:	205942-001	Sampled:	09/03/08
Lab ID:	QC460514	Received:	09/11/08
Matrix:	Filtrate	Analyzed:	09/16/08

MSS Result	MSS RL	Result	RL	% Diff	Lim
12.56	10.00	12.57 J	36.95	NC	10

J= Estimated value
NC= Not Calculated
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Selenium

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	STANDARD	Analysis:	EPA 6010B
Analyte:	Selenium	Units:	ug/L
Field ID:	GWGW2273	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	142547
MSS Lab ID:	205942-001	Sampled:	09/03/08
Lab ID:	QC460515	Received:	09/11/08
Matrix:	Filtrate	Analyzed:	09/16/08

MSS Result	Spiked	Result	%REC	Limits
12.56	100.0	112.2	100	75-125

Curtis & Tompkins, Ltd.

Nitrate Nitrogen

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Diln Fac:	1.000
Field ID:	GWGW2278	Batch#:	142380
Matrix:	Water	Sampled:	09/10/08 15:00
Units:	mg/L	Received:	09/11/08

Type	Lab ID	Result	RL	Analyzed
SAMPLE	205942-006	1.3	0.05	09/11/08 12:40
BLANK	QC459812	ND	0.05	09/11/08 09:56

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Nitrate Nitrogen

Lab #:	205942	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Units:	mg/L
Field ID:	ZZZZZZZZZZ	Batch#:	142380
MSS Lab ID:	205959-010	Sampled:	09/11/08 11:40
Matrix:	Water	Received:	09/11/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
BS	QC459813		1.000	0.9856	99	80-120			1.000	09/11/08 15:54
BSD	QC459814		1.000	0.9702	97	80-120	2	20	1.000	09/11/08 16:11
MS	QC459836	1.522	5.000	6.335	96	80-120			10.00	09/11/08 21:12
MSD	QC459837		5.000	6.364	97	80-120	0	20	10.00	09/11/08 21:29

RPD= Relative Percent Difference

~~205~~ 206017

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-32
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
A geotechnical Associates Incorporated, DBA

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Client Contact	Project Manager: Bob Devany	Sampled by: RKD, KHA	Date: 9/12/08	COC Number: UCD
Weiss Associates	Tel: 510-450-6144	Lab Contact: WO/PO# 08-02	Carrier:	Page 1 of 1
5801 Christie Avenue, Suite 600	Analysis Turnaround Time			Job No. 388-1856-1-32
Emeryville, CA 94608	Calendar (C) or Work Days (W) --- 5W			
(510) 450-6000 Phone	TAT if different from Below _____			
(510) 547-5043 FAX	☐ 2 weeks			SDG No.
	☐ 1 week			
Job Name: UC Davis	☐ 2 days			
Address: One Shields Ave, Davis	☐ 1 day			

Normal TAT

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	VOCs (8260B)	Formaldehyde (8315)	Sample Specific Notes:
	~~GWGW2280~~				water				
	~~GWGW2281~~				water				
	~~GWGW2282~~				water				
1	GWGW2283	9/12/08	13:30	AQ	water	4	X	X	87-1 location
	~~GWGW2284~~				water				
	~~GWGW2285~~				water				
2	Trip Blank ~~EBGW0014~~				water				
	Temp Blank ~~EBGW0015~~				water				
	~~TBGW0510~~				water				
	Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____						2	1	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **Note: Formaldehyde has a hold time of 72 hrs (3 days).** **LEVEL IV REPORTING**

* PLEASE PDF COPY OF SIGNED COC *

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Robert H. [illegible]	Weiss Associates	9/12/08, 13:30	[illegible]	C&T	9/12/08 1400
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

* RECEIVED ON ICE

Micah Smith

From: "Anja Verce" <av@weiss.com>
To: "Micah Smith" <micah.smith@ctberk.com>; "Tim R. Utterback" <TRU@weiss.com>
Cc: "Jim Martin" <jam@weiss.com>; "Bob Devany" <ROD@weiss.com>
Sent: Wednesday, September 17, 2008 6:52 PM
Subject: Re: UC Davis - C&T Login Summary (206017)

Hi Micah,

yes, please analyze the trip blank. Please log this sample in as TBGW0510.

Thanks for checking,
Anja

>>> "Micah Smith" <micah.smith@ctberk.com> 9/17/2008 10:12 am >>>

Will the trip blank need to be analyzed? Thanks Micah
C&T Login Summary for 206017

Project:STANDARD
Site:UC Davis
Lab Login #:206017
Report Due:09/19/08
PO#:WO-08-02
C&T Proj Mgr:Micah Smith

Report To:Weiss Associates

5801 Christie Avenue

Suite 600

Emeryville, CA 94608

ATTN: Tim Utterback

(510) 450-6000

Bill To:Weiss Associates

5801 Christie Avenue

Suite 600

Emeryville, CA 94608

ATTN: Accounts Payable

(510) 450-6000

use Project ID as Project#

Client IDLab IDSampledReceivedMatrixAnalysesCOC #Comments
GWGW228300109/1209/12

UCD

Water8260

WaterFORMALDEHYDE
Subcontracted to North Coast Laboratories, Ltd..
TRIP BLANK00209/1209/12

UCD

WaterHOLD

Email compiled and sent 09/17/08 10:12 AM.

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 206017 Date Received 9-12-08 Number of coolers 1
Client Weiss Project UC Davis

Date Opened 9-12-08 By (print) E Nichols (sign) [signature]
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc)? ..... YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? ..... YES NO (N/A)
3. Were custody papers dry and intact when received? ..... (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? ..... (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ..... (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

   ☒ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels
7. Temperature documentation:

   Type of ice used: ☐ Wet ☒ Blue/Gel ☐ None Temp(°C) _____

   ☐ Samples Received on ice & cold without a temperature blank

   ☒ Samples received on ice directly from the field. Cooling process had begun
8. Were Method 5035 sampling containers present? ..... YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? ..... (YES) NO
10. Are samples in the appropriate containers for indicated tests? ..... (YES) NO
11. Are sample labels present, in good condition and complete? ..... YES (NO)*
12. Do the sample labels agree with custody papers? ..... (YES) NO
13. Was sufficient amount of sample sent for tests requested? ..... (YES) NO
14. Are the samples appropriately preserved? ..... (YES) NO N/A
15. Are bubbles > 6mm absent in VOA samples? ..... (YES) NO N/A
16. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

* 1 L amber arrived with no label. There is only one sample on COC so it will be logged in as "GWGW2283"

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206017	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	GWGW2283	Batch#:	142579
Lab ID:	206017-001	Sampled:	09/12/08
Matrix:	Water	Received:	09/12/08
Units:	ug/L	Analyzed:	09/17/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	22	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	5.1	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	40	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	8.0	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	2.9	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206017	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	GWGW2283	Batch#:	142579
Lab ID:	206017-001	Sampled:	09/12/08
Matrix:	Water	Received:	09/12/08
Units:	ug/L	Analyzed:	09/17/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	0.7	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-125
1,2-Dichloroethane-d4	114	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	101	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206017	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	TBGW0510	Batch#:	142639
Lab ID:	206017-002	Sampled:	09/12/08
Matrix:	Water	Received:	09/12/08
Units:	ug/L	Analyzed:	09/18/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206017	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	TBGW0510	Batch#:	142639
Lab ID:	206017-002	Sampled:	09/12/08
Matrix:	Water	Received:	09/12/08
Units:	ug/L	Analyzed:	09/18/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	108	80-125
1,2-Dichloroethane-d4	103	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	107	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206017	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	142579
Units:	ug/L	Analyzed:	09/17/08
Diln Fac:	1.000		

Type: BS Lab ID: QC460633

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	27.90	112	73-133
Benzene	25.00	24.69	99	80-120
Trichloroethene	25.00	24.49	98	80-120
Toluene	25.00	24.60	98	80-120
Chlorobenzene	25.00	24.10	96	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-125
1,2-Dichloroethane-d4	110	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	97	80-122

Type: BSD Lab ID: QC460634

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	26.14	105	73-133	7	20
Benzene	25.00	22.79	91	80-120	8	20
Trichloroethene	25.00	24.14	97	80-120	1	20
Toluene	25.00	24.54	98	80-120	0	20
Chlorobenzene	25.00	21.98	88	80-120	9	20

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-125
1,2-Dichloroethane-d4	106	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	100	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206017	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC460644	Batch#:	142579
Matrix:	Water	Analyzed:	09/17/08
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206017	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC460644	Batch#:	142579
Matrix:	Water	Analyzed:	09/17/08
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-125
1,2-Dichloroethane-d4	115	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	100	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206017	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC460861	Batch#:	142639
Matrix:	Water	Analyzed:	09/18/08
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206017	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC460861	Batch#:	142639
Matrix:	Water	Analyzed:	09/18/08
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-125
1,2-Dichloroethane-d4	103	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	106	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206017	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC460862	Batch#:	142639
Matrix:	Water	Analyzed:	09/18/08
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	22.28	111	73-133
Benzene	20.00	20.88	104	80-120
Trichloroethene	20.00	22.03	110	80-120
Toluene	20.00	21.60	108	80-120
Chlorobenzene	20.00	20.38	102	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-125
1,2-Dichloroethane-d4	98	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	97	80-122

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206017	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	142639
MSS Lab ID:	205959-010	Sampled:	09/11/08
Matrix:	Water	Received:	09/11/08
Units:	ug/L	Analyzed:	09/18/08
Diln Fac:	1,000		

Type: MS Lab ID: QC460999

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	476.4	25,000	28,680	113	76-133
Benzene	<100.0	25,000	26,610	106	80-121
Trichloroethene	77,060	25,000	105,600 >LR b	114	74-129
Toluene	<100.0	25,000	25,370	101	80-120
Chlorobenzene	<100.0	25,000	23,690	95	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	114	80-125
1,2-Dichloroethane-d4	113	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	100	80-122

Type: MSD Lab ID: QC461000

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25,000	29,120	115	76-133	2	20
Benzene	25,000	26,430	106	80-121	1	20
Trichloroethene	25,000	105,500 >LR b	114	74-129	NC	20
Toluene	25,000	25,510	102	80-120	1	20
Chlorobenzene	25,000	24,000	96	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	110	80-125
1,2-Dichloroethane-d4	106	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	98	80-122

b= See narrative
NC= Not Calculated
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Chain of Custody Record

206086

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-32
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
A Geotechnic Associates Incorporated, DBA

Client Contact		Project Manager: Bob Devany	Sampled by: R. Davis	Date: 9/16/08	COC Number: UCD20080916-1
Weiss Associates		Tel: 510-450-6144	Lab Contact: WO/PO# 08-02	Carrier: Courier	Page 1 of 3
5801 Christie Avenue, Suite 600		Analysis Turnaround Time			Job No. 388-1856-1-32
Emeryville, CA 94608		Calendar (C) or Work Days (W) --- 5W			SDG No.
(510) 450-6000	Phone	TAT if different from Below			
(510) 547-5043	FAX	☐ 2 weeks			
		☐ 1 week			
Job Name: UC Davis		☐ 2 days			
Address: One Shields Ave, Davis		☐ 1 day			

normal TAT

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered (for total Cr)	VOCs (8260B)	Total Cr (6010B)	Nitrate (300.0)	SVOCs (8270)		Cu, Se 6010B		Pesticides 8081	PCBs	Sample Specific Notes:
1	GWGW2286	9/15/08	12:15	bailed	water	8	X	X	X	X	X				X	X	borehole = WBH-4
2	~~TDGW0341~~ GWGW2291	9/15/08	08:30	bailed	water	1					X						borehole = ST-2
3	GWGW 2287	9/16/08	08:00	bailed	water	2	X				X		X				borehole = LF1-2
								2	1								

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **Note: Nitrate has a hold time of 48 hrs! LEVEL IV REPORTING**

W.O. 0805

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Robert H. [illegible]	Weiss Associates	9/16/08 1336	[illegible]	C&T	9/16/8 1336
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

206086

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-32
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
A geoTracker Associates Incorporated, DBA

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Client Contact	Project Manager: Bob Devany	Sampled by: R. Davis	Date: 9/16/08	COC Number: UCD20080916-1
Weiss Associates	Tel: 510-450-6144	Lab Contact: WO/PO# 08-03	Carrier: courier	Page 2 of 3
5801 Christie Avenue, Suite 600	Analysis Turnaround Time			Job No.
Emeryville, CA 94608	Calendar (C) or Work Days (W) --- 5W			
(510) 450-6000 Phone	TAT if different from Below _____			SDG No.
(510) 547-5043 FAX	☐ 2 weeks			
	☐ 1 week			
Job Name: UC Davis	☐ 2 days			
Address: One Shields Ave, Davis	☐ 1 day			

normal TAT

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cu, Se (6010/3050)	Cr (VI) 7199/3060.A	Cd, Ag (6010/3050)	Sb, Ba, Cd, Cu, Mn, Ag (6010/3050)	SVOCs (8270/3550)	~~Pesticides (8081/3550)~~	Sample Specific Notes:
4	SSLF1-2- 15.5'	9/15/08		acetate liner	soil		X						
5	SSLF1-2- 20'	↓		"	soil		X						
6	SSLF1-2- 27.5'			"	soil		X						
7	SSLF1-2- 37.5'	↓		"	soil		X						
8	SSWBH3 ~~SSLF2-1~~ - 7.5'	9/16/08		"	soil			X					
9	SSWBH3 ~~SSLF2-1~~ - 20'	↓		"	soil			X					
10	SSWBH3 ~~SSLF2-1~~ - 27.5'	↓		"	soil			X					
	~~Trip Blank~~ ~~SSLF2-1~~				soil								
	Temp Blank ~~SSLF3-2~~				soil								
							1	1	1	1	1	1	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For _____ Months*

Special Instructions/QC Requirements & Comments: **LEVEL IV REPORTING**

w.o. # 0805

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Weiss Associates	9/16/08 1336	[signature]	CTT	9/16/8 1336

206084

Chain of Custody Record

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-32
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
A geoTracker Associates Incorporated, DBA

Client Contact	Project Manager: Bob Devany	Sampled by: RMA	Date: 9/16/08	COC Number: UCD2108091160-1
Weiss Associates	Tel: 510-450-6144	Lab Contact:	Carrier:	3 of 3 COCs
5801 Christie Avenue, Suite 600	Analysis Turnaround Time			Job No.
Emeryville, CA 94608	Calendar (C) or Work Days (W) --- 5W			388-1856-1-32
(510) 450-6000 Phone	TAT if different from Below ~~NORMAL~~ TAT			SDG No.
(510) 547-5043 FAX	☐ 2 weeks			
	☐ 1 week			
Job Name: UC Davis	☐ 2 days			
Address: One Shields Ave, Davis	☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs 8260B	Formaldehyde 8315	Sample Specific Notes:
11	GWGW 2280	9/15/08	1515	W		4		X	X	LF2-1
12	GWGW 2281	9/15/08	1630	W		4		X	X	LF2-2
13	GWGW 2282	9/15/08	1430	W		3		X		LF2-3

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For _____ Months*

Special Instructions/QC Requirements & Comments:

WO #0805

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
RYAN ATKINSON	WEISS	9/16/08 1340	[signature]	C&T	9/16/8 1336
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 206086 Date Received 9/16/08 Number of coolers 1
Client Weiss Project UC Davis

Date Opened 9/16 By (print) K Wellbrock (sign) K Wellbrock
Date Logged in ✓ By (print) M. VILLANUEVA (sign)

1. Did cooler come with a shipping slip (airbill, etc)? ..... YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? ..... YES NO (N/A)
3. Were custody papers dry and intact when received? ..... (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? ..... (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ..... (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

   ☒ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels
7. Temperature documentation:

   Type of ice used: ☑ Wet ☒ Blue/Gel ☐ None Temp(°C) _____

   ☒ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ..... YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? ..... (YES) NO
10. Are samples in the appropriate containers for indicated tests? ..... (YES) NO
11. Are sample labels present, in good condition and complete? ..... (YES) NO
12. Do the sample labels agree with custody papers? ..... (YES) NO
13. Was sufficient amount of sample sent for tests requested? ..... (YES) NO
14. Are the samples appropriately preserved? ..... (YES) NO N/A
15. Are bubbles > 6mm absent in VOA samples? ..... (YES) NO N/A
16. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

COC indicated temp Ø in cooler, none seen

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2286	Batch#:	142679
Lab ID:	206086-001	Sampled:	09/15/08
Matrix:	Water	Received:	09/16/08
Units:	ug/L	Analyzed:	09/19/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2286	Batch#:	142679
Lab ID:	206086-001	Sampled:	09/15/08
Matrix:	Water	Received:	09/16/08
Units:	ug/L	Analyzed:	09/19/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-125
1,2-Dichloroethane-d4	104	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	93	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2280	Batch#:	142679
Lab ID:	206086-011	Sampled:	09/15/08
Matrix:	Water	Received:	09/16/08
Units:	ug/L	Analyzed:	09/19/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	0.7	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	7.4	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2280	Batch#:	142679
Lab ID:	206086-011	Sampled:	09/15/08
Matrix:	Water	Received:	09/16/08
Units:	ug/L	Analyzed:	09/19/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-125
1,2-Dichloroethane-d4	105	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	94	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2281	Batch#:	142679
Lab ID:	206086-012	Sampled:	09/15/08
Matrix:	Water	Received:	09/16/08
Units:	ug/L	Analyzed:	09/19/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2281	Batch#:	142679
Lab ID:	206086-012	Sampled:	09/15/08
Matrix:	Water	Received:	09/16/08
Units:	ug/L	Analyzed:	09/19/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-125
1,2-Dichloroethane-d4	101	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	91	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2282	Batch#:	142679
Lab ID:	206086-013	Sampled:	09/15/08
Matrix:	Water	Received:	09/16/08
Units:	ug/L	Analyzed:	09/19/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2282	Batch#:	142679
Lab ID:	206086-013	Sampled:	09/15/08
Matrix:	Water	Received:	09/16/08
Units:	ug/L	Analyzed:	09/19/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-125
1,2-Dichloroethane-d4	106	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	90	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	142679
Units:	ug/L	Analyzed:	09/19/08
Diln Fac:	1.000		

Type: BS Lab ID: QC461024

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	21.24	106	73-133
Benzene	20.00	20.08	100	80-120
Trichloroethene	20.00	22.11	111	80-120
Toluene	20.00	21.84	109	80-120
Chlorobenzene	20.00	19.98	100	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-125
1,2-Dichloroethane-d4	104	80-137
Toluene-d8	96	80-120
Bromofluorobenzene	91	80-122

Type: BSD Lab ID: QC461025

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	20.00	20.85	104	73-133	2	20
Benzene	20.00	20.20	101	80-120	1	20
Trichloroethene	20.00	21.27	106	80-120	4	20
Toluene	20.00	20.35	102	80-120	7	20
Chlorobenzene	20.00	21.10	105	80-120	5	20

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-125
1,2-Dichloroethane-d4	103	80-137
Toluene-d8	93	80-120
Bromofluorobenzene	88	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC461108	Batch#:	142679
Matrix:	Water	Analyzed:	09/19/08
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC461108	Batch#:	142679
Matrix:	Water	Analyzed:	09/19/08
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-125
1,2-Dichloroethane-d4	97	80-137
Toluene-d8	96	80-120
Bromofluorobenzene	94	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C
Field ID:	GWGW2286	Batch#:	142719
Lab ID:	206086-001	Sampled:	09/15/08
Matrix:	Water	Received:	09/16/08
Units:	ug/L	Prepared:	09/19/08
Diln Fac:	1.000	Analyzed:	09/22/08

Analyte	Result	RL
N-Nitrosodimethylamine	ND	9.4
Phenol	ND	9.4
bis(2-Chloroethyl)ether	ND	9.4
2-Chlorophenol	ND	9.4
1,3-Dichlorobenzene	ND	9.4
1,4-Dichlorobenzene	ND	9.4
Benzyl alcohol	ND	9.4
1,2-Dichlorobenzene	ND	9.4
2-Methylphenol	ND	9.4
bis(2-Chloroisopropyl) ether	ND	9.4
4-Methylphenol	ND	9.4
N-Nitroso-di-n-propylamine	ND	9.4
Hexachloroethane	ND	9.4
Nitrobenzene	ND	9.4
Isophorone	ND	9.4
2-Nitrophenol	ND	19
2,4-Dimethylphenol	ND	9.4
Benzoic acid	ND	47
bis(2-Chloroethoxy)methane	ND	9.4
2,4-Dichlorophenol	ND	9.4
1,2,4-Trichlorobenzene	ND	9.4
Naphthalene	ND	9.4
4-Chloroaniline	ND	9.4
Hexachlorobutadiene	ND	9.4
4-Chloro-3-methylphenol	ND	9.4
2-Methylnaphthalene	ND	9.4
Hexachlorocyclopentadiene	ND	19
2,4,6-Trichlorophenol	ND	9.4
2,4,5-Trichlorophenol	ND	9.4
2-Chloronaphthalene	ND	9.4
2-Nitroaniline	ND	19
Dimethylphthalate	ND	9.4
Acenaphthylene	ND	9.4
2,6-Dinitrotoluene	ND	9.4
3-Nitroaniline	ND	19
Acenaphthene	ND	9.4
2,4-Dinitrophenol	ND	19
4-Nitrophenol	ND	19
Dibenzofuran	ND	9.4
2,4-Dinitrotoluene	ND	9.4
Diethylphthalate	ND	9.4
Fluorene	ND	9.4
4-Chlorophenyl-phenylether	ND	9.4
4-Nitroaniline	ND	19
4,6-Dinitro-2-methylphenol	ND	19
N-Nitrosodiphenylamine	ND	9.4
Azobenzene	ND	9.4
4-Bromophenyl-phenylether	ND	9.4
Hexachlorobenzene	ND	9.4
Pentachlorophenol	ND	19
Phenanthrene	ND	9.4
Anthracene	ND	9.4
Di-n-butylphthalate	ND	9.4

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

33.0

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C
Field ID:	GWGW2286	Batch#:	142719
Lab ID:	206086-001	Sampled:	09/15/08
Matrix:	Water	Received:	09/16/08
Units:	ug/L	Prepared:	09/19/08
Diln Fac:	1.000	Analyzed:	09/22/08

Analyte	Result	RL
Fluoranthene	ND	9.4
Pyrene	ND	9.4
Butylbenzylphthalate	ND	9.4
3,3'-Dichlorobenzidine	ND	19
Benzo(a)anthracene	ND	9.4
Chrysene	ND	9.4
bis(2-Ethylhexyl)phthalate	ND	9.4
Di-n-octylphthalate	ND	9.4
Benzo(b)fluoranthene	ND	9.4
Benzo(k)fluoranthene	ND	9.4
Benzo(a)pyrene	ND	9.4
Indeno(1,2,3-cd)pyrene	ND	9.4
Dibenz(a,h)anthracene	ND	9.4
Benzo(g,h,i)perylene	ND	9.4

Surrogate	%REC	Limits
2-Fluorophenol	24 *	40-120
Phenol-d5	28 *	43-120
2,4,6-Tribromophenol	31 *	40-122
Nitrobenzene-d5	67	56-120
2-Fluorobiphenyl	70	55-120
Terphenyl-d14	29 *	34-120

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

33.0

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C
Field ID:	GWGW2291	Batch#:	142719
Lab ID:	206086-002	Sampled:	09/15/08
Matrix:	Water	Received:	09/16/08
Units:	ug/L	Prepared:	09/19/08
Diln Fac:	1.000	Analyzed:	09/22/08

Analyte	Result	RL
N-Nitrosodimethylamine	ND	9.4
Phenol	ND	9.4
bis(2-Chloroethyl)ether	ND	9.4
2-Chlorophenol	ND	9.4
1,3-Dichlorobenzene	ND	9.4
1,4-Dichlorobenzene	ND	9.4
Benzyl alcohol	ND	9.4
1,2-Dichlorobenzene	ND	9.4
2-Methylphenol	ND	9.4
bis(2-Chloroisopropyl) ether	ND	9.4
4-Methylphenol	ND	9.4
N-Nitroso-di-n-propylamine	ND	9.4
Hexachloroethane	ND	9.4
Nitrobenzene	ND	9.4
Isophorone	ND	9.4
2-Nitrophenol	ND	19
2,4-Dimethylphenol	ND	9.4
Benzoic acid	ND	47
bis(2-Chloroethoxy)methane	ND	9.4
2,4-Dichlorophenol	ND	9.4
1,2,4-Trichlorobenzene	ND	9.4
Naphthalene	ND	9.4
4-Chloroaniline	ND	9.4
Hexachlorobutadiene	ND	9.4
4-Chloro-3-methylphenol	ND	9.4
2-Methylnaphthalene	ND	9.4
Hexachlorocyclopentadiene	ND	19
2,4,6-Trichlorophenol	ND	9.4
2,4,5-Trichlorophenol	ND	9.4
2-Chloronaphthalene	ND	9.4
2-Nitroaniline	ND	19
Dimethylphthalate	ND	9.4
Acenaphthylene	ND	9.4
2,6-Dinitrotoluene	ND	9.4
3-Nitroaniline	ND	19
Acenaphthene	ND	9.4
2,4-Dinitrophenol	ND	19
4-Nitrophenol	ND	19
Dibenzofuran	ND	9.4
2,4-Dinitrotoluene	ND	9.4
Diethylphthalate	ND	9.4
Fluorene	ND	9.4
4-Chlorophenyl-phenylether	ND	9.4
4-Nitroaniline	ND	19
4,6-Dinitro-2-methylphenol	ND	19
N-Nitrosodiphenylamine	ND	9.4
Azobenzene	ND	9.4
4-Bromophenyl-phenylether	ND	9.4
Hexachlorobenzene	ND	9.4
Pentachlorophenol	ND	19
Phenanthrene	ND	9.4
Anthracene	ND	9.4
Di-n-butylphthalate	ND	9.4
Fluoranthene	ND	9.4

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C
Field ID:	GWGW2291	Batch#:	142719
Lab ID:	206086-002	Sampled:	09/15/08
Matrix:	Water	Received:	09/16/08
Units:	ug/L	Prepared:	09/19/08
Diln Fac:	1.000	Analyzed:	09/22/08

Analyte	Result	RL
Pyrene	ND	9.4
Butylbenzylphthalate	ND	9.4
3,3'-Dichlorobenzidine	ND	19
Benzo(a)anthracene	ND	9.4
Chrysene	ND	9.4
bis(2-Ethylhexyl)phthalate	ND	9.4
Di-n-octylphthalate	ND	9.4
Benzo(b)fluoranthene	ND	9.4
Benzo(k)fluoranthene	ND	9.4
Benzo(a)pyrene	ND	9.4
Indeno(1,2,3-cd)pyrene	ND	9.4
Dibenz(a,h)anthracene	ND	9.4
Benzo(g,h,i)perylene	ND	9.4

Surrogate	%REC	Limits
2-Fluorophenol	64	40-120
Phenol-d5	66	43-120
2,4,6-Tribromophenol	73	40-122
Nitrobenzene-d5	66	56-120
2-Fluorobiphenyl	70	55-120
Terphenyl-d14	46	34-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C
Field ID:	GWGW2287	Batch#:	142719
Lab ID:	206086-003	Sampled:	09/16/08
Matrix:	Water	Received:	09/16/08
Units:	ug/L	Prepared:	09/19/08
Diln Fac:	1.000	Analyzed:	09/22/08

Analyte	Result	RL
N-Nitrosodimethylamine	ND	9.6
Phenol	ND	9.6
bis(2-Chloroethyl)ether	ND	9.6
2-Chlorophenol	ND	9.6
1,3-Dichlorobenzene	ND	9.6
1,4-Dichlorobenzene	ND	9.6
Benzyl alcohol	ND	9.6
1,2-Dichlorobenzene	ND	9.6
2-Methylphenol	ND	9.6
bis(2-Chloroisopropyl) ether	ND	9.6
4-Methylphenol	ND	9.6
N-Nitroso-di-n-propylamine	ND	9.6
Hexachloroethane	ND	9.6
Nitrobenzene	ND	9.6
Isophorone	ND	9.6
2-Nitrophenol	ND	19
2,4-Dimethylphenol	ND	9.6
Benzoic acid	ND	48
bis(2-Chloroethoxy)methane	ND	9.6
2,4-Dichlorophenol	ND	9.6
1,2,4-Trichlorobenzene	ND	9.6
Naphthalene	ND	9.6
4-Chloroaniline	ND	9.6
Hexachlorobutadiene	ND	9.6
4-Chloro-3-methylphenol	ND	9.6
2-Methylnaphthalene	ND	9.6
Hexachlorocyclopentadiene	ND	19
2,4,6-Trichlorophenol	ND	9.6
2,4,5-Trichlorophenol	ND	9.6
2-Chloronaphthalene	ND	9.6
2-Nitroaniline	ND	19
Dimethylphthalate	ND	9.6
Acenaphthylene	ND	9.6
2,6-Dinitrotoluene	ND	9.6
3-Nitroaniline	ND	19
Acenaphthene	ND	9.6
2,4-Dinitrophenol	ND	19
4-Nitrophenol	ND	19
Dibenzofuran	ND	9.6
2,4-Dinitrotoluene	ND	9.6
Diethylphthalate	ND	9.6
Fluorene	ND	9.6
4-Chlorophenyl-phenylether	ND	9.6
4-Nitroaniline	ND	19
4,6-Dinitro-2-methylphenol	ND	19
N-Nitrosodiphenylamine	ND	9.6
Azobenzene	ND	9.6
4-Bromophenyl-phenylether	ND	9.6
Hexachlorobenzene	ND	9.6
Pentachlorophenol	ND	19
Phenanthrene	ND	9.6
Anthracene	ND	9.6
Di-n-butylphthalate	ND	9.6

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

35.0

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C
Field ID:	GWGW2287	Batch#:	142719
Lab ID:	206086-003	Sampled:	09/16/08
Matrix:	Water	Received:	09/16/08
Units:	ug/L	Prepared:	09/19/08
Diln Fac:	1.000	Analyzed:	09/22/08

Analyte	Result	RL
Fluoranthene	ND	9.6
Pyrene	ND	9.6
Butylbenzylphthalate	ND	9.6
3,3'-Dichlorobenzidine	ND	19
Benzo(a)anthracene	ND	9.6
Chrysene	ND	9.6
bis(2-Ethylhexyl)phthalate	ND	9.6
Di-n-octylphthalate	ND	9.6
Benzo(b)fluoranthene	ND	9.6
Benzo(k)fluoranthene	ND	9.6
Benzo(a)pyrene	ND	9.6
Indeno(1,2,3-cd)pyrene	ND	9.6
Dibenz(a,h)anthracene	ND	9.6
Benzo(g,h,i)perylene	ND	9.6

Surrogate	%REC	Limits
2-Fluorophenol	7 *	40-120
Phenol-d5	2 *	43-120
2,4,6-Tribromophenol	27 *	40-122
Nitrobenzene-d5	60	56-120
2-Fluorobiphenyl	63	55-120
Terphenyl-d14	9 *	34-120

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

35.0

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC461200	Batch#:	142719
Matrix:	Water	Prepared:	09/19/08
Units:	ug/L	Analyzed:	09/22/08

Analyte	Result	RL
N-Nitrosodimethylamine	ND	10
Phenol	ND	10
bis(2-Chloroethyl)ether	ND	10
2-Chlorophenol	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
Benzyl alcohol	ND	10
1,2-Dichlorobenzene	ND	10
2-Methylphenol	ND	10
bis(2-Chloroisopropyl) ether	ND	10
4-Methylphenol	ND	10
N-Nitroso-di-n-propylamine	ND	10
Hexachloroethane	ND	10
Nitrobenzene	ND	10
Isophorone	ND	10
2-Nitrophenol	ND	20
2,4-Dimethylphenol	ND	10
Benzoic acid	ND	50
bis(2-Chloroethoxy)methane	ND	10
2,4-Dichlorophenol	ND	10
1,2,4-Trichlorobenzene	ND	10
Naphthalene	ND	10
4-Chloroaniline	ND	10
Hexachlorobutadiene	ND	10
4-Chloro-3-methylphenol	ND	10
2-Methylnaphthalene	ND	10
Hexachlorocyclopentadiene	ND	20
2,4,6-Trichlorophenol	ND	10
2,4,5-Trichlorophenol	ND	10
2-Chloronaphthalene	ND	10
2-Nitroaniline	ND	20
Dimethylphthalate	ND	10
Acenaphthylene	ND	10
2,6-Dinitrotoluene	ND	10
3-Nitroaniline	ND	20
Acenaphthene	ND	10
2,4-Dinitrophenol	ND	20
4-Nitrophenol	ND	20
Dibenzofuran	ND	10
2,4-Dinitrotoluene	ND	10
Diethylphthalate	ND	10
Fluorene	ND	10
4-Chlorophenyl-phenylether	ND	10
4-Nitroaniline	ND	20
4,6-Dinitro-2-methylphenol	ND	20
N-Nitrosodiphenylamine	ND	10
Azobenzene	ND	10
4-Bromophenyl-phenylether	ND	10
Hexachlorobenzene	ND	10
Pentachlorophenol	ND	20
Phenanthrene	ND	10
Anthracene	ND	10
Di-n-butylphthalate	ND	10
Fluoranthene	ND	10

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC461200	Batch#:	142719
Matrix:	Water	Prepared:	09/19/08
Units:	ug/L	Analyzed:	09/22/08

Analyte	Result	RL
Pyrene	ND	10
Butylbenzylphthalate	ND	10
3,3'-Dichlorobenzidine	ND	20
Benzo(a)anthracene	ND	10
Chrysene	ND	10
bis(2-Ethylhexyl)phthalate	ND	10
Di-n-octylphthalate	ND	10
Benzo(b)fluoranthene	ND	10
Benzo(k)fluoranthene	ND	10
Benzo(a)pyrene	ND	10
Indeno(1,2,3-cd)pyrene	ND	10
Dibenz(a,h)anthracene	ND	10
Benzo(g,h,i)perylene	ND	10

Surrogate	%REC	Limits
2-Fluorophenol	58	40-120
Phenol-d5	66	43-120
2,4,6-Tribromophenol	51	40-122
Nitrobenzene-d5	67	56-120
2-Fluorobiphenyl	70	55-120
Terphenyl-d14	65	34-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C
Matrix:	Water	Batch#:	142719
Units:	ug/L	Prepared:	09/19/08
Diln Fac:	1.000	Analyzed:	09/22/08

Type: BS Lab ID: QC461201

Analyte	Spiked	Result	%REC	Limits
Phenol	80.00	56.80	71	45-120
2-Chlorophenol	80.00	59.47	74	52-120
1,4-Dichlorobenzene	80.00	50.38	63	47-120
N-Nitroso-di-n-propylamine	80.00	52.32	65	38-120
1,2,4-Trichlorobenzene	80.00	46.17	58	46-120
4-Chloro-3-methylphenol	80.00	59.46	74	55-120
Acenaphthene	30.00	23.03	77	54-120
4-Nitrophenol	80.00	57.75	72	46-120
2,4-Dinitrotoluene	80.00	71.78	90	56-120
Pentachlorophenol	80.00	45.01	56	50-121
Pyrene	30.00	25.69	86	54-120

Surrogate	%REC	Limits
2-Fluorophenol	60	40-120
Phenol-d5	70	43-120
2,4,6-Tribromophenol	88	40-122
Nitrobenzene-d5	70	56-120
2-Fluorobiphenyl	79	55-120
Terphenyl-d14	73	34-120

Type: BSD Lab ID: QC461202

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Phenol	80.00	56.43	71	45-120	1	24
2-Chlorophenol	80.00	58.80	73	52-120	1	23
1,4-Dichlorobenzene	80.00	51.09	64	47-120	1	29
N-Nitroso-di-n-propylamine	80.00	52.54	66	38-120	0	25
1,2,4-Trichlorobenzene	80.00	46.66	58	46-120	1	28
4-Chloro-3-methylphenol	80.00	59.30	74	55-120	0	20
Acenaphthene	30.00	22.88	76	54-120	1	20
4-Nitrophenol	80.00	57.65	72	46-120	0	23
2,4-Dinitrotoluene	80.00	71.71	90	56-120	0	20
Pentachlorophenol	80.00	47.65	60	50-121	6	23
Pyrene	30.00	26.25	87	54-120	2	22

Surrogate	%REC	Limits
2-Fluorophenol	63	40-120
Phenol-d5	70	43-120
2,4,6-Tribromophenol	89	40-122
Nitrobenzene-d5	70	56-120
2-Fluorobiphenyl	78	55-120
Terphenyl-d14	75	34-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8081A
Field ID:	GWGW2286	Batch#:	142625
Lab ID:	206086-001	Sampled:	09/15/08
Matrix:	Water	Received:	09/16/08
Units:	ug/L	Prepared:	09/17/08
Diln Fac:	1.000	Analyzed:	09/19/08

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND	0.09
Endrin aldehyde	ND	0.09
4,4'-DDT	ND	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	76	37-120
Decachlorobiphenyl	94	29-141

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC460812	Batch#:	142625
Matrix:	Water	Prepared:	09/17/08
Units:	ug/L	Analyzed:	09/18/08

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
Endrin aldehyde	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	87	37-120
Decachlorobiphenyl	88	29-141

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8081A
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC460813	Batch#:	142625
Matrix:	Water	Prepared:	09/17/08
Units:	ug/L	Analyzed:	09/18/08

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	0.2000	0.1747	87	63-126
Heptachlor	0.2000	0.2191 #	110	48-127
Aldrin	0.2000	0.1496	75	45-127
Dieldrin	0.4000	0.3383	85	61-135
Endrin	0.4000	0.3305	83	56-142
4,4'-DDT	0.4000	0.4378 #	109	49-140

Surrogate	%REC	Limits
TCMX	88	37-120
Decachlorobiphenyl	83	29-141

#= CCV drift outside limits; average CCV drift within limits per method requirements

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8081A
Field ID:	ZZZZZZZZZZ	Batch#:	142625
MSS Lab ID:	206004-002	Sampled:	09/11/08
Matrix:	Water	Received:	09/12/08
Units:	ug/L	Prepared:	09/17/08
Diln Fac:	1.000	Analyzed:	09/20/08

Type: MS Lab ID: QC460814

Analyte	MSS Result	Spiked	Result	%REC	Limits
gamma-BHC	<0.005824	0.1923	0.1880	98	59-137
Heptachlor	<0.006638	0.1923	0.1834	95	61-123
Aldrin	<0.005255	0.1923	0.1815	94	46-122
Dieldrin	<0.01667	0.3846	0.3692	96	66-122
Endrin	<0.02087	0.3846	0.3703	96	65-142
4,4'-DDT	<0.01889	0.3846	0.3226	84	57-134

Surrogate	%REC	Limits
TCMX	89	37-120
Decachlorobiphenyl	104	29-141

Type: MSD Lab ID: QC460815

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.2000	0.2135	107	59-137	9	30
Heptachlor	0.2000	0.2193	110	61-123	14	40
Aldrin	0.2000	0.2173	109	46-122	14	38
Dieldrin	0.4000	0.4813	120	66-122	22	33
Endrin	0.4000	0.5068	127	65-142	27	41
4,4'-DDT	0.4000	0.3392	85	57-134	1	39

Surrogate	%REC	Limits
TCMX	92	37-120
Decachlorobiphenyl	101	29-141

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8082
Field ID:	GWGW2286	Batch#:	142626
Matrix:	Water	Sampled:	09/15/08
Units:	ug/L	Received:	09/16/08
Diln Fac:	1.000	Prepared:	09/17/08

Type:	SAMPLE	Analyzed:	09/19/08
Lab ID:	206086-001	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	76	53-124
Decachlorobiphenyl	93	23-120

Type:	BLANK	Analyzed:	09/18/08
Lab ID:	QC460816	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	73	53-124
Decachlorobiphenyl	67	23-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8082
Matrix:	Water	Batch#:	142626
Units:	ug/L	Prepared:	09/17/08
Diln Fac:	1.000	Analyzed:	09/18/08

Type: BS Cleanup Method: EPA 3665A
Lab ID: QC460817

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	5.000	5.415	108	71-139
Aroclor-1260	5.000	5.408	108	75-141

Surrogate	%REC	Limits
TCMX	77	53-124
Decachlorobiphenyl	88	23-120

Type: BSD Cleanup Method: EPA 3665A
Lab ID: QC460818

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	5.000	4.469	89	71-139	19	24
Aroclor-1260	5.000	4.550	91	75-141	17	27

Surrogate	%REC	Limits
TCMX	69	53-124
Decachlorobiphenyl	79	23-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Copper

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3050B
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Copper	Batch#:	142574
Matrix:	Soil	Sampled:	09/15/08
Units:	mg/Kg	Received:	09/16/08
Basis:	as received	Prepared:	09/16/08
Diln Fac:	1.000	Analyzed:	09/17/08

Field ID	Type	Lab ID	Result	RL
SSLF1-2-15.5'	SAMPLE	206086-004	31	0.25
SSLF1-2-20'	SAMPLE	206086-005	27	0.25
SSLF1-2-27.5'	SAMPLE	206086-006	35	0.25
SSLF1-2-37.5'	SAMPLE	206086-007	32	0.25
	BLANK	QC460613	ND	0.25

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Copper

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3050B
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Copper	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	142574
MSS Lab ID:	205972-001	Sampled:	09/10/08
Matrix:	Soil	Received:	09/10/08
Units:	mg/Kg	Prepared:	09/16/08
Basis:	as received	Analyzed:	09/17/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC460614		12.50	11.94	95	80-120		
BSD	QC460615		12.50	11.81	94	80-120	1	20
MS	QC460616	801.3	12.14	994.5 >LR	1591 NM	39-151		
MSD	QC460617		11.57	958.9 >LR	1361 NM	39-151	NC	27

NC= Not Calculated
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Copper

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3050B
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Copper	Basis:	as received
Field ID:	SSLF1-2-15.5'	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	142574
MSS Lab ID:	206086-004	Sampled:	09/15/08
Lab ID:	QC460840	Received:	09/16/08
Matrix:	Soil	Analyzed:	09/22/08
Units:	mg/Kg		

MSS Result	MSS RL	Result	RL	% Diff	Lim
31.18	0.2500	35.23	1.168	13 *	10

*= Value outside of QC limits; see narrative
RL= Reporting Limit

30.0

Curtis & Tompkins, Ltd.

Batch QC Report

Copper

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3050B
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Copper	Basis:	as received
Field ID:	SSLF1-2-15.5'	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	142574
MSS Lab ID:	206086-004	Sampled:	09/15/08
Lab ID:	QC460841	Received:	09/16/08
Matrix:	Soil	Analyzed:	09/22/08
Units:	mg/Kg		

MSS Result	Spiked	Result	%REC	Limits
31.18	11.68	42.39	96	75-125

Curtis & Tompkins, Ltd.

Selenium

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3050B
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Selenium	Batch#:	142574
Matrix:	Soil	Sampled:	09/15/08
Units:	mg/Kg	Received:	09/16/08
Basis:	as received	Prepared:	09/16/08
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Analyzed
SSLF1-2-15.5'	SAMPLE	206086-004	ND	0.50	09/17/08
SSLF1-2-20'	SAMPLE	206086-005	ND	0.50	09/17/08
SSLF1-2-27.5'	SAMPLE	206086-006	ND	0.50	09/17/08
SSLF1-2-37.5'	SAMPLE	206086-007	ND	0.50	09/22/08
	BLANK	QC460613	ND	0.50	09/17/08

ND= Not Detected
RL= Reporting Limit

25.0

Curtis & Tompkins, Ltd.

Batch QC Report

Selenium

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3050B
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Selenium	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	142574
MSS Lab ID:	205972-001	Sampled:	09/10/08
Matrix:	Soil	Received:	09/10/08
Units:	mg/Kg	Prepared:	09/16/08
Basis:	as received	Analyzed:	09/17/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC460614		50.00	48.96	98	80-120		
BSD	QC460615		50.00	49.15	98	80-120	0	20
MS	QC460616	1.124	48.54	49.38	99	62-120		
MSD	QC460617		46.30	46.31	98	62-120	2	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Selenium

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3050B
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Selenium	Basis:	as received
Field ID:	SSLF1-2-15.5'	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	142574
MSS Lab ID:	206086-004	Sampled:	09/15/08
Lab ID:	QC460840	Received:	09/16/08
Matrix:	Soil	Analyzed:	09/22/08
Units:	mg/Kg		

MSS Result	MSS RL	Result	RL	% Diff	Lim
0.4042	0.5000	ND	1.317	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Selenium

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3050B
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Selenium	Basis:	as received
Field ID:	SSLF1-2-15.5'	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	142574
MSS Lab ID:	206086-004	Sampled:	09/15/08
Lab ID:	QC460841	Received:	09/16/08
Matrix:	Soil	Analyzed:	09/22/08
Units:	mg/Kg		

MSS Result	Spiked	Result	%REC	Limits
0.4042	46.73	42.12	89	75-125

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Matrix:	Filtrate	Received:	09/16/08
Units:	ug/L	Prepared:	09/18/08
Diln Fac:	1.000	Analyzed:	09/18/08
Batch#:	142655		

Field ID:	GWGW2286	Lab ID:	206086-001
Type:	SAMPLE	Sampled:	09/15/08

Analyte	Result	RL
Chromium	38	5.0

Field ID:	GWGW2287	Lab ID:	206086-003
Type:	SAMPLE	Sampled:	09/16/08

Analyte	Result	RL
Copper	5.3	5.0
Selenium	ND	10

Type:	BLANK	Lab ID:	QC460918

Analyte	Result	RL
Chromium	ND	5.0
Copper	ND	5.0
Selenium	ND	10

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Matrix:	Filtrate	Batch#:	142655
Units:	ug/L	Prepared:	09/18/08
Diln Fac:	1.000	Analyzed:	09/18/08

Type: BS Lab ID: QC460919

Analyte	Spiked	Result	%REC	Limits
Chromium	200.0	199.4	100	80-120
Copper	250.0	248.9	100	80-120
Selenium	100.0	103.1	103	80-120

Type: BSD Lab ID: QC460920

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Chromium	200.0	192.5	96	80-120	4	20
Copper	250.0	240.9	96	80-120	3	20
Selenium	100.0	96.78	97	80-120	6	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2286	Batch#:	142655
MSS Lab ID:	206086-001	Sampled:	09/15/08
Matrix:	Filtrate	Received:	09/16/08
Units:	ug/L	Prepared:	09/18/08
Diln Fac:	1.000	Analyzed:	09/18/08

Type: MS Lab ID: QC460921

Analyte	MSS Result	Spiked	Result	%REC	Limits
Chromium	37.90	200.0	235.2	99	78-120
Copper	5.019	250.0	249.0	98	75-120
Selenium	<2.787	100.0	98.64	99	73-125

Type: MSD Lab ID: QC460922

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Chromium	200.0	233.8	98	78-120	1	20
Copper	250.0	250.6	98	75-120	1	20
Selenium	100.0	98.15	98	73-125	0	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2286	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	142655
MSS Lab ID:	206086-001	Sampled:	09/15/08
Lab ID:	QC460923	Received:	09/16/08
Matrix:	Filtrate	Analyzed:	09/18/08
Units:	ug/L		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim
Chromium	37.90	5.000	39.81	25.00	5	10
Copper	5.019	5.000	5.491 J	25.00	NC	10
Selenium	ND	10.00	ND	41.81	NC	10

J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2286	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	142655
MSS Lab ID:	206086-001	Sampled:	09/15/08
Lab ID:	QC460924	Received:	09/16/08
Matrix:	Filtrate	Analyzed:	09/18/08
Units:	ug/L		

Analyte	MSS Result	Spiked	Result	%REC	Limits
Chromium	37.90	200.0	225.4	94	75-125
Copper	5.019	250.0	240.7	94	75-125
Selenium	<2.787	100.0	97.70	98	75-125

Curtis & Tompkins, Ltd.

Nitrate Nitrogen

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Diln Fac:	1.000
Field ID:	GWGW2286	Batch#:	142565
Matrix:	Water	Sampled:	09/15/08 12:15
Units:	mg/L	Received:	09/16/08

Type	Lab ID	Result	RL	Analyzed
SAMPLE	206086-001	4.5	0.05	09/16/08 17:06
BLANK	QC460572	ND	0.05	09/16/08 15:55

ND= Not Detected
RL= Reporting Limit

2.0

Curtis & Tompkins, Ltd.

Batch QC Report

Nitrate Nitrogen

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Units:	mg/L
Field ID:	GWGW2286	Batch#:	142565
MSS Lab ID:	206086-001	Sampled:	09/15/08 12:15
Matrix:	Water	Received:	09/16/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
BS	QC460573		1.000	0.9796	98	80-120			1.000	09/16/08 16:13
BSD	QC460574		1.000	0.9876	99	80-120	1	20	1.000	09/16/08 16:30
MS	QC460579	4.499	2.500	6.866	95	80-120			5.000	09/16/08 19:28
MSD	QC460580		2.500	6.807	92	80-120	1	20	5.000	09/16/08 19:45

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Hexavalent Chromium

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3060A
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Batch#:	142677
Matrix:	Soil	Sampled:	09/16/08
Units:	mg/Kg	Received:	09/16/08
Basis:	as received	Prepared:	09/22/08 00:00
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Analyzed
SSWBH3-7.5'	SAMPLE	206086-008	ND	0.020	09/23/08 10:39
SSWBH3-20'	SAMPLE	206086-009	ND	0.020	09/23/08 10:52
SSWBH3-27.5'	SAMPLE	206086-010	ND	0.020	09/23/08 11:05
	BLANK	QC461017	ND	0.020	09/23/08 10:27

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Hexavalent Chromium

Lab #:	206086	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3060A
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Diln Fac:	5.000
Field ID:	SSWBH3-7.5'	Batch#:	142677
MSS Lab ID:	206086-008	Sampled:	09/16/08
Matrix:	Soil	Received:	09/16/08
Units:	mg/Kg	Prepared:	09/22/08 00:00
Basis:	as received		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
LCS	QC461018		40.00	40.97	102	80-120			09/20/08 10:04
MS	QC461019	ND	40.00	42.81	107	70-130			09/20/08 10:17
MSD	QC461020		40.16	40.08	100	70-130	7	30	09/20/08 10:30

ND= Not Detected
RPD= Relative Percent Difference

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-32
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
A qualified Associates Incorporated, DBA

206098

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Client Contact	Project Manager: Bob Devany	Sampled by: R. Davis	Date: 9/16/08	COC Number: UCD 20080916-1
Weiss Associates	Tel: 510-450-6144	Lab Contact: WO/PO# 08-02	Carrier:	Page 1 of 1
5801 Christie Avenue, Suite 600	Analysis Turnaround Time			Job No. 388-1856-1-32
Emeryville, CA 94608	Calendar (C) or Work Days (W) --- 5W			
(510) 450-6000 Phone	TAT if different from Below _____			
(510) 547-5043 FAX	☐ 2 weeks normal TAT			SDG No.
	☐ 1 week			
Job Name: UC Davis	☐ 2 days			
Address: One Shields Ave, Davis	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	filtered only for metals	~~Cu, Se (6010B)~~	Cr (VI) 7199	~~Cd, Ag (6010B)~~	~~Sb, Be, Cd, Cu, Mo, Ag (6010B)~~	~~SVOCs (8270)~~	~~[illegible]~~	Sample Specific Notes:
~~GWGW2287~~				water		x							
~~GWGW2288~~				water		x							
~~GWGW2289~~				water		x							
~~GWGW2290~~				water		x							
~~GWGW2291~~				water		x							
-1 GWGW2292	9/16/08	18:00	bailed water	water	1	x	*	X					Borehole ID: WBH-2
-2 GWGW2293	"	14:30	"	water	1	x		X					Borehole ID: WBH-3
							→ Total Chromium, not Cr VI, per Kian Atkinson AQ 9/17/08						
							4	1	4	4	1	1	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For _____ Months*

Special Instructions/QC Requirements & Comments: **Note: Cr (VI) has a hold time of 24 hrs!!! LEVEL IV REPORTING**

W.O. 0805

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Robert A. D[illegible]	Weiss Associates	9/16/08 1830	[illegible]	CCT	9/17/08 0930
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 206098 Date Received 9/17/08 Number of coolers 1
Client Weiss Project UC Davis

Date Opened 9/17 By (print) K Wellbrock (sign) K Wellbrock
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc)? ..... YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ~~☐ NO~~
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? ..... YES NO ~~N/A~~
3. Were custody papers dry and intact when received? ..... (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? ..... (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ..... (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

   ☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☒ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

   Type of ice used: ☐ Wet ☒ Blue/Gel ☐ None Temp(°C) _____

   ☒ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ..... YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? ..... (YES) NO
10. Are samples in the appropriate containers for indicated tests? ..... (YES) NO
11. Are sample labels present, in good condition and complete? ..... (YES) NO
12. Do the sample labels agree with custody papers? ..... (YES) NO
13. Was sufficient amount of sample sent for tests requested? ..... (YES) NO
14. Are the samples appropriately preserved? ..... (YES) NO N/A
15. Are bubbles > 6mm absent in VOA samples? ..... YES NO (N/A)
16. Was the client contacted concerning this sample delivery? ..... YES NO
    If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

Curtis & Tompkins, Ltd.

Chromium

Lab #:	206098	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	STANDARD	Analysis:	EPA 6010B
Analyte:	Chromium	Batch#:	142651
Field ID:	GWGW2292	Sampled:	09/16/08
Matrix:	Water	Received:	09/17/08
Units:	ug/L	Prepared:	09/18/08
Diln Fac:	1.000	Analyzed:	09/18/08

Type	Lab ID	Result	RL
SAMPLE	206098-001	8.4	5.0
BLANK	QC460902	ND	5.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Chromium

Lab #:	206098	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	STANDARD	Analysis:	EPA 6010B
Analyte:	Chromium	Batch#:	142651
Field ID:	GWGW2292	Sampled:	09/16/08
MSS Lab ID:	206098-001	Received:	09/17/08
Matrix:	Water	Prepared:	09/18/08
Units:	ug/L	Analyzed:	09/18/08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC460903		200.0	170.4	85	80-120		
BSD	QC460904		200.0	186.7	93	80-120	9	20
MS	QC460905	8.440	200.0	202.8	97	78-120		
MSD	QC460906		200.0	189.4	90	78-120	7	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Chromium

Lab #:	206098	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	STANDARD	Analysis:	EPA 6010B
Analyte:	Chromium	Units:	ug/L
Field ID:	GWGW2292	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	142651
MSS Lab ID:	206098-001	Sampled:	09/16/08
Lab ID:	QC460907	Received:	09/17/08
Matrix:	Water	Analyzed:	09/18/08

MSS Result	MSS RL	Result	RL	% Diff	Lim
8.440	5.000	9.672 J	25.00	NC	10

J= Estimated value
NC= Not Calculated
RL= Reporting Limit

4.0

Curtis & Tompkins, Ltd.

Batch QC Report

Chromium

Lab #:	206098	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	STANDARD	Analysis:	EPA 6010B
Analyte:	Chromium	Units:	ug/L
Field ID:	GWGW2292	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	142651
MSS Lab ID:	206098-001	Sampled:	09/16/08
Lab ID:	QC460908	Received:	09/17/08
Matrix:	Water	Analyzed:	09/18/08

MSS Result	Spiked	Result	%REC	Limits
8.440	200.0	192.7	92	75-125

Curtis & Tompkins, Ltd.

Hexavalent Chromium

Lab #:	206098	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Field ID:	GWGW2293	Batch#:	142593
Matrix:	Water	Sampled:	09/16/08 14:30
Units:	ug/L	Received:	09/17/08

Type	Lab ID	Result	RL	Analyzed
SAMPLE	206098-002	42	0.50	09/17/08 12:52
BLANK	QC460695	ND	0.50	09/17/08 12:39

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Hexavalent Chromium

Lab #:	206098	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Units:	ug/L
Field ID:	GWGW2293	Batch#:	142593
MSS Lab ID:	206098-002	Sampled:	09/16/08 14:30
Matrix:	Water	Received:	09/17/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
BS	QC460696		20.00	19.77	99	90-110			1.000	09/17/08 13:08
BSD	QC460697		20.00	19.70	99	90-110	0	20	1.000	09/17/08 13:21
MS	QC460698	41.65	10.20	52.28	104 NM	85-115			1.020	09/17/08 13:33
MSD	QC460699		10.20	52.27	104 NM	85-115	0	20	1.020	09/17/08 13:46

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

206139

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-32
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
A California Corporation, 1984

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Client Contact		Project Manager: Bob Devany	Sampled by: R. Davis	Date: 9/18/08	COC Number: UCD20080918-1
Weiss Associates		Tel: 510-450-6144	Lab Contact: WO/PO# 08-02	Carrier: Courier	Page 1 of 3
5801 Christie Avenue, Suite 600		Analysis Turnaround Time			Job No. 388-1856-1-32
Emeryville, CA 94608		Calendar (C) or Work Days (W) --- 5W			
(510) 450-6000	Phone	TAT if different from Below _____			SDG No.
(510) 547-5043	FAX	☐ 2 weeks			
		☐ 1 week			
Job Name: UC Davis		☐ 2 days			
Address: One Shields Ave, Davis		☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	filtered (for total Cr)	VOCs (8260B)	Total Cr (6010B)	Nitrate (300.0)	SVOCs (8270)	Pesticides	PCBs	Cr (VI) 3060A	Cd, Ag 6010/3050			Formaldehyde 8315							Sample Specific Notes:
	~~GWGW2286~~	~~9/15/08~~	~~12:15~~	~~Bailed water~~	~~water~~	~~2~~						X	X												~~Borehole ID: WBH-4~~ RKD
1	TBGW0511			AQ	water			X																	
2	GWGW2291	9/15/08	08:30	Bailed water	water	1					X														Borehole ID: ST-2
	~~GWGW2287~~	~~9/16/08~~	~~08:00~~																						~~" CF1-2~~ RKD
3	GWGW2292	9/17/08	07:30			1					X														" WBH-2
4	GWGW2293	9/16/08	14:30			1					X														" WBH-3
5	GWGW2288	9/18/08	07:30			3					X			X	X										" CF2-4
6	GWGW2285	9/18/08	11:10			4		X										X							" WBH-1
7	GWGW2282	9/17/08	10:45			1												X							" CF2-3
								2	1	1	1			1	1			1							

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **Note: Nitrate has a hold time of 48 hrs! LEVEL IV REPORTING**

W.O. 0805 * RECEIVED ON ICE

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Robert K [signature]	Weiss Associates	9/18/08	[signature]	C&T	9/18/08 1330
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

206139

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
A geoTrans Associates Incorporated, DBA

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Project ID: 388-1856-1-32
Protocol No.: ROD

Client Contact	Project Manager: Bob Devany	Sampled by: KHA	Date: 9/18/08	COC Number: UCD20080918-1
Weiss Associates	Tel: 510-450-6144	Lab Contact: WO/PO# 08-02	Carrier:	Page 2 of 3
5801 Christie Avenue, Suite 600	Analysis Turnaround Time			Job No. 3888-1856-1-32
Emeryville, CA 94608	Calendar (C) or Work Days (W) --- 5W			SDG No.
(510) 450-6000 Phone	TAT if different from Below NORMAL TAT			
(510) 547-5043 FAX	☐ 2 weeks			
	☐ 1 week			
Job Name: UC Davis	☐ 2 days			
Address: One Shields Ave, Davis	☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	VOCs (8260B)	Formaldehyde (8315)	Sample Specific Notes:
	~~GWGW2280~~				water				
	~~GWGW2281~~				water				
	~~GWGW2282~~				water				
	~~GWGW2283~~				water				
	~~GWGW2284~~				water				
	~~GWGW2285~~				water				
8	EBGW0014	9/18/08	1200		water	4	X	X	
9	EBGW0015	9/18/08	1210		water	4	X	X	
	TBGW0510				water				
	Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____						2	1	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For _____ Months*

Special Instructions/QC Requirements & Comments: **Note: Formaldehyde has a hold time of 72 hrs (3 days)! LEVEL IV REPORTING**

W.O. 08805 * RECEIVED ON ICE

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
KAN ATKINSON	WEISS ASSOC.	9/18/08 1240	[illegible]	C&T	9/18/08 1330
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

206139

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
A Geotechnical Associates Incorporated, DBA

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Project ID: 388-1856-1-32
Protocol No.: ROD

Client Contact	Project Manager: Bob Devany	Sampled by: R. Davis	Date: 9/18/08	COC Number: UCD20080918-1
Weiss Associates	Tel: 510-450-6144	Lab Contact: WO/PO# 08-03	Carrier: courier	Page 3 of 3
5801 Christie Avenue, Suite 600	Analysis Turnaround Time			Job No. 388-1856-1-32
Emeryville, CA 94608	Calendar (C) or Work Days (W) --- 5W			
(510) 450-6000 Phone	TAT if different from Below ____			SDG No.
(510) 547-5043 FAX	☐ 2 weeks			
	☐ 1 week			
Job Name: UC Davis	☐ 2 days			
Address: One Shields Ave, Davis	☐ 1 day			

normal TAT

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr (VI) 7199/3060A	SVOCs (8270/3550)	~~Pesticides (8081/3550)~~	Cd, Ag 6010/3050	Sample Specific Notes:
10	SSLF2-4-12.5' ~~SSWBH-2-~~	9/17/08		acetate liner	soil	1	X			X	
11	SSLF2-4-20' ~~SSWBH-2-~~	↓		↓	soil	1	X			X	
12	SSWBH-2-15'	9/16/08			soil	1	X				
13	SSWBH-2-20'	↓			soil	1	X				
14	SSWBH-2-30'				soil	1	X				
15	SSWBH-2-35'	↓			soil	1	X				
16	SSLF2-4-25' ~~SSWBH-3-~~	9/17/08			soil	1	X			X	
17	SSLF2-4-32.5' ~~SSWBH-3-~~	↓		↓	soil	1	X			X	
	~~SSWBH-3-~~				soil						
	Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____						1	1			

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For _____ Months*

Special Instructions/QC Requirements & Comments: **LEVEL IV REPORTING**

W.O. 0805

*RECEIVED ON ICE

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
R. Tuttle	Weiss Associates	9/18/08	[illegible]	C&T	9/18/08 1330
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 206139 Date Received 9/18/08 Number of coolers 2
Client Weisse Project UC Davis

Date Opened 9/18 By (print) K Wellbrock (sign) K Wellbrock
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc)? ..... YES NO
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? ..... YES NO N/A
3. Were custody papers dry and intact when received? ..... YES NO
4. Were custody papers filled out properly (ink, signed, etc)? ..... YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ..... YES NO
6. Indicate the packing in cooler: (if other, describe) _____

   ☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

   Type of ice used: ☐ Wet ☒ Blue/Gel ☐ None Temp(°C) _____

   ☒ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ..... YES NO
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? ..... YES NO
10. Are samples in the appropriate containers for indicated tests? ..... YES NO
11. Are sample labels present, in good condition and complete? ..... YES NO
12. Do the sample labels agree with custody papers? ..... YES NO
13. Was sufficient amount of sample sent for tests requested? ..... YES NO
14. Are the samples appropriately preserved? ..... YES NO N/A
15. Are bubbles > 6mm absent in VOA samples? ..... YES NO N/A
16. Was the client contacted concerning this sample delivery? ..... YES NO
    If YES, Who was called? _____ By _____ Date: _____

COMMENTS

1/1 TB VOA w/ Bubble

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TBGW0511	Batch#:	142750
Lab ID:	206139-001	Sampled:	09/15/08
Matrix:	Water	Received:	09/18/08
Units:	ug/L	Analyzed:	09/22/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TBGW0511	Batch#:	142750
Lab ID:	206139-001	Sampled:	09/15/08
Matrix:	Water	Received:	09/18/08
Units:	ug/L	Analyzed:	09/22/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-125
1,2-Dichloroethane-d4	117	80-137
Toluene-d8	105	80-120
Bromofluorobenzene	105	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2285	Batch#:	142796
Lab ID:	206139-006	Sampled:	09/18/08
Matrix:	Water	Received:	09/18/08
Units:	ug/L	Analyzed:	09/23/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	0.5	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2285	Batch#:	142796
Lab ID:	206139-006	Sampled:	09/18/08
Matrix:	Water	Received:	09/18/08
Units:	ug/L	Analyzed:	09/23/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-125
1,2-Dichloroethane-d4	105	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	98	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	EBGW0014	Batch#:	142750
Lab ID:	206139-008	Sampled:	09/18/08
Matrix:	Water	Received:	09/18/08
Units:	ug/L	Analyzed:	09/22/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	EBGW0014	Batch#:	142750
Lab ID:	206139-008	Sampled:	09/18/08
Matrix:	Water	Received:	09/18/08
Units:	ug/L	Analyzed:	09/22/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	110	80-125
1,2-Dichloroethane-d4	115	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	102	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	EBGW0015	Batch#:	142750
Lab ID:	206139-009	Sampled:	09/18/08
Matrix:	Water	Received:	09/18/08
Units:	ug/L	Analyzed:	09/22/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	EBGW0015	Batch#:	142750
Lab ID:	206139-009	Sampled:	09/18/08
Matrix:	Water	Received:	09/18/08
Units:	ug/L	Analyzed:	09/22/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-125
1,2-Dichloroethane-d4	117	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	105	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2285-DUP	Batch#:	143028
Lab ID:	206139-018	Sampled:	09/18/08
Matrix:	Water	Received:	09/18/08
Units:	ug/L	Analyzed:	09/29/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	0.6	0.5

ND= Not Detected
RL= Reporting Limit

34.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2285-DUP	Batch#:	143028
Lab ID:	206139-018	Sampled:	09/18/08
Matrix:	Water	Received:	09/18/08
Units:	ug/L	Analyzed:	09/29/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-125
1,2-Dichloroethane-d4	99	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	104	80-122

ND= Not Detected
RL= Reporting Limit

34.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	142750
Units:	ug/L	Analyzed:	09/22/08
Diln Fac:	1.000		

Type: BS Lab ID: QC461319

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	25.22	101	73-133
Benzene	25.00	26.25	105	80-120
Trichloroethene	25.00	26.75	107	80-120
Toluene	25.00	26.40	106	80-120
Chlorobenzene	25.00	24.54	98	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-125
1,2-Dichloroethane-d4	106	80-137
Toluene-d8	105	80-120
Bromofluorobenzene	104	80-122

Type: BSD Lab ID: QC461320

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	24.85	99	73-133	1	20
Benzene	25.00	25.26	101	80-120	4	20
Trichloroethene	25.00	25.86	103	80-120	3	20
Toluene	25.00	24.87	99	80-120	6	20
Chlorobenzene	25.00	24.05	96	80-120	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-125
1,2-Dichloroethane-d4	106	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	102	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC461321	Batch#:	142750
Matrix:	Water	Analyzed:	09/22/08
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC461321	Batch#:	142750
Matrix:	Water	Analyzed:	09/22/08
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-125
1,2-Dichloroethane-d4	108	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	103	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	142750
MSS Lab ID:	206090-002	Sampled:	09/16/08
Matrix:	Water	Received:	09/16/08
Units:	ug/L	Analyzed:	09/22/08
Diln Fac:	1.000		

Type: MS Lab ID: QC461444

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.1379	25.00	25.61	102	76-133
Benzene	<0.1000	25.00	26.91	108	80-121
Trichloroethene	19.07	25.00	44.24	101	74-129
Toluene	<0.1000	25.00	26.70	107	80-120
Chlorobenzene	<0.1000	25.00	24.57	98	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-125
1,2-Dichloroethane-d4	114	80-137
Toluene-d8	106	80-120
Bromofluorobenzene	104	80-122

Type: MSD Lab ID: QC461445

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	25.60	102	76-133	0	20
Benzene	25.00	26.55	106	80-121	1	20
Trichloroethene	25.00	42.71	95	74-129	4	20
Toluene	25.00	25.76	103	80-120	4	20
Chlorobenzene	25.00	24.59	98	80-120	0	20

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-125
1,2-Dichloroethane-d4	113	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	106	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	142796
Units:	ug/L	Analyzed:	09/23/08
Diln Fac:	1.000		

Type: BS Lab ID: QC461534

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	19.47	97	73-133
Benzene	20.00	19.57	98	80-120
Trichloroethene	20.00	20.14	101	80-120
Toluene	20.00	19.34	97	80-120
Chlorobenzene	20.00	19.53	98	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-125
1,2-Dichloroethane-d4	100	80-137
Toluene-d8	98	80-120
Bromofluorobenzene	103	80-122

Type: BSD Lab ID: QC461535

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	20.00	18.78	94	73-133	4	20
Benzene	20.00	19.61	98	80-120	0	20
Trichloroethene	20.00	19.77	99	80-120	2	20
Toluene	20.00	19.88	99	80-120	3	20
Chlorobenzene	20.00	19.29	96	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-125
1,2-Dichloroethane-d4	102	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	99	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC461536	Batch#:	142796
Matrix:	Water	Analyzed:	09/23/08
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC461536	Batch#:	142796
Matrix:	Water	Analyzed:	09/23/08
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-125
1,2-Dichloroethane-d4	103	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	100	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC462527	Batch#:	143028
Matrix:	Water	Analyzed:	09/29/08
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC462527	Batch#:	143028
Matrix:	Water	Analyzed:	09/29/08
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-125
1,2-Dichloroethane-d4	100	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	101	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	143028
Units:	ug/L	Analyzed:	09/29/08
Diln Fac:	1.000		

Type: BS Lab ID: QC462528

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	26.96	108	73-133
Benzene	25.00	26.41	106	80-120
Trichloroethene	25.00	27.73	111	80-120
Toluene	25.00	26.40	106	80-120
Chlorobenzene	25.00	26.43	106	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-125
1,2-Dichloroethane-d4	98	80-137
Toluene-d8	98	80-120
Bromofluorobenzene	93	80-122

Type: BSD Lab ID: QC462529

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	27.79	111	73-133	3	20
Benzene	25.00	26.97	108	80-120	2	20
Trichloroethene	25.00	28.86	115	80-120	4	20
Toluene	25.00	27.02	108	80-120	2	20
Chlorobenzene	25.00	26.70	107	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-125
1,2-Dichloroethane-d4	94	80-137
Toluene-d8	98	80-120
Bromofluorobenzene	96	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C
Field ID:	GWGW2291	Batch#:	142719
Lab ID:	206139-002	Sampled:	09/15/08
Matrix:	Water	Received:	09/18/08
Units:	ug/L	Prepared:	09/19/08
Diln Fac:	1.000	Analyzed:	09/23/08

Analyte	Result	RL
N-Nitrosodimethylamine	ND	10
Phenol	ND	10
bis(2-Chloroethyl)ether	ND	10
2-Chlorophenol	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
Benzyl alcohol	ND	10
1,2-Dichlorobenzene	ND	10
2-Methylphenol	ND	10
bis(2-Chloroisopropyl) ether	ND	10
4-Methylphenol	ND	10
N-Nitroso-di-n-propylamine	ND	10
Hexachloroethane	ND	10
Nitrobenzene	ND	10
Isophorone	ND	10
2-Nitrophenol	ND	21
2,4-Dimethylphenol	ND	10
Benzoic acid	ND	51
bis(2-Chloroethoxy)methane	ND	10
2,4-Dichlorophenol	ND	10
1,2,4-Trichlorobenzene	ND	10
Naphthalene	ND	10
4-Chloroaniline	ND	10
Hexachlorobutadiene	ND	10
4-Chloro-3-methylphenol	ND	10
2-Methylnaphthalene	ND	10
Hexachlorocyclopentadiene	ND	21
2,4,6-Trichlorophenol	ND	10
2,4,5-Trichlorophenol	ND	10
2-Chloronaphthalene	ND	10
2-Nitroaniline	ND	21
Dimethylphthalate	ND	10
Acenaphthylene	ND	10
2,6-Dinitrotoluene	ND	10
3-Nitroaniline	ND	21
Acenaphthene	ND	10
2,4-Dinitrophenol	ND	21
4-Nitrophenol	ND	21
Dibenzofuran	ND	10
2,4-Dinitrotoluene	ND	10
Diethylphthalate	ND	10
Fluorene	ND	10
4-Chlorophenyl-phenylether	ND	10
4-Nitroaniline	ND	21
4,6-Dinitro-2-methylphenol	ND	21
N-Nitrosodiphenylamine	ND	10
Azobenzene	ND	10
4-Bromophenyl-phenylether	ND	10
Hexachlorobenzene	ND	10
Pentachlorophenol	ND	21
Phenanthrene	ND	10
Anthracene	ND	10
Di-n-butylphthalate	ND	10
Fluoranthene	ND	10

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C
Field ID:	GWGW2291	Batch#:	142719
Lab ID:	206139-002	Sampled:	09/15/08
Matrix:	Water	Received:	09/18/08
Units:	ug/L	Prepared:	09/19/08
Diln Fac:	1.000	Analyzed:	09/23/08

Analyte	Result	RL
Pyrene	ND	10
Butylbenzylphthalate	ND	10
3,3'-Dichlorobenzidine	ND	21
Benzo(a)anthracene	ND	10
Chrysene	ND	10
bis(2-Ethylhexyl)phthalate	ND	10
Di-n-octylphthalate	ND	10
Benzo(b)fluoranthene	ND	10
Benzo(k)fluoranthene	ND	10
Benzo(a)pyrene	ND	10
Indeno(1,2,3-cd)pyrene	ND	10
Dibenz(a,h)anthracene	ND	10
Benzo(g,h,i)perylene	ND	10

Surrogate	%REC	Limits
2-Fluorophenol	80	40-120
Phenol-d5	74	43-120
2,4,6-Tribromophenol	83	40-122
Nitrobenzene-d5	70	56-120
2-Fluorobiphenyl	82	55-120
Terphenyl-d14	63	34-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C
Field ID:	GWGW2292	Batch#:	142719
Lab ID:	206139-003	Sampled:	09/17/08
Matrix:	Water	Received:	09/18/08
Units:	ug/L	Prepared:	09/19/08
Diln Fac:	1.000	Analyzed:	09/23/08

Analyte	Result	RL
N-Nitrosodimethylamine	ND	9.4
Phenol	ND	9.4
bis(2-Chloroethyl)ether	ND	9.4
2-Chlorophenol	ND	9.4
1,3-Dichlorobenzene	ND	9.4
1,4-Dichlorobenzene	ND	9.4
Benzyl alcohol	ND	9.4
1,2-Dichlorobenzene	ND	9.4
2-Methylphenol	ND	9.4
bis(2-Chloroisopropyl) ether	ND	9.4
4-Methylphenol	ND	9.4
N-Nitroso-di-n-propylamine	ND	9.4
Hexachloroethane	ND	9.4
Nitrobenzene	ND	9.4
Isophorone	ND	9.4
2-Nitrophenol	ND	19
2,4-Dimethylphenol	ND	9.4
Benzoic acid	ND	47
bis(2-Chloroethoxy)methane	ND	9.4
2,4-Dichlorophenol	ND	9.4
1,2,4-Trichlorobenzene	ND	9.4
Naphthalene	ND	9.4
4-Chloroaniline	ND	9.4
Hexachlorobutadiene	ND	9.4
4-Chloro-3-methylphenol	ND	9.4
2-Methylnaphthalene	ND	9.4
Hexachlorocyclopentadiene	ND	19
2,4,6-Trichlorophenol	ND	9.4
2,4,5-Trichlorophenol	ND	9.4
2-Chloronaphthalene	ND	9.4
2-Nitroaniline	ND	19
Dimethylphthalate	ND	9.4
Acenaphthylene	ND	9.4
2,6-Dinitrotoluene	ND	9.4
3-Nitroaniline	ND	19
Acenaphthene	ND	9.4
2,4-Dinitrophenol	ND	19
4-Nitrophenol	ND	19
Dibenzofuran	ND	9.4
2,4-Dinitrotoluene	ND	9.4
Diethylphthalate	ND	9.4
Fluorene	ND	9.4
4-Chlorophenyl-phenylether	ND	9.4
4-Nitroaniline	ND	19
4,6-Dinitro-2-methylphenol	ND	19
N-Nitrosodiphenylamine	ND	9.4
Azobenzene	ND	9.4
4-Bromophenyl-phenylether	ND	9.4
Hexachlorobenzene	ND	9.4
Pentachlorophenol	ND	19
Phenanthrene	ND	9.4
Anthracene	ND	9.4
Di-n-butylphthalate	ND	9.4
Fluoranthene	ND	9.4

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C
Field ID:	GWGW2292	Batch#:	142719
Lab ID:	206139-003	Sampled:	09/17/08
Matrix:	Water	Received:	09/18/08
Units:	ug/L	Prepared:	09/19/08
Diln Fac:	1.000	Analyzed:	09/23/08

Analyte	Result	RL
Pyrene	ND	9.4
Butylbenzylphthalate	ND	9.4
3,3'-Dichlorobenzidine	ND	19
Benzo(a)anthracene	ND	9.4
Chrysene	ND	9.4
bis(2-Ethylhexyl)phthalate	ND	9.4
Di-n-octylphthalate	ND	9.4
Benzo(b)fluoranthene	ND	9.4
Benzo(k)fluoranthene	ND	9.4
Benzo(a)pyrene	ND	9.4
Indeno(1,2,3-cd)pyrene	ND	9.4
Dibenz(a,h)anthracene	ND	9.4
Benzo(g,h,i)perylene	ND	9.4

Surrogate	%REC	Limits
2-Fluorophenol	77	40-120
Phenol-d5	71	43-120
2,4,6-Tribromophenol	76	40-122
Nitrobenzene-d5	68	56-120
2-Fluorobiphenyl	80	55-120
Terphenyl-d14	38	34-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C
Field ID:	GWGW2293	Batch#:	142719
Lab ID:	206139-004	Sampled:	09/16/08
Matrix:	Water	Received:	09/18/08
Units:	ug/L	Prepared:	09/19/08
Diln Fac:	1.000	Analyzed:	09/23/08

Analyte	Result	RL
N-Nitrosodimethylamine	ND	9.4
Phenol	ND	9.4
bis(2-Chloroethyl)ether	ND	9.4
2-Chlorophenol	ND	9.4
1,3-Dichlorobenzene	ND	9.4
1,4-Dichlorobenzene	ND	9.4
Benzyl alcohol	ND	9.4
1,2-Dichlorobenzene	ND	9.4
2-Methylphenol	ND	9.4
bis(2-Chloroisopropyl) ether	ND	9.4
4-Methylphenol	ND	9.4
N-Nitroso-di-n-propylamine	ND	9.4
Hexachloroethane	ND	9.4
Nitrobenzene	ND	9.4
Isophorone	ND	9.4
2-Nitrophenol	ND	19
2,4-Dimethylphenol	ND	9.4
Benzoic acid	ND	47
bis(2-Chloroethoxy)methane	ND	9.4
2,4-Dichlorophenol	ND	9.4
1,2,4-Trichlorobenzene	ND	9.4
Naphthalene	ND	9.4
4-Chloroaniline	ND	9.4
Hexachlorobutadiene	ND	9.4
4-Chloro-3-methylphenol	ND	9.4
2-Methylnaphthalene	ND	9.4
Hexachlorocyclopentadiene	ND	19
2,4,6-Trichlorophenol	ND	9.4
2,4,5-Trichlorophenol	ND	9.4
2-Chloronaphthalene	ND	9.4
2-Nitroaniline	ND	19
Dimethylphthalate	ND	9.4
Acenaphthylene	ND	9.4
2,6-Dinitrotoluene	ND	9.4
3-Nitroaniline	ND	19
Acenaphthene	ND	9.4
2,4-Dinitrophenol	ND	19
4-Nitrophenol	ND	19
Dibenzofuran	ND	9.4
2,4-Dinitrotoluene	ND	9.4
Diethylphthalate	ND	9.4
Fluorene	ND	9.4
4-Chlorophenyl-phenylether	ND	9.4
4-Nitroaniline	ND	19
4,6-Dinitro-2-methylphenol	ND	19
N-Nitrosodiphenylamine	ND	9.4
Azobenzene	ND	9.4
4-Bromophenyl-phenylether	ND	9.4
Hexachlorobenzene	ND	9.4
Pentachlorophenol	ND	19
Phenanthrene	ND	9.4
Anthracene	ND	9.4
Di-n-butylphthalate	ND	9.4
Fluoranthene	ND	9.4

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C
Field ID:	GWGW2293	Batch#:	142719
Lab ID:	206139-004	Sampled:	09/16/08
Matrix:	Water	Received:	09/18/08
Units:	ug/L	Prepared:	09/19/08
Diln Fac:	1.000	Analyzed:	09/23/08

Analyte	Result	RL
Pyrene	ND	9.4
Butylbenzylphthalate	ND	9.4
3,3'-Dichlorobenzidine	ND	19
Benzo(a)anthracene	ND	9.4
Chrysene	ND	9.4
bis(2-Ethylhexyl)phthalate	ND	9.4
Di-n-octylphthalate	ND	9.4
Benzo(b)fluoranthene	ND	9.4
Benzo(k)fluoranthene	ND	9.4
Benzo(a)pyrene	ND	9.4
Indeno(1,2,3-cd)pyrene	ND	9.4
Dibenz(a,h)anthracene	ND	9.4
Benzo(g,h,i)perylene	ND	9.4

Surrogate	%REC	Limits
2-Fluorophenol	76	40-120
Phenol-d5	73	43-120
2,4,6-Tribromophenol	71	40-122
Nitrobenzene-d5	67	56-120
2-Fluorobiphenyl	80	55-120
Terphenyl-d14	47	34-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C
Field ID:	GWGW2288	Batch#:	142719
Lab ID:	206139-005	Sampled:	09/18/08
Matrix:	Water	Received:	09/18/08
Units:	ug/L	Prepared:	09/19/08
Diln Fac:	1.000	Analyzed:	09/23/08

Analyte	Result	RL
N-Nitrosodimethylamine	ND	9.4
Phenol	ND	9.4
bis(2-Chloroethyl)ether	ND	9.4
2-Chlorophenol	ND	9.4
1,3-Dichlorobenzene	ND	9.4
1,4-Dichlorobenzene	ND	9.4
Benzyl alcohol	ND	9.4
1,2-Dichlorobenzene	ND	9.4
2-Methylphenol	ND	9.4
bis(2-Chloroisopropyl) ether	ND	9.4
4-Methylphenol	ND	9.4
N-Nitroso-di-n-propylamine	ND	9.4
Hexachloroethane	ND	9.4
Nitrobenzene	ND	9.4
Isophorone	ND	9.4
2-Nitrophenol	ND	19
2,4-Dimethylphenol	ND	9.4
Benzoic acid	ND	47
bis(2-Chloroethoxy)methane	ND	9.4
2,4-Dichlorophenol	ND	9.4
1,2,4-Trichlorobenzene	ND	9.4
Naphthalene	ND	9.4
4-Chloroaniline	ND	9.4
Hexachlorobutadiene	ND	9.4
4-Chloro-3-methylphenol	ND	9.4
2-Methylnaphthalene	ND	9.4
Hexachlorocyclopentadiene	ND	19
2,4,6-Trichlorophenol	ND	9.4
2,4,5-Trichlorophenol	ND	9.4
2-Chloronaphthalene	ND	9.4
2-Nitroaniline	ND	19
Dimethylphthalate	ND	9.4
Acenaphthylene	ND	9.4
2,6-Dinitrotoluene	ND	9.4
3-Nitroaniline	ND	19
Acenaphthene	ND	9.4
2,4-Dinitrophenol	ND	19
4-Nitrophenol	ND	19
Dibenzofuran	ND	9.4
2,4-Dinitrotoluene	ND	9.4
Diethylphthalate	ND	9.4
Fluorene	ND	9.4
4-Chlorophenyl-phenylether	ND	9.4
4-Nitroaniline	ND	19
4,6-Dinitro-2-methylphenol	ND	19
N-Nitrosodiphenylamine	ND	9.4
Azobenzene	ND	9.4
4-Bromophenyl-phenylether	ND	9.4
Hexachlorobenzene	ND	9.4
Pentachlorophenol	ND	19
Phenanthrene	ND	9.4
Anthracene	ND	9.4
Di-n-butylphthalate	ND	9.4

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C
Field ID:	GWGW2288	Batch#:	142719
Lab ID:	206139-005	Sampled:	09/18/08
Matrix:	Water	Received:	09/18/08
Units:	ug/L	Prepared:	09/19/08
Diln Fac:	1.000	Analyzed:	09/23/08

Analyte	Result	RL
Fluoranthene	ND	9.4
Pyrene	ND	9.4
Butylbenzylphthalate	ND	9.4
3,3'-Dichlorobenzidine	ND	19
Benzo(a)anthracene	ND	9.4
Chrysene	ND	9.4
bis(2-Ethylhexyl)phthalate	ND	9.4
Di-n-octylphthalate	ND	9.4
Benzo(b)fluoranthene	ND	9.4
Benzo(k)fluoranthene	ND	9.4
Benzo(a)pyrene	ND	9.4
Indeno(1,2,3-cd)pyrene	ND	9.4
Dibenz(a,h)anthracene	ND	9.4
Benzo(g,h,i)perylene	ND	9.4

Surrogate	%REC	Limits
2-Fluorophenol	59	40-120
Phenol-d5	60	43-120
2,4,6-Tribromophenol	60	40-122
Nitrobenzene-d5	53 *	56-120
2-Fluorobiphenyl	64	55-120
Terphenyl-d14	34	34-120

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

30.0

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC461200	Batch#:	142719
Matrix:	Water	Prepared:	09/19/08
Units:	ug/L	Analyzed:	09/22/08

Analyte	Result	RL
N-Nitrosodimethylamine	ND	10
Phenol	ND	10
bis(2-Chloroethyl)ether	ND	10
2-Chlorophenol	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
Benzyl alcohol	ND	10
1,2-Dichlorobenzene	ND	10
2-Methylphenol	ND	10
bis(2-Chloroisopropyl) ether	ND	10
4-Methylphenol	ND	10
N-Nitroso-di-n-propylamine	ND	10
Hexachloroethane	ND	10
Nitrobenzene	ND	10
Isophorone	ND	10
2-Nitrophenol	ND	20
2,4-Dimethylphenol	ND	10
Benzoic acid	ND	50
bis(2-Chloroethoxy)methane	ND	10
2,4-Dichlorophenol	ND	10
1,2,4-Trichlorobenzene	ND	10
Naphthalene	ND	10
4-Chloroaniline	ND	10
Hexachlorobutadiene	ND	10
4-Chloro-3-methylphenol	ND	10
2-Methylnaphthalene	ND	10
Hexachlorocyclopentadiene	ND	20
2,4,6-Trichlorophenol	ND	10
2,4,5-Trichlorophenol	ND	10
2-Chloronaphthalene	ND	10
2-Nitroaniline	ND	20
Dimethylphthalate	ND	10
Acenaphthylene	ND	10
2,6-Dinitrotoluene	ND	10
3-Nitroaniline	ND	20
Acenaphthene	ND	10
2,4-Dinitrophenol	ND	20
4-Nitrophenol	ND	20
Dibenzofuran	ND	10
2,4-Dinitrotoluene	ND	10
Diethylphthalate	ND	10
Fluorene	ND	10
4-Chlorophenyl-phenylether	ND	10
4-Nitroaniline	ND	20
4,6-Dinitro-2-methylphenol	ND	20
N-Nitrosodiphenylamine	ND	10
Azobenzene	ND	10
4-Bromophenyl-phenylether	ND	10
Hexachlorobenzene	ND	10
Pentachlorophenol	ND	20
Phenanthrene	ND	10
Anthracene	ND	10
Di-n-butylphthalate	ND	10
Fluoranthene	ND	10

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC461200	Batch#:	142719
Matrix:	Water	Prepared:	09/19/08
Units:	ug/L	Analyzed:	09/22/08

Analyte	Result	RL
Pyrene	ND	10
Butylbenzylphthalate	ND	10
3,3'-Dichlorobenzidine	ND	20
Benzo(a)anthracene	ND	10
Chrysene	ND	10
bis(2-Ethylhexyl)phthalate	ND	10
Di-n-octylphthalate	ND	10
Benzo(b)fluoranthene	ND	10
Benzo(k)fluoranthene	ND	10
Benzo(a)pyrene	ND	10
Indeno(1,2,3-cd)pyrene	ND	10
Dibenz(a,h)anthracene	ND	10
Benzo(g,h,i)perylene	ND	10

Surrogate	%REC	Limits
2-Fluorophenol	58	40-120
Phenol-d5	66	43-120
2,4,6-Tribromophenol	51	40-122
Nitrobenzene-d5	67	56-120
2-Fluorobiphenyl	70	55-120
Terphenyl-d14	65	34-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C
Matrix:	Water	Batch#:	142719
Units:	ug/L	Prepared:	09/19/08
Diln Fac:	1.000	Analyzed:	09/22/08

Type: BS Lab ID: QC461201

Analyte	Spiked	Result	%REC	Limits
Phenol	80.00	56.80	71	45-120
2-Chlorophenol	80.00	59.47	74	52-120
1,4-Dichlorobenzene	80.00	50.38	63	47-120
N-Nitroso-di-n-propylamine	80.00	52.32	65	38-120
1,2,4-Trichlorobenzene	80.00	46.17	58	46-120
4-Chloro-3-methylphenol	80.00	59.46	74	55-120
Acenaphthene	30.00	23.03	77	54-120
4-Nitrophenol	80.00	57.75	72	46-120
2,4-Dinitrotoluene	80.00	71.78	90	56-120
Pentachlorophenol	80.00	45.01	56	50-121
Pyrene	30.00	25.69	86	54-120

Surrogate	%REC	Limits
2-Fluorophenol	60	40-120
Phenol-d5	70	43-120
2,4,6-Tribromophenol	88	40-122
Nitrobenzene-d5	70	56-120
2-Fluorobiphenyl	79	55-120
Terphenyl-d14	73	34-120

Type: BSD Lab ID: QC461202

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Phenol	80.00	56.43	71	45-120	1	24
2-Chlorophenol	80.00	58.80	73	52-120	1	23
1,4-Dichlorobenzene	80.00	51.09	64	47-120	1	29
N-Nitroso-di-n-propylamine	80.00	52.54	66	38-120	0	25
1,2,4-Trichlorobenzene	80.00	46.66	58	46-120	1	28
4-Chloro-3-methylphenol	80.00	59.30	74	55-120	0	20
Acenaphthene	30.00	22.88	76	54-120	1	20
4-Nitrophenol	80.00	57.65	72	46-120	0	23
2,4-Dinitrotoluene	80.00	71.71	90	56-120	0	20
Pentachlorophenol	80.00	47.65	60	50-121	6	23
Pyrene	30.00	26.25	87	54-120	2	22

Surrogate	%REC	Limits
2-Fluorophenol	63	40-120
Phenol-d5	70	43-120
2,4,6-Tribromophenol	89	40-122
Nitrobenzene-d5	70	56-120
2-Fluorobiphenyl	78	55-120
Terphenyl-d14	75	34-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Metals Analytical Report

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2288	Sampled:	09/18/08
Matrix:	Water	Received:	09/18/08
Units:	ug/L	Prepared:	09/19/08
Diln Fac:	1.000	Analyzed:	09/19/08
Batch#:	142704		

Type: SAMPLE Lab ID: 206139-005

Analyte	Result	RL
Cadmium	ND	5.0
Silver	ND	5.0

Type: BLANK Lab ID: QC461133

Analyte	Result	RL
Cadmium	ND	5.0
Silver	ND	5.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Matrix:	Water	Batch#:	142704
Units:	ug/L	Prepared:	09/19/08
Diln Fac:	1.000	Analyzed:	09/19/08

Type: BS Lab ID: QC461134

Analyte	Spiked	Result	%REC	Limits
Cadmium	50.00	51.06	102	80-120
Silver	50.00	48.46	97	80-120

Type: BSD Lab ID: QC461135

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Cadmium	50.00	50.12	100	80-120	2	20
Silver	50.00	47.47	95	80-120	2	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	142704
MSS Lab ID:	205905-003	Sampled:	09/08/08
Matrix:	Water	Received:	09/10/08
Units:	ug/L	Prepared:	09/19/08
Diln Fac:	1.000	Analyzed:	09/19/08

Type: MS Lab ID: QC461136

Analyte	MSS Result	Spiked	Result	%REC	Limits
Cadmium	<0.3309	50.00	51.29	103	80-120
Silver	1.423	50.00	48.17	93	69-120

Type: MSD Lab ID: QC461137

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Cadmium	50.00	51.39	103	80-120	0	20
Silver	50.00	49.01	95	69-120	2	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	142704
MSS Lab ID:	205905-003	Sampled:	09/08/08
Lab ID:	QC461138	Received:	09/10/08
Matrix:	Water	Analyzed:	09/19/08
Units:	ug/L		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim
Cadmium	ND	5.000	ND	25.00	NC	10
Silver	1.423	5.000	6.836 J	25.00	NC	10

J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	142704
MSS Lab ID:	205905-003	Sampled:	09/08/08
Lab ID:	QC461139	Received:	09/10/08
Matrix:	Water	Analyzed:	09/19/08
Units:	ug/L		

Analyte	MSS Result	Spiked	Result	%REC	Limits
Cadmium	<0.3309	50.00	48.76	98	75-125
Silver	1.423	50.00	40.61	78	75-125

Curtis & Tompkins, Ltd.

Silver

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3050B
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Silver	Batch#:	142720
Matrix:	Soil	Sampled:	09/17/08
Units:	mg/Kg	Received:	09/18/08
Basis:	as received	Prepared:	09/19/08
Diln Fac:	1.000	Analyzed:	09/22/08

Field ID	Type	Lab ID	Result	RL
SSLF2-4-12.5'	SAMPLE	206139-010	ND	0.25
SSLF2-4-20'	SAMPLE	206139-011	ND	0.25
SSLF2-4-25'	SAMPLE	206139-016	ND	0.25
SSLF2-4-32.5'	SAMPLE	206139-017	ND	0.25
	BLANK	QC461205	ND	0.25

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Silver

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3050B
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Silver	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	142720
MSS Lab ID:	206136-002	Sampled:	09/18/08
Matrix:	Soil	Received:	09/18/08
Units:	mg/Kg	Prepared:	09/19/08
Basis:	as received	Analyzed:	09/22/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC461206		10.00	9.256	93	80-120		
BSD	QC461207		10.00	9.383	94	80-120	1	20
MS	QC461208	0.3454	9.709	8.844	88	65-120		
MSD	QC461209		9.804	9.427	93	65-120	5	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Cadmium

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3050B
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Cadmium	Batch#:	142720
Matrix:	Soil	Sampled:	09/17/08
Units:	mg/Kg	Received:	09/18/08
Basis:	as received	Prepared:	09/19/08
Diln Fac:	1.000	Analyzed:	09/22/08

Field ID	Type	Lab ID	Result	RL
SSLF2-4-12.5'	SAMPLE	206139-010	1.3	0.25
SSLF2-4-20'	SAMPLE	206139-011	1.1	0.25
SSLF2-4-25'	SAMPLE	206139-016	1.2	0.25
SSLF2-4-32.5'	SAMPLE	206139-017	1.0	0.25
	BLANK	QC461205	ND	0.25

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Cadmium

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3050B
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Cadmium	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	142720
MSS Lab ID:	206136-002	Sampled:	09/18/08
Matrix:	Soil	Received:	09/18/08
Units:	mg/Kg	Prepared:	09/19/08
Basis:	as received	Analyzed:	09/22/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC461206		10.00	9.423	94	80-120		
BSD	QC461207		10.00	9.543	95	80-120	1	20
MS	QC461208	1.203	9.709	9.386	84	65-120		
MSD	QC461209		9.804	9.993	90	65-120	5	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Hexavalent Chromium

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Field ID:	GWGW2288	Batch#:	142664
Matrix:	Water	Sampled:	09/18/08 07:30
Units:	ug/L	Received:	09/18/08

Type	Lab ID	Result	RL	Analyzed
SAMPLE	206139-005	26	0.50	09/18/08 17:18
BLANK	QC460970	ND	0.50	09/18/08 16:39

ND= Not Detected
RL= Reporting Limit

6.0

Curtis & Tompkins, Ltd.

Batch QC Report

Hexavalent Chromium

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Units:	ug/L
Field ID:	GWGW2288	Batch#:	142664
MSS Lab ID:	206139-005	Sampled:	09/18/08 07:30
Matrix:	Water	Received:	09/18/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
BS	QC460971		20.00	19.70	99	90-110			1.000	09/18/08 16:53
BSD	QC460972		20.00	19.39	97	90-110	2	20	1.000	09/18/08 17:05
MS	QC460973	25.74	10.20	36.13	102	85-115			1.020	09/18/08 17:32
MSD	QC460974		10.20	36.04	101	85-115	0	20	1.020	09/18/08 17:44

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Hexavalent Chromium

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3060A
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Matrix:	Soil	Batch#:	142677
Units:	mg/Kg	Received:	09/18/08
Basis:	as received	Prepared:	09/22/08 00:00

Field ID	Type	Lab ID	Result	RL	Sampled	Analyzed
SSLF2-4-12.5'	SAMPLE	206139-010	ND	0.020	09/17/08	09/23/08 11:17
SSLF2-4-20'	SAMPLE	206139-011	ND	0.020	09/17/08	09/23/08 11:30
SSWBH-2-15'	SAMPLE	206139-012	ND	0.020	09/16/08	09/23/08 11:42
SSWBH-2-20'	SAMPLE	206139-013	ND	0.020	09/16/08	09/23/08 11:55
SSWBH-2-30'	SAMPLE	206139-014	ND	0.020	09/16/08	09/23/08 12:08
SSWBH-2-35'	SAMPLE	206139-015	ND	0.020	09/16/08	09/23/08 12:20
SSLF2-4-25'	SAMPLE	206139-016	ND	0.020	09/17/08	09/23/08 12:59
SSLF2-4-32.5'	SAMPLE	206139-017	ND	0.020	09/17/08	09/23/08 13:11
	BLANK	QC461017	ND	0.020		09/23/08 10:27

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Hexavalent Chromium

Lab #:	206139	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3060A
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Diln Fac:	5.000
Field ID:	SSWBH3-7.5'	Batch#:	142677
MSS Lab ID:	206086-008	Sampled:	09/16/08
Matrix:	Soil	Received:	09/16/08
Units:	mg/Kg	Prepared:	09/22/08 00:00
Basis:	as received		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
LCS	QC461018		40.00	40.97	102	80-120			09/20/08 10:04
MS	QC461019	ND	40.00	42.81	107	70-130			09/20/08 10:17
MSD	QC461020		40.16	40.08	100	70-130	7	30	09/20/08 10:30

ND= Not Detected
RPD= Relative Percent Difference

206185

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-32
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
A qualified Associates Incorporated, DBA

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Client Contact		Project Manager: Bob Devany	Sampled by: R. Davis	Date: 9/19/08	COC Number: UCD20080919-1
Weiss Associates		Tel: 510-450-6144	Lab Contact: WO/PO# 08-03	Carrier: N/A	Page 1 of 1
5801 Christie Avenue, Suite 600		Analysis Turnaround Time			Job No. 388-1856-1-32
Emeryville, CA 94608		Calendar (C) or Work Days (W) --- 5W			
(510) 450-6000	Phone	TAT if different from Below			SDG No.
(510) 547-5043	FAX	☐ 2 weeks			
		☐ 1 week			
Job Name: UC Davis		☐ 2 days			
Address: One Shields Ave, Davis		☐ 1 day			

Normal TAT

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr (VI) 7199/3060A	SVOCs (8270/3550)	~~Pesticides (8081/3550)~~	Sb, Ba, Cd, Cu, Mn, Ag 6010B	Sample Specific Notes:
~~SSWBH-3~~				~~soil~~						
1 GWGW2289	9/19/08	08:30	bailed water	water	1				X	Borehole ID: LF3-2
2 GWGW2290	9/18/08	08:30	1	1	1		X			Borehole ID: ET-2
						1	1	1	4	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **LEVEL IV REPORTING**

W.O. # 0805

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Weiss Associates	9/19/08 14:20	[signature]	C&T	9/19/08 14:20
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

cold, intact

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 206185 Date Received 9/19/08 Number of coolers Ø
Client WRISS ASSC. Project UC DAVIS

Date Opened 9/19/08 By (print) M. VILLANUEVA (sign) [signature]
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc)? ..... YES NO
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☐ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? ..... YES NO N/A
3. Were custody papers dry and intact when received? ..... YES NO
4. Were custody papers filled out properly (ink, signed, etc)? ..... YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ..... YES NO
6. Indicate the packing in cooler: (if other, describe) _____

   ☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☑ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels
7. Temperature documentation:

   Type of ice used: ☑ Wet ☐ Blue/Gel ☐ None Temp(°C) _____

   ☑ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ..... YES NO
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? ..... YES NO
10. Are samples in the appropriate containers for indicated tests? ..... YES NO
11. Are sample labels present, in good condition and complete? ..... YES NO
12. Do the sample labels agree with custody papers? ..... YES NO
13. Was sufficient amount of sample sent for tests requested? ..... YES NO
14. Are the samples appropriately preserved? ..... YES NO N/A
15. Are bubbles > 6mm absent in VOA samples? ..... YES NO N/A
16. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	206185	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C
Field ID:	GWGW2290	Batch#:	142785
Lab ID:	206185-002	Sampled:	09/18/08
Matrix:	Water	Received:	09/19/08
Units:	ug/L	Prepared:	09/22/08
Diln Fac:	1.000	Analyzed:	09/24/08

Analyte	Result	RL
N-Nitrosodimethylamine	ND	9.4
Phenol	ND	9.4
bis(2-Chloroethyl)ether	ND	9.4
2-Chlorophenol	ND	9.4
1,3-Dichlorobenzene	ND	9.4
1,4-Dichlorobenzene	ND	9.4
Benzyl alcohol	ND	9.4
1,2-Dichlorobenzene	ND	9.4
2-Methylphenol	ND	9.4
bis(2-Chloroisopropyl) ether	ND	9.4
4-Methylphenol	ND	9.4
N-Nitroso-di-n-propylamine	ND	9.4
Hexachloroethane	ND	9.4
Nitrobenzene	ND	9.4
Isophorone	ND	9.4
2-Nitrophenol	ND	19
2,4-Dimethylphenol	ND	9.4
Benzoic acid	ND	47
bis(2-Chloroethoxy)methane	ND	9.4
2,4-Dichlorophenol	ND	9.4
1,2,4-Trichlorobenzene	ND	9.4
Naphthalene	ND	9.4
4-Chloroaniline	ND	9.4
Hexachlorobutadiene	ND	9.4
4-Chloro-3-methylphenol	ND	9.4
2-Methylnaphthalene	ND	9.4
Hexachlorocyclopentadiene	ND	19
2,4,6-Trichlorophenol	ND	9.4
2,4,5-Trichlorophenol	ND	9.4
2-Chloronaphthalene	ND	9.4
2-Nitroaniline	ND	19
Dimethylphthalate	ND	9.4
Acenaphthylene	ND	9.4
2,6-Dinitrotoluene	ND	9.4
3-Nitroaniline	ND	19
Acenaphthene	ND	9.4
2,4-Dinitrophenol	ND	19
4-Nitrophenol	ND	19
Dibenzofuran	ND	9.4
2,4-Dinitrotoluene	ND	9.4
Diethylphthalate	ND	9.4
Fluorene	ND	9.4
4-Chlorophenyl-phenylether	ND	9.4
4-Nitroaniline	ND	19
4,6-Dinitro-2-methylphenol	ND	19
N-Nitrosodiphenylamine	ND	9.4
Azobenzene	ND	9.4
4-Bromophenyl-phenylether	ND	9.4
Hexachlorobenzene	ND	9.4
Pentachlorophenol	ND	19
Phenanthrene	ND	9.4
Anthracene	ND	9.4
Di-n-butylphthalate	ND	9.4

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	206185	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C
Field ID:	GWGW2290	Batch#:	142785
Lab ID:	206185-002	Sampled:	09/18/08
Matrix:	Water	Received:	09/19/08
Units:	ug/L	Prepared:	09/22/08
Diln Fac:	1.000	Analyzed:	09/24/08

Analyte	Result	RL
Fluoranthene	ND	9.4
Pyrene	ND	9.4
Butylbenzylphthalate	ND	9.4
3,3'-Dichlorobenzidine	ND	19
Benzo(a)anthracene	ND	9.4
Chrysene	ND	9.4
bis(2-Ethylhexyl)phthalate	ND	9.4
Di-n-octylphthalate	ND	9.4
Benzo(b)fluoranthene	ND	9.4
Benzo(k)fluoranthene	ND	9.4
Benzo(a)pyrene	ND	9.4
Indeno(1,2,3-cd)pyrene	ND	9.4
Dibenz(a,h)anthracene	ND	9.4
Benzo(g,h,i)perylene	ND	9.4

Surrogate	%REC	Limits
2-Fluorophenol	17 *	40-120
Phenol-d5	10 *	43-120
2,4,6-Tribromophenol	31 *	40-122
Nitrobenzene-d5	64	56-120
2-Fluorobiphenyl	78	55-120
Terphenyl-d14	23 *	34-120

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	206185	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC461489	Batch#:	142785
Matrix:	Water	Prepared:	09/22/08
Units:	ug/L	Analyzed:	09/23/08

Analyte	Result	RL
N-Nitrosodimethylamine	ND	10
Phenol	ND	10
bis(2-Chloroethyl)ether	ND	10
2-Chlorophenol	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
Benzyl alcohol	ND	10
1,2-Dichlorobenzene	ND	10
2-Methylphenol	ND	10
bis(2-Chloroisopropyl) ether	ND	10
4-Methylphenol	ND	10
N-Nitroso-di-n-propylamine	ND	10
Hexachloroethane	ND	10
Nitrobenzene	ND	10
Isophorone	ND	10
2-Nitrophenol	ND	20
2,4-Dimethylphenol	ND	10
Benzoic acid	ND	50
bis(2-Chloroethoxy)methane	ND	10
2,4-Dichlorophenol	ND	10
1,2,4-Trichlorobenzene	ND	10
Naphthalene	ND	10
4-Chloroaniline	ND	10
Hexachlorobutadiene	ND	10
4-Chloro-3-methylphenol	ND	10
2-Methylnaphthalene	ND	10
Hexachlorocyclopentadiene	ND	20
2,4,6-Trichlorophenol	ND	10
2,4,5-Trichlorophenol	ND	10
2-Chloronaphthalene	ND	10
2-Nitroaniline	ND	20
Dimethylphthalate	ND	10
Acenaphthylene	ND	10
2,6-Dinitrotoluene	ND	10
3-Nitroaniline	ND	20
Acenaphthene	ND	10
2,4-Dinitrophenol	ND	20
4-Nitrophenol	ND	20
Dibenzofuran	ND	10
2,4-Dinitrotoluene	ND	10
Diethylphthalate	ND	10
Fluorene	ND	10
4-Chlorophenyl-phenylether	ND	10
4-Nitroaniline	ND	20
4,6-Dinitro-2-methylphenol	ND	20
N-Nitrosodiphenylamine	ND	10
Azobenzene	ND	10
4-Bromophenyl-phenylether	ND	10
Hexachlorobenzene	ND	10
Pentachlorophenol	ND	20
Phenanthrene	ND	10
Anthracene	ND	10
Di-n-butylphthalate	ND	10
Fluoranthene	ND	10

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	206185	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC461489	Batch#:	142785
Matrix:	Water	Prepared:	09/22/08
Units:	ug/L	Analyzed:	09/23/08

Analyte	Result	RL
Pyrene	ND	10
Butylbenzylphthalate	ND	10
3,3'-Dichlorobenzidine	ND	20
Benzo(a)anthracene	ND	10
Chrysene	ND	10
bis(2-Ethylhexyl)phthalate	ND	10
Di-n-octylphthalate	ND	10
Benzo(b)fluoranthene	ND	10
Benzo(k)fluoranthene	ND	10
Benzo(a)pyrene	ND	10
Indeno(1,2,3-cd)pyrene	ND	10
Dibenz(a,h)anthracene	ND	10
Benzo(g,h,i)perylene	ND	10

Surrogate	%REC	Limits
2-Fluorophenol	79	40-120
Phenol-d5	76	43-120
2,4,6-Tribromophenol	63	40-122
Nitrobenzene-d5	70	56-120
2-Fluorobiphenyl	87	55-120
Terphenyl-d14	84	34-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	206185	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C
Matrix:	Water	Batch#:	142785
Units:	ug/L	Prepared:	09/22/08
Diln Fac:	1.000	Analyzed:	09/23/08

Type: BS Lab ID: QC461490

Analyte	Spiked	Result	%REC	Limits
Phenol	80.00	54.32	68	45-120
2-Chlorophenol	80.00	60.15	75	52-120
1,4-Dichlorobenzene	80.00	47.77	60	47-120
N-Nitroso-di-n-propylamine	80.00	49.18	61	38-120
1,2,4-Trichlorobenzene	80.00	50.12	63	46-120
4-Chloro-3-methylphenol	80.00	57.17	71	55-120
Acenaphthene	30.00	22.71	76	54-120
4-Nitrophenol	80.00	58.26	73	46-120
2,4-Dinitrotoluene	80.00	68.28	85	56-120
Pentachlorophenol	80.00	71.19	89	50-121
Pyrene	30.00	29.23	97	54-120

Surrogate	%REC	Limits
2-Fluorophenol	68	40-120
Phenol-d5	68	43-120
2,4,6-Tribromophenol	79	40-122
Nitrobenzene-d5	64	56-120
2-Fluorobiphenyl	80	55-120
Terphenyl-d14	84	34-120

Type: BSD Lab ID: QC461491

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Phenol	80.00	57.08	71	45-120	5	24
2-Chlorophenol	80.00	64.05	80	52-120	6	23
1,4-Dichlorobenzene	80.00	47.35	59	47-120	1	29
N-Nitroso-di-n-propylamine	80.00	51.08	64	38-120	4	25
1,2,4-Trichlorobenzene	80.00	50.08	63	46-120	0	28
4-Chloro-3-methylphenol	80.00	58.42	73	55-120	2	20
Acenaphthene	30.00	23.07	77	54-120	2	20
4-Nitrophenol	80.00	59.88	75	46-120	3	23
2,4-Dinitrotoluene	80.00	70.03	88	56-120	3	20
Pentachlorophenol	80.00	73.65	92	50-121	3	23
Pyrene	30.00	29.79	99	54-120	2	22

Surrogate	%REC	Limits
2-Fluorophenol	72	40-120
Phenol-d5	72	43-120
2,4,6-Tribromophenol	81	40-122
Nitrobenzene-d5	68	56-120
2-Fluorobiphenyl	83	55-120
Terphenyl-d14	85	34-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Metals Analytical Report

Lab #:	206185	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2289	Sampled:	09/19/08
Matrix:	Water	Received:	09/19/08
Units:	ug/L	Prepared:	09/22/08
Diln Fac:	1.000	Analyzed:	09/23/08
Batch#:	142761		

Type: SAMPLE Lab ID: 206185-001

Analyte	Result	RL
Antimony	ND	10
Barium	150	5.0
Cadmium	ND	5.0
Copper	6.8	5.0
Manganese	ND	5.0
Silver	ND	5.0

Type: BLANK Lab ID: QC461365

Analyte	Result	RL
Antimony	ND	10
Barium	ND	5.0
Cadmium	ND	5.0
Copper	ND	5.0
Manganese	ND	5.0
Silver	ND	5.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	206185	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Matrix:	Water	Batch#:	142761
Units:	ug/L	Prepared:	09/22/08
Diln Fac:	1.000	Analyzed:	09/23/08

Type: BS Lab ID: QC461366

Analyte	Spiked	Result	%REC	Limits
Antimony	500.0	509.4	102	80-120
Barium	2,000	2,018	101	80-120
Cadmium	50.00	52.04	104	80-120
Copper	250.0	243.6	97	80-120
Manganese	50.00	51.57	103	80-120
Silver	50.00	51.03	102	80-120

Type: BSD Lab ID: QC461367

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	500.0	486.4	97	80-120	5	20
Barium	2,000	1,923	96	80-120	5	20
Cadmium	50.00	49.69	99	80-120	5	20
Copper	250.0	231.2	92	80-120	5	20
Manganese	50.00	49.64	99	80-120	4	20
Silver	50.00	48.62	97	80-120	5	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	206185	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2289	Batch#:	142761
MSS Lab ID:	206185-001	Sampled:	09/19/08
Matrix:	Water	Received:	09/19/08
Units:	ug/L	Prepared:	09/22/08
Diln Fac:	1.000	Analyzed:	09/23/08

Type: MS Lab ID: QC461368

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	5.016	500.0	503.8	100	75-120
Barium	154.9	2,000	2,119	98	80-120
Cadmium	<0.3309	50.00	49.54	99	80-120
Copper	6.761	250.0	243.5	95	75-120
Manganese	4.198	50.00	56.76	105	73-121
Silver	1.444	50.00	50.83	99	69-120

Type: MSD Lab ID: QC461369

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	500.0	501.9	99	75-120	0	20
Barium	2,000	2,094	97	80-120	1	20
Cadmium	50.00	49.21	98	80-120	1	20
Copper	250.0	239.8	93	75-120	2	20
Manganese	50.00	53.14	98	73-121	7	20
Silver	50.00	49.50	96	69-120	3	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	206185	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2289	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	142761
MSS Lab ID:	206185-001	Sampled:	09/19/08
Lab ID:	QC461370	Received:	09/19/08
Matrix:	Water	Analyzed:	09/23/08
Units:	ug/L		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim
Antimony	5.016	10.00	ND	49.76	NC	10
Barium	154.9	5.000	140.8	25.00	9	10
Cadmium	ND	5.000	ND	25.00	NC	10
Copper	6.761	5.000	11.18 J	25.00	NC	10
Manganese	4.198	5.000	2.365 J	25.00	NC	10
Silver	1.444	5.000	ND	25.00	NC	10

J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	206185	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2289	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	142761
MSS Lab ID:	206185-001	Sampled:	09/19/08
Lab ID:	QC461371	Received:	09/19/08
Matrix:	Water	Analyzed:	09/23/08
Units:	ug/L		

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	5.016	500.0	473.8	94	75-125
Barium	154.9	2,000	2,016	93	75-125
Cadmium	<0.3309	50.00	47.59	95	75-125
Copper	6.761	250.0	231.7	90	75-125
Manganese	4.198	50.00	51.51	95	75-125
Silver	1.444	50.00	41.94	81	75-125

2061258

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-32
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
A geoTrans Associates Incorporated, DBA

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Client Contact		Project Manager: Bob Devany	Sampled by: RKS	Date: 9/23/08	COC Number: UCD20080923-1
Weiss Associates		Tel: 510-450-6144	Lab Contact:	Carrier:	1 of 1 COCs
5801 Christie Avenue, Suite 600		Analysis Turnaround Time			Job No. 388-1856-1-32
Emeryville, CA 94608		Calendar (C) or Work Days (W) --- 5W			SDG No.
(510) 450-6000	Phone	TAT if different from Below ~~XXXXX~~ NORMAL TAT			
(510) 547-5043	FAX	☐ 2 weeks			
		☐ 1 week			
Job Name: UC Davis		☐ 2 days			
Address: One Shields Ave, Davis		☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	DISSOLVED ORGANIC CARBON 5M5310B	Cr, Mn, Fe, B - 6010B *	Cr VI 7196 *	FE II 5M3500 FED	Ca, Mg, K, Na, Ni 6010B *	CHLORIDE, NITRATE, SULFATE 300.0	PHOSPHATE - 5M4500-PE OF * 365.2	CARBONATE, BICARBONATE 310.1	FLUORIDE 5M4500 FC OF 340.1	Sample Specific Notes:
1	BGCr-1-55	9/22/08	1400		GROUND H2O	9		X	X	X	X	X	X	X	X	X	
2	BGCr-1-85	9/22/08	1600		GROUND H2O	9		X	X	X	X	X	X	X	X	X	
																	* FILTERED IN FIELD
																	SHORT HOLD TIME (24,48 HR)
								3	4	1	2	4	1	3	1	1	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____ 1 → FOR ALL

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments:

WORK ORDER 0805

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
KIAN ATKINSON	WEISS ASSOCIATES	9/23/08	Tony Rego	C&T	9/23/08 1245
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 206258 Date Received 9/23/08 Number of coolers 1
Client WEISS ASSC. Project UC DAVIS

Date Opened 9/23/08 By (print) M. VILLENUEVA (sign)
Date Logged in ✓ By (print) ✓ (sign) ✓

1. Did cooler come with a shipping slip (airbill, etc)? ..... YES NO
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☐ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? ..... YES NO N/A
3. Were custody papers dry and intact when received? ..... YES NO
4. Were custody papers filled out properly (ink, signed, etc)? ..... YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ..... YES NO
6. Indicate the packing in cooler: (if other, describe) _____

   ☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☑ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

   Type of ice used: ☐ Wet ☑ Blue/Gel ☐ None Temp(°C) _____

   ☑ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ..... YES NO
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? ..... YES NO
10. Are samples in the appropriate containers for indicated tests? ..... YES NO
11. Are sample labels present, in good condition and complete? ..... YES NO
12. Do the sample labels agree with custody papers? ..... YES NO
13. Was sufficient amount of sample sent for tests requested? ..... YES NO
14. Are the samples appropriately preserved? ..... YES NO N/A
15. Are bubbles > 6mm absent in VOA samples? ..... YES NO N/A
16. Was the client contacted concerning this sample delivery? ..... YES NO
    If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

Curtis & Tompkins, Ltd.

Dissolved Hexavalent Chromium

Lab #:	206258	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Batch#:	142832
Units:	ug/L	Received:	09/23/08
Diln Fac:	1.000		

Field ID	Type	Lab ID	Matrix	Result	RL	Sampled	Analyzed
BGCR-1-55	SAMPLE	206258-001	Filtrate	11	0.50	09/22/08 14:00	09/23/08 17:46
BGCR-1-85	SAMPLE	206258-002	Filtrate	ND	0.50	09/22/08 16:00	09/23/08 17:59
	BLANK	QC461664	Water	ND	0.50		09/23/08 14:54

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Hexavalent Chromium

Lab #:	206258	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Field ID:	BGCR-1-55	Batch#:	142832
MSS Lab ID:	206258-001	Sampled:	09/22/08 14:00
Units:	ug/L	Received:	09/23/08

Type	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
BS	QC461665	Water		20.00	18.96	95	90-110			09/23/08 15:07
BSD	QC461666	Water		20.00	19.36	97	90-110	2	20	09/23/08 15:20
MS	QC461667	Filtrate	10.63	10.00	19.99	94	85-115			09/23/08 18:13
MSD	QC461668	Filtrate		10.00	20.37	97	85-115	2	20	09/23/08 18:26

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206258	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	BGCR-1-55	Batch#:	142844
Lab ID:	206258-001	Sampled:	09/22/08
Matrix:	Filtrate	Received:	09/23/08
Units:	ug/L	Prepared:	09/24/08

Analyte	Result	RL	Diln Fac	Analyzed
Boron	610	100	1.000	09/26/08
Calcium	35,000	500	1.000	09/26/08
Chromium	13	5.0	1.000	09/26/08
Iron	ND	100	1.000	09/26/08
Magnesium	98,000	500	1.000	09/26/08
Manganese	6.0	5.0	1.000	09/26/08
Nickel	ND	5.0	1.000	09/26/08
Potassium	1,300	500	1.000	09/26/08
Sodium	28,000	5,000	10.00	09/29/08

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206258	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	BGCR-1-85	Batch#:	142844
Lab ID:	206258-002	Sampled:	09/22/08
Matrix:	Filtrate	Received:	09/23/08
Units:	ug/L	Prepared:	09/24/08

Analyte	Result	RL	Diln Fac	Analyzed
Boron	520	100	1.000	09/26/08
Calcium	120,000	2,000	10.00	09/29/08
Chromium	100	5.0	1.000	09/26/08
Iron	23,000	100	1.000	09/26/08
Magnesium	170,000	2,000	10.00	09/29/08
Manganese	16,000	50	10.00	09/29/08
Nickel	800	5.0	1.000	09/26/08
Potassium	4,300	500	1.000	09/26/08
Sodium	27,000	5,000	10.00	09/29/08

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206258	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC461719	Batch#:	142844
Matrix:	Water	Prepared:	09/24/08
Units:	ug/L	Analyzed:	09/26/08

Analyte	Result	RL
Boron	ND	100
Calcium	ND	500
Chromium	ND	5.0
Iron	ND	100
Magnesium	ND	500
Manganese	ND	5.0
Nickel	ND	5.0
Potassium	ND	500
Sodium	ND	500

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206258	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Matrix:	Water	Batch#:	142844
Units:	ug/L	Prepared:	09/24/08
Diln Fac:	1.000		

Type: BS Lab ID: QC461720

Analyte	Spiked	Result	%REC	Limits	Analyzed
Boron	1,000	1,116	112	80-120	09/26/08
Calcium	20,000	21,950	110	80-120	09/26/08
Chromium	200.0	213.8	107	80-120	09/26/08
Iron	1,000	1,110	111	80-120	09/26/08
Magnesium	20,000	18,090	90	80-120	10/02/08
Manganese	50.00	56.96	114	80-120	09/26/08
Nickel	500.0	530.0	106	80-120	09/26/08
Potassium	10,000	10,890	109	80-120	09/26/08
Sodium	20,000	22,080	110	80-120	09/26/08

Type: BSD Lab ID: QC461721

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
Boron	1,000	1,127	113	80-120	1	20	09/26/08
Calcium	20,000	22,970	115	80-120	5	20	09/26/08
Chromium	200.0	216.7	108	80-120	1	20	09/26/08
Iron	1,000	1,166	117	80-120	5	20	09/26/08
Magnesium	20,000	19,660	98	80-120	8	20	10/02/08
Manganese	50.00	57.34	115	80-120	1	20	09/26/08
Nickel	500.0	534.1	107	80-120	1	20	09/26/08
Potassium	10,000	11,320	113	80-120	4	20	09/26/08
Sodium	20,000	23,020	115	80-120	4	20	09/26/08

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206258	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	142844
MSS Lab ID:	206099-006	Sampled:	09/16/08
Matrix:	Water	Received:	09/17/08
Units:	ug/L	Prepared:	09/24/08
Diln Fac:	1.000		

Type: MS Lab ID: QC461722

Analyte	MSS Result	Spiked	Result	%REC	Limits	Analyzed
Boron	607.0	1,000	1,707	110	79-121	09/26/08
Calcium	67,700	20,000	89,270	108	63-130	09/26/08
Chromium	1.578	200.0	209.9	104	78-120	09/26/08
Iron	59.10	1,000	1,153	109	66-126	09/26/08
Magnesium	28,400	20,000	45,920	88	66-126	10/02/08
Manganese	3,146	50.00	3,220	148 NM	73-121	09/26/08
Nickel	10.04	500.0	509.3	100	74-120	09/26/08
Potassium	5,684	10,000	16,480	108	68-125	09/26/08
Sodium	211,200	20,000	250,300 >LR	196 NM	60-131	09/26/08

Type: MSD Lab ID: QC461723

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
Boron	1,000	1,596	99	79-121	7	20	09/26/08
Calcium	20,000	74,100	32 *	63-130	19	20	09/26/08
Chromium	200.0	199.0	99	78-120	5	20	09/26/08
Iron	1,000	974.0	91	66-126	17	20	09/26/08
Magnesium	20,000	46,780	92	66-126	2	20	10/02/08
Manganese	50.00	2,942	-409 NM	73-121	9	20	09/26/08
Nickel	500.0	482.2	94	74-120	5	20	09/26/08
Potassium	10,000	14,000	83	68-125	16	20	09/26/08
Sodium	20,000	206,100 >LR	-26 NM	60-131	NC	20	09/26/08

*= Value outside of QC limits; see narrative
NC= Not Calculated
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206258	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Units:	ug/L
Type:	Serial Dilution	Batch#:	142844
MSS Lab ID:	206099-006	Sampled:	09/16/08
Lab ID:	QC461724	Received:	09/17/08
Matrix:	Water		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln Fac	Analyzed
Boron	607.0	100.0	571.6	500.0	6	10	5.000	09/26/08
Calcium	67,700	500.0	62,600	1,000	8	10	5.000	09/26/08
Chromium	1.578	5.000	ND	25.00	NC	10	5.000	09/26/08
Iron	59.10	100.0	ND	500.0	NC	10	5.000	09/26/08
Magnesium	26,860	2,000	25,610	10,000	5	10	50.00	09/29/08
Manganese	3,146	5.000	2,928	25.00	7	10	5.000	09/26/08
Nickel	10.04	5.000	10.82 J	25.00	NC	10	5.000	09/26/08
Potassium	5,684	500.0	5,396	2,500	5	10	5.000	09/26/08
Sodium	211,200	5,000	179,600	25,000	15 *	10	50.00	09/29/08

*= Value outside of QC limits; see narrative
J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206258	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Units:	ug/L
Type:	Post Digest Spike	Batch#:	142844
MSS Lab ID:	206099-006	Sampled:	09/16/08
Lab ID:	QC461725	Received:	09/17/08
Matrix:	Water		

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln Fac	Analyzed
Boron	607.0	1,000	1,602	100	75-125	1.000	09/26/08
Calcium	67,700	20,000	79,600	59 *	75-125	1.000	09/26/08
Chromium	1.578	200.0	197.2	98	75-125	1.000	09/26/08
Iron	59.10	1,000	1,058	100	75-125	1.000	09/26/08
Magnesium	26,860	200,000	212,800	93	75-125	10.00	09/29/08
Manganese	3,146	50.00	2,950	-393 NM	75-125	1.000	09/26/08
Nickel	10.04	500.0	477.6	94	75-125	1.000	09/26/08
Potassium	5,684	10,000	14,990	93	75-125	1.000	09/26/08
Sodium	211,200	200,000	395,900	92	75-125	10.00	09/29/08

*= Value outside of QC limits; see narrative
NM= Not Meaningful: Sample concentration > 4X spike concentration

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	206258	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Matrix:	Water	Received:	09/23/08
Units:	mg/L		

Field ID: BGCR-1-55 Lab ID: 206258-001
Type: SAMPLE Sampled: 09/22/08 14:00

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Fluoride	0.42	0.10	1.000	142937	09/25/08 18:13
Chloride	19	0.40	2.000	142823	09/23/08 20:25
Nitrogen, Nitrate	7.7	0.10	2.000	142823	09/23/08 20:25
Sulfate	47	1.0	2.000	142823	09/23/08 20:25

Field ID: BGCR-1-85 Lab ID: 206258-002
Type: SAMPLE Sampled: 09/22/08 16:00

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Fluoride	ND	0.50	5.000	142937	09/25/08 18:30
Chloride	21	1.0	5.000	142823	09/23/08 19:32
Nitrogen, Nitrate	5.7	0.25	5.000	142823	09/23/08 19:32
Sulfate	1,300	25	50.00	142823	09/24/08 08:18

Type: BLANK Batch#: 142823
Lab ID: QC461634 Analyzed: 09/23/08 11:44
Diln Fac: 1.000

Analyte	Result	RL
Chloride	ND	0.20
Nitrogen, Nitrate	ND	0.05
Sulfate	ND	0.50

Type: BLANK Batch#: 142937
Lab ID: QC462115 Analyzed: 09/25/08 13:02
Diln Fac: 1.000

Analyte	Result	RL
Fluoride	ND	0.10

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	206258	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Matrix:	Water	Diln Fac:	1.000
Units:	mg/L	Batch#:	142823

Type: BS Analyzed: 09/23/08 12:01
Lab ID: QC461635

Analyte	Spiked	Result	%REC	Limits
Chloride	4.000	4.074	102	80-120
Nitrogen, Nitrate	1.000	0.9770	98	80-120
Sulfate	10.00	10.06	101	80-120

Type: BSD Analyzed: 09/23/08 12:18
Lab ID: QC461636

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Chloride	4.000	4.066	102	80-120	0	20
Nitrogen, Nitrate	1.000	0.9874	99	80-120	1	20
Sulfate	10.00	10.05	100	80-120	0	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	206258	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Field ID:	BGCR-1-55	Diln Fac:	5.000
MSS Lab ID:	206258-001	Batch#:	142823
Matrix:	Water	Sampled:	09/22/08 14:00
Units:	mg/L	Received:	09/23/08

Type: MS Analyzed: 09/24/08 02:13
Lab ID: QC461669

Analyte	MSS Result	Spiked	Result	%REC	Limits
Chloride	18.96	10.00	29.67	107	80-120
Nitrogen, Nitrate	7.651	2.500	10.14	99	80-120
Sulfate	47.47	25.00	73.90	106	80-120

Type: MSD Analyzed: 09/24/08 02:30
Lab ID: QC461670

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Chloride	10.00	29.64	107	80-120	0	20
Nitrogen, Nitrate	2.500	10.08	97	80-120	1	20
Sulfate	25.00	73.25	103	80-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	206258	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Analyte:	Fluoride	Diln Fac:	1.000
Matrix:	Water	Batch#:	142937
Units:	mg/L		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
BS	QC462116	2.000	1.973	99	74-120			09/25/08 13:19
BSD	QC462117	2.000	1.969	98	74-120	0	20	09/25/08 13:37

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	206258	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Analyte:	Fluoride	Diln Fac:	5.000
Field ID:	ZZZZZZZZZZ	Batch#:	142937
MSS Lab ID:	206298-005	Sampled:	09/23/08 13:58
Matrix:	Water	Received:	09/24/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
MS	QC462118	0.03273	5.000	4.995	99	66-120			09/25/08 20:32
MSD	QC462119		5.000	4.998	99	66-120	0	20	09/25/08 20:50

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Hexavalent Chromium

Lab #:	206258	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Batch#:	142832
Units:	ug/L	Received:	09/23/08
Diln Fac:	1.000		

Field ID	Type	Lab ID	Matrix	Result	RL	Sampled	Analyzed
BGCR-1-55	SAMPLE	206258-001	Filtrate	11	0.50	09/22/08 14:00	09/23/08 17:46
BGCR-1-85	SAMPLE	206258-002	Filtrate	ND	0.50	09/22/08 16:00	09/23/08 17:59
	BLANK	QC461664	Water	ND	0.50		09/23/08 14:54

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Hexavalent Chromium

Lab #:	206258	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Field ID:	BGCR-1-55	Batch#:	142832
MSS Lab ID:	206258-001	Sampled:	09/22/08 14:00
Units:	ug/L	Received:	09/23/08

Type	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
BS	QC461665	Water		20.00	18.96	95	90-110			09/23/08 15:07
BSD	QC461666	Water		20.00	19.36	97	90-110	2	20	09/23/08 15:20
MS	QC461667	Filtrate	10.63	10.00	19.99	94	85-115			09/23/08 18:13
MSD	QC461668	Filtrate		10.00	20.37	97	85-115	2	20	09/23/08 18:26

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	206258	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Matrix:	Water	Sampled:	09/22/08
Units:	mg/L	Received:	09/23/08
Batch#:	142875	Analyzed:	09/24/08

Field ID:	BGCR-1-55	Lab ID:	206258-001
Type:	SAMPLE	Diln Fac:	6.700

Analyte	Result	RL
Alkalinity, Bicarbonate	490	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	490	6.7

Field ID:	BGCR-1-85	Lab ID:	206258-002
Type:	SAMPLE	Diln Fac:	6.700

Analyte	Result	RL
Alkalinity, Bicarbonate	1,400	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	1,400	6.7

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC461846		

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	206258	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	4.000
Lab ID:	QC461847	Batch#:	142875
Matrix:	Water	Analyzed:	09/24/08

Spiked	Result	%REC	Limits
200.0	194.0	97	90-110

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	206258	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	4.000
Field ID:	ZZZZZZZZZZ	Batch#:	142875
MSS Lab ID:	206263-007	Sampled:	09/23/08
Matrix:	Water	Received:	09/23/08
Units:	mg/L	Analyzed:	09/24/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC461848	3.700	200.0	200.8	99	80-120		
MSD	QC461849		200.0	196.8	97	80-120	2	25

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Organic Carbon (DOC)

Lab #:	206258	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Dissolved Organic Carbon	Batch#:	142962
Matrix:	Water	Sampled:	09/22/08
Units:	mg/L	Received:	09/23/08
Diln Fac:	1.000	Analyzed:	09/26/08

Field ID	Type	Lab ID	Result	RL
BGCR-1-55	SAMPLE	206258-001	2.3	1.0
BGCR-1-85	SAMPLE	206258-002	5.3	1.0
	BLANK	QC462235	ND	1.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Organic Carbon (DOC)

Lab #:	206258	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Dissolved Organic Carbon	Batch#:	142962
Field ID:	BGCR-1-55	Sampled:	09/22/08
MSS Lab ID:	206258-001	Received:	09/23/08
Matrix:	Water	Analyzed:	09/26/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
LCS	QC462236		10.00	9.929	99	90-110			1.000
MS	QC462237	2.342	10.00	12.16	98	80-121			2.000
MSD	QC462238		10.00	12.22	99	80-121	0	20	2.000

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Ferrous Iron (Fe+2)

Lab #:	206258	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM3500FE-B
Analyte:	Ferrous Iron (Fe+2)	Batch#:	142836
Matrix:	Water	Received:	09/23/08
Units:	mg/L	Prepared:	09/23/08 20:15
Diln Fac:	1.000	Analyzed:	09/23/08 20:32

Field ID	Type	Lab ID	Result	RL	Sampled
BGCR-1-55	SAMPLE	206258-001	ND b	0.10	09/22/08 14:00
BGCR-1-85	SAMPLE	206258-002	0.34 b	0.10	09/22/08 16:00
	BLANK	QC461688	ND	0.10	

b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Ferrous Iron (Fe+2)

Lab #:	206258	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM3500FE-B
Analyte:	Ferrous Iron (Fe+2)	Batch#:	142836
Field ID:	ZZZZZZZZZZ	Sampled:	09/23/08 10:16
MSS Lab ID:	206259-001	Received:	09/23/08
Units:	mg/L	Prepared:	09/23/08 20:15
Diln Fac:	1.000	Analyzed:	09/23/08 20:32

Type	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC461689	Water		0.8000	0.8036	100	90-110		
MS	QC461690	Filtrate	<0.1000	0.8000	0.7804	98	73-136		
MSD	QC461691	Filtrate		0.8000	0.7775	97	73-136	0	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Total Phosphorous

Lab #:	206258	Location:	UC Davis
Client:	Weiss Associates	Analysis:	SM4500P-E
Project#:	388-1856		
Analyte:	Phosphorous	Sampled:	09/22/08
Units:	mg/L	Received:	09/23/08
Batch#:	143031	Analyzed:	09/29/08

Field ID	Type	Lab ID	Matrix	Result	RL	Diln Fac
BGCR-1-55	SAMPLE	206258-001	Filtrate	0.10	0.050	1.667
BGCR-1-85	SAMPLE	206258-002	Filtrate	0.091	0.030	1.000
	BLANK	QC462536	Water	ND	0.030	1.000

ND= Not Detected
RL= Reporting Limit

18.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Total Phosphorous

Lab #:	206258	Location:	UC Davis
Client:	Weiss Associates	Analysis:	SM4500P-E
Project#:	388-1856		
Analyte:	Phosphorous	Batch#:	143031
Field ID:	ZZZZZZZZZZ	Sampled:	09/16/08
MSS Lab ID:	206121-001	Received:	09/17/08
Matrix:	Water	Analyzed:	09/29/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
LCS	QC462537		0.3960	0.4201	106	72-134			1.000
MS	QC462538	0.03318	0.3960	0.4411	103	19-182			1.667
MSD	QC462539		0.3960	0.4326	101	19-182	2	26	1.667

RPD= Relative Percent Difference

206283

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-32
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
A Geotrans Associates Incorporated, USA

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Client Contact	Project Manager: Bob Devany	Sampled by: RKD	Date: 9/24/08	COC Number: UCD 20080924-1
Weiss Associates	Tel: 510-450-6144	Lab Contact:	Carrier:	___ of ___ COCs
5801 Christie Avenue, Suite 600	Analysis Turnaround Time			Job No. 388-1856-1-32
Emeryville, CA 94608	Calendar (C) or Work Days (W) --- 5W			
(510) 450-6000 Phone	TAT if different from Below NORMAL TAT EXCEPT WHEN NOTED			SDG No.
(510) 547-5043 FAX	☐ 2 weeks			
	☐ 1 week			
Job Name: UC Davis	☐ 2 days			
Address: One Shields Ave, Davis	☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	DISSOLVED ORGANIC CARBON 5M5310B	Cr, Mn, Fe, B - 6010B *	Cr VI 7199 *	Fe II SM3500 FE-D	Ca, Mg, K, Na, Ni 6010B *	CHLORIDE, NITRATE, SULFATE 300.0	PHOSPHATE - SM4500-PE 02 *	CARBONATE 310.1, BICARBONATE	FLUORIDE SM4500 FE 02 340.1	Cr, Cu, Se 6010B **	Sample Specific Notes:
1	GWGW2300 (BGG-2-65)	9/23/08	1400		WATER	9		X	X	X	X	X	X	X	X	X		
2	GWGW2301 (BGG-2-85)	9/24/08	0830		WATER	4		X		X	X		X					
3	GWGW2279	9/10/08	0830		WATER	1												Cr 24 TAT **
4	GWGW2302 (BGG-2-85-DUPLICATE)	9/24/08	0830		WATER	4		X		X	X		X					* FILTERED IN FIELD
																		SHORT HOLD TIMES (24/48 HR)
								3	4	1	2	4	1	3	1	1		

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____ 1 → ALSO FROZEN

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments:

Work Order D8D5

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Weiss Assoc.	9/24/08 1140	[signature]	CT	9/24/08 11:40am
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

cold, intact

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 206283 Date Received 9-24-08 Number of coolers 1
Client Weiss Project UC Davis

Date Opened 9-24-08 By (print) F Nichols (sign) [signature]
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc)?.....YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? ..... YES NO (N/A)
3. Were custody papers dry and intact when received?..... (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)?..... (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form)..... (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

   ☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☒ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

   Type of ice used: ☐ Wet ☐ Blue/Gel ☒ None Temp(°C) Cold

   ☐ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? .....YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened?..... (YES) NO
10. Are samples in the appropriate containers for indicated tests? ..... (YES) NO
11. Are sample labels present, in good condition and complete? ..... (YES) NO
12. Do the sample labels agree with custody papers? ..... (YES) NO
13. Was sufficient amount of sample sent for tests requested? ..... (YES) NO
14. Are the samples appropriately preserved? ..... (YES) NO N/A
15. Are bubbles > 6mm absent in VOA samples?.....YES NO (N/A)
16. Was the client contacted concerning this sample delivery?.....YES NO
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

Curtis & Tompkins, Ltd.

Metals Analytical Report

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2279	Sampled:	09/10/08
Units:	ug/L	Received:	09/24/08
Diln Fac:	1.000	Prepared:	09/25/08
Batch#:	142923	Analyzed:	09/25/08

Type: SAMPLE Matrix: Water
Lab ID: 206283-003

Analyte	Result	RL
Chromium	190	5.0
Copper	55	5.0
Selenium	ND	10

Type: BLANK Matrix: Filtrate
Lab ID: QC462041

Analyte	Result	RL
Chromium	ND	5.0
Copper	ND	5.0
Selenium	ND	10

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Matrix:	Filtrate	Batch#:	142923
Units:	ug/L	Prepared:	09/25/08
Diln Fac:	1.000	Analyzed:	09/25/08

Type: BS Lab ID: QC462042

Analyte	Spiked	Result	%REC	Limits
Chromium	200.0	193.1	97	80-120
Copper	250.0	239.5	96	80-120
Selenium	100.0	97.29	97	80-120

Type: BSD Lab ID: QC462043

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Chromium	200.0	173.8	87	80-120	11	20
Copper	250.0	214.6	86	80-120	11	20
Selenium	100.0	86.34	86	80-120	12	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2300(BGCR-2-65)	Sampled:	09/23/08
Lab ID:	206283-001	Received:	09/24/08
Matrix:	Filtrate	Prepared:	09/25/08
Units:	ug/L	Analyzed:	09/25/08
Batch#:	142923		

Analyte	Result	RL	Diln Fac
Boron	880	100	1.000
Calcium	170,000	3,300	10.00
Chromium	1,100	5.0	1.000
Iron	470,000	1,000	10.00
Magnesium	330,000	3,300	10.00
Manganese	12,000	50	10.00
Nickel	2,200	5.0	1.000
Potassium	22,000	500	1.000
Sodium	71,000	500	1.000

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC462041	Batch#:	142923
Matrix:	Filtrate	Prepared:	09/25/08
Units:	ug/L	Analyzed:	09/25/08

Analyte	Result	RL
Boron	ND	100
Calcium	ND	500
Chromium	ND	5.0
Iron	ND	100
Magnesium	ND	500
Manganese	ND	5.0
Nickel	ND	5.0
Potassium	ND	500
Sodium	ND	500

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Matrix:	Filtrate	Batch#:	142923
Units:	ug/L	Prepared:	09/25/08
Diln Fac:	1.000	Analyzed:	09/25/08

Type: BS Lab ID: QC462042

Analyte	Spiked	Result	%REC	Limits
Boron	1,000	1,038	104	80-120
Calcium	20,000	21,140	106	80-120
Chromium	200.0	193.1	97	80-120
Iron	1,000	1,046	105	80-120
Magnesium	20,000	21,600	108	80-120
Manganese	50.00	50.67	101	80-120
Nickel	500.0	496.2	99	80-120
Potassium	10,000	10,100	101	80-120
Sodium	20,000	20,900	104	80-120

Type: BSD Lab ID: QC462043

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Boron	1,000	933.6	93	80-120	11	20
Calcium	20,000	20,070	100	80-120	5	20
Chromium	200.0	173.8	87	80-120	11	20
Iron	1,000	990.2	99	80-120	5	20
Magnesium	20,000	20,520	103	80-120	5	20
Manganese	50.00	45.40	91	80-120	11	20
Nickel	500.0	447.0	89	80-120	10	20
Potassium	10,000	9,668	97	80-120	4	20
Sodium	20,000	19,240	96	80-120	8	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2300(BGCR-2-65)	Batch#:	142923
MSS Lab ID:	206283-001	Sampled:	09/23/08
Matrix:	Filtrate	Received:	09/24/08
Units:	ug/L	Prepared:	09/25/08
Diln Fac:	1.000	Analyzed:	09/25/08

Type: MS Lab ID: QC462044

Analyte	MSS Result	Spiked	Result	%REC	Limits
Boron	875.9	1,000	1,784	91	79-121
Calcium	167,300	20,000	189,500 >LR	111 NM	63-130
Chromium	1,071	200.0	1,218	74 NM	78-120
Iron	469,000	1,000	443,100 >LR	-2590 NM	66-126
Magnesium	334,700	20,000	355,400 >LR	103 NM	66-126
Manganese	12,150	50.00	11,780 >LR	-742 NM	73-121
Nickel	2,215	500.0	2,574	72 NM	74-120
Potassium	21,720	10,000	31,290	96	68-125
Sodium	70,660	20,000	90,270	98	60-131

Type: MSD Lab ID: QC462045

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Boron	1,000	1,724	85	79-121	3	20
Calcium	20,000	188,500 >LR	106 NM	63-130	NC	20
Chromium	200.0	1,195	62 NM	78-120	2	20
Iron	1,000	448,100 >LR	-2091 NM	66-126	NC	20
Magnesium	20,000	354,600 >LR	99 NM	66-126	NC	20
Manganese	50.00	11,220 >LR	-1867 NM	73-121	NC	20
Nickel	500.0	2,487	54 NM	74-120	3	20
Potassium	10,000	32,450	107	68-125	4	20
Sodium	20,000	88,870	91	60-131	2	20

NC= Not Calculated
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2300(BGCR-2-65)	Units:	ug/L
Type:	Serial Dilution	Batch#:	142923
MSS Lab ID:	206283-001	Sampled:	09/23/08
Lab ID:	QC462046	Received:	09/24/08
Matrix:	Filtrate	Analyzed:	09/25/08

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln Fac
Boron	875.9	100.0	928.8	500.0	6	10	5.000
Calcium	167,300	3,328	176,800	16,640	6	10	50.00
Chromium	1,071	5.000	1,136	25.00	6	10	5.000
Iron	469,000	1,000	517,000	5,000	10	10	50.00
Magnesium	334,700	3,281	374,900	16,410	12 *	10	50.00
Manganese	12,150	50.00	12,910	250.0	6	10	50.00
Nickel	2,215	5.000	2,394	25.00	8	10	5.000
Potassium	21,720	500.0	18,020	2,500	17 *	10	5.000
Sodium	70,660	500.0	66,830	2,500	5	10	5.000

*= Value outside of QC limits; see narrative
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2300(BGCR-2-65)	Units:	ug/L
Type:	Post Digest Spike	Batch#:	142923
MSS Lab ID:	206283-001	Sampled:	09/23/08
Lab ID:	QC462047	Received:	09/24/08
Matrix:	Filtrate	Analyzed:	09/25/08

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln Fac
Boron	875.9	1,000	1,746	87	75-125	1.000
Calcium	167,300	200,000	376,300	104	75-125	10.00
Chromium	1,071	200.0	1,189	59 NM	75-125	1.000
Iron	469,000	10,000	498,300	294 NM	75-125	10.00
Magnesium	334,700	200,000	556,200	111	75-125	10.00
Manganese	12,150	500.0	13,110	192 NM	75-125	10.00
Nickel	2,215	500.0	2,509	59 NM	75-125	1.000
Potassium	21,720	10,000	27,440	57 *	75-125	1.000
Sodium	70,660	20,000	77,240	33 *	75-125	1.000

*= Value outside of QC limits; see narrative
NM= Not Meaningful: Sample concentration > 4X spike concentration

Curtis & Tompkins, Ltd.

Hexavalent Chromium

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Matrix:	Water	Batch#:	142867
Units:	ug/L	Received:	09/24/08

Field ID	Type	Lab ID	Result	RL	Sampled	Analyzed
GWGW2300(BGCR-2-65)	SAMPLE	206283-001	9.0	0.50	09/23/08 14:00	09/24/08 14:01
GWGW2301(BGCR-2-85)	SAMPLE	206283-002	ND	0.50	09/24/08 08:30	09/24/08 14:14
GWGW2302(BGCR-2-85-DUPLICATE)	SAMPLE	206283-004	ND	0.50	09/24/08 08:30	09/24/08 14:26
	BLANK	QC461816	ND	0.50		09/24/08 10:29

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Hexavalent Chromium

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Units:	ug/L
Field ID:	GWGW2300(BGCR-2-65)	Batch#:	142867
MSS Lab ID:	206283-001	Sampled:	09/23/08 14:00
Matrix:	Water	Received:	09/24/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
BS	QC461817		20.00	19.43	97	90-110			1.000	09/24/08 10:45
BSD	QC461818		20.00	19.62	98	90-110	1	20	1.000	09/24/08 10:57
MS	QC461819	9.040	10.20	19.27	100	85-115			1.020	09/24/08 14:45
MSD	QC461820		10.20	19.35	101	85-115	0	20	1.020	09/24/08 14:58

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Metals Analytical Report

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2279	Sampled:	09/10/08
Units:	ug/L	Received:	09/24/08
Diln Fac:	1.000	Prepared:	09/25/08
Batch#:	142923	Analyzed:	09/25/08

Type: SAMPLE Matrix: Water
Lab ID: 206283-003

Analyte	Result	RL
Chromium	190	5.0
Copper	55	5.0
Selenium	ND	10

Type: BLANK Matrix: Filtrate
Lab ID: QC462041

Analyte	Result	RL
Chromium	ND	5.0
Copper	ND	5.0
Selenium	ND	10

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Matrix:	Filtrate	Batch#:	142923
Units:	ug/L	Prepared:	09/25/08
Diln Fac:	1.000	Analyzed:	09/25/08

Type: BS Lab ID: QC462042

Analyte	Spiked	Result	%REC	Limits
Chromium	200.0	193.1	97	80-120
Copper	250.0	239.5	96	80-120
Selenium	100.0	97.29	97	80-120

Type: BSD Lab ID: QC462043

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Chromium	200.0	173.8	87	80-120	11	20
Copper	250.0	214.6	86	80-120	11	20
Selenium	100.0	86.34	86	80-120	12	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2300(BGCR-2-65)	Sampled:	09/23/08
Lab ID:	206283-001	Received:	09/24/08
Matrix:	Filtrate	Prepared:	09/25/08
Units:	ug/L	Analyzed:	09/25/08
Batch#:	142923		

Analyte	Result	RL	Diln Fac
Boron	880	100	1.000
Calcium	170,000	3,300	10.00
Chromium	1,100	5.0	1.000
Iron	470,000	1,000	10.00
Magnesium	330,000	3,300	10.00
Manganese	12,000	50	10.00
Nickel	2,200	5.0	1.000
Potassium	22,000	500	1.000
Sodium	71,000	500	1.000

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC462041	Batch#:	142923
Matrix:	Filtrate	Prepared:	09/25/08
Units:	ug/L	Analyzed:	09/25/08

Analyte	Result	RL
Boron	ND	100
Calcium	ND	500
Chromium	ND	5.0
Iron	ND	100
Magnesium	ND	500
Manganese	ND	5.0
Nickel	ND	5.0
Potassium	ND	500
Sodium	ND	500

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Matrix:	Filtrate	Batch#:	142923
Units:	ug/L	Prepared:	09/25/08
Diln Fac:	1.000	Analyzed:	09/25/08

Type: BS Lab ID: QC462042

Analyte	Spiked	Result	%REC	Limits
Boron	1,000	1,038	104	80-120
Calcium	20,000	21,140	106	80-120
Chromium	200.0	193.1	97	80-120
Iron	1,000	1,046	105	80-120
Magnesium	20,000	21,600	108	80-120
Manganese	50.00	50.67	101	80-120
Nickel	500.0	496.2	99	80-120
Potassium	10,000	10,100	101	80-120
Sodium	20,000	20,900	104	80-120

Type: BSD Lab ID: QC462043

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Boron	1,000	933.6	93	80-120	11	20
Calcium	20,000	20,070	100	80-120	5	20
Chromium	200.0	173.8	87	80-120	11	20
Iron	1,000	990.2	99	80-120	5	20
Magnesium	20,000	20,520	103	80-120	5	20
Manganese	50.00	45.40	91	80-120	11	20
Nickel	500.0	447.0	89	80-120	10	20
Potassium	10,000	9,668	97	80-120	4	20
Sodium	20,000	19,240	96	80-120	8	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2300(BGCR-2-65)	Batch#:	142923
MSS Lab ID:	206283-001	Sampled:	09/23/08
Matrix:	Filtrate	Received:	09/24/08
Units:	ug/L	Prepared:	09/25/08
Diln Fac:	1.000	Analyzed:	09/25/08

Type: MS Lab ID: QC462044

Analyte	MSS Result	Spiked	Result	%REC	Limits
Boron	875.9	1,000	1,784	91	79-121
Calcium	167,300	20,000	189,500 >LR	111 NM	63-130
Chromium	1,071	200.0	1,218	74 NM	78-120
Iron	469,000	1,000	443,100 >LR	-2590 NM	66-126
Magnesium	334,700	20,000	355,400 >LR	103 NM	66-126
Manganese	12,150	50.00	11,780 >LR	-742 NM	73-121
Nickel	2,215	500.0	2,574	72 NM	74-120
Potassium	21,720	10,000	31,290	96	68-125
Sodium	70,660	20,000	90,270	98	60-131

Type: MSD Lab ID: QC462045

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Boron	1,000	1,724	85	79-121	3	20
Calcium	20,000	188,500 >LR	106 NM	63-130	NC	20
Chromium	200.0	1,195	62 NM	78-120	2	20
Iron	1,000	448,100 >LR	-2091 NM	66-126	NC	20
Magnesium	20,000	354,600 >LR	99 NM	66-126	NC	20
Manganese	50.00	11,220 >LR	-1867 NM	73-121	NC	20
Nickel	500.0	2,487	54 NM	74-120	3	20
Potassium	10,000	32,450	107	68-125	4	20
Sodium	20,000	88,870	91	60-131	2	20

NC= Not Calculated
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2300(BGCR-2-65)	Units:	ug/L
Type:	Serial Dilution	Batch#:	142923
MSS Lab ID:	206283-001	Sampled:	09/23/08
Lab ID:	QC462046	Received:	09/24/08
Matrix:	Filtrate	Analyzed:	09/25/08

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln Fac
Boron	875.9	100.0	928.8	500.0	6	10	5.000
Calcium	167,300	3,328	176,800	16,640	6	10	50.00
Chromium	1,071	5.000	1,136	25.00	6	10	5.000
Iron	469,000	1,000	517,000	5,000	10	10	50.00
Magnesium	334,700	3,281	374,900	16,410	12 *	10	50.00
Manganese	12,150	50.00	12,910	250.0	6	10	50.00
Nickel	2,215	5.000	2,394	25.00	8	10	5.000
Potassium	21,720	500.0	18,020	2,500	17 *	10	5.000
Sodium	70,660	500.0	66,830	2,500	5	10	5.000

*= Value outside of QC limits; see narrative
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2300(BGCR-2-65)	Units:	ug/L
Type:	Post Digest Spike	Batch#:	142923
MSS Lab ID:	206283-001	Sampled:	09/23/08
Lab ID:	QC462047	Received:	09/24/08
Matrix:	Filtrate	Analyzed:	09/25/08

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln Fac
Boron	875.9	1,000	1,746	87	75-125	1.000
Calcium	167,300	200,000	376,300	104	75-125	10.00
Chromium	1,071	200.0	1,189	59 NM	75-125	1.000
Iron	469,000	10,000	498,300	294 NM	75-125	10.00
Magnesium	334,700	200,000	556,200	111	75-125	10.00
Manganese	12,150	500.0	13,110	192 NM	75-125	10.00
Nickel	2,215	500.0	2,509	59 NM	75-125	1.000
Potassium	21,720	10,000	27,440	57 *	75-125	1.000
Sodium	70,660	20,000	77,240	33 *	75-125	1.000

*= Value outside of QC limits; see narrative
NM= Not Meaningful: Sample concentration > 4X spike concentration

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Matrix:	Water	Received:	09/24/08
Units:	mg/L		

Field ID: GWGW2300(BGCR-2-65) Lab ID: 206283-001
Type: SAMPLE Sampled: 09/23/08 14:00

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Fluoride	0.36	0.10	1.000	142937	09/25/08 14:57
Chloride	11	0.20	1.000	142868	09/24/08 13:58
Nitrogen, Nitrate	45	1.0	20.00	142868	09/24/08 14:51
Sulfate	40	0.50	1.000	142868	09/24/08 13:58

Field ID: GWGW2301(BGCR-2-85) Batch#: 142868
Type: SAMPLE Sampled: 09/24/08 08:30
Lab ID: 206283-002 Analyzed: 09/24/08 14:16
Diln Fac: 1.000

Analyte	Result	RL
Chloride	13	0.20
Nitrogen, Nitrate	2.0	0.05
Sulfate	49	0.50

Field ID: GWGW2302(BGCR-2-85-DUPLICATE) Batch#: 142868
Type: SAMPLE Sampled: 09/24/08 08:30
Lab ID: 206283-004 Analyzed: 09/24/08 14:33
Diln Fac: 1.000

Analyte	Result	RL
Chloride	13	0.20
Nitrogen, Nitrate	2.0	0.05
Sulfate	48	0.50

Type: BLANK Batch#: 142868
Lab ID: QC461821 Analyzed: 09/24/08 13:39
Diln Fac: 1.000

Analyte	Result	RL
Chloride	ND	0.20
Nitrogen, Nitrate	ND	0.05
Sulfate	ND	0.50

Type: BLANK Batch#: 142937
Lab ID: QC462115 Analyzed: 09/25/08 13:02
Diln Fac: 1.000

Analyte	Result	RL
Fluoride	ND	0.10

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Matrix:	Water	Diln Fac:	1.000
Units:	mg/L	Batch#:	142868

Type: BS Analyzed: 09/24/08 15:30
Lab ID: QC461822

Analyte	Spiked	Result	%REC	Limits
Chloride	4.000	4.168	104	80-120
Nitrogen, Nitrate	1.000	1.005	101	80-120
Sulfate	10.00	10.25	103	80-120

Type: BSD Analyzed: 09/24/08 15:47
Lab ID: QC461823

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Chloride	4.000	4.124	103	80-120	1	20
Nitrogen, Nitrate	1.000	0.9997	100	80-120	1	20
Sulfate	10.00	10.20	102	80-120	0	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
MSS Lab ID:	206298-005	Batch#:	142868
Matrix:	Water	Sampled:	09/23/08 13:58
Units:	mg/L	Received:	09/24/08

Type: MS Analyzed: 09/24/08 22:27
Lab ID: QC461861

Analyte	MSS Result	Spiked	Result	%REC	Limits
Chloride	26.20	10.00	36.54	103	80-120
Nitrogen, Nitrate	<0.01445	2.500	2.501	100	80-120
Sulfate	25.00	25.00	50.49	102	80-120

Type: MSD Analyzed: 09/24/08 22:45
Lab ID: QC461862

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Chloride	10.00	36.43	102	80-120	0	20
Nitrogen, Nitrate	2.500	2.479	99	80-120	1	20
Sulfate	25.00	51.23	105	80-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Analyte:	Fluoride	Diln Fac:	1.000
Matrix:	Water	Batch#:	142937
Units:	mg/L		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
BS	QC462116	2.000	1.973	99	74-120			09/25/08 13:19
BSD	QC462117	2.000	1.969	98	74-120	0	20	09/25/08 13:37

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Analyte:	Fluoride	Diln Fac:	5.000
Field ID:	ZZZZZZZZZZ	Batch#:	142937
MSS Lab ID:	206298-005	Sampled:	09/23/08 13:58
Matrix:	Water	Received:	09/24/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
MS	QC462118	0.03273	5.000	4.995	99	66-120			09/25/08 20:32
MSD	QC462119		5.000	4.998	99	66-120	0	20	09/25/08 20:50

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Hexavalent Chromium

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Matrix:	Water	Batch#:	142867
Units:	ug/L	Received:	09/24/08

Field ID	Type	Lab ID	Result	RL	Sampled	Analyzed
GWGW2300(BGCR-2-65)	SAMPLE	206283-001	9.0	0.50	09/23/08 14:00	09/24/08 14:01
GWGW2301(BGCR-2-85)	SAMPLE	206283-002	ND	0.50	09/24/08 08:30	09/24/08 14:14
GWGW2302(BGCR-2-85-DUPLICATE)	SAMPLE	206283-004	ND	0.50	09/24/08 08:30	09/24/08 14:26
	BLANK	QC461816	ND	0.50		09/24/08 10:29

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Hexavalent Chromium

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Units:	ug/L
Field ID:	GWGW2300(BGCR-2-65)	Batch#:	142867
MSS Lab ID:	206283-001	Sampled:	09/23/08 14:00
Matrix:	Water	Received:	09/24/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
BS	QC461817		20.00	19.43	97	90-110			1.000	09/24/08 10:45
BSD	QC461818		20.00	19.62	98	90-110	1	20	1.000	09/24/08 10:57
MS	QC461819	9.040	10.20	19.27	100	85-115			1.020	09/24/08 14:45
MSD	QC461820		10.20	19.35	101	85-115	0	20	1.020	09/24/08 14:58

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Field ID:	GWGW2300(BGCR-2-65)	Sampled:	09/23/08
Matrix:	Water	Received:	09/24/08
Units:	mg/L	Analyzed:	09/29/08
Batch#:	143045		

Type: SAMPLE Diln Fac: 6.700
Lab ID: 206283-001

Analyte	Result	RL
Alkalinity, Bicarbonate	830	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	830	6.7

Type: BLANK Diln Fac: 1.000
Lab ID: QC462617

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	4.000
Lab ID:	QC462618	Batch#:	143045
Matrix:	Water	Analyzed:	09/29/08

Spiked	Result	%REC	Limits
200.0	195.6	98	90-110

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	4.000
Field ID:	ZZZZZZZZZZ	Batch#:	143045
MSS Lab ID:	206171-002	Sampled:	09/18/08
Matrix:	Water	Received:	09/19/08
Units:	mg/L	Analyzed:	09/29/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC462619	252.7	200.0	444.8	96	80-120		
MSD	QC462620		200.0	440.8	94	80-120	1	25

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Organic Carbon (DOC)

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Dissolved Organic Carbon	Batch#:	143033
Matrix:	Water	Received:	09/24/08
Units:	mg/L	Analyzed:	09/29/08
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Sampled
GWGW2300(BGCR-2-65)	SAMPLE	206283-001	2.7	1.0	09/23/08
GWGW2301(BGCR-2-85)	SAMPLE	206283-002	5.7	1.0	09/24/08
GWGW2302(BGCR-2-85-DUPLICATE)	SAMPLE	206283-004	7.1	1.0	09/24/08
	BLANK	QC462546	ND	1.0	

ND= Not Detected
RL= Reporting Limit

18.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Organic Carbon (DOC)

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Dissolved Organic Carbon	Batch#:	143033
Field ID:	GWGW2300(BGCR-2-65)	Sampled:	09/23/08
MSS Lab ID:	206283-001	Received:	09/24/08
Matrix:	Water	Analyzed:	09/29/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
LCS	QC462547		10.00	10.18	102	90-110			1.000
MS	QC462548	2.671	10.00	12.75	101	80-121			2.000
MSD	QC462549		10.00	12.75	101	80-121	0	20	2.000

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Ferrous Iron (Fe+2)

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM3500FE-B
Analyte:	Ferrous Iron (Fe+2)	Batch#:	142873
Matrix:	Water	Received:	09/24/08
Units:	mg/L	Prepared:	09/24/08 14:30
Diln Fac:	1.000	Analyzed:	09/24/08 14:59

Field ID	Type	Lab ID	Result	RL	Sampled
GWGW2300(BGCR-2-65)	SAMPLE	206283-001	ND b	0.10	09/23/08 14:00
GWGW2301(BGCR-2-85)	SAMPLE	206283-002	ND	0.10	09/24/08 08:30
GWGW2302(BGCR-2-85-DUPLICATE)	SAMPLE	206283-004	ND	0.10	09/24/08 08:30
	BLANK	QC461835	ND	0.10	

b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Ferrous Iron (Fe+2)

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM3500FE-B
Analyte:	Ferrous Iron (Fe+2)	Batch#:	142873
Field ID:	GWGW2300(BGCR-2-65)	Sampled:	09/23/08 14:00
MSS Lab ID:	206283-001	Received:	09/24/08
Matrix:	Water	Prepared:	09/24/08 14:30
Units:	mg/L	Analyzed:	09/24/08 14:59
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC461836		0.8000	0.7215	90	90-110		
MS	QC461837	<0.1000	0.8000	0.8461 b	106	73-136		
MSD	QC461838		0.8000	0.8741 b	109	73-136	3	20

b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Phosphorous

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	SMWW18:4500P-B
Project#:	388-1856	Analysis:	SM4500P-E
Analyte:	Phosphorous	Batch#:	143031
Field ID:	GWGW2300(BGCR-2-65)	Sampled:	09/23/08
Matrix:	Water	Received:	09/24/08
Units:	mg/L	Analyzed:	09/29/08

Type	Lab ID	Result	RL	Diln Fac
SAMPLE	206283-001	0.33	0.050	1.667
BLANK	QC462536	ND	0.030	1.000

ND= Not Detected
RL= Reporting Limit

20.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Phosphorous

Lab #:	206283	Location:	UC Davis
Client:	Weiss Associates	Prep:	SMWW18:4500P-B
Project#:	388-1856	Analysis:	SM4500P-E
Analyte:	Phosphorous	Batch#:	143031
Field ID:	ZZZZZZZZZZ	Sampled:	09/16/08
MSS Lab ID:	206121-001	Received:	09/17/08
Matrix:	Water	Analyzed:	09/29/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
LCS	QC462537		0.3960	0.4201	106	72-134			1.000
MS	QC462538	0.03318	0.3960	0.4411	103	19-182			1.667
MSD	QC462539		0.3960	0.4326	101	19-182	2	26	1.667

RPD= Relative Percent Difference

206348

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
A qualified Associates Incorporated, DBA

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Project ID: 388-1856-1-32
Protocol No.: 080919_Chromium detail_GW

Client Contact	Project Manager: Bob Devany	Sampled by: KW	Date: 9/25/08	COC Number: UCD 20080925-1
Weiss Associates	Tel: 510-450-6144	Lab Contact: WO/PO# 08-02	Carrier:	Page 1 of 1
5801 Christie Avenue, Suite 600	Analysis Turnaround Time			Job No. 388-18856-1-32
Emeryville, CA 94608	Calendar (C) or Work Days (W) --- 5W			SDG No.
(510) 450-6000 Phone	TAT if different from Below _____			
(510) 547-5043 FAX	☐ 2 weeks			
	☐ 1 week			
Job Name: UC Davis	☐ 2 days			
Address: One Shields Ave, Davis	☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	~~Dissolved Organic Carbon - SM5310B~~	Cr, Mn, Fe, B- 6010B (field filtered)	~~Cr(VI) - 7199 (field filtered)~~	~~Fe(II) - SM3500Fe-B~~	Ca, Mg, K, Na, Ni - 6010B (field filtered)	Phosphate - SM 4500-PE or 365.2 (field filtered)	Carbonate, Bicarbonate - 310.1	Fluoride - SM 4500-FC or 340.1	Sample Specific Notes:
1	GWGW2301	9/24/08	0830		water	5		X			X	X	X	X	
2	GWGW2302	9/24/08	0830		water	5		X			X	X	X	X	
					water										
					water										
					water										
					water										
					water										
					water										
					water										
							2	4	1	2	4	1	3	1	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For _____ Months*

Special Instructions/QC Requirements & Comments: **LEVEL IV REPORTING, Cr (VI) and Fe(II) have a hold time of 24 hrs and DOC and nitrate samples have a hold time of 48 hrs!!!**

WORK ORDER 08052

DISSOLVED ORGANIC CARBON, Cr VI, FE II & CHLORIDE, NITRATE, SULFATE SUBMITTED ON 9/24/08 DUE TO HOLD TIME.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
KYLE ATKINSON	WEISS ASSOC.	9/25/08	[illegible]	C&T	9/25/08 1238
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 206348 Date Received 9/25/08 Number of coolers 1
Client WEISS ASSC. Project UC DAVIS

Date Opened 9/25/08 By (print) M. VILLANUEVA (sign) [signature]
Date Logged in ✓ By (print) ✓ (sign) ✓

1. Did cooler come with a shipping slip (airbill, etc)? ..... YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☐ (NO)
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? ..... YES NO (N/A)
3. Were custody papers dry and intact when received? ..... (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? ..... (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ..... (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

   ☐ Bubble Wrap ☐ Foam blocks ☑ Bags ☐ None
   ☐ Cloth material ☑ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

   Type of ice used: ☐ Wet ☑ Blue/Gel ☐ None Temp(°C) _____

   ☑ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ..... YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? ..... (YES) NO
10. Are samples in the appropriate containers for indicated tests? ..... (YES) NO
11. Are sample labels present, in good condition and complete? ..... (YES) NO
12. Do the sample labels agree with custody papers? ..... (YES) NO
13. Was sufficient amount of sample sent for tests requested? ..... (YES) NO
14. Are the samples appropriately preserved? ..... (YES) NO N/A
15. Are bubbles > 6mm absent in VOA samples? ..... YES NO (N/A)
16. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206348	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2301	Batch#:	143085
Lab ID:	206348-001	Sampled:	09/24/08
Matrix:	Filtrate	Received:	09/25/08
Units:	ug/L	Prepared:	09/30/08
Diln Fac:	1.000	Analyzed:	10/02/08

Analyte	Result	RL
Boron	500	100
Calcium	28,000	500
Chromium	ND	5.0
Iron	ND	100
Magnesium	53,000	500
Manganese	480	5.0
Nickel	5.6	5.0
Potassium	2,000	500
Sodium	48,000	500

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206348	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2302	Batch#:	143085
Lab ID:	206348-002	Sampled:	09/24/08
Matrix:	Filtrate	Received:	09/25/08
Units:	ug/L	Prepared:	09/30/08
Diln Fac:	1.000	Analyzed:	10/02/08

Analyte	Result	RL
Boron	500	100
Calcium	27,000	500
Chromium	ND	5.0
Iron	ND	100
Magnesium	51,000	500
Manganese	480	5.0
Nickel	5.7	5.0
Potassium	2,000	500
Sodium	47,000	500

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206348	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC462823	Batch#:	143085
Matrix:	Filtrate	Prepared:	09/30/08
Units:	ug/L	Analyzed:	10/02/08

Analyte	Result	RL
Boron	ND	100
Calcium	ND	500
Chromium	ND	5.0
Iron	ND	100
Magnesium	ND	500
Manganese	ND	5.0
Nickel	ND	5.0
Potassium	ND	500
Sodium	ND	500

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206348	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Matrix:	Filtrate	Batch#:	143085
Units:	ug/L	Prepared:	09/30/08
Diln Fac:	1.000	Analyzed:	10/02/08

Type: BS Lab ID: QC462824

Analyte	Spiked	Result	%REC	Limits
Boron	1,000	1,018	102	80-120
Calcium	20,000	19,350	97	80-120
Chromium	200.0	198.3	99	80-120
Iron	1,000	945.0	95	80-120
Magnesium	20,000	19,950	100	80-120
Manganese	50.00	50.19	100	80-120
Nickel	500.0	485.2	97	80-120
Potassium	10,000	9,211	92	80-120
Sodium	20,000	18,930	95	80-120

Type: BSD Lab ID: QC462825

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Boron	1,000	969.9	97	80-120	5	20
Calcium	20,000	18,040	90	80-120	7	20
Chromium	200.0	187.3	94	80-120	6	20
Iron	1,000	857.7	86	80-120	10	20
Magnesium	20,000	17,950	90	80-120	11	20
Manganese	50.00	47.33	95	80-120	6	20
Nickel	500.0	458.5	92	80-120	6	20
Potassium	10,000	8,213	82	80-120	11	20
Sodium	20,000	16,940	85	80-120	11	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206348	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2301	Batch#:	143085
MSS Lab ID:	206348-001	Sampled:	09/24/08
Matrix:	Filtrate	Received:	09/25/08
Units:	ug/L	Prepared:	09/30/08
Diln Fac:	1.000	Analyzed:	10/02/08

Type: MS Lab ID: QC462826

Analyte	MSS Result	Spiked	Result	%REC	Limits
Boron	499.7	1,000	1,520	102	79-121
Calcium	27,660	20,000	46,770	96	63-130
Chromium	<0.4838	200.0	197.6	99	78-120
Iron	<16.49	1,000	986.2	99	66-126
Magnesium	52,580	20,000	71,690	96	66-126
Manganese	476.1	50.00	506.1	60 NM	73-121
Nickel	5.617	500.0	479.4	95	74-120
Potassium	2,043	10,000	11,600	96	68-125
Sodium	47,740	20,000	65,480	89	60-131

Type: MSD Lab ID: QC462827

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Boron	1,000	1,573	107	79-121	3	20
Calcium	20,000	48,350	103	63-130	3	20
Chromium	200.0	198.4	99	78-120	0	20
Iron	1,000	962.8	96	66-126	2	20
Magnesium	20,000	74,150	108	66-126	3	20
Manganese	50.00	541.9	132 NM	73-121	7	20
Nickel	500.0	478.5	95	74-120	0	20
Potassium	10,000	11,780	97	68-125	2	20
Sodium	20,000	69,660	110	60-131	6	20

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206348	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2301	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	143085
MSS Lab ID:	206348-001	Sampled:	09/24/08
Lab ID:	QC462828	Received:	09/25/08
Matrix:	Filtrate	Analyzed:	10/02/08
Units:	ug/L		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim
Boron	499.7	100.0	533.8	500.0	7	10
Calcium	27,660	500.0	27,370	1,000	1	10
Chromium	ND	5.000	ND	25.00	NC	10
Iron	ND	100.0	ND	500.0	NC	10
Magnesium	52,580	500.0	53,110	1,000	1	10
Manganese	476.1	5.000	471.6	25.00	1	10
Nickel	5.617	5.000	ND	25.00	NC	10
Potassium	2,043	500.0	2,366 J	2,500	NC	10
Sodium	47,740	500.0	48,190	2,500	1	10

J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206348	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2301	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	143085
MSS Lab ID:	206348-001	Sampled:	09/24/08
Lab ID:	QC462829	Received:	09/25/08
Matrix:	Filtrate	Analyzed:	10/02/08
Units:	ug/L		

Analyte	MSS Result	Spiked	Result	%REC	Limits
Boron	499.7	1,000	1,474	97	75-125
Calcium	27,660	20,000	43,680	80	75-125
Chromium	<0.4838	200.0	185.8	93	75-125
Iron	<16.49	1,000	857.1	86	75-125
Magnesium	52,580	20,000	67,080	72 *	75-125
Manganese	476.1	50.00	506.4	61 NM	75-125
Nickel	5.617	500.0	449.7	89	75-125
Potassium	2,043	10,000	10,660	86	75-125
Sodium	47,740	20,000	62,100	72 *	75-125

*= Value outside of QC limits; see narrative
NM= Not Meaningful: Sample concentration > 4X spike concentration

Curtis & Tompkins, Ltd.

Fluoride

Lab #:	206348	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Analyte:	Fluoride	Batch#:	142985
Matrix:	Water	Sampled:	09/24/08 08:30
Units:	mg/L	Received:	09/25/08
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Analyzed
GWGW2301	SAMPLE	206348-001	0.51	0.10	09/26/08 15:54
GWGW2302	SAMPLE	206348-002	0.50	0.10	09/26/08 16:11
	BLANK	QC462361	ND	0.10	09/26/08 10:41

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Fluoride

Lab #:	206348	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Analyte:	Fluoride	Units:	mg/L
Field ID:	GWGW2302	Batch#:	142985
MSS Lab ID:	206348-002	Sampled:	09/24/08 08:30
Matrix:	Water	Received:	09/25/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
BS	QC462362		2.000	1.992	100	74-120			1.000	09/26/08 13:25
BSD	QC462363		2.000	1.991	100	74-120	0	20	1.000	09/26/08 13:42
MS	QC462364	0.5025	5.000	5.573	101	66-120			5.000	09/26/08 23:03
MSD	QC462365		5.000	5.577	101	66-120	0	20	5.000	09/26/08 23:20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	206348	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Matrix:	Water	Sampled:	09/24/08
Units:	mg/L	Received:	09/25/08
Batch#:	143045	Analyzed:	09/29/08

Field ID: GWGW2301 Lab ID: 206348-001
Type: SAMPLE Diln Fac: 6.700

Analyte	Result	RL
Alkalinity, Bicarbonate	4,900	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	4,900	6.7

Field ID: GWGW2302 Lab ID: 206348-002
Type: SAMPLE Diln Fac: 6.700

Analyte	Result	RL
Alkalinity, Bicarbonate	4,900	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	4,900	6.7

Type: BLANK Diln Fac: 1.000
Lab ID: QC462617

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	206348	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	4.000
Lab ID:	QC462618	Batch#:	143045
Matrix:	Water	Analyzed:	09/29/08

Spiked	Result	%REC	Limits
200.0	195.6	98	90-110

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	206348	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	4.000
Field ID:	ZZZZZZZZZZ	Batch#:	143045
MSS Lab ID:	206171-002	Sampled:	09/18/08
Matrix:	Water	Received:	09/19/08
Units:	mg/L	Analyzed:	09/29/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC462619	252.7	200.0	444.8	96	80-120		
MSD	QC462620		200.0	440.8	94	80-120	1	25

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Total Phosphorous

Lab #:	206348	Location:	UC Davis
Client:	Weiss Associates	Analysis:	SM4500P-E
Project#:	388-1856		
Analyte:	Phosphorous	Sampled:	09/24/08
Units:	mg/L	Received:	09/25/08
Diln Fac:	1.000	Analyzed:	09/29/08
Batch#:	143031		

Field ID	Type	Lab ID	Matrix	Result	RL
GWGW2301	SAMPLE	206348-001	Filtrate	ND	0.030
GWGW2302	SAMPLE	206348-002	Filtrate	ND	0.030
	BLANK	QC462536	Water	ND	0.030

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Total Phosphorous

Lab #:	206348	Location:	UC Davis
Client:	Weiss Associates	Analysis:	SM4500P-E
Project#:	388-1856		
Analyte:	Phosphorous	Batch#:	143031
Field ID:	ZZZZZZZZZZ	Sampled:	09/16/08
MSS Lab ID:	206121-001	Received:	09/17/08
Matrix:	Water	Analyzed:	09/29/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
LCS	QC462537		0.3960	0.4201	106	72-134			1.000
MS	QC462538	0.03318	0.3960	0.4411	103	19-182			1.667
MSD	QC462539		0.3960	0.4326	101	19-182	2	26	1.667

RPD= Relative Percent Difference

206440

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-32
Protocol No.: 080919_Chromium detail_soil

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AguaTierra Associates Incorporated DBA

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Client Contact	
Weiss Associates	
5801 Christie Avenue, Suite 600	
Emeryville, CA 94608	
(510) 450-6000	Phone
(510) 547-5043	FAX
Job Name:	UC Davis
Address:	One Shields Ave, Davis

Project Manager: Bob Devany
Tel: 510-450-6144

Analysis Turnaround Time
Calendar (C) or Work Days (W) --- 5W
TAT if different from Below _____
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sampled by: KAA
Lab Contact: WO/PO# 08-03
Date: 9/29/08
Carrier:
COC Number: UCD 20080929-1
Page 1 of 1
Job No. 388-1856-1-32
SDG No.

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Dissolved Organic Carbon SM5310B*	Cr, Mn, Fe, B - 6010B	Cr VI 7199 *	Fe(II) - SM3500 Fe-D *	Ca, Mg, K, Na, Ni - 6010B	Chloride, Nitrate, Sulfate *300.0	Phosphate - SM4500 P-E or 365.2	Carbonate, Bicarbonate 310.1	Fluoride - SM4500 F-C or 340.2
1	GWGW2294	9/29/08	1245		WATER	9	X	X	X	X	X	X	X	X	X
2	GWGW2295	↓	1600		↓	9	X	X	X	X	X	X	X	X	X
							3	4	1	2	4	1	3	1	1

Sample Specific Notes: *SHORT HOLD TIMES

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **LEVEL IV REPORTING, Analyze Cr (VI) samples within 5 days!**

WORK ORDER 0805

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
KAN ATKINSON	WEISS ASSOC.	9/29/08 1900	K Williams	C&T	9/29/08 1900
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 206440 Date Received 9/29/08 Number of coolers 1
Client Weiss Project UC Davis

Date Opened 9/29 By (print) K Wellbrock (sign) K Wellbrock
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc)? ..... YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? ..... YES NO (N/A)
3. Were custody papers dry and intact when received? ..... (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? ..... (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ..... (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

   ☒ Bubble Wrap ☐ Foam blocks ☐ Bags ☐ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels
7. Temperature documentation:

   Type of ice used: ☐ Wet ☒ Blue/Gel ☐ None Temp(°C) _____

   ☒ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ..... YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? ..... (YES) NO
10. Are samples in the appropriate containers for indicated tests? ..... (YES) NO
11. Are sample labels present, in good condition and complete? ..... (YES) NO
12. Do the sample labels agree with custody papers? ..... (YES) NO
13. Was sufficient amount of sample sent for tests requested? ..... (YES) NO
14. Are the samples appropriately preserved? ..... (YES) NO N/A
15. Are bubbles > 6mm absent in VOA samples? ..... YES NO (N/A)
16. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

Curtis & Tompkins, Ltd.

Metals Analytical Report

Lab #:	206440	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2294	Batch#:	143190
Lab ID:	206440-001	Sampled:	09/29/08
Matrix:	Water	Received:	09/30/08
Units:	ug/L	Prepared:	10/02/08

Analyte	Result	RL	Diln Fac	Analyzed
Boron	800	100	1.000	10/03/08
Calcium	53,000	500	1.000	10/03/08
Chromium	82	5.0	1.000	10/03/08
Iron	ND	100	1.000	10/03/08
Magnesium	130,000	2,000	10.00	10/04/08
Manganese	43	5.0	1.000	10/03/08
Nickel	ND	5.0	1.000	10/03/08
Potassium	ND	5,000	10.00	10/04/08
Sodium	82,000	5,000	10.00	10/04/08

ND= Not Detected
RL= Reporting Limit

18.0

Curtis & Tompkins, Ltd.

Metals Analytical Report

Lab #:	206440	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2295	Batch#:	143190
Lab ID:	206440-002	Sampled:	09/29/08
Matrix:	Water	Received:	09/30/08
Units:	ug/L	Prepared:	10/02/08

Analyte	Result	RL	Diln Fac	Analyzed
Boron	700	100	1.000	10/03/08
Calcium	45,000	500	1.000	10/03/08
Chromium	ND	5.0	1.000	10/03/08
Iron	150	100	1.000	10/03/08
Magnesium	130,000	2,000	10.00	10/04/08
Manganese	300	5.0	1.000	10/03/08
Nickel	ND	5.0	1.000	10/03/08
Potassium	ND	5,000	10.00	10/04/08
Sodium	78,000	5,000	10.00	10/04/08

ND= Not Detected
RL= Reporting Limit

19.0

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	206440	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC463266	Batch#:	143190
Matrix:	Water	Prepared:	10/02/08
Units:	ug/L	Analyzed:	10/03/08

Analyte	Result	RL
Boron	ND	100
Calcium	ND	500
Chromium	ND	5.0
Iron	ND	100
Magnesium	ND	500
Manganese	ND	5.0
Nickel	ND	5.0
Potassium	ND	500
Sodium	ND	500

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	206440	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Matrix:	Water	Batch#:	143190
Units:	ug/L	Prepared:	10/02/08
Diln Fac:	1.000	Analyzed:	10/03/08

Type: BS Lab ID: QC463267

Analyte	Spiked	Result	%REC	Limits
Boron	1,000	1,012	101	80-120
Calcium	20,000	18,880	94	80-120
Chromium	200.0	196.8	98	80-120
Iron	1,000	940.4	94	80-120
Magnesium	20,000	18,740	94	80-120
Manganese	50.00	49.76	100	80-120
Nickel	500.0	481.7	96	80-120
Potassium	10,000	9,025	90	80-120
Sodium	20,000	18,270	91	80-120

Type: BSD Lab ID: QC463268

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Boron	1,000	972.9	97	80-120	4	20
Calcium	20,000	18,250	91	80-120	3	20
Chromium	200.0	184.4	92	80-120	7	20
Iron	1,000	924.9	92	80-120	2	20
Magnesium	20,000	18,230	91	80-120	3	20
Manganese	50.00	47.22	94	80-120	5	20
Nickel	500.0	454.0	91	80-120	6	20
Potassium	10,000	8,671	87	80-120	4	20
Sodium	20,000	17,550	88	80-120	4	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	206440	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	143190
MSS Lab ID:	206247-001	Sampled:	09/23/08
Matrix:	Water	Received:	09/23/08
Units:	ug/L	Prepared:	10/02/08
Diln Fac:	1.000	Analyzed:	10/03/08

Type: MS Lab ID: QC463269

Analyte	MSS Result	Spiked	Result	%REC	Limits
Boron	2,062	1,000	3,050	99	79-121
Calcium	55,740	20,000	71,890	81	63-130
Chromium	<0.4838	200.0	186.7	93	78-120
Iron	1,328	1,000	2,233	91	66-126
Magnesium	22,100	20,000	39,800	89	66-126
Manganese	1,783	50.00	1,819	71 NM	73-121
Nickel	<1.497	500.0	451.1	90	74-120
Potassium	627.5	10,000	9,906	93	68-125
Sodium	166,000	20,000	189,800 >LR	119 NM	60-131

Type: MSD Lab ID: QC463270

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Boron	1,000	2,972	91	79-121	3	20
Calcium	20,000	70,410	73	63-130	2	20
Chromium	200.0	185.2	93	78-120	1	20
Iron	1,000	2,202	87	66-126	1	20
Magnesium	20,000	38,690	83	66-126	3	20
Manganese	50.00	1,754	-59 NM	73-121	4	20
Nickel	500.0	445.4	89	74-120	1	20
Potassium	10,000	9,851	92	68-125	1	20
Sodium	20,000	186,900 >LR	104 NM	60-131	NC	20

NC= Not Calculated
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	206440	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Units:	ug/L
Type:	Serial Dilution	Batch#:	143190
MSS Lab ID:	206247-001	Sampled:	09/23/08
Lab ID:	QC463271	Received:	09/23/08
Matrix:	Water		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln Fac	Analyzed
Boron	2,062	100.0	2,034	500.0	1	10	5.000	10/03/08
Calcium	55,740	500.0	54,020	1,000	3	10	5.000	10/03/08
Chromium	ND	5.000	ND	25.00	NC	10	5.000	10/03/08
Iron	1,328	100.0	1,181	500.0	11 *	10	5.000	10/03/08
Magnesium	22,100	500.0	21,630	1,000	2	10	5.000	10/03/08
Manganese	1,783	5.000	1,746	25.00	2	10	5.000	10/03/08
Nickel	ND	5.000	ND	25.00	NC	10	5.000	10/03/08
Potassium	627.5	500.0	650.4 J	2,500	NC	10	5.000	10/03/08
Sodium	166,000	10,000	176,900	50,000	7	10	100.0	10/06/08

*= Value outside of QC limits; see narrative
J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	206440	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Units:	ug/L
Type:	Post Digest Spike	Batch#:	143190
MSS Lab ID:	206247-001	Sampled:	09/23/08
Lab ID:	QC463272	Received:	09/23/08
Matrix:	Water		

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln Fac	Analyzed
Boron	2,062	1,000	3,059	100	75-125	1.000	10/03/08
Calcium	55,740	20,000	71,730	80	75-125	1.000	10/03/08
Chromium	<0.4838	200.0	182.4	91	75-125	1.000	10/03/08
Iron	1,328	1,000	2,173	85	75-125	1.000	10/03/08
Magnesium	22,100	20,000	39,220	86	75-125	1.000	10/03/08
Manganese	1,783	50.00	1,832	97 NM	75-125	1.000	10/03/08
Nickel	<1.497	500.0	437.3	87	75-125	1.000	10/03/08
Potassium	627.5	10,000	9,547	89	75-125	1.000	10/03/08
Sodium	166,000	400,000	552,200	97	75-125	20.00	10/05/08

NM= Not Meaningful: Sample concentration > 4X spike concentration

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	206440	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Matrix:	Water	Batch#:	143069
Units:	mg/L	Received:	09/30/08

Field ID:	GWGW2294	Lab ID:	206440-001
Type:	SAMPLE	Sampled:	09/29/08 12:45

Analyte	Result	RL	Diln Fac	Analyzed
Fluoride	0.42	0.10	1.000	09/30/08 09:32
Chloride	82	2.0	10.00	09/30/08 11:16
Nitrogen, Nitrate	39	0.50	10.00	09/30/08 11:16
Sulfate	43	0.50	1.000	09/30/08 09:32

Field ID:	GWGW2295	Lab ID:	206440-002
Type:	SAMPLE	Sampled:	09/29/08 16:00

Analyte	Result	RL	Diln Fac	Analyzed
Fluoride	0.31	0.10	1.000	09/30/08 09:50
Chloride	78	2.0	10.00	09/30/08 12:13
Nitrogen, Nitrate	36	0.50	10.00	09/30/08 12:13
Sulfate	46	0.50	1.000	09/30/08 09:50

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC462760	Analyzed:	09/30/08 08:17

Analyte	Result	RL
Fluoride	ND	0.10
Chloride	ND	0.20
Nitrogen, Nitrate	ND	0.05
Sulfate	ND	0.50

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	206440	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Matrix:	Water	Diln Fac:	1.000
Units:	mg/L	Batch#:	143069

Type: BS Analyzed: 09/30/08 08:34
Lab ID: QC462761

Analyte	Spiked	Result	%REC	Limits
Fluoride	2.000	2.068	103	74-120
Chloride	4.000	3.855	96	80-120
Nitrogen, Nitrate	1.000	0.9394	94	80-120
Sulfate	10.00	9.487	95	80-120

Type: BSD Analyzed: 09/30/08 08:52
Lab ID: QC462762

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Fluoride	2.000	2.119	106	74-120	2	20
Chloride	4.000	3.898	97	80-120	1	20
Nitrogen, Nitrate	1.000	0.9221	92	80-120	2	20
Sulfate	10.00	9.353	94	80-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	206440	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
MSS Lab ID:	206439-011	Batch#:	143069
Matrix:	Water	Sampled:	09/29/08 10:10
Units:	mg/L	Received:	09/29/08

Type: MS Analyzed: 09/30/08 10:24
Lab ID: QC462775

Analyte	MSS Result	Spiked	Result	%REC	Limits
Fluoride	1.512	5.000	6.572	101	66-120
Chloride	24.01	10.00	33.38	94	80-120
Nitrogen, Nitrate	0.3894	2.500	2.657	91	80-120
Sulfate	17.08	25.00	40.87	95	80-120

Type: MSD Analyzed: 09/30/08 10:42
Lab ID: QC462776

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Fluoride	5.000	6.843	107	66-120	4	20
Chloride	10.00	33.54	95	80-120	0	20
Nitrogen, Nitrate	2.500	2.736	94	80-120	3	20
Sulfate	25.00	41.32	97	80-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Hexavalent Chromium

Lab #:	206440	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Matrix:	Water	Batch#:	143080
Units:	ug/L	Received:	09/30/08

Field ID	Type	Lab ID	Result	RL	Sampled	Analyzed
GWGW2294	SAMPLE	206440-001	82	1.0	09/29/08 12:45	09/30/08 11:44
GWGW2295	SAMPLE	206440-002	ND	1.0	09/29/08 16:00	09/30/08 11:56
	BLANK	QC462798	ND	1.0		09/30/08 11:11

ND= Not Detected
RL= Reporting Limit

5.0

Curtis & Tompkins, Ltd.

Batch QC Report

Hexavalent Chromium

Lab #:	206440	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Field ID:	GWGW2294	Batch#:	143080
MSS Lab ID:	206440-001	Sampled:	09/29/08 12:45
Matrix:	Water	Received:	09/30/08
Units:	ug/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
BS	QC462799		20.00	19.39	97	90-110			09/30/08 12:20
BSD	QC462800		20.00	19.30	96	90-110	0	20	09/30/08 12:32
MS	QC462801	82.22	10.00	91.05	88 NM	85-115			09/30/08 12:55
MSD	QC462802		10.00	90.80	86 NM	85-115	0	20	09/30/08 13:08

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	206440	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Matrix:	Water	Sampled:	09/29/08
Units:	mg/L	Received:	09/30/08
Batch#:	143195	Analyzed:	10/02/08

Field ID: GWGW2294 Lab ID: 206440-001
Type: SAMPLE Diln Fac: 6.700

Analyte	Result	RL
Alkalinity, Bicarbonate	560	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	560	6.7

Field ID: GWGW2295 Lab ID: 206440-002
Type: SAMPLE Diln Fac: 6.700

Analyte	Result	RL
Alkalinity, Bicarbonate	4,500	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	4,500	6.7

Type: BLANK Diln Fac: 1.000
Lab ID: QC463292

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	206440	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	4.000
Lab ID:	QC463293	Batch#:	143195
Matrix:	Water	Analyzed:	10/02/08

Spiked	Result	%REC	Limits
200.0	192.8	96	90-110

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	206440	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	4.000
Field ID:	ZZZZZZZZZZ	Batch#:	143195
MSS Lab ID:	206523-005	Sampled:	10/01/08
Matrix:	Water	Received:	10/01/08
Units:	mg/L	Analyzed:	10/02/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC463294	131.6	200.0	317.2	93	80-120		
MSD	QC463295		200.0	319.2	94	80-120	1	25

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Organic Carbon (DOC)

Lab #:	206440	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Dissolved Organic Carbon	Batch#:	143283
Matrix:	Water	Sampled:	09/29/08
Units:	mg/L	Received:	09/30/08
Diln Fac:	1.000	Analyzed:	10/06/08

Field ID	Type	Lab ID	Result	RL
GWGW2294	SAMPLE	206440-001	4.5	1.0
GWGW2295	SAMPLE	206440-002	5.0	1.0
	BLANK	QC463653	ND	1.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Organic Carbon (DOC)

Lab #:	206440	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Dissolved Organic Carbon	Batch#:	143283
Field ID:	GWGW2294	Sampled:	09/29/08
MSS Lab ID:	206440-001	Received:	09/30/08
Matrix:	Water	Analyzed:	10/06/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
LCS	QC463654		10.00	9.780	98	90-110			1.000
MS	QC463655	4.520	10.00	13.70	92	80-121			2.000
MSD	QC463656		10.00	13.80	93	80-121	1	20	2.000

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Ferrous Iron (Fe+2)

Lab #:	206440	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM3500FE-B
Analyte:	Ferrous Iron (Fe+2)	Batch#:	143061
Matrix:	Water	Received:	09/30/08
Units:	mg/L	Prepared:	09/29/08 21:10
Diln Fac:	1.000	Analyzed:	09/29/08 21:20

Field ID	Type	Lab ID	Result	RL	Sampled
GWGW2294	SAMPLE	206440-001	ND	0.10	09/29/08 12:45
GWGW2295	SAMPLE	206440-002	ND	0.10	09/29/08 16:00
	BLANK	QC462719	ND	0.10	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Ferrous Iron (Fe+2)

Lab #:	206440	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM3500FE-B
Analyte:	Ferrous Iron (Fe+2)	Batch#:	143061
Field ID:	GWGW2294	Sampled:	09/29/08 12:45
MSS Lab ID:	206440-001	Received:	09/30/08
Matrix:	Water	Prepared:	09/29/08 21:10
Units:	mg/L	Analyzed:	09/29/08 21:20
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC462720		0.8000	0.7592	95	90-110		
MS	QC462721	<0.1000	0.8000	0.7679	96	73-136		
MSD	QC462722		0.8000	0.7640	96	73-136	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Orthophosphate Phosphorous

Lab #:	206440	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM4500P-E
Analyte:	Orthophosphate (as P)	Batch#:	143124
Matrix:	Water	Received:	09/30/08
Units:	mg/L	Analyzed:	10/01/08 12:05
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Sampled
GWGW2294	SAMPLE	206440-001	0.12	0.030	09/29/08 12:45
GWGW2295	SAMPLE	206440-002	0.046	0.030	09/29/08 16:00
	BLANK	QC463001	ND	0.030	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Orthophosphate Phosphorous

Lab #:	206440	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM4500P-E
Analyte:	Orthophosphate (as P)	Batch#:	143124
Field ID:	ZZZZZZZZZZ	Sampled:	09/30/08 12:55
MSS Lab ID:	206475-004	Received:	09/30/08
Matrix:	Water	Analyzed:	10/01/08 12:05
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
LCS	QC463002		0.4000	0.3954	99	80-120			1.000
MS	QC463003	2.777	0.4000	3.065	72 NM	80-136			4.000
MSD	QC463004		0.4000	3.123	86 NM	80-136	2	20	4.000

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

2064462

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
A goal here, A reservation here, nowhere else. 1984

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Project ID: 388-1856-1-32
Protocol No.: 080919_Chromium detail_GW

Client Contact	Project Manager: Bob Devany	Sampled by: KMA	Date: 09/30/08	COC Number: UCD20080930-1
Weiss Associates	Tel: 510-450-6144	Lab Contact: WO/PO# 08-02	Carrier:	Page 1 of 1
5801 Christie Avenue, Suite 600	Analysis Turnaround Time			Job No. 388-1856-1-32
Emeryville, CA 94608	Calendar (C) or Work Days (W) --- 5W			SDG No.
(510) 450-6000 Phone	TAT if different from Below _____			
(510) 547-5043 FAX	☐ 2 weeks			
	☐ 1 week			
Job Name: UC Davis	☐ 2 days			
Address: One Shields Ave, Davis	☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Dissolved Organic Carbon - SM5310B *	Cr, Mn, Fe, B- 6010B (field filtered)	Cr (VI) - 7199 (field filtered) *	Fe (II) - SM3500Fe-D *	Ca, Mg, K, Na, Ni - 6010B (field filtered)	Phosphate - SM 4500-PE or 365.2 (field filtered)	Carbonate, Bicarbonate - 310.1	Fluoride - SM 4500-FC or 340.1	CHLORIDE, NITRATE, SULFATE * 300.0	Sample Specific Notes:
1	GWGW2296	9/30/08	1130		water	9	X	X	X	X	X	X	X	X	X	* SHORT HOLD TIMES
2	GWGW2297	↓	1245		water	9	X	X	X	X	X	X	X	X	X	
					water											
					water											
					water											
					water											
					water											
					water											
					water											
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____							2	4	1	2	4	1	3	1	1	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **LEVEL IV REPORTING, Cr (VI) and Fe(II) have a hold time of 24 hrs and DOC and nitrate samples have a hold time of 48 hrs!!!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
KMA ATKINSON	WEISS ASSOC.	9/30/08 1625	[signature]	C&T	9/30/2008 1625
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 206462 Date Received 9-30-08 Number of coolers 1
Client Weiss Project UC Davis

Date Opened 9-30-08 By (print) F Nichols (sign) [signature]
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc)? ..... YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? ..... YES NO (N/A)
3. Were custody papers dry and intact when received? ..... (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? ..... (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ..... (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

   ☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☒ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels
7. Temperature documentation:

   Type of ice used: ☐ Wet ☒ Blue/Gel ☐ None Temp(°C) _____

   ☒ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ..... YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? ..... (YES) NO
10. Are samples in the appropriate containers for indicated tests? ..... (YES) NO
11. Are sample labels present, in good condition and complete? ..... (YES) NO
12. Do the sample labels agree with custody papers? ..... (YES) NO
13. Was sufficient amount of sample sent for tests requested? ..... (YES) NO
14. Are the samples appropriately preserved? ..... (YES) NO N/A
15. Are bubbles > 6mm absent in VOA samples? ..... YES NO (N/A)
16. Was the client contacted concerning this sample delivery? ..... YES NO
    If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206462	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2296	Batch#:	143219
Lab ID:	206462-001	Sampled:	09/30/08
Matrix:	Filtrate	Received:	09/30/08
Units:	ug/L	Prepared:	10/03/08
Diln Fac:	1.000	Analyzed:	10/08/08

Analyte	Result	RL
Boron	1,000	100
Calcium	34,000	500
Chromium	530	5.0
Iron	ND	100
Magnesium	81,000	500
Manganese	8.2	5.0
Nickel	ND	5.0
Potassium	6,300	500
Sodium	97,000	500

ND= Not Detected
RL= Reporting Limit

19.0

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206462	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2297	Batch#:	143219
Lab ID:	206462-002	Sampled:	09/30/08
Matrix:	Filtrate	Received:	09/30/08
Units:	ug/L	Prepared:	10/03/08
Diln Fac:	1.000	Analyzed:	10/08/08

Analyte	Result	RL
Boron	650	100
Calcium	22,000	500
Chromium	44	5.0
Iron	ND	100
Magnesium	44,000	500
Manganese	ND	5.0
Nickel	ND	5.0
Potassium	3,900	500
Sodium	76,000	500

ND= Not Detected
RL= Reporting Limit

20.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206462	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC463394	Batch#:	143219
Matrix:	Filtrate	Prepared:	10/03/08
Units:	ug/L	Analyzed:	10/08/08

Analyte	Result	RL
Boron	ND	100
Calcium	ND	500
Chromium	ND	5.0
Iron	ND	100
Magnesium	ND	500
Manganese	ND	5.0
Nickel	ND	5.0
Potassium	ND	500
Sodium	ND	500

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206462	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Matrix:	Filtrate	Batch#:	143219
Units:	ug/L	Prepared:	10/03/08
Diln Fac:	1.000	Analyzed:	10/08/08

Type: BS Lab ID: QC463395

Analyte	Spiked	Result	%REC	Limits
Boron	1,000	1,045	104	80-120
Calcium	20,000	18,830	94	80-120
Chromium	200.0	205.2	103	80-120
Iron	1,000	925.9	93	80-120
Magnesium	20,000	18,640	93	80-120
Manganese	50.00	53.66	107	80-120
Nickel	500.0	503.8	101	80-120
Potassium	10,000	9,052	91	80-120
Sodium	20,000	17,940	90	80-120

Type: BSD Lab ID: QC463396

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Boron	1,000	986.1	99	80-120	6	20
Calcium	20,000	19,380	97	80-120	3	20
Chromium	200.0	191.0	96	80-120	7	20
Iron	1,000	942.8	94	80-120	2	20
Magnesium	20,000	19,040	95	80-120	2	20
Manganese	50.00	50.29	101	80-120	6	20
Nickel	500.0	469.5	94	80-120	7	20
Potassium	10,000	9,269	93	80-120	2	20
Sodium	20,000	18,350	92	80-120	2	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206462	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2296	Batch#:	143219
MSS Lab ID:	206462-001	Sampled:	09/30/08
Matrix:	Filtrate	Received:	09/30/08
Units:	ug/L	Prepared:	10/03/08
Diln Fac:	1.000	Analyzed:	10/08/08

Type: MS Lab ID: QC463397

Analyte	MSS Result	Spiked	Result	%REC	Limits
Boron	1,001	1,000	2,083	108	79-121
Calcium	34,420	20,000	49,500	75	63-130
Chromium	527.1	200.0	730.7	102	78-120
Iron	54.03	1,000	941.4	89	66-126
Magnesium	81,360	20,000	94,260	64 NM	66-126
Manganese	8.152	50.00	59.73	103	73-121
Nickel	<1.497	500.0	461.2	92	74-120
Potassium	6,287	10,000	14,910	86	68-125
Sodium	96,720	20,000	109,300 >LR	63 NM	60-131

Type: MSD Lab ID: QC463398

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Boron	1,000	2,095	109	79-121	1	20
Calcium	20,000	54,290	99	63-130	9	20
Chromium	200.0	740.4	107	78-120	1	20
Iron	1,000	1,087	103	66-126	14	20
Magnesium	20,000	104,000 >LR	113 NM	66-126	NC	20
Manganese	50.00	59.73	103	73-121	0	20
Nickel	500.0	459.1	92	74-120	0	20
Potassium	10,000	16,250	100	68-125	9	20
Sodium	20,000	118,700 >LR	110 NM	60-131	NC	20

NC= Not Calculated
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206462	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2296	Units:	ug/L
Type:	Serial Dilution	Diln Fac:	5.000
MSS Lab ID:	206462-001	Batch#:	143219
Lab ID:	QC463399	Sampled:	09/30/08
Matrix:	Filtrate	Received:	09/30/08

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Analyzed
Boron	1,001	100.0	1,038	500.0	4	10	10/08/08
Calcium	34,420	500.0	36,070	1,000	5	10	10/13/08
Chromium	527.1	5.000	537.4	25.00	2	10	10/08/08
Iron	54.03	100.0	ND	500.0	NC	10	10/08/08
Magnesium	81,360	500.0	82,270	1,000	1	10	10/08/08
Manganese	8.152	5.000	ND	25.00	NC	10	10/08/08
Nickel	ND	5.000	ND	25.00	NC	10	10/08/08
Potassium	6,287	500.0	6,108	2,500	3	10	10/08/08
Sodium	96,720	500.0	97,000	2,500	0	10	10/08/08

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206462	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2296	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	143219
MSS Lab ID:	206462-001	Sampled:	09/30/08
Lab ID:	QC463400	Received:	09/30/08
Matrix:	Filtrate	Analyzed:	10/08/08
Units:	ug/L		

Analyte	MSS Result	Spiked	Result	%REC	Limits
Boron	1,001	1,000	2,001	100	75-125
Calcium	34,420	20,000	48,700	71 *	75-125
Chromium	527.1	200.0	704.6	89	75-125
Iron	54.03	1,000	899.2	85	75-125
Magnesium	81,360	20,000	92,970	58 NM	75-125
Manganese	8.152	50.00	57.14	98	75-125
Nickel	<1.497	500.0	440.6	88	75-125
Potassium	6,287	10,000	14,560	83	75-125
Sodium	96,720	20,000	107,200 >LR	52 NM	75-125

*= Value outside of QC limits; see narrative
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	206462	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Matrix:	Water	Batch#:	143069
Units:	mg/L	Received:	09/30/08

Field ID:	GWGW2296	Lab ID:	206462-001
Type:	SAMPLE	Sampled:	09/30/08 11:30

Analyte	Result	RL	Diln Fac	Analyzed
Fluoride	0.59	0.10	1.000	10/01/08 09:23
Chloride	44	1.0	5.000	09/30/08 16:51
Nitrogen, Nitrate	17	0.25	5.000	09/30/08 16:51
Sulfate	81	2.5	5.000	09/30/08 16:51

Field ID:	GWGW2297	Lab ID:	206462-002
Type:	SAMPLE	Sampled:	09/30/08 12:15

Analyte	Result	RL	Diln Fac	Analyzed
Fluoride	0.17	0.10	1.000	09/30/08 17:08
Chloride	47	1.0	5.000	09/30/08 17:25
Nitrogen, Nitrate	20	0.25	5.000	09/30/08 17:25
Sulfate	84	2.5	5.000	09/30/08 17:25

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC462760	Analyzed:	09/30/08 08:17

Analyte	Result	RL
Fluoride	ND	0.10
Chloride	ND	0.20
Nitrogen, Nitrate	ND	0.05
Sulfate	ND	0.50

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	206462	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Matrix:	Water	Diln Fac:	1.000
Units:	mg/L	Batch#:	143069

Type: BS Analyzed: 09/30/08 08:34
Lab ID: QC462761

Analyte	Spiked	Result	%REC	Limits
Fluoride	2.000	2.068	103	74-120
Chloride	4.000	3.855	96	80-120
Nitrogen, Nitrate	1.000	0.9394	94	80-120
Sulfate	10.00	9.487	95	80-120

Type: BSD Analyzed: 09/30/08 08:52
Lab ID: QC462762

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Fluoride	2.000	2.119	106	74-120	2	20
Chloride	4.000	3.898	97	80-120	1	20
Nitrogen, Nitrate	1.000	0.9221	92	80-120	2	20
Sulfate	10.00	9.353	94	80-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	206462	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
MSS Lab ID:	206439-011	Batch#:	143069
Matrix:	Water	Sampled:	09/29/08 10:10
Units:	mg/L	Received:	09/29/08

Type: MS Analyzed: 09/30/08 10:24
Lab ID: QC462775

Analyte	MSS Result	Spiked	Result	%REC	Limits
Fluoride	1.512	5.000	6.572	101	66-120
Chloride	24.01	10.00	33.38	94	80-120
Nitrogen, Nitrate	0.3894	2.500	2.657	91	80-120
Sulfate	17.08	25.00	40.87	95	80-120

Type: MSD Analyzed: 09/30/08 10:42
Lab ID: QC462776

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Fluoride	5.000	6.843	107	66-120	4	20
Chloride	10.00	33.54	95	80-120	0	20
Nitrogen, Nitrate	2.500	2.736	94	80-120	3	20
Sulfate	25.00	41.32	97	80-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Hexavalent Chromium

Lab #:	206462	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Batch#:	143080
Units:	ug/L	Received:	09/30/08

Field ID	Type	Lab ID	Matrix	Result	RL	Diln Fac	Sampled	Analyzed
GWGW2296	SAMPLE	206462-001	Filtrate	510	5.0	5.000	09/30/08 11:30	09/30/08 17:15
GWGW2297	SAMPLE	206462-002	Filtrate	41	1.0	1.000	09/30/08 12:15	09/30/08 17:02
	BLANK	QC462798	Water	ND	1.0	1.000		09/30/08 11:11

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Hexavalent Chromium

Lab #:	206462	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Field ID:	GWGW2294	Batch#:	143080
MSS Lab ID:	206440-001	Sampled:	09/29/08 12:45
Matrix:	Water	Received:	09/30/08
Units:	ug/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
BS	QC462799		20.00	19.39	97	90-110			09/30/08 12:20
BSD	QC462800		20.00	19.30	96	90-110	0	20	09/30/08 12:32
MS	QC462801	82.22	10.00	91.05	88 NM	85-115			09/30/08 12:55
MSD	QC462802		10.00	90.80	86 NM	85-115	0	20	09/30/08 13:08

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	206462	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Matrix:	Water	Sampled:	09/30/08
Units:	mg/L	Received:	09/30/08
Batch#:	143195	Analyzed:	10/02/08

Field ID:	GWGW2296	Lab ID:	206462-001
Type:	SAMPLE	Diln Fac:	6.700

Analyte	Result	RL
Alkalinity, Bicarbonate	410	6.7
Alkalinity, Carbonate	39	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	450	6.7

Field ID:	GWGW2297	Lab ID:	206462-002
Type:	SAMPLE	Diln Fac:	6.700

Analyte	Result	RL
Alkalinity, Bicarbonate	950	6.7
Alkalinity, Carbonate	130	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	1,100	6.7

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC463292		

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	206462	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	4.000
Lab ID:	QC463293	Batch#:	143195
Matrix:	Water	Analyzed:	10/02/08

Spiked	Result	%REC	Limits
200.0	192.8	96	90-110

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	206462	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	4.000
Field ID:	ZZZZZZZZZZ	Batch#:	143195
MSS Lab ID:	206523-005	Sampled:	10/01/08
Matrix:	Water	Received:	10/01/08
Units:	mg/L	Analyzed:	10/02/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC463294	131.6	200.0	317.2	93	80-120		
MSD	QC463295		200.0	319.2	94	80-120	1	25

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Organic Carbon (DOC)

Lab #:	206462	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Dissolved Organic Carbon	Batch#:	143283
Matrix:	Water	Sampled:	09/30/08
Units:	mg/L	Received:	09/30/08
Diln Fac:	1.000	Analyzed:	10/06/08

Field ID	Type	Lab ID	Result	RL
GWGW2296	SAMPLE	206462-001	3.8	1.0
GWGW2297	SAMPLE	206462-002	5.1	1.0
	BLANK	QC463653	ND	1.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Organic Carbon (DOC)

Lab #:	206462	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Dissolved Organic Carbon	Batch#:	143283
Field ID:	GWGW2294	Sampled:	09/29/08
MSS Lab ID:	206440-001	Received:	09/30/08
Matrix:	Water	Analyzed:	10/06/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
LCS	QC463654		10.00	9.780	98	90-110			1.000
MS	QC463655	4.520	10.00	13.70	92	80-121			2.000
MSD	QC463656		10.00	13.80	93	80-121	1	20	2.000

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Ferrous Iron (Fe+2)

Lab #:	206462	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM3500FE-B
Analyte:	Ferrous Iron (Fe+2)	Batch#:	143114
Matrix:	Water	Received:	09/30/08
Units:	mg/L	Prepared:	09/30/08 21:00
Diln Fac:	1.000	Analyzed:	09/30/08 21:14

Field ID	Type	Lab ID	Result	RL	Sampled
GWGW2296	SAMPLE	206462-001	ND	0.10	09/30/08 11:30
GWGW2297	SAMPLE	206462-002	ND	0.10	09/30/08 12:15
	BLANK	QC462956	ND	0.10	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Ferrous Iron (Fe+2)

Lab #:	206462	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM3500FE-B
Analyte:	Ferrous Iron (Fe+2)	Batch#:	143114
Field ID:	GWGW2296	Sampled:	09/30/08 11:30
MSS Lab ID:	206462-001	Received:	09/30/08
Matrix:	Water	Prepared:	09/30/08 21:00
Units:	mg/L	Analyzed:	09/30/08 21:14
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC462957		0.8000	0.7708	96	90-110		
MS	QC462958	<0.1000	0.8000	0.8152	102	73-136		
MSD	QC462959		0.8000	0.8161	102	73-136	0	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Total Phosphorous

Lab #:	206462	Location:	UC Davis
Client:	Weiss Associates	Analysis:	SM4500P-E
Project#:	388-1856		
Analyte:	Phosphorous	Sampled:	09/30/08
Units:	mg/L	Received:	09/30/08
Batch#:	143284	Analyzed:	10/06/08

Field ID	Type	Lab ID	Matrix	Result	RL	Diln Fac
GWGW2296	SAMPLE	206462-001	Filtrate	0.096	0.050	1.667
GWGW2297	SAMPLE	206462-002	Filtrate	0.14	0.050	1.667
	BLANK	QC463657	Water	ND	0.030	1.000

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Total Phosphorous

Lab #:	206462	Location:	UC Davis
Client:	Weiss Associates	Analysis:	SM4500P-E
Project#:	388-1856		
Analyte:	Phosphorous	Batch#:	143284
Field ID:	ZZZZZZZZZZ	Sampled:	10/01/08
MSS Lab ID:	206523-005	Received:	10/01/08
Matrix:	Water	Analyzed:	10/06/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
LCS	QC463658		0.3960	0.4333	109	72-134			1.000
MS	QC463659	0.06205	0.3960	0.07239	3 *	19-182			1.667
MSD	QC463660		0.3960	0.09442	8 *	19-182	26	26	1.667

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

206717

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-16
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AguaTierra Associates Incorporated, DBA

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Client Contact	Project Manager: Bob Devany	Sampled by: JMD	Date: 10/8/08	COC Number: UCD
Weiss Associates	Tel: 510-450-6144	Lab Contact:	Carrier:	Page 1 of 1
5801 Christie Avenue, Suite 600	Analysis Turnaround Time			Job No.
Emeryville, CA 94608	Calendar (C) or Work Days (W) --- 5W			
(510) 450-6000 Phone	TAT if different from Below _____			SDG No.
(510) 547-5043 FAX	☐ 2 weeks			
	☐ 1 week			
Job Name: UC Davis	☐ 2 days			
Address: One Shields Ave, Davis	☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Field Filtered (Y/N)	VOCs (8260)	Nitrate (EPA 300.0) *	Cr (6010B)	Title 22 Metals (6010B)	TOC (SM 5310C)	TDS (SM2540C)	Alkalinity (SM2320B)	Ca,K,Mg,Na (6010)	Chlorate, Sulfate (EPA 300.0)	1,4-dioxane (8270-SIM)	TOC	Fe II	CO_3, HCO_3, Fl, Cl, NO_3	SO_4, Cr VI	Phosphate	1,4 Dioxane			Sample Specific Notes:
-1	GWGW2309	10/7/08	1500	W	W	3			X	X							X									*needs to be analyzed in 24 hours
-2	~~GWGW~~ GWGW2307	10/8/08	1245	W	W	12		X				X	X		X			X	X	X	X	X				
-3	GWGW2310	10/8/08	1055	W	W	9						X	X		X			X	X	X		X	X			
	TBGW0513	10/8/08	0800	W	W	1		X																		~~HOLD~~ AMK 10/08/08

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **Level III Reporting**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Weiss Assoc	10/08/08 1530	[signature]	CT	10/8/08 1530
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Micah Smith

From: "Tim R. Utterback" <tru@weiss.com>
To: "Micah Smith" <micah.smith@ctberk.com>
Cc: "Anja Verce" <av@weiss.com>; "Tom Fojut" <tjf@weiss.com>
Sent: Monday, October 13, 2008 5:12 PM
Subject: Re: 388-1856 - C&T Login Summary (206717)

Micah,
There were several missing analysis requests on the chain of custody for login 206717. There should be sufficient sample volume for the following added analysis requests.
For sample GWGW2307 please add:
Mn, Fe, B, Cr, Ni by Method 6010
Hardness by EPA 130.2 or SM2340B

For sample GWGW2310 please add:
Mn, Fe, B, Cr, Ni by Method 6010
Hardness by EPA 130.2 or SM2340B
Sulfate by EPA method 300.0

Do not analyze sample GWGW2310 for Cr6+. Its too far outside holding time. We will recollect this sample.
Thanks,
-Tim

>>> "Micah Smith" <micah.smith@ctberk.com> 10/13/2008 12:10 pm >>>

Does sample #3 need Sulfate and Hexavalent Chromium? Thanks Micah
C&T Login Summary for 206717

Project:388-1856
Site:UC Davis
Lab Login #:206717
Report Due:10/15/08
PO#:
C&T Proj Mgr:Micah Smith

Report To:Weiss Associates

5801 Christie Avenue

Suite 600

Emeryville, CA 94608

ATTN: Tim Utterback

(510) 450-6000

Bill To:Weiss Associates

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd

Login # 206717 Date Received 10/8/08 Number of coolers 1
Client WEISSE Project UCDAVIS

Date Opened 10/8 By (print) KWellbrock (sign) K Wellbrock
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc)? ..... YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? ..... YES NO N/A
3. Were custody papers dry and intact when received? ..... (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? ..... (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ..... (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

   ☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

   Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) _____

   ☒ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ..... YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? ..... (YES) NO
10. Are samples in the appropriate containers for indicated tests? ..... (YES) NO
11. Are sample labels present, in good condition and complete? ..... (YES) NO
12. Do the sample labels agree with custody papers? ..... (YES) NO
13. Was sufficient amount of sample sent for tests requested? ..... (YES) NO
14. Are the samples appropriately preserved? ..... (YES) NO
15. Are bubbles > 6mm absent in VOA samples? ..... (YES) NO N/A
16. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

Only 11 containers for sample GWGW2307
Sent 1 VOA for Trip Blank – logged in ~~on hold~~ at end

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2307	Batch#:	143719
Lab ID:	206717-002	Sampled:	10/08/08
Matrix:	Water	Received:	10/08/08
Units:	ug/L	Analyzed:	10/16/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	3.9	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2307	Batch#:	143719
Lab ID:	206717-002	Sampled:	10/08/08
Matrix:	Water	Received:	10/08/08
Units:	ug/L	Analyzed:	10/16/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-125
1,2-Dichloroethane-d4	115	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	109	80-122

ND= Not Detected
RL= Reporting Limit

48.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TBGW0513	Batch#:	143719
Lab ID:	206717-004	Sampled:	10/08/08
Matrix:	Water	Received:	10/08/08
Units:	ug/L	Analyzed:	10/16/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TBGW0513	Batch#:	143719
Lab ID:	206717-004	Sampled:	10/08/08
Matrix:	Water	Received:	10/08/08
Units:	ug/L	Analyzed:	10/16/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-125
1,2-Dichloroethane-d4	98	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	105	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	143719
Units:	ug/L	Analyzed:	10/16/08
Diln Fac:	1.000		

Type: BS Lab ID: QC465512

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	22.15	89	73-133
Benzene	25.00	23.21	93	80-120
Trichloroethene	25.00	23.97	96	80-120
Toluene	25.00	24.28	97	80-120
Chlorobenzene	25.00	25.72	103	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	89	80-125
1,2-Dichloroethane-d4	93	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	99	80-122

Type: BSD Lab ID: QC465513

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	24.97	100	73-133	12	20
Benzene	25.00	23.32	93	80-120	0	20
Trichloroethene	25.00	24.93	100	80-120	4	20
Toluene	25.00	24.88	100	80-120	2	20
Chlorobenzene	25.00	26.13	105	80-120	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	91	80-125
1,2-Dichloroethane-d4	88	80-137
Toluene-d8	93	80-120
Bromofluorobenzene	98	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC465514	Batch#:	143719
Matrix:	Water	Analyzed:	10/16/08
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC465514	Batch#:	143719
Matrix:	Water	Analyzed:	10/16/08
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	89	80-125
1,2-Dichloroethane-d4	93	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	103	80-122

ND= Not Detected
RL= Reporting Limit

50.0

Curtis & Tompkins, Ltd.

1,4-Dioxane by 8270-SIM

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C-SIM
Matrix:	Water	Batch#:	143473
Units:	ug/L	Received:	10/08/08
Diln Fac:	1.000	Prepared:	10/09/08

Field ID:	GWGW2309	Sampled:	10/07/08
Type:	SAMPLE	Analyzed:	10/12/08
Lab ID:	206717-001		

Analyte	Result	RL
1,4-Dioxane	2.2	0.95

Surrogate	%REC	Limits
Nitrobenzene-d5	66	48-130
2-Fluorobiphenyl	71	54-120

Field ID:	GWGW2310	Sampled:	10/08/08
Type:	SAMPLE	Analyzed:	10/12/08
Lab ID:	206717-003		

Analyte	Result	RL
1,4-Dioxane	ND	0.95

Surrogate	%REC	Limits
Nitrobenzene-d5	63	48-130
2-Fluorobiphenyl	71	54-120

Type:	BLANK	Analyzed:	10/13/08
Lab ID:	QC464482		

Analyte	Result	RL
1,4-Dioxane	ND	1.0

Surrogate	%REC	Limits
Nitrobenzene-d5	62	48-130
2-Fluorobiphenyl	55	54-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

1,4-Dioxane by 8270-SIM

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C-SIM
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC464483	Batch#:	143473
Matrix:	Water	Prepared:	10/09/08
Units:	ug/L	Analyzed:	10/13/08

Analyte	Spiked	Result	%REC	Limits
1,4-Dioxane	3.003	2.364	79	28-120

Surrogate	%REC	Limits
Nitrobenzene-d5	82	48-130
2-Fluorobiphenyl	92	54-120

Curtis & Tompkins, Ltd.

Batch QC Report

1,4-Dioxane by 8270-SIM

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C-SIM
Field ID:	ZZZZZZZZZZ	Batch#:	143473
MSS Lab ID:	206733-001	Sampled:	10/08/08
Matrix:	Water	Received:	10/09/08
Units:	ug/L	Prepared:	10/09/08
Diln Fac:	1.000	Analyzed:	10/12/08

Type: MS Lab ID: QC464484

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,4-Dioxane	<0.07360	3.080	2.185	71	31-120

Surrogate	%REC	Limits
Nitrobenzene-d5	100	48-130
2-Fluorobiphenyl	78	54-120

Type: MSD Lab ID: QC464485

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,4-Dioxane	3.080	2.043	66	31-120	7	23

Surrogate	%REC	Limits
Nitrobenzene-d5	106	48-130
2-Fluorobiphenyl	77	54-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Chromium

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Chromium	Batch#:	143454
Field ID:	GWGW2309	Sampled:	10/07/08
Matrix:	Water	Received:	10/08/08
Units:	ug/L	Prepared:	10/09/08
Diln Fac:	1.000		

Type	Lab ID	Result	RL	Analyzed
SAMPLE	206717-001	68	5.0	10/14/08
BLANK	QC464384	ND	5.0	10/11/08

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Chromium

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Chromium	Batch#:	143454
Field ID:	ZZZZZZZZZZ	Sampled:	10/07/08
MSS Lab ID:	206687-001	Received:	10/08/08
Matrix:	Water	Prepared:	10/09/08
Units:	ug/L	Analyzed:	10/11/08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC464385		200.0	201.0	100	80-120		
BSD	QC464386		200.0	203.1	102	80-120	1	20
MS	QC464387	2.506	200.0	156.7	77 *	78-120		
MSD	QC464388		200.0	148.7	73 *	78-120	5	20

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Chromium

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Chromium	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	143454
MSS Lab ID:	206687-001	Sampled:	10/07/08
Lab ID:	QC464389	Received:	10/08/08
Matrix:	Water	Analyzed:	10/11/08

MSS Result	MSS RL	Result	RL	% Diff	Lim
2.506	5.000	3.790 J	25.00	NC	10

J= Estimated value
NC= Not Calculated
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Chromium

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Chromium	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	143454
MSS Lab ID:	206687-001	Sampled:	10/07/08
Lab ID:	QC464390	Received:	10/08/08
Matrix:	Water	Analyzed:	10/11/08

MSS Result	Spiked	Result	%REC	Limits
2.506	200.0	152.9	75	75-125

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2307	Batch#:	143700
Lab ID:	206717-002	Sampled:	10/08/08
Matrix:	Filtrate	Received:	10/08/08
Units:	ug/L	Prepared:	10/15/08

Analyte	Result	RL	Diln Fac	Analyzed
Boron	870	100	1.000	10/15/08
Calcium	59,000	500	1.000	10/15/08
Chromium	160	5.0	1.000	10/15/08
Iron	ND	100	1.000	10/15/08
Magnesium	140,000	2,000	10.00	10/17/08
Manganese	ND	5.0	1.000	10/15/08
Nickel	ND	5.0	1.000	10/15/08
Potassium	790	500	1.000	10/15/08
Sodium	84,000	500	1.000	10/15/08

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2310	Batch#:	143700
Lab ID:	206717-003	Sampled:	10/08/08
Matrix:	Filtrate	Received:	10/08/08
Units:	ug/L	Prepared:	10/15/08
Diln Fac:	1.000	Analyzed:	10/15/08

Analyte	Result	RL
Boron	460	100
Calcium	29,000	500
Chromium	8.0	5.0
Iron	ND	100
Magnesium	74,000	500
Manganese	ND	5.0
Nickel	ND	5.0
Potassium	520	500
Sodium	32,000	500

ND= Not Detected
RL= Reporting Limit

41.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC465437	Batch#:	143700
Matrix:	Filtrate	Prepared:	10/15/08
Units:	ug/L	Analyzed:	10/17/08

Analyte	Result	RL
Boron	ND	100
Calcium	ND	500
Chromium	ND	5.0
Iron	ND	100
Magnesium	ND	500
Manganese	ND	5.0
Nickel	ND	5.0
Potassium	ND	500
Sodium	ND	500

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Matrix:	Filtrate	Batch#:	143700
Units:	ug/L	Prepared:	10/15/08
Diln Fac:	1.000	Analyzed:	10/17/08

Type: BS Lab ID: QC465438

Analyte	Spiked	Result	%REC	Limits
Boron	1,000	999.5	100	80-120
Calcium	20,000	20,270	101	80-120
Chromium	200.0	202.6	101	80-120
Iron	1,000	998.1	100	80-120
Magnesium	20,000	20,480	102	80-120
Manganese	50.00	51.44	103	80-120
Nickel	500.0	486.7	97	80-120
Potassium	10,000	9,832	98	80-120
Sodium	20,000	20,100	101	80-120

Type: BSD Lab ID: QC465439

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Boron	1,000	1,047	105	80-120	5	20
Calcium	20,000	20,790	104	80-120	3	20
Chromium	200.0	205.0	102	80-120	1	20
Iron	1,000	1,010	101	80-120	1	20
Magnesium	20,000	20,810	104	80-120	2	20
Manganese	50.00	52.82	106	80-120	3	20
Nickel	500.0	499.0	100	80-120	2	20
Potassium	10,000	10,010	100	80-120	2	20
Sodium	20,000	20,720	104	80-120	3	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2307	Batch#:	143700
MSS Lab ID:	206717-002	Sampled:	10/08/08
Matrix:	Filtrate	Received:	10/08/08
Units:	ug/L	Prepared:	10/15/08
Diln Fac:	1.000	Analyzed:	10/17/08

Type: MS Lab ID: QC465440

Analyte	MSS Result	Spiked	Result	%REC	Limits
Boron	869.6	1,000	1,937	107	79-121
Calcium	58,870	20,000	75,050	81	63-130
Chromium	158.7	200.0	354.3	98	78-120
Iron	<16.49	1,000	965.9	97	66-126
Magnesium	144,900	20,000	161,600 >LR	84 NM	66-126
Manganese	3.400	50.00	56.54	106	73-121
Nickel	<1.497	500.0	471.8	94	74-120
Potassium	792.9	10,000	10,800	100	68-125
Sodium	84,220	20,000	100,800 >LR	83 NM	60-131

Type: MSD Lab ID: QC465441

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Boron	1,000	1,954	108	79-121	1	20
Calcium	20,000	72,300	67	63-130	4	20
Chromium	200.0	360.2	101	78-120	2	20
Iron	1,000	900.2	90	66-126	7	20
Magnesium	20,000	155,700 >LR	54 NM	66-126	NC	20
Manganese	50.00	57.09	107	73-121	1	20
Nickel	500.0	475.4	95	74-120	1	20
Potassium	10,000	10,410	96	68-125	4	20
Sodium	20,000	97,060	64 NM	60-131	NC	20

NC= Not Calculated
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2307	Units:	ug/L
Type:	Serial Dilution	Batch#:	143700
MSS Lab ID:	206717-002	Sampled:	10/08/08
Lab ID:	QC465442	Received:	10/08/08
Matrix:	Filtrate		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln Fac	Analyzed
Boron	869.6	100.0	887.9	500.0	2	10	5.000	10/15/08
Calcium	58,870	500.0	58,530	1,000	1	10	5.000	10/15/08
Chromium	158.7	5.000	153.3	25.00	3	10	5.000	10/15/08
Iron	ND	100.0	ND	500.0	NC	10	5.000	10/15/08
Magnesium	144,900	2,000	155,300	10,000	7	10	50.00	10/17/08
Manganese	3.400	5.000	ND	25.00	NC	10	5.000	10/15/08
Nickel	ND	5.000	ND	25.00	NC	10	5.000	10/15/08
Potassium	792.9	500.0	1,197 J	2,500	NC	10	5.000	10/15/08
Sodium	84,220	500.0	81,990	2,500	3	10	5.000	10/15/08

J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2307	Units:	ug/L
Type:	Post Digest Spike	Batch#:	143700
MSS Lab ID:	206717-002	Sampled:	10/08/08
Lab ID:	QC465443	Received:	10/08/08
Matrix:	Filtrate		

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln Fac	Analyzed
Boron	869.6	1,000	1,868	100	75-125	1.000	10/15/08
Calcium	58,870	20,000	72,820	70 *	75-125	1.000	10/15/08
Chromium	158.7	200.0	350.8	96	75-125	1.000	10/15/08
Iron	<16.49	1,000	931.3	93	75-125	1.000	10/15/08
Magnesium	144,900	200,000	353,300	104	75-125	10.00	10/17/08
Manganese	3.400	50.00	53.55	100	75-125	1.000	10/15/08
Nickel	<1.497	500.0	452.4	90	75-125	1.000	10/15/08
Potassium	792.9	10,000	10,360	96	75-125	1.000	10/15/08
Sodium	84,220	20,000	97,050	64 NM	75-125	1.000	10/15/08

*= Value outside of QC limits; see narrative
NM= Not Meaningful: Sample concentration > 4X spike concentration

Curtis & Tompkins, Ltd.

Dissolved Hardness (Total)

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	SM 2340B
Analyte:	Hardness as CaCO3	Batch#:	143700
Matrix:	Filtrate	Sampled:	10/08/08
Units:	mg/L	Received:	10/08/08
Diln Fac:	1.000	Prepared:	10/15/08

Field ID	Type	Lab ID	Result	RL	Analyzed
GWGW2307	SAMPLE	206717-002	740	3.3	10/15/08
GWGW2310	SAMPLE	206717-003	380	3.3	10/15/08
	BLANK	QC465437	ND	3.3	10/17/08

ND= Not Detected
RL= Reporting Limit

47.1

Curtis & Tompkins, Ltd.

Nitrate Nitrogen

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Batch#:	143386
Field ID:	GWGW2309	Sampled:	10/07/08 15:00
Matrix:	Water	Received:	10/08/08
Units:	mg/L		

Type	Lab ID	Result	RL	Diln Fac	Analyzed
SAMPLE	206717-001	6.2	0.10	2.000	10/09/08 12:36
BLANK	QC464097	ND	0.05	1.000	10/08/08 09:27

ND= Not Detected
RL= Reporting Limit

13.0

Curtis & Tompkins, Ltd.

Batch QC Report

Nitrate Nitrogen

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Units:	mg/L
Field ID:	ZZZZZZZZZZ	Batch#:	143386
MSS Lab ID:	206709-004	Sampled:	10/08/08 11:37
Matrix:	Water	Received:	10/08/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
BS	QC464098		1.000	0.9411	94	80-120			1.000	10/08/08 09:52
BSD	QC464099		1.000	0.9344	93	80-120	1	20	1.000	10/08/08 10:09
MS	QC464256	<0.02889	50.00	49.16	98	80-120			100.0	10/09/08 05:38
MSD	QC464257		50.00	49.17	98	80-120	0	20	100.0	10/09/08 05:55

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Curtis & Tompkins Laboratories Analytical Report

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Analysis:	EPA 300.0
Project#:	388-1856		
Units:	mg/L	Received:	10/08/08
Batch#:	143386		

Field ID:	GWGW2307	Matrix:	Filtrate
Type:	SAMPLE	Sampled:	10/08/08 12:45
Lab ID:	206717-002		

Analyte	Result	RL	Diln Fac	Analyzed
Fluoride	0.30	0.10	1.000	10/09/08 08:50
Chloride	63	1.0	5.000	10/08/08 17:40
Nitrogen, Nitrate	37	0.50	10.00	10/08/08 20:21
Sulfate	40	0.50	1.000	10/09/08 08:50

Field ID:	GWGW2310	Diln Fac:	1.000
Type:	SAMPLE	Sampled:	10/08/08 10:55
Lab ID:	206717-003	Analyzed:	10/08/08 17:57
Matrix:	Filtrate		

Analyte	Result	RL
Fluoride	0.38	0.10
Chloride	11	0.20
Nitrogen, Nitrate	3.6	0.05
Sulfate	31	0.50

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC464097	Analyzed:	10/08/08 09:27
Matrix:	Water		

Analyte	Result	RL
Fluoride	ND	0.10
Chloride	ND	0.20
Nitrogen, Nitrate	ND	0.05
Sulfate	ND	0.50

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Curtis & Tompkins Laboratories Analytical Report

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Analysis:	EPA 300.0
Project#:	388-1856		
Matrix:	Water	Diln Fac:	1.000
Units:	mg/L	Batch#:	143386

Type: BS Analyzed: 10/08/08 09:52
Lab ID: QC464098

Analyte	Spiked	Result	%REC	Limits
Fluoride	2.000	2.112	106	74-120
Chloride	4.000	3.916	98	80-120
Nitrogen, Nitrate	1.000	0.9411	94	80-120
Sulfate	10.00	9.591	96	80-120

Type: BSD Analyzed: 10/08/08 10:09
Lab ID: QC464099

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Fluoride	2.000	2.196	110	74-120	4	20
Chloride	4.000	3.962	99	80-120	1	20
Nitrogen, Nitrate	1.000	0.9344	93	80-120	1	20
Sulfate	10.00	9.589	96	80-120	0	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Curtis & Tompkins Laboratories Analytical Report

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Analysis:	EPA 300.0
Project#:	388-1856		
Field ID:	ZZZZZZZZZZ	Diln Fac:	100.0
MSS Lab ID:	206709-004	Batch#:	143386
Matrix:	Water	Sampled:	10/08/08 11:37
Units:	mg/L	Received:	10/08/08

Type: MS Analyzed: 10/09/08 05:38
Lab ID: QC464256

Analyte	MSS Result	Spiked	Result	%REC	Limits
Fluoride	0.6351	100.0	117.1	116	66-120
Chloride	1,380	200.0	1,566	93 NM	80-120
Nitrogen, Nitrate	<0.02889	50.00	49.16	98	80-120
Sulfate	135.4	500.0	637.8	100	80-120

Type: MSD Analyzed: 10/09/08 05:55
Lab ID: QC464257

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Fluoride	100.0	114.9	114	66-120	2	20
Chloride	200.0	1,575	97 NM	80-120	1	20
Nitrogen, Nitrate	50.00	49.17	98	80-120	0	20
Sulfate	500.0	634.8	100	80-120	0	20

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Hexavalent Chromium

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Batch#:	143418
Units:	ug/L	Received:	10/08/08
Diln Fac:	1.000		

Field ID	Type	Lab ID	Matrix	Result	RL	Sampled	Analyzed
GWGW2307	SAMPLE	206717-002	Filtrate	150	1.0	10/08/08 12:45	10/08/08 17:46
GWGW2310	SAMPLE	206717-003	Filtrate	8.0	1.0	10/08/08 10:55	10/08/08 17:59
	BLANK	QC464251	Water	ND	1.0		10/08/08 15:00

ND= Not Detected
RL= Reporting Limit

18.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Hexavalent Chromium

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	143418
MSS Lab ID:	206709-004	Sampled:	10/08/08 11:37
Matrix:	Water	Received:	10/08/08
Units:	ug/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
BS	QC464252		20.00	19.84	99	90-110			10/08/08 15:15
BSD	QC464253		20.00	19.37	97	90-110	2	20	10/08/08 15:28
MS	QC464254	<0.1302	10.00	7.123	71 *	85-115			10/08/08 18:37
MSD	QC464255		10.00	7.635	76 *	85-115	7	20	10/08/08 18:49

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Matrix:	Water	Sampled:	10/08/08
Units:	mg/L	Received:	10/08/08
Batch#:	143509	Analyzed:	10/10/08

Field ID:	GWGW2307	Lab ID:	206717-002
Type:	SAMPLE	Diln Fac:	6.700

Analyte	Result	RL
Alkalinity, Bicarbonate	630	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	630	6.7

Field ID:	GWGW2310	Lab ID:	206717-003
Type:	SAMPLE	Diln Fac:	6.700

Analyte	Result	RL
Alkalinity, Bicarbonate	370	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	370	6.7

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC464644		

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	4.000
Lab ID:	QC464645	Batch#:	143509
Matrix:	Water	Analyzed:	10/10/08

Spiked	Result	%REC	Limits
200.0	189.6	95	90-110

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	4.000
Field ID:	ZZZZZZZZZZ	Batch#:	143509
MSS Lab ID:	206518-002	Sampled:	10/01/08
Matrix:	Water	Received:	10/01/08
Units:	mg/L	Analyzed:	10/10/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC464646	1,629	200.0	1,812	91	80-120		
MSD	QC464647		200.0	1,806	88	80-120	0	25

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Organic Carbon (DOC)

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Dissolved Organic Carbon	Batch#:	143617
Matrix:	Water	Sampled:	10/08/08
Units:	mg/L	Received:	10/08/08
Diln Fac:	1.000	Analyzed:	10/14/08

Field ID	Type	Lab ID	Result	RL
GWGW2307	SAMPLE	206717-002	1.1	1.0
GWGW2310	SAMPLE	206717-003	ND	1.0
	BLANK	QC465103	ND	1.0

ND= Not Detected
RL= Reporting Limit

22.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Organic Carbon (DOC)

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Dissolved Organic Carbon	Batch#:	143617
Field ID:	GWGW2307	Sampled:	10/08/08
MSS Lab ID:	206717-002	Received:	10/08/08
Matrix:	Water	Analyzed:	10/14/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
LCS	QC465104		10.00	10.17	102	90-110			1.000
MS	QC465105	1.052	10.00	11.16	101	80-121			2.000
MSD	QC465106		10.00	11.19	101	80-121	0	20	2.000

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Ferrous Iron (Fe+2)

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM3500FE-B
Analyte:	Ferrous Iron (Fe+2)	Batch#:	143428
Matrix:	Water	Received:	10/08/08
Units:	mg/L	Prepared:	10/08/08 19:15
Diln Fac:	1.000	Analyzed:	10/08/08 19:33

Field ID	Type	Lab ID	Result	RL	Sampled
GWGW2307	SAMPLE	206717-002	ND	0.10	10/08/08 12:45
GWGW2310	SAMPLE	206717-003	ND	0.10	10/08/08 10:55
	BLANK	QC464288	ND	0.10	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Ferrous Iron (Fe+2)

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM3500FE-B
Analyte:	Ferrous Iron (Fe+2)	Batch#:	143428
Field ID:	GWGW2307	Sampled:	10/08/08 12:45
MSS Lab ID:	206717-002	Received:	10/08/08
Matrix:	Water	Prepared:	10/08/08 19:15
Units:	mg/L	Analyzed:	10/08/08 19:33
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC464289		0.8000	0.7939	99	90-110		
MS	QC464290	<0.1000	0.8000	0.8017	100	73-136		
MSD	QC464291		0.8000	0.8239	103	73-136	3	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Orthophosphate Phosphorous

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM4500P-E
Analyte:	Orthophosphate (as P)	Batch#:	143492
Matrix:	Water	Received:	10/08/08
Units:	mg/L	Analyzed:	10/10/08 09:50
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Sampled
GWGW2307	SAMPLE	206717-002	0.16	0.030	10/08/08 12:45
GWGW2310	SAMPLE	206717-003	0.20	0.030	10/08/08 10:55
	BLANK	QC464561	ND	0.030	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Orthophosphate Phosphorous

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM4500P-E
Analyte:	Orthophosphate (as P)	Diln Fac:	1.000
Field ID:	GWGW2308	Batch#:	143492
MSS Lab ID:	206749-002	Sampled:	10/09/08 08:30
Matrix:	Water	Received:	10/09/08
Units:	mg/L	Analyzed:	10/10/08 09:50

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC464562		0.4000	0.3952	99	80-120		
MS	QC464563	0.2711	0.4000	0.6639	98	80-136		
MSD	QC464564		0.4000	0.6673	99	80-136	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2540C
Analyte:	Total Dissolved Solids	Sampled:	10/08/08
Matrix:	Water	Received:	10/08/08
Units:	mg/L	Prepared:	10/09/08
Batch#:	143475	Analyzed:	10/10/08

Field ID	Type	Lab ID	Result	RL	Diln Fac
GWGW2307	SAMPLE	206717-002	930	13	1.250
GWGW2310	SAMPLE	206717-003	420	11	1.111
	BLANK	QC464493	ND	10	1.000

ND= Not Detected
RL= Reporting Limit

4.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Dissolved Solids (TDS)

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2540C
Analyte:	Total Dissolved Solids	Batch#:	143475
Field ID:	ZZZZZZZZZZ	Sampled:	10/08/08
MSS Lab ID:	206698-001	Received:	10/08/08
Matrix:	Water	Prepared:	10/09/08
Units:	mg/L	Analyzed:	10/10/08

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim	Diln Fac
BS	QC464494		104.0	92.00		88	73-120			1.000
BSD	QC464495		104.0	88.00		85	73-120	4	22	1.000
SDUP	QC464496	22,700		22,500	500.0			1	20	50.00

RL= Reporting Limit
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Organic Carbon (TOC)

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Batch#:	143521
Matrix:	Water	Sampled:	10/08/08
Units:	mg/L	Received:	10/08/08
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Analyzed
GWGW2307	SAMPLE	206717-002	1.1	0.50	10/10/08
GWGW2310	SAMPLE	206717-003	0.98	0.50	10/11/08
	BLANK	QC464700	ND	0.50	10/10/08

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Organic Carbon (TOC)

Lab #:	206717	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Batch#:	143521
Field ID:	ZZZZZZZZZZ	Sampled:	10/06/08
MSS Lab ID:	206706-001	Received:	10/08/08
Matrix:	Water	Analyzed:	10/10/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
LCS	QC464701		10.00	10.54	105	90-110			1.000
MS	QC464702	33.80	20.00	54.95	106	62-124			4.000
MSD	QC464703		20.00	54.65	104	62-124	1	20	4.000

RPD= Relative Percent Difference

206731

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-16
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AguaTierra Associates Incorporated, DBA

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Client Contact	Project Manager: Bob Devany	Sampled by: JMD/KHA	Date: 10/8/08	COC Number: UCD
Weiss Associates	Tel: 510-450-6144	Lab Contact:	Carrier:	Page 1 of 1
5801 Christie Avenue, Suite 600	**Analysis Turnaround Time**			Job No.
Emeryville, CA 94608	Calendar (C) or Work Days (W) --- 5W			
(510) 450-6000 Phone	TAT if different from Below _____			SDG No.
(510) 547-5043 FAX	☐ 2 weeks			
	☐ 1 week			
Job Name: UC Davis	☐ 2 days			
Address: One Shields Ave, Davis	☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Field Filtered (Y/N)	VOCs (8260) A2P	Nitrate (EPA 300.0) *	Cr (6010B)	Dissolved Organic Carbon SM5310B	Ca, Mg, K, Na, Ni, Mn, Fe, B (6010B) +	Cr6+ (7199)	Fe II (SM3500 FeD)	Chlorate, Sulfate (EPA 300.0)	Phosphate (SM4500-PE)	Carbonate, Bicarbonate (EPA 310.1)	Fluoride (SM 4500-Fl)	TOC (SM 5310C)	TDS (SM 2540C)	Title 22 Metals (6010B)	Alkalinity (SM2320B)	Total Cr, Nickel, Hardness +	Cl, NO3, SO4, Cr (VI)	Sample Specific Notes:
-1	OWGW2315	10/8	1615	W	W	1			X																* Analyze w/in 48 hours of sample time
-2	GWGW 2317	10/8	1620	W	W	7		X			X	X	X	X		X	X		X	X			X		X + 2 tests done from same SAMPLE

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **Level III Reporting**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
John Atkinson	Weiss Assoc.	10/8/08 1915	K Wellhost	C&T	10/8/08 2115
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 206731 Date Received 10/8/08 Number of coolers 1
Client WEISS ASSC. Project UC DAVIS

Date Opened 10/8/08 By (print) M. VILLANUEVA (sign)
Date Logged in 10/8/08 By (print) (sign)

1. Did cooler come with a shipping slip (airbill, etc)? ..... YES NO
   Shipping info

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☐ NO
   How many Name Date
2B. Were custody seals intact upon arrival? ..... YES NO N/A
3. Were custody papers dry and intact when received? ..... YES NO
4. Were custody papers filled out properly (ink, signed, etc)? ..... YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ..... YES NO
6. Indicate the packing in cooler: (if other, describe)

   ☐ Bubble Wrap ☐ Foam blocks ☑ Bags ☐ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

   Type of ice used: ☑ Wet ☐ Blue/Gel ☐ None Temp(°C)

   ☑ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ..... YES NO
   If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? ..... YES NO
10. Are samples in the appropriate containers for indicated tests? ..... YES NO
11. Are sample labels present, in good condition and complete? ..... YES NO
12. Do the sample labels agree with custody papers? ..... YES NO
13. Was sufficient amount of sample sent for tests requested? ..... YES NO
14. Are the samples appropriately preserved? ..... YES NO N/A
15. Are bubbles > 6mm absent in VOA samples? ..... YES NO N/A
16. Was the client contacted concerning this sample delivery? ..... YES NO
    If YES, Who was called? By Date:

COMMENTS

Curtis & Tompkins, Ltd.

Metals Analytical Report

Lab #:	206731	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2317	Sampled:	10/08/08
Lab ID:	206731-002	Received:	10/08/08
Matrix:	Water	Prepared:	10/09/08
Units:	ug/L	Analyzed:	10/14/08
Batch#:	143454		

Analyte	Result	RL	Diln Fac
Boron	1,200	100	1.000
Calcium	59,000	500	1.000
Chromium	490	5.0	1.000
Iron	ND	100	1.000
Magnesium	180,000	2,000	10.00
Manganese	ND	5.0	1.000
Nickel	ND	5.0	1.000
Potassium	1,300	500	1.000
Sodium	100,000	5,000	10.00

ND= Not Detected
RL= Reporting Limit

15.1

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	206731	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC464384	Batch#:	143454
Matrix:	Water	Prepared:	10/09/08
Units:	ug/L	Analyzed:	10/11/08

Analyte	Result	RL
Boron	ND	100
Calcium	ND	500
Chromium	ND	5.0
Iron	ND	100
Magnesium	ND	500
Manganese	ND	5.0
Nickel	ND	5.0
Potassium	ND	500
Sodium	ND	500

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	206731	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Matrix:	Water	Batch#:	143454
Units:	ug/L	Prepared:	10/09/08
Diln Fac:	1.000	Analyzed:	10/11/08

Type: BS Lab ID: QC464385

Analyte	Spiked	Result	%REC	Limits
Boron	1,000	1,047	105	80-120
Calcium	20,000	18,440	92	80-120
Chromium	200.0	201.0	100	80-120
Iron	1,000	1,040	104	80-120
Magnesium	20,000	17,710	89	80-120
Manganese	50.00	53.79	108	80-120
Nickel	500.0	496.1	99	80-120
Potassium	10,000	9,298	93	80-120
Sodium	20,000	18,450	92	80-120

Type: BSD Lab ID: QC464386

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Boron	1,000	1,052	105	80-120	1	20
Calcium	20,000	18,520	93	80-120	0	20
Chromium	200.0	203.1	102	80-120	1	20
Iron	1,000	902.4	90	80-120	14	20
Magnesium	20,000	17,480	87	80-120	1	20
Manganese	50.00	53.99	108	80-120	0	20
Nickel	500.0	500.2	100	80-120	1	20
Potassium	10,000	9,335	93	80-120	0	20
Sodium	20,000	18,570	93	80-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	206731	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	143454
MSS Lab ID:	206687-001	Sampled:	10/07/08
Matrix:	Water	Received:	10/08/08
Units:	ug/L	Prepared:	10/09/08

Type: MS Lab ID: QC464387

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln Fac	Analyzed
Boron	8,354	1,000	9,479	113 NM	79-121	1.000	10/11/08
Calcium	633,200	20,000	527,700 >LR	-527 NM	63-130	1.000	10/11/08
Chromium	2.506	200.0	156.7	77 *	78-120	1.000	10/11/08
Iron	62.52	1,000	826.5	76	66-126	1.000	10/11/08
Magnesium	1,871,000	20,000	1,475,000 >LR	-1980 NM	66-126	1.000	10/11/08
Manganese	<1.510	50.00	45.32	91	73-121	1.000	10/11/08
Nickel	<1.497	500.0	339.2	68 *	74-120	1.000	10/11/08
Potassium	585,900	10,000	843,700 >LR	2578 NM	68-125	1.000	10/11/08
Sodium	17,500,000	20,000	16,380,000	NM	60-131	500.0	10/14/08

Type: MSD Lab ID: QC464388

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
Boron	1,000	9,308	95 NM	79-121	2	20	1.000	10/11/08
Calcium	20,000	472,300 >LR	-804 NM	63-130	NC	20	1.000	10/11/08
Chromium	200.0	148.7	73 *	78-120	5	20	1.000	10/11/08
Iron	1,000	732.5	67	66-126	12	20	1.000	10/11/08
Magnesium	20,000	1,308,000 >LR	-2813 NM	66-126	NC	20	1.000	10/11/08
Manganese	50.00	43.35	87	73-121	4	20	1.000	10/11/08
Nickel	500.0	317.7	64 *	74-120	7	20	1.000	10/11/08
Potassium	10,000	770,900 >LR	1850 NM	68-125	NC	20	1.000	10/11/08
Sodium	20,000	18,620,000	NM	60-131	13	20	500.0	10/14/08

*= Value outside of QC limits; see narrative
NC= Not Calculated
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	206731	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Units:	ug/L
Type:	Serial Dilution	Batch#:	143454
MSS Lab ID:	206687-001	Sampled:	10/07/08
Lab ID:	QC464389	Received:	10/08/08
Matrix:	Water		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln Fac	Analyzed
Boron	8,354	100.0	8,564	500.0	3	10	5.000	10/11/08
Calcium	633,200	20,000	617,800	100,000	2	10	500.0	10/11/08
Chromium	2.506	5.000	3.790 J	25.00	NC	10	5.000	10/11/08
Iron	62.52	100.0	ND	500.0	NC	10	5.000	10/11/08
Magnesium	1,871,000	20,000	1,720,000	100,000	8	10	500.0	10/11/08
Manganese	ND	5.000	ND	25.00	NC	10	5.000	10/11/08
Nickel	ND	5.000	ND	25.00	NC	10	5.000	10/11/08
Potassium	585,900	50,000	598,500	250,000	2	10	500.0	10/11/08
Sodium	17,500,000	250,000	16,600,000	1,250,000	5	10	2,500	10/14/08

J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

19.0

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	206731	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Units:	ug/L
Type:	Post Digest Spike	Batch#:	143454
MSS Lab ID:	206687-001	Sampled:	10/07/08
Lab ID:	QC464390	Received:	10/08/08
Matrix:	Water		

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln Fac	Analyzed
Boron	7,844	100,000	119,200	111	75-125	100.0	10/11/08
Calcium	633,200	2,000,000	2,524,000	95	75-125	100.0	10/11/08
Chromium	2.506	200.0	152.9	75	75-125	1.000	10/11/08
Iron	62.52	1,000	799.4	74 *	75-125	1.000	10/11/08
Magnesium	1,871,000	2,000,000	3,943,000	104	75-125	100.0	10/11/08
Manganese	<1.510	50.00	45.05	90	75-125	1.000	10/11/08
Nickel	<1.497	500.0	324.5	65 *	75-125	1.000	10/11/08
Potassium	585,900	1,000,000	1,504,000	92	75-125	100.0	10/11/08
Sodium	17,500,000	10,000,000	25,890,000	84	75-125	500.0	10/14/08

*= Value outside of QC limits; see narrative

Curtis & Tompkins, Ltd.

Hardness (Total)

Lab #:	206731	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	SM 2340B
Analyte:	Hardness as CaCO3	Batch#:	143454
Field ID:	GWGW2317	Sampled:	10/08/08
Matrix:	Water	Received:	10/08/08
Units:	mg/L	Prepared:	10/09/08
Diln Fac:	1.000		

Type	Lab ID	Result	RL	Analyzed
SAMPLE	206731-002	900	3.3	10/14/08
BLANK	QC464384	ND	3.3	10/11/08

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Fluoride

Lab #:	206731	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Analyte:	Fluoride	Diln Fac:	1.000
Field ID:	GWGW2317	Batch#:	143512
Matrix:	Water	Sampled:	10/08/08 16:20
Units:	mg/L	Received:	10/08/08

Type	Lab ID	Result	RL	Analyzed
SAMPLE	206731-002	0.30	0.10	10/11/08 01:11
BLANK	QC464658	ND	0.10	10/10/08 11:55

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Fluoride

Lab #:	206731	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Analyte:	Fluoride	Units:	mg/L
Field ID:	ZZZZZZZZZZ	Batch#:	143512
Matrix:	Water		

Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Sampled	Received	Analyzed
BS		QC464659		2.000	2.032	102	74-120			1.000			10/10/08 12:12
BSD		QC464660		2.000	1.987	99	74-120	2	20	1.000			10/10/08 12:30
MS	206760-007	QC464661	<0.8367	1,000	1,035	103	66-120			1,000	10/09/08 13:30	10/09/08	10/10/08 16:19
MSD	206760-007	QC464662		1,000	1,022	102	66-120	1	20	1,000	10/09/08 13:30	10/09/08	10/10/08 16:37
MS	206685-002	QC464711	0.1916	1.020	1.341	113	66-120			1.020	10/03/08 10:02	10/07/08	10/10/08 16:54
MSD	206685-002	QC464712		1.020	1.298	109	66-120	3	20	1.020	10/03/08 10:02	10/07/08	10/10/08 17:11

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Curtis & Tompkins, Ltd.

Nitrate Nitrogen

Lab #:	206731	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Batch#:	143459
Field ID:	GWGW2315	Sampled:	10/08/08 16:15
Matrix:	Water	Received:	10/08/08
Units:	mg/L		

Type	Lab ID	Result	RL	Diln Fac	Analyzed
SAMPLE	206731-001	11	0.25	5.000	10/09/08 15:13
BLANK	QC464413	ND	0.05	1.000	10/09/08 13:11

ND= Not Detected
RL= Reporting Limit

26.0

Curtis & Tompkins, Ltd.

Batch QC Report

Nitrate Nitrogen

Lab #:	206731	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Units:	mg/L
Field ID:	ZZZZZZZZZZ	Batch#:	143459
MSS Lab ID:	206734-001	Sampled:	10/08/08 09:40
Matrix:	Water	Received:	10/09/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
BS	QC464414		1.000	0.9368	94	80-120			1.000	10/09/08 13:28
BSD	QC464415		1.000	0.9317	93	80-120	1	20	1.000	10/09/08 13:46
MS	QC464416	<0.01445	10.00	8.993	90	80-120			20.00	10/10/08 06:59
MSD	QC464417		10.00	9.032	90	80-120	0	20	20.00	10/10/08 07:16

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Hexavalent Chromium

Lab #:	206731	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Field ID:	GWGW2317	Batch#:	143453
Matrix:	Water	Sampled:	10/08/08 16:20
Units:	ug/L	Received:	10/08/08

Type	Lab ID	Result	RL	Analyzed
SAMPLE	206731-002	450	1.0	10/09/08 12:43
BLANK	QC464379	ND	1.0	10/09/08 12:31

ND= Not Detected
RL= Reporting Limit

21.0

Curtis & Tompkins, Ltd.

Batch QC Report

Hexavalent Chromium

Lab #:	206731	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Field ID:	GWGW2317	Batch#:	143453
MSS Lab ID:	206731-002	Sampled:	10/08/08 16:20
Matrix:	Water	Received:	10/08/08
Units:	ug/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
BS	QC464380		20.00	20.10	100	90-110			10/09/08 12:56
BSD	QC464381		20.00	19.80	99	90-110	2	20	10/09/08 13:09
MS	QC464382	449.8	10.00	452.1	23 NM	85-115			10/09/08 13:23
MSD	QC464383		10.00	452.0	21 NM	85-115	0	20	10/09/08 13:35

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	206731	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Field ID:	GWGW2317	Sampled:	10/08/08
Matrix:	Water	Received:	10/08/08
Units:	mg/L	Analyzed:	10/10/08
Batch#:	143509		

Type: SAMPLE Diln Fac: 6.700
Lab ID: 206731-002

Analyte	Result	RL
Alkalinity, Bicarbonate	770	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	770	6.7

Type: BLANK Diln Fac: 1.000
Lab ID: QC464644

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	206731	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	4.000
Lab ID:	QC464645	Batch#:	143509
Matrix:	Water	Analyzed:	10/10/08

Spiked	Result	%REC	Limits
200.0	189.6	95	90-110

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	206731	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	4.000
Field ID:	ZZZZZZZZZZ	Batch#:	143509
MSS Lab ID:	206518-002	Sampled:	10/01/08
Matrix:	Water	Received:	10/01/08
Units:	mg/L	Analyzed:	10/10/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC464646	1,629	200.0	1,812	91	80-120		
MSD	QC464647		200.0	1,806	88	80-120	0	25

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Organic Carbon (DOC)

Lab #:	206731	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Dissolved Organic Carbon	Batch#:	143617
Field ID:	GWGW2317	Sampled:	10/08/08
Matrix:	Water	Received:	10/08/08
Units:	mg/L	Analyzed:	10/14/08
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	206731-002	1.5	1.0
BLANK	QC465103	ND	1.0

ND= Not Detected
RL= Reporting Limit

12.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Organic Carbon (DOC)

Lab #:	206731	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Dissolved Organic Carbon	Batch#:	143617
Field ID:	GWGW2307	Sampled:	10/08/08
MSS Lab ID:	206717-002	Received:	10/08/08
Matrix:	Water	Analyzed:	10/14/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
LCS	QC465104		10.00	10.17	102	90-110			1.000
MS	QC465105	1.052	10.00	11.16	101	80-121			2.000
MSD	QC465106		10.00	11.19	101	80-121	0	20	2.000

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Ferrous Iron (Fe+2)

Lab #:	206731	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM3500FE-B
Analyte:	Ferrous Iron (Fe+2)	Diln Fac:	1.000
Field ID:	GWGW2317	Batch#:	143428
Matrix:	Water	Sampled:	10/08/08 16:20
Units:	mg/L	Received:	10/08/08

Type	Lab ID	Result	RL	Prepared	Analyzed
SAMPLE	206731-002	ND	0.10	10/08/08 21:50	10/08/08 21:56
BLANK	QC464288	ND	0.10	10/08/08 19:15	10/08/08 19:33

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Ferrous Iron (Fe+2)

Lab #:	206731	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM3500FE-B
Analyte:	Ferrous Iron (Fe+2)	Batch#:	143428
Field ID:	GWGW2307	Sampled:	10/08/08 12:45
MSS Lab ID:	206717-002	Received:	10/08/08
Matrix:	Water	Prepared:	10/08/08 19:15
Units:	mg/L	Analyzed:	10/08/08 19:33
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC464289		0.8000	0.7939	99	90-110		
MS	QC464290	<0.1000	0.8000	0.8017	100	73-136		
MSD	QC464291		0.8000	0.8239	103	73-136	3	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Orthophosphate Phosphorous

Lab #:	206731	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM4500P-E
Analyte:	Orthophosphate (as P)	Diln Fac:	1.000
Field ID:	GWGW2317	Batch#:	143492
Matrix:	Water	Sampled:	10/08/08 16:20
Units:	mg/L	Received:	10/08/08

Type	Lab ID	Result	RL	Analyzed
SAMPLE	206731-002	0.12	0.030	10/10/08 12:55
BLANK	QC464561	ND	0.030	10/10/08 09:50

ND= Not Detected
RL= Reporting Limit

2.0

Curtis & Tompkins, Ltd.

Batch QC Report

Orthophosphate Phosphorous

Lab #:	206731	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM4500P-E
Analyte:	Orthophosphate (as P)	Diln Fac:	1.000
Field ID:	GWGW2308	Batch#:	143492
MSS Lab ID:	206749-002	Sampled:	10/09/08 08:30
Matrix:	Water	Received:	10/09/08
Units:	mg/L	Analyzed:	10/10/08 09:50

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC464562		0.4000	0.3952	99	80-120		
MS	QC464563	0.2711	0.4000	0.6639	98	80-136		
MSD	QC464564		0.4000	0.6673	99	80-136	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	206731	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2540C
Analyte:	Total Dissolved Solids	Sampled:	10/08/08
Field ID:	GWGW2317	Received:	10/08/08
Matrix:	Water	Prepared:	10/09/08
Units:	mg/L	Analyzed:	10/10/08
Batch#:	143475		

Type	Lab ID	Result	RL	Diln Fac
SAMPLE	206731-002	1,370	13	1.250
BLANK	QC464493	ND	10	1.000

ND= Not Detected
RL= Reporting Limit

4.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Dissolved Solids (TDS)

Lab #:	206731	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2540C
Analyte:	Total Dissolved Solids	Batch#:	143475
Field ID:	ZZZZZZZZZZ	Sampled:	10/08/08
MSS Lab ID:	206698-001	Received:	10/08/08
Matrix:	Water	Prepared:	10/09/08
Units:	mg/L	Analyzed:	10/10/08

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim	Diln Fac
BS	QC464494		104.0	92.00		88	73-120			1.000
BSD	QC464495		104.0	88.00		85	73-120	4	22	1.000
SDUP	QC464496	22,700		22,500	500.0			1	20	50.00

RL= Reporting Limit
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Organic Carbon (TOC)

Lab #:	206731	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Batch#:	143676
Field ID:	GWGW2317	Sampled:	10/08/08
Matrix:	Water	Received:	10/08/08
Units:	mg/L	Analyzed:	10/15/08
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	206731-002	1.4	0.50
BLANK	QC465355	ND	0.50

ND= Not Detected
RL= Reporting Limit

30.0

Batch QC Report

Total Organic Carbon (TOC)

Lab #:	206731	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Units:	mg/L
Field ID:	ZZZZZZZZZZ	Batch#:	143676
Matrix:	Water	Analyzed:	10/15/08

Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Sampled	Received
LCS		QC465356		10.00	10.18	102	90-110			1.000		
MS	206578-004	QC465357	2.512	10.00	12.55	100	62-124			2.000	10/02/08	10/03/08
MSD	206578-004	QC465358		10.00	12.64	101	62-124	1	20	2.000	10/02/08	10/03/08
MS	206877-002	QC465431	2.136	10.00	12.10	100	62-124			2.000	10/15/08	10/15/08
MSD	206877-002	QC465432		10.00	12.14	100	62-124	0	20	2.000	10/15/08	10/15/08

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

206749

Chain of Custody Record

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-16
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AguaTierra Associates Incorporated, DBA

Client Contact	Project Manager: Bob Devany	Sampled by: JMD/KITA	Date: 10/8 & 10/9/08	COC Number: UCD
Weiss Associates	Tel: 510-450-6144	Lab Contact:	Carrier:	Page 1 of 2
5801 Christie Avenue, Suite 600	Analysis Turnaround Time			Job No.
Emeryville, CA 94608	Calendar (C) or Work Days (W) 5W			
(510) 450-6000 Phone	TAT if different from Below			SDG No.
(510) 547-5043 FAX	☐ 2 weeks			
	☐ 1 week			
Job Name: UC Davis	☒ 2 days			
Address: One Shields Ave, Davis	☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Field Filtered (Y/N)	VOCs (8260)	Nitrate (EPA 300.0) ☐	Cr (6010B)	Title 22 Metals (6010B)	TOC (SM 5310C)	TDS (SM2540C)	Alkalinity (SM2320B)	Ca,K,Mg,Na (6010)	Chlorate, Sulfate (EPA 300.0)	1,4 Dioxane	dissolved organic carbon	nickel, EPA (13C.2)	hardness (EPA 13C.2)	phosphate	Fe II *	carbonate, bicarbonate	Cr VI *	Fe	Sample Specific Notes:
1	GWGW2314 •	10/8/08	1715		W	2											X									
2	GWGW2308	10/9/08	0830		W	12		X	X	X		X	X		X	X	X	X	X	X	X	X	X	X	X	* 24 hr hold time ☐ 48 hr hold time
3	TBGW0514	10/9/08	0910		W	1		X																		
4	GWGW2311 •	10/9/08	0910		W	2			X	X																☐ 48 hr hold time
5	GWGW2320A •	10/9/08	1000		W	5		X	X	X																☐ 48 hr hold time
6	GWGW2320B •	10/9/08	1000		W	5		X	X	X																☐ 48 hr hold time
7	GWGW2319 •	10/9/08	1000		W	4		X	X																	☐ 48 hr hold time
8	GWGW2312 •	10/9/08	1045		W	4			X	X							X									☐ 48 hr hold

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **Level III Reporting**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
IVAN ATKINSON	WEISS ASSOC	10/9/08 1500	[illegible]	10/9/08 1500	[illegible]
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

*RECEIVED ON ICE

206749

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:

Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

Project ID: 388-1856-1-16
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AguaTierra Associates Incorporated, DBA

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Client Contact
Weiss Associates
5801 Christie Avenue, Suite 600
Emeryville, CA 94608
(510) 450-6000 Phone
(510) 547-5043 FAX

Job Name: UC Davis
Address: One Shields Ave, Davis

Project Manager: Bob Devany
Tel: 510-450-6144

Analysis Turnaround Time
Calendar (C) or Work Days (W) --- 5W
TAT if different from Below _____
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sampled by: KHA/JMD
Lab Contact:
Date: 10/9/08
Carrier:

COC Number: UCD
Page 2 of 2
Job No.
SDG No.

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Field Filtered (Y/N)	VOCs (8260)	Nitrate (EPA 300.0) ☐	Cr (6010B)	Dissolved Organic Carbon SM5310B	Ca, Mg, K, Na, Ni, Mn, Fe, B (6010B)	Cr6+ (7199)	Fe II (SM3500 FeD)	Chlorate, Sulfate (EPA 300.0)	Phosphate (SM4500-PE)	Carbonate, Bicarbonate (EPA 310.1)	Fluoride (SM 4500-FI)	TOC (SM 5310C)	TDS (SM 2540C)	Title 22 Metals (6010B)	Alkalinity (SM2320B)	Sample Specific Notes:
9	GWGW 2316 •	10/9/08	1130	W	W	5		X	X	X													☐ 48 hour hold
10	GW GW 2353	10/9/08	1340	W	W	5		X	X	X													
11	GWGW 2350	10/9/08	1255	W	W	1			X														
12	GWGW 2321	10/9/08	1355	W	W	2			X	X													

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **Level III Reporting**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
DAN ATLNSON	WEISS ASSOC.	10/9/08 1500	[illegible]	C&T	10/9/08 1500
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

* RECEIVED ON ICE

Micah Smith

From: "Tim R. Utterback" <tru@weiss.com>
To: "Micah Smith" <micah.smith@ctberk.com>
Sent: Tuesday, October 14, 2008 12:39 PM
Subject: Re: 388-1856 - C&T Login Summary (206749)

Micah,
The COC for Login# 206749 was missing the analysis request for Mn, Fe and B for sample GWGW2308. Please add these analytes to the request for this sample. Analyze Mn, Fe and B from the filtered/HNO3 preserved sample.
Thanks,
-Tim

>>> "Micah Smith" <micah.smith@ctberk.com> 10/10/2008 3:40 pm >>>
C&T Login Summary for 206749

Project:388-1856
Site:UC Davis
Lab Login #:206749
Report Due:10/16/08
PO#:
C&T Proj Mgr:Micah Smith

Report To:Weiss Associates

5801 Christie Avenue

Suite 600

Emeryville, CA 94608

ATTN: Tim Utterback

(510) 450-6000

Bill To:Weiss Associates

5801 Christie Avenue

Suite 600

Emeryville, CA 94608

ATTN: Accounts Payable

(510) 450-6000
Hex Cr soils analyze within 5 days; use Project ID as Project#

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 206749 Date Received 10/9/08 Number of coolers 1
Client WEISSE Project UCDavis

Date Opened 10/9 By (print) K Wellbrock (sign) K Wellbrock
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc)? ..... YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? ..... YES NO (N/A)
3. Were custody papers dry and intact when received? ..... (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? ..... (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ..... (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

   ☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

   Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) _____

   ☒ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ..... YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? ..... (YES) NO
10. Are samples in the appropriate containers for indicated tests? ..... (YES) NO
11. Are sample labels present, in good condition and complete? ..... (YES) NO
12. Do the sample labels agree with custody papers? ..... (YES) NO
13. Was sufficient amount of sample sent for tests requested? ..... (YES) NO
14. Are the samples appropriately preserved? ..... (YES) NO
15. Are bubbles > 6mm absent in VOA samples? ..... (YES) NO N/A
16. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2308	Batch#:	143680
Lab ID:	206749-002	Sampled:	10/09/08
Matrix:	Water	Received:	10/09/08
Units:	ug/L	Analyzed:	10/15/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	35	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	0.9	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

51.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2308	Batch#:	143680
Lab ID:	206749-002	Sampled:	10/09/08
Matrix:	Water	Received:	10/09/08
Units:	ug/L	Analyzed:	10/15/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	110	80-125
1,2-Dichloroethane-d4	111	80-137
Toluene-d8	106	80-120
Bromofluorobenzene	104	80-122

ND= Not Detected
RL= Reporting Limit

51.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TBGW0514	Batch#:	143680
Lab ID:	206749-003	Sampled:	10/09/08
Matrix:	Water	Received:	10/09/08
Units:	ug/L	Analyzed:	10/15/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

52.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TBGW0514	Batch#:	143680
Lab ID:	206749-003	Sampled:	10/09/08
Matrix:	Water	Received:	10/09/08
Units:	ug/L	Analyzed:	10/15/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-125
1,2-Dichloroethane-d4	99	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	101	80-122

ND= Not Detected
RL= Reporting Limit

52.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2320A	Units:	ug/L
Lab ID:	206749-005	Sampled:	10/09/08
Matrix:	Water	Received:	10/09/08

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Freon 12	ND	1.0	1.000	143682	10/15/08
Chloromethane	ND	1.0	1.000	143682	10/15/08
Vinyl Chloride	ND	0.5	1.000	143682	10/15/08
Bromomethane	ND	1.0	1.000	143682	10/15/08
Chloroethane	ND	1.0	1.000	143682	10/15/08
Trichlorofluoromethane	ND	1.0	1.000	143682	10/15/08
Acetone	ND	10	1.000	143682	10/15/08
Freon 113	ND	2.0	1.000	143682	10/15/08
1,1-Dichloroethene	3.2	0.5	1.000	143682	10/15/08
Methylene Chloride	ND	10	1.000	143682	10/15/08
Carbon Disulfide	ND	0.5	1.000	143682	10/15/08
MTBE	ND	0.5	1.000	143682	10/15/08
trans-1,2-Dichloroethene	ND	0.5	1.000	143682	10/15/08
Vinyl Acetate	ND	10	1.000	143682	10/15/08
1,1-Dichloroethane	15	0.5	1.000	143682	10/15/08
2-Butanone	ND	10	1.000	143682	10/15/08
cis-1,2-Dichloroethene	ND	0.5	1.000	143682	10/15/08
2,2-Dichloropropane	ND	0.5	1.000	143682	10/15/08
Chloroform	740	10	20.00	143773	10/17/08
Bromochloromethane	ND	0.5	1.000	143682	10/15/08
1,1,1-Trichloroethane	ND	0.5	1.000	143682	10/15/08
1,1-Dichloropropene	ND	0.5	1.000	143682	10/15/08
Carbon Tetrachloride	ND	0.5	1.000	143682	10/15/08
1,2-Dichloroethane	9.0	0.5	1.000	143682	10/15/08
Benzene	ND	0.5	1.000	143682	10/15/08
Trichloroethene	ND	0.5	1.000	143682	10/15/08
1,2-Dichloropropane	0.8	0.5	1.000	143682	10/15/08
Bromodichloromethane	ND	0.5	1.000	143682	10/15/08
Dibromomethane	ND	0.5	1.000	143682	10/15/08
4-Methyl-2-Pentanone	ND	10	1.000	143682	10/15/08
cis-1,3-Dichloropropene	ND	0.5	1.000	143682	10/15/08
Toluene	ND	0.5	1.000	143682	10/15/08
trans-1,3-Dichloropropene	ND	0.5	1.000	143682	10/15/08
1,1,2-Trichloroethane	3.6	0.5	1.000	143682	10/15/08
2-Hexanone	ND	10	1.000	143682	10/15/08
1,3-Dichloropropane	ND	0.5	1.000	143682	10/15/08
Tetrachloroethene	2.0	0.5	1.000	143682	10/15/08
Dibromochloromethane	ND	0.5	1.000	143682	10/15/08
1,2-Dibromoethane	ND	0.5	1.000	143682	10/15/08

ND= Not Detected
RL= Reporting Limit

53.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2320A	Units:	ug/L
Lab ID:	206749-005	Sampled:	10/09/08
Matrix:	Water	Received:	10/09/08

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Chlorobenzene	ND	0.5	1.000	143682	10/15/08
1,1,1,2-Tetrachloroethane	ND	0.5	1.000	143682	10/15/08
Ethylbenzene	ND	0.5	1.000	143682	10/15/08
m,p-Xylenes	ND	0.5	1.000	143682	10/15/08
o-Xylene	ND	0.5	1.000	143682	10/15/08
Styrene	ND	0.5	1.000	143682	10/15/08
Bromoform	ND	1.0	1.000	143682	10/15/08
Isopropylbenzene	ND	0.5	1.000	143682	10/15/08
1,1,2,2-Tetrachloroethane	ND	0.5	1.000	143682	10/15/08
1,2,3-Trichloropropane	ND	0.5	1.000	143682	10/15/08
Propylbenzene	ND	0.5	1.000	143682	10/15/08
Bromobenzene	ND	0.5	1.000	143682	10/15/08
1,3,5-Trimethylbenzene	ND	0.5	1.000	143682	10/15/08
2-Chlorotoluene	ND	0.5	1.000	143682	10/15/08
4-Chlorotoluene	ND	0.5	1.000	143682	10/15/08
tert-Butylbenzene	ND	0.5	1.000	143682	10/15/08
1,2,4-Trimethylbenzene	ND	0.5	1.000	143682	10/15/08
sec-Butylbenzene	ND	0.5	1.000	143682	10/15/08
para-Isopropyl Toluene	ND	0.5	1.000	143682	10/15/08
1,3-Dichlorobenzene	ND	0.5	1.000	143682	10/15/08
1,4-Dichlorobenzene	ND	0.5	1.000	143682	10/15/08
n-Butylbenzene	ND	0.5	1.000	143682	10/15/08
1,2-Dichlorobenzene	ND	0.5	1.000	143682	10/15/08
1,2-Dibromo-3-Chloropropane	ND	2.0	1.000	143682	10/15/08
1,2,4-Trichlorobenzene	ND	0.5	1.000	143682	10/15/08
Hexachlorobutadiene	ND	2.0	1.000	143682	10/15/08
Naphthalene	ND	2.0	1.000	143682	10/15/08
1,2,3-Trichlorobenzene	ND	0.5	1.000	143682	10/15/08

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	103	80-125	1.000	143682	10/15/08
1,2-Dichloroethane-d4	106	80-137	1.000	143682	10/15/08
Toluene-d8	101	80-120	1.000	143682	10/15/08
Bromofluorobenzene	105	80-122	1.000	143682	10/15/08

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2320B	Units:	ug/L
Lab ID:	206749-006	Sampled:	10/09/08
Matrix:	Water	Received:	10/09/08

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Freon 12	ND	1.0	1.000	143682	10/15/08
Chloromethane	ND	1.0	1.000	143682	10/15/08
Vinyl Chloride	ND	0.5	1.000	143682	10/15/08
Bromomethane	ND	1.0	1.000	143682	10/15/08
Chloroethane	ND	1.0	1.000	143682	10/15/08
Trichlorofluoromethane	ND	1.0	1.000	143682	10/15/08
Acetone	ND	10	1.000	143682	10/15/08
Freon 113	ND	2.0	1.000	143682	10/15/08
1,1-Dichloroethene	3.1	0.5	1.000	143682	10/15/08
Methylene Chloride	ND	10	1.000	143682	10/15/08
Carbon Disulfide	ND	0.5	1.000	143682	10/15/08
MTBE	ND	0.5	1.000	143682	10/15/08
trans-1,2-Dichloroethene	ND	0.5	1.000	143682	10/15/08
Vinyl Acetate	ND	10	1.000	143682	10/15/08
1,1-Dichloroethane	16	0.5	1.000	143682	10/15/08
2-Butanone	ND	10	1.000	143682	10/15/08
cis-1,2-Dichloroethene	ND	0.5	1.000	143682	10/15/08
2,2-Dichloropropane	ND	0.5	1.000	143682	10/15/08
Chloroform	750	10	20.00	143773	10/17/08
Bromochloromethane	ND	0.5	1.000	143682	10/15/08
1,1,1-Trichloroethane	ND	0.5	1.000	143682	10/15/08
1,1-Dichloropropene	ND	0.5	1.000	143682	10/15/08
Carbon Tetrachloride	ND	0.5	1.000	143682	10/15/08
1,2-Dichloroethane	9.0	0.5	1.000	143682	10/15/08
Benzene	ND	0.5	1.000	143682	10/15/08
Trichloroethene	ND	0.5	1.000	143682	10/15/08
1,2-Dichloropropane	0.7	0.5	1.000	143682	10/15/08
Bromodichloromethane	ND	0.5	1.000	143682	10/15/08
Dibromomethane	ND	0.5	1.000	143682	10/15/08
4-Methyl-2-Pentanone	ND	10	1.000	143682	10/15/08
cis-1,3-Dichloropropene	ND	0.5	1.000	143682	10/15/08
Toluene	ND	0.5	1.000	143682	10/15/08
trans-1,3-Dichloropropene	ND	0.5	1.000	143682	10/15/08
1,1,2-Trichloroethane	3.6	0.5	1.000	143682	10/15/08
2-Hexanone	ND	10	1.000	143682	10/15/08
1,3-Dichloropropane	ND	0.5	1.000	143682	10/15/08
Tetrachloroethene	1.9	0.5	1.000	143682	10/15/08
Dibromochloromethane	ND	0.5	1.000	143682	10/15/08
1,2-Dibromoethane	ND	0.5	1.000	143682	10/15/08

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2320B	Units:	ug/L
Lab ID:	206749-006	Sampled:	10/09/08
Matrix:	Water	Received:	10/09/08

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Chlorobenzene	ND	0.5	1.000	143682	10/15/08
1,1,1,2-Tetrachloroethane	ND	0.5	1.000	143682	10/15/08
Ethylbenzene	ND	0.5	1.000	143682	10/15/08
m,p-Xylenes	ND	0.5	1.000	143682	10/15/08
o-Xylene	ND	0.5	1.000	143682	10/15/08
Styrene	ND	0.5	1.000	143682	10/15/08
Bromoform	ND	1.0	1.000	143682	10/15/08
Isopropylbenzene	ND	0.5	1.000	143682	10/15/08
1,1,2,2-Tetrachloroethane	ND	0.5	1.000	143682	10/15/08
1,2,3-Trichloropropane	ND	0.5	1.000	143682	10/15/08
Propylbenzene	ND	0.5	1.000	143682	10/15/08
Bromobenzene	ND	0.5	1.000	143682	10/15/08
1,3,5-Trimethylbenzene	ND	0.5	1.000	143682	10/15/08
2-Chlorotoluene	ND	0.5	1.000	143682	10/15/08
4-Chlorotoluene	ND	0.5	1.000	143682	10/15/08
tert-Butylbenzene	ND	0.5	1.000	143682	10/15/08
1,2,4-Trimethylbenzene	ND	0.5	1.000	143682	10/15/08
sec-Butylbenzene	ND	0.5	1.000	143682	10/15/08
para-Isopropyl Toluene	ND	0.5	1.000	143682	10/15/08
1,3-Dichlorobenzene	ND	0.5	1.000	143682	10/15/08
1,4-Dichlorobenzene	ND	0.5	1.000	143682	10/15/08
n-Butylbenzene	ND	0.5	1.000	143682	10/15/08
1,2-Dichlorobenzene	ND	0.5	1.000	143682	10/15/08
1,2-Dibromo-3-Chloropropane	ND	2.0	1.000	143682	10/15/08
1,2,4-Trichlorobenzene	ND	0.5	1.000	143682	10/15/08
Hexachlorobutadiene	ND	2.0	1.000	143682	10/15/08
Naphthalene	ND	2.0	1.000	143682	10/15/08
1,2,3-Trichlorobenzene	ND	0.5	1.000	143682	10/15/08

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	104	80-125	1.000	143682	10/15/08
1,2-Dichloroethane-d4	105	80-137	1.000	143682	10/15/08
Toluene-d8	100	80-120	1.000	143682	10/15/08
Bromofluorobenzene	108	80-122	1.000	143682	10/15/08

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2319	Units:	ug/L
Lab ID:	206749-007	Sampled:	10/09/08
Matrix:	Water	Received:	10/09/08

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Freon 12	ND	1.0	1.000	143682	10/15/08
Chloromethane	ND	1.0	1.000	143682	10/15/08
Vinyl Chloride	ND	0.5	1.000	143682	10/15/08
Bromomethane	ND	1.0	1.000	143682	10/15/08
Chloroethane	ND	1.0	1.000	143682	10/15/08
Trichlorofluoromethane	ND	1.0	1.000	143682	10/15/08
Acetone	ND	10	1.000	143682	10/15/08
Freon 113	ND	2.0	1.000	143682	10/15/08
1,1-Dichloroethene	1.9	0.5	1.000	143682	10/15/08
Methylene Chloride	ND	10	1.000	143682	10/15/08
Carbon Disulfide	ND	0.5	1.000	143682	10/15/08
MTBE	ND	0.5	1.000	143682	10/15/08
trans-1,2-Dichloroethene	ND	0.5	1.000	143682	10/15/08
Vinyl Acetate	ND	10	1.000	143682	10/15/08
1,1-Dichloroethane	1.8	0.5	1.000	143682	10/15/08
2-Butanone	ND	10	1.000	143682	10/15/08
cis-1,2-Dichloroethene	ND	0.5	1.000	143682	10/15/08
2,2-Dichloropropane	ND	0.5	1.000	143682	10/15/08
Chloroform	440	6.3	12.50	143773	10/17/08
Bromochloromethane	ND	0.5	1.000	143682	10/15/08
1,1,1-Trichloroethane	ND	0.5	1.000	143682	10/15/08
1,1-Dichloropropene	ND	0.5	1.000	143682	10/15/08
Carbon Tetrachloride	ND	0.5	1.000	143682	10/15/08
1,2-Dichloroethane	0.7	0.5	1.000	143682	10/15/08
Benzene	ND	0.5	1.000	143682	10/15/08
Trichloroethene	2.2	0.5	1.000	143682	10/15/08
1,2-Dichloropropane	ND	0.5	1.000	143682	10/15/08
Bromodichloromethane	ND	0.5	1.000	143682	10/15/08
Dibromomethane	ND	0.5	1.000	143682	10/15/08
4-Methyl-2-Pentanone	ND	10	1.000	143682	10/15/08
cis-1,3-Dichloropropene	ND	0.5	1.000	143682	10/15/08
Toluene	ND	0.5	1.000	143682	10/15/08
trans-1,3-Dichloropropene	ND	0.5	1.000	143682	10/15/08
1,1,2-Trichloroethane	29	0.5	1.000	143682	10/15/08
2-Hexanone	ND	10	1.000	143682	10/15/08
1,3-Dichloropropane	ND	0.5	1.000	143682	10/15/08
Tetrachloroethene	0.8	0.5	1.000	143682	10/15/08
Dibromochloromethane	ND	0.5	1.000	143682	10/15/08
1,2-Dibromoethane	ND	0.5	1.000	143682	10/15/08

ND= Not Detected
RL= Reporting Limit

55.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2319	Units:	ug/L
Lab ID:	206749-007	Sampled:	10/09/08
Matrix:	Water	Received:	10/09/08

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Chlorobenzene	ND	0.5	1.000	143682	10/15/08
1,1,1,2-Tetrachloroethane	ND	0.5	1.000	143682	10/15/08
Ethylbenzene	ND	0.5	1.000	143682	10/15/08
m,p-Xylenes	ND	0.5	1.000	143682	10/15/08
o-Xylene	ND	0.5	1.000	143682	10/15/08
Styrene	ND	0.5	1.000	143682	10/15/08
Bromoform	ND	1.0	1.000	143682	10/15/08
Isopropylbenzene	ND	0.5	1.000	143682	10/15/08
1,1,2,2-Tetrachloroethane	ND	0.5	1.000	143682	10/15/08
1,2,3-Trichloropropane	ND	0.5	1.000	143682	10/15/08
Propylbenzene	ND	0.5	1.000	143682	10/15/08
Bromobenzene	ND	0.5	1.000	143682	10/15/08
1,3,5-Trimethylbenzene	ND	0.5	1.000	143682	10/15/08
2-Chlorotoluene	ND	0.5	1.000	143682	10/15/08
4-Chlorotoluene	ND	0.5	1.000	143682	10/15/08
tert-Butylbenzene	ND	0.5	1.000	143682	10/15/08
1,2,4-Trimethylbenzene	ND	0.5	1.000	143682	10/15/08
sec-Butylbenzene	ND	0.5	1.000	143682	10/15/08
para-Isopropyl Toluene	ND	0.5	1.000	143682	10/15/08
1,3-Dichlorobenzene	ND	0.5	1.000	143682	10/15/08
1,4-Dichlorobenzene	ND	0.5	1.000	143682	10/15/08
n-Butylbenzene	ND	0.5	1.000	143682	10/15/08
1,2-Dichlorobenzene	ND	0.5	1.000	143682	10/15/08
1,2-Dibromo-3-Chloropropane	ND	2.0	1.000	143682	10/15/08
1,2,4-Trichlorobenzene	ND	0.5	1.000	143682	10/15/08
Hexachlorobutadiene	ND	2.0	1.000	143682	10/15/08
Naphthalene	ND	2.0	1.000	143682	10/15/08
1,2,3-Trichlorobenzene	ND	0.5	1.000	143682	10/15/08

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	104	80-125	1.000	143682	10/15/08
1,2-Dichloroethane-d4	108	80-137	1.000	143682	10/15/08
Toluene-d8	101	80-120	1.000	143682	10/15/08
Bromofluorobenzene	108	80-122	1.000	143682	10/15/08

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2316	Batch#:	143730
Lab ID:	206749-009	Sampled:	10/09/08
Matrix:	Water	Received:	10/09/08
Units:	ug/L	Analyzed:	10/16/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	0.9	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

56.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2316	Batch#:	143730
Lab ID:	206749-009	Sampled:	10/09/08
Matrix:	Water	Received:	10/09/08
Units:	ug/L	Analyzed:	10/16/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-125
1,2-Dichloroethane-d4	111	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	115	80-122

ND= Not Detected
RL= Reporting Limit

56.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2353	Batch#:	143682
Lab ID:	206749-010	Sampled:	10/09/08
Matrix:	Water	Received:	10/09/08
Units:	ug/L	Analyzed:	10/15/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	8.3	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

57.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2353	Batch#:	143682
Lab ID:	206749-010	Sampled:	10/09/08
Matrix:	Water	Received:	10/09/08
Units:	ug/L	Analyzed:	10/15/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-125
1,2-Dichloroethane-d4	112	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	108	80-122

ND= Not Detected
RL= Reporting Limit

57.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC465370	Batch#:	143680
Matrix:	Water	Analyzed:	10/15/08
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	22.82	114	73-133
Benzene	20.00	20.26	101	80-120
Trichloroethene	20.00	21.13	106	80-120
Toluene	20.00	20.72	104	80-120
Chlorobenzene	20.00	18.98	95	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-125
1,2-Dichloroethane-d4	94	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	93	80-122

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC465372	Batch#:	143680
Matrix:	Water	Analyzed:	10/15/08
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

59.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC465372	Batch#:	143680
Matrix:	Water	Analyzed:	10/15/08
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-125
1,2-Dichloroethane-d4	99	80-137
Toluene-d8	105	80-120
Bromofluorobenzene	98	80-122

ND= Not Detected
RL= Reporting Limit

59.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	143682
Units:	ug/L	Analyzed:	10/15/08
Diln Fac:	1.000		

Type: BS Lab ID: QC465376

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	19.21	96	73-133
Benzene	20.00	20.67	103	80-120
Trichloroethene	20.00	21.63	108	80-120
Toluene	20.00	18.53	93	80-120
Chlorobenzene	20.00	22.57	113	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-125
1,2-Dichloroethane-d4	100	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	100	80-122

Type: BSD Lab ID: QC465377

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	20.00	18.74	94	73-133	2	20
Benzene	20.00	19.99	100	80-120	3	20
Trichloroethene	20.00	20.94	105	80-120	3	20
Toluene	20.00	17.77	89	80-120	4	20
Chlorobenzene	20.00	22.14	111	80-120	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-125
1,2-Dichloroethane-d4	98	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	101	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC465457	Batch#:	143682
Matrix:	Water	Analyzed:	10/15/08
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC465457	Batch#:	143682
Matrix:	Water	Analyzed:	10/15/08
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-125
1,2-Dichloroethane-d4	103	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	107	80-122

ND= Not Detected
RL= Reporting Limit

61.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	143680
MSS Lab ID:	206727-004	Sampled:	10/08/08
Matrix:	Water	Received:	10/08/08
Units:	ug/L	Analyzed:	10/16/08
Diln Fac:	1.000		

Type: MS Lab ID: QC465470

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.1808	25.00	33.49	134 *	76-133
Benzene	<0.1121	25.00	29.73	119	80-121
Trichloroethene	<0.1628	25.00	29.81	119	74-129
Toluene	<0.1078	25.00	29.46	118	80-120
Chlorobenzene	<0.1000	25.00	25.62	102	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	108	80-125
1,2-Dichloroethane-d4	109	80-137
Toluene-d8	108	80-120
Bromofluorobenzene	100	80-122

Type: MSD Lab ID: QC465471

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	31.70	127	76-133	5	20
Benzene	25.00	28.36	113	80-121	5	20
Trichloroethene	25.00	29.30	117	74-129	2	20
Toluene	25.00	27.89	112	80-120	5	20
Chlorobenzene	25.00	25.45	102	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-125
1,2-Dichloroethane-d4	105	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	99	80-122

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC465564	Batch#:	143730
Matrix:	Water	Analyzed:	10/16/08
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

63.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC465564	Batch#:	143730
Matrix:	Water	Analyzed:	10/16/08
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-125
1,2-Dichloroethane-d4	109	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	114	80-122

ND= Not Detected
RL= Reporting Limit

63.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	143730
Units:	ug/L	Analyzed:	10/16/08
Diln Fac:	1.000		

Type: BS Lab ID: QC465565

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	23.13	93	73-133
Benzene	25.00	25.51	102	80-120
Trichloroethene	25.00	26.77	107	80-120
Toluene	25.00	22.93	92	80-120
Chlorobenzene	25.00	28.90	116	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-125
1,2-Dichloroethane-d4	106	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	103	80-122

Type: BSD Lab ID: QC465566

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	22.12	88	73-133	4	20
Benzene	25.00	24.47	98	80-120	4	20
Trichloroethene	25.00	25.82	103	80-120	4	20
Toluene	25.00	22.47	90	80-120	2	20
Chlorobenzene	25.00	28.27	113	80-120	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-125
1,2-Dichloroethane-d4	105	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	105	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	143773
Units:	ug/L	Analyzed:	10/17/08
Diln Fac:	1.000		

Type: BS Lab ID: QC465745

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	19.27	96	73-133
Benzene	20.00	20.62	103	80-120
Trichloroethene	20.00	22.47	112	80-120
Toluene	20.00	19.52	98	80-120
Chlorobenzene	20.00	19.76	99	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-125
1,2-Dichloroethane-d4	112	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	105	80-122

Type: BSD Lab ID: QC465746

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	20.00	18.21	91	73-133	6	20
Benzene	20.00	19.40	97	80-120	6	20
Trichloroethene	20.00	21.06	105	80-120	6	20
Toluene	20.00	18.04	90	80-120	8	20
Chlorobenzene	20.00	18.79	94	80-120	5	20

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-125
1,2-Dichloroethane-d4	115	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	101	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC465747	Batch#:	143773
Matrix:	Water	Analyzed:	10/17/08
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

66.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC465747	Batch#:	143773
Matrix:	Water	Analyzed:	10/17/08
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	110	80-125
1,2-Dichloroethane-d4	120	80-137
Toluene-d8	105	80-120
Bromofluorobenzene	108	80-122

ND= Not Detected
RL= Reporting Limit

66.0

Curtis & Tompkins, Ltd.

1,4-Dioxane by 8270-SIM

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C-SIM
Matrix:	Water	Batch#:	143522
Units:	ug/L	Received:	10/09/08
Diln Fac:	1.000	Prepared:	10/10/08

Field ID:	GWGW2314	Sampled:	10/08/08
Type:	SAMPLE	Analyzed:	10/14/08
Lab ID:	206749-001		

Analyte	Result	RL
1,4-Dioxane	ND	0.94

Surrogate	%REC	Limits
Nitrobenzene-d5	56	48-130
2-Fluorobiphenyl	64	54-120

Field ID:	GWGW2308	Sampled:	10/09/08
Type:	SAMPLE	Analyzed:	10/14/08
Lab ID:	206749-002		

Analyte	Result	RL
1,4-Dioxane	2.8	0.94

Surrogate	%REC	Limits
Nitrobenzene-d5	54	48-130
2-Fluorobiphenyl	59	54-120

Field ID:	GWGW2312	Sampled:	10/09/08
Type:	SAMPLE	Analyzed:	10/14/08
Lab ID:	206749-008		

Analyte	Result	RL
1,4-Dioxane	ND	0.94

Surrogate	%REC	Limits
Nitrobenzene-d5	53	48-130
2-Fluorobiphenyl	65	54-120

Type:	BLANK	Analyzed:	10/13/08
Lab ID:	QC464704		

Analyte	Result	RL
1,4-Dioxane	ND	1.0

Surrogate	%REC	Limits
Nitrobenzene-d5	64	48-130
2-Fluorobiphenyl	65	54-120

ND= Not Detected
RL= Reporting Limit

48.0

Curtis & Tompkins, Ltd.

Batch QC Report

1,4-Dioxane by 8270-SIM

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C-SIM
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC464705	Batch#:	143522
Matrix:	Water	Prepared:	10/10/08
Units:	ug/L	Analyzed:	10/13/08

Analyte	Spiked	Result	%REC	Limits
1,4-Dioxane	3.000	2.056	69	28-120

Surrogate	%REC	Limits
Nitrobenzene-d5	62	48-130
2-Fluorobiphenyl	64	54-120

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2308	Sampled:	10/09/08
Lab ID:	206749-002	Received:	10/09/08
Matrix:	Filtrate	Prepared:	10/10/08
Units:	ug/L	Analyzed:	10/15/08
Batch#:	143516		

Analyte	Result	RL	Diln Fac
Boron	970	100	1.000
Calcium	45,000	500	1.000
Chromium	130	5.0	1.000
Iron	ND	100	1.000
Magnesium	170,000	3,300	10.00
Manganese	ND	5.0	1.000
Nickel	ND	5.0	1.000
Potassium	1,000	500	1.000
Sodium	100,000	5,000	10.00

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Chromium	Batch#:	143516
Field ID:	GWGW2311	Sampled:	10/09/08
Lab ID:	206749-004	Received:	10/09/08
Matrix:	Filtrate	Prepared:	10/10/08
Units:	ug/L	Analyzed:	10/15/08
Diln Fac:	1.000		

Result	RL
210	5.0

RL= Reporting Limit

17.0

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Chromium	Batch#:	143516
Field ID:	GWGW2320A	Sampled:	10/09/08
Lab ID:	206749-005	Received:	10/09/08
Matrix:	Filtrate	Prepared:	10/10/08
Units:	ug/L	Analyzed:	10/15/08
Diln Fac:	1.000		

Result	RL
120	5.0

RL= Reporting Limit

18.0

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Chromium	Batch#:	143516
Field ID:	GWGW2320B	Sampled:	10/09/08
Lab ID:	206749-006	Received:	10/09/08
Matrix:	Filtrate	Prepared:	10/10/08
Units:	ug/L	Analyzed:	10/15/08
Diln Fac:	1.000		

Result	RL
120	5.0

RL= Reporting Limit

19.0

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Chromium	Batch#:	143516
Field ID:	GWGW2312	Sampled:	10/09/08
Lab ID:	206749-008	Received:	10/09/08
Matrix:	Filtrate	Prepared:	10/10/08
Units:	ug/L	Analyzed:	10/15/08
Diln Fac:	1.000		

Result	RL
72	5.0

RL= Reporting Limit

20.0

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Chromium	Batch#:	143516
Field ID:	GWGW2316	Sampled:	10/09/08
Lab ID:	206749-009	Received:	10/09/08
Matrix:	Filtrate	Prepared:	10/10/08
Units:	ug/L	Analyzed:	10/15/08
Diln Fac:	1.000		

Result	RL
75	5.0

RL= Reporting Limit

21.0

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Chromium	Batch#:	143516
Field ID:	GWGW2353	Sampled:	10/09/08
Lab ID:	206749-010	Received:	10/09/08
Matrix:	Filtrate	Prepared:	10/10/08
Units:	ug/L	Analyzed:	10/15/08
Diln Fac:	1.000		

Result	RL
48	5.0

RL= Reporting Limit

22.0

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Chromium	Batch#:	143516
Field ID:	GWGW2321	Sampled:	10/09/08
Lab ID:	206749-012	Received:	10/09/08
Matrix:	Filtrate	Prepared:	10/10/08
Units:	ug/L	Analyzed:	10/15/08
Diln Fac:	1.000		

Result	RL
170	5.0

RL= Reporting Limit

23.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC464677	Batch#:	143516
Matrix:	Water	Prepared:	10/10/08
Units:	ug/L	Analyzed:	10/14/08

Analyte	Result	RL
Boron	ND	100
Calcium	ND	500
Chromium	ND	5.0
Iron	ND	100
Magnesium	ND	500
Manganese	ND	5.0
Nickel	ND	5.0
Potassium	ND	500
Sodium	ND	500

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Matrix:	Water	Batch#:	143516
Units:	ug/L	Prepared:	10/10/08
Diln Fac:	1.000	Analyzed:	10/14/08

Type: BS Lab ID: QC464678

Analyte	Spiked	Result	%REC	Limits
Boron	1,000	1,056	106	80-120
Calcium	20,000	23,510	118	80-120
Chromium	200.0	210.8	105	80-120
Iron	1,000	1,159	116	80-120
Magnesium	20,000	22,980	115	80-120
Manganese	50.00	55.11	110	80-120
Nickel	500.0	520.8	104	80-120
Potassium	10,000	11,540	115	80-120
Sodium	20,000	22,720	114	80-120

Type: BSD Lab ID: QC464679

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Boron	1,000	1,060	106	80-120	0	20
Calcium	20,000	20,900	105	80-120	12	20
Chromium	200.0	211.1	106	80-120	0	20
Iron	1,000	1,027	103	80-120	12	20
Magnesium	20,000	20,210	101	80-120	13	20
Manganese	50.00	55.00	110	80-120	0	20
Nickel	500.0	522.4	104	80-120	0	20
Potassium	10,000	10,250	103	80-120	12	20
Sodium	20,000	20,510	103	80-120	10	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	143516
MSS Lab ID:	206589-001	Sampled:	10/02/08
Matrix:	Water	Received:	10/03/08
Units:	ug/L	Prepared:	10/10/08
Diln Fac:	1.000	Analyzed:	10/15/08

Type: MS Lab ID: QC464680

Analyte	MSS Result	Spiked	Result	%REC	Limits
Boron	178.7	1,000	1,238	106	79-121
Calcium	54,180	20,000	65,850	58 *	63-130
Chromium	1.437	200.0	210.5	105	78-120
Iron	1,382	1,000	2,156	77	66-126
Magnesium	29,190	20,000	44,930	79	66-126
Manganese	1,819	50.00	1,795	-48 NM	73-121
Nickel	1.827	500.0	512.2	102	74-120
Potassium	2,433	10,000	11,820	94	68-125
Sodium	69,770	20,000	78,910	46 *	60-131

Type: MSD Lab ID: QC464681

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Boron	1,000	1,264	109	79-121	2	20
Calcium	20,000	64,860	53 *	63-130	2	20
Chromium	200.0	213.4	106	78-120	1	20
Iron	1,000	2,137	75	66-126	1	20
Magnesium	20,000	44,380	76	66-126	1	20
Manganese	50.00	1,796	-45 NM	73-121	0	20
Nickel	500.0	518.9	103	74-120	1	20
Potassium	10,000	11,750	93	68-125	1	20
Sodium	20,000	77,540	39 *	60-131	2	20

*= Value outside of QC limits; see narrative
NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	143516
MSS Lab ID:	206589-001	Sampled:	10/02/08
Lab ID:	QC464682	Received:	10/03/08
Matrix:	Water	Analyzed:	10/15/08
Units:	ug/L		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim
Boron	178.7	100.0	228.6 J	500.0	NC	10
Calcium	54,180	500.0	48,930	1,000	10	10
Chromium	1.437	5.000	2.967 J	25.00	NC	10
Iron	1,382	100.0	1,234	500.0	11 *	10
Magnesium	29,190	500.0	27,360	1,000	6	10
Manganese	1,819	5.000	1,739	25.00	4	10
Nickel	1.827	5.000	ND	25.00	NC	10
Potassium	2,433	500.0	2,247 J	2,500	NC	10
Sodium	69,770	500.0	60,910	2,500	13 *	10

*= Value outside of QC limits; see narrative
J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	143516
MSS Lab ID:	206589-001	Sampled:	10/02/08
Lab ID:	QC464683	Received:	10/03/08
Matrix:	Water	Analyzed:	10/15/08
Units:	ug/L		

Analyte	MSS Result	Spiked	Result	%REC	Limits
Boron	178.7	1,000	1,131	95	75-125
Calcium	54,180	20,000	71,630	87	75-125
Chromium	1.437	200.0	188.2	93	75-125
Iron	1,382	1,000	2,279	90	75-125
Magnesium	29,190	20,000	48,210	95	75-125
Manganese	1,819	50.00	1,758	-121 NM	75-125
Nickel	1.827	500.0	456.8	91	75-125
Potassium	2,433	10,000	12,120	97	75-125
Sodium	69,770	20,000	86,350	83	75-125

NM= Not Meaningful: Sample concentration > 4X spike concentration

Curtis & Tompkins, Ltd.

Dissolved Hardness (Total)

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	SM 2340B
Analyte:	Hardness as CaCO3	Batch#:	143516
Field ID:	GWGW2308	Sampled:	10/09/08
Units:	mg/L	Received:	10/09/08
Diln Fac:	1.000	Prepared:	10/10/08

Type	Lab ID	Matrix	Result	RL	Analyzed
SAMPLE	206749-002	Filtrate	810	3.3	10/15/08
BLANK	QC464677	Water	ND	3.3	10/14/08

ND= Not Detected
RL= Reporting Limit

15.1

Curtis & Tompkins, Ltd.

Chloride

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Analyte:	Chloride	Batch#:	143459
Field ID:	GWGW2308	Sampled:	10/09/08 08:30
Matrix:	Water	Received:	10/09/08
Units:	mg/L		

Type	Lab ID	Result	RL	Diln Fac	Analyzed
SAMPLE	206749-002	130	5.0	25.00	10/10/08 08:09
BLANK	QC464413	ND	0.20	1.000	10/09/08 13:11

ND= Not Detected
RL= Reporting Limit

29.0

Curtis & Tompkins, Ltd.

Batch QC Report

Chloride

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Analyte:	Chloride	Units:	mg/L
Field ID:	ZZZZZZZZZZ	Batch#:	143459
MSS Lab ID:	206734-001	Sampled:	10/08/08 09:40
Matrix:	Water	Received:	10/09/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
BS	QC464414		4.000	3.799	95	80-120			1.000	10/09/08 13:28
BSD	QC464415		4.000	3.764	94	80-120	1	20	1.000	10/09/08 13:46
MS	QC464416	180.2	40.00	210.7	76 NM	80-120			20.00	10/10/08 06:59
MSD	QC464417		40.00	210.8	76 NM	80-120	0	20	20.00	10/10/08 07:16

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

30.0

Curtis & Tompkins, Ltd.

Fluoride

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Analyte:	Fluoride	Diln Fac:	1.000
Field ID:	GWGW2308	Batch#:	143512
Matrix:	Water	Sampled:	10/09/08 08:30
Units:	mg/L	Received:	10/09/08

Type	Lab ID	Result	RL	Analyzed
SAMPLE	206749-002	0.36	0.10	10/11/08 00:19
BLANK	QC464658	ND	0.10	10/10/08 11:55

ND= Not Detected
RL= Reporting Limit

31.0

Batch QC Report

Fluoride

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Analyte:	Fluoride	Units:	mg/L
Field ID:	ZZZZZZZZZZ	Batch#:	143512
Matrix:	Water		

Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Sampled	Received	Analyzed
BS		QC464659		2.000	2.032	102	74-120			1.000			10/10/08 12:12
BSD		QC464660		2.000	1.987	99	74-120	2	20	1.000			10/10/08 12:30
MS	206760-007	QC464661	<0.8367	1,000	1,035	103	66-120			1,000	10/09/08 13:30	10/09/08	10/10/08 16:19
MSD	206760-007	QC464662		1,000	1,022	102	66-120	1	20	1,000	10/09/08 13:30	10/09/08	10/10/08 16:37
MS	206685-002	QC464711	0.1916	1.020	1.341	113	66-120			1.020	10/03/08 10:02	10/07/08	10/10/08 16:54
MSD	206685-002	QC464712		1.020	1.298	109	66-120	3	20	1.020	10/03/08 10:02	10/07/08	10/10/08 17:11

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Curtis & Tompkins, Ltd.

Nitrate Nitrogen

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Units:	mg/L
Matrix:	Water	Received:	10/09/08

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Sampled	Analyzed
GWGW2308	SAMPLE	206749-002	66	1.3	25.00	143459	10/09/08 08:30	10/10/08 08:09
GWGW2311	SAMPLE	206749-004	32	1.0	20.00	143474	10/09/08 09:10	10/09/08 20:28
GWGW2320A	SAMPLE	206749-005	73	2.5	50.00	143474	10/09/08 10:00	10/09/08 20:46
GWGW2320B	SAMPLE	206749-006	73	2.5	50.00	143474	10/09/08 10:00	10/09/08 21:03
GWGW2319	SAMPLE	206749-007	78	2.5	50.00	143474	10/09/08 10:00	10/09/08 21:20
GWGW2312	SAMPLE	206749-008	23	0.50	10.00	143474	10/09/08 10:45	10/09/08 18:26
GWGW2316	SAMPLE	206749-009	23	0.50	10.00	143474	10/09/08 11:30	10/09/08 18:44
GWGW2353	SAMPLE	206749-010	11	0.50	10.00	143474	10/09/08 13:40	10/09/08 19:01
GWGW2350	SAMPLE	206749-011	16	0.50	10.00	143474	10/09/08 12:55	10/09/08 21:38
GWGW2321	SAMPLE	206749-012	63	2.5	50.00	143474	10/09/08 13:55	10/09/08 23:05
	BLANK	QC464413	ND	0.05	1.000	143459		10/09/08 13:11
	BLANK	QC464488	ND	0.05	1.000	143474		10/09/08 13:40

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Nitrate Nitrogen

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Units:	mg/L
Matrix:	Water	Received:	10/09/08

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Analyzed
	BS		QC464414		1.000	0.9368	94	80-120			1.000	143459		10/09/08 13:28
	BSD		QC464415		1.000	0.9317	93	80-120	1	20	1.000	143459		10/09/08 13:46
ZZZZZZZZZZ	MS	206734-001	QC464416	<0.01445	10.00	8.993	90	80-120			20.00	143459	10/08/08 09:40	10/10/08 06:59
ZZZZZZZZZZ	MSD	206734-001	QC464417		10.00	9.032	90	80-120	0	20	20.00	143459	10/08/08 09:40	10/10/08 07:16
	BS		QC464489		1.000	1.017	102	80-120			1.000	143474		10/09/08 13:57
	BSD		QC464490		1.000	1.011	101	80-120	1	20	1.000	143474		10/09/08 14:15
GWGW2311	MS	206749-004	QC464491	32.02	10.00	41.91	99	80-120			20.00	143474	10/09/08 09:10	10/10/08 00:32
GWGW2311	MSD	206749-004	QC464492		10.00	41.99	100	80-120	0	20	20.00	143474	10/09/08 09:10	10/10/08 00:49

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Curtis & Tompkins, Ltd.

Sulfate

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Analyte:	Sulfate	Batch#:	143459
Field ID:	GWGW2308	Sampled:	10/09/08 08:30
Matrix:	Water	Received:	10/09/08
Units:	mg/L		

Type	Lab ID	Result	RL	Diln Fac	Analyzed
SAMPLE	206749-002	170	5.0	10.00	10/09/08 17:51
BLANK	QC464413	ND	0.50	1.000	10/09/08 13:11

ND= Not Detected
RL= Reporting Limit

35.0

Curtis & Tompkins, Ltd.

Batch QC Report

Sulfate

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Analyte:	Sulfate	Units:	mg/L
Field ID:	ZZZZZZZZZZ	Batch#:	143459
MSS Lab ID:	206734-001	Sampled:	10/08/08 09:40
Matrix:	Water	Received:	10/09/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
BS	QC464414		10.00	9.449	94	80-120			1.000	10/09/08 13:28
BSD	QC464415		10.00	9.184	92	80-120	3	20	1.000	10/09/08 13:46
MS	QC464416	134.8	100.0	223.0	88	80-120			20.00	10/10/08 06:59
MSD	QC464417		100.0	224.2	89	80-120	1	20	20.00	10/10/08 07:16

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Hexavalent Chromium

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Field ID:	GWGW2308	Batch#:	143453
Matrix:	Water	Sampled:	10/09/08 08:30
Units:	ug/L	Received:	10/09/08

Type	Lab ID	Result	RL	Analyzed
SAMPLE	206749-002	120	1.0	10/09/08 17:49
BLANK	QC464379	ND	1.0	10/09/08 12:31

ND= Not Detected
RL= Reporting Limit

13.0

Curtis & Tompkins, Ltd.

Batch QC Report

Hexavalent Chromium

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Field ID:	GWGW2317	Batch#:	143453
MSS Lab ID:	206731-002	Sampled:	10/08/08 16:20
Matrix:	Water	Received:	10/08/08
Units:	ug/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
BS	QC464380		20.00	20.10	100	90-110			10/09/08 12:56
BSD	QC464381		20.00	19.80	99	90-110	2	20	10/09/08 13:09
MS	QC464382	449.8	10.00	452.1	23 NM	85-115			10/09/08 13:23
MSD	QC464383		10.00	452.0	21 NM	85-115	0	20	10/09/08 13:35

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Field ID:	GWGW2308	Sampled:	10/09/08
Matrix:	Water	Received:	10/09/08
Units:	mg/L	Analyzed:	10/10/08
Batch#:	143509		

Type: SAMPLE Diln Fac: 6.700
Lab ID: 206749-002

Analyte	Result	RL
Alkalinity, Bicarbonate	450	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	450	6.7

Type: BLANK Diln Fac: 1.000
Lab ID: QC464644

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	4.000
Lab ID:	QC464645	Batch#:	143509
Matrix:	Water	Analyzed:	10/10/08

Spiked	Result	%REC	Limits
200.0	189.6	95	90-110

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	4.000
Field ID:	ZZZZZZZZZZ	Batch#:	143509
MSS Lab ID:	206518-002	Sampled:	10/01/08
Matrix:	Water	Received:	10/01/08
Units:	mg/L	Analyzed:	10/10/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC464646	1,629	200.0	1,812	91	80-120		
MSD	QC464647		200.0	1,806	88	80-120	0	25

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Organic Carbon (DOC)

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Dissolved Organic Carbon	Batch#:	143617
Field ID:	GWGW2308	Sampled:	10/09/08
Matrix:	Water	Received:	10/09/08
Units:	mg/L	Analyzed:	10/14/08
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	206749-002	1.9	1.0
BLANK	QC465103	ND	1.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Organic Carbon (DOC)

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Dissolved Organic Carbon	Batch#:	143617
Field ID:	GWGW2307	Sampled:	10/08/08
MSS Lab ID:	206717-002	Received:	10/08/08
Matrix:	Water	Analyzed:	10/14/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
LCS	QC465104		10.00	10.17	102	90-110			1.000
MS	QC465105	1.052	10.00	11.16	101	80-121			2.000
MSD	QC465106		10.00	11.19	101	80-121	0	20	2.000

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Ferrous Iron (Fe+2)

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM3500FE-B
Analyte:	Ferrous Iron (Fe+2)	Batch#:	143478
Field ID:	GWGW2308	Sampled:	10/09/08 08:30
Matrix:	Water	Received:	10/09/08
Units:	mg/L	Prepared:	10/09/08 18:00
Diln Fac:	1.000	Analyzed:	10/09/08 18:08

Type	Lab ID	Result	RL
SAMPLE	206749-002	ND	0.10
BLANK	QC464501	ND	0.10

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Ferrous Iron (Fe+2)

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM3500FE-B
Analyte:	Ferrous Iron (Fe+2)	Batch#:	143478
Field ID:	GWGW2308	Sampled:	10/09/08 08:30
MSS Lab ID:	206749-002	Received:	10/09/08
Matrix:	Water	Prepared:	10/09/08 18:00
Units:	mg/L	Analyzed:	10/09/08 18:08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC464502		0.8000	0.8335	104	90-110		
MS	QC464503	<0.1000	0.8000	0.8181	102	73-136		
MSD	QC464504		0.8000	0.8306	104	73-136	2	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Orthophosphate Phosphorous

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM4500P-E
Analyte:	Orthophosphate (as P)	Batch#:	143492
Field ID:	GWGW2308	Sampled:	10/09/08 08:30
Matrix:	Water	Received:	10/09/08
Units:	mg/L	Analyzed:	10/10/08 09:50
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	206749-002	0.27	0.030
BLANK	QC464561	ND	0.030

ND= Not Detected
RL= Reporting Limit

2.0

Curtis & Tompkins, Ltd.

Batch QC Report

Orthophosphate Phosphorous

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM4500P-E
Analyte:	Orthophosphate (as P)	Diln Fac:	1.000
Field ID:	GWGW2308	Batch#:	143492
MSS Lab ID:	206749-002	Sampled:	10/09/08 08:30
Matrix:	Water	Received:	10/09/08
Units:	mg/L	Analyzed:	10/10/08 09:50

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC464562		0.4000	0.3952	99	80-120		
MS	QC464563	0.2711	0.4000	0.6639	98	80-136		
MSD	QC464564		0.4000	0.6673	99	80-136	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2540C
Analyte:	Total Dissolved Solids	Sampled:	10/09/08
Field ID:	GWGW2308	Received:	10/09/08
Matrix:	Water	Prepared:	10/13/08
Units:	mg/L	Analyzed:	10/14/08
Batch#:	143592		

Type	Lab ID	Result	RL	Diln Fac
SAMPLE	206749-002	1,180	11	1.111
BLANK	QC464993	ND	10	1.000

ND= Not Detected
RL= Reporting Limit

9.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Dissolved Solids (TDS)

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2540C
Analyte:	Total Dissolved Solids	Batch#:	143592
Field ID:	ZZZZZZZZZZ	Sampled:	10/09/08
MSS Lab ID:	206760-007	Received:	10/09/08
Matrix:	Water	Prepared:	10/13/08
Units:	mg/L	Analyzed:	10/14/08

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim	Diln Fac
BS	QC464994		104.0	90.00		87	73-120			1.000
BSD	QC464995		104.0	94.00		90	73-120	4	22	1.000
SDUP	QC464996	25,460		25,520	100.0			0	20	10.00

RL= Reporting Limit
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Organic Carbon (TOC)

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Batch#:	143658
Field ID:	GWGW2308	Sampled:	10/09/08
Matrix:	Water	Received:	10/09/08
Units:	mg/L	Analyzed:	10/15/08
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	206749-002	2.1	0.50
BLANK	QC465260	ND	0.50

ND= Not Detected
RL= Reporting Limit

40.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Organic Carbon (TOC)

Lab #:	206749	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Batch#:	143658
Field ID:	GWGW2308	Sampled:	10/09/08
MSS Lab ID:	206749-002	Received:	10/09/08
Matrix:	Water	Analyzed:	10/15/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
LCS	QC465261		10.00	10.56	106	90-110			1.000
MS	QC465359	2.068	10.00	12.57	105	62-124			2.000
MSD	QC465360		10.00	12.63	106	62-124	0	20	2.000

RPD= Relative Percent Difference

206823

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AguaTierra Associates Incorporated, DBA

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Client Contact		Project Manager: Bob Devany	Sampled by: KHA/JMD	Date:	COC Number: UCD
Weiss Associates		Tel: 510-450-6144	Lab Contact:	Carrier:	Page 1 of 1
5801 Christie Avenue, Suite 600		Analysis Turnaround Time			Job No.
Emeryville, CA 94608		Calendar (C) or Work Days (W) --- 5W			
(510) 450-6000	Phone	TAT if different from Below _____			SDG No.
(510) 547-5043	FAX	☐ 2 weeks			
		☐ 1 week			
Job Name: UC Davis		☐ 2 days			
Address: One Shields Ave, Davis		☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Field Filtered (Y/N)	Dissolved Organic Carbon SM5310B	Cr, Mn, Fe, B (6010B)	Cr6+ (7199)	Fe II (SM3500 FeD)	Ca, Mg, K, Na, Ni (6010B)	Chlorate, Nitrate, Sulfate (EPA 300.0)	Phosphate (SM4500-PE)	Carbonate, Bicarbonate (EPA 310.1)	Fluoride (SM 4500-F)	TOC (SM 5310C)	TDS (SM 2540C)	VOCs (8260)	Pesticides (8081)	PCBs (8082)	Title 22 Metals (6010B)	Total Cr			Sample Specific Notes:
1 ✓	GWGW2318	10/10/08	0715		W	3													X							
2	GWOW2352	10/10/08	1050		W	1																	X			
3 ✓	GWGW2355	10/10/08	0935		W	4													X				X			
4 ✓	TBGW0515	10/10/08	0600		W	1													X							
5	GWGW2356	10/10/08	0900		W	3													X							
6 ✓	GWGW2360	10/13/08	1115		W	10		X	X	X	X	X	X	X	X	X	X	X	X				X			
7	GWGW2359	10/13/08	1350		W	10		X	X	X	X	X	X	X	X	X	X	X	X				X			
8 ✓	TBGW0516	10/13/08	0900		W	1													X							

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For _____ Months*

Special Instructions/QC Requirements & Comments: **Level III Reporting**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
KHA ATKINSON	WEISS ASSOC.	10/13/08 1510	[signature]	C&T	10/13/08 1510
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 206823 Date Received 10-13-8 Number of coolers 1
Client WEISS Project 388-1856-1-16

Date Opened 10-13-8 By (print) Sam Evans (sign)
Date Logged in ↓ By (print) M. Villanueva (sign)

1. Did cooler come with a shipping slip (airbill, etc)?.....YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? ..... YES NO (N/A)
3. Were custody papers dry and intact when received?..... (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)?..... (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form)..... (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) _____

☒ Samples Received on ice & cold without a temperature blank

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? .....YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened?..... (YES) NO
10. Are samples in the appropriate containers for indicated tests? ..... (YES) NO
11. Are sample labels present, in good condition and complete? ..... (YES) NO
12. Do the sample labels agree with custody papers? ..... (YES) NO
13. Was sufficient amount of sample sent for tests requested? ..... (YES) NO
14. Are the samples appropriately preserved? ..... (YES) NO N/A
15. Are bubbles > 6mm absent in VOA samples?.....YES (NO) N/A
16. Was the client contacted concerning this sample delivery?.....YES NO
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

SAMPLE # 5 HAD BUBBLES PRESENT in 3 OF 3 SAMPLES

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2318	Batch#:	143843
Lab ID:	206823-001	Sampled:	10/10/08
Matrix:	Water	Received:	10/13/08
Units:	ug/L	Analyzed:	10/19/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	0.6	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	41	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	3.0	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2318	Batch#:	143843
Lab ID:	206823-001	Sampled:	10/10/08
Matrix:	Water	Received:	10/13/08
Units:	ug/L	Analyzed:	10/19/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-125
1,2-Dichloroethane-d4	111	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	103	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2355	Batch#:	143842
Lab ID:	206823-003	Sampled:	10/10/08
Matrix:	Water	Received:	10/13/08
Units:	ug/L	Analyzed:	10/19/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2355	Batch#:	143842
Lab ID:	206823-003	Sampled:	10/10/08
Matrix:	Water	Received:	10/13/08
Units:	ug/L	Analyzed:	10/19/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-125
1,2-Dichloroethane-d4	119	80-137
Toluene-d8	96	80-120
Bromofluorobenzene	114	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TBGW0515	Batch#:	143842
Lab ID:	206823-004	Sampled:	10/10/08
Matrix:	Water	Received:	10/13/08
Units:	ug/L	Analyzed:	10/19/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TBGW0515	Batch#:	143842
Lab ID:	206823-004	Sampled:	10/10/08
Matrix:	Water	Received:	10/13/08
Units:	ug/L	Analyzed:	10/19/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-125
1,2-Dichloroethane-d4	116	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	114	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2356	Batch#:	143842
Lab ID:	206823-005	Sampled:	10/10/08
Matrix:	Water	Received:	10/13/08
Units:	ug/L	Analyzed:	10/19/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2356	Batch#:	143842
Lab ID:	206823-005	Sampled:	10/10/08
Matrix:	Water	Received:	10/13/08
Units:	ug/L	Analyzed:	10/19/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-125
1,2-Dichloroethane-d4	117	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	120	80-122

ND= Not Detected
RL= Reporting Limit

34.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2360	Batch#:	143842
Lab ID:	206823-006	Sampled:	10/13/08
Matrix:	Water	Received:	10/13/08
Units:	ug/L	Analyzed:	10/19/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	0.7	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

35.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2360	Batch#:	143842
Lab ID:	206823-006	Sampled:	10/13/08
Matrix:	Water	Received:	10/13/08
Units:	ug/L	Analyzed:	10/19/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-125
1,2-Dichloroethane-d4	122	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	114	80-122

ND= Not Detected
RL= Reporting Limit

35.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2359	Batch#:	143842
Lab ID:	206823-007	Sampled:	10/13/08
Matrix:	Water	Received:	10/13/08
Units:	ug/L	Analyzed:	10/19/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	1.8	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2359	Batch#:	143842
Lab ID:	206823-007	Sampled:	10/13/08
Matrix:	Water	Received:	10/13/08
Units:	ug/L	Analyzed:	10/19/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-125
1,2-Dichloroethane-d4	124	80-137
Toluene-d8	96	80-120
Bromofluorobenzene	120	80-122

ND= Not Detected
RL= Reporting Limit

36.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TBGW0516	Batch#:	143842
Lab ID:	206823-008	Sampled:	10/13/08
Matrix:	Water	Received:	10/13/08
Units:	ug/L	Analyzed:	10/19/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TBGW0516	Batch#:	143842
Lab ID:	206823-008	Sampled:	10/13/08
Matrix:	Water	Received:	10/13/08
Units:	ug/L	Analyzed:	10/19/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-125
1,2-Dichloroethane-d4	119	80-137
Toluene-d8	98	80-120
Bromofluorobenzene	111	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC466053	Batch#:	143842
Matrix:	Water	Analyzed:	10/19/08
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC466053	Batch#:	143842
Matrix:	Water	Analyzed:	10/19/08
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-125
1,2-Dichloroethane-d4	114	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	115	80-122

ND= Not Detected
RL= Reporting Limit

38.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	143842
Units:	ug/L	Analyzed:	10/19/08
Diln Fac:	1.000		

Type: BS Lab ID: QC466054

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	25.75	129	73-133
Benzene	20.00	19.04	95	80-120
Trichloroethene	20.00	22.23	111	80-120
Toluene	20.00	20.98	105	80-120
Chlorobenzene	20.00	21.92	110	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-125
1,2-Dichloroethane-d4	111	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	105	80-122

Type: BSD Lab ID: QC466055

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	20.00	23.88	119	73-133	8	20
Benzene	20.00	18.78	94	80-120	1	20
Trichloroethene	20.00	22.07	110	80-120	1	20
Toluene	20.00	20.63	103	80-120	2	20
Chlorobenzene	20.00	20.31	102	80-120	8	20

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-125
1,2-Dichloroethane-d4	112	80-137
Toluene-d8	96	80-120
Bromofluorobenzene	106	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC466056	Batch#:	143843
Matrix:	Water	Analyzed:	10/19/08
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC466056	Batch#:	143843
Matrix:	Water	Analyzed:	10/19/08
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-125
1,2-Dichloroethane-d4	105	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	98	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	143843
Units:	ug/L	Analyzed:	10/19/08
Diln Fac:	1.000		

Type: BS Lab ID: QC466057

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	21.08	105	73-133
Benzene	20.00	20.05	100	80-120
Trichloroethene	20.00	19.89	99	80-120
Toluene	20.00	19.38	97	80-120
Chlorobenzene	20.00	19.87	99	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-125
1,2-Dichloroethane-d4	103	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	98	80-122

Type: BSD Lab ID: QC466058

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	20.00	22.46	112	73-133	6	20
Benzene	20.00	20.34	102	80-120	1	20
Trichloroethene	20.00	20.90	104	80-120	5	20
Toluene	20.00	20.70	103	80-120	7	20
Chlorobenzene	20.00	21.05	105	80-120	6	20

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-125
1,2-Dichloroethane-d4	103	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	97	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Chromium

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Chromium	Sampled:	10/10/08
Units:	ug/L	Received:	10/13/08
Diln Fac:	1.000	Prepared:	10/16/08
Batch#:	143735	Analyzed:	10/20/08

Field ID	Type	Lab ID	Matrix	Result	RL
GWGW2352	SAMPLE	206823-002	Water	36	5.0
GWGW2355	SAMPLE	206823-003	Water	47	5.0
	BLANK	QC465584	Filtrate	ND	5.0

ND= Not Detected
RL= Reporting Limit

51.1

Curtis & Tompkins, Ltd.

Batch QC Report

Chromium

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Chromium	Batch#:	143735
Field ID:	GWGW2364	Sampled:	10/15/08
MSS Lab ID:	206908-002	Received:	10/15/08
Matrix:	Filtrate	Prepared:	10/16/08
Units:	ug/L	Analyzed:	10/20/08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC465585		200.0	180.1	90	80-120		
BSD	QC465586		200.0	184.4	92	80-120	2	20
MS	QC465587	60.95	200.0	246.8	93	78-120		
MSD	QC465588		200.0	248.4	94	78-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Chromium

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Chromium	Units:	ug/L
Field ID:	GWGW2364	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	143735
MSS Lab ID:	206908-002	Sampled:	10/15/08
Lab ID:	QC465589	Received:	10/15/08
Matrix:	Filtrate	Analyzed:	10/20/08

MSS Result	MSS RL	Result	RL	% Diff	Lim
60.95	5.000	59.96	25.00	2	10

RL= Reporting Limit

53.2

Curtis & Tompkins, Ltd.

Batch QC Report

Chromium

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Chromium	Units:	ug/L
Field ID:	GWGW2364	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	143735
MSS Lab ID:	206908-002	Sampled:	10/15/08
Lab ID:	QC465590	Received:	10/15/08
Matrix:	Filtrate	Analyzed:	10/20/08

MSS Result	Spiked	Result	%REC	Limits
60.95	200.0	243.7	91	75-125

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2360	Sampled:	10/13/08
Lab ID:	206823-006	Received:	10/13/08
Matrix:	Filtrate	Prepared:	10/16/08
Units:	ug/L	Analyzed:	10/20/08
Batch#:	143735		

Analyte	Result	RL	Diln Fac
Boron	1,200	100	1.000
Calcium	64,000	500	1.000
Chromium	58	5.0	1.000
Iron	ND	100	1.000
Magnesium	100,000	1,000	5.000
Manganese	ND	5.0	1.000
Nickel	ND	5.0	1.000
Potassium	1,100	500	1.000
Sodium	84,000	500	1.000

ND= Not Detected
RL= Reporting Limit

44.1

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2359	Batch#:	143735
Lab ID:	206823-007	Sampled:	10/13/08
Matrix:	Filtrate	Received:	10/13/08
Units:	ug/L	Prepared:	10/16/08
Diln Fac:	1.000	Analyzed:	10/20/08

Analyte	Result	RL
Boron	580	100
Calcium	49,000	500
Chromium	47	5.0
Iron	ND	100
Magnesium	82,000	500
Manganese	ND	5.0
Nickel	14	5.0
Potassium	590	500
Sodium	46,000	500

ND= Not Detected
RL= Reporting Limit

45.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC465584	Batch#:	143735
Matrix:	Filtrate	Prepared:	10/16/08
Units:	ug/L	Analyzed:	10/20/08

Analyte	Result	RL
Boron	ND	100
Calcium	ND	500
Chromium	ND	5.0
Iron	ND	100
Magnesium	ND	500
Manganese	ND	5.0
Nickel	ND	5.0
Potassium	ND	500
Sodium	ND	500

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Matrix:	Filtrate	Batch#:	143735
Units:	ug/L	Prepared:	10/16/08
Diln Fac:	1.000	Analyzed:	10/20/08

Type: BS Lab ID: QC465585

Analyte	Spiked	Result	%REC	Limits
Boron	1,000	905.9	91	80-120
Calcium	20,000	18,900	94	80-120
Chromium	200.0	180.1	90	80-120
Iron	1,000	935.9	94	80-120
Magnesium	20,000	18,910	95	80-120
Manganese	50.00	48.46	97	80-120
Nickel	500.0	443.0	89	80-120
Potassium	10,000	9,206	92	80-120
Sodium	20,000	19,310	97	80-120

Type: BSD Lab ID: QC465586

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Boron	1,000	955.2	96	80-120	5	20
Calcium	20,000	19,940	100	80-120	5	20
Chromium	200.0	184.4	92	80-120	2	20
Iron	1,000	986.1	99	80-120	5	20
Magnesium	20,000	20,030	100	80-120	6	20
Manganese	50.00	47.87	96	80-120	1	20
Nickel	500.0	452.8	91	80-120	2	20
Potassium	10,000	9,821	98	80-120	6	20
Sodium	20,000	20,000	100	80-120	4	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2364	Batch#:	143735
MSS Lab ID:	206908-002	Sampled:	10/15/08
Matrix:	Filtrate	Received:	10/15/08
Units:	ug/L	Prepared:	10/16/08
Diln Fac:	1.000	Analyzed:	10/20/08

Type: MS Lab ID: QC465587

Analyte	MSS Result	Spiked	Result	%REC	Limits
Boron	943.9	1,000	1,944	100	79-121
Calcium	58,240	20,000	73,650	77	63-130
Chromium	60.95	200.0	246.8	93	78-120
Iron	<12.36	1,000	960.4	96	66-126
Magnesium	94,890	20,000	107,300 >LR	62 NM	66-126
Manganese	22.99	50.00	69.60	93	73-121
Nickel	1.781	500.0	453.5	90	74-120
Potassium	1,363	10,000	11,160	98	68-125
Sodium	73,880	20,000	88,430	73	60-131

Type: MSD Lab ID: QC465588

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Boron	1,000	1,953	101	79-121	0	20
Calcium	20,000	75,310	85	63-130	2	20
Chromium	200.0	248.4	94	78-120	1	20
Iron	1,000	1,005	100	66-126	5	20
Magnesium	20,000	109,700 >LR	74 NM	66-126	NC	20
Manganese	50.00	70.45	95	73-121	1	20
Nickel	500.0	456.3	91	74-120	1	20
Potassium	10,000	11,600	102	68-125	4	20
Sodium	20,000	90,590	84	60-131	2	20

NC= Not Calculated
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2364	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	143735
MSS Lab ID:	206908-002	Sampled:	10/15/08
Lab ID:	QC465589	Received:	10/15/08
Matrix:	Filtrate	Analyzed:	10/20/08
Units:	ug/L		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim
Boron	943.9	100.0	752.4	500.0	20 *	10
Calcium	58,240	500.0	58,240	1,664	0	10
Chromium	60.95	5.000	59.96	25.00	2	10
Iron	ND	100.0	ND	500.0	NC	10
Magnesium	94,890	500.0	95,470	1,641	1	10
Manganese	22.99	5.000	23.22 J	25.00	1	10
Nickel	1.781	5.000	7.956 J	25.00	NC	10
Potassium	1,363	500.0	1,070 J	2,500	NC	10
Sodium	73,880	500.0	73,690	2,500	0	10

*= Value outside of QC limits; see narrative
J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2364	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	143735
MSS Lab ID:	206908-002	Sampled:	10/15/08
Lab ID:	QC465590	Received:	10/15/08
Matrix:	Filtrate	Analyzed:	10/20/08
Units:	ug/L		

Analyte	MSS Result	Spiked	Result	%REC	Limits
Boron	943.9	1,000	1,960	102	75-125
Calcium	58,240	20,000	76,610	92	75-125
Chromium	60.95	200.0	243.7	91	75-125
Iron	<12.36	1,000	978.4	98	75-125
Magnesium	94,890	20,000	112,600 >LR	89 NM	75-125
Manganese	22.99	50.00	69.98	94	75-125
Nickel	1.781	500.0	439.2	87	75-125
Potassium	1,363	10,000	11,250	99	75-125
Sodium	73,880	20,000	92,400	93	75-125

NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range

Curtis & Tompkins, Ltd.

Dissolved Hardness (Total)

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	SM 2340B
Analyte:	Hardness as CaCO3	Sampled:	10/13/08
Matrix:	Filtrate	Received:	10/13/08
Units:	mg/L	Prepared:	10/16/08
Diln Fac:	1.000	Analyzed:	10/20/08
Batch#:	143735		

Field ID	Type	Lab ID	Result	RL
GWGW2360	SAMPLE	206823-006	580	3.3
GWGW2359	SAMPLE	206823-007	460	3.3
	BLANK	QC465584	ND	3.3

ND= Not Detected
RL= Reporting Limit

43.1

Curtis & Tompkins, Ltd.

Dissolved Curtis & Tompkins Laboratories Analytical Report

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Analysis:	EPA 300.0
Project#:	388-1856		
Units:	mg/L	Received:	10/13/08
Batch#:	143591		

Field ID:	GWGW2360	Matrix:	Filtrate
Type:	SAMPLE	Sampled:	10/13/08 11:15
Lab ID:	206823-006		

Analyte	Result	RL	Diln Fac	Analyzed
Fluoride	0.32	0.10	1.000	10/13/08 18:27
Chloride	37	1.0	5.000	10/14/08 03:49
Nitrogen, Nitrate	15	0.25	5.000	10/14/08 03:49
Sulfate	75	2.5	5.000	10/14/08 03:49

Field ID:	GWGW2359	Matrix:	Filtrate
Type:	SAMPLE	Sampled:	10/13/08 13:50
Lab ID:	206823-007		

Analyte	Result	RL	Diln Fac	Analyzed
Fluoride	0.42	0.10	1.000	10/14/08 10:47
Chloride	19	0.20	1.000	10/14/08 10:47
Nitrogen, Nitrate	12	0.25	5.000	10/14/08 10:30
Sulfate	47	0.50	1.000	10/14/08 10:47

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC464988	Analyzed:	10/13/08 14:09
Matrix:	Water		

Analyte	Result	RL
Fluoride	ND	0.10
Chloride	ND	0.20
Nitrogen, Nitrate	ND	0.05
Sulfate	ND	0.50

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Curtis & Tompkins Laboratories Analytical Report

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Analysis:	EPA 300.0
Project#:	388-1856		
Matrix:	Water	Diln Fac:	1.000
Units:	mg/L	Batch#:	143591

Type: BS Analyzed: 10/13/08 15:00
Lab ID: QC464989

Analyte	Spiked	Result	%REC	Limits
Fluoride	2.000	1.995	100	74-120
Chloride	4.000	3.767	94	80-120
Nitrogen, Nitrate	1.000	0.9175	92	80-120
Sulfate	10.00	9.281	93	80-120

Type: BSD Analyzed: 10/13/08 15:18
Lab ID: QC464990

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Fluoride	2.000	1.964	98	74-120	2	20
Chloride	4.000	3.794	95	80-120	1	20
Nitrogen, Nitrate	1.000	0.9082	91	80-120	1	20
Sulfate	10.00	9.285	93	80-120	0	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Curtis & Tompkins Laboratories Analytical Report

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Analysis:	EPA 300.0
Project#:	388-1856		
Field ID:	ZZZZZZZZZZ	Diln Fac:	5,000
MSS Lab ID:	206801-002	Batch#:	143591
Matrix:	Water	Sampled:	10/13/08 11:30
Units:	mg/L	Received:	10/13/08

Type: MS Analyzed: 10/14/08 08:45
Lab ID: QC464991

Analyte	MSS Result	Spiked	Result	%REC	Limits
Fluoride	<3.347	5,000	5,582	112	66-120
Chloride	36,230	10,000	43,720	75 *	80-120
Nitrogen, Nitrate	<1.445	2,500	2,421	97	80-120
Sulfate	5,197	25,000	32,080	108	80-120

Type: MSD Analyzed: 10/14/08 09:03
Lab ID: QC464992

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Fluoride	5,000	5,128	103	66-120	8	20
Chloride	10,000	44,020	78 *	80-120	1	20
Nitrogen, Nitrate	2,500	2,465	99	80-120	2	20
Sulfate	25,000	30,140	100	80-120	6	20

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Hexavalent Chromium

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Batch#:	143601
Units:	ug/L	Received:	10/13/08
Diln Fac:	1.000		

Field ID	Type	Lab ID	Matrix	Result	RL	Sampled	Analyzed
GWGW2360	SAMPLE	206823-006	Filtrate	55	1.0	10/13/08 11:15	10/13/08 18:36
GWGW2359	SAMPLE	206823-007	Filtrate	46	1.0	10/13/08 13:50	10/13/08 18:23
	BLANK	QC465035	Water	ND	1.0		10/13/08 16:37

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Hexavalent Chromium

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Batch#:	143601
Field ID:	GWGW2360	Sampled:	10/13/08 11:15
MSS Lab ID:	206823-006	Received:	10/13/08
Units:	ug/L		

Type	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
BS	QC465036	Water		20.00	19.74	99	90-110			1.000	10/13/08 16:51
BSD	QC465037	Water		20.00	19.48	97	90-110	1	20	1.000	10/13/08 17:04
MS	QC465086	Filtrate	54.92	10.20	65.14	100 NM	85-115			1.020	10/13/08 19:46
MSD	QC465087	Filtrate		10.20	65.40	103 NM	85-115	0	20	1.020	10/13/08 19:59

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Matrix:	Water	Sampled:	10/13/08
Units:	mg/L	Received:	10/13/08
Batch#:	143657	Analyzed:	10/14/08

Field ID:	GWGW2360	Lab ID:	206823-006
Type:	SAMPLE	Diln Fac:	6.700

Analyte	Result	RL
Alkalinity, Bicarbonate	570	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	570	6.7

Field ID:	GWGW2359	Lab ID:	206823-007
Type:	SAMPLE	Diln Fac:	6.700

Analyte	Result	RL
Alkalinity, Bicarbonate	490	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	490	6.7

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC465254		

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	4.000
Lab ID:	QC465255	Batch#:	143657
Matrix:	Water	Analyzed:	10/14/08

Spiked	Result	%REC	Limits
200.0	192.0	96	90-110

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	4.000
Field ID:	ZZZZZZZZZZ	Batch#:	143657
MSS Lab ID:	206760-007	Sampled:	10/09/08
Matrix:	Water	Received:	10/09/08
Units:	mg/L	Analyzed:	10/14/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC465256	1,896	200.0	2,086	95	80-120		
MSD	QC465257		200.0	2,090	97	80-120	0	25

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Organic Carbon (DOC)

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Dissolved Organic Carbon	Batch#:	143617
Matrix:	Water	Sampled:	10/13/08
Units:	mg/L	Received:	10/13/08
Diln Fac:	1.000	Analyzed:	10/14/08

Field ID	Type	Lab ID	Result	RL
GWGW2360	SAMPLE	206823-006	1.1	1.0
GWGW2359	SAMPLE	206823-007	ND	1.0
	BLANK	QC465103	ND	1.0

ND= Not Detected
RL= Reporting Limit

2.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Organic Carbon (DOC)

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Dissolved Organic Carbon	Batch#:	143617
Field ID:	GWGW2307	Sampled:	10/08/08
MSS Lab ID:	206717-002	Received:	10/08/08
Matrix:	Water	Analyzed:	10/14/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
LCS	QC465104		10.00	10.17	102	90-110			1.000
MS	QC465105	1.052	10.00	11.16	101	80-121			2.000
MSD	QC465106		10.00	11.19	101	80-121	0	20	2.000

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Ferrous Iron (Fe+2)

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM3500FE-B
Analyte:	Ferrous Iron (Fe+2)	Batch#:	143608
Matrix:	Water	Received:	10/13/08
Units:	mg/L	Prepared:	10/13/08 20:30
Diln Fac:	1.000	Analyzed:	10/13/08 20:36

Field ID	Type	Lab ID	Result	RL	Sampled
GWGW2360	SAMPLE	206823-006	ND	0.10	10/13/08 11:15
GWGW2359	SAMPLE	206823-007	ND	0.10	10/13/08 13:50
	BLANK	QC465062	ND	0.10	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Ferrous Iron (Fe+2)

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM3500FE-B
Analyte:	Ferrous Iron (Fe+2)	Batch#:	143608
Field ID:	GWGW2360	Sampled:	10/13/08 11:15
MSS Lab ID:	206823-006	Received:	10/13/08
Matrix:	Water	Prepared:	10/13/08 20:30
Units:	mg/L	Analyzed:	10/13/08 20:36
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC465063		0.8000	0.7524	94	90-110		
MS	QC465064	<0.1000	0.8000	0.8490	106	73-136		
MSD	QC465065		0.8000	0.9263	116	73-136	9	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Phosphorous

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	SMWW18:4500P-B
Project#:	388-1856	Analysis:	SM4500P-E
Analyte:	Phosphorous	Sampled:	10/13/08
Matrix:	Water	Received:	10/13/08
Units:	mg/L	Analyzed:	10/17/08
Batch#:	143776		

Field ID	Type	Lab ID	Result	RL	Diln Fac
GWGW2360	SAMPLE	206823-006	0.11	0.050	1.667
GWGW2359	SAMPLE	206823-007	0.099	0.030	1.000
	BLANK	QC465754	ND	0.030	1.000

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Phosphorous

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	SMWW18:4500P-B
Project#:	388-1856	Analysis:	SM4500P-E
Analyte:	Phosphorous	Batch#:	143776
Field ID:	GWGW2360	Sampled:	10/13/08
MSS Lab ID:	206823-006	Received:	10/13/08
Matrix:	Water	Analyzed:	10/17/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
LCS	QC465755		0.3960	0.4179	106	72-134			1.000
MS	QC465756	0.1079	0.3960	0.5041	100	19-182			1.667
MSD	QC465757		0.3960	0.5207	104	19-182	3	26	1.667

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2540C
Analyte:	Total Dissolved Solids	Sampled:	10/13/08
Matrix:	Water	Received:	10/13/08
Units:	mg/L	Prepared:	10/15/08
Batch#:	143707	Analyzed:	10/16/08

Field ID	Type	Lab ID	Result	RL	Diln Fac
GWGW2360	SAMPLE	206823-006	800	11	1.111
GWGW2359	SAMPLE	206823-007	630	11	1.111
	BLANK	QC465464	ND	10	1.000

ND= Not Detected
RL= Reporting Limit

13.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Dissolved Solids (TDS)

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2540C
Analyte:	Total Dissolved Solids	Batch#:	143707
Field ID:	ZZZZZZZZZZ	Sampled:	10/13/08
MSS Lab ID:	206801-002	Received:	10/13/08
Matrix:	Water	Prepared:	10/15/08
Units:	mg/L	Analyzed:	10/16/08

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim	Diln Fac
BS	QC465465		104.0	96.00		92	73-120			1.000
BSD	QC465466		104.0	92.00		88	73-120	4	22	1.000
SDUP	QC465467	66,400		65,900	500.0			1	20	50.00

RL= Reporting Limit
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Organic Carbon (TOC)

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Batch#:	143724
Matrix:	Water	Sampled:	10/13/08
Units:	mg/L	Received:	10/13/08
Diln Fac:	1.000	Analyzed:	10/16/08

Field ID	Type	Lab ID	Result	RL
GWGW2360	SAMPLE	206823-006	0.97	0.50
GWGW2359	SAMPLE	206823-007	0.72	0.50
	BLANK	QC465530	ND	0.50

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Organic Carbon (TOC)

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Batch#:	143724
Field ID:	GWGW2326	Sampled:	10/14/08
MSS Lab ID:	206870-007	Received:	10/14/08
Matrix:	Water	Analyzed:	10/16/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
LCS	QC465531		10.00	10.69	107	90-110			1.000
MS	QC465532	1.244	10.00	11.83	106	62-124			2.000
MSD	QC465533		10.00	12.01	108	62-124	2	20	2.000

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Orthophosphate Phosphorous

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Analysis:	SM4500P-E
Project#:	388-1856		
Analyte:	Orthophosphate (as P)	Batch#:	143685
Matrix:	Filtrate	Received:	10/13/08
Units:	mg/L	Analyzed:	10/15/08 10:35
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Sampled
GWGW2360	SAMPLE	206823-006	0.10	0.030	10/13/08 11:15
GWGW2359	SAMPLE	206823-007	0.096	0.030	10/13/08 13:50
	BLANK	QC465384	ND	0.030	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Orthophosphate Phosphorous

Lab #:	206823	Location:	UC Davis
Client:	Weiss Associates	Analysis:	SM4500P-E
Project#:	388-1856		
Analyte:	Orthophosphate (as P)	Diln Fac:	1.000
Field ID:	GWGW2360	Batch#:	143685
MSS Lab ID:	206823-006	Sampled:	10/13/08 11:15
Matrix:	Filtrate	Received:	10/13/08
Units:	mg/L	Analyzed:	10/15/08 10:35

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC465385		0.4000	0.3965	99	80-120		
MS	QC465386	0.1008	0.4000	0.4946	98	80-136		
MSD	QC465387		0.4000	0.4959	99	80-136	0	20

RPD= Relative Percent Difference

206870

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-16
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AguaTierra Associates Incorporated, DBA

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Client Contact		Project Manager: Bob Devany	Sampled by: KHA/JMD	Date: 10/14/08	COC Number: UCD
Weiss Associates		Tel: 510-450-6144	Lab Contact:	Carrier:	Page 1 of ____
5801 Christie Avenue, Suite 600		Analysis Turnaround Time			Job No.
Emeryville, CA 94608		Calendar (C) or Work Days (W) --- 5W			
(510) 450-6000	Phone	TAT if different from Below ____			SDG No.
(510) 547-5043	FAX	☐ 2 weeks			
		☐ 1 week			
Job Name: UC Davis		☐ 2 days			
Address: One Shields Ave, Davis		☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Field Filtered (Y/N)	Dissolved Organic Carbon SM5310B	Cr, Mn, Fe, B (6010B)	Cr6+ (7199)	Fe II (SM3500 FeD)	Ca, Mg, K, Na, Ni (6010B)	Chlorate, Nitrate, Sulfate (EPA 300.0)	Phosphate (SM4500-PE)	Carbonate, Bicarbonate (EPA 310.1)	Fluoride (SM 4500-F)	TOC (SM 5310C)	TDS (SM 2540C)	VOCs (8260)	Pesticides (8081)	PCBs (8082)	Title 22 Metals (6010B)	Hardness	Total Cr	Nitrate-N	Sample Specific Notes:
1.	GWGW2322	10/14/08	1620		W	2			X				X													
2.	GWGW2354A	10/14/08	1615		W	5													X					X	X	
3.	GWGW2354B	10/14/08	1615		W	2		DW				DW												X	X	
4.	GWGW2328A	10/14/08	1035		W	7		X	X	X	X	X	X	X	X	X	X	X					X			24hr Hold
5.	GWGW2328B	10/14/08	1035		W	7		X	X	X	X	X	X	X	X	X	X	X					X			24hr Hold
6.	GWGW2361	10/14/08	1120		W	10		X	X	X	X	X	X	X	X	X	X	X	X				X			
7.	GWGW2326	10/14/08	1215		W	10		X	X	X	X	X	X	X	X	X	X	X	X				X			24hr Hold
8.	TBGW0517	10/14/08	0600		W	1													X							
9.	GWGW2317	10/14/08	1500		W	1							X													

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other ____

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* ____ *Months*

Special Instructions/QC Requirements & Comments: **Level III Reporting**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	weiss	10/14/08	[signature]	CT	10/14/08 1526
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

intact on ice cold RC

Micah Smith

From: "Tim R. Utterback" <tru@weiss.com>
To: "Micah Smith" <micah.smith@ctberk.com>
Sent: Wednesday, October 15, 2008 2:11 PM
Subject: Re: 388-1856 - C&T Login Summary (206870)

Micah,
The Chain-of-custody was incorrect for sample GWGW2322. Please only analyze this sample for Cr and Nitrate-N. Please remove Mn, Fe, B, chloride and sulfate from the analysis request for sample GWGW2322.
Thanks,
-Tim

>>> "Micah Smith" <micah.smith@ctberk.com> 10/15/2008 10:51 am >>>

Anja sent an email saying that Phosphate should be run as Ortho-phosphate. I have only logged these samples for PO4-O. There were bottles for PO4-T but these do have a bit on sediment in them. I have poured of an aliquot from the field filtered samples and preserved them at 20:25 on 10/14/08. Please let me know if Total Phosphate needs to be analyzed for these sample. Thanks Micah
C&T Login Summary for 206870

Project:388-1856
Site:UC Davis
Lab Login #:206870
Report Due:10/21/08
PO#:
C&T Proj Mgr:Micah Smith

Report To:Weiss Associates

5801 Christie Avenue

Suite 600

Emeryville, CA 94608

ATTN: Tim Utterback

(510) 450-6000

Bill To:Weiss Associates

5801 Christie Avenue

Suite 600

Emeryville, CA 94608

Micah Smith

From: "Tim R. Utterback" <tru@weiss.com>
To: "Micah Smith" <micah.smith@ctberk.com>
Cc: "Anja Verce" <av@weiss.com>
Sent: Wednesday, October 15, 2008 1:05 PM
Subject: Re: 388-1856 - C&T Login Summary (206870)

Micah,
Yes, please analyze the field filtered aliquot that you preserved for PO4-Total.
Thanks,
-Tim

>>> "Micah Smith" <micah.smith@ctberk.com> 10/15/2008 10:51 am >>>

Anja sent an email saying that Phosphate should be run as Ortho-phosphate. I have only logged these samples for PO4-O. There were bottles for PO4-T but these do have a bit on sediment in them. I have poured of an aliquot from the field filtered samples and preserved them at 20:25 on 10/14/08. Please let me know if Total Phosphate needs to be analyzed for these sample. Thanks Micah
C&T Login Summary for 206870

Project:388-1856
Site:UC Davis
Lab Login #:206870
Report Due:10/21/08
PO#:
C&T Proj Mgr:Micah Smith

Report To:Weiss Associates

5801 Christie Avenue

Suite 600

Emeryville, CA 94608

ATTN: Tim Utterback

(510) 450-6000

Bill To:Weiss Associates

5801 Christie Avenue

Suite 600

Emeryville, CA 94608

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 206870 Date Received 10/14/08 Number of coolers 2
Client WEISS ASSOCIATES Project UC DAVIS

Date Opened 10-14-08 By (print) SAM EVANS (sign) [signature]
Date Logged in ✓ By (print) M VILLANUEVA (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc)?.....YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? ..... YES NO (N/A)
3. Were custody papers dry and intact when received?..... (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)?..... (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form)..... (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

   ☒ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

   Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) _____

   ☒ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? .....YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened?..... (YES) NO
10. Are samples in the appropriate containers for indicated tests? ..... (YES) NO
11. Are sample labels present, in good condition and complete? ..... (YES) NO
12. Do the sample labels agree with custody papers? ..... (YES) NO
13. Was sufficient amount of sample sent for tests requested? ..... (YES) NO
14. Are the samples appropriately preserved? ..... (YES) NO N/A
15. Are bubbles > 6mm absent in VOA samples?..... (YES) NO N/A
16. Was the client contacted concerning this sample delivery?.....YES NO
    If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2354A	Batch#:	143861
Lab ID:	206870-002	Sampled:	10/13/08
Matrix:	Water	Received:	10/14/08
Units:	ug/L	Analyzed:	10/20/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	3.2	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2354A	Batch#:	143861
Lab ID:	206870-002	Sampled:	10/13/08
Matrix:	Water	Received:	10/14/08
Units:	ug/L	Analyzed:	10/20/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-125
1,2-Dichloroethane-d4	123	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	113	80-122

ND= Not Detected
RL= Reporting Limit

44.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2361	Batch#:	143861
Lab ID:	206870-006	Sampled:	10/14/08
Matrix:	Water	Received:	10/14/08
Units:	ug/L	Analyzed:	10/20/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	4.7	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

45.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2361	Batch#:	143861
Lab ID:	206870-006	Sampled:	10/14/08
Matrix:	Water	Received:	10/14/08
Units:	ug/L	Analyzed:	10/20/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-125
1,2-Dichloroethane-d4	125	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	117	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2326	Batch#:	143861
Lab ID:	206870-007	Sampled:	10/14/08
Matrix:	Water	Received:	10/14/08
Units:	ug/L	Analyzed:	10/20/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

46.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2326	Batch#:	143861
Lab ID:	206870-007	Sampled:	10/14/08
Matrix:	Water	Received:	10/14/08
Units:	ug/L	Analyzed:	10/20/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-125
1,2-Dichloroethane-d4	129	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	116	80-122

ND= Not Detected
RL= Reporting Limit

46.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TBGW0517	Batch#:	143861
Lab ID:	206870-008	Sampled:	10/14/08
Matrix:	Water	Received:	10/14/08
Units:	ug/L	Analyzed:	10/20/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TBGW0517	Batch#:	143861
Lab ID:	206870-008	Sampled:	10/14/08
Matrix:	Water	Received:	10/14/08
Units:	ug/L	Analyzed:	10/20/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-125
1,2-Dichloroethane-d4	116	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	113	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	143861
Units:	ug/L	Analyzed:	10/20/08
Diln Fac:	1.000		

Type: BS Lab ID: QC466150

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	26.10	104	73-133
Benzene	25.00	25.11	100	80-120
Trichloroethene	25.00	27.39	110	80-120
Toluene	25.00	27.34	109	80-120
Chlorobenzene	25.00	26.43	106	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	90	80-125
1,2-Dichloroethane-d4	93	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	98	80-122

Type: BSD Lab ID: QC466151

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	25.12	100	73-133	4	20
Benzene	25.00	23.32	93	80-120	7	20
Trichloroethene	25.00	25.16	101	80-120	8	20
Toluene	25.00	25.30	101	80-120	8	20
Chlorobenzene	25.00	25.42	102	80-120	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	90	80-125
1,2-Dichloroethane-d4	92	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	96	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC466152	Batch#:	143861
Matrix:	Water	Analyzed:	10/20/08
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC466152	Batch#:	143861
Matrix:	Water	Analyzed:	10/20/08
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	88	80-125
1,2-Dichloroethane-d4	97	80-137
Toluene-d8	94	80-120
Bromofluorobenzene	104	80-122

ND= Not Detected
RL= Reporting Limit

48.0

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Chromium	Batch#:	143752
Field ID:	GWGW2322	Sampled:	10/13/08
Lab ID:	206870-001	Received:	10/14/08
Matrix:	Filtrate	Prepared:	10/16/08
Units:	ug/L	Analyzed:	10/21/08
Diln Fac:	1.000		

Result	RL
410	5.0

RL= Reporting Limit

51.0

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Chromium	Batch#:	143752
Field ID:	GWGW2354A	Sampled:	10/13/08
Lab ID:	206870-002	Received:	10/14/08
Matrix:	Filtrate	Prepared:	10/16/08
Units:	ug/L	Analyzed:	10/21/08
Diln Fac:	1.000		

Result	RL
34	5.0

RL= Reporting Limit

52.0

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Chromium	Batch#:	143752
Field ID:	GWGW2354B	Sampled:	10/13/08
Lab ID:	206870-003	Received:	10/14/08
Matrix:	Filtrate	Prepared:	10/16/08
Units:	ug/L	Analyzed:	10/21/08
Diln Fac:	1.000		

Result	RL
36	5.0

RL= Reporting Limit

53.0

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2328A	Batch#:	143752
Lab ID:	206870-004	Sampled:	10/14/08
Matrix:	Filtrate	Received:	10/14/08
Units:	ug/L	Prepared:	10/16/08
Diln Fac:	1.000	Analyzed:	10/21/08

Analyte	Result	RL
Boron	650	100
Calcium	26,000	500
Chromium	29	5.0
Iron	ND	100
Magnesium	49,000	500
Manganese	ND	5.0
Nickel	ND	5.0
Potassium	1,700	500
Sodium	58,000	500

ND= Not Detected
RL= Reporting Limit

54.0

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2328B	Batch#:	143752
Lab ID:	206870-005	Sampled:	10/14/08
Matrix:	Filtrate	Received:	10/14/08
Units:	ug/L	Prepared:	10/16/08
Diln Fac:	1.000	Analyzed:	10/21/08

Analyte	Result	RL
Boron	650	100
Calcium	26,000	500
Chromium	29	5.0
Iron	ND	100
Magnesium	49,000	500
Manganese	ND	5.0
Nickel	ND	5.0
Potassium	1,700	500
Sodium	57,000	500

ND= Not Detected
RL= Reporting Limit

55.0

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2361	Batch#:	143752
Lab ID:	206870-006	Sampled:	10/14/08
Matrix:	Filtrate	Received:	10/14/08
Units:	ug/L	Prepared:	10/16/08
Diln Fac:	1.000	Analyzed:	10/21/08

Analyte	Result	RL
Boron	660	100
Calcium	51,000	500
Chromium	34	5.0
Iron	ND	100
Magnesium	85,000	500
Manganese	5.0	5.0
Nickel	ND	5.0
Potassium	710	500
Sodium	46,000	500

ND= Not Detected
RL= Reporting Limit

56.0

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2326	Sampled:	10/14/08
Lab ID:	206870-007	Received:	10/14/08
Matrix:	Filtrate	Prepared:	10/16/08
Units:	ug/L	Analyzed:	10/21/08
Batch#:	143752		

Analyte	Result	RL	Diln Fac
Boron	1,100	100	1.000
Calcium	33,000	500	1.000
Chromium	65	5.0	1.000
Iron	ND	100	1.000
Magnesium	120,000	2,000	10.00
Manganese	ND	5.0	1.000
Nickel	ND	5.0	1.000
Potassium	4,100	500	1.000
Sodium	88,000	500	1.000

ND= Not Detected
RL= Reporting Limit

57.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC465660	Batch#:	143752
Matrix:	Filtrate	Prepared:	10/16/08
Units:	ug/L	Analyzed:	10/21/08

Analyte	Result	RL
Boron	ND	100
Calcium	ND	500
Chromium	ND	5.0
Iron	ND	100
Magnesium	ND	500
Manganese	ND	5.0
Nickel	ND	5.0
Potassium	ND	500
Sodium	ND	500

ND= Not Detected
RL= Reporting Limit

58.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Matrix:	Filtrate	Batch#:	143752
Units:	ug/L	Prepared:	10/16/08
Diln Fac:	1.000	Analyzed:	10/21/08

Type: BS Lab ID: QC465661

Analyte	Spiked	Result	%REC	Limits
Boron	1,000	1,064	106	80-120
Calcium	20,000	21,080	105	80-120
Chromium	200.0	203.2	102	80-120
Iron	1,000	1,176	118	80-120
Magnesium	20,000	20,540	103	80-120
Manganese	50.00	52.24	104	80-120
Nickel	500.0	492.3	98	80-120
Potassium	10,000	10,510	105	80-120
Sodium	20,000	21,980	110	80-120

Type: BSD Lab ID: QC465662

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Boron	1,000	1,118	112	80-120	5	20
Calcium	20,000	18,930	95	80-120	11	20
Chromium	200.0	212.0	106	80-120	4	20
Iron	1,000	997.9	100	80-120	16	20
Magnesium	20,000	18,110	91	80-120	13	20
Manganese	50.00	54.35	109	80-120	4	20
Nickel	500.0	514.8	103	80-120	4	20
Potassium	10,000	11,620	116	80-120	10	20
Sodium	20,000	19,850	99	80-120	10	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Sampled:	10/08/08
MSS Lab ID:	206733-001	Received:	10/09/08
Matrix:	Filtrate	Prepared:	10/16/08
Units:	ug/L	Analyzed:	10/21/08
Batch#:	143752		

Type: MS Lab ID: QC465663

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln Fac
Boron	347.2	1,000	1,517	117	79-121	1.000
Calcium	490,700	20,000	527,600	184 NM	63-130	10.00
Chromium	2.465	200.0	199.3	98	78-120	1.000
Iron	8,679	1,000	9,784	111 NM	66-126	1.000
Magnesium	213,600	20,000	241,700	140 NM	66-126	10.00
Manganese	7,673	50.00	8,012	678 NM	73-121	1.000
Nickel	<1.497	500.0	451.5	90	74-120	1.000
Potassium	10,840	10,000	21,730	109	68-125	10.00
Sodium	488,200	20,000	520,600	162 NM	60-131	10.00

Type: MSD Lab ID: QC465664

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
Boron	1,000	1,493	115	79-121	2	20	1.000
Calcium	20,000	515,800	125 NM	63-130	2	20	10.00
Chromium	200.0	197.0	97	78-120	1	20	1.000
Iron	1,000	9,012	33 NM	66-126	8	20	1.000
Magnesium	20,000	236,300	113 NM	66-126	2	20	10.00
Manganese	50.00	7,845	343 NM	73-121	2	20	1.000
Nickel	500.0	449.1	90	74-120	1	20	1.000
Potassium	10,000	22,540	117	68-125	4	20	10.00
Sodium	20,000	505,100	85 NM	60-131	3	20	10.00

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Units:	ug/L
Type:	Serial Dilution	Batch#:	143752
MSS Lab ID:	206733-001	Sampled:	10/08/08
Lab ID:	QC465665	Received:	10/09/08
Matrix:	Filtrate	Analyzed:	10/21/08

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln Fac
Boron	347.2	100.0	477.0 J	500.0	37 *	10	5.000
Calcium	490,700	2,000	522,600	10,000	6	10	50.00
Chromium	2.465	5.000	ND	25.00	NC	10	5.000
Iron	8,679	100.0	8,177	500.0	6	10	5.000
Magnesium	213,600	2,000	229,500	10,000	7	10	50.00
Manganese	7,673	5.000	7,942	25.00	3	10	5.000
Nickel	ND	5.000	ND	25.00	NC	10	5.000
Potassium	10,840	5,000	5,862 J	25,000	NC	10	50.00
Sodium	488,200	5,000	496,500	25,000	2	10	50.00

*= Value outside of QC limits; see narrative
J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Units:	ug/L
Type:	Post Digest Spike	Batch#:	143752
MSS Lab ID:	206733-001	Sampled:	10/08/08
Lab ID:	QC465666	Received:	10/09/08
Matrix:	Filtrate	Analyzed:	10/21/08

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln Fac
Boron	347.2	1,000	1,441	109	75-125	1.000
Calcium	490,700	200,000	761,200	135 *	75-125	10.00
Chromium	2.465	200.0	188.8	93	75-125	1.000
Iron	8,679	1,000	9,436	76 NM	75-125	1.000
Magnesium	213,600	200,000	452,100	119	75-125	10.00
Manganese	7,673	50.00	7,663	-21 NM	75-125	1.000
Nickel	<1.497	500.0	430.6	86	75-125	1.000
Potassium	10,840	100,000	125,500	115	75-125	10.00
Sodium	488,200	200,000	772,700	142 *	75-125	10.00

*= Value outside of QC limits; see narrative
NM= Not Meaningful: Sample concentration > 4X spike concentration

62.0

Curtis & Tompkins, Ltd.

Dissolved Hardness (Total)

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	SM 2340B
Analyte:	Hardness as CaCO3	Sampled:	10/14/08
Matrix:	Filtrate	Received:	10/14/08
Units:	mg/L	Prepared:	10/16/08
Diln Fac:	1.000	Analyzed:	10/21/08
Batch#:	143752		

Field ID	Type	Lab ID	Result	RL
GWGW2328A	SAMPLE	206870-004	270	3.3
GWGW2328B	SAMPLE	206870-005	270	3.3
GWGW2361	SAMPLE	206870-006	480	3.3
GWGW2326	SAMPLE	206870-007	600	3.3
	BLANK	QC465660	ND	3.3

ND= Not Detected
RL= Reporting Limit

50.1

Curtis & Tompkins, Ltd.

Chloride

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Analyte:	Chloride	Batch#:	143705
Field ID:	GWGW2317	Sampled:	10/14/08 15:00
Matrix:	Water	Received:	10/14/08
Units:	mg/L		

Type	Lab ID	Result	RL	Diln Fac	Analyzed
SAMPLE	206870-009	48	1.0	5.000	10/15/08 16:11
BLANK	QC465458	ND	0.20	1.000	10/15/08 14:01

ND= Not Detected
RL= Reporting Limit

13.0

Curtis & Tompkins, Ltd.

Batch QC Report

Chloride

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Analyte:	Chloride	Batch#:	143705
Field ID:	GWGW2326	Sampled:	10/14/08 12:15
MSS Lab ID:	206870-007	Received:	10/14/08
Units:	mg/L		

Type	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
BS	QC465459	Water		4.000	3.875	97	80-120			1.000	10/15/08 14:19
BSD	QC465460	Water		4.000	3.828	96	80-120	1	20	1.000	10/15/08 14:36
MS	QC465490	Filtrate	43.10	10.00	54.17	111 NM	80-120			5.000	10/15/08 21:35
MSD	QC465491	Filtrate		10.00	53.10	100 NM	80-120	2	20	5.000	10/15/08 21:52

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Nitrate Nitrogen

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Units:	mg/L
Matrix:	Water	Received:	10/14/08

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Sampled	Analyzed
GWGW2322	SAMPLE	206870-001	42	1.3	25.00	143640	10/13/08 16:20	10/14/08 19:41
GWGW2354A	SAMPLE	206870-002	8.4	0.25	5.000	143640	10/13/08 16:15	10/14/08 19:24
GWGW2354B	SAMPLE	206870-003	8.7	0.25	5.000	143640	10/13/08 16:15	10/14/08 19:07
GWGW2317	SAMPLE	206870-009	67	1.3	25.00	143705	10/14/08 15:00	10/15/08 20:08
	BLANK	QC465204	ND	0.05	1.000	143640		10/14/08 12:45
	BLANK	QC465458	ND	0.05	1.000	143705		10/15/08 14:01

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Nitrate Nitrogen

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Received:	10/14/08
Units:	mg/L		

Field ID	Type	MSS Lab ID	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Analyzed
	BS		QC465205	Water		1.000	0.9326	93	80-120			1.000	143640		10/14/08 16:29
	BSD		QC465206	Water		1.000	0.9333	93	80-120	0	20	1.000	143640		10/14/08 16:47
ZZZZZZZZZZ	MS	206839-001	QC465266	Water	8.043	2.500	10.40	94	80-120			5.000	143640	10/13/08 16:33	10/15/08 01:31
ZZZZZZZZZZ	MSD	206839-001	QC465267	Water		2.500	10.30	90	80-120	1	20	5.000	143640	10/13/08 16:33	10/15/08 01:49
	BS		QC465459	Water		1.000	0.9436	94	80-120			1.000	143705		10/15/08 14:19
	BSD		QC465460	Water		1.000	0.9233	92	80-120	2	20	1.000	143705		10/15/08 14:36
GWGW2326	MS	206870-007	QC465490	Filtrate	9.345	2.500	11.98	106	80-120			5.000	143705	10/14/08 12:15	10/15/08 21:35
GWGW2326	MSD	206870-007	QC465491	Filtrate		2.500	11.79	98	80-120	2	20	5.000	143705	10/14/08 12:15	10/15/08 21:52

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Curtis & Tompkins, Ltd.

Sulfate

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Analyte:	Sulfate	Batch#:	143705
Field ID:	GWGW2317	Sampled:	10/14/08 15:00
Matrix:	Water	Received:	10/14/08
Units:	mg/L		

Type	Lab ID	Result	RL	Diln Fac	Analyzed
SAMPLE	206870-009	44	2.5	5.000	10/15/08 16:11
BLANK	QC465458	ND	0.50	1.000	10/15/08 14:01

ND= Not Detected
RL= Reporting Limit

17.0

Curtis & Tompkins, Ltd.

Batch QC Report

Sulfate

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Analyte:	Sulfate	Batch#:	143705
Field ID:	GWGW2326	Sampled:	10/14/08 12:15
MSS Lab ID:	206870-007	Received:	10/14/08
Units:	mg/L		

Type	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
BS	QC465459	Water		10.00	9.458	95	80-120			1.000	10/15/08 14:19
BSD	QC465460	Water		10.00	9.407	94	80-120	1	20	1.000	10/15/08 14:36
MS	QC465490	Filtrate	58.61	25.00	86.21	110	80-120			5.000	10/15/08 21:35
MSD	QC465491	Filtrate		25.00	85.04	106	80-120	1	20	5.000	10/15/08 21:52

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Chloride

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Analysis:	EPA 300.0
Project#:	388-1856		
Analyte:	Chloride	Batch#:	143705
Units:	mg/L	Received:	10/14/08

Field ID	Type	Lab ID	Matrix	Result	RL	Diln Fac	Sampled	Analyzed
GWGW2328A	SAMPLE	206870-004	Filtrate	18	0.20	1.000	10/14/08 10:35	10/15/08 16:46
GWGW2328B	SAMPLE	206870-005	Filtrate	18	0.20	1.000	10/14/08 10:35	10/15/08 15:19
GWGW2361	SAMPLE	206870-006	Filtrate	21	1.0	5.000	10/14/08 11:20	10/15/08 19:50
GWGW2326	SAMPLE	206870-007	Filtrate	43	1.0	5.000	10/14/08 12:15	10/15/08 15:54
	BLANK	QC465458	Water	ND	0.20	1.000		10/15/08 14:01

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Chloride

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Analysis:	EPA 300.0
Project#:	388-1856		
Analyte:	Chloride	Batch#:	143705
Field ID:	GWGW2326	Sampled:	10/14/08 12:15
MSS Lab ID:	206870-007	Received:	10/14/08
Units:	mg/L		

Type	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
BS	QC465459	Water		4.000	3.875	97	80-120			1.000	10/15/08 14:19
BSD	QC465460	Water		4.000	3.828	96	80-120	1	20	1.000	10/15/08 14:36
MS	QC465490	Filtrate	43.10	10.00	54.17	111 NM	80-120			5.000	10/15/08 21:35
MSD	QC465491	Filtrate		10.00	53.10	100 NM	80-120	2	20	5.000	10/15/08 21:52

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Fluoride

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Analysis:	EPA 300.0
Project#:	388-1856		
Analyte:	Fluoride	Batch#:	143743
Units:	mg/L	Received:	10/14/08
Diln Fac:	1.000		

Field ID	Type	Lab ID	Matrix	Result	RL	Sampled	Analyzed
GWGW2328A	SAMPLE	206870-004	Filtrate	0.39	0.10	10/14/08 10:35	10/16/08 17:44
GWGW2328B	SAMPLE	206870-005	Filtrate	0.37	0.10	10/14/08 10:35	10/16/08 18:01
GWGW2361	SAMPLE	206870-006	Filtrate	0.29	0.10	10/14/08 11:20	10/16/08 18:19
GWGW2326	SAMPLE	206870-007	Filtrate	0.24	0.10	10/14/08 12:15	10/16/08 18:36
	BLANK	QC465625	Water	ND	0.10		10/16/08 14:08

ND= Not Detected
RL= Reporting Limit

33.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Fluoride

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Analysis:	EPA 300.0
Project#:	388-1856		
Analyte:	Fluoride	Batch#:	143743
Field ID:	GWGW2365B	Sampled:	10/15/08 14:35
MSS Lab ID:	206908-010	Received:	10/15/08
Units:	mg/L		

Type	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
BS	QC465626	Water		2.000	1.914	96	74-120			1.000	10/16/08 14:26
BSD	QC465627	Water		2.000	1.908	95	74-120	0	20	1.000	10/16/08 14:43
MS	QC465671	Filtrate	0.2754	5.000	4.978	94	66-120			5.000	10/16/08 21:47
MSD	QC465672	Filtrate		5.000	5.091	96	66-120	2	20	5.000	10/16/08 22:05

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Nitrate Nitrogen

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Analysis:	EPA 300.0
Project#:	388-1856		
Analyte:	Nitrogen, Nitrate	Batch#:	143705
Units:	mg/L	Received:	10/14/08

Field ID	Type	Lab ID	Matrix	Result	RL	Diln Fac	Sampled	Analyzed
GWGW2328A	SAMPLE	206870-004	Filtrate	1.2	0.05	1.000	10/14/08 10:35	10/15/08 16:46
GWGW2328B	SAMPLE	206870-005	Filtrate	1.3	0.05	1.000	10/14/08 10:35	10/15/08 15:19
GWGW2361	SAMPLE	206870-006	Filtrate	11	0.25	5.000	10/14/08 11:20	10/15/08 19:50
GWGW2326	SAMPLE	206870-007	Filtrate	9.3	0.25	5.000	10/14/08 12:15	10/15/08 15:54
	BLANK	QC465458	Water	ND	0.05	1.000		10/15/08 14:01

ND= Not Detected
RL= Reporting Limit

35.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Nitrate Nitrogen

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Analysis:	EPA 300.0
Project#:	388-1856		
Analyte:	Nitrogen, Nitrate	Batch#:	143705
Field ID:	GWGW2326	Sampled:	10/14/08 12:15
MSS Lab ID:	206870-007	Received:	10/14/08
Units:	mg/L		

Type	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
BS	QC465459	Water		1.000	0.9436	94	80-120			1.000	10/15/08 14:19
BSD	QC465460	Water		1.000	0.9233	92	80-120	2	20	1.000	10/15/08 14:36
MS	QC465490	Filtrate	9.345	2.500	11.98	106	80-120			5.000	10/15/08 21:35
MSD	QC465491	Filtrate		2.500	11.79	98	80-120	2	20	5.000	10/15/08 21:52

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Sulfate

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Analysis:	EPA 300.0
Project#:	388-1856		
Analyte:	Sulfate	Batch#:	143705
Units:	mg/L	Received:	10/14/08

Field ID	Type	Lab ID	Matrix	Result	RL	Diln Fac	Sampled	Analyzed
GWGW2328A	SAMPLE	206870-004	Filtrate	35	0.50	1.000	10/14/08 10:35	10/15/08 16:46
GWGW2328B	SAMPLE	206870-005	Filtrate	35	0.50	1.000	10/14/08 10:35	10/15/08 15:19
GWGW2361	SAMPLE	206870-006	Filtrate	48	0.50	1.000	10/14/08 11:20	10/15/08 15:36
GWGW2326	SAMPLE	206870-007	Filtrate	59	2.5	5.000	10/14/08 12:15	10/15/08 15:54
	BLANK	QC465458	Water	ND	0.50	1.000		10/15/08 14:01

ND= Not Detected
RL= Reporting Limit

37.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Sulfate

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Analysis:	EPA 300.0
Project#:	388-1856		
Analyte:	Sulfate	Batch#:	143705
Field ID:	GWGW2326	Sampled:	10/14/08 12:15
MSS Lab ID:	206870-007	Received:	10/14/08
Units:	mg/L		

Type	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
BS	QC465459	Water		10.00	9.458	95	80-120			1.000	10/15/08 14:19
BSD	QC465460	Water		10.00	9.407	94	80-120	1	20	1.000	10/15/08 14:36
MS	QC465490	Filtrate	58.61	25.00	86.21	110	80-120			5.000	10/15/08 21:35
MSD	QC465491	Filtrate		25.00	85.04	106	80-120	1	20	5.000	10/15/08 21:52

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Hexavalent Chromium

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Batch#:	143664
Units:	ug/L	Received:	10/14/08
Diln Fac:	1.000		

Field ID	Type	Lab ID	Matrix	Result	RL	Sampled	Analyzed
GWGW2328A	SAMPLE	206870-004	Filtrate	30	1.0	10/14/08 10:35	10/14/08 20:53
GWGW2328B	SAMPLE	206870-005	Filtrate	30	1.0	10/14/08 10:35	10/14/08 21:06
GWGW2361	SAMPLE	206870-006	Filtrate	34	1.0	10/14/08 11:20	10/14/08 21:19
GWGW2326	SAMPLE	206870-007	Filtrate	65	1.0	10/14/08 12:15	10/14/08 21:31
	BLANK	QC465293	Water	ND	1.0		10/14/08 14:03

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Hexavalent Chromium

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Batch#:	143664
MSS Lab ID:	206866-004	Sampled:	10/14/08 10:15
Matrix:	Water	Received:	10/14/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
BS	QC465294		20.00	19.80	99	90-110			1.000	10/14/08 15:09
BSD	QC465295		20.00	19.52	98	90-110	1	20	1.000	10/14/08 15:21
MS	QC465296	14,560	1,000	15,560	99 NM	85-115			100.0	10/14/08 21:44
MSD	QC465297		1,000	15,600	103 NM	85-115	0	20	100.0	10/14/08 21:57

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Matrix:	Water	Sampled:	10/14/08
Units:	mg/L	Received:	10/14/08
Batch#:	143746	Analyzed:	10/16/08

Field ID: GWGW2328A Lab ID: 206870-004
Type: SAMPLE Diln Fac: 6.700

Analyte	Result	RL
Alkalinity, Bicarbonate	360	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	360	6.7

Field ID: GWGW2328B Lab ID: 206870-005
Type: SAMPLE Diln Fac: 6.700

Analyte	Result	RL
Alkalinity, Bicarbonate	360	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	360	6.7

Field ID: GWGW2361 Lab ID: 206870-006
Type: SAMPLE Diln Fac: 6.700

Analyte	Result	RL
Alkalinity, Bicarbonate	470	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	470	6.7

Field ID: GWGW2326 Lab ID: 206870-007
Type: SAMPLE Diln Fac: 6.700

Analyte	Result	RL
Alkalinity, Bicarbonate	660	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	660	6.7

Type: BLANK Diln Fac: 1.000
Lab ID: QC465636

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	4.000
Lab ID:	QC465637	Batch#:	143746
Matrix:	Water	Analyzed:	10/16/08

Spiked	Result	%REC	Limits
200.0	188.4	94	90-110

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	4.000
Field ID:	ZZZZZZZZZZ	Batch#:	143746
MSS Lab ID:	206801-002	Sampled:	10/13/08
Matrix:	Water	Received:	10/13/08
Units:	mg/L	Analyzed:	10/16/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC465638	181.3	200.0	380.0	99	80-120		
MSD	QC465639		200.0	371.2	95	80-120	2	25

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Organic Carbon (DOC)

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Dissolved Organic Carbon	Batch#:	143777
Matrix:	Water	Sampled:	10/14/08
Units:	mg/L	Received:	10/14/08
Diln Fac:	1.000	Analyzed:	10/17/08

Field ID	Type	Lab ID	Result	RL
GWGW2328A	SAMPLE	206870-004	ND	1.0
GWGW2328B	SAMPLE	206870-005	ND	1.0
GWGW2361	SAMPLE	206870-006	ND	1.0
GWGW2326	SAMPLE	206870-007	1.2	1.0
	BLANK	QC465758	ND	1.0

ND= Not Detected
RL= Reporting Limit

28.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Organic Carbon (DOC)

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Dissolved Organic Carbon	Batch#:	143777
Field ID:	ZZZZZZZZZZ	Sampled:	10/16/08
MSS Lab ID:	206947-001	Received:	10/16/08
Matrix:	Water	Analyzed:	10/17/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
LCS	QC465759		10.00	10.70	107	90-110			1.000
MS	QC465760	0.9204	10.00	12.02	111	80-121			2.000
MSD	QC465761		10.00	11.84	109	80-121	2	20	2.000

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Ferrous Iron (Fe+2)

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM3500FE-B
Analyte:	Ferrous Iron (Fe+2)	Batch#:	143668
Matrix:	Water	Received:	10/14/08
Units:	mg/L	Prepared:	10/14/08 20:00
Diln Fac:	1.000	Analyzed:	10/14/08 20:17

Field ID	Type	Lab ID	Result	RL	Sampled
GWGW2328A	SAMPLE	206870-004	ND	0.10	10/14/08 10:35
GWGW2328B	SAMPLE	206870-005	ND	0.10	10/14/08 10:35
GWGW2361	SAMPLE	206870-006	ND	0.10	10/14/08 11:20
GWGW2326	SAMPLE	206870-007	ND	0.10	10/14/08 12:15
	BLANK	QC465310	ND	0.10	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Ferrous Iron (Fe+2)

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM3500FE-B
Analyte:	Ferrous Iron (Fe+2)	Batch#:	143668
Field ID:	GWGW2328A	Sampled:	10/14/08 10:35
MSS Lab ID:	206870-004	Received:	10/14/08
Matrix:	Water	Prepared:	10/14/08 20:00
Units:	mg/L	Analyzed:	10/14/08 20:17
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC465311		0.8000	0.7881	99	90-110		
MS	QC465312	<0.1000	0.8000	0.6809	85	73-136		
MSD	QC465313		0.8000	0.7804	98	73-136	14	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2540C
Analyte:	Total Dissolved Solids	Sampled:	10/14/08
Matrix:	Water	Received:	10/14/08
Units:	mg/L	Prepared:	10/15/08
Batch#:	143707	Analyzed:	10/16/08

Field ID	Type	Lab ID	Result	RL	Diln Fac
GWGW2328A	SAMPLE	206870-004	460	11	1.111
GWGW2328B	SAMPLE	206870-005	450	11	1.111
GWGW2361	SAMPLE	206870-006	610	11	1.111
GWGW2326	SAMPLE	206870-007	800	11	1.111
	BLANK	QC465464	ND	10	1.000

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Dissolved Solids (TDS)

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2540C
Analyte:	Total Dissolved Solids	Batch#:	143707
Field ID:	ZZZZZZZZZZ	Sampled:	10/13/08
MSS Lab ID:	206801-002	Received:	10/13/08
Matrix:	Water	Prepared:	10/15/08
Units:	mg/L	Analyzed:	10/16/08

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim	Diln Fac
BS	QC465465		104.0	96.00		92	73-120			1.000
BSD	QC465466		104.0	92.00		88	73-120	4	22	1.000
SDUP	QC465467	66,400		65,900	500.0			1	20	50.00

RL= Reporting Limit
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Organic Carbon (TOC)

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Batch#:	143724
Matrix:	Water	Sampled:	10/14/08
Units:	mg/L	Received:	10/14/08
Diln Fac:	1.000	Analyzed:	10/16/08

Field ID	Type	Lab ID	Result	RL
GWGW2328A	SAMPLE	206870-004	0.86	0.50
GWGW2328B	SAMPLE	206870-005	0.97	0.50
GWGW2361	SAMPLE	206870-006	0.81	0.50
GWGW2326	SAMPLE	206870-007	1.2	0.50
	BLANK	QC465530	ND	0.50

ND= Not Detected
RL= Reporting Limit

8.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Organic Carbon (TOC)

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Batch#:	143724
Field ID:	GWGW2326	Sampled:	10/14/08
MSS Lab ID:	206870-007	Received:	10/14/08
Matrix:	Water	Analyzed:	10/16/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
LCS	QC465531		10.00	10.69	107	90-110			1.000
MS	QC465532	1.244	10.00	11.83	106	62-124			2.000
MSD	QC465533		10.00	12.01	108	62-124	2	20	2.000

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Orthophosphate Phosphorous

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Analysis:	SM4500P-E
Project#:	388-1856		
Analyte:	Orthophosphate (as P)	Batch#:	143685
Matrix:	Filtrate	Received:	10/14/08
Units:	mg/L	Analyzed:	10/15/08 10:35
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Sampled
GWGW2328A	SAMPLE	206870-004	0.14	0.030	10/14/08 10:35
GWGW2328B	SAMPLE	206870-005	0.14	0.030	10/14/08 10:35
GWGW2361	SAMPLE	206870-006	0.10	0.030	10/14/08 11:20
GWGW2326	SAMPLE	206870-007	0.17	0.030	10/14/08 12:15
	BLANK	QC465384	ND	0.030	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Orthophosphate Phosphorous

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Analysis:	SM4500P-E
Project#:	388-1856		
Analyte:	Orthophosphate (as P)	Diln Fac:	1.000
Field ID:	GWGW2360	Batch#:	143685
MSS Lab ID:	206823-006	Sampled:	10/13/08 11:15
Matrix:	Filtrate	Received:	10/13/08
Units:	mg/L	Analyzed:	10/15/08 10:35

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC465385		0.4000	0.3965	99	80-120		
MS	QC465386	0.1008	0.4000	0.4946	98	80-136		
MSD	QC465387		0.4000	0.4959	99	80-136	0	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Total Phosphorous

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Analysis:	SM4500P-E
Project#:	388-1856		
Analyte:	Phosphorous	Sampled:	10/14/08
Units:	mg/L	Received:	10/14/08
Batch#:	143776	Analyzed:	10/17/08

Field ID	Type	Lab ID	Matrix	Result	RL	Diln Fac
GWGW2328A	SAMPLE	206870-004	Filtrate	0.14	0.050	1.667
GWGW2328B	SAMPLE	206870-005	Filtrate	0.12	0.050	1.667
GWGW2361	SAMPLE	206870-006	Filtrate	0.10	0.050	1.667
GWGW2326	SAMPLE	206870-007	Filtrate	0.19	0.050	1.667
	BLANK	QC465754	Water	ND	0.030	1.000

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Total Phosphorous

Lab #:	206870	Location:	UC Davis
Client:	Weiss Associates	Analysis:	SM4500P-E
Project#:	388-1856		
Analyte:	Phosphorous	Batch#:	143776
Field ID:	GWGW2360	Sampled:	10/13/08
MSS Lab ID:	206823-006	Received:	10/13/08
Matrix:	Water	Analyzed:	10/17/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
LCS	QC465755		0.3960	0.4179	106	72-134			1.000
MS	QC465756	0.1079	0.3960	0.5041	100	19-182			1.667
MSD	QC465757		0.3960	0.5207	104	19-182	3	26	1.667

RPD= Relative Percent Difference

206968

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-16
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AquaTerra Associates Incorporated, DBA

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Client Contact
Weiss Associates
5801 Christie Avenue, Suite 600
Emeryville, CA 94608
(510) 450-6000 Phone
(510) 547-5043 FAX

Job Name: UC Davis
Address: One Shields Ave, Davis

Project Manager: Bob Devany
Tel: 510-450-6144

Analysis Turnaround Time
Calendar (C) or Work Days (W) --- 5W
TAT if different from Below _____
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sampled by: KLA/JMS
Lab Contact:
Date: 10/15/08
Carrier:

COC Number: UCD
Page 1 of 2
Job No.
SDG No.

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Dissolved Organic Carbon SM5310B	Mn, Fe, B (6010B)	Cr6+ (7199)	Fe II (SM3500 FeD)	Ca, Mg, K, Na, Ni (6010B)	Chloride, Nitrate, Sulfate (EPA 300.0)	Total Phosphate (SM4500-PE)	Carbonate, Bicarbonate (EPA 310.1)	Fluoride (SM 4500-F)	TOC (SM 5310C)	TDS (SM 2540C)	VOCs (8260)	Pesticides (8081)	PCBs (8082)	Title 22 Metals (6010B)	Total Cr (6010B)	Ortho Phosphate (SM4500-PE)	Hardness (EPA 130.2)	Nitrate (EPA 300.0)	Sample Specific Notes:
1	GWGW2323	10/15/08	0852		W	1																			X	48 hr
2	GWGW2364	10/15/08	0905		W	8	X	X	X	X	X	X	X	X	X	X	X				X	X	X			24 hr
3	GWGW2362	10/15/08	1050		W	12	X	X	X	X	X	X	X	X	X	X	X	X				X	X	X		24 hr
4	GWGW2363A	10/15/08	1040		W	5												X				X			X	
5	GWGW2363B	10/15/08	1040		W	5												X				X			X	
6	GWGW2324	10/15/08	0940		W	5												X				X			X	48 hr
7	GWGW2325	10/15/08	1135		W	11	X	X	X	X	X	X	X	X	X	X	X	X				X	X	X		24 hr
8	GWGW2306	10/15/08	1435		W	2																X			X	48 hr
						Field Filtered		X	X		X	X	X	X	X						X	X	X	X		

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **Level III Reporting**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
KLA ATKINSON	WEISS ASSOC.	10/15/08 1515	[signature]	C&T	10/16/08 1515
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

206908

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-16
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AquaTerra Associates Incorporated, DBA

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Client Contact		Project Manager: Bob Devany	Sampled by: KWA/JMD	Date: 10/15/08	COC Number: UCD
Weiss Associates		Tel: 510-450-6144	Lab Contact:	Carrier:	Page 2 of 2
5801 Christie Avenue, Suite 600		Analysis Turnaround Time			Job No.
Emeryville, CA 94608		Calendar (C) or Work Days (W) --- 5W			
(510) 450-6000	Phone	TAT if different from Below _____			SDG No.
(510) 547-5043	FAX	☐ 2 weeks			
		☐ 1 week			
Job Name: UC Davis		☐ 2 days			
Address: One Shields Ave, Davis		☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Dissolved Organic Carbon SM5310B	Mn, Fe, B (6010B)	Cr6+ (7199)	Fe II (SM3500 FeD)	Ca, Mg, K, Na, Ni (6010B)	Chloride, Nitrate, Sulfate (EPA 300.0)	Total Phosphate (SM4500-PE)	Carbonate, Bicarbonate (EPA 310.1)	Fluoride (SM 4500-Fl)	TOC (SM 5310C)	TDS (SM 2540C)	VOCs (8260)	Pesticides (8081)	PCBs (8082)	Title 22 Metals (6010B)	Total Cr (6010B)	Ortho Phosphate (SM4500-PE)	Hardness (EPA 130.2)	Sample Specific Notes:
9	GWGW2365A	10/15/08	1435		W	8	X	X	X	X	X	X	X	X	X	X	X					X	X	X	24 hr
10	GWGW2365B	10/15/08	1435		W	8	X	X	X	X	X	X	X	X	X	X	X					X	X	X	24 hr
11	TBGW0518	10/15/08	0600		W	1												X							
						Field Filtered		X	X		X	X	X	X	X						X	X	X	X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **Level III Reporting**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
KWA ATKINSON	WEISS ASSOC.	10/15/08 1515	[signature]	C&T	10/16/08 1015
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 206908 Date Received 10/15/08 Number of coolers 2
Client WEISS ASSOCIATES Project UC DAVIS

Date Opened 10-15-8 By (print) SAM EVANS (sign)
Date Logged in ✓ By (print) M. VILLENUEVA (sign)

1. Did cooler come with a shipping slip (airbill, etc)?.....YES ~~NO~~
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ~~☐ NO~~
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? ..... YES NO N/A
3. Were custody papers dry and intact when received?..... YES NO
4. Were custody papers filled out properly (ink, signed, etc)?..... YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form)..... YES NO
6. Indicate the packing in cooler: (if other, describe)_____

☐ Bubble Wrap ☐ Foam blocks ~~☐~~ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

Type of ice used: ~~☐~~ Wet ☐ Blue/Gel ☐ None Temp(°C)_____

~~☐~~ Samples Received on ice & cold without a temperature blank

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? .....YES NO
   If YES, what time were they transferred to freezer?_____
9. Did all bottles arrive unbroken/unopened?..... YES NO
10. Are samples in the appropriate containers for indicated tests? ..... YES NO
11. Are sample labels present, in good condition and complete? ..... YES NO
12. Do the sample labels agree with custody papers? ..... YES NO
13. Was sufficient amount of sample sent for tests requested? ..... YES NO
14. Are the samples appropriately preserved? ..... YES NO N/A
15. Are bubbles > 6mm absent in VOA samples?..... YES NO N/A
16. Was the client contacted concerning this sample delivery?.....YES NO
   If YES, Who was called?_____ By_____ Date:_____

COMMENTS

_____
_____
_____
_____
_____
_____
_____
_____

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2362	Batch#:	143962
Lab ID:	206908-003	Sampled:	10/15/08
Matrix:	Water	Received:	10/15/08
Units:	ug/L	Analyzed:	10/22/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

77.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2362	Batch#:	143962
Lab ID:	206908-003	Sampled:	10/15/08
Matrix:	Water	Received:	10/15/08
Units:	ug/L	Analyzed:	10/22/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	112	80-125
1,2-Dichloroethane-d4	123	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	113	80-122

ND= Not Detected
RL= Reporting Limit

77.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2363A	Batch#:	143962
Lab ID:	206908-004	Sampled:	10/15/08
Matrix:	Water	Received:	10/15/08
Units:	ug/L	Analyzed:	10/22/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

78.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2363A	Batch#:	143962
Lab ID:	206908-004	Sampled:	10/15/08
Matrix:	Water	Received:	10/15/08
Units:	ug/L	Analyzed:	10/22/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	117	80-125
1,2-Dichloroethane-d4	128	80-137
Toluene-d8	106	80-120
Bromofluorobenzene	115	80-122

ND= Not Detected
RL= Reporting Limit

78.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2363B	Batch#:	143963
Lab ID:	206908-005	Sampled:	10/15/08
Matrix:	Water	Received:	10/15/08
Units:	ug/L	Analyzed:	10/22/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

79.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2363B	Batch#:	143963
Lab ID:	206908-005	Sampled:	10/15/08
Matrix:	Water	Received:	10/15/08
Units:	ug/L	Analyzed:	10/22/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-125
1,2-Dichloroethane-d4	113	80-137
Toluene-d8	98	80-120
Bromofluorobenzene	102	80-122

ND= Not Detected
RL= Reporting Limit

79.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2324	Batch#:	143963
Lab ID:	206908-006	Sampled:	10/15/08
Matrix:	Water	Received:	10/15/08
Units:	ug/L	Analyzed:	10/22/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

80.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2324	Batch#:	143963
Lab ID:	206908-006	Sampled:	10/15/08
Matrix:	Water	Received:	10/15/08
Units:	ug/L	Analyzed:	10/22/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-125
1,2-Dichloroethane-d4	110	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	98	80-122

ND= Not Detected
RL= Reporting Limit

80.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2325	Batch#:	143963
Lab ID:	206908-007	Sampled:	10/15/08
Matrix:	Water	Received:	10/15/08
Units:	ug/L	Analyzed:	10/22/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

81.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2325	Batch#:	143963
Lab ID:	206908-007	Sampled:	10/15/08
Matrix:	Water	Received:	10/15/08
Units:	ug/L	Analyzed:	10/22/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-125
1,2-Dichloroethane-d4	110	80-137
Toluene-d8	96	80-120
Bromofluorobenzene	105	80-122

ND= Not Detected
RL= Reporting Limit

81.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TBGW0518	Batch#:	143963
Lab ID:	206908-011	Sampled:	10/15/08
Matrix:	Water	Received:	10/15/08
Units:	ug/L	Analyzed:	10/22/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

82.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TBGW0518	Batch#:	143963
Lab ID:	206908-011	Sampled:	10/15/08
Matrix:	Water	Received:	10/15/08
Units:	ug/L	Analyzed:	10/22/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-125
1,2-Dichloroethane-d4	106	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	98	80-122

ND= Not Detected
RL= Reporting Limit

82.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC466554	Batch#:	143962
Matrix:	Water	Analyzed:	10/22/08
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

83.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC466554	Batch#:	143962
Matrix:	Water	Analyzed:	10/22/08
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-125
1,2-Dichloroethane-d4	113	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	108	80-122

ND= Not Detected
RL= Reporting Limit

83.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	143962
Units:	ug/L	Analyzed:	10/22/08
Diln Fac:	1.000		

Type: BS Lab ID: QC466555

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	28.84	115	73-133
Benzene	25.00	28.75	115	80-120
Trichloroethene	25.00	26.59	106	80-120
Toluene	25.00	28.70	115	80-120
Chlorobenzene	25.00	27.04	108	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-125
1,2-Dichloroethane-d4	112	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	106	80-122

Type: BSD Lab ID: QC466556

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	26.74	107	73-133	8	20
Benzene	25.00	27.32	109	80-120	5	20
Trichloroethene	25.00	25.47	102	80-120	4	20
Toluene	25.00	27.13	109	80-120	6	20
Chlorobenzene	25.00	25.24	101	80-120	7	20

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-125
1,2-Dichloroethane-d4	110	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	105	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC466557	Batch#:	143963
Matrix:	Water	Analyzed:	10/22/08
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

84.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC466557	Batch#:	143963
Matrix:	Water	Analyzed:	10/22/08
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-125
1,2-Dichloroethane-d4	106	80-137
Toluene-d8	98	80-120
Bromofluorobenzene	105	80-122

ND= Not Detected
RL= Reporting Limit

84.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	143963
Units:	ug/L	Analyzed:	10/22/08
Diln Fac:	1.000		

Type: BS Lab ID: QC466558

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	29.98	120	73-133
Benzene	25.00	24.97	100	80-120
Trichloroethene	25.00	26.99	108	80-120
Toluene	25.00	26.59	106	80-120
Chlorobenzene	25.00	25.54	102	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-125
1,2-Dichloroethane-d4	105	80-137
Toluene-d8	98	80-120
Bromofluorobenzene	97	80-122

Type: BSD Lab ID: QC466559

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	30.10	120	73-133	0	20
Benzene	25.00	25.57	102	80-120	2	20
Trichloroethene	25.00	26.82	107	80-120	1	20
Toluene	25.00	25.98	104	80-120	2	20
Chlorobenzene	25.00	25.55	102	80-120	0	20

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-125
1,2-Dichloroethane-d4	106	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	99	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	206760-019	Batch#:	143963
Matrix:	Water	Sampled:	10/09/08
Units:	ug/L	Received:	10/09/08

Type: MS Analyzed: 10/22/08
Lab ID: QC466637

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.1516	25.00	33.03	132	76-133
Benzene	<0.1000	25.00	26.55	106	80-121
Trichloroethene	<0.1320	25.00	27.74	111	74-129
Toluene	<0.1047	25.00	25.76	103	80-120
Chlorobenzene	<0.1000	25.00	27.45	110	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-125
1,2-Dichloroethane-d4	108	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	100	80-122

Type: MSD Analyzed: 10/23/08
Lab ID: QC466638

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	32.06	128	76-133	3	20
Benzene	25.00	27.01	108	80-121	2	20
Trichloroethene	25.00	29.40	118	74-129	6	20
Toluene	25.00	26.84	107	80-120	4	20
Chlorobenzene	25.00	25.98	104	80-120	6	20

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-125
1,2-Dichloroethane-d4	111	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	98	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Boron

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Boron	Sampled:	10/15/08
Matrix:	Filtrate	Received:	10/15/08
Units:	ug/L	Prepared:	10/16/08
Diln Fac:	1.000	Analyzed:	10/20/08
Batch#:	143735		

Field ID	Type	Lab ID	Result	RL
GWGW2364	SAMPLE	206908-002	940	100
GWGW2362	SAMPLE	206908-003	870	100
GWGW2325	SAMPLE	206908-007	1,600	100
GWGW2365A	SAMPLE	206908-009	940	100
GWGW2365B	SAMPLE	206908-010	930	100
	BLANK	QC465584	ND	100

ND= Not Detected
RL= Reporting Limit

32.1

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Boron

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Boron	Batch#:	143735
Field ID:	GWGW2364	Sampled:	10/15/08
MSS Lab ID:	206908-002	Received:	10/15/08
Matrix:	Filtrate	Prepared:	10/16/08
Units:	ug/L	Analyzed:	10/20/08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC465585		1,000	905.9	91	80-120		
BSD	QC465586		1,000	955.2	96	80-120	5	20
MS	QC465587	943.9	1,000	1,944	100	79-121		
MSD	QC465588		1,000	1,953	101	79-121	0	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Boron

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Boron	Units:	ug/L
Field ID:	GWGW2364	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	143735
MSS Lab ID:	206908-002	Sampled:	10/15/08
Lab ID:	QC465589	Received:	10/15/08
Matrix:	Filtrate	Analyzed:	10/20/08

MSS Result	MSS RL	Result	RL	% Diff	Lim
943.9	100.0	752.4	500.0	20 *	10

*= Value outside of QC limits; see narrative
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Boron

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Boron	Units:	ug/L
Field ID:	GWGW2364	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	143735
MSS Lab ID:	206908-002	Sampled:	10/15/08
Lab ID:	QC465590	Received:	10/15/08
Matrix:	Filtrate	Analyzed:	10/20/08

MSS Result	Spiked	Result	%REC	Limits
943.9	1,000	1,960	102	75-125

Curtis & Tompkins, Ltd.

Dissolved Calcium

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Calcium	Sampled:	10/15/08
Matrix:	Filtrate	Received:	10/15/08
Units:	ug/L	Prepared:	10/16/08
Diln Fac:	1.000	Analyzed:	10/20/08
Batch#:	143735		

Field ID	Type	Lab ID	Result	RL
GWGW2364	SAMPLE	206908-002	58,000	500
GWGW2362	SAMPLE	206908-003	56,000	500
GWGW2325	SAMPLE	206908-007	29,000	500
GWGW2365A	SAMPLE	206908-009	57,000	500
GWGW2365B	SAMPLE	206908-010	55,000	500
	BLANK	QC465584	ND	500

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Calcium

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Calcium	Batch#:	143735
Field ID:	GWGW2364	Sampled:	10/15/08
MSS Lab ID:	206908-002	Received:	10/15/08
Matrix:	Filtrate	Prepared:	10/16/08
Units:	ug/L	Analyzed:	10/20/08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC465585		20,000	18,900	94	80-120		
BSD	QC465586		20,000	19,940	100	80-120	5	20
MS	QC465587	58,240	20,000	73,650	77	63-130		
MSD	QC465588		20,000	75,310	85	63-130	2	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Calcium

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Calcium	Units:	ug/L
Field ID:	GWGW2364	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	143735
MSS Lab ID:	206908-002	Sampled:	10/15/08
Lab ID:	QC465589	Received:	10/15/08
Matrix:	Filtrate	Analyzed:	10/20/08

MSS Result	MSS RL	Result	RL	% Diff	Lim
58,240	500.0	58,240	1,664	0	10

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Calcium

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Calcium	Units:	ug/L
Field ID:	GWGW2364	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	143735
MSS Lab ID:	206908-002	Sampled:	10/15/08
Lab ID:	QC465590	Received:	10/15/08
Matrix:	Filtrate	Analyzed:	10/20/08

MSS Result	Spiked	Result	%REC	Limits
58,240	20,000	76,610	92	75-125

Curtis & Tompkins, Ltd.

Dissolved Chromium

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Chromium	Sampled:	10/15/08
Matrix:	Filtrate	Received:	10/15/08
Units:	ug/L	Prepared:	10/16/08
Diln Fac:	1.000	Analyzed:	10/20/08
Batch#:	143735		

Field ID	Type	Lab ID	Result	RL
GWGW2364	SAMPLE	206908-002	61	5.0
GWGW2362	SAMPLE	206908-003	88	5.0
GWGW2363A	SAMPLE	206908-004	46	5.0
GWGW2363B	SAMPLE	206908-005	45	5.0
GWGW2324	SAMPLE	206908-006	38	5.0
GWGW2325	SAMPLE	206908-007	63	5.0
GWGW2306	SAMPLE	206908-008	47	5.0
GWGW2365A	SAMPLE	206908-009	47	5.0
GWGW2365B	SAMPLE	206908-010	47	5.0
	BLANK	QC465584	ND	5.0

ND= Not Detected
RL= Reporting Limit

40.2

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Chromium

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Chromium	Batch#:	143735
Field ID:	GWGW2364	Sampled:	10/15/08
MSS Lab ID:	206908-002	Received:	10/15/08
Matrix:	Filtrate	Prepared:	10/16/08
Units:	ug/L	Analyzed:	10/20/08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC465585		200.0	180.1	90	80-120		
BSD	QC465586		200.0	184.4	92	80-120	2	20
MS	QC465587	60.95	200.0	246.8	93	78-120		
MSD	QC465588		200.0	248.4	94	78-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Chromium

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Chromium	Units:	ug/L
Field ID:	GWGW2364	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	143735
MSS Lab ID:	206908-002	Sampled:	10/15/08
Lab ID:	QC465589	Received:	10/15/08
Matrix:	Filtrate	Analyzed:	10/20/08

MSS Result	MSS RL	Result	RL	% Diff	Lim
60.95	5.000	59.96	25.00	2	10

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Chromium

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Chromium	Units:	ug/L
Field ID:	GWGW2364	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	143735
MSS Lab ID:	206908-002	Sampled:	10/15/08
Lab ID:	QC465590	Received:	10/15/08
Matrix:	Filtrate	Analyzed:	10/20/08

MSS Result	Spiked	Result	%REC	Limits
60.95	200.0	243.7	91	75-125

Curtis & Tompkins, Ltd.

Dissolved Iron

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Iron	Sampled:	10/15/08
Matrix:	Filtrate	Received:	10/15/08
Units:	ug/L	Prepared:	10/16/08
Diln Fac:	1.000	Analyzed:	10/20/08
Batch#:	143735		

Field ID	Type	Lab ID	Result	RL
GWGW2364	SAMPLE	206908-002	ND	100
GWGW2362	SAMPLE	206908-003	ND	100
GWGW2325	SAMPLE	206908-007	ND	100
GWGW2365A	SAMPLE	206908-009	ND	100
GWGW2365B	SAMPLE	206908-010	ND	100
	BLANK	QC465584	ND	100

ND= Not Detected
RL= Reporting Limit

44.2

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Iron

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Iron	Batch#:	143735
Field ID:	GWGW2364	Sampled:	10/15/08
MSS Lab ID:	206908-002	Received:	10/15/08
Matrix:	Filtrate	Prepared:	10/16/08
Units:	ug/L	Analyzed:	10/20/08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC465585		1,000	935.9	94	80-120		
BSD	QC465586		1,000	986.1	99	80-120	5	20
MS	QC465587	<12.36	1,000	960.4	96	66-126		
MSD	QC465588		1,000	1,005	100	66-126	5	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Iron

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Iron	Units:	ug/L
Field ID:	GWGW2364	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	143735
MSS Lab ID:	206908-002	Sampled:	10/15/08
Lab ID:	QC465589	Received:	10/15/08
Matrix:	Filtrate	Analyzed:	10/20/08

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	100.0	ND	500.0	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

46.1

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Iron

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Iron	Units:	ug/L
Field ID:	GWGW2364	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	143735
MSS Lab ID:	206908-002	Sampled:	10/15/08
Lab ID:	QC465590	Received:	10/15/08
Matrix:	Filtrate	Analyzed:	10/20/08

MSS Result	Spiked	Result	%REC	Limits
<12.36	1,000	978.4	98	75-125

Curtis & Tompkins, Ltd.

Dissolved Hardness (Total)

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	SM 2340B
Analyte:	Hardness as CaCO3	Sampled:	10/15/08
Matrix:	Filtrate	Received:	10/15/08
Units:	mg/L	Prepared:	10/16/08
Diln Fac:	1.000	Analyzed:	10/20/08
Batch#:	143735		

Field ID	Lab ID	Result	RL
GWGW2364	206908-002	540	3.3
GWGW2362	206908-003	540	3.3
GWGW2325	206908-007	320	3.3
GWGW2365A	206908-009	530	3.3
GWGW2365B	206908-010	510	3.3

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Potassium

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Potassium	Sampled:	10/15/08
Matrix:	Filtrate	Received:	10/15/08
Units:	ug/L	Prepared:	10/16/08
Diln Fac:	1.000	Analyzed:	10/20/08
Batch#:	143735		

Field ID	Type	Lab ID	Result	RL
GWGW2364	SAMPLE	206908-002	1,400	500
GWGW2362	SAMPLE	206908-003	910	500
GWGW2325	SAMPLE	206908-007	1,200	500
GWGW2365A	SAMPLE	206908-009	1,200	500
GWGW2365B	SAMPLE	206908-010	1,100	500
	BLANK	QC465584	ND	500

ND= Not Detected
RL= Reporting Limit

48.1

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Potassium

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Potassium	Batch#:	143735
Field ID:	GWGW2364	Sampled:	10/15/08
MSS Lab ID:	206908-002	Received:	10/15/08
Matrix:	Filtrate	Prepared:	10/16/08
Units:	ug/L	Analyzed:	10/20/08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC465585		10,000	9,206	92	80-120		
BSD	QC465586		10,000	9,821	98	80-120	6	20
MS	QC465587	1,363	10,000	11,160	98	68-125		
MSD	QC465588		10,000	11,600	102	68-125	4	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Potassium

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Potassium	Units:	ug/L
Field ID:	GWGW2364	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	143735
MSS Lab ID:	206908-002	Sampled:	10/15/08
Lab ID:	QC465589	Received:	10/15/08
Matrix:	Filtrate	Analyzed:	10/20/08

MSS Result	MSS RL	Result	RL	% Diff	Lim
1,363	500.0	1,070 J	2,500	NC	10

J= Estimated value
NC= Not Calculated
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Potassium

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Potassium	Units:	ug/L
Field ID:	GWGW2364	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	143735
MSS Lab ID:	206908-002	Sampled:	10/15/08
Lab ID:	QC465590	Received:	10/15/08
Matrix:	Filtrate	Analyzed:	10/20/08

MSS Result	Spiked	Result	%REC	Limits
1,363	10,000	11,250	99	75-125

Curtis & Tompkins, Ltd.

Dissolved Magnesium

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Magnesium	Sampled:	10/15/08
Matrix:	Filtrate	Received:	10/15/08
Units:	ug/L	Prepared:	10/16/08
Diln Fac:	1.000	Analyzed:	10/20/08
Batch#:	143735		

Field ID	Type	Lab ID	Result	RL
GWGW2364	SAMPLE	206908-002	95,000	500
GWGW2362	SAMPLE	206908-003	97,000	500
GWGW2325	SAMPLE	206908-007	60,000	500
GWGW2365A	SAMPLE	206908-009	94,000	500
GWGW2365B	SAMPLE	206908-010	90,000	500
	BLANK	QC465584	ND	500

ND= Not Detected
RL= Reporting Limit

52.2

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Magnesium

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Magnesium	Batch#:	143735
Field ID:	GWGW2364	Sampled:	10/15/08
MSS Lab ID:	206908-002	Received:	10/15/08
Matrix:	Filtrate	Prepared:	10/16/08
Units:	ug/L	Analyzed:	10/20/08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC465585		20,000	18,910	95	80-120		
BSD	QC465586		20,000	20,030	100	80-120	6	20
MS	QC465587	94,890	20,000	107,300 >LR	62 NM	66-126		
MSD	QC465588		20,000	109,700 >LR	74 NM	66-126	NC	20

NC= Not Calculated
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Magnesium

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Magnesium	Units:	ug/L
Field ID:	GWGW2364	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	143735
MSS Lab ID:	206908-002	Sampled:	10/15/08
Lab ID:	QC465589	Received:	10/15/08
Matrix:	Filtrate	Analyzed:	10/20/08

MSS Result	MSS RL	Result	RL	% Diff	Lim
94,890	500.0	95,470	1,641	1	10

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Magnesium

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Magnesium	Units:	ug/L
Field ID:	GWGW2364	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	143735
MSS Lab ID:	206908-002	Sampled:	10/15/08
Lab ID:	QC465590	Received:	10/15/08
Matrix:	Filtrate	Analyzed:	10/20/08

MSS Result	Spiked	Result	%REC	Limits
94,890	20,000	112,600 >LR	89 NM	75-125

NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range

Curtis & Tompkins, Ltd.

Dissolved Manganese

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Manganese	Sampled:	10/15/08
Matrix:	Filtrate	Received:	10/15/08
Units:	ug/L	Prepared:	10/16/08
Diln Fac:	1.000	Analyzed:	10/20/08
Batch#:	143735		

Field ID	Type	Lab ID	Result	RL
GWGW2364	SAMPLE	206908-002	23	5.0
GWGW2362	SAMPLE	206908-003	ND	5.0
GWGW2325	SAMPLE	206908-007	ND	5.0
GWGW2365A	SAMPLE	206908-009	ND	5.0
GWGW2365B	SAMPLE	206908-010	ND	5.0
	BLANK	QC465584	ND	5.0

ND= Not Detected
RL= Reporting Limit

56.2

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Manganese

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Manganese	Batch#:	143735
Field ID:	GWGW2364	Sampled:	10/15/08
MSS Lab ID:	206908-002	Received:	10/15/08
Matrix:	Filtrate	Prepared:	10/16/08
Units:	ug/L	Analyzed:	10/20/08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC465585		50.00	48.46	97	80-120		
BSD	QC465586		50.00	47.87	96	80-120	1	20
MS	QC465587	22.99	50.00	69.60	93	73-121		
MSD	QC465588		50.00	70.45	95	73-121	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Manganese

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Manganese	Units:	ug/L
Field ID:	GWGW2364	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	143735
MSS Lab ID:	206908-002	Sampled:	10/15/08
Lab ID:	QC465589	Received:	10/15/08
Matrix:	Filtrate	Analyzed:	10/20/08

MSS Result	MSS RL	Result	RL	% Diff	Lim
22.99	5.000	23.22 J	25.00	1	10

J= Estimated value
RL= Reporting Limit

58.1

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Manganese

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Manganese	Units:	ug/L
Field ID:	GWGW2364	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	143735
MSS Lab ID:	206908-002	Sampled:	10/15/08
Lab ID:	QC465590	Received:	10/15/08
Matrix:	Filtrate	Analyzed:	10/20/08

MSS Result	Spiked	Result	%REC	Limits
22.99	50.00	69.98	94	75-125

Curtis & Tompkins, Ltd.

Dissolved Sodium

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Sodium	Sampled:	10/15/08
Matrix:	Filtrate	Received:	10/15/08
Units:	ug/L	Prepared:	10/16/08
Batch#:	143735	Analyzed:	10/20/08

Field ID	Type	Lab ID	Result	RL	Diln Fac
GWGW2364	SAMPLE	206908-002	74,000	500	1.000
GWGW2362	SAMPLE	206908-003	72,000	500	1.000
GWGW2325	SAMPLE	206908-007	140,000	2,500	5.000
GWGW2365A	SAMPLE	206908-009	77,000	500	1.000
GWGW2365B	SAMPLE	206908-010	73,000	500	1.000
	BLANK	QC465584	ND	500	1.000

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Sodium

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Sodium	Batch#:	143735
Field ID:	GWGW2364	Sampled:	10/15/08
MSS Lab ID:	206908-002	Received:	10/15/08
Matrix:	Filtrate	Prepared:	10/16/08
Units:	ug/L	Analyzed:	10/20/08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC465585		20,000	19,310	97	80-120		
BSD	QC465586		20,000	20,000	100	80-120	4	20
MS	QC465587	73,880	20,000	88,430	73	60-131		
MSD	QC465588		20,000	90,590	84	60-131	2	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Sodium

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Sodium	Units:	ug/L
Field ID:	GWGW2364	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	143735
MSS Lab ID:	206908-002	Sampled:	10/15/08
Lab ID:	QC465589	Received:	10/15/08
Matrix:	Filtrate	Analyzed:	10/20/08

MSS Result	MSS RL	Result	RL	% Diff	Lim
73,880	500.0	73,690	2,500	0	10

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Sodium

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Sodium	Units:	ug/L
Field ID:	GWGW2364	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	143735
MSS Lab ID:	206908-002	Sampled:	10/15/08
Lab ID:	QC465590	Received:	10/15/08
Matrix:	Filtrate	Analyzed:	10/20/08

MSS Result	Spiked	Result	%REC	Limits
73,880	20,000	92,400	93	75-125

Curtis & Tompkins, Ltd.

Dissolved Nickel

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Nickel	Sampled:	10/15/08
Matrix:	Filtrate	Received:	10/15/08
Units:	ug/L	Prepared:	10/16/08
Diln Fac:	1.000	Analyzed:	10/20/08
Batch#:	143735		

Field ID	Type	Lab ID	Result	RL
GWGW2364	SAMPLE	206908-002	ND	5.0
GWGW2362	SAMPLE	206908-003	ND	5.0
GWGW2325	SAMPLE	206908-007	ND	5.0
GWGW2365A	SAMPLE	206908-009	ND	5.0
GWGW2365B	SAMPLE	206908-010	ND	5.0
	BLANK	QC465584	ND	5.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Nickel

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Nickel	Batch#:	143735
Field ID:	GWGW2364	Sampled:	10/15/08
MSS Lab ID:	206908-002	Received:	10/15/08
Matrix:	Filtrate	Prepared:	10/16/08
Units:	ug/L	Analyzed:	10/20/08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC465585		500.0	443.0	89	80-120		
BSD	QC465586		500.0	452.8	91	80-120	2	20
MS	QC465587	1.781	500.0	453.5	90	74-120		
MSD	QC465588		500.0	456.3	91	74-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Nickel

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Nickel	Units:	ug/L
Field ID:	GWGW2364	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	143735
MSS Lab ID:	206908-002	Sampled:	10/15/08
Lab ID:	QC465589	Received:	10/15/08
Matrix:	Filtrate	Analyzed:	10/20/08

MSS Result	MSS RL	Result	RL	% Diff	Lim
1.781	5.000	7.956 J	25.00	NC	10

J= Estimated value
NC= Not Calculated
RL= Reporting Limit

66.1

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Nickel

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Nickel	Units:	ug/L
Field ID:	GWGW2364	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	143735
MSS Lab ID:	206908-002	Sampled:	10/15/08
Lab ID:	QC465590	Received:	10/15/08
Matrix:	Filtrate	Analyzed:	10/20/08

MSS Result	Spiked	Result	%REC	Limits
1.781	500.0	439.2	87	75-125

Curtis & Tompkins, Ltd.

Nitrate Nitrogen

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Batch#:	143705
Field ID:	GWGW2323	Sampled:	10/15/08 08:52
Matrix:	Water	Received:	10/15/08
Units:	mg/L		

Type	Lab ID	Result	RL	Diln Fac	Analyzed
SAMPLE	206908-001	13	0.50	10.00	10/15/08 19:14
BLANK	QC465458	ND	0.05	1.000	10/15/08 14:01

ND= Not Detected
RL= Reporting Limit

13.0

Curtis & Tompkins, Ltd.

Batch QC Report

Nitrate Nitrogen

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Batch#:	143705
Field ID:	GWGW2326	Sampled:	10/14/08 12:15
MSS Lab ID:	206870-007	Received:	10/14/08
Units:	mg/L		

Type	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
BS	QC465459	Water		1.000	0.9436	94	80-120			1.000	10/15/08 14:19
BSD	QC465460	Water		1.000	0.9233	92	80-120	2	20	1.000	10/15/08 14:36
MS	QC465490	Filtrate	9.345	2.500	11.98	106	80-120			5.000	10/15/08 21:35
MSD	QC465491	Filtrate		2.500	11.79	98	80-120	2	20	5.000	10/15/08 21:52

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Chloride

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Analysis:	EPA 300.0
Project#:	388-1856		
Analyte:	Chloride	Batch#:	143705
Units:	mg/L	Received:	10/15/08

Field ID	Type	Lab ID	Matrix	Result	RL	Diln Fac	Sampled	Analyzed
GWGW2364	SAMPLE	206908-002	Filtrate	27	1.0	5.000	10/15/08 09:05	10/16/08 01:38
GWGW2362	SAMPLE	206908-003	Filtrate	30	1.0	5.000	10/15/08 10:50	10/15/08 19:32
GWGW2325	SAMPLE	206908-007	Filtrate	26	1.0	5.000	10/15/08 11:35	10/16/08 03:23
GWGW2365A	SAMPLE	206908-009	Filtrate	20	0.40	2.000	10/15/08 14:35	10/16/08 06:52
GWGW2365B	SAMPLE	206908-010	Filtrate	20	0.40	2.000	10/15/08 14:35	10/16/08 07:27
	BLANK	QC465458	Water	ND	0.20	1.000		10/15/08 14:01

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Chloride

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Analysis:	EPA 300.0
Project#:	388-1856		
Analyte:	Chloride	Batch#:	143705
Field ID:	GWGW2326	Sampled:	10/14/08 12:15
MSS Lab ID:	206870-007	Received:	10/14/08
Units:	mg/L		

Type	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
BS	QC465459	Water		4.000	3.875	97	80-120			1.000	10/15/08 14:19
BSD	QC465460	Water		4.000	3.828	96	80-120	1	20	1.000	10/15/08 14:36
MS	QC465490	Filtrate	43.10	10.00	54.17	111 NM	80-120			5.000	10/15/08 21:35
MSD	QC465491	Filtrate		10.00	53.10	100 NM	80-120	2	20	5.000	10/15/08 21:52

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Fluoride

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Analysis:	EPA 300.0
Project#:	388-1856		
Analyte:	Fluoride	Batch#:	143743
Units:	mg/L	Received:	10/15/08
Diln Fac:	1.000		

Field ID	Type	Lab ID	Matrix	Result	RL	Sampled	Analyzed
GWGW2364	SAMPLE	206908-002	Filtrate	0.26	0.10	10/15/08 09:05	10/16/08 18:53
GWGW2362	SAMPLE	206908-003	Filtrate	0.26	0.10	10/15/08 10:50	10/16/08 19:11
GWGW2325	SAMPLE	206908-007	Filtrate	0.33	0.10	10/15/08 11:35	10/16/08 19:28
GWGW2365A	SAMPLE	206908-009	Filtrate	0.28	0.10	10/15/08 14:35	10/16/08 19:46
GWGW2365B	SAMPLE	206908-010	Filtrate	0.28	0.10	10/15/08 14:35	10/16/08 20:03
	BLANK	QC465625	Water	ND	0.10		10/16/08 14:08

ND= Not Detected
RL= Reporting Limit

19.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Fluoride

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Analysis:	EPA 300.0
Project#:	388-1856		
Analyte:	Fluoride	Batch#:	143743
Field ID:	GWGW2365B	Sampled:	10/15/08 14:35
MSS Lab ID:	206908-010	Received:	10/15/08
Units:	mg/L		

Type	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
BS	QC465626	Water		2.000	1.914	96	74-120			1.000	10/16/08 14:26
BSD	QC465627	Water		2.000	1.908	95	74-120	0	20	1.000	10/16/08 14:43
MS	QC465671	Filtrate	0.2754	5.000	4.978	94	66-120			5.000	10/16/08 21:47
MSD	QC465672	Filtrate		5.000	5.091	96	66-120	2	20	5.000	10/16/08 22:05

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Nitrate Nitrogen

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Analysis:	EPA 300.0
Project#:	388-1856		
Analyte:	Nitrogen, Nitrate	Batch#:	143705
Units:	mg/L	Received:	10/15/08

Field ID	Type	Lab ID	Matrix	Result	RL	Diln Fac	Sampled	Analyzed
GWGW2364	SAMPLE	206908-002	Filtrate	11	0.25	5.000	10/15/08 09:05	10/16/08 01:38
GWGW2362	SAMPLE	206908-003	Filtrate	12	0.25	5.000	10/15/08 10:50	10/15/08 19:32
GWGW2363A	SAMPLE	206908-004	Filtrate	7.0	0.25	5.000	10/15/08 10:40	10/15/08 18:40
GWGW2363B	SAMPLE	206908-005	Filtrate	7.1	0.25	5.000	10/15/08 10:40	10/16/08 01:04
GWGW2324	SAMPLE	206908-006	Filtrate	17	0.25	5.000	10/15/08 09:40	10/16/08 03:05
GWGW2325	SAMPLE	206908-007	Filtrate	16	0.25	5.000	10/15/08 11:35	10/16/08 03:23
GWGW2306	SAMPLE	206908-008	Filtrate	9.3	0.25	5.000	10/15/08 14:35	10/16/08 03:40
GWGW2365A	SAMPLE	206908-009	Filtrate	5.9	0.10	2.000	10/15/08 14:35	10/16/08 06:52
GWGW2365B	SAMPLE	206908-010	Filtrate	5.9	0.10	2.000	10/15/08 14:35	10/16/08 07:27
	BLANK	QC465458	Water	ND	0.05	1.000		10/15/08 14:01

ND= Not Detected
RL= Reporting Limit

21.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Nitrate Nitrogen

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Analysis:	EPA 300.0
Project#:	388-1856		
Analyte:	Nitrogen, Nitrate	Batch#:	143705
Field ID:	GWGW2326	Sampled:	10/14/08 12:15
MSS Lab ID:	206870-007	Received:	10/14/08
Units:	mg/L		

Type	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
BS	QC465459	Water		1.000	0.9436	94	80-120			1.000	10/15/08 14:19
BSD	QC465460	Water		1.000	0.9233	92	80-120	2	20	1.000	10/15/08 14:36
MS	QC465490	Filtrate	9.345	2.500	11.98	106	80-120			5.000	10/15/08 21:35
MSD	QC465491	Filtrate		2.500	11.79	98	80-120	2	20	5.000	10/15/08 21:52

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Sulfate

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Analysis:	EPA 300.0
Project#:	388-1856		
Analyte:	Sulfate	Batch#:	143705
Units:	mg/L	Received:	10/15/08

Field ID	Type	Lab ID	Matrix	Result	RL	Diln Fac	Sampled	Analyzed
GWGW2364	SAMPLE	206908-002	Filtrate	53	2.5	5.000	10/15/08 09:05	10/16/08 01:38
GWGW2362	SAMPLE	206908-003	Filtrate	50	0.50	1.000	10/15/08 10:50	10/16/08 04:33
GWGW2325	SAMPLE	206908-007	Filtrate	59	2.5	5.000	10/15/08 11:35	10/16/08 03:23
GWGW2365A	SAMPLE	206908-009	Filtrate	49	1.0	2.000	10/15/08 14:35	10/16/08 06:52
GWGW2365B	SAMPLE	206908-010	Filtrate	49	1.0	2.000	10/15/08 14:35	10/16/08 07:27
	BLANK	QC465458	Water	ND	0.50	1.000		10/15/08 14:01

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Sulfate

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Analysis:	EPA 300.0
Project#:	388-1856		
Analyte:	Sulfate	Batch#:	143705
Field ID:	GWGW2326	Sampled:	10/14/08 12:15
MSS Lab ID:	206870-007	Received:	10/14/08
Units:	mg/L		

Type	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
BS	QC465459	Water		10.00	9.458	95	80-120			1.000	10/15/08 14:19
BSD	QC465460	Water		10.00	9.407	94	80-120	1	20	1.000	10/15/08 14:36
MS	QC465490	Filtrate	58.61	25.00	86.21	110	80-120			5.000	10/15/08 21:35
MSD	QC465491	Filtrate		25.00	85.04	106	80-120	1	20	5.000	10/15/08 21:52

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Hexavalent Chromium

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Batch#:	143713
Units:	ug/L	Received:	10/15/08
Diln Fac:	1.000		

Field ID	Type	Lab ID	Matrix	Result	RL	Sampled	Analyzed
GWGW2364	SAMPLE	206908-002	Filtrate	58	1.0	10/15/08 09:05	10/15/08 18:25
GWGW2362	SAMPLE	206908-003	Filtrate	88	1.0	10/15/08 10:50	10/15/08 18:38
GWGW2325	SAMPLE	206908-007	Filtrate	61	1.0	10/15/08 11:35	10/15/08 19:16
GWGW2365A	SAMPLE	206908-009	Filtrate	45	1.0	10/15/08 14:35	10/15/08 19:28
GWGW2365B	SAMPLE	206908-010	Filtrate	46	1.0	10/15/08 14:35	10/15/08 19:41
	BLANK	QC465485	Water	ND	1.0		10/15/08 10:44

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Hexavalent Chromium

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	143713
MSS Lab ID:	206909-004	Sampled:	10/15/08 08:16
Matrix:	Water	Received:	10/15/08
Units:	ug/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
BS	QC465486		20.00	19.89	99	90-110			10/15/08 14:18
BSD	QC465487		20.00	19.58	98	90-110	2	20	10/15/08 14:30
MS	QC465488	<0.1302	10.00	4.690	47 *	85-115			10/15/08 20:44
MSD	QC465489		10.00	4.936	49 *	85-115	5	20	10/15/08 20:56

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Matrix:	Water	Sampled:	10/15/08
Units:	mg/L	Received:	10/15/08
Batch#:	143746	Analyzed:	10/16/08

Field ID: GWGW2364 Lab ID: 206908-002
Type: SAMPLE Diln Fac: 6.700

Analyte	Result	RL
Alkalinity, Bicarbonate	530	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	530	6.7

Field ID: GWGW2362 Lab ID: 206908-003
Type: SAMPLE Diln Fac: 6.700

Analyte	Result	RL
Alkalinity, Bicarbonate	590	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	590	6.7

Field ID: GWGW2325 Lab ID: 206908-007
Type: SAMPLE Diln Fac: 6.700

Analyte	Result	RL
Alkalinity, Bicarbonate	500	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	500	6.7

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Matrix:	Water	Sampled:	10/15/08
Units:	mg/L	Received:	10/15/08
Batch#:	143746	Analyzed:	10/16/08

Field ID:	GWGW2365A	Lab ID:	206908-009
Type:	SAMPLE	Diln Fac:	6.700

Analyte	Result	RL
Alkalinity, Bicarbonate	540	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	540	6.7

Field ID:	GWGW2365B	Lab ID:	206908-010
Type:	SAMPLE	Diln Fac:	6.700

Analyte	Result	RL
Alkalinity, Bicarbonate	540	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	540	6.7

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC465636		

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	4.000
Lab ID:	QC465637	Batch#:	143746
Matrix:	Water	Analyzed:	10/16/08

Spiked	Result	%REC	Limits
200.0	188.4	94	90-110

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	4.000
Field ID:	ZZZZZZZZZZ	Batch#:	143746
MSS Lab ID:	206801-002	Sampled:	10/13/08
Matrix:	Water	Received:	10/13/08
Units:	mg/L	Analyzed:	10/16/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC465638	181.3	200.0	380.0	99	80-120		
MSD	QC465639		200.0	371.2	95	80-120	2	25

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Organic Carbon (DOC)

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Dissolved Organic Carbon	Batch#:	143777
Matrix:	Water	Sampled:	10/15/08
Units:	mg/L	Received:	10/15/08
Diln Fac:	1.000	Analyzed:	10/17/08

Field ID	Type	Lab ID	Result	RL
GWGW2364	SAMPLE	206908-002	ND	1.0
GWGW2362	SAMPLE	206908-003	ND	1.0
GWGW2325	SAMPLE	206908-007	1.4	1.0
GWGW2365A	SAMPLE	206908-009	ND	1.0
GWGW2365B	SAMPLE	206908-010	ND	1.0
	BLANK	QC465758	ND	1.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Organic Carbon (DOC)

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Dissolved Organic Carbon	Batch#:	143777
Field ID:	ZZZZZZZZZZ	Sampled:	10/16/08
MSS Lab ID:	206947-001	Received:	10/16/08
Matrix:	Water	Analyzed:	10/17/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
LCS	QC465759		10.00	10.70	107	90-110			1.000
MS	QC465760	0.9204	10.00	12.02	111	80-121			2.000
MSD	QC465761		10.00	11.84	109	80-121	2	20	2.000

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Ferrous Iron (Fe+2)

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM3500FE-B
Analyte:	Ferrous Iron (Fe+2)	Batch#:	143714
Matrix:	Water	Received:	10/15/08
Units:	mg/L	Prepared:	10/15/08 19:15
Diln Fac:	1.000	Analyzed:	10/15/08 19:25

Field ID	Type	Lab ID	Result	RL	Sampled
GWGW2364	SAMPLE	206908-002	ND	0.10	10/15/08 09:05
GWGW2362	SAMPLE	206908-003	ND	0.10	10/15/08 10:50
GWGW2325	SAMPLE	206908-007	ND	0.10	10/15/08 11:35
GWGW2365A	SAMPLE	206908-009	ND	0.10	10/15/08 14:35
GWGW2365B	SAMPLE	206908-010	ND	0.10	10/15/08 14:35
	BLANK	QC465492	ND	0.10	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Ferrous Iron (Fe+2)

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM3500FE-B
Analyte:	Ferrous Iron (Fe+2)	Batch#:	143714
Field ID:	GWGW2364	Sampled:	10/15/08 09:05
MSS Lab ID:	206908-002	Received:	10/15/08
Matrix:	Water	Prepared:	10/15/08 19:15
Units:	mg/L	Analyzed:	10/15/08 19:25
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC465493		0.8000	0.7775	97	90-110		
MS	QC465494	<0.1000	0.8000	0.8345	104	73-136		
MSD	QC465495		0.8000	0.8378	105	73-136	0	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2540C
Analyte:	Total Dissolved Solids	Sampled:	10/15/08
Matrix:	Water	Received:	10/15/08
Units:	mg/L	Prepared:	10/17/08
Batch#:	143800	Analyzed:	10/20/08

Field ID	Type	Lab ID	Result	RL	Diln Fac
GWGW2364	SAMPLE	206908-002	710	11	1.111
GWGW2362	SAMPLE	206908-003	750	11	1.111
GWGW2325	SAMPLE	206908-007	840	11	1.111
GWGW2365A	SAMPLE	206908-009	650	11	1.111
GWGW2365B	SAMPLE	206908-010	650	11	1.111
	BLANK	QC465878	ND	10	1.000

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Dissolved Solids (TDS)

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2540C
Analyte:	Total Dissolved Solids	Batch#:	143800
Field ID:	ZZZZZZZZZZ	Sampled:	10/14/08
MSS Lab ID:	206852-002	Received:	10/14/08
Matrix:	Water	Prepared:	10/17/08
Units:	mg/L	Analyzed:	10/20/08

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim	Diln Fac
BS	QC465879		104.0	88.00		85	73-120			1.000
BSD	QC465880		104.0	98.00		94	73-120	11	22	1.000
SDUP	QC465881	41,100		41,900	500.0			2	20	50.00

RL= Reporting Limit
RPD= Relative Percent Difference

30.0

Curtis & Tompkins, Ltd.

Total Organic Carbon (TOC)

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Batch#:	143864
Matrix:	Water	Sampled:	10/15/08
Units:	mg/L	Received:	10/15/08
Diln Fac:	1.000	Analyzed:	10/21/08

Field ID	Type	Lab ID	Result	RL
GWGW2364	SAMPLE	206908-002	0.94	0.50
GWGW2362	SAMPLE	206908-003	0.84	0.50
GWGW2325	SAMPLE	206908-007	1.4	0.50
GWGW2365A	SAMPLE	206908-009	0.90	0.50
GWGW2365B	SAMPLE	206908-010	0.84	0.50
	BLANK	QC466159	ND	0.50

ND= Not Detected
RL= Reporting Limit

69.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Organic Carbon (TOC)

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Batch#:	143864
Field ID:	ZZZZZZZZZZ	Sampled:	10/08/08
MSS Lab ID:	206734-001	Received:	10/09/08
Matrix:	Water	Analyzed:	10/21/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
LCS	QC466160		10.00	9.779	98	90-110			1.000
MS	QC466161	8.703	10.00	18.07	94	62-124			2.000
MSD	QC466162		10.00	18.07	94	62-124	0	20	2.000

RPD= Relative Percent Difference

70.0

Curtis & Tompkins, Ltd.

Dissolved Orthophosphate Phosphorous

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Analysis:	SM4500P-E
Project#:	388-1856		
Analyte:	Orthophosphate (as P)	Batch#:	143751
Matrix:	Filtrate	Received:	10/15/08
Units:	mg/L	Analyzed:	10/16/08 16:25
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Sampled
GWGW2364	SAMPLE	206908-002	0.098	0.030	10/15/08 09:05
GWGW2362	SAMPLE	206908-003	0.10	0.030	10/15/08 10:50
GWGW2325	SAMPLE	206908-007	0.18	0.030	10/15/08 11:35
GWGW2365A	SAMPLE	206908-009	0.10	0.030	10/15/08 14:35
GWGW2365B	SAMPLE	206908-010	0.10	0.030	10/15/08 14:35
	BLANK	QC465656	ND	0.030	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Orthophosphate Phosphorous

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Analysis:	SM4500P-E
Project#:	388-1856		
Analyte:	Orthophosphate (as P)	Diln Fac:	1.000
Field ID:	GWGW2364	Batch#:	143751
MSS Lab ID:	206908-002	Sampled:	10/15/08 09:05
Matrix:	Filtrate	Received:	10/15/08
Units:	mg/L	Analyzed:	10/16/08 16:25

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC465657		0.4000	0.3936	98	80-120		
MS	QC465658	0.09760	0.4000	0.4928	99	80-136		
MSD	QC465659		0.4000	0.4891	98	80-136	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Total Phosphorous

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Analysis:	SM4500P-E
Project#:	388-1856		
Analyte:	Phosphorous	Sampled:	10/15/08
Units:	mg/L	Received:	10/15/08
Batch#:	143776	Analyzed:	10/17/08

Field ID	Type	Lab ID	Matrix	Result	RL	Diln Fac
GWGW2364	SAMPLE	206908-002	Filtrate	0.096	0.050	1.667
GWGW2362	SAMPLE	206908-003	Filtrate	0.11	0.050	1.667
GWGW2325	SAMPLE	206908-007	Filtrate	0.19	0.050	1.667
GWGW2365A	SAMPLE	206908-009	Filtrate	0.10	0.050	1.667
GWGW2365B	SAMPLE	206908-010	Filtrate	0.11	0.050	1.667
	BLANK	QC465754	Water	ND	0.030	1.000

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Total Phosphorous

Lab #:	206908	Location:	UC Davis
Client:	Weiss Associates	Analysis:	SM4500P-E
Project#:	388-1856		
Analyte:	Phosphorous	Batch#:	143776
Field ID:	GWGW2360	Sampled:	10/13/08
MSS Lab ID:	206823-006	Received:	10/13/08
Matrix:	Water	Analyzed:	10/17/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
LCS	QC465755		0.3960	0.4179	106	72-134			1.000
MS	QC465756	0.1079	0.3960	0.5041	100	19-182			1.667
MSD	QC465757		0.3960	0.5207	104	19-182	3	26	1.667

RPD= Relative Percent Difference

206946

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-16
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AgueTerra Associates Incorporated, DBA

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Client Contact	Project Manager: Bob Devany	Sampled by: [illegible]	Date: 10/16/08	COC Number: UCD
Weiss Associates	Tel: 510-450-6144	Lab Contact:	Carrier:	Page____ of ____
5801 Christie Avenue, Suite 600	Analysis Turnaround Time			Job No.
Emeryville, CA 94608	Calendar (C) or Work Days (W) --- 5W			
(510) 450-6000 Phone	TAT if different from Below ____			SDG No.
(510) 547-5043 FAX	☐ 2 weeks			
	☐ 1 week			
Job Name: UC Davis	☐ 2 days			
Address: One Shields Ave, Davis	☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Dissolved Organic Carbon SM5310B	Mn, Fe, B (6010B)	Cr6+ (7199)	Fe II (SM3500 FeD)	Ca, Mg, K, Na, Ni (6010B)	Chloride, Nitrate, Sulfate (EPA 300.0)	Total Phosphate (SM4500-PE)	Carbonate, Bicarbonate (EPA 310.1)	Fluoride (SM 4500-F)	TOC (SM 5310C)	TDS (SM 2540C)	VOCs (8260)	Pesticides (8081)	PCBs (8082)	Title 22 Metals (6010B)	Total Cr (6010B)	Ortho Phosphate (SM4500-PE)	Hardness (EPA 130.2)	Sample Specific Notes:
10	GWGW2308	10/16/08	1130		W	1							X												
11	GW GW 2317	10/16/08	1150		W	1							X												
12	GW GW 2307	10/16/08	1140		W	1							X												
13	TB GW 0519	10/16/08	0700		W	1												X							
14	EBGW0016	10/16/08	1515		W	7			X									X	X	X	X				
						Field Filtered		X	X		X	X	X	X	X						X	X	X	X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For ____ Months*

Special Instructions/QC Requirements & Comments: **Level III Reporting**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[illegible] Atkinson	Weiss Assoc	10/16/08 1520	[illegible]	C&T	10/16/08 1520
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

206946

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-16
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AgueTerra Associates Incorporated, DBA

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Client Contact	
Weiss Associates	
5801 Christie Avenue, Suite 600	
Emeryville, CA 94608	
(510) 450-6000	Phone
(510) 547-5043	FAX
Job Name:	UC Davis
Address:	One Shields Ave, Davis

Project Manager: Bob Devany
Tel: 510-450-6144

Analysis Turnaround Time
Calendar (C) or Work Days (W) --- 5W
TAT if different from Below _____
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sampled by: [illegible]
Date: 10/16/08
Lab Contact:
Carrier:
COC Number: UCD
Page_____ of _____
Job No.
SDG No.

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	1,4 - Dioxane (EPA 8270)	Dissolved Organic Carbon SM5310B	Mn, Fe, B (6010B)	Cr6+ (7199)	Fe II (SM3500 FeD)	Ca, Mg, K, Na, Ni (6010B)	Chloride, Nitrate, Sulfate (EPA 300.0)	Total Phosphate (SM4500-PE)	Carbonate, Bicarbonate (EPA 310.1)	Fluoride (SM 4500-F)	TOC (SM 5310C)	TDS (SM 2540C)	VOCs (8260)	Pesticides (8081)	PCBs (8082)	Title 22 Metals (6010B)	Total Cr (6010B)	Ortho Phosphate (SM4500-PE)	Hardness (EPA 130.2)	Nitrate-N (EPA 300)	Sample Specific Notes:
1	GWGW2351	10/16/08	0850		W	2																	X			X	48hr
2	TPINO363	10/16/08	0850		W	4											X		X								
3	TPEFO363	10/16/08	0830		W	6						X	X					X	X			X					Alkalinity (SM2320B) 48hr
4	GWGW2331A	10/16/08	0940		W	9	X												X	X	X	X				X	48 hr
5	GWGW2331B	10/16/08	0940		W	9	X												X	X	X	X				X	48hr
6	GWGW2330	10/16/08	1135		W	9	X												X	X	X	X				X	48hr
7	GWGW2329	10/16/08	1400		W	9	X												X	X	X	X				X	48hr
8	GWGW2327	10/16/08	1355		W	16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X			24hr
9	GWGW2310	10/16/08	1115		W	1								X													
						Field Filtered			X	X		X	X	X	X	X						X	X	X	X		

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **Level III Reporting**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[illegible] Atkinson	Weiss Assoc	10/16/08 1520	[illegible]	CT	10/16/08 1520
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd

Login # Z06946 Date Received 10/16/08 Number of coolers 4
Client WEISS ASSC Project UC DAVIS

Date Opened 10/16 By (print) K Wellbrock (sign) K Wellbrock
Date Logged in ↓ By (print) M. VILLANUEVA (sign)

1. Did cooler come with a shipping slip (airbill, etc)? ..... YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ~~☐ NO~~
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? ..... YES NO (N/A)
3. Were custody papers dry and intact when received? ..... (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? ..... (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ..... (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

   ☒ Bubble Wrap ☒ Foam blocks ☒ Bags ☐ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

   Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) _____

   ☒ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ..... YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? ..... (YES) NO
10. Are samples in the appropriate containers for indicated tests? ..... (YES) NO
11. Are sample labels present, in good condition and complete? ..... (YES) NO
12. Do the sample labels agree with custody papers? ..... (YES) NO
13. Was sufficient amount of sample sent for tests requested? ..... YES NO ☆
14. Are the samples appropriately preserved? ..... (YES) NO
15. Are bubbles > 6mm absent in VOA samples? ..... (YES) NO N/A
16. Was the client contacted concerning this sample delivery? ..... YES NO N/A
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

SAMPLE #12 ID# ON SAMPLE GWGW2317 10/16/08 1140

SAMPLE #7 RECD CONTAINERS FOR OTHER ANALYSIS NOT ON COC & EXTRA CONTAINERS, 1-1L POLY W/HNO3 FOR EPA 905.0, 1-1L POLY W/HNO3 FOR EPA 903.1, 1-1L POLY W/HNO3 FOR GAMMA SPEC, 2-1L POLY W/HNO3 FOR URANIUM & THORIUM, 1-500ML POLY W/HNO3 FOR EPA 9100.0, 1-500ML POLY UNP. FOR EERF C-01, 1-500ML CLEAR GLASS BOTTLE UNP. FOR EPA 906.0. THESE CONTAINERS WILL BE STORED IN SUB-LAB FRIDGE

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TPIN0363	Batch#:	144094
Lab ID:	206946-002	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	9.4	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

82.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TPIN0363	Batch#:	144094
Lab ID:	206946-002	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-125
1,2-Dichloroethane-d4	96	80-137
Toluene-d8	106	80-120
Bromofluorobenzene	104	80-122

ND= Not Detected
RL= Reporting Limit

82.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TPEF0363	Batch#:	144094
Lab ID:	206946-003	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

83.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TPEF0363	Batch#:	144094
Lab ID:	206946-003	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-125
1,2-Dichloroethane-d4	95	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	102	80-122

ND= Not Detected
RL= Reporting Limit

83.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2331A	Batch#:	144094
Lab ID:	206946-004	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	0.7	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	1.2	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	52	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

84.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2331A	Batch#:	144094
Lab ID:	206946-004	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-125
1,2-Dichloroethane-d4	99	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	108	80-122

ND= Not Detected
RL= Reporting Limit

84.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2331B	Batch#:	144094
Lab ID:	206946-005	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	1.0	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	1.3	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	54	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

85.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2331B	Batch#:	144094
Lab ID:	206946-005	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-125
1,2-Dichloroethane-d4	98	80-137
Toluene-d8	105	80-120
Bromofluorobenzene	105	80-122

ND= Not Detected
RL= Reporting Limit

85.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2330	Batch#:	144094
Lab ID:	206946-006	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

86.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2330	Batch#:	144094
Lab ID:	206946-006	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-125
1,2-Dichloroethane-d4	98	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	112	80-122

ND= Not Detected
RL= Reporting Limit

86.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2329	Batch#:	144094
Lab ID:	206946-007	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

87.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2329	Batch#:	144094
Lab ID:	206946-007	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-125
1,2-Dichloroethane-d4	99	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	108	80-122

ND= Not Detected
RL= Reporting Limit

87.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2327	Batch#:	144094
Lab ID:	206946-008	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

88.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2327	Batch#:	144094
Lab ID:	206946-008	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	2.8	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-125
1,2-Dichloroethane-d4	99	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	106	80-122

ND= Not Detected
RL= Reporting Limit

88.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TBGW0519	Batch#:	144094
Lab ID:	206946-013	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

89.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TBGW0519	Batch#:	144094
Lab ID:	206946-013	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-125
1,2-Dichloroethane-d4	95	80-137
Toluene-d8	109	80-120
Bromofluorobenzene	101	80-122

ND= Not Detected
RL= Reporting Limit

89.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	EBGW0016	Batch#:	144094
Lab ID:	206946-014	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

90.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	EBGW0016	Batch#:	144094
Lab ID:	206946-014	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-125
1,2-Dichloroethane-d4	94	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	106	80-122

ND= Not Detected
RL= Reporting Limit

90.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC467122	Batch#:	144094
Matrix:	Water	Analyzed:	10/25/08
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

91.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC467122	Batch#:	144094
Matrix:	Water	Analyzed:	10/25/08
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-125
1,2-Dichloroethane-d4	91	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	111	80-122

ND= Not Detected
RL= Reporting Limit

91.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	144094
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Type: BS Lab ID: QC467123

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	32.44	130	73-133
Benzene	25.00	27.64	111	80-120
Trichloroethene	25.00	27.28	109	80-120
Toluene	25.00	27.10	108	80-120
Chlorobenzene	25.00	25.66	103	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-125
1,2-Dichloroethane-d4	91	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	95	80-122

Type: BSD Lab ID: QC467124

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	30.75	123	73-133	5	20
Benzene	25.00	27.24	109	80-120	1	20
Trichloroethene	25.00	26.95	108	80-120	1	20
Toluene	25.00	26.47	106	80-120	2	20
Chlorobenzene	25.00	26.27	105	80-120	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-125
1,2-Dichloroethane-d4	90	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	96	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

1,4-Dioxane by 8270-SIM

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C-SIM
Matrix:	Water	Sampled:	10/16/08
Units:	ug/L	Received:	10/16/08
Diln Fac:	1.000	Prepared:	10/20/08
Batch#:	143896	Analyzed:	10/21/08

Field ID: GWGW2331A Lab ID: 206946-004
Type: SAMPLE

Analyte	Result	RL
1,4-Dioxane	14	0.94

Surrogate	%REC	Limits
Nitrobenzene-d5	67	48-130
2-Fluorobiphenyl	65	54-120

Field ID: GWGW2331B Lab ID: 206946-005
Type: SAMPLE

Analyte	Result	RL
1,4-Dioxane	13	0.94

Surrogate	%REC	Limits
Nitrobenzene-d5	66	48-130
2-Fluorobiphenyl	69	54-120

Field ID: GWGW2330 Lab ID: 206946-006
Type: SAMPLE

Analyte	Result	RL
1,4-Dioxane	7.6	0.94

Surrogate	%REC	Limits
Nitrobenzene-d5	75	48-130
2-Fluorobiphenyl	76	54-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

1,4-Dioxane by 8270-SIM

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C-SIM
Matrix:	Water	Sampled:	10/16/08
Units:	ug/L	Received:	10/16/08
Diln Fac:	1.000	Prepared:	10/20/08
Batch#:	143896	Analyzed:	10/21/08

Field ID: GWGW2329 Lab ID: 206946-007
Type: SAMPLE

Analyte	Result	RL
1,4-Dioxane	ND	0.94

Surrogate	%REC	Limits
Nitrobenzene-d5	60	48-130
2-Fluorobiphenyl	66	54-120

Field ID: GWGW2327 Lab ID: 206946-008
Type: SAMPLE

Analyte	Result	RL
1,4-Dioxane	ND	0.94

Surrogate	%REC	Limits
Nitrobenzene-d5	70	48-130
2-Fluorobiphenyl	76	54-120

Type: BLANK Lab ID: QC466294

Analyte	Result	RL
1,4-Dioxane	ND	1.0

Surrogate	%REC	Limits
Nitrobenzene-d5	63	48-130
2-Fluorobiphenyl	79	54-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

1,4-Dioxane by 8270-SIM

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C-SIM
Matrix:	Water	Batch#:	143896
Units:	ug/L	Prepared:	10/20/08
Diln Fac:	1.000	Analyzed:	10/21/08

Type: BS Lab ID: QC466295

Analyte	Spiked	Result	%REC	Limits
1,4-Dioxane	3.000	2.157	72	28-120

Surrogate	%REC	Limits
Nitrobenzene-d5	55	48-130
2-Fluorobiphenyl	65	54-120

Type: BSD Lab ID: QC466296

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,4-Dioxane	3.000	2.456	82	28-120	13	32

Surrogate	%REC	Limits
Nitrobenzene-d5	63	48-130
2-Fluorobiphenyl	71	54-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8081A
Field ID:	GWGW2331A	Batch#:	143814
Lab ID:	206946-004	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Prepared:	10/17/08
Diln Fac:	1.000	Analyzed:	10/20/08

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND #	0.09
Endrin aldehyde	ND	0.09
4,4'-DDT	ND	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	54	37-120
Decachlorobiphenyl	45	29-141

#= CCV drift outside limits; average CCV drift within limits per method requirements
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8081A
Field ID:	GWGW2331B	Batch#:	143814
Lab ID:	206946-005	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Prepared:	10/17/08
Diln Fac:	1.000	Analyzed:	10/20/08

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND #	0.09
Endrin aldehyde	ND	0.09
4,4'-DDT	ND	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	51	37-120
Decachlorobiphenyl	30	29-141

#= CCV drift outside limits; average CCV drift within limits per method requirements
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8081A
Field ID:	GWGW2330	Batch#:	143814
Lab ID:	206946-006	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Prepared:	10/17/08
Diln Fac:	1.000	Analyzed:	10/20/08

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND	0.09
Endrin aldehyde	ND	0.09
4,4'-DDT	ND	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	59	37-120
Decachlorobiphenyl	52	29-141

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8081A
Field ID:	GWGW2329	Batch#:	143814
Lab ID:	206946-007	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Prepared:	10/17/08
Diln Fac:	1.000	Analyzed:	10/20/08

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND	0.09
Endrin aldehyde	ND	0.09
4,4'-DDT	ND	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	51	37-120
Decachlorobiphenyl	40	29-141

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8081A
Field ID:	GWGW2327	Batch#:	143814
Lab ID:	206946-008	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Prepared:	10/17/08
Diln Fac:	1.000	Analyzed:	10/20/08

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND	0.09
Endrin aldehyde	ND	0.09
4,4'-DDT	ND	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	73	37-120
Decachlorobiphenyl	61	29-141

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8081A
Field ID:	EBGW0016	Batch#:	143814
Lab ID:	206946-014	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Prepared:	10/17/08
Diln Fac:	1.000	Analyzed:	10/20/08

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND	0.09
Endrin aldehyde	ND	0.09
4,4'-DDT	ND	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	66	37-120
Decachlorobiphenyl	59	29-141

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC465932	Batch#:	143814
Matrix:	Water	Prepared:	10/17/08
Units:	ug/L	Analyzed:	10/20/08

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND #	0.1
Endrin aldehyde	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	68	37-120
Decachlorobiphenyl	65	29-141

#= CCV drift outside limits; average CCV drift within limits per method requirements
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8081A
Matrix:	Water	Batch#:	143814
Units:	ug/L	Prepared:	10/17/08
Diln Fac:	1.000	Analyzed:	10/20/08

Type: BS Lab ID: QC465933

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	0.2000	0.1767	88	63-126
Heptachlor	0.2000	0.1640	82	48-127
Aldrin	0.2000	0.1722	86	45-127
Dieldrin	0.4000	0.3629	91	61-135
Endrin	0.4000	0.3757	94	56-142
4,4'-DDT	0.4000	0.3946	99	49-140

Surrogate	%REC	Limits
TCMX	60	37-120
Decachlorobiphenyl	67	29-141

Type: BSD Lab ID: QC465934

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.2000	0.2044	102	63-126	15	20
Heptachlor	0.2000	0.1536	77	48-127	7	30
Aldrin	0.2000	0.1962	98	45-127	13	28
Dieldrin	0.4000	0.4141	104	61-135	13	23
Endrin	0.4000	0.4328	108	56-142	14	31
4,4'-DDT	0.4000	0.4913	123	49-140	22	29

Surrogate	%REC	Limits
TCMX	68	37-120
Decachlorobiphenyl	67	29-141

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8082
Matrix:	Water	Sampled:	10/16/08
Units:	ug/L	Received:	10/16/08
Diln Fac:	1.000	Prepared:	10/17/08
Batch#:	143813		

Field ID:	GWGW2331A	Analyzed:	10/20/08
Type:	SAMPLE	Cleanup Method:	EPA 3665A
Lab ID:	206946-004		

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	74	53-124
Decachlorobiphenyl	27	23-120

Field ID:	GWGW2331B	Analyzed:	10/20/08
Type:	SAMPLE	Cleanup Method:	EPA 3665A
Lab ID:	206946-005		

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	80	53-124
Decachlorobiphenyl	24	23-120

Field ID:	GWGW2330	Analyzed:	10/20/08
Type:	SAMPLE	Cleanup Method:	EPA 3665A
Lab ID:	206946-006		

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	87	53-124
Decachlorobiphenyl	64	23-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8082
Matrix:	Water	Sampled:	10/16/08
Units:	ug/L	Received:	10/16/08
Diln Fac:	1.000	Prepared:	10/17/08
Batch#:	143813		

Field ID:	GWGW2329	Analyzed:	10/20/08
Type:	SAMPLE	Cleanup Method:	EPA 3665A
Lab ID:	206946-007		

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	89	53-124
Decachlorobiphenyl	50	23-120

Field ID:	GWGW2327	Analyzed:	10/21/08
Type:	SAMPLE	Cleanup Method:	EPA 3665A
Lab ID:	206946-008		

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	85	53-124
Decachlorobiphenyl	58	23-120

Field ID:	EBGW0016	Analyzed:	10/21/08
Type:	SAMPLE	Cleanup Method:	EPA 3665A
Lab ID:	206946-014		

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	88	53-124
Decachlorobiphenyl	64	23-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8082
Matrix:	Water	Sampled:	10/16/08
Units:	ug/L	Received:	10/16/08
Diln Fac:	1.000	Prepared:	10/17/08
Batch#:	143813		

Type:	BLANK	Analyzed:	10/20/08
Lab ID:	QC465928	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	79	53-124
Decachlorobiphenyl	90	23-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC465929	Batch#:	143813
Matrix:	Water	Prepared:	10/17/08
Units:	ug/L	Analyzed:	10/20/08

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	5.000	4.932	99	71-139
Aroclor-1260	5.000	5.490	110	75-141

Surrogate	%REC	Limits
TCMX	75	53-124
Decachlorobiphenyl	75	23-120

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8082
Field ID:	ZZZZZZZZZZ	Batch#:	143813
MSS Lab ID:	206841-005	Sampled:	10/13/08
Matrix:	Water	Received:	10/14/08
Units:	ug/L	Prepared:	10/17/08
Diln Fac:	1.000	Analyzed:	10/20/08

Type: MS Cleanup Method: EPA 3665A
Lab ID: QC465930

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<0.1105	4.854	5.009	103	32-146
Aroclor-1260	<0.1489	4.854	5.526	114	53-127

Surrogate	%REC	Limits
TCMX	87	53-124
Decachlorobiphenyl	63	23-120

Type: MSD Cleanup Method: EPA 3665A
Lab ID: QC465931

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	4.854	4.874	100	32-146	3	34
Aroclor-1260	4.854	5.424	112	53-127	2	37

Surrogate	%REC	Limits
TCMX	87	53-124
Decachlorobiphenyl	59	23-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Chromium	Batch#:	143788
Field ID:	GWGW2351	Sampled:	10/16/08
Lab ID:	206946-001	Received:	10/16/08
Matrix:	Filtrate	Prepared:	10/17/08
Units:	ug/L	Analyzed:	10/21/08
Diln Fac:	1.000		

Result	RL
33	5.0

RL= Reporting Limit

57.0

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	TPEF0363	Batch#:	143788
Lab ID:	206946-003	Sampled:	10/16/08
Matrix:	Filtrate	Received:	10/16/08
Units:	ug/L	Prepared:	10/17/08
Diln Fac:	1.000	Analyzed:	10/21/08

Analyte	Result	RL
Calcium	49,000	500
Magnesium	86,000	500
Potassium	760	500
Sodium	44,000	500

RL= Reporting Limit

58.0

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2327	Sampled:	10/16/08
Lab ID:	206946-008	Received:	10/16/08
Matrix:	Filtrate	Prepared:	10/17/08
Units:	ug/L	Analyzed:	10/21/08
Batch#:	143788		

Analyte	Result	RL	Diln Fac
Boron	1,100	100	1.000
Calcium	70,000	500	1.000
Iron	ND	100	1.000
Magnesium	180,000	1,000	5.000
Manganese	9.3	5.0	1.000
Potassium	2,800	500	1.000
Sodium	91,000	500	1.000

ND= Not Detected
RL= Reporting Limit

59.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC465807	Batch#:	143788
Matrix:	Filtrate	Prepared:	10/17/08
Units:	ug/L	Analyzed:	10/21/08

Analyte	Result	RL
Boron	ND	100
Calcium	ND	500
Chromium	ND	5.0
Iron	ND	100
Magnesium	ND	500
Manganese	ND	5.0
Potassium	ND	500
Sodium	ND	500

ND= Not Detected
RL= Reporting Limit

60.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Matrix:	Filtrate	Batch#:	143788
Units:	ug/L	Prepared:	10/17/08
Diln Fac:	1.000	Analyzed:	10/21/08

Type: BS Lab ID: QC465808

Analyte	Spiked	Result	%REC	Limits
Boron	1,000	982.1	98	80-120
Calcium	20,000	20,330	102	80-120
Chromium	200.0	195.4	98	80-120
Iron	1,000	1,099	110	80-120
Magnesium	20,000	20,370	102	80-120
Manganese	50.00	51.97	104	80-120
Potassium	10,000	10,210	102	80-120
Sodium	20,000	20,650	103	80-120

Type: BSD Lab ID: QC465809

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Boron	1,000	1,002	100	80-120	2	20
Calcium	20,000	19,390	97	80-120	5	20
Chromium	200.0	195.7	98	80-120	0	20
Iron	1,000	1,009	101	80-120	9	20
Magnesium	20,000	19,330	97	80-120	5	20
Manganese	50.00	51.52	103	80-120	1	20
Potassium	10,000	9,898	99	80-120	3	20
Sodium	20,000	19,690	98	80-120	5	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	143788
MSS Lab ID:	206762-001	Sampled:	10/09/08
Matrix:	Filtrate	Received:	10/10/08
Units:	ug/L	Prepared:	10/17/08
Diln Fac:	1.000	Analyzed:	10/21/08

Type: MS Lab ID: QC465810

Analyte	MSS Result	Spiked	Result	%REC	Limits
Boron	58.22	1,000	1,087	103	79-121
Calcium	77,740	20,000	93,060	77	63-130
Chromium	0.6709	200.0	195.2	97	78-120
Iron	13,420	1,000	13,720	30 NM	66-126
Magnesium	37,210	20,000	54,180	85	66-126
Manganese	2,005	50.00	2,031	53 NM	73-121
Potassium	684.3	10,000	11,130	104	68-125
Sodium	94,800	20,000	120,000 >LR	126 NM	60-131

Type: MSD Lab ID: QC465811

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Boron	1,000	1,090	103	79-121	0	20
Calcium	20,000	94,840	86	63-130	2	20
Chromium	200.0	195.4	97	78-120	0	20
Iron	1,000	14,060	64 NM	66-126	2	20
Magnesium	20,000	55,190	90	66-126	2	20
Manganese	50.00	2,116	222 NM	73-121	4	20
Potassium	10,000	10,820	101	68-125	3	20
Sodium	20,000	121,300 >LR	132 NM	60-131	NC	20

NC= Not Calculated
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Units:	ug/L
Type:	Serial Dilution	Batch#:	143788
MSS Lab ID:	206762-001	Sampled:	10/09/08
Lab ID:	QC465812	Received:	10/10/08
Matrix:	Filtrate	Analyzed:	10/21/08

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln Fac
Boron	58.22	100.0	78.27 J	500.0	NC	10	5.000
Calcium	77,740	500.0	75,070	1,000	3	10	5.000
Chromium	0.6709	5.000	ND	25.00	NC	10	5.000
Iron	13,420	100.0	12,990	500.0	3	10	5.000
Magnesium	37,210	500.0	36,080	1,000	3	10	5.000
Manganese	2,005	5.000	1,939	25.00	3	10	5.000
Potassium	684.3	500.0	ND	2,500	NC	10	5.000
Sodium	94,800	2,500	82,430	12,500	13 *	10	25.00

*= Value outside of QC limits; see narrative
J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Units:	ug/L
Type:	Post Digest Spike	Batch#:	143788
MSS Lab ID:	206762-001	Sampled:	10/09/08
Lab ID:	QC465813	Received:	10/10/08
Matrix:	Filtrate	Analyzed:	10/21/08

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln Fac
Boron	58.22	1,000	1,074	102	75-125	1.000
Calcium	77,740	20,000	93,910	81	75-125	1.000
Chromium	0.6709	200.0	193.0	96	75-125	1.000
Iron	13,420	1,000	13,850	44 NM	75-125	1.000
Magnesium	37,210	20,000	55,060	89	75-125	1.000
Manganese	2,005	50.00	2,039	68 NM	75-125	1.000
Potassium	684.3	10,000	10,860	102	75-125	1.000
Sodium	94,800	100,000	198,500	104	75-125	5.000

NM= Not Meaningful: Sample concentration > 4X spike concentration

64.0

Curtis & Tompkins, Ltd.

Dissolved California Title 22 Metals

Lab #:	206946	Project#:	388-1856
Client:	Weiss Associates	Location:	UC Davis
Field ID:	TPEF0363	Diln Fac:	1.000
Lab ID:	206946-003	Sampled:	10/16/08
Matrix:	Filtrate	Received:	10/16/08
Units:	ug/L		

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Arsenic	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Barium	210	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Beryllium	ND	2.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Cadmium	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Chromium	41	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Cobalt	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Copper	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Lead	ND	3.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Mercury	ND	0.20	143855	10/20/08	10/20/08	METHOD	EPA 7470A
Molybdenum	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Nickel	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Selenium	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Silver	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Thallium	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Vanadium	9.9	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Zinc	ND	20	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B

ND= Not Detected
RL= Reporting Limit

37.0

Curtis & Tompkins, Ltd.

Dissolved California Title 22 Metals

Lab #:	206946	Project#:	388-1856
Client:	Weiss Associates	Location:	UC Davis
Field ID:	GWGW2331A	Diln Fac:	1.000
Lab ID:	206946-004	Sampled:	10/16/08
Matrix:	Filtrate	Received:	10/16/08
Units:	ug/L		

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Arsenic	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Barium	56	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Beryllium	ND	2.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Cadmium	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Chromium	73	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Cobalt	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Copper	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Lead	ND	3.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Mercury	ND	0.20	143855	10/20/08	10/20/08	METHOD	EPA 7470A
Molybdenum	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Nickel	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Selenium	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Silver	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Thallium	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Vanadium	13	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Zinc	ND	20	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B

ND= Not Detected
RL= Reporting Limit

38.0

Curtis & Tompkins, Ltd.

Dissolved California Title 22 Metals

Lab #:	206946	Project#:	388-1856
Client:	Weiss Associates	Location:	UC Davis
Field ID:	GWGW2331B	Diln Fac:	1.000
Lab ID:	206946-005	Sampled:	10/16/08
Matrix:	Filtrate	Received:	10/16/08
Units:	ug/L		

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Arsenic	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Barium	55	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Beryllium	ND	2.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Cadmium	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Chromium	72	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Cobalt	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Copper	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Lead	ND	3.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Mercury	ND	0.20	143855	10/20/08	10/20/08	METHOD	EPA 7470A
Molybdenum	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Nickel	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Selenium	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Silver	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Thallium	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Vanadium	12	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Zinc	ND	20	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B

ND= Not Detected
RL= Reporting Limit

39.0

Curtis & Tompkins, Ltd.

Dissolved California Title 22 Metals

Lab #:	206946	Project#:	388-1856
Client:	Weiss Associates	Location:	UC Davis
Field ID:	GWGW2330	Diln Fac:	1.000
Lab ID:	206946-006	Sampled:	10/16/08
Matrix:	Filtrate	Received:	10/16/08
Units:	ug/L		

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Arsenic	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Barium	110	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Beryllium	ND	2.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Cadmium	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Chromium	67	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Cobalt	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Copper	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Lead	ND	3.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Mercury	ND	0.20	143855	10/20/08	10/20/08	METHOD	EPA 7470A
Molybdenum	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Nickel	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Selenium	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Silver	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Thallium	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Vanadium	10	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Zinc	ND	20	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B

ND= Not Detected
RL= Reporting Limit

40.0

Curtis & Tompkins, Ltd.

Dissolved California Title 22 Metals

Lab #:	206946	Project#:	388-1856
Client:	Weiss Associates	Location:	UC Davis
Field ID:	GWGW2329	Diln Fac:	1.000
Lab ID:	206946-007	Sampled:	10/16/08
Matrix:	Filtrate	Received:	10/16/08
Units:	ug/L		

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Arsenic	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Barium	140	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Beryllium	ND	2.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Cadmium	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Chromium	40	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Cobalt	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Copper	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Lead	ND	3.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Mercury	ND	0.20	143855	10/20/08	10/20/08	METHOD	EPA 7470A
Molybdenum	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Nickel	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Selenium	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Silver	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Thallium	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Vanadium	9.6	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Zinc	ND	20	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B

ND= Not Detected
RL= Reporting Limit

41.0

Curtis & Tompkins, Ltd.

Dissolved California Title 22 Metals

Lab #:	206946	Project#:	388-1856
Client:	Weiss Associates	Location:	UC Davis
Field ID:	GWGW2327	Diln Fac:	1.000
Lab ID:	206946-008	Sampled:	10/16/08
Matrix:	Filtrate	Received:	10/16/08
Units:	ug/L		

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Arsenic	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Barium	56	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Beryllium	ND	2.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Cadmium	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Chromium	120	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Cobalt	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Copper	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Lead	ND	3.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Mercury	ND	0.20	143855	10/20/08	10/20/08	METHOD	EPA 7470A
Molybdenum	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Nickel	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Selenium	12	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Silver	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Thallium	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Vanadium	11	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Zinc	ND	20	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved California Title 22 Metals

Lab #:	206946	Project#:	388-1856
Client:	Weiss Associates	Location:	UC Davis
Field ID:	EBGW0016	Diln Fac:	1.000
Lab ID:	206946-014	Sampled:	10/16/08
Matrix:	Filtrate	Received:	10/16/08
Units:	ug/L	Analyzed:	10/21/08

Analyte	Result	RL	Batch#	Prepared	Prep	Analysis
Antimony	ND	10	143788	10/17/08	EPA 3010A	EPA 6010B
Arsenic	ND	5.0	143788	10/17/08	EPA 3010A	EPA 6010B
Barium	ND	5.0	143788	10/17/08	EPA 3010A	EPA 6010B
Beryllium	ND	2.0	143788	10/17/08	EPA 3010A	EPA 6010B
Cadmium	ND	5.0	143788	10/17/08	EPA 3010A	EPA 6010B
Chromium	ND	5.0	143788	10/17/08	EPA 3010A	EPA 6010B
Cobalt	ND	5.0	143788	10/17/08	EPA 3010A	EPA 6010B
Copper	ND	5.0	143788	10/17/08	EPA 3010A	EPA 6010B
Lead	ND	3.0	143788	10/17/08	EPA 3010A	EPA 6010B
Mercury	ND	0.20	143910	10/21/08	METHOD	EPA 7470A
Molybdenum	ND	5.0	143788	10/17/08	EPA 3010A	EPA 6010B
Nickel	ND	5.0	143788	10/17/08	EPA 3010A	EPA 6010B
Selenium	ND	10	143788	10/17/08	EPA 3010A	EPA 6010B
Silver	ND	5.0	143788	10/17/08	EPA 3010A	EPA 6010B
Thallium	ND	10	143788	10/17/08	EPA 3010A	EPA 6010B
Vanadium	ND	5.0	143788	10/17/08	EPA 3010A	EPA 6010B
Zinc	ND	20	143788	10/17/08	EPA 3010A	EPA 6010B

ND= Not Detected
RL= Reporting Limit

43.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC465807	Batch#:	143788
Matrix:	Filtrate	Prepared:	10/17/08
Units:	ug/L	Analyzed:	10/21/08

Analyte	Result	RL
Antimony	ND	10
Arsenic	ND	5.0
Barium	ND	5.0
Beryllium	ND	2.0
Cadmium	ND	5.0
Chromium	ND	5.0
Cobalt	ND	5.0
Copper	ND	5.0
Lead	ND	3.0
Molybdenum	ND	5.0
Nickel	ND	5.0
Selenium	ND	10
Silver	ND	5.0
Thallium	ND	10
Vanadium	ND	5.0
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Matrix:	Filtrate	Batch#:	143788
Units:	ug/L	Prepared:	10/17/08
Diln Fac:	1.000	Analyzed:	10/21/08

Type: BS Lab ID: QC465808

Analyte	Spiked	Result	%REC	Limits
Antimony	500.0	484.9	97	80-120
Arsenic	100.0	95.72	96	80-120
Barium	2,000	1,902	95	80-120
Beryllium	50.00	53.01	106	80-120
Cadmium	50.00	46.92	94	80-120
Chromium	200.0	195.4	98	80-120
Cobalt	500.0	461.0	92	80-120
Copper	250.0	236.3	95	80-120
Lead	100.0	99.98	100	80-120
Molybdenum	400.0	397.7	99	80-120
Nickel	500.0	470.2	94	80-120
Selenium	100.0	92.20	92	80-120
Silver	50.00	49.78	100	80-120
Thallium	100.0	97.42	97	80-120
Vanadium	500.0	493.2	99	80-120
Zinc	500.0	470.1	94	80-120

Type: BSD Lab ID: QC465809

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	500.0	481.5	96	80-120	1	20
Arsenic	100.0	95.35	95	80-120	0	20
Barium	2,000	1,909	95	80-120	0	20
Beryllium	50.00	52.98	106	80-120	0	20
Cadmium	50.00	46.78	94	80-120	0	20
Chromium	200.0	195.7	98	80-120	0	20
Cobalt	500.0	466.2	93	80-120	1	20
Copper	250.0	238.1	95	80-120	1	20
Lead	100.0	96.21	96	80-120	4	20
Molybdenum	400.0	398.1	100	80-120	0	20
Nickel	500.0	476.2	95	80-120	1	20
Selenium	100.0	93.96	94	80-120	2	20
Silver	50.00	49.90	100	80-120	0	20
Thallium	100.0	97.95	98	80-120	1	20
Vanadium	500.0	496.1	99	80-120	1	20
Zinc	500.0	475.2	95	80-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	143788
MSS Lab ID:	206762-001	Sampled:	10/09/08
Matrix:	Filtrate	Received:	10/10/08
Units:	ug/L	Prepared:	10/17/08
Diln Fac:	1.000	Analyzed:	10/21/08

Type: MS Lab ID: QC465810

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	<2.749	500.0	501.3	100	75-120
Arsenic	9.358	100.0	108.1	99	79-125
Barium	53.65	2,000	1,980	96	80-120
Beryllium	<0.1415	50.00	54.11	108	80-120
Cadmium	<1.469	50.00	45.91	92	80-120
Chromium	0.6709	200.0	195.2	97	78-120
Cobalt	3.735	500.0	455.6	90	76-120
Copper	<0.9723	250.0	243.6	97	75-120
Lead	<0.9197	100.0	77.33	77	71-120
Molybdenum	3.027	400.0	410.4	102	80-120
Nickel	1.867	500.0	457.9	91	74-120
Selenium	<2.464	100.0	98.93	99	73-125
Silver	<1.605	50.00	49.42	99	69-120
Thallium	<1.767	100.0	94.73	95	72-120
Vanadium	<0.9127	500.0	503.3	101	79-120
Zinc	<4.210	500.0	460.5	92	74-122

Type: MSD Lab ID: QC465811

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	500.0	502.7	101	75-120	0	20
Arsenic	100.0	106.2	97	79-125	2	20
Barium	2,000	1,981	96	80-120	0	20
Beryllium	50.00	53.87	108	80-120	0	20
Cadmium	50.00	45.47	91	80-120	1	20
Chromium	200.0	195.4	97	78-120	0	20
Cobalt	500.0	450.5	89	76-120	1	20
Copper	250.0	243.3	97	75-120	0	20
Lead	100.0	76.12	76	71-120	2	20
Molybdenum	400.0	406.6	101	80-120	1	20
Nickel	500.0	458.7	91	74-120	0	20
Selenium	100.0	98.18	98	73-125	1	20
Silver	50.00	49.66	99	69-120	0	20
Thallium	100.0	92.68	93	72-120	2	20
Vanadium	500.0	503.0	101	79-120	0	20
Zinc	500.0	455.8	91	74-122	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	143788
MSS Lab ID:	206762-001	Sampled:	10/09/08
Lab ID:	QC465812	Received:	10/10/08
Matrix:	Filtrate	Analyzed:	10/21/08
Units:	ug/L		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim
Antimony	ND	10.00	ND	41.23	NC	10
Arsenic	9.358	5.000	5.106 J	25.00	NC	10
Barium	53.65	5.000	55.10	25.00	3	10
Beryllium	ND	2.000	ND	10.00	NC	10
Cadmium	ND	5.000	ND	25.00	NC	10
Chromium	0.6709	5.000	ND	25.00	NC	10
Cobalt	3.735	5.000	3.539 J	25.00	NC	10
Copper	ND	5.000	ND	25.00	NC	10
Lead	ND	3.000	ND	15.00	NC	10
Molybdenum	3.027	5.000	5.338 J	25.00	NC	10
Nickel	1.867	5.000	ND	25.00	NC	10
Selenium	ND	10.00	ND	36.95	NC	10
Silver	ND	5.000	ND	25.00	NC	10
Thallium	ND	10.00	ND	26.51	NC	10
Vanadium	ND	5.000	ND	25.00	NC	10
Zinc	ND	20.00	ND	100.0	NC	10

J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	143788
MSS Lab ID:	206762-001	Sampled:	10/09/08
Lab ID:	QC465813	Received:	10/10/08
Matrix:	Filtrate	Analyzed:	10/21/08
Units:	ug/L		

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	<2.749	500.0	497.4	99	75-125
Arsenic	9.358	100.0	106.4	97	75-125
Barium	53.65	2,000	1,940	94	75-125
Beryllium	<0.1415	50.00	53.10	106	75-125
Cadmium	<1.469	50.00	45.26	91	75-125
Chromium	0.6709	200.0	193.0	96	75-125
Cobalt	3.735	500.0	446.9	89	75-125
Copper	<0.9723	250.0	240.1	96	75-125
Lead	<0.9197	100.0	74.83	75	75-125
Molybdenum	3.027	400.0	400.1	99	75-125
Nickel	1.867	500.0	452.3	90	75-125
Selenium	<2.464	100.0	95.17	95	75-125
Silver	<1.605	50.00	39.85	80	75-125
Thallium	<1.767	100.0	92.65	93	75-125
Vanadium	<0.9127	500.0	494.6	99	75-125
Zinc	<4.210	500.0	453.7	91	75-125

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	143855
Lab ID:	QC466122	Prepared:	10/20/08
Matrix:	Filtrate	Analyzed:	10/20/08
Units:	ug/L		

Result	RL
ND	0.20

ND= Not Detected
RL= Reporting Limit

45.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	143855
Matrix:	Filtrate	Prepared:	10/20/08
Units:	ug/L	Analyzed:	10/20/08
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC466123	5.000	5.200	104	80-120		
BSD	QC466124	5.000	5.190	104	80-120	0	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	143855
Field ID:	ZZZZZZZZZZ	Sampled:	10/09/08
MSS Lab ID:	206743-001	Received:	10/09/08
Matrix:	Filtrate	Prepared:	10/20/08
Units:	ug/L	Analyzed:	10/20/08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC466125	<0.05879	5.000	5.280	106	71-124		
MSD	QC466126		5.000	5.270	105	71-124	0	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	143855
MSS Lab ID:	206743-001	Sampled:	10/09/08
Lab ID:	QC466127	Received:	10/09/08
Matrix:	Filtrate	Analyzed:	10/20/08

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

53.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	143910
Lab ID:	QC466344	Prepared:	10/21/08
Matrix:	Water	Analyzed:	10/21/08
Units:	ug/L		

Result	RL
ND	0.20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	143910
Matrix:	Water	Prepared:	10/21/08
Units:	ug/L	Analyzed:	10/21/08
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC466345	5.000	5.470	109	80-120		
BSD	QC466346	5.000	5.480	110	80-120	0	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	143910
Field ID:	ZZZZZZZZZZ	Sampled:	10/13/08
MSS Lab ID:	206824-011	Received:	10/13/08
Matrix:	Filtrate	Prepared:	10/21/08
Units:	ug/L	Analyzed:	10/21/08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC466347	<0.04502	5.000	6.050	121	71-124		
MSD	QC466348		5.000	6.010	120	71-124	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	143910
MSS Lab ID:	206824-011	Sampled:	10/13/08
Lab ID:	QC466349	Received:	10/13/08
Matrix:	Filtrate	Analyzed:	10/21/08

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Nitrate Nitrogen

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Units:	mg/L
Matrix:	Water	Received:	10/16/08

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Sampled	Analyzed
GWGW2351	SAMPLE	206946-001	5.5	0.10	2.000	143778	10/16/08 08:50	10/17/08 16:36
GWGW2331A	SAMPLE	206946-004	13	0.50	10.00	143797	10/16/08 09:40	10/17/08 19:23
GWGW2331B	SAMPLE	206946-005	13	0.50	10.00	143797	10/16/08 09:40	10/17/08 14:04
GWGW2330	SAMPLE	206946-006	3.9	0.10	2.000	143797	10/16/08 11:35	10/17/08 19:05
GWGW2329	SAMPLE	206946-007	0.65	0.05	1.000	143797	10/16/08 14:00	10/17/08 16:01
	BLANK	QC465762	ND	0.05	1.000	143778		10/17/08 07:48
	BLANK	QC465861	ND	0.05	1.000	143797		10/17/08 12:18

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Nitrate Nitrogen

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Received:	10/16/08
Units:	mg/L		

Field ID	Type	MSS Lab ID	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Analyzed
	BS		QC465763	Water		1.000	0.9735	97	80-120			1.000	143778		10/17/08 08:39
	BSD		QC465764	Water		1.000	0.9714	97	80-120	0	20	1.000	143778		10/17/08 08:57
TPEF0363	MS	206946-003	QC465923	Filtrate	9.658	2.500	12.02	95	80-120			5.000	143778	10/16/08 08:30	10/17/08 17:28
TPEF0363	MSD	206946-003	QC465924	Filtrate		2.500	11.95	92	80-120	1	20	5.000	143778	10/16/08 08:30	10/17/08 17:45
	BS		QC465862	Water		1.000	1.035	103	80-120			1.000	143797		10/17/08 12:37
	BSD		QC465863	Water		1.000	1.018	102	80-120	2	20	1.000	143797		10/17/08 12:55
GWGW2331A	MS	206946-004	QC465910	Water	12.66	10.00	23.09	104	80-120			20.00	143797	10/16/08 09:40	10/17/08 16:56
GWGW2331A	MSD	206946-004	QC465911	Water		10.00	22.83	102	80-120	1	20	20.00	143797	10/16/08 09:40	10/17/08 17:13

RPD= Relative Percent Difference

20.0

Curtis & Tompkins, Ltd.

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Dissolved Curtis & Tompkins Laboratories Analytical Report

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Analysis:	EPA 300.0
Project#:	388-1856		
Units:	mg/L	Received:	10/16/08
Batch#:	143778		

Field ID:	TPEF0363	Matrix:	Filtrate
Type:	SAMPLE	Sampled:	10/16/08 08:30
Lab ID:	206946-003		

Analyte	Result	RL	Diln Fac	Analyzed
Chloride	19	0.20	1.000	10/17/08 09:42
Nitrogen, Nitrate	9.7	0.25	5.000	10/17/08 16:53
Sulfate	49	0.50	1.000	10/17/08 09:42

Field ID:	GWGW2327	Matrix:	Filtrate
Type:	SAMPLE	Sampled:	10/16/08 13:55
Lab ID:	206946-008		

Analyte	Result	RL	Diln Fac	Analyzed
Fluoride	0.28	0.10	1.000	10/17/08 10:00
Chloride	56	2.0	10.00	10/17/08 17:11
Nitrogen, Nitrate	27	0.50	10.00	10/17/08 17:11
Sulfate	160	5.0	10.00	10/17/08 17:11

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC465762	Analyzed:	10/17/08 07:48
Matrix:	Water		

Analyte	Result	RL
Fluoride	ND	0.10
Chloride	ND	0.20
Nitrogen, Nitrate	ND	0.05
Sulfate	ND	0.50

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Curtis & Tompkins Laboratories Analytical Report

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Analysis:	EPA 300.0
Project#:	388-1856		
Matrix:	Water	Diln Fac:	1.000
Units:	mg/L	Batch#:	143778

Type: BS Analyzed: 10/17/08 08:39
Lab ID: QC465763

Analyte	Spiked	Result	%REC	Limits
Fluoride	2.000	2.066	103	74-120
Chloride	4.000	4.001	100	80-120
Nitrogen, Nitrate	1.000	0.9735	97	80-120
Sulfate	10.00	9.869	99	80-120

Type: BSD Analyzed: 10/17/08 08:57
Lab ID: QC465764

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Fluoride	2.000	1.994	100	74-120	4	20
Chloride	4.000	3.929	98	80-120	2	20
Nitrogen, Nitrate	1.000	0.9714	97	80-120	0	20
Sulfate	10.00	9.437	94	80-120	4	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Curtis & Tompkins Laboratories Analytical Report

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Analysis:	EPA 300.0
Project#:	388-1856		
Field ID:	TPEF0363	Diln Fac:	5.000
MSS Lab ID:	206946-003	Batch#:	143778
Matrix:	Filtrate	Sampled:	10/16/08 08:30
Units:	mg/L	Received:	10/16/08

Type: MS Analyzed: 10/17/08 17:28
Lab ID: QC465923

Analyte	MSS Result	Spiked	Result	%REC	Limits
Fluoride	<0.03347	5.000	5.895	118	66-120
Chloride	18.93	10.00	29.06	101	80-120
Nitrogen, Nitrate	9.658	2.500	12.02	95	80-120
Sulfate	48.83	25.00	70.47	87	80-120

Type: MSD Analyzed: 10/17/08 17:45
Lab ID: QC465924

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Fluoride	5.000	5.456	109	66-120	8	20
Chloride	10.00	28.66	97	80-120	1	20
Nitrogen, Nitrate	2.500	11.95	92	80-120	1	20
Sulfate	25.00	70.85	88	80-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Hexavalent Chromium

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Field ID:	EBGW0016	Batch#:	143756
Matrix:	Water	Sampled:	10/16/08 15:15
Units:	ug/L	Received:	10/16/08

Type	Lab ID	Result	RL	Analyzed
SAMPLE	206946-014	ND	1.0	10/16/08 18:54
BLANK	QC465684	ND	1.0	10/16/08 13:19

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Hexavalent Chromium

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	143756
MSS Lab ID:	206941-004	Sampled:	10/16/08 08:26
Matrix:	Water	Received:	10/16/08
Units:	ug/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
BS	QC465685		20.00	20.07	100	90-110			10/16/08 13:32
BSD	QC465686		20.00	19.60	98	90-110	2	20	10/16/08 13:44
MS	QC465687	<0.1302	10.00	8.082	81 *	85-115			10/16/08 19:39
MSD	QC465688		10.00	8.012	80 *	85-115	1	20	10/16/08 19:51

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Hexavalent Chromium

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Batch#:	143756
Field ID:	GWGW2327	Sampled:	10/16/08 13:55
Units:	ug/L	Received:	10/16/08
Diln Fac:	1.000		

Type	Lab ID	Matrix	Result	RL	Analyzed
SAMPLE	206946-008	Filtrate	120	1.0	10/16/08 20:05
BLANK	QC465684	Water	ND	1.0	10/16/08 13:19

ND= Not Detected
RL= Reporting Limit

9.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Hexavalent Chromium

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	143756
MSS Lab ID:	206941-004	Sampled:	10/16/08 08:26
Matrix:	Water	Received:	10/16/08
Units:	ug/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
BS	QC465685		20.00	20.07	100	90-110			10/16/08 13:32
BSD	QC465686		20.00	19.60	98	90-110	2	20	10/16/08 13:44
MS	QC465687	<0.1302	10.00	8.082	81 *	85-115			10/16/08 19:39
MSD	QC465688		10.00	8.012	80 *	85-115	1	20	10/16/08 19:51

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Matrix:	Water	Sampled:	10/16/08
Units:	mg/L	Received:	10/16/08
Batch#:	143883	Analyzed:	10/20/08

Field ID:	TPEF0363	Lab ID:	206946-003
Type:	SAMPLE	Diln Fac:	6.700

Analyte	Result	RL
Alkalinity, Bicarbonate	460	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	460	6.7

Field ID:	GWGW2327	Lab ID:	206946-008
Type:	SAMPLE	Diln Fac:	6.700

Analyte	Result	RL
Alkalinity, Bicarbonate	740	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	740	6.7

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC466226		

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	4.000
Lab ID:	QC466227	Batch#:	143883
Matrix:	Water	Analyzed:	10/20/08

Spiked	Result	%REC	Limits
200.0	193.2	97	90-110

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	4.000
Field ID:	ZZZZZZZZZZ	Batch#:	143883
MSS Lab ID:	206961-001	Sampled:	10/15/08
Matrix:	Water	Received:	10/17/08
Units:	mg/L	Analyzed:	10/20/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC466228	806.7	200.0	991.6	92	80-120		
MSD	QC466229		200.0	993.6	93	80-120	0	25

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Organic Carbon (DOC)

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Dissolved Organic Carbon	Batch#:	143777
Field ID:	GWGW2327	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	mg/L	Analyzed:	10/17/08
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	206946-008	1.1	1.0
BLANK	QC465758	ND	1.0

ND= Not Detected
RL= Reporting Limit

5.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Organic Carbon (DOC)

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Dissolved Organic Carbon	Batch#:	143777
Field ID:	ZZZZZZZZZZ	Sampled:	10/16/08
MSS Lab ID:	206947-001	Received:	10/16/08
Matrix:	Water	Analyzed:	10/17/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
LCS	QC465759		10.00	10.70	107	90-110			1.000
MS	QC465760	0.9204	10.00	12.02	111	80-121			2.000
MSD	QC465761		10.00	11.84	109	80-121	2	20	2.000

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Ferrous Iron (Fe+2)

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM3500FE-B
Analyte:	Ferrous Iron (Fe+2)	Diln Fac:	1.000
Field ID:	GWGW2327	Batch#:	143763
Matrix:	Water	Sampled:	10/16/08 13:55
Units:	mg/L	Received:	10/16/08

Type	Lab ID	Result	RL	Prepared	Analyzed
SAMPLE	206946-008	ND	0.10	10/16/08 20:45	10/16/08 20:49
BLANK	QC465713	ND	0.10	10/16/08 19:45	10/16/08 19:52

ND= Not Detected
RL= Reporting Limit

35.0

Curtis & Tompkins, Ltd.

Batch QC Report

Ferrous Iron (Fe+2)

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM3500FE-B
Analyte:	Ferrous Iron (Fe+2)	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	143763
MSS Lab ID:	206944-008	Sampled:	10/16/08 13:45
Matrix:	Water	Received:	10/16/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Prepared	Analyzed
LCS	QC465714		0.8000	0.7959	99	90-110			10/16/08 19:45	10/16/08 19:52
MS	QC465715	11.06	100.0	102.1	91	73-136			10/16/08 20:30	10/16/08 20:39
MSD	QC465716		100.0	100.7	90	73-136	1	20	10/16/08 20:30	10/16/08 20:39

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2540C
Analyte:	Total Dissolved Solids	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	mg/L	Prepared:	10/17/08
Batch#:	143800	Analyzed:	10/20/08

Field ID	Type	Lab ID	Result	RL	Diln Fac
TPEF0363	SAMPLE	206946-003	580	11	1.111
GWGW2327	SAMPLE	206946-008	1,150	13	1.250
	BLANK	QC465878	ND	10	1.000

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Dissolved Solids (TDS)

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2540C
Analyte:	Total Dissolved Solids	Batch#:	143800
Field ID:	ZZZZZZZZZZ	Sampled:	10/14/08
MSS Lab ID:	206852-002	Received:	10/14/08
Matrix:	Water	Prepared:	10/17/08
Units:	mg/L	Analyzed:	10/20/08

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim	Diln Fac
BS	QC465879		104.0	88.00		85	73-120			1.000
BSD	QC465880		104.0	98.00		94	73-120	11	22	1.000
SDUP	QC465881	41,100		41,900	500.0			2	20	50.00

RL= Reporting Limit
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Organic Carbon (TOC)

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Batch#:	143927
Matrix:	Water	Sampled:	10/16/08
Units:	mg/L	Received:	10/16/08
Diln Fac:	1.000	Analyzed:	10/21/08

Field ID	Type	Lab ID	Result	RL
TPIN0363	SAMPLE	206946-002	0.74	0.50
GWGW2327	SAMPLE	206946-008	1.1	0.50
	BLANK	QC466428	ND	0.50

ND= Not Detected
RL= Reporting Limit

65.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Organic Carbon (TOC)

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Batch#:	143927
Field ID:	ZZZZZZZZZZ	Sampled:	10/13/08
MSS Lab ID:	206839-001	Received:	10/14/08
Matrix:	Water	Analyzed:	10/21/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
LCS	QC466429		10.00	9.632	96	90-110			1.000
MS	QC466430	1.160	10.00	10.63	95	62-124			2.000
MSD	QC466431		10.00	10.72	96	62-124	1	20	2.000

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Orthophosphate Phosphorous

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Analysis:	SM4500P-E
Project#:	388-1856		
Analyte:	Orthophosphate (as P)	Batch#:	143826
Field ID:	GWGW2327	Sampled:	10/16/08 13:55
Matrix:	Filtrate	Received:	10/16/08
Units:	mg/L	Analyzed:	10/18/08 11:00
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	206946-008	0.17	0.030
BLANK	QC465980	ND	0.030

ND= Not Detected
RL= Reporting Limit

17.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Orthophosphate Phosphorous

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Analysis:	SM4500P-E
Project#:	388-1856		
Analyte:	Orthophosphate (as P)	Diln Fac:	1.000
Field ID:	GWGW2327	Batch#:	143826
MSS Lab ID:	206946-008	Sampled:	10/16/08 13:55
Matrix:	Filtrate	Received:	10/16/08
Units:	mg/L	Analyzed:	10/18/08 11:00

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC465981		0.4000	0.3978	99	80-120		
MS	QC465982	0.1738	0.4000	0.5663	98	80-136		
MSD	QC465983		0.4000	0.5694	99	80-136	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Total Phosphorous

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Analysis:	SM4500P-E
Project#:	388-1856		
Analyte:	Phosphorous	Sampled:	10/16/08
Units:	mg/L	Received:	10/16/08
Batch#:	143776	Analyzed:	10/17/08

Field ID	Type	Lab ID	Matrix	Result	RL	Diln Fac
GWGW2327	SAMPLE	206946-008	Filtrate	0.18	0.050	1.667
GWGW2310	SAMPLE	206946-009	Filtrate	0.17	0.050	1.667
GWGW2308	SAMPLE	206946-010	Filtrate	0.25	0.050	1.667
GWGW2317	SAMPLE	206946-011	Filtrate	0.12	0.050	1.667
GWGW2307	SAMPLE	206946-012	Filtrate	0.16	0.050	1.667
	BLANK	QC465754	Water	ND	0.030	1.000

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Total Phosphorous

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Analysis:	SM4500P-E
Project#:	388-1856		
Analyte:	Phosphorous	Batch#:	143776
Field ID:	GWGW2360	Sampled:	10/13/08
MSS Lab ID:	206823-006	Received:	10/13/08
Matrix:	Water	Analyzed:	10/17/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
LCS	QC465755		0.3960	0.4179	106	72-134			1.000
MS	QC465756	0.1079	0.3960	0.5041	100	19-182			1.667
MSD	QC465757		0.3960	0.5207	104	19-182	3	26	1.667

RPD= Relative Percent Difference

Micah Smith 207222

From: "Tim R. Utterback" <tru@weiss.com>
To: "Micah Smith" <micah.smith@ctberk.com>
Cc: "John Goyette" <goyette@ctberk.com>
Sent: Friday, October 24, 2008 5:31 PM
Subject: Perchlorate Analysis Request

Micah,
Please login perchlorate by EPA 314.0 on the following samples
previously received by C&T:
GWGW2307
GWGW2308
GWGW2309
GWGW2310
GWGW2317
GWGW2329
GWGW2353
GWGW2361
Please analyze from the unpreserved, filtered fractions if available.
Use unpreserved, unfiltered sample if filtered is not available.
According to my records, only unfiltered sample is available for samples
GWGW2309, GWGW2329 and GWGW2353. The rest should have filtered sample.
My records show these samples have at least 11 days left before the
holding time expires, so holding time should not be a problem. John
provided a unit cost of $70 for perchlorate analysis.
Thanks,
-Tim

>>> John Goyette <goyette@ctberk.com> 10/24/2008 4:49 pm >>>
Hi Tim.

Perchlorate would be $70 for this project.

thanks

John Goyette
Senior Program Manager
(510) 204-2233
curtisandtompkins.com

Tim R. Utterback wrote:
> John, Micah,
> UCD wants to run perchlorate analysis EPA 314.0 on some of the
samples
> submitted to C&T about 2 weeks ago. Please provide a cost.
> Thanks,

206717

Chain of Custody Record

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-16
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AguaTierra Associates Incorporated, DBA

Client Contact	Project Manager: Bob Devany	Sampled by: JMD	Date: 10/8/08	COC Number: UCD
Weiss Associates	Tel: 510-450-6144	Lab Contact:	Carrier:	Page 1 of 1
5801 Christie Avenue, Suite 600	Analysis Turnaround Time			Job No.
Emeryville, CA 94608	Calendar (C) or Work Days (W) --- 5W			
(510) 450-6000 Phone	TAT if different from Below _____			SDG No.
(510) 547-5043 FAX	☐ 2 weeks			
	☐ 1 week			
Job Name: UC Davis	☐ 2 days			
Address: One Shields Ave, Davis	☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	VOCs (8260)	Nitrate (EPA 300.0)*	Cr (6010B)	Title 22 Metals (6010B)	TOC (SM 5310C)	TDS (SM2540C)	Alkalinity (SM2320B)	Ca,K,Mg,Na (6010)	Chlorate, Sulfate (EPA 300.0)	1,4-dioxane (8270-SIM)	TOC	Fe,II CO_3,HCO_3,Fl,Cl,NO3	SO_4, Cr VI	Phosphate	1,4 Dioxane	Sample Specific Notes:
-1	GWGW2309	10/7/08	1500	W	W	3		X	X							X						*needs to be analyzed in 24 hours
-2	~~GWGW~~ GWGW2307	10/8/08	1245	W	W	12	X				X	X		X			X	X	X	X		
-3	GWGW2310	10/8/08	1055	W	W	9					X	X		X			X	X	X	X		
	TBGW0513	10/8/08	0800	W	W	1	X															~~HOLD~~ AMK 10/08/08

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **Level III Reporting**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Weiss Assoc	10/08/08 1530	[signature]	C&T	10/8/08 1530
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Micah Smith

From: "Tim R. Utterback" <tru@weiss.com>
To: "Micah Smith" <micah.smith@ctberk.com>
Cc: "Anja Verce" <av@weiss.com>; "Tom Fojut" <tjf@weiss.com>
Sent: Monday, October 13, 2008 5:12 PM
Subject: Re: 388-1856 - C&T Login Summary (206717)

Micah,
There were several missing analysis requests on the chain of custody for login 206717. There should be sufficient sample volume for the following added analysis requests.
For sample GWGW2307 please add:
Mn, Fe, B, Cr, Ni by Method 6010
Hardness by EPA 130.2 or SM2340B

For sample GWGW2310 please add:
Mn, Fe, B, Cr, Ni by Method 6010
Hardness by EPA 130.2 or SM2340B
Sulfate by EPA method 300.0

Do not analyze sample GWGW2310 for Cr6+. Its too far outside holding time. We will recollect this sample.
Thanks,
-Tim

>>> "Micah Smith" <micah.smith@ctberk.com> 10/13/2008 12:10 pm >>>

Does sample #3 need Sulfate and Hexavalent Chromium? Thanks Micah
C&T Login Summary for 206717

Project:388-1856
Site:UC Davis
Lab Login #:206717
Report Due:10/15/08
PO#:
C&T Proj Mgr:Micah Smith

Report To:Weiss Associates

5801 Christie Avenue

Suite 600

Emeryville, CA 94608

ATTN: Tim Utterback

(510) 450-6000

Bill To:Weiss Associates

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 206717 Date Received 10/8/08 Number of coolers 1
Client WESSE Project UCDAVIS

Date Opened 10/8 By (print) K Wellbrock (sign) K Wellbrock
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc)? ..... YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____

2B. Were custody seals intact upon arrival? ..... YES NO (N/A)

3. Were custody papers dry and intact when received? ..... (YES) NO

4. Were custody papers filled out properly (ink, signed, etc)? ..... (YES) NO

5. Is the project identifiable from custody papers? (If so fill out top of form) ..... (YES) NO

6. Indicate the packing in cooler: (if other, describe) _____

   ☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

   Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) _____

   ☒ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ..... YES (NO)
   If YES, what time were they transferred to freezer? _____

9. Did all bottles arrive unbroken/unopened? ..... (YES) NO

10. Are samples in the appropriate containers for indicated tests? ..... (YES) NO

11. Are sample labels present, in good condition and complete? ..... (YES) NO

12. Do the sample labels agree with custody papers? ..... (YES) NO

13. Was sufficient amount of sample sent for tests requested? ..... (YES) NO

14. Are the samples appropriately preserved? ..... (YES) NO

15. Are bubbles > 6mm absent in VOA samples? ..... (YES) NO N/A

16. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

Only 11 containers for sample GWGW2307
Sent 1 VOA for Trip Blank – logged in ~~on hold~~ at end

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1

Rev. 6 Number 1 of 3
Effective: 23 July 2008
F:\qc\forms\checklists\Cooler Receipt Checklist_rv6.doc

206749

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-16
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AguaTierra Associates Incorporated, DBA

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Client Contact	Project Manager: Bob Devany	Sampled by: JMD/KIAA	Date: 10/8 & 10/9/08	COC Number: UCD
Weiss Associates	Tel: 510-450-6144	Lab Contact:	Carrier:	Page 1 of 2
5801 Christie Avenue, Suite 600	Analysis Turnaround Time			Job No.
Emeryville, CA 94608	Calendar (C) or Work Days (W) 5W			SDG No.
(510) 450-6000 Phone	TAT if different from Below _____			
(510) 547-5043 FAX	☐ 2 weeks			
	☐ 1 week			
Job Name: UC Davis	☒ 2 days			
Address: One Shields Ave, Davis	☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	VOCs (8260)	Nitrate (EPA 300.0)	Cr (6010B)	Title 22 Metals (6010B)	TOC (SM 5310C)	TDS (SM2540C)	Alkalinity (SM2320B)	Ca,K,Mg,Na (6010)	Chlorate, Sulfate (EPA 300.0)	1,4 Dioxane	dissolved organic carbon	nickel, EPA (130.2)	hardness (EPA 130.2)	phosphate	Fe II *	carbonate, bicarbonate	Cr VI *	F-	Sample Specific Notes:
1	GWGW2314 •	10/8/08	1715		W	2										X									
2	GWGW2308	10/9/08	0830		W	12	X	X	X		X	X		X	X	X	X	X	X	X	X	X	X	X	* 24 hr hold time ☐ 48 hr hold time
3	TBGW0514	10/9/08	0910		W	1	X																		
4	GWGW2311 •	10/9/08	0910		W	2		X	X																☐ 48 hr hold time
5	GWGW2320A •	10/9/08	1000		W	5	X	X	X																☐ 48 hr hold time
6	GWGW2320B •	10/9/08	1000		W	5	X	X	X																☐ 48 hr hold time
7	GWGW2319 •	10/9/08	1000		W	4	X	X																	☐ 48 hr hold time
8	GWGW2312 •	10/9/08	1045		W	4		X	X							X									☐ 48 hr hold

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For _____ Months*

Special Instructions/QC Requirements & Comments: **Level III Reporting**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
KIAN ATKINSON	WEISS ASSOC	10/9/08 1500	[illegible]	10/9/08 1500	[illegible]
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

*RECEIVED ON ICE

206749

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

Project ID: 388-1856-1-16
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AquaTerra Associates Incorporated, DBA

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Client Contact
Weiss Associates
5801 Christie Avenue, Suite 600
Emeryville, CA 94608
(510) 450-6000 Phone
(510) 547-5043 FAX

Job Name: UC Davis
Address: One Shields Ave, Davis

Project Manager: Bob Devany
Tel: 510-450-6144

Analysis Turnaround Time
Calendar (C) or Work Days (W) --- 5W
TAT if different from Below _____
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sampled by: KHA/JMD
Date: 10/9/08
Lab Contact:
Carrier:

COC Number: UCD
Page 2 of 2
Job No.
SDG No.

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	VOCs (8260)	Nitrate (EPA 300.0) ☐	Cr (6010B)	Dissolved Organic Carbon SM5310B	Ca, Mg, K, Na, Ni, Mn, Fe, B (6010B)	Cr6+ (7199)	Fe II (SM3500 FeD)	Chlorate, Sulfate (EPA 300.0)	Phosphate (SM4500-PE)	Carbonate, Bicarbonate (EPA 310.1)	Fluoride (SM 4500-Fl)	TOC (SM 5310C)	TDS (SM 2540C)	Title 22 Metals (6010B)	Alkalinity (SM2320B)	Sample Specific Notes:
9	GWGW 2316 •	10/9/08	1130	W	W	5	X	X	X													☐ 48 hour hold
10	GW GW 2353	10/9/08	1340	W	W	5	X	X	X													
11	GWGW 2350	10/9/08	1255	W	W	1		X														
12	GWGW 2321	10/9/08	1355	W	W	2		X	X													

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **Level III Reporting**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
KHA ATCHSON	WEISS ASSOC.	10/9/08 1500	[illegible]	C&T	10/9/08 1500
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

* RECEIVED ON ICE

Micah Smith

From: "Tim R. Utterback" <tru@weiss.com>
To: "Micah Smith" <micah.smith@ctberk.com>
Sent: Tuesday, October 14, 2008 12:39 PM
Subject: Re: 388-1856 - C&T Login Summary (206749)

Micah,
The COC for Login# 206749 was missing the analysis request for Mn, Fe and B for sample GWGW2308. Please add these analytes to the request for this sample. Analyze Mn, Fe and B from the filtered/HNO3 preserved sample.
Thanks,
-Tim

>>> "Micah Smith" <micah.smith@ctberk.com> 10/10/2008 3:40 pm >>>
C&T Login Summary for 206749

Project:388-1856
Site:UC Davis
Lab Login #:206749
Report Due:10/16/08
PO#:
C&T Proj Mgr:Micah Smith

Report To:Weiss Associates

5801 Christie Avenue

Suite 600

Emeryville, CA 94608

ATTN: Tim Utterback

(510) 450-6000

Bill To:Weiss Associates

5801 Christie Avenue

Suite 600

Emeryville, CA 94608

ATTN: Accounts Payable

(510) 450-6000
Hex Cr soils analyze within 5 days; use Project ID as Project#

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd

Login # 206749 Date Received 10/9/08 Number of coolers 1
Client WEISSE Project UCDavis

Date Opened 10/9 By (print) K Wellbrock (sign) K Wellbrock
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc)? ..... YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? ..... YES NO N/A
3. Were custody papers dry and intact when received? ..... (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? ..... (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ..... (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

   ☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

   Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) _____

   ☒ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ..... YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? ..... (YES) NO
10. Are samples in the appropriate containers for indicated tests? ..... (YES) NO
11. Are sample labels present, in good condition and complete? ..... (YES) NO
12. Do the sample labels agree with custody papers? ..... (YES) NO
13. Was sufficient amount of sample sent for tests requested? ..... (YES) NO
14. Are the samples appropriately preserved? ..... (YES) NO N/A
15. Are bubbles > 6mm absent in VOA samples? ..... (YES) NO N/A
16. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

206870

Chain of Custody Record

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-16
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AquaTierra Associates Incorporated, DBA

Client Contact
Weiss Associates
5801 Christie Avenue, Suite 600
Emeryville, CA 94608
(510) 450-6000 Phone
(510) 547-5043 FAX
Job Name: UC Davis
Address: One Shields Ave, Davis

Project Manager: Bob Devany
Tel: 510-450-6144

Analysis Turnaround Time
Calendar (C) or Work Days (W) --- 5W
TAT if different from Below _____
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sampled by: KHA / JMD
Lab Contact:
Date: 10/14/08
Carrier:
COC Number: UCD
Page 1 of ____
Job No.
SDG No.

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Dissolved Organic Carbon SM5310B	Cr, Mn, Fe, B (6010B)	Cr6+ (7199)	Fe II (SM3500 FeD)	Ca, Mg, K, Na, Ni (6010B)	Chlorate, Nitrate, Sulfate (EPA 300.0)	Phosphate (SM4500-PE)	Carbonate, Bicarbonate (EPA 310.1)	Fluoride (SM 4500-F)	TOC (SM 5310C)	TDS (SM 2540C)	VOCs (8260)	Pesticides (8081)	PCBs (8082)	Title 22 Metals (6010B)	Hardness	Total Cr	Nitrate-N	Sample Specific Notes:
1.	GWGW2322	10/14/08	1620		W	2		X				X													
2.	GWGW2354A	10/14/08	1615		W	5												X					X	X	
3.	GWGW2354B	10/14/08	1615		W	2	DW				DW												X	X	
4.	GWGW2328A	10/14/08	1035		W	7	X	X	X	X	X	X	X	X	X	X	X					X			24hr Hold
5.	GWGW2328B	10/14/08	1035		W	7	X	X	X	X	X	X	X	X	X	X	X					X			24hr Hold
6.	GWGW2361	10/14/08	1120		W	10	X	X	X	X	X	X	X	X	X	X	X	X				X			
7.	GWGW2326	10/14/08	1215		W	10	X	X	X	X	X	X	X	X	X	X	X	X				X			24hr Hold
8.	TBGW0517	10/14/08	0600		W	1												X							
9.	GWGW2317	10/14/08	1500		W	1						X													

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **Level III Reporting**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Weiss	10/14/08	[signature]	CT	10/14/08 1526
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

intact on ice cold RC

Micah Smith

From: "Tim R. Utterback" <tru@weiss.com>
To: "Micah Smith" <micah.smith@ctberk.com>
Sent: Wednesday, October 15, 2008 2:11 PM
Subject: Re: 388-1856 - C&T Login Summary (206870)

Micah,
The Chain-of-custody was incorrect for sample GWGW2322. Please only analyze this sample for Cr and Nitrate-N. Please remove Mn, Fe, B, chloride and sulfate from the analysis request for sample GWGW2322.
Thanks,
-Tim

>>> "Micah Smith" <micah.smith@ctberk.com> 10/15/2008 10:51 am >>>

Anja sent an email saying that Phosphate should be run as Ortho-phosphate. I have only logged these samples for PO4-O. There were bottles for PO4-T but these do have a bit on sediment in them. I have poured of an aliquot from the field filtered samples and preserved them at 20:25 on 10/14/08. Please let me know if Total Phosphate needs to be analyzed for these sample. Thanks Micah
C&T Login Summary for 206870

Project:388-1856
Site:UC Davis
Lab Login #:206870
Report Due:10/21/08
PO#:
C&T Proj Mgr:Micah Smith

Report To:Weiss Associates

5801 Christie Avenue

Suite 600

Emeryville, CA 94608

ATTN: Tim Utterback

(510) 450-6000

Bill To:Weiss Associates

5801 Christie Avenue

Suite 600

Emeryville, CA 94608

Micah Smith

From: "Tim R. Utterback" <tru@weiss.com>
To: "Micah Smith" <micah.smith@ctberk.com>
Cc: "Anja Verce" <av@weiss.com>
Sent: Wednesday, October 15, 2008 1:05 PM
Subject: Re: 388-1856 - C&T Login Summary (206870)

Micah,
Yes, please analyze the field filtered aliquot that you preserved for PO4-Total.
Thanks,
-Tim

>>> "Micah Smith" <micah.smith@ctberk.com> 10/15/2008 10:51 am >>>

Anja sent an email saying that Phosphate should be run as Ortho-phosphate. I have only logged these samples for PO4-O. There were bottles for PO4-T but these do have a bit on sediment in them. I have poured of an aliquot from the field filtered samples and preserved them at 20:25 on 10/14/08. Please let me know if Total Phosphate needs to be analyzed for these sample. Thanks Micah
C&T Login Summary for 206870

Project:388-1856
Site:UC Davis
Lab Login #:206870
Report Due:10/21/08
PO#:
C&T Proj Mgr:Micah Smith

Report To:Weiss Associates

5801 Christie Avenue

Suite 600

Emeryville, CA 94608

ATTN: Tim Utterback

(510) 450-6000

Bill To:Weiss Associates

5801 Christie Avenue

Suite 600

Emeryville, CA 94608

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 206870 Date Received 10/14/08 Number of coolers 2
Client WEISS ASSOCIATES Project UC DAVIS

Date Opened 10-14-08 By (print) SAM EVANS (sign)
Date Logged in ✓ By (print) M. VILLANUEVA (sign)

1. Did cooler come with a shipping slip (airbill, etc)?.....YES NO
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? ..... YES NO N/A
3. Were custody papers dry and intact when received?.....YES NO
4. Were custody papers filled out properly (ink, signed, etc)?.....YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form)..... YES NO
6. Indicate the packing in cooler: (if other, describe) _____

☒ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) _____

☒ Samples Received on ice & cold without a temperature blank

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? .....YES NO
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened?.....YES NO
10. Are samples in the appropriate containers for indicated tests? .....YES NO
11. Are sample labels present, in good condition and complete? .....YES NO
12. Do the sample labels agree with custody papers? .....YES NO
13. Was sufficient amount of sample sent for tests requested? .....YES NO
14. Are the samples appropriately preserved? .....YES NO N/A
15. Are bubbles > 6mm absent in VOA samples?.....YES NO N/A
16. Was the client contacted concerning this sample delivery?.....YES NO
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

206946

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-16
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AquaTerra Associates Incorporated, DBA

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Client Contact		Project Manager: Bob Devany	Sampled by: [illegible]	Date: 10/16/08	COC Number: UCD
Weiss Associates		Tel: 510-450-6144	Lab Contact:	Carrier:	Page____ of ____
5801 Christie Avenue, Suite 600		Analysis Turnaround Time			Job No.
Emeryville, CA 94608		Calendar (C) or Work Days (W) --- 5W			
(510) 450-6000	Phone	TAT if different from Below ____			SDG No.
(510) 547-5043	FAX	☐ 2 weeks			
		☐ 1 week			
Job Name: UC Davis		☐ 2 days			
Address: One Shields Ave, Davis		☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Dissolved Organic Carbon SM5310B	Nitrate Hg B (6010B)	Cr6+ (7199)	Fe II (SM3500 FeD)	Ca, Mg, K, Na, Ni (6010B)	Chloride, Nitrate, Sulfate (EPA 300.0)	Total Phosphate (SM4500-PE)	Carbonate, Bicarbonate (EPA 310.1)	Fluoride (SM 4500-F)	TOC (SM 5310C)	TDS (SM 2540C)	VOCs (8260)	Pesticides (8081)	PCBs (8082)	Title 22 Metals (6010B)	Total Cr (6010B)	Ortho Phosphate (SM4500-PE)	Hardness (EPA 130.2)	Sample Specific Notes:
10	GWGW2308	10/16/08	1130		W	1							X												
11	GW GW2317	10/16/08	1150		W	1							X												
12	GW GW2307	10/16/08	1140		W	1							X												
13	TB GW0519	10/16/08	0700		W	1												X							
14	EBGW0016	10/16/08	1515		W	7			X									X	X	X	X				
						Field Filtered		X	X		X	X	X	X	X						X	X	X	X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For ____ Months*

Special Instructions/QC Requirements & Comments: **Level III Reporting**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[illegible] Atkinson	Weiss Assoc	10/16/08 1520	[illegible]	C&T	10/16/08 1520
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

206946

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-16
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AquaTerra Associates Incorporated, DBA

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Client Contact	Project Manager: Bob Devany	Sampled by: [illegible]	Date: 10/16/08	COC Number: UCD
Weiss Associates	Tel: 510-450-6144	Lab Contact:	Carrier:	Page____ of ____
5801 Christie Avenue, Suite 600	Analysis Turnaround Time			Job No.
Emeryville, CA 94608	Calendar (C) or Work Days (W) --- 5W			
(510) 450-6000 Phone	TAT if different from Below ____			SDG No.
(510) 547-5043 FAX	☐ 2 weeks			
	☐ 1 week			
Job Name: UC Davis	☐ 2 days			
Address: One Shields Ave, Davis	☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	EPA Pesticides (EPA 8081)	Dissolved Organic Carbon SM5310B	Mn, Fe, B (6010B)	Cr6+ (7199)	Fe II (SM3500 FeD)	Ca, Mg, K, Na, Ni (6010B)	Chloride, Nitrate, Sulfate (EPA 300.0)	Total Phosphate (SM4500-PE)	Carbonate, Bicarbonate (EPA 310.1)	Fluoride (SM 4500-F)	TOC (SM 5310C)	TDS (SM 2540C)	VOCs (8260)	Pesticides (8081)	PCBs (8082)	Title 22 Metals (6010B)	Total Cr (6010B)	Ortho Phosphate (SM4500-PE)	Hardness (EPA 130.2)	Nitrate-N (EPA 300.0)	Sample Specific Notes:
1	GWGW2351	10/16/08	0850		W	2																	X			X	48hr
2	TPINO363	10/16/08	0850		W	4											X		X								
3	TPEFO363	10/16/08	0830		W	6						X	X					X	X			X					Alkalinity (SM2320B) 48hr
4	GWGW2331A	10/16/08	0940		W	9	X												X	X	X	X				X	48 hr
5	GWGW2331B	10/16/08	0940		W	9	X												X	X	X	X				X	48hr
6	GWGW2330	10/16/08	1135		W	9	X												X	X	X	X				X	48hr
7	GWGW2329	10/16/08	1400		W	9	X												X	X	X	X				X	48hr
8	GWGW2327	10/16/08	1355		W	16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X			24hr
9	GWGW2310	10/16/08	1115		W	1								X													
						Field Filtered			X	X		X	X	X	X	X						X	X	X	X		

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For ____ Months*

Special Instructions/QC Requirements & Comments: Level III Reporting

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
IAN ATKINSON	WEISS ASSOC	10/16/08 1520	[illegible]	CT	10/16/08 1520
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd

Login # 706946 Date Received 10/16/08 Number of coolers 4
Client LUBISS XSSC Project UC DAVIS

Date Opened 10/16 By (print) K Wellbrock (sign) K Wellbrock
Date Logged in ✓ By (print) M. VILLANUEVA (sign)

1. Did cooler come with a shipping slip (airbill, etc)? ..... YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ~~☐ NO~~
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? ..... YES NO (N/A)
3. Were custody papers dry and intact when received? ..... (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? ..... (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ..... (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

   ☒ Bubble Wrap ☒ Foam blocks ☒ Bags ☐ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

   Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) _____

   ☒ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ..... YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? ..... (YES) NO
10. Are samples in the appropriate containers for indicated tests? ..... (YES) NO
11. Are sample labels present, in good condition and complete? ..... (YES) NO
12. Do the sample labels agree with custody papers? ..... (YES) NO
13. Was sufficient amount of sample sent for tests requested? ..... YES NO ☆
14. Are the samples appropriately preserved? ..... (YES) NO
15. Are bubbles > 6mm absent in VOA samples? ..... (YES) NO N/A
16. Was the client contacted concerning this sample delivery? ..... YES NO N/A
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS
SAMPLE #12 ID # ON SAMPLE GWGW2317 10/16/08 1140

SAMPLE #7 REC'D CONTAINERS FOR OTHER ANALYSIS NOT ON COC.
8 EXTRA CONTAINERS, 1-1L POLY W/HNO3 FOR EPA 905.0, 1-1L POLY W/HNO3 FOR EPA 903.1, 1-1L POLY W/HNO3 FOR GAMMA SPEC, 2-1L POLY W/HNO3 FOR URANIUM & THORIUM, 1-500ML POLY W/HNO3 FOR EPA 900.0, 1-500ML POLY UNP. FOR BERF C-01, 1-500ML CLEAR GLASS BOTTLE UNP. FOR EPA 906.0. THESE CONTAINERS WILL BE STORED IN SUB-LAB FRIDGE

Curtis & Tompkins, Ltd.

Perchlorate

Lab #:	207222	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 314.0
Analyte:	Perchlorate	Diln Fac:	1.000
Matrix:	Water	Batch#:	144184
Units:	ug/L	Analyzed:	10/28/08

Field ID	Type	Lab ID	Result	RL	Sampled	Received
GWGW2307	SAMPLE	207222-001	ND	4.0	10/08/08	10/08/08
GWGW2308	SAMPLE	207222-002	ND	4.0	10/09/08	10/09/08
GWGW2309	SAMPLE	207222-003	ND	4.0	10/07/08	10/08/08
GWGW2310	SAMPLE	207222-004	ND	4.0	10/08/08	10/08/08
GWGW2317	SAMPLE	207222-005	ND	4.0	10/14/08	10/14/08
GWGW2329	SAMPLE	207222-006	ND	4.0	10/16/08	10/16/08
GWGW2353	SAMPLE	207222-007	ND	4.0	10/09/08	10/09/08
GWGW2361	SAMPLE	207222-008	ND	4.0	10/14/08	10/14/08
	BLANK	QC467516	ND	4.0		

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Perchlorate

Lab #:	207222	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 314.0
Analyte:	Perchlorate	Batch#:	144184
Field ID:	ZZZZZZZZZZ	Sampled:	10/23/08
MSS Lab ID:	207149-005	Received:	10/24/08
Units:	ug/L	Analyzed:	10/28/08

Type	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
BS	QC467517	Water		20.00	17.73	89	85-115			1.000
BSD	QC467518	Water		20.00	17.92	90	85-115	1	15	1.000
MS	QC467528	WET DI Leachate	<0.6443	20.40	20.02	98	80-120			1.020
MSD	QC467529	WET DI Leachate		20.40	17.79	87	80-120	12	15	1.020

RPD= Relative Percent Difference

CURTIS & TOMPKINS, LTD. BERKELEY LOGIN CHANGE FORM

Reason for change: ____X___ Client Request By: Anja Verce Date/Time: 10/28/08 18:21 Initials: MRS
_____ Login Review _____Data Review Client: **WEISSE**

Current Lab ID	Previous Lab ID	Client ID	Matrix	Add/Cancel	Analysis	Duedate
207228-001	206440-002	GWGW2295	Water	Add	Alkalinity filtered	11/4/2008
207228-002	206462-002	GWGW2297	Water	Add	Alkalinity filtered	11/4/2008
207228-003	206258-002	BGCR-1-85 (GWGW2299)	Water	Add	Alkalinity filtered	11/4/2008
207228-004	206348-001	GWGW2301	Water	Add	Alkalinity filtered	11/4/2008

Micah Smith

From: "Anja Verce" <av@weiss.com>
To: "Micah Smith" <micah.smith@ctberk.com>
Sent: Friday, October 17, 2008 2:12 PM
Subject: Re: UC Davis samples GWGW2299 and GWGW2300

THANK YOU !!

>>> "Micah Smith" <micah.smith@ctberk.com> 10/17/2008 2:10 pm >>>
Anja,
We re-ran that sample for Sulfate and got the exact same number.
Thanks
Micah
----- Original Message -----
From: "Anja Verce" <av@weiss.com>
To: "Micah Smith" <micah.smith@ctberk.com>
Sent: Wednesday, October 15, 2008 3:28 PM
Subject: Re: UC Davis samples GWGW2299 and GWGW2300

> Thanks Micah!
>
> Would it be possible to re-analyze sample BGCr-1-85 for sulfate?
> Results showed that 1,300 mg/L of sulfate were detected. I just want
to
> double check, since this concentration would be the highest sulfate
> concentrations ever detected at the site.
>
> Thank you,
> Anja
>
>>>> "Micah Smith" <micah.smith@ctberk.com> 10/15/2008 1:47 pm >>>
> I sent those revised results.
> Thanks
> Micah
>
> ----- Original Message -----
> From: "Anja Verce" <av@weiss.com>
> To: "Micah Smith" <micah.smith@ctberk.com>
> Sent: Wednesday, October 15, 2008 1:27 PM
> Subject: Re: UC Davis samples GWGW2299 and GWGW2300
>
>
>> Hi Micah,
>>
>> the sample might have been labeled BGCr-1-85.
>> Anja
>>
>>>>> "Micah Smith" <micah.smith@ctberk.com> 10/15/2008 1:03 pm >>>
>> Anja,

>> I can't find any sample in our system with that ID.
>> Do you have any other information I could try to look it up by?
>> Thanks
>> Micah
>> ----- Original Message -----
>> From: "Anja Verce" <av@weiss.com>
>> To: <micah.smith@ctberk.com>
>> Sent: Wednesday, October 15, 2008 10:55 AM
>> Subject: Re: UC Davis samples GWGW2299 and GWGW2300
>>
>>
>>> Thanks Micah for sending the report for GWGW2300.
>>> Could you please let me know if GWGW2299 got re-analyzed too?
>>>
>>> Anja
>>>
>>>
>>>>>> Anja Verce 10/14/2008 3:43 pm >>>
>>> Hi Micah,
>>>
>>> I wanted to check on samples GWGW2299 and GWGW2300. These were
the
>> GW
>>> samples that probably got acidified in the field but were not
>> filtered.
>>> We wanted to re-analyze these for dissolved metals, Ca, Mg, K, Na
> ...
>> by
>>> acidifying an unpreserved bottle (the one submitted for Cr(VI)).
I
>>> don't think I received results for these. Could you please check?
>>>
>>> Thanks so much!
>>> Anja

206440

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-32
Protocol No.: 080919_Chromium detail_soil

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AguaTierra Associates Incorporated DBA

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Client Contact		Project Manager: Bob Devany	Sampled by: KHA	Date: 9/29/08	COC Number: UCD20080929-1
Weiss Associates		Tel: 510-450-6144	Lab Contact: WO/PO# 08-03	Carrier:	Page 1 of 1
5801 Christie Avenue, Suite 600		Analysis Turnaround Time			Job No. 388-1856-1-32
Emeryville, CA 94608		Calendar (C) or Work Days (W) --- 5W			SDG No.
(510) 450-6000	Phone	TAT if different from Below ____			
(510) 547-5043	FAX	☐ 2 weeks			
		☐ 1 week			
Job Name: UC Davis		☐ 2 days			
Address: One Shields Ave, Davis		☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Dissolved Organic Carbon SM5310B*	Cr, Mn, Fe, B - 6010B	Cr VI 7199 *	Fe (II) - SM3500 Fe D *	Ca, Mg, K, Na, Ni - 6010B	Chloride, Nitrate, Sulfate 300.0*	Phosphate SM4500 P E or 365.2	Carbonate, Bicarbonate 310.1	Fluoride - SM4500 F C or 340.1	Sample Specific Notes:
1	GWGW2294	9/29/08	1245		WATER	9	X	X	X	X	X	X	X	X	X	*SHORT HOLD TIMES
2	GWGW2295	↓	1600		↓	9	X	X	X	X	X	X	X	X	X	
							3	4	1	2	4	1	3	1	1	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **LEVEL IV REPORTING, Analyze Cr (VI) samples within 5 days!**

WORK ORDER 0805

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Kim Atkinson	Weiss Assoc.	9/29/08 1900	K Williams	C&T	9/29/08 1900
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 206440 Date Received 9/29/08 Number of coolers 1
Client Weiss Project UC Davis

Date Opened 9/29 By (print) K Wellbrock (sign) K Wellbrock
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc)? ..... YES NO
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? ..... YES NO N/A
3. Were custody papers dry and intact when received? ..... YES NO
4. Were custody papers filled out properly (ink, signed, etc)? ..... YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ..... YES NO
6. Indicate the packing in cooler: (if other, describe) _____

   ☒ Bubble Wrap ☐ Foam blocks ☐ Bags ☐ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

   Type of ice used: ☐ Wet ☒ Blue/Gel ☐ None Temp(°C) _____

   ☒ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ..... YES NO
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? ..... YES NO
10. Are samples in the appropriate containers for indicated tests? ..... YES NO
11. Are sample labels present, in good condition and complete? ..... YES NO
12. Do the sample labels agree with custody papers? ..... YES NO
13. Was sufficient amount of sample sent for tests requested? ..... YES NO
14. Are the samples appropriately preserved? ..... YES NO N/A
15. Are bubbles > 6mm absent in VOA samples? ..... YES NO N/A
16. Was the client contacted concerning this sample delivery? ..... YES NO
    If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

206462

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Project ID: 388-1856-1-32
Protocol No.: 080919_Chromium detail_GW

Client Contact	Project Manager: Bob Devany	Sampled by: KMA	Date: 09/30/08	COC Number: UCD20080930-1
Weiss Associates	Tel: 510-450-6144	Lab Contact: WO/PO# 08-02	Carrier:	Page 1 of 1
5801 Christie Avenue, Suite 600	Analysis Turnaround Time			Job No. 388-1856-1-32
Emeryville, CA 94608	Calendar (C) or Work Days (W) --- 5W			SDG No.
(510) 450-6000 Phone	TAT if different from Below _____			
(510) 547-5043 FAX	☐ 2 weeks			
	☐ 1 week			
Job Name: UC Davis	☐ 2 days			
Address: One Shields Ave, Davis	☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Dissolved Organic Carbon - SM5310B *	Cr, Mn, Fe, B- 6010B (field filtered)	Cr (VI) - 7199 (field filtered) *	Fe (II) - SM3500Fe-D *	Ca, Mg, K, Na, Ni - 6010B (field filtered)	Phosphate - SM 4500-PE or 365.2 (field filtered)	Carbonate, Bicarbonate - 310.1	Fluoride - SM 4500-FC or 340.1	Chloride, Nitrate, Sulfate - 300.0 *	Sample Specific Notes:
1	GWGW2296	9/30/08	1130		water	9	X	X	X	X	X	X	X	X	X	* SHORT HOLD TIMES
2	GWGW2297	↓	1245		water	9	X	X	X	X	X	X	X	X	X	
					water											
					water											
					water											
					water											
					water											
					water											
					water											
					water											
	Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____						2	4	1	2	4	1	3	1	1	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **LEVEL IV REPORTING, Cr (VI) and Fe(II) have a hold time of 24 hrs and DOC and nitrate samples have a hold time of 48 hrs!!!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
KMA ATLINSON	WEISS ASSOC.	9/30/08 1625	[signature]	C&T	9/30/2008 1625
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 206462 Date Received 9-30-08 Number of coolers 1
Client Weiss Project UC Davis

Date Opened 9-30-08 By (print) F. Nichols (sign) [signature]
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc)? ..... YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? ..... YES NO (N/A)
3. Were custody papers dry and intact when received? ..... (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? ..... (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ..... (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

   ☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☒ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

   Type of ice used: ☐ Wet ☒ Blue/Gel ☐ None Temp(°C) _____

   ☒ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ..... YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? ..... (YES) NO
10. Are samples in the appropriate containers for indicated tests? ..... (YES) NO
11. Are sample labels present, in good condition and complete? ..... (YES) NO
12. Do the sample labels agree with custody papers? ..... (YES) NO
13. Was sufficient amount of sample sent for tests requested? ..... (YES) NO
14. Are the samples appropriately preserved? ..... (YES) NO N/A
15. Are bubbles > 6mm absent in VOA samples? ..... YES NO (N/A)
16. Was the client contacted concerning this sample delivery? ..... YES (NO)
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

206258

Chain of Custody Record

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-32
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043

Client Contact	
Weiss Associates	
5801 Christie Avenue, Suite 600	
Emeryville, CA 94608	
(510) 450-6000	Phone
(510) 547-5043	FAX
Job Name: UC Davis	
Address: One Shields Ave, Davis	

Project Manager: Bob Devany
Tel: 510-450-6144

Analysis Turnaround Time
Calendar (C) or Work Days (W) --- 5W
TAT if different from Below ~~[illegible]~~ NORMAL TAT
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sampled by: RKD
Lab Contact:
Date: 9/23/08
Carrier:

COC Number: UCD20080923-1
1 of 1 COCs
Job No. 388-1856-1-32
SDG No.

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	SM5310B Dissolved Organic Carbon	Ca, Mn, Fe, B - 6010B *	Cr VI 7195 *	Fe II SM3500 FeD	Ca, Mg, K, Na, Ni 6010B *	Chloride, Nitrate, Sulfate 300.0	Phosphate - SM4500-P E or 365.2 *	Carbonate, Bicarbonate 310.1	Fluoride SM4500 F C or 340.1	Sample Specific Notes
1	BGCr-1-55	9/22/08	1400		Ground H_2O	9		X	X	X	X	X	X	X	X	X	
2	BGCr-1-85	9/22/08	1600		Ground H_2O	9		X	X	X	X	X	X	X	X	X	

* FILTERED IN FIELD
SHORT HOLD TIME (24, 48 HR)

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 1 → FOR ALL — 3 4 1 2 4 1 3 1 1

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client (Disposal By Lab) Archive For ______ Months

Special Instructions/QC Requirements & Comments:
WORK ORDER 0805

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
KIAN ATKINSON	WEISS ASSOCIATES	9/23/08	[signature]	C&T	9/23/08 1245
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 206258 Date Received 9/23/08 Number of coolers 1
Client WEISS ESSC. Project UC DAVIS

Date Opened 9/23/08 By (print) M. VILLENUEVA (sign)
Date Logged in ✓ By (print) ✓ (sign) ✓

1. Did cooler come with a shipping slip (airbill, etc)?.....YES NO
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☐ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? ..... YES NO N/A
3. Were custody papers dry and intact when received?..... YES NO
4. Were custody papers filled out properly (ink, signed, etc)?..... YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form)..... YES NO
6. Indicate the packing in cooler: (if other, describe) _____

   ☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☑ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels
7. Temperature documentation:

   Type of ice used: ☐ Wet ☑ Blue/Gel ☐ None Temp(°C) _____

   ☑ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? .....YES NO
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened?..... YES NO
10. Are samples in the appropriate containers for indicated tests? ..... YES NO
11. Are sample labels present, in good condition and complete? ..... YES NO
12. Do the sample labels agree with custody papers? ..... YES NO
13. Was sufficient amount of sample sent for tests requested? ..... YES NO
14. Are the samples appropriately preserved? ..... YES NO N/A
15. Are bubbles > 6mm absent in VOA samples?..... YES NO N/A
16. Was the client contacted concerning this sample delivery?..... YES NO
    If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

206348

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Project ID: 388-1856-1-32
Protocol No.: 080919_Chromium detail_GW

Client Contact	Project Manager: Bob Devany	Sampled by: KLJ	Date: 9/25/08	COC Number: UCD 20080925-1
Weiss Associates	Tel: 510-450-6144	Lab Contact: WO/PO# 08-02	Carrier:	Page 1 of 1
5801 Christie Avenue, Suite 600	Analysis Turnaround Time			Job No. 388-18856-1-32
Emeryville, CA 94608	Calendar (C) or Work Days (W) --- 5W			SDG No.
(510) 450-6000 Phone	TAT if different from Below _____			
(510) 547-5043 FAX	☐ 2 weeks			
	☐ 1 week			
Job Name: UC Davis	☐ 2 days			
Address: One Shields Ave, Davis	☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	~~Dissolved Organic Carbon - SM5310B~~	Cr, Mn, Fe, B- 6010B (field filtered)	~~Cr(VI) - 7199 (field filtered)~~	~~Fe(II) - SM3500Fe-B~~	Ca, Mg, K, Na, Ni - 6010B (field filtered)	Phosphate - SM 4500-PE or 365.2 (field filtered)	Carbonate, Bicarbonate - 310.1	Fluoride - SM 4500-FC or 340.1	Sample Specific Notes:
1	GWGW2301	9/24/08	0830		water	5		X			X	X	X	X	
2	GWGW2302	9/24/08	0830		water	5		X			X	X	X	X	
					water										
					water										
					water										
					water										
					water										
					water										
					water										
							2	4	1	2	4	1	3	1	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For _____ Months*

Special Instructions/QC Requirements & Comments: **LEVEL IV REPORTING, Cr (VI) and Fe(II) have a hold time ~~of 24~~ hrs and DOC and nitrate samples have a hold time of 48 hrs!!!**

WORK ORDER 08605

DISSOLVED ORGANIC CARBON, Cr VI, FE II & CHLORIDE, NITRATE, SULFATE SUBMITTED ON 9/24/08 DUE TO HOLD TIME.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
KAN ATKINSON	WEISS ASSOC.	9/25/08	[illegible]	C&T	9/25/08 1238
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 206348 Date Received 9/25/08 Number of coolers 1
Client WEISS ASSC. Project UC DAVIS

Date Opened 9/25/08 By (print) M. VILLANUEVA (sign) [signature]
Date Logged in ✓ By (print) ✓ (sign) ✓

1. Did cooler come with a shipping slip (airbill, etc)? ..... YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☐ (NO)
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? ..... YES NO (N/A)
3. Were custody papers dry and intact when received? ..... (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? ..... (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ..... (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☐ Foam blocks ☑ Bags ☐ None
☐ Cloth material ☑ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

Type of ice used: ☐ Wet ☑ Blue/Gel ☐ None Temp(°C) _____

☑ Samples Received on ice & cold without a temperature blank

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ..... YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? ..... (YES) NO
10. Are samples in the appropriate containers for indicated tests? ..... (YES) NO
11. Are sample labels present, in good condition and complete? ..... (YES) NO
12. Do the sample labels agree with custody papers? ..... (YES) NO
13. Was sufficient amount of sample sent for tests requested? ..... (YES) NO
14. Are the samples appropriately preserved? ..... (YES) NO N/A
15. Are bubbles > 6mm absent in VOA samples? ..... YES NO (N/A)
16. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	207228	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Matrix:	Water	Batch#:	144311
Units:	mg/L	Analyzed:	10/31/08

Field ID:	GWGW2295	Diln Fac:	6.700
Type:	SAMPLE	Sampled:	09/29/08
Lab ID:	207228-001	Received:	09/30/08

Analyte	Result	RL
Alkalinity, Bicarbonate	500 b	6.7
Alkalinity, Carbonate	ND b	6.7
Alkalinity, Hydroxide	ND b	6.7
Alkalinity, Total as CaCO3	500 b	6.7

Field ID:	GWGW2297	Diln Fac:	6.700
Type:	SAMPLE	Sampled:	09/30/08
Lab ID:	207228-002	Received:	09/30/08

Analyte	Result	RL
Alkalinity, Bicarbonate	130 b	6.7
Alkalinity, Carbonate	35 b	6.7
Alkalinity, Hydroxide	ND b	6.7
Alkalinity, Total as CaCO3	160 b	6.7

Field ID:	BGCR-1-85	Diln Fac:	6.700
Type:	SAMPLE	Sampled:	09/22/08
Lab ID:	207228-003	Received:	09/23/08

Analyte	Result	RL
Alkalinity, Bicarbonate	450 b	6.7
Alkalinity, Carbonate	ND b	6.7
Alkalinity, Hydroxide	ND b	6.7
Alkalinity, Total as CaCO3	450 b	6.7

b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	207228	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Matrix:	Water	Batch#:	144311
Units:	mg/L	Analyzed:	10/31/08

Field ID:	GWGW2301	Diln Fac:	6.700
Type:	SAMPLE	Sampled:	09/24/08
Lab ID:	207228-004	Received:	09/25/08

Analyte	Result	RL
Alkalinity, Bicarbonate	340 b	6.7
Alkalinity, Carbonate	9.3 b	6.7
Alkalinity, Hydroxide	ND b	6.7
Alkalinity, Total as CaCO3	340 b	6.7

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC468063		

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	207228	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	4.000
Lab ID:	QC468064	Batch#:	144311
Matrix:	Water	Analyzed:	10/31/08

Spiked	Result	%REC	Limits
200.0	188.8	94	90-110

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	207228	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	4.000
Field ID:	ZZZZZZZZZZ	Batch#:	144311
MSS Lab ID:	207269-004	Sampled:	10/28/08
Matrix:	Water	Received:	10/29/08
Units:	mg/L	Analyzed:	10/31/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC468065	382.7	200.0	577.6	97	80-120		
MSD	QC468066		200.0	576.8	97	80-120	0	25

RPD= Relative Percent Difference

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

PROJECT NO. 388-1856-1-32

UC Davis

Lot #: F8I160151

Tim Utterback

Weiss Associates
350 East Middlefield Rd.
Mountain View, CA 94043

TESTAMERICA LABORATORIES, INC.

Michael C. Franks
Project Manager

September 29, 2008

Case Narrative
LOT NUMBER: **F8I160151**

This report contains the analytical results for the sample received under Project ID 1856-1-32 by TestAmerica St. Louis on September 15, 2008. This sample is associated with your UC Davis project.

The analytical results included in this report meet all applicable quality control procedure requirements except as noted on the following page.

The test results in this report meet all NELAP requirements for parameters in which accreditations are held by TestAmerica St. Louis. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of this report.

All chemical analysis results are based upon sample as received, wet weight, unless noted otherwise. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Observations/Nonconformances
Reference the chain of custody and condition upon receipt report for any variations on receipt conditions and temperature of samples on receipt.

The Uranium sample duplicate has a tracer recovery below the 30% QC limit. The associated sample recovered low but within QC range. The RPD/RER is within QC range, demonstrating acceptable sample performance. The low tracer recovery is attributed to matrix interference.
Affected Samples:
F8I160151 (1): GWGW2278

METHODS SUMMARY

F8I160151

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Carbon 14 by LSC	EERF C-01-1	
Isotopic Uranium by Alpha Spectroscopy	EML A-01-R MOD	

References:

EERF	EERF
EML	"ENVIRONMENTAL MEASUREMENTS LABORATORY PROCEDURES MANUAL" HASL-300 28TH EDITION, VOLUME I and II DEPARTMENT OF ENERGY

SAMPLE SUMMARY

F8I160151

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
KWX2N	001	GWGW2278	09/10/08	15:00

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Lot# F8I1695

Chain of Custody Record

TA- Test America
13215 Rider Trail North
Earth City, MO 63045
Phone 314.298.8566 fax: 314.298.8757

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-32
Protocol No.: ROD

CUP 109

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
A JacobsNiles Associates Incorporated, Company

Client Contact	Project Manager: Bob Devany	Sampled by: RHA / RKS	Date: 9/12/08	COC Number: UCD
Weiss Associates	Tel: 510-450-6144	Lab Contact:	Carrier:	____ of ____ COCs
5801 Christie Avenue, Suite 600	Analysis Turnaround Time			Job No. 388-1856-1-32
Emeryville, CA 94608	Calendar (C) or Work Days (W) --- 5W			SDG No.
(510) 450-6000 Phone	TAT if different from Below NATURAL TAT			
(510) 547-5043 FAX	☐ 2 weeks			
	☐ 1 week			
Job Name: UC Davis	☐ 2 days			
Address: One Shields Ave, Davis	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Carbon 14 (BERF C-01)	Uranium 235 (~~903.1~~ A-01-R (Alpha Spec))																	Sample Specific Notes:
GWGW2278	9/10/08	1500	GRAB	GW	3	X	X			2xLP, LC														
~~GWGW2279~~																								
~~EBGW0013~~																								
~~EBGW0014~~																								
						1	4																	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For _____ Months*

Special Instructions/QC Requirements & Comments:

W.O. # 0805

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Kevin Atkinson	Weiss Assoc.	9/12/08 1700	[signature]	TA STL	09.15.08 0915.
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

TestAmerica St. Louis

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Lot #(s): F8I160151

Condition Upon Receipt Form

Client: Weiss Assoc. COC/RFA No: 8 Date: 09.15.08
Quote No: 60342 Initiated By: 8 Time: 0915

Shipping Information

Shipper Name: FedX
Multiple Packages Y (N)

Shipping # (s):*
1. 8664 2222 0914
2.
3.
4.
5.
6.
7.
8.
9.
10.

Sample Temperature (s):**
1. ambient
2.
3.
4.
5.
6.
7.
8.
9.
10.

*Numbered shipping lines correspond to Numbered Sample Temp lines

**Sample must be received at 4°C ± 2°C- If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	Y (N)	Are there custody seals present on the cooler?	8.	Y (N)	Are there custody seals present on bottles?
2.	Y N (N/A)	Do custody seals on cooler appear to be tampered with?	9.	Y N (N/A)	Do custody seals on bottles appear to be tampered with?
3.	(Y) N	Were contents of cooler frisked after opening, but before unpacking?	10.	(Y) N N/A	Was sample received with proper pH[1]? (If not, make note below)
4.	(Y) N	Sample received with Chain of Custody?	11.	Y N	If N/A- Was pH taken by original TestAmerica lab?
5.	(Y) N N/A	Does the Chain of Custody match sample ID's on the container(s)?	12.	(Y) N	Sample received in proper containers?
6.	Y (N)	Was sample received broken?	13.	Y N (N/A)	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)
7.	(Y) N	Is sample volume sufficient for analysis?	14.	Y N	Was Internal COC/Workshare received?

[1] For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes:

Corrective Action:
- ☐ Client Contact Name: Informed by:
- ☐ Sample(s) processed "as is"
- ☐ Sample(s) on hold until: If released, notify:

Project Management Review: Date: 09.16.08

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED IN. IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIAL AND THE DATE NEXT TO THAT ITEM.

Weiss Associates

Client Sample ID: GWGW2278

Radiochemistry

Lab Sample ID: F8I160151-001
Work Order: KWX2N
Matrix: WATER

Date Collected: 09/10/08 1500
Date Received: 09/15/08 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/L**		**Batch # 8261402**	**Yld %**
Carbon 14	2.9	U	5.4	20.0	8.9	09/17/08	09/19/08
Iso URANIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**		**Batch # 8263551**	**Yld % 36**
Uranium 235/236	0.04	U	0.13	1.00	0.31	09/19/08	09/22/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

METHOD BLANK REPORT

Radiochemistry

Client Lot ID: F8I160151
Matrix: WATER

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC		Prep Date	Lab Sample ID Analysis Date
Carbon 14 by EERF C-01-1			pCi/L	Batch #	8261402	Yld %		F8I170000-402B
Carbon 14	3.7	U	5.4	20.0	9.0		09/17/08	09/19/08
Iso URANIUM (SHORT CT) DOE A-01-R MOD			pCi/L	Batch #	8263551	Yld %	82	F8I190000-551B
Uranium 235/236	0.0	U	0.024	1.00	0.076		09/19/08	09/22/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined using instrument performance only
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Laboratory Control Sample Report

Radiochemistry

Client Lot ID: F8I160151
Matrix: WATER

Parameter	Spike Amount	Result	Total Uncert. (2 σ+/-)	MDC	% Yld	% Rec	Lab Sample ID / QC Control Limits
Carbon 14 by EERF C-01-1			**pCi/L**	**C-01-1**			**F8I170000-402C**
Carbon 14	976	686	54	9		70	(38 - 112)
	Batch #:	8261402		Analysis Date:	09/19/08		
Iso URANIUM (SHORT CT) DOE A-01-R MOD			**pCi/L**	**A-01-R MOD**			**F8I190000-551C**
Uranium 234	13.1	13.5	1.6	0.1	87	102	(87 - 127)
Uranium 238	13.6	14.4	1.6	0.1	87	106	(87 - 128)
	Batch #:	8263551		Analysis Date:	09/22/08		

NOTE(S)

MDC is determined by instrument performance only
All calculations are performed before rounding to avoid round-off error in calculated results

MATRIX SPIKE REPORT

Radiochemistry

Client Lot Id: F8I160151
Matrix: WATER

Date Sampled: 09/10/08
Date Received: 09/15/08

Parameter	Spike Amount	Spike Result	Total Uncert. (2σ +/-)	Spike Yld.	Sample Result	Total Uncert. (2 σ +/-)	QC Sample ID %YLD	QC Sample ID %REC	QC Control Limits
Carbon 14 by EERF C-01-1			pCi/L		C-01-1			F8I160151-001	
Carbon 14	2870	2310	180		2.9	5.4		81	(37 - 121)
	Batch #:	8261402		Analysis Date:		09/19/08			

NOTE(S)

Data are incomplete without the case narrative.
Calculations are performed before rounding to avoid round-off errors in calculated results.

DUPLICATE EVALUATION REPORT

Radiochemistry

Client Lot ID: F8I160151
Matrix: WATER

Date Sampled: 09/10/08
Date Received: 09/15/08

Parameter	SAMPLE Result		Total Uncert. (2σ+/-)	% Yld	DUPLICATE Result		Total Uncert. (2 σ+/-)	% Yld	QC Sample ID Precision	
Carbon 14 by EERF C-01-1				**pCi/L**	**C-01-1**				**F8I160151-001**	
Carbon 14	2.9	U	5.4		10.7	J	5.7		115	%RPD
		Batch #:	8261402	(Sample)	8261402	(Duplicate)				
Iso URANIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**A-01-R MOD**				**F8I160151-001**	
Uranium 235/236	0.04	U	0.13	36	0.16	U	0.26	24	122	%RPD
		Batch #:	8263551	(Sample)	8263551	(Duplicate)				

NOTE(S)

Data are incomplete without the case narrative.
Calculations are performed before rounding to avoid round-off error in calculated results

J Result is greater than sample detection limit but less than stated reporting limit.
U Result is less than the sample detection limit.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

PROJECT NO. 388-1856-1-32

UC Davis

Lot #: F8I230279

Tim Utterback

Weiss Associates
350 East Middlefield Rd.
Mountain View, CA 94043

TESTAMERICA LABORATORIES, INC.

Michael C. Franks
Project Manager

September 29, 2008

Case Narrative
LOT NUMBER: **F8I230279**

This report contains the analytical results for the sample received under Project ID 388-185-1-32 by TestAmerica St. Louis on September 20, 2008. This sample is associated with your UC Davis project.

The analytical results included in this report meet all applicable quality control procedure requirements.

The test results in this report meet all NELAP requirements for parameters in which accreditations are held by TestAmerica St. Louis. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of this report.

All chemical analysis results are based upon sample as received, wet weight, unless noted otherwise. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Observations/Nonconformances
Reference the chain of custody and condition upon receipt report for any variations on receipt conditions and temperature of samples on receipt.

No observations or non-conformances were noted for the analyses reported for this report.

METHODS SUMMARY

F8I230279

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Carbon 14 by LSC	EERF C-01-1	
H-3 by Distillation & LSC	EPA 906.0 MOD	

References:

EERF	EERF
EPA	"EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984

SAMPLE SUMMARY

F8I230279

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
KXFV8	001	GWGW2286	09/15/08	12:15

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

REVISED PER MARY STALLARD - 9/22/08 MZQ

Chain of Custody Record

TA - Test America
13715 Rider Trail North
Earth City, MO 63045
Phone 314.298.8566 fax 314.298.8757

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Ufferback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-32
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytical/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043

Client Contact	Project Manager: Bob Devany	Sampled by: R. Davis	Date: 9/18/08	COC Number: UCD20080918-
Weiss Associates	Tel: 510-450-6144	Lab Contact: WO/PO# 08-05	Carrier:	Page 1 of 3
5801 Christie Avenue, Suite 600	Analysis Turnaround Time			Job No. 388-1856-1-32
Emeryville, CA 94608	Calendar (C) or Work Days (W) -- 5W			SDG No.
(510) 450-6000 Phone	TAT if different from Below			
(510) 547-5043 FAX	☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day	Normal TAT		
Job Name: UC Davis				
Address: One Shields Ave, Davis				

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Carbon 14 (EERF C-01)	Tritium (906.0)	U-233 [redacted] A-01-R	Sr-90 (905.0)	Sample Specific Notes:
GWGW2286 ~~GWGW2276~~	9/15/08	12:15	bailed water	water	2	X	X			→ RUSH SAMPLE 3 DAYS borehole ID = WBH-4
GWGW2291 HOLD!	9/15/08	08:30	bailed	water	2			X		→ HOLD borehole ID = ST-2
GWGW2287	9/16/08	08:40	bailed	water	3	X		X		borehole ID = LF1-2
GWGW2288	9/18/08	16:30	BAILED	WATER	5	X		X	X	
						1	1	1		

Preservation Used: 1= Ice, 2= HCl, 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification
Non-Hazard Flammable Skin Irritant Poison B Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client Disposal By Lab Archive For ____ Months

Special Instructions/QC Requirements & Comments: LEVEL IV REPORTING!

Work Order 0805

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Weiss Associates	9/18/08 1700	[signature]	TA	9/20/08
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Sep 23 08 11:55a Weiss Associates 5307556863 PAGE 14
09/22/2008 14:09
COPYLAND
5102500660 TestAmerica St. Louis
Lot# F8I230279
5 of 11

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Lot #(s): F8I230279 (2493)

Condition Upon Receipt Form

Client: Weiss
Quote No: 80342
COC/RFA No: UC01 008.04.18.1
Initiated By: bl
Date: 9/20/08
Time: 0940

Shipping Information

Shipper Name: FE
Shipping # (s):*
1. 6656 4924 7353
2.
3.
4.
5.
6.
7.
8.
9.
10.

Multiple Packages Y (N)
Sample Temperature (s):**
1. ambient
2.
3.
4.
5.
6.
7.
8.
9.
10.

*Numbered shipping lines correspond to Numbered Sample Temp lines

**Sample must be received at 4°C ± 2°C- If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	Y (N)	Are there custody seals present on the cooler?	8.	Y (N)	Are there custody seals present on bottles?
2.	Y N (N/A)	Do custody seals on cooler appear to be tampered with?	9.	Y N (N/A)	Do custody seals on bottles appear to be tampered with?
3.	(Y) N	Were contents of cooler frisked after opening, but before unpacking?	10.	(Y) N N/A	Was sample received with proper pH[1]? (If not, make note below)
4.	(Y) N	Sample received with Chain of Custody?	11.	Y N	If N/A- Was pH taken by original TestAmerica lab?
5. +	(Y) N N/A	Does the Chain of Custody match sample ID's on the container(s)?	12.	(Y) N	Sample received in proper containers?
6. *	(Y) N	Was sample received broken?	13.	Y N (N/A)	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)
7.	Y (N)	Is sample volume sufficient for analysis?	14.	Y N	Was Internal COC/Workshare received?

[1] For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes: * 4L for GW GW 2287 received broken

+ Sample SSST-2-27.5 (COC) received as SSST-2-28 (sample) & SSST-2-32.5 (COC) as 33 (Sample)

Received revised COC's on 9/23 bl

Corrective Action:
☐ Client Contact Name: Informed by:
☐ Sample(s) processed "as is"
☐ Sample(s) on hold until: If released, notify:
Project Management Review: Date: 09-24-08

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED IN. IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIAL AND THE DATE NEXT TO THAT ITEM.

Weiss Associates

Client Sample ID: GWGW2286

Radiochemistry

Lab Sample ID: F8I230279-001
Work Order: KXFV8
Matrix: WATER

Date Collected: 09/15/08 1215
Date Received: 09/20/08 0900

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/L**		**Batch # 8267542**	**Yld %**
Carbon 14	10.4	J	5.8	20.0	9.0	09/23/08	09/25/08
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**		**Batch # 8268330**	**Yld %**
Tritium	-20	U	170	300	310	09/24/08	09/24/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

J Result is greater than sample detection limit but less than stated reporting limit.
U Result is less than the sample detection limit.

METHOD BLANK REPORT

Radiochemistry

Client Lot ID: F8I230279
Matrix: WATER

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC		Prep Date	Lab Sample ID Analysis Date
Carbon 14 by EERF C-01-1			pCi/L	Batch #	8267542	Yld %		F8I230000-542B
Carbon 14	-5.2	U	5.1	20.0	9.0		09/23/08	09/25/08
TRITIUM (Distill) by EPA 906.0 MOD			pCi/L	Batch #	8268330	Yld %		F8I240000-330B
Tritium	-100	U	170	300	310		09/24/08	09/24/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined using instrument performance only
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Laboratory Control Sample Report

Radiochemistry

Client Lot ID: F8I230279
Matrix: WATER

Parameter	Spike Amount	Result	Total Uncert. (2 σ+/-)	MDC	% Yld	% Rec	Lab Sample ID / QC Control Limits
Carbon 14 by EERF C-01-1			pCi/L	C-01-1			F8I230000-542C
Carbon 14	976	675	53	9		69	(38 - 112)
	Batch #:	8267542		Analysis Date:	09/25/08		
TRITIUM (Distill) by EPA 906.0 MOD			pCi/L	906.0 MOD			F8I240000-330C
Tritium	4900	4660	480	310		95	(67 - 111)
	Batch #:	8268330		Analysis Date:	09/24/08		

NOTE(S)

MDC is determined by instrument performance only
Calculations are performed before rounding to avoid round-off error in calculated results

MATRIX SPIKE REPORT

Radiochemistry

Client Lot Id: F8I230279
Matrix: WATER

Date Sampled: 09/15/08
Date Received: 09/20/08

Parameter	Spike Amount	Spike Result	Total Uncert. (2σ +/-)	Spike Yld.	Sample Result	Total Uncert. (2 σ +/-)	QC Sample ID %YLD	QC Sample ID %REC	QC Control Limits
Carbon 14 by EERF C-01-1			pCi/L		C-01-1			F8I230279-001	
Carbon 14	2900	2220	170		10.4	5.8		76	(37 - 121)
	Batch #:	8267542		Analysis Date:		09/25/08			
TRITIUM (Distill) by EPA 906.0 MOD			pCi/L		906.0 MOD			F8I230279-001	
Tritium	4900	4250	450		-20	170		87	(27 - 150)
	Batch #:	8268330		Analysis Date:		09/24/08			

NOTE(S)

Data are incomplete without the case narrative.

Calculations are performed before rounding to avoid round-off errors in calculated results.

DUPLICATE EVALUATION REPORT

Radiochemistry

Client Lot ID: F8I230279 Date Sampled: 09/15/08
Matrix: WATER Date Received: 09/20/08

Parameter	SAMPLE Result		Total Uncert. (2σ+/-)	% Yld	DUPLICATE Result		Total Uncert. (2 σ+/-)	% Yld	QC Sample ID Precision	
Carbon 14 by EERF C-01-1				**pCi/L**	**C-01-1**				**F8I230279-001**	
Carbon 14	10.4	J	5.8		17.3	J	6.1		50	%RPD
		Batch #:	8267542	(Sample)	8267542		(Duplicate)			
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**906.0 MOD**				**F8I230279-001**	
Tritium	-20	U	170		110	U	180		294	%RPD
		Batch #:	8268330	(Sample)	8268330		(Duplicate)			

NOTE(S)

Data are incomplete without the case narrative.
Calculations are performed before rounding to avoid round-off error in calculated results

J Result is greater than sample detection limit but less than stated reporting limit.
U Result is less than the sample detection limit.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

PROJECT NO. 388-1856-1-32

UC Davis

Lot #: F8I230283

Tim Utterback

Weiss Associates
350 East Middlefield Rd.
Mountain View, CA 94043

TESTAMERICA LABORATORIES, INC.

Michael C. Franks
Project Manager

October 10, 2008

Case Narrative
LOT NUMBER: **F8I230283**

This report contains the analytical results for thirteen samples received under chain of custody UCD20080918-1 by TestAmerica St. Louis on September 20, 2008. These samples are associated with your UC Davis project.

The analytical results included in this report meet all applicable quality control procedure requirements except as noted on the following page.

The test results in this report meet all NELAP requirements for parameters in which accreditations are held by TestAmerica St. Louis. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of this report.

All chemical analysis results are based upon sample as received, wet weight, unless noted otherwise. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Observations/Nonconformances
Reference the chain of custody and condition upon receipt report for any variations on receipt conditions and temperature of samples on receipt.

Samples SST-2-12.5', SST-2-20', SST-2-27.5', SST-2-32.5', and GWGW2291 were placed on-hold per client request.

Carbon-14 by EERF C-01-1

Sample was received preserved in Nitric acid for Carbon 14. The result for this sample may be biased low to the loss of C02 in preserved samples.
Affected Samples:
F8I230283 (17): GWGW2287

Strontium-90 by EPA 905.0

The Strontium carrier recovery is outside the upper control limit (110%). The QC samples associated with the batch have acceptable carrier recovery indicating the presence of matrix interference.
Affected Samples:
F8I230283 (18): GWGW2288

METHODS SUMMARY

F8I230283

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Carbon 14 by LSC	EERF C-01-1	
Isotopic Uranium by Alpha Spectroscopy	EML A-01-R MOD	
Percent Moisture	MCAWW 160.3 MOD	MCAWW 160.3 MOD
Strontium 90 by GFPC	EML SR-03-RC MO	
Strontium 90 by GFPC	EPA 905 MOD	
Tritium by LSC	EML H3-04-RC MO	

References:

EERF EERF

EML "ENVIRONMENTAL MEASUREMENTS LABORATORY PROCEDURES MANUAL" HASL-300 28TH EDITION, VOLUME I and II DEPARTMENT OF ENERGY

EPA "EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SAMPLE SUMMARY

F8I230283

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
KXF3L	005	SSWBH-3-7.5'	09/16/08	
KXF3M	006	SSWBH-3-20'	09/16/08	
KXF3N	007	SSWBH-3-27.5'	09/16/08	
KXF3T	008	SSET-2-15'	09/17/08	
KXF3W	009	SSET-2-22.5'	09/17/08	
KXF3X	010	SSET-2-27.5'	09/17/08	
KXF30	011	SSET-2-35'	09/17/08	
KXF31	012	SS-LF1-2-15.5'	09/15/08	
KXF32	013	SS-LF1-2-20'	09/15/08	
KXF33	014	SS-LF1-2-27.5'	09/15/08	
KXF35	015	SS-LF1-2-37.5'	09/15/08	
KXF4A	017	GWGW2287	09/16/08	08:00
KXF4C	018	GWGW2288	09/17/08	16:30

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

F8I230283 CLIENT ANALYSIS SUMMARY

Storage Loc: RAD

Project Manager: MCF | Quote #: 80342 | SDG:

Project: 388-1856-1-32 | UC Davis

PO#: | Report to: Tim Utterback

Client: 1353423 Weiss Associates

#SMPS in LOT: 18

Date Received: 2008-09-20
Analytical Due Date: 2008-10-06
Report Due Date: 2008-10-07
Report Type: D Expanded Deliverable
EDD Code: 99

Sample Control: Change the Project field to the Project ID on the COC. Enter COC# in the COC field.
Enter "WAE" in Sample Name field. Enter "U" in the LPR Code field.
RADIOCHEMISTRY: Please note the required MDCs

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
1	SSST-2-12.5'			2008-09-12 / 0	KXF3G	SOLID

SAMPLE COMMENTS:

XX	ZZ	NONE	NONE	SOLID, ZZ Code for Invoicing	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: Z	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
2	SSST-2-20'			2008-09-12 / 0	KXF3H	SOLID

SAMPLE COMMENTS:

XX	ZZ	NONE	NONE	SOLID, ZZ Code for Invoicing	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: Z	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
3	SSST-2-27.5'			2008-09-12 / 0	KXF3J	SOLID

SAMPLE COMMENTS:

XX	ZZ	NONE	NONE	SOLID, ZZ Code for Invoicing	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: Z	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
4	SSST-2-32.5'			2008-09-12 / 0	KXF3K	SOLID

SAMPLE COMMENTS:

XX	ZZ	NONE	NONE	SOLID, ZZ Code for Invoicing	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: Z	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
5	SSWBH-3-7.5'			2008-09-16 / 0	KXF3L	SOLID

SAMPLE COMMENTS:

XX	1L	EML	H3-04-RC MOD	SOLID, H3-04-RC MOD, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	2M	EML	A-01-R MOD	SOLID, A-01-R MOD, IsoU	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	4E	EERF	C-01-1	SOLID, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZK	EML	SR-03-RC MOD	SOLID, SR-03-RC MOD, Strontium-90	FW	Dry, Grind, Digest, Precipitate, Separation	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	WM	MCAW W	160.3 MOD	SOLID, 160.3 MOD, Percent Moisture	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
X XX	ZK	EML	SR-03-RC MOD	SOLID, SR-03-RC MOD, Strontium-90	FW	Dry, Grind, Digest, Precipitate, Separation	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
6	SSWBH-3-20'			2008-09-16 / 0	KXF3M	SOLID

SAMPLE COMMENTS:

XX	1L	EML	H3-04-RC MOD	SOLID, H3-04-RC MOD, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	2M	EML	A-01-R MOD	SOLID, A-01-R MOD, IsoU	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	4E	EERF	C-01-1	SOLID, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZK	EML	SR-03-RC MOD	SOLID, SR-03-RC MOD, Strontium-90	FW	Dry, Grind, Digest, Precipitate, Separation	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	WM	MCAW W	160.3 MOD	SOLID, 160.3 MOD, Percent Moisture	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: Z	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
7	SSWBH-3-27.5'			2008-09-16 / 0	KXF3N	SOLID

SAMPLE COMMENTS:

F8I230283 CLIENT ANALYSIS SUMMARY

Storage Loc: RAD

Date Received: 2008-09-20

Analytical Due Date: 2008-10-06

Report Due Date: 2008-10-07

Report Type: D Expanded Deliverable

EDD Code: 99

Project Manager: MCF Quote #: 80342 SDG:

Project: 388-1856-1-32 UC Davis

PO#: Report to: Tim Utterback

Client: 1353423 Weiss Associates

#SMPS in LOT: 18

Sample Control: Change the Project field to the Project ID on the COC. Enter COC# in the COC field.

Enter "WAE" in Sample Name field. Enter "U" in the LPR Code field.

RADIOCHEMISTRY: Please note the required MDCs

XX	1L	EML	H3-04-RC MOD	SOLID, H3-04-RC MOD, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	2M	EML	A-01-R MOD	SOLID, A-01-R MOD, IsoU	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	4E	EERF	C-01-1	SOLID, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZK	EML	SR-03-RC MOD	SOLID, SR-03-RC MOD, Strontium-90	FW	Dry, Grind, Digest, Precipitate, Separation	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	WM	MCAW W	160.3 MOD	SOLID, 160.3 MOD, Percent Moisture	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: Z	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
8	SSET-2-15'			2008-09-17 / 0	KXF3T	SOLID

SAMPLE COMMENTS:

XX	1L	EML	H3-04-RC MOD	SOLID, H3-04-RC MOD, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	2M	EML	A-01-R MOD	SOLID, A-01-R MOD, IsoU	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	4E	EERF	C-01-1	SOLID, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	WM	MCAW W	160.3 MOD	SOLID, 160.3 MOD, Percent Moisture	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: Z	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
9	SSET-2-22.5'			2008-09-17 / 0	KXF3W	SOLID

SAMPLE COMMENTS:

XX	1L	EML	H3-04-RC MOD	SOLID, H3-04-RC MOD, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	2M	EML	A-01-R MOD	SOLID, A-01-R MOD, IsoU	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	4E	EERF	C-01-1	SOLID, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	WM	MCAW W	160.3 MOD	SOLID, 160.3 MOD, Percent Moisture	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: Z	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
10	SSET-2-27.5'			2008-09-17 / 0	KXF3X	SOLID

SAMPLE COMMENTS:

XX	1L	EML	H3-04-RC MOD	SOLID, H3-04-RC MOD, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	2M	EML	A-01-R MOD	SOLID, A-01-R MOD, IsoU	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	4E	EERF	C-01-1	SOLID, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	WM	MCAW W	160.3 MOD	SOLID, 160.3 MOD, Percent Moisture	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: Z	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
11	SSET-2-35'			2008-09-17 / 0	KXF30	SOLID

SAMPLE COMMENTS:

XX	1L	EML	H3-04-RC MOD	SOLID, H3-04-RC MOD, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	2M	EML	A-01-R MOD	SOLID, A-01-R MOD, IsoU	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	4E	EERF	C-01-1	SOLID, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	WM	MCAW W	160.3 MOD	SOLID, 160.3 MOD, Percent Moisture	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: Z	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
12	SS-LF1-2-15.5'			2008-09-15 / 0	KXF31	SOLID

SAMPLE COMMENTS:

F8I230283 CLIENT ANALYSIS SUMMARY

Storage Loc: RAD

Project Manager: MCF Quote #: 80342 SDG:

Project: 388-1856-1-32 UC Davis

PO#: Report to: Tim Utterback

Client: 1353423 Weiss Associates

#SMPS in LOT: 18

Date Received: 2008-09-20

Analytical Due Date: 2008-10-06

Report Due Date: 2008-10-07

Report Type: D Expanded Deliverable

EDD Code: 99

Sample Control: Change the Project field to the Project ID on the COC. Enter COC# in the COC field.

Enter "WAE" in Sample Name field. Enter "U" in the LPR Code field.

RADIOCHEMISTRY: Please note the required MDCs

XX	2M	EML	A-01-R MOD	SOLID, A-01-R MOD, IsoU	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	4E	EERF	C-01-1	SOLID, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
13	SS-LF1-2-20'			2008-09-15 / 0	KXF32	SOLID

SAMPLE COMMENTS:

XX	2M	EML	A-01-R MOD	SOLID, A-01-R MOD, IsoU	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	4E	EERF	C-01-1	SOLID, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
14	SS-LF1-2-27.5'			2008-09-15 / 0	KXF33	SOLID

SAMPLE COMMENTS:

XX	2M	EML	A-01-R MOD	SOLID, A-01-R MOD, IsoU	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	4E	EERF	C-01-1	SOLID, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
15	SS-LF1-2-37.5'			2008-09-15 / 0	KXF35	SOLID

SAMPLE COMMENTS:

XX	2M	EML	A-01-R MOD	SOLID, A-01-R MOD, IsoU	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	4E	EERF	C-01-1	SOLID, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
16	GWGW2291			2008-09-15 / 830	KXF37	WATER

SAMPLE COMMENTS:

XX	ZZ	NONE	NONE	WATER, NONE, Archive, Special List	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
17	GWGW2287			2008-09-16 / 800	KXF4A	WATER

SAMPLE COMMENTS:

XX	2I	EML	A-01-R MOD	WATER, A-01-R, IsoU	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
18	GWGW2288			2008-09-17 / 1630	KXF4C	WATER

SAMPLE COMMENTS:

XX	2I	EML	A-01-R MOD	WATER, A-01-R, IsoU	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZO	EPA	905 MOD	WATER, 905 MOD, SR-90	FX	Precipitate, Separation	01	STANDARD TEST SET	PROT: R	WRK LOC	06

REVISED PER MARY STALLARD - 9/22/08 MJB

Chain of Custody Record

TA - Test America
13715 Rider Trail North
Earth City, MO 63045
Phone 314.298.8566 fax: 314.298.8757

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-32
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
A Geotechnical Consultant Company, Inc.

Client Contact	Project Manager: Bob Devany	Sampled by: RCD	Date: 9/18/08	COC Number: UCD
Weiss Associates	Tel: 510-450-6144	Lab Contact: WO/PO# 08-06	Carrier:	Page 2 of 3
5801 Christie Avenue, Suite 600	Analysis Turnaround Time			Job No. 388-1856-1-32
Emeryville, CA 94608	Calendar (C) or Work Days (W) — 5W			SDG No.
(510) 450-6000 Phone	TAT if different from Below _____			
(510) 547-5043 FAX	☐ 2 weeks			
	☐ 1 week NORMAL TAT			
Job Name: UC Davis	☐ 2 days			
Address: One Shields Ave, Davis	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Carbon 14 (BERF C-01)	Tritium (906.0)	U-235 (A-01-R)	Sr-90 (905.0)	U-235/U-236	U-238 (A-01-R)	Sample Specific Notes:
SSST-2- 12.5' HOLD	9/12/08		acetate liner	soil	1					X		HOLD!
SSST-2- 20' HOLD	↓		↓	soil	↓					X		HOLD!
SSST-2 ~~SSWBH-2~~ 27.5' HOLD				soil						X		HOLD!
SSST2 ~~SSWBH-2~~ 32.5' HOLD				soil						X		HOLD!
~~SSWBH-2~~ TUBE				soil								
~~SSWBH-2~~ TUBE				soil								
SSWBH-3- 7.5	9/16/08			soil	1	X	X	X	X		X	
SSWBH-3- 20	↓		↓	soil	↓	X	X	X	X		X	
SSWBH-3- 27.5'				soil		X	X	X	X		X	

Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other _____

Possible Hazard Identification
Non-Hazard Flammable Skin Irritant Poison B Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client Disposal By Lab Archive For _____ Months

Special Instructions/QC Requirements & Comments: LEVEL IV REPORTING!

WORK ORDER 0805

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Ryan Atkinson	Weiss Assoc.	9/18/08 1700	[illegible]	TA	9/20/08 0900
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

REVISED PER MARY STALLARD - 9/22/08 [illegible]

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-32
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytical prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
A [illegible] Company

TA - Test America
13715 Rider Trail North
Earth City, MO 63045
Phone 314.298.8566 fax: 314.298.8757

Client Contact	Project Manager: Bob Devany	Sampled by: RKD	Date: 9/18/08	COC Number: UCD 20080918-
Weiss Associates	Tel: 510-450-6144	Lab Contact: WO/PO# 08-06	Carrier:	Page 3 of 3
5801 Christie Avenue, Suite 600	Analysis Turnaround Time			Job No.
Emeryville, CA 94608	Calendar (C) or Work Days (W) — 5W			388-1856-1-32
(510) 450-6000 Phone	TAT if different from Below _____			SDG No.
(510) 547-5043 FAX	☐ 2 weeks			
	☐ 1 week	NORMAL TAT		
Job Name: UC Davis	☐ 2 days			
Address: One Shields Ave, Davis	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Tritium (906.0)	U-238 (CA-01-R)	U-235 (CA-01-R)	Sr-90 (905.0)	Carbon 14 (EERF C-01)	Sample Specific Notes:
SSET2-13' SB/BH-3	9/17/08		ACETATE LINER	soil	1	X		X		X	
SSET2-22.5'	↓		↓	↓	↓	X		X		X	
SSET2-27.5'						X		X		X	
SSET2-35'						X		X		X	
SS-LF1-2-15.5'	9/15/08							X		X	
20'								X		X	
27.5'								X		X	
37.5'	↓		↓	↓	↓			X		X	
						1	1	1	1	1	

Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other _____

Possible Hazard Identification: Non-Hazard / Flammable / Skin Irritant / Poison B / Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): Return To Client / Disposal By Lab / Archive For _____ Months

Special Instructions/QC Requirements & Comments: LEVEL IV REPORTING!

WORK ORDER 0805

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
			[illegible]	TA	9/20/08 0900
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

REVISED PER MARY STALLARD - 9/22/08 MZQ

Chain of Custody Record

TA - Test America
13715 Rider Trail North
Earth City, MO 63045
Phone 314.298.8566 fax 314.298.8757

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-32
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytical method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
A geotechnical consultant, ltd.

Client Contact	Project Manager: Bob Devany	Sampled by: R. Davis	Date: 9/18/08	COC Number: UCD20080918-1
Weiss Associates	Tel: 510-450-6144	Lab Contact: WO/PO# 08-05	Carrier:	Page 1 of 3
5801 Christie Avenue, Suite 600	Analysis Turnaround Time			Job No. 388-1856-1-32
Emeryville, CA 94608	Calendar (C) or Work Days (W) -- 5W			
(510) 450-6000 Phone	TAT if different from Below			SDG No.
(510) 547-5043 FAX	☐ 2 weeks			
	☐ 1 week Normal TAT			
Job Name: UC Davis	☐ 2 days			
Address: One Shields Ave, Davis	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Carbon 14 (EERF C-01)	Tritium (906.0)	U-235	A-01-R	8260B (GC/MS)	Sample Specific Notes:
GWGW 2286 ~~GWGW2276~~	9/15/08	12:15	bailed water	water	2	X	X				→ RUSH SAMPLE 3 DAYS borehole ID = WBH-4
GWGW 2291 HOLD!	9/15/08	08:30	bailed	water	2			X			HOLD borehole ID = ST-2
GWGW 2287	9/16/08	08:40	bailed	water	3	X		X			borehole ID = LF1-2
GWGW 2288	9/18/08	10:30	BAILED	WATER	5	X		X	X		
						1	1	1			

Preservation Used: 1=Ice, 2=HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification
Non-Hazard Flammable Skin Irritant Poison B Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client Disposal By Lab Archive For ____ Months

Special Instructions/QC Requirements & Comments: LEVEL IV REPORTING!

Work order 0805

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Weiss Associates	9/18/08 1700	[signature]	TA	9/20/08
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Lot #(s): F8I230279
243

Condition Upon Receipt Form

Client: Weiss
Quote No: 80342
COC/RFA No: UC01 008.0918.1
Initiated By: BA
Date: 9/20/08
Time: 0900

Shipping Information

Shipper Name: FE
Shipping # (s):*
1. 8656 4924 7353
2.
3.
4.
5.
6.
7.
8.
9.
10.

Multiple Packages Y (N)
Sample Temperature (s):**
1. ambient
2.
3.
4.
5.
6.
7.
8.
9.
10.

*Numbered shipping lines correspond to Numbered Sample Temp lines

**Sample must be received at 4°C ± 2°C- If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	Y (N)	Are there custody seals present on the cooler?	8.	Y (N)	Are there custody seals present on bottles?
2.	Y N (N/A)	Do custody seals on cooler appear to be tampered with?	9.	Y N (N/A)	Do custody seals on bottles appear to be tampered with?
3.	(Y) N	Were contents of cooler frisked after opening, but before unpacking?	10.	(Y) N N/A	Was sample received with proper pH[1]? (If not, make note below)
4.	(Y) N	Sample received with Chain of Custody?	11.	Y N	If N/A- Was pH taken by original TestAmerica lab?
5. +	(Y) N N/A	Does the Chain of Custody match sample ID's on the container(s)?	12.	(Y) N	Sample received in proper containers?
6. *	(Y) N	Was sample received broken?	13.	Y N (N/A)	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)
7.	Y (N)	Is sample volume sufficient for analysis?	14.	Y N	Was Internal COC/Workshare received?

[1] For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes: * CL for GWGW2287 received broken

+ Sample SSST-2-27.5 (COC) received as SSST-2-28 (sample) & SSST-2-32.5 (COC) as 33 (Sample)

Received revised COC's on 9/23 BA

Corrective Action:
☐ Client Contact Name: Informed by:
☐ Sample(s) processed "as is"
☐ Sample(s) on hold until: If released, notify:
Project Management Review: Date: 09-25-08

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED IN. IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIAL AND THE DATE NEXT TO THAT ITEM.

Weiss Associates

Client Sample ID: SSWBH-3-7.5'

Radiochemistry

Lab Sample ID: F8I230283-005
Work Order: KXF3L
Matrix: SOLID

Date Collected: 09/16/08 0000
Date Received: 09/20/08 0900

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/g**		**Batch # 8273535**	**Yld %**
Carbon 14	0.66	U	0.59	1.00	0.94	09/29/08	10/06/08
Iso URANIUM (LONG CT) DOE A-01-R MOD				**pCi/g**		**Batch # 8270357**	**Yld % 79**
Uranium 235/236	0.039	U	0.042	0.200	0.047	09/26/08	10/02/08
Uranium 238	**0.52**		**0.14**	0.20	**0.02**	**09/26/08**	**10/02/08**
Tritium by LSC by DOE H3-04-RC MOD.				**pCi/g**		**Batch # 8273457**	**Yld %**
Tritium	**56.5**		**3.7**	1.0	**0.4**	**09/29/08**	**10/02/08**
Strontium-90 by GFPC DOE SR-03-RC MOD				**pCi/g**		**Batch # 8267599**	**Yld % 73**
Strontium 90	-0.02	U	0.34	1.00	0.58	09/23/08	10/09/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: SSWBH-3-20'

Radiochemistry

Lab Sample ID: F8I230283-006
Work Order: KXF3M
Matrix: SOLID

Date Collected: 09/16/08 0000
Date Received: 09/20/08 0900

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/g**		**Batch # 8273535**	**Yld %**
Carbon 14	0.57	U	0.55	1.00	0.89	09/29/08	10/06/08
Iso URANIUM (LONG CT) DOE A-01-R MOD				**pCi/g**		**Batch # 8270357**	**Yld % 94**
Uranium 235/236	0.005	U	0.020	0.200	0.049	09/26/08	10/02/08
Uranium 238	**0.259**		**0.091**	0.200	**0.034**	**09/26/08**	**10/02/08**
Tritium by LSC by DOE H3-04-RC MOD.				**pCi/g**		**Batch # 8273457**	**Yld %**
Tritium	**0.85**	**J**	**0.32**	1.00	**0.45**	**09/29/08**	**10/02/08**
Strontium-90 by GFPC DOE SR-03-RC MOD				**pCi/g**		**Batch # 8267599**	**Yld % 75**
Strontium 90	0.17	U	0.33	1.00	0.55	09/23/08	10/09/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

J Result is greater than sample detection limit but less than stated reporting limit.
U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: SSWBH-3-27.5'

Radiochemistry

Lab Sample ID: F8I230283-007
Work Order: KXF3N
Matrix: SOLID

Date Collected: 09/16/08 0000
Date Received: 09/20/08 0900

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/g**		**Batch # 8273535**	**Yld %**
Carbon 14	0.21	U	0.56	1.00	0.94	09/29/08	10/06/08
Iso URANIUM (LONG CT) DOE A-01-R MOD				**pCi/g**		**Batch # 8270357**	**Yld % 84**
Uranium 235/236	-0.0051	U	0.0072	0.200	0.054	09/26/08	10/02/08
Uranium 238	**0.38**		**0.12**	0.20	**0.02**	**09/26/08**	**10/02/08**
Tritium by LSC by DOE H3-04-RC MOD.				**pCi/g**		**Batch # 8273457**	**Yld %**
Tritium	**0.56**	**J**	**0.29**	1.00	**0.43**	**09/29/08**	**10/02/08**
Strontium-90 by GFPC DOE SR-03-RC MOD				**pCi/g**		**Batch # 8267599**	**Yld % 74**
Strontium 90	0.04	U	0.33	1.00	0.57	09/23/08	10/09/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

J Result is greater than sample detection limit but less than stated reporting limit.
U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: SSET-2-15'

Radiochemistry

Lab Sample ID: F8I230283-008
Work Order: KXF3T
Matrix: SOLID

Date Collected: 09/17/08 0000
Date Received: 09/20/08 0900

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/g**		**Batch # 8273535**	**Yld %**
Carbon 14	-0.12	U	0.50	1.00	0.89	09/29/08	10/06/08
Iso URANIUM (LONG CT) DOE A-01-R MOD				**pCi/g**		**Batch # 8270357**	**Yld % 95**
Uranium 235/236	**0.036**	**J**	**0.036**	0.200	**0.024**	**09/26/08**	**10/02/08**
Uranium 238	**0.45**		**0.12**	0.20	**0.05**	**09/26/08**	**10/02/08**
Tritium by LSC by DOE H3-04-RC MOD.				**pCi/g**		**Batch # 8273457**	**Yld %**
Tritium	0.01	U	0.26	1.00	0.45	09/29/08	10/02/08

NOTE(S)

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Bold results are greater than the MDC

J Result is greater than sample detection limit but less than stated reporting limit.
U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: SSET-2-22.5'

Radiochemistry

Lab Sample ID: F8I230283-009
Work Order: KXF3W
Matrix: SOLID

Date Collected: 09/17/08 0000
Date Received: 09/20/08 0900

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/g**		**Batch # 8273535**	**Yld %**
Carbon 14	-0.12	U	0.53	1.00	0.93	09/29/08	10/06/08
Iso URANIUM (LONG CT) DOE A-01-R MOD				**pCi/g**		**Batch # 8270357**	**Yld % 94**
Uranium 235/236	0.019	U	0.027	0.200	0.026	09/26/08	10/02/08
Uranium 238	**0.35**		**0.11**	0.20	**0.04**	**09/26/08**	**10/02/08**
Tritium by LSC by DOE H3-04-RC MOD.				**pCi/g**		**Batch # 8273457**	**Yld %**
Tritium	0.13	U	0.27	1.00	0.44	09/29/08	10/02/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: SSET-2-27.5'

Radiochemistry

Lab Sample ID: F8I230283-010
Work Order: KXF3X
Matrix: SOLID

Date Collected: 09/17/08 0000
Date Received: 09/20/08 0900

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/g**	**Batch # 8273535**		**Yld %**
Carbon 14	0.18	U	0.54	1.00	0.92	09/29/08	10/06/08
Iso URANIUM (LONG CT) DOE A-01-R MOD				**pCi/g**	**Batch # 8270357**		**Yld % 89**
Uranium 235/236	0.025	U	0.035	0.200	0.053	09/26/08	10/02/08
Uranium 238	**0.36**		**0.11**	0.20	**0.04**	**09/26/08**	**10/02/08**
Tritium by LSC by DOE H3-04-RC MOD.				**pCi/g**	**Batch # 8273457**		**Yld %**
Tritium	0.36	U	0.28	1.00	0.44	09/29/08	10/02/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: SSET-2-35'

Radiochemistry

Lab Sample ID: F8I230283-011
Work Order: KXF30
Matrix: SOLID

Date Collected: 09/17/08 0000
Date Received: 09/20/08 0900

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/g**		**Batch # 8273535**	**Yld %**
Carbon 14	-0.03	U	0.54	1.00	0.94	09/29/08	10/06/08
Iso URANIUM (LONG CT) DOE A-01-R MOD				**pCi/g**		**Batch # 8270357**	**Yld % 104**
Uranium 235/236	0.036	U	0.039	0.200	0.044	09/26/08	10/02/08
Uranium 238	**0.38**		**0.11**	0.20	**0.04**	**09/26/08**	**10/02/08**
Tritium by LSC by DOE H3-04-RC MOD.				**pCi/g**		**Batch # 8273457**	**Yld %**
Tritium	0.18	U	0.26	1.00	0.44	09/29/08	10/02/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: SS-LF1-2-15.5'

Radiochemistry

Lab Sample ID: F8I230283-012
Work Order: KXF31
Matrix: SOLID

Date Collected: 09/15/08 0000
Date Received: 09/20/08 0900

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/g**		**Batch # 8273535**	**Yld %**
Carbon 14	**1.02**		**0.60**	1.00	**0.92**	**09/29/08**	**10/06/08**
Iso URANIUM (LONG CT) DOE A-01-R MOD				**pCi/g**		**Batch # 8270357**	**Yld % 84**
Uranium 235/236	0.018	U	0.030	0.200	0.047	09/26/08	10/02/08
Uranium 238	**0.44**		**0.13**	0.20	**0.06**	**09/26/08**	**10/02/08**

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: SS-LF1-2-20'

Radiochemistry

Lab Sample ID: F8I230283-013
Work Order: KXF32
Matrix: SOLID

Date Collected: 09/15/08 0000
Date Received: 09/20/08 0900

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/g**		**Batch # 8273535**	**Yld %**
Carbon 14	0.05	U	0.51	1.00	0.89	09/29/08	10/06/08
Iso URANIUM (LONG CT) DOE A-01-R MOD				**pCi/g**		**Batch # 8270357**	**Yld % 89**
Uranium 235/236	0.033	U	0.039	0.200	0.050	09/26/08	10/02/08
Uranium 238	**0.49**		**0.13**	0.20	**0.05**	**09/26/08**	**10/02/08**

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: SS-LF1-2-27.5'

Radiochemistry

Lab Sample ID: F8I230283-014
Work Order: KXF33
Matrix: SOLID

Date Collected: 09/15/08 0000
Date Received: 09/20/08 0900

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/g**		**Batch # 8273535**	**Yld %**
Carbon 14	0.32	U	0.53	1.00	0.88	09/29/08	10/06/08
Iso URANIUM (LONG CT) DOE A-01-R MOD				**pCi/g**		**Batch # 8270357**	**Yld % 81**
Uranium 235/236	0.021	U	0.029	0.200	0.028	09/26/08	10/02/08
Uranium 238	**0.67**		**0.16**	0.20	**0.04**	**09/26/08**	**10/02/08**

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: SS-LF1-2-37.5'

Radiochemistry

Lab Sample ID: F8I230283-015
Work Order: KXF35
Matrix: SOLID

Date Collected: 09/15/08 0000
Date Received: 09/20/08 0900

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/g**		**Batch # 8273535**	**Yld %**
Carbon 14	0.19	U	0.53	1.00	0.90	09/29/08	10/06/08
Iso URANIUM (LONG CT) DOE A-01-R MOD				**pCi/g**		**Batch # 8270357**	**Yld % 84**
Uranium 235/236	**0.031**	**J**	**0.036**	0.200	**0.028**	**09/26/08**	**10/02/08**
Uranium 238	**0.56**		**0.15**	0.20	**0.04**	**09/26/08**	**10/02/08**

NOTE(S)

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U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: GWGW2287

Radiochemistry

Lab Sample ID: F8I230283-017
Work Order: KXF4A
Matrix: WATER

Date Collected: 09/16/08 0800
Date Received: 09/20/08 0900

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/L**		**Batch # 8273533**	**Yld %**
Carbon 14	6.4	U	5.5	20.0	8.8	09/29/08	10/01/08
Iso URANIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**		**Batch # 8274253**	**Yld % 43**
Uranium 235/236	0.0	U	0.047	1.00	0.15	09/30/08	10/02/08
Uranium 238	**1.64**		**0.56**	1.00	**0.24**	**09/30/08**	**10/02/08**

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: GWGW2288

Radiochemistry

Lab Sample ID: F8I230283-018
Work Order: KXF4C
Matrix: WATER

Date Collected: 09/17/08 1630
Date Received: 09/20/08 0900

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
SR-90 BY GFPC EPA-905 MOD				**pCi/L**		**Batch # 8267598**	**Yld % 94**
Strontium 90	0.40	U	0.28	1.00	0.43	09/23/08	10/02/08
Carbon 14 by EERF C-01-1				**pCi/L**		**Batch # 8273533**	**Yld %**
Carbon 14	**12.4**	**J**	**5.8**	20.0	**8.8**	**09/29/08**	**10/01/08**
Iso URANIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**		**Batch # 8274253**	**Yld % 34**
Uranium 235/236	-0.027	U	0.038	1.00	0.35	09/30/08	10/02/08
Uranium 238	**0.78**	**J**	**0.43**	1.00	**0.28**	**09/30/08**	**10/02/08**

NOTE(S)

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Bold results are greater than the MDC

J Result is greater than sample detection limit but less than stated reporting limit.
U Result is less than the sample detection limit.

METHOD BLANK REPORT

Radiochemistry

Client Lot ID: F8I230283
Matrix: SOLID

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC		Prep Date	Analysis Date	Lab Sample ID
Strontium-90 by GFPC DOE SR-03-RC MOD			**pCi/g**	**Batch #**	**8267599**	**Yld %**	**75**		**F8I230000-599B**
Strontium 90	-0.03	U	0.32	1.00	0.55		09/23/08	10/09/08	
Iso URANIUM (LONG CT) DOE A-01-R MOD			**pCi/g**	**Batch #**	**8270357**	**Yld %**	**92**		**F8I260000-357B**
Uranium 235/236	-0.0012	U	0.0025	0.100	0.022		09/26/08	10/02/08	
Uranium 238	0.008	U	0.011	0.100	0.011		09/26/08	10/02/08	
Tritium by LSC by DOE H3-04-RC MOD.			**pCi/g**	**Batch #**	**8273457**	**Yld %**			**F8I290000-457B**
Tritium	-0.09	U	0.22	1.00	0.39		09/29/08	10/02/08	
Carbon 14 by EERF C-01-1			**pCi/g**	**Batch #**	**8273535**	**Yld %**			**F8I290000-535B**
Carbon 14	0.14	U	0.55	1.00	0.93		09/29/08	10/06/08	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined using instrument performance only
Bold results are greater than the MDC

U Result is less than the sample detection limit.

METHOD BLANK REPORT

Radiochemistry

Client Lot ID: F8I230283
Matrix: WATER

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC		Prep Date	Analysis Date	Lab Sample ID
SR-90 BY GFPC EPA-905 MOD			**pCi/L**	**Batch #**	**8267598**	**Yld %**	**68**		**F8I230000-598B**
Strontium 90	0.06	U	0.36	1.00	0.62		09/23/08	10/02/08	
Carbon 14 by EERF C-01-1			**pCi/L**	**Batch #**	**8273533**	**Yld %**			**F8I290000-533B**
Carbon 14	-2.5	U	5.1	20.0	8.8		09/29/08	10/01/08	
Iso URANIUM (SHORT CT) DOE A-01-R MOD			**pCi/L**	**Batch #**	**8274253**	**Yld %**	**68**		**F8I300000-253B**
Uranium 235/236	0.067	U	0.095	1.00	0.090		09/30/08	10/02/08	
Uranium 238	0.054	U	0.076	1.00	0.073		09/30/08	10/02/08	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined using instrument performance only
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Laboratory Control Sample Report

Radiochemistry

Client Lot ID: F8I230283
Matrix: SOLID

Parameter	Spike Amount	Result	Total Uncert. (2 σ+/-)	MDC	% Yld	% Rec	Lab Sample ID / QC Control Limits
Strontium-90 by GFPC DOE SR-03-RC MOD			**pCi/g**	**SR-03-RC MOD**			**F8I230000-599C**
Strontium 90	7.03	8.31	0.94	0.55	75	118	(69 - 137)
	Batch #:	8267599		**Analysis Date:**	10/09/08		
Iso URANIUM (LONG CT) DOE A-01-R MOD			**pCi/g**	**A-01-R MOD**			**F8I260000-357C**
Uranium 234	19.6	18.1	2.5	0.4	92	92	(70 - 122)
Uranium 238	19.6	17.5	2.5	0.3	92	89	(69 - 119)
	Batch #:	8270357		**Analysis Date:**	10/02/08		
Tritium by LSC by DOE H3-04-RC MOD.			**pCi/g**	**H3-04-RC MOD**			**F8I290000-457C**
Tritium	16.3	14.8	1.2	0.4		91	(75 - 104)
	Batch #:	8273457		**Analysis Date:**	10/02/08		
Carbon 14 by EERF C-01-1			**pCi/g**	**C-01-1**			**F8I290000-535C**
Carbon 14	73.2	63.4	5.2	0.9		87	(62 - 109)
	Batch #:	8273535		**Analysis Date:**	10/06/08		

NOTE(S)

MDC is determined by instrument performance only
Calculations are performed before rounding to avoid round-off error in calculated results

Laboratory Control Sample Report

Radiochemistry

Client Lot ID: F8I230283
Matrix: WATER

Parameter	Spike Amount	Result	Total Uncert. (2 σ+/-)	MDC	% Yld	% Rec	Lab Sample ID / QC Control Limits
Carbon 14 by EERF C-01-1			**pCi/L**	**C-01-1**			**F8I290000-533C**
Carbon 14	976	693	55	9		71	(38 - 112)
	Batch #:	8273533		**Analysis Date:**	10/01/08		
Iso URANIUM (SHORT CT) DOE A-01-R MOD			**pCi/L**	**A-01-R MOD**			**F8I300000-253C**
Uranium 234	13.1	13.2	1.6	0.1	72	100	(87 - 127)
Uranium 238	13.6	15.0	1.8	0.1	72	110	(87 - 128)
	Batch #:	8274253		**Analysis Date:**	10/02/08		

NOTE(S)

MDC is determined by instrument performance only
Calculations are performed before rounding to avoid round-off error in calculated results

Laboratory Control Sample/LCS Duplicate Report

Radiochemistry

Client Lot ID: F8I230283
Matrix: WATER

Parameter		Spike Amount	Result	Total Uncert. (2 σ+/-)	% Yld	% Rec	QC Control Limits	Lab Sample ID Precision	
SR-90 BY GFPC EPA-905 MOD			**pCi/L**	**905 MOD**			**F8I230000-598C**		
Strontium 90		7.04	8.68	0.999	70	123	(73 - 135)		
	Spk 2	7.04	8.35	0.98	70	119	(73 - 135)	4	%RPD
		Batch #:	8267598		**Analysis Date:**		10/02/08		

NOTE(S)

Calculations are performed before rounding to avoid round-off error in calculated results

MATRIX SPIKE REPORT

Radiochemistry

Client Lot Id: F8I230283
Matrix: SOLID

Date Sampled: 09/16/08
Date Received: 09/20/08

Parameter	Spike Amount	Spike Result	Total Uncert. (2σ +/-)	Spike Yld.	Sample Result	Total Uncert. (2 σ +/-)	QC Sample ID %YLD	QC Sample ID %REC	QC Control Limits
Tritium by LSC by DOE H3-04-RC MOD.			**pCi/g**		**H3-04-RC MOD**			**F8I230283-006**	
Tritium	16.3	16.2	1.3		0.85	0.32		94	(62 - 129)
	Batch #:	8273457		Analysis Date:		10/02/08			

NOTE(S)

Data are incomplete without the case narrative.
Calculations are performed before rounding to avoid round-off errors in calculated results.

DUPLICATE EVALUATION REPORT

Radiochemistry

Client Lot ID: F8I230283
Matrix: SOLID

Date Sampled: 09/16/08
Date Received: 09/20/08

Parameter	SAMPLE Result		Total Uncert. (2σ+/-)	% Yld	DUPLICATE Result		Total Uncert. (2 σ+/-)	% Yld	QC Sample ID Precision	
Strontium-90 by GFPC DOE SR-03-RC MOD				**pCi/g**	**SR-03-RC MOD**				**F8I230283-005**	
Strontium 90	-0.02	U	0.34	73	0.002	U	0.33	70	260	%RPD
	Batch #:		8267599	(Sample)	8267599		(Duplicate)			
Iso URANIUM (LONG CT) DOE A-01-R MOD				**pCi/g**	**A-01-R MOD**				**F8I230283-005**	
Uranium 235/236	0.039	U	0.042	79	**0.074**	J	**0.057**	82	63	%RPD
Uranium 238	**0.52**		**0.14**	79	**0.47**		**0.13**	82	11	%RPD
	Batch #:		8270357	(Sample)	8270357		(Duplicate)			
Tritium by LSC by DOE H3-04-RC MOD.				**pCi/g**	**H3-04-RC MOD**				**F8I230283-005**	
Tritium	**56.5**		**3.7**		**43.5**		**2.9**		26	%RPD
	Batch #:		8273457	(Sample)	8273457		(Duplicate)			

NOTE(S)

Data are incomplete without the case narrative.
Calculations are performed before rounding to avoid round-off error in calculated results

J Result is greater than sample detection limit but less than stated reporting limit.
U Result is less than the sample detection limit.

DUPLICATE EVALUATION REPORT

Radiochemistry

Client Lot ID: F8I230283
Matrix: WATER

Date Sampled: 09/16/08
Date Received: 09/20/08

Parameter	SAMPLE Result		Total Uncert. (2σ+/-)	% Yld	DUPLICATE Result		Total Uncert. (2 σ+/-)	% Yld	QC Sample ID Precision	
Iso URANIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**A-01-R MOD**				**F8I230283-017**	
Uranium 235/236	0.0	U	0.047	43	0.06	U	0.14	31	200	%RPD
Uranium 238	**1.64**		**0.56**	43	**1.38**		**0.56**	31	17	%RPD
		Batch #:	8274253	(Sample)	8274253	(Duplicate)				

NOTE(S)

Data are incomplete without the case narrative.
Calculations are performed before rounding to avoid round-off error in calculated results

J Result is greater than sample detection limit but less than stated reporting limit.
U Result is less than the sample detection limit.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

PROJECT NO. 388-1856-1-11

UC Davis

Lot #: F8I250199

Tim Utterback

Weiss Associates
350 East Middlefield Rd.
Mountain View, CA 94043

TESTAMERICA LABORATORIES, INC.

Michael C. Franks
Project Manager

October 6, 2008

Case Narrative
LOT NUMBER: **F8I250199**

This report contains the analytical results for the four samples received under chain of custody UCD20080922-2 by TestAmerica St. Louis on September 24, 2008. These samples are associated with your UC Davis project.

The analytical results included in this report meet all applicable quality control procedure requirements except as noted on the following page.

The test results in this report meet all NELAP requirements for parameters in which accreditations are held by TestAmerica St. Louis. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of this report.

All chemical analysis results are based upon sample as received, wet weight, unless noted otherwise. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Observations/Nonconformances
Reference the chain of custody and condition upon receipt report for any variations on receipt conditions and temperature of samples on receipt.

Tritium by EPA 906.0 MOD

Tritium sample aliquot was reduced due to sample had a soapy appearance, which may cause the sample to effervesce into the distillate.
Affected Samples:
F8I250199 (1): GWGW2289
F8I250199 (3): GWGW2292
F8I250199 (4): GWGW2293

Tritium sample had been preserved in HNO3, so additional NAOH pellets were added to make sample basic.
Affected Samples:
F8I250199 (2): GWGW2290

Carbon-14 by EERF C-01-1

Sample was preserved in Nitric acid for Carbon 14. If the sample contains carbonates, it is possible CO2 may have been released before the analysis causing low bias to the result. If the carbon is mostly in an organic form, preservation will have little or no impact on the result.
Affected Samples:
F8I250199 (2): GWGW2290

METHODS SUMMARY

F8I250199

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Carbon 14 by LSC	EERF C-01-1	
H-3 by Distillation & LSC	EPA 906.0 MOD	
Isotopic Uranium by Alpha Spectroscopy	EML A-01-R MOD	
Strontium 90 by GFPC	EPA 905 MOD	

References:

EERF EERF

EML "ENVIRONMENTAL MEASUREMENTS LABORATORY PROCEDURES MANUAL" HASL-300 28TH EDITION, VOLUME I and II DEPARTMENT OF ENERGY

EPA "EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984

SAMPLE SUMMARY

F8I250199

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
KXK12	001	GWGW2289	09/19/08	08:30
KXK14	002	GWGW2290	09/18/08	08:30
KXK16	003	GWGW2292	09/17/08	07:30
KXK17	004	GWGW2293	09/16/08	13:50

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

F8I250199 CLIENT ANALYSIS SUMMARY

Storage Loc: R121-122

Project Manager: MCF | Quote #: 80342 | SDG:

Project: 388-1856-1-11 | UC Davis

PO#: | Report to: Tim Utterback

Client: 1353423 Weiss Associates

#SMPS in LOT: 4

Date Received: 2008-09-24

Analytical Due Date: 2008-10-06

Report Due Date: 2008-10-08

Report Type: D Expanded Deliverable

EDD Code: 99

Sample Control: Change the Project field to the Project ID on the COC. Enter COC# in the COC field.

Enter "WAE" in Sample Name field. Enter "U" in the LPR Code field.

RADIOCHEMISTRY: Please note the required MDCs

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
1	GWGW2289			2008-09-19 / 830	KXK12	WATER

SAMPLE COMMENTS: TRITIUM AND CARBON-14 PRESERVED WITH NITRIC ACID

XX	2I	EML	A-01-R MOD	WATER, A-01-R, IsoU	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZO	EPA	905 MOD	WATER, 905 MOD, SR-90	FX	Precipitate, Separation	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
2	GWGW2290			2008-09-18 / 830	KXK14	WATER

SAMPLE COMMENTS: TRITIUM AND CARBON-14 PRESERVED WITH NITRIC ACID

XX	2I	EML	A-01-R MOD	WATER, A-01-R, IsoU	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
3	GWGW2292			2008-09-17 / 730	KXK16	WATER

SAMPLE COMMENTS: TRITIUM AND CARBON-14 PRESERVED WITH NITRIC ACID

XX	2I	EML	A-01-R MOD	WATER, A-01-R, IsoU	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZO	EPA	905 MOD	WATER, 905 MOD, SR-90	FX	Precipitate, Separation	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
4	GWGW2293			2008-09-16 / 1350	KXK17	WATER

SAMPLE COMMENTS:

XX	2I	EML	A-01-R MOD	WATER, A-01-R, IsoU	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZO	EPA	905 MOD	WATER, 905 MOD, SR-90	FX	Precipitate, Separation	01	STANDARD TEST SET	PROT: R	WRK LOC	06

Lot# F8I250199

OUR 187

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

TA - Test America
13715 Rider Trail North
Earth City, MO 63045
Phone 314.298.8566 fax: 314.298.8757

Project ID: 388-1856-1-32
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
A Geotechnical Consultant Company, Inc.

Client Contact	Project Manager: Bob Devany	Sampled by: RKD	Date: 9-22-08	COC Number: UCD20080922-2
Weiss Associates	Tel: 510-450-6144	Lab Contact: WO/PO# 08-05	Carrier: Test America Inc.	Page 1 of 1
5801 Christie Avenue, Suite 600	Analysis Turnaround Time			Job No. 388-1856-1-32
Emeryville, CA 94608	Calendar (C) or Work Days (W) --- 5W			SDG No.
(510) 450-6000 Phone	TAT if different from Below NORMAL			
(510) 547-5043 FAX	☐ 2 weeks			
	☐ 1 week			
Job Name: UC Davis	☐ 2 days			
Address: One Shields Ave, Davis	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	filtered for U-235, 238, Sr-90	Carbon 14 (EERF C-01)	Tritium (906.0)	U-235 (A-01-R)	Sr-90 (905.0)	U-235/U-236	U-238 (A-01-R)	Sample Specific Notes:
~~GWGW2287~~				water									
~~GWGW2288~~				water									
✓ GWGW2289	9-19-08	0830		water	4		X	X	X	X			4xLP
✓ GWGW2290	9-18-08	08:30		water	3		X	X	X				2xLP
~~GWGW2291~~				water									
✓ GWGW2292	9-17-08	07:30		water	4		X	X	X	X		X	4xLP
✓ GWGW2293	9-16-08	13:50		water	4		X	X	X	X		X	1xLP, 2xLh
							1	1	4	4	4	4	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **LEVEL IV REPORTING!**

W.O. 0805 COOLER 1 OF 2

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Ann Atkinson	Weiss	9/22/08 1700	[illegible]	TA	9/23/08 0930
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

TestAmerica St. Louis

Lot# F8I250199

Cwk 21L

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-32
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
A partnership Associates Incorporated, DBA

TA - Test America
13715 Rider Trail North
Earth City, MO 63045
Phone 314.298.8566 fax: 314.298.8757

Client Contact	Project Manager: Bob Devany	Sampled by: RKJ	Date: 09.25.08	COC Number: UCD 20080925-2
Weiss Associates	Tel: 510-450-6144	Lab Contact:	Carrier:	1 of 1 COCs
5801 Christie Avenue, Suite 600	Analysis Turnaround Time			Job No. 388-1856-1-32
Emeryville, CA 94608	Calendar (C) or Work Days (W) --- 5W			SDG No.
(510) 450-6000 Phone	TAT if different from Below _____			
(510) 547-5043 FAX	☐ 2 weeks			
	☐ 1 week			
Job Name: UC Davis	☐ 2 days			
Address: One Shields Ave, Davis	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	TRITIUM EPA 906.0	C-14 EPA 526F C-01	Sample Specific Notes:
GWGW2289	9/19/08	0830		WATER	2		X	X	2LG
GWGW2292	9/17/08	0730		WATER	1			X	LG
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____							1	1	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For _____ Months*

Special Instructions/QC Requirements & Comments:

Work Order 0805

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
RKJ Atkinson	Weiss Assoc.	9/25/08 1700	Angela Boon	TA-STL	9-26-08 9:30
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

TestAmerica St. Louis

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Lot #(s): F8I250199

- 187 -

Condition Upon Receipt Form

Client: Weiss Assoc. COC/RFA No: VCD2008 0922-2 Date: 9/24/08
Quote No: 80342 Initiated By: bm Time: 0930

Shipping Information

Shipper Name:
Shipping # (s):*
1. 8667 4102 4230
2.
3.
4.
5.
6.
7.
8.
9.
10.

Multiple Packages Y (N)
Sample Temperature (s):**
1. ambient
2.
3.
4.
5.
6.
7.
8.
9.
10.

*Numbered shipping lines correspond to Numbered Sample Temp lines

**Sample must be received at 4°C ± 2°C- If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	Y (N)	Are there custody seals present on the cooler?	8.	Y (N)	Are there custody seals present on bottles?
2.	Y N (N/A)	Do custody seals on cooler appear to be tampered with?	9.	Y N (N/A)	Do custody seals on bottles appear to be tampered with?
3.	(Y) N	Were contents of cooler frisked after opening, but before unpacking?	10.	(Y) N N/A	Was sample received with proper pH[1]? (If not, make note below)
4.	(Y) N	Sample received with Chain of Custody?	11.	Y N	If N/A- Was pH taken by original TestAmerica lab?
5.	(Y) N N/A	Does the Chain of Custody match sample ID's on the container(s)?	12.	(Y) N	Sample received in proper containers?
6.	Y (N)	Was sample received broken?	13.	Y N (N/A)	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)
7.	Y N	Is sample volume sufficient for analysis?	14.	Y N	Was Internal COC/Workshare received?

[1] For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes: Received unpreserved containers for hwhw2289 (2xLG) & 2292 (1LG) on 9/26

Corrective Action:
☐ Client Contact Name: Informed by:
☐ Sample(s) processed "as is"
☐ Sample(s) on hold until: If released, notify:
Project Management Review: Date: 09-25-08

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED IN. IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIAL AND THE DATE NEXT TO THAT ITEM.

Weiss Associates

Client Sample ID: GWGW2289

Radiochemistry

Lab Sample ID: F8I250199-001
Work Order: KXK12
Matrix: WATER

Date Collected: 09/19/08 0830
Date Received: 09/24/08 0930

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
SR-90 BY GFPC EPA-905 MOD				pCi/L		Batch # 8269285	Yld % 74
Strontium 90	0.18	U	0.35	1.00	0.58	09/25/08	10/03/08
Carbon 14 by EERF C-01-1				pCi/L		Batch # 8273533	Yld %
Carbon 14	6.2	U	5.4	20.0	8.8	09/29/08	10/02/08
TRITIUM (Distill) by EPA 906.0 MOD				pCi/L		Batch # 8274185	Yld %
Tritium	-110	U	140	300	240	09/30/08	10/01/08
Iso URANIUM (SHORT CT) DOE A-01-R MOD				pCi/L		Batch # 8274253	Yld % 33
Uranium 235/236	0.11	U	0.20	1.00	0.34	09/30/08	10/02/08
Uranium 238	**2.07**		**0.71**	1.00	**0.24**	**09/30/08**	**10/02/08**

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: GWGW2290

Radiochemistry

Lab Sample ID: F8I250199-002
Work Order: KXK14
Matrix: WATER

Date Collected: 09/18/08 0830
Date Received: 09/24/08 0930

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				pCi/L		Batch # 8273533	Yld %
Carbon 14	46.5		7.7	20.0	8.8	09/29/08	10/02/08
TRITIUM (Distill) by EPA 906.0 MOD				pCi/L		Batch # 8274185	Yld %
Tritium	1520		220	300	250	09/30/08	10/01/08
Iso URANIUM (SHORT CT) DOE A-01-R MOD				pCi/L		Batch # 8274253	Yld % 33
Uranium 235/236	-0.027	U	0.038	1.00	0.35	09/30/08	10/02/08
Uranium 238	2.23		0.74	1.00	0.15	09/30/08	10/02/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: GWGW2292

Radiochemistry

Lab Sample ID: F8I250199-003
Work Order: KXK16
Matrix: WATER

Date Collected: 09/17/08 0730
Date Received: 09/24/08 0930

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
SR-90 BY GFPC EPA-905 MOD				**pCi/L**		**Batch # 8269285**	**Yld % 81**
Strontium 90	0.01	U	0.29	1.00	0.51	09/25/08	10/03/08
Carbon 14 by EERF C-01-1				**pCi/L**		**Batch # 8273533**	**Yld %**
Carbon 14	2.1	U	5.3	20.0	8.9	09/29/08	10/02/08
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**		**Batch # 8274185**	**Yld %**
Tritium	1620		220	300	250	09/30/08	10/01/08
Iso URANIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**		**Batch # 8274253**	**Yld % 35**
Uranium 235/236	0.0	U	0.057	1.00	0.18	09/30/08	10/02/08
Uranium 238	0.74	J	0.42	1.00	0.35	09/30/08	10/02/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

J Result is greater than sample detection limit but less than stated reporting limit.
U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: GWGW2293

Radiochemistry

Lab Sample ID: F8I250199-004
Work Order: KXK17
Matrix: WATER

Date Collected: 09/16/08 1350
Date Received: 09/24/08 0930

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
SR-90 BY GFPC EPA-905 MOD				pCi/L		Batch # 8269285	Yld % 88
Strontium 90	0.24	U	0.27	1.00	0.45	09/25/08	10/03/08
Carbon 14 by EERF C-01-1				pCi/L		Batch # 8273533	Yld %
Carbon 14	12.4	J	5.8	20.0	8.8	09/29/08	10/02/08
TRITIUM (Distill) by EPA 906.0 MOD				pCi/L		Batch # 8274185	Yld %
Tritium	40	U	140	300	240	09/30/08	10/01/08
Iso URANIUM (SHORT CT) DOE A-01-R MOD				pCi/L		Batch # 8277540	Yld % 63
Uranium 235/236	-0.014	U	0.020	1.00	0.18	10/03/08	10/05/08
Uranium 238	1.99		0.52	1.00	0.17	10/03/08	10/05/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

J Result is greater than sample detection limit but less than stated reporting limit.
U Result is less than the sample detection limit.

METHOD BLANK REPORT

Radiochemistry

Client Lot ID: F8I250199
Matrix: WATER

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC		Prep Date	Lab Sample ID / Analysis Date
Iso URANIUM (SHORT CT) DOE A-01-R MOD			pCi/L	Batch #	8277540	Yld %	81	F8J030000-540B
Uranium 235/236	0.0	U	0.025	1.00	0.078		10/03/08	10/05/08
Uranium 238	0.038	U	0.067	1.00	0.11		10/03/08	10/05/08
SR-90 BY GFPC EPA-905 MOD			pCi/L	Batch #	8269285	Yld %	65	F8I250000-285B
Strontium 90	0.30	U	0.37	1.00	0.61		09/25/08	10/03/08
Carbon 14 by EERF C-01-1			pCi/L	Batch #	8273533	Yld %		F8I290000-533B
Carbon 14	-2.5	U	5.1	20.0	8.8		09/29/08	10/01/08
TRITIUM (Distill) by EPA 906.0 MOD			pCi/L	Batch #	8274185	Yld %		F8I300000-185B
Tritium	100	U	150	300	240		09/30/08	10/01/08
Iso URANIUM (SHORT CT) DOE A-01-R MOD			pCi/L	Batch #	8274253	Yld %	68	F8I300000-253B
Uranium 235/236	0.067	U	0.095	1.00	0.090		09/30/08	10/02/08
Uranium 238	0.054	U	0.076	1.00	0.073		09/30/08	10/02/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined using instrument performance only
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Laboratory Control Sample Report

Radiochemistry

Client Lot ID: F8I250199
Matrix: WATER

Parameter	Spike Amount	Result	Total Uncert. (2 σ+/-)	MDC	% Yld	% Rec	Lab Sample ID / QC Control Limits
Carbon 14 by EERF C-01-1			pCi/L	C-01-1			F8I290000-533C
Carbon 14	976	693	55	9		71	(38 - 112)
	Batch #:	8273533		Analysis Date:	10/01/08		
TRITIUM (Distill) by EPA 906.0 MOD			pCi/L	906.0 MOD			F8I300000-185C
Tritium	4900	4200	370	240		86	(67 - 111)
	Batch #:	8274185		Analysis Date:	10/01/08		
Iso URANIUM (SHORT CT) DOE A-01-R MOD			pCi/L	A-01-R MOD			F8I300000-253C
Uranium 234	13.1	13.2	1.6	0.1	72	100	(87 - 127)
Uranium 238	13.6	15.0	1.8	0.1	72	110	(87 - 128)
	Batch #:	8274253		Analysis Date:	10/02/08		

NOTE(S)

MDC is determined by instrument performance only
All calculations are performed before rounding to avoid round-off error in calculated results

Laboratory Control Sample/LCS Duplicate Report

Radiochemistry

Client Lot ID: F8I250199
Matrix: WATER

Parameter		Spike Amount	Result	Total Uncert. (2 σ+/-)	% Yld	% Rec	QC Control Limits	Precision	Lab Sample ID
Iso URANIUM (SHORT CT) DOE A-01-R MOD			**pCi/L**	**A-01-R MOD**					**F8J030000-540C**
Uranium 234		13.1	14.3	1.6	83	109	(87 - 127)		
	Spk 2	13.1	13.0	1.5	85	99	(87 - 127)	10	%RPD
Uranium 238		13.6	15.1	1.7	83	110	(87 - 128)		
	Spk 2	13.6	14.4	1.6	85	105	(87 - 128)	5	%RPD
		Batch #:	8277540		**Analysis Date:**		10/05/08		
SR-90 BY GFPC EPA-905 MOD			**pCi/L**	**905 MOD**					**F8I250000-285C**
Strontium 90		7.04	8.6	1.0	61	122	(73 - 135)		
	Spk 2	7.04	9.0	1.0	65	128	(73 - 135)	5	%RPD
		Batch #:	8269285		**Analysis Date:**		10/03/08		

NOTE(S)

Calculations are performed before rounding to avoid round-off error in calculated results

MATRIX SPIKE REPORT

Radiochemistry

Client Lot Id: F8I250199
Matrix: WATER

Date Sampled: 09/18/08
Date Received: 09/24/08

Parameter	Spike Amount	Spike Result	Total Uncert. (2σ +/-)	Spike Yld.	Sample Result	Total Uncert. (2 σ +/-)	QC Sample ID %YLD	QC Sample ID %REC	QC Control Limits
TRITIUM (Distill) by EPA 906.0 MOD			pCi/L		906.0 MOD			F8I250199-002	
Tritium	4900	5690	450		1520	220		85	(27 - 150)
	Batch #:	8274185		Analysis Date:		10/01/08			

NOTE(S)

Data are incomplete without the case narrative.

Calculations are performed before rounding to avoid round-off errors in calculated results.

DUPLICATE EVALUATION REPORT

Radiochemistry

Client Lot ID: F8I250199
Matrix: WATER

Date Sampled: 09/16/08
Date Received: 09/20/08

Parameter	SAMPLE Result		Total Uncert. (2σ+/-)	% Yld	DUPLICATE Result		Total Uncert. (2 σ+/-)	% Yld	QC Sample ID Precision	
Iso URANIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**A-01-R MOD**				**F8I230283-017**	
Uranium 235/236	0.0	U	0.047	43	0.06	U	0.14	31	200	%RPD
Uranium 238	1.64		0.56	43	1.38		0.56	31	17	%RPD
	Batch #:		8274253	(Sample)	8274253	(Duplicate)				
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**906.0 MOD**				**F8I250199-001**	
Tritium	-110	U	140		-50	U	140		72	%RPD
	Batch #:		8274185	(Sample)	8274185	(Duplicate)				

NOTE(S)

Data are incomplete without the case narrative.
Calculations are performed before rounding to avoid round-off error in calculated results

U Result is less than the sample detection limit.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

PROJECT NO. 388-1856-1-16

UC Davis

Lot #: F8J130132

Tim Utterback

Weiss Associates
5801 Christie Ave.
Suite 600
Emeryvilly, CA 94608

TESTAMERICA LABORATORIES, INC.

Michael C. Franks
Project Manager

October 29, 2008

Case Narrative
LOT NUMBER: **F8J130132**

This report contains the analytical results for the nine samples received under chain of custody UCD20081010 by TestAmerica St. Louis on October 13, 2008. These samples are associated with your UC Davis project.

The analytical results included in this report meet all applicable quality control procedure requirements.

The test results in this report meet all NELAP requirements for parameters in which accreditations are held by TestAmerica St. Louis. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of this report.

All chemical analysis results are based upon sample as received, wet weight, unless noted otherwise. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Observations/Nonconformances
Reference the chain of custody and condition upon receipt report for any variations on receipt conditions and temperature of samples on receipt.

No observations or non-conformances were noted for the analyses reported for this report.

METHODS SUMMARY

F8J130132

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Carbon 14 by LSC	EERF C-01-1	
H-3 by Distillation & LSC	EPA 906.0 MOD	
Radium-226 by GFPC	EPA 903.0 MOD	

References:

EERF EERF

EPA "EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984

SAMPLE SUMMARY

F8J130132

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
K0P06	001	GWGW2309	10/07/08	15:00
K0P28	002	GWGW2310	10/08/08	10:55
K0P3A	003	GWGW2307	10/08/08	12:45
K0P3E	004	GWGW2320A	10/09/08	10:00
K0P3F	005	GWGW2319	10/09/08	10:00
K0P3H	006	GWGW2312	10/09/08	10:45
K0P3J	007	GWGW2313	10/10/08	07:50
K0P3L	008	GWGW2358	10/10/08	08:20
K0P30	009	GWGW2357	10/10/08	09:45

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

F8J130132 CLIENT ANALYSIS SUMMARY

Storage Loc: R187

Project Manager: MCF | Quote #: 80342 | SDG:

Project: 388-1856-1-16 | UC Davis

PO#: | Report to: Tim Utterback

Client: 1353423 Weiss Associates

#SMPS in LOT: 9

Date Received: 2008-10-13
Analytical Due Date: 2008-10-24
Report Due Date: 2008-10-27
Report Type: D Expanded Deliverable
EDD Code: 99

Sample Control: Change the Project field to the Project ID on the COC. Enter COC# in the COC field.
Enter "WAE" in Sample Name field. Enter "U" in the LPR Code field.
RADIOCHEMISTRY: Please note the required MDCs

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
1	GWGW2309			2008-10-07 / 1500	K0P06	WATER

SAMPLE COMMENTS:

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZY	EPA	903.0 MOD	WATER, 903.0, Radium 226	G3	Precipitate, Separation - 14 day Ingrowth	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
2	GWGW2310			2008-10-08 / 1055	K0P28	WATER

SAMPLE COMMENTS:

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	ZY	EPA	903.0 MOD	WATER, 903.0, Radium 226	G3	Precipitate, Separation - 14 day Ingrowth	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
3	GWGW2307			2008-10-08 / 1245	K0P3A	WATER

SAMPLE COMMENTS:

	XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
	XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
X	XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
4	GWGW2320A			2008-10-09 / 1000	K0P3E	WATER

SAMPLE COMMENTS:

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
5	GWGW2319			2008-10-09 / 1000	K0P3F	WATER

SAMPLE COMMENTS:

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
6	GWGW2312			2008-10-09 / 1045	K0P3H	WATER

SAMPLE COMMENTS:

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	ZY	EPA	903.0 MOD	WATER, 903.0, Radium 226	G3	Precipitate, Separation - 14 day Ingrowth	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I

F8J130132 CLIENT ANALYSIS SUMMARY

Storage Loc: R187

Project Manager: MCF | Quote #: 80342 | SDG:

Project: 388-1856-1-16 | UC Davis

PO#: | Report to: Tim Utterback

Client: 1353423 Weiss Associates

Date Received: 2008-10-13
Analytical Due Date: 2008-10-24
Report Due Date: 2008-10-27
Report Type: D Expanded Deliverable
#SMPS in LOT: 9 EDD Code: 99

Sample Control: Change the Project field to the Project ID on the COC. Enter COC# in the COC field.
Enter "WAE" in Sample Name field. Enter "U" in the LPR Code field.
RADIOCHEMISTRY: Please note the required MDCs

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
7	GWGW2313			2008-10-10 / 750	K0P3J	WATER

SAMPLE COMMENTS:

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	ZY	EPA	903.0 MOD	WATER, 903.0, Radium 226	G3	Precipitate, Separation - 14 day Ingrowth	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
8	GWGW2358			2008-10-10 / 820	K0P3L	WATER

SAMPLE COMMENTS:

	XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
	XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
S	XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
9	GWGW2357			2008-10-10 / 945	K0P30	WATER

SAMPLE COMMENTS:

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	ZY	EPA	903.0 MOD	WATER, 903.0, Radium 226	G3	Precipitate, Separation - 14 day Ingrowth	01	STANDARD TEST SET	PROT: R	WRK LOC	06

Lot# F8J130132

CUR 341

Chain of Custody Record

TA - Test America
13715 Rider Trail North
Earth City, MO 63045
Phone 314.298.8566 fax: 314.298.8757

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-16
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AguaTierra Associates Incorporated, DBA

Client Contact		Project Manager: Bob Devany	Sampled by: JMD/KHA	Date: 10/10/08	COC Number: UCD
Weiss Associates		Tel: 510-450-6144	Lab Contact:	Carrier:	Page 1 of 1
5801 Christie Avenue, Suite 600		Analysis Turnaround Time			Job No.
Emeryville, CA 94608		Calendar (C) or Work Days (W) --- 10W			
(510) 450-6000	Phone	TAT if different from Below _____			SDG No.
(510) 547-5043	FAX	☐ 2 weeks			
		☐ 1 week			
Job Name: UC Davis		☐ 2 days			
Address: One Shields Ave, Davis		☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Field Filtered (Y/N)	Tritium (EPA 906.0)	Carbon-14 (C-01-1)	Radium 226 (903)	Sample Specific Notes:
GWGW2309	10/7/08	1500	W	W		3	X	X	X	LP, 500p, 250g
GWGW2310	10/8/08	1055	W	W		1			X	LP
GWGW2307	10/8/08	1245	W	W		2	X	X		250g, 500p
GWGW2320A	10/9/08	1000	W	W		1		X		500p
GWGW2319	10/9/08	1000	W	W		1		X		
GWGW2312	10/9/08	1045	W	W		1			X	LP
GWGW2313	10/10/08	0750	W	W		1			X	LP
GWGW2358	10/10/08	0820	W	W		2	X	X		2X500p
GWGW2357	10/10/08	0945	W	W		1			X	LP

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **Level III Reporting**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
KHA Atkinson	Weiss Assoc.	10/10/08 1300	Angela Boon	TASTL	10-13-08 9:30
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

TestAmerica St. Louis

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Lot #(s): F8J130132

Condition Upon Receipt Form

Client: Weiss
Quote No: 80342
COC/RFA No: WCD
Initiated By: AB
Date: 10-13-08
Time: 9:30

Shipping Information

Shipper Name: FE
Shipping # (s):*

1.
2. 8664 1383 1111
3.
4.
5.
6.
7.
8.
9.
10.

Multiple Packages Y (N)
Sample Temperature (s):**

1. Ambient
2.
3.
4.
5.
6.
7.
8.
9.
10.

*Numbered shipping lines correspond to Numbered Sample Temp lines

**Sample must be received at 4°C ± 2°C- If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	Y (N)	Are there custody seals present on the cooler?	8.	Y (N)	Are there custody seals present on bottles?
2.	Y N (N/A)	Do custody seals on cooler appear to be tampered with?	9.	Y N (N/A)	Do custody seals on bottles appear to be tampered with?
3.	(Y) N	Were contents of cooler frisked after opening, but before unpacking?	10.	(Y) N N/A	Was sample received with proper pH[1]? (If not, make note below)
4.	(Y) N	Sample received with Chain of Custody?	11.	Y N	If N/A- Was pH taken by original TestAmerica lab?
5.	(Y) N N/A	Does the Chain of Custody match sample ID's on the container(s)?	12.	(Y) N	Sample received in proper containers?
6.	Y (N)	Was sample received broken?	13.	Y N (N/A)	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)
7.	(Y) N	Is sample volume sufficient for analysis?	14.	Y N	Was Internal COC/Workshare received?

[1] For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes:
Received GWB W2358 (tritium) in a poly - ok to log per MF

Corrective Action:
☐ Client Contact Name:
☐ Sample(s) processed "as is"
☐ Sample(s) on hold until:
Project Management Review:
Informed by:
If released, notify:
Date: 10-18-08

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED IN. IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIAL AND THE DATE NEXT TO THAT ITEM.

Weiss Associates

Client Sample ID: GWGW2309

Radiochemistry

Lab Sample ID: F8J130132-001
Work Order: K0P06
Matrix: WATER

Date Collected: 10/07/08 1500
Date Received: 10/13/08 0930

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				pCi/L		Batch # 8296072	Yld %
Carbon 14	179		17	20	9	10/22/08	10/23/08
TRITIUM (Distill) by EPA 906.0 MOD				pCi/L		Batch # 8289067	Yld %
Tritium	270	J	170	300	260	10/15/08	10/16/08
Radium 226 by EPA 903.0 MOD				pCi/L		Batch # 8287576	Yld % 96
Radium (226)	0.007	U	0.092	1.00	0.18	10/13/08	10/29/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

J Result is greater than sample detection limit but less than stated reporting limit.
U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: GWGW2310

Radiochemistry

Lab Sample ID: F8J130132-002
Work Order: K0P28
Matrix: WATER

Date Collected: 10/08/08 1055
Date Received: 10/13/08 0930

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Radium 226 by EPA 903.0 MOD				**pCi/L**		**Batch # 8287576**	**Yld % 99**
Radium (226)	0.11	U	0.11	1.00	0.16	10/13/08	10/29/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: GWGW2307

Radiochemistry

Lab Sample ID: F8J130132-003
Work Order: K0P3A
Matrix: WATER

Date Collected: 10/08/08 1245
Date Received: 10/13/08 0930

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/L**		**Batch # 8296072**	**Yld %**
Carbon 14	4.9	U	5.3	20.0	8.6	10/22/08	10/23/08
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**		**Batch # 8289067**	**Yld %**
Tritium	100	U	170	300	280	10/15/08	10/16/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: GWGW2320A

Radiochemistry

Lab Sample ID: F8J130132-004
Work Order: K0P3E
Matrix: WATER

Date Collected: 10/09/08 1000
Date Received: 10/13/08 0930

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				pCi/L		Batch # 8296072	Yld %
Carbon 14	46.5		7.6	20.0	8.5	10/22/08	10/23/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

Weiss Associates

Client Sample ID: GWGW2319

Radiochemistry

Lab Sample ID: F8J130132-005
Work Order: K0P3F
Matrix: WATER

Date Collected: 10/09/08 1000
Date Received: 10/13/08 0930

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				pCi/L		Batch # 8296072	Yld %
Carbon 14	27.9		6.5	20.0	8.5	10/22/08	10/23/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

Weiss Associates

Client Sample ID: GWGW2312

Radiochemistry

Lab Sample ID: F8J130132-006
Work Order: K0P3H
Matrix: WATER

Date Collected: 10/09/08 1045
Date Received: 10/13/08 0930

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Radium 226 by EPA 903.0 MOD				**pCi/L**		**Batch # 8287576**	**Yld % 100**
Radium (226)	0.09	U	0.12	1.00	0.19	10/13/08	10/29/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: GWGW2313

Radiochemistry

Lab Sample ID: F8J130132-007
Work Order: K0P3J
Matrix: WATER

Date Collected: 10/10/08 0750
Date Received: 10/13/08 0930

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Radium 226 by EPA 903.0 MOD				**pCi/L**		**Batch # 8287576**	**Yld % 94**
Radium (226)	0.06	U	0.12	1.00	0.21	10/13/08	10/29/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: GWGW2358

Radiochemistry

Lab Sample ID: F8J130132-008
Work Order: K0P3L
Matrix: WATER

Date Collected: 10/10/08 0820
Date Received: 10/13/08 0930

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/L**		**Batch # 8296072**	**Yld %**
Carbon 14	2.9	U	5.2	20.0	8.6	10/22/08	10/23/08
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**		**Batch # 8289067**	**Yld %**
Tritium	-40	U	160	300	280	10/15/08	10/16/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: GWGW2357

Radiochemistry

Lab Sample ID: F8J130132-009
Work Order: K0P30
Matrix: WATER

Date Collected: 10/10/08 0945
Date Received: 10/13/08 0930

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Radium 226 by EPA 903.0 MOD				pCi/L		Batch # 8287576	Yld % 96
Radium (226)	0.20	J	0.13	1.00	0.18	10/13/08	10/29/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

J Result is greater than sample detection limit but less than stated reporting limit.

METHOD BLANK REPORT

Radiochemistry

Client Lot ID: F8J130132
Matrix: WATER

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC		Prep Date	Lab Sample ID Analysis Date
Radium 226 by EPA 903.0 MOD			pCi/L	Batch #	8287576	Yld %	93	F8J130000-576B
Radium (226)	-0.015	U	0.088	1.00	0.19		10/13/08	10/29/08
TRITIUM (Distill) by EPA 906.0 MOD			pCi/L	Batch #	8289067	Yld %		F8J150000-067B
Tritium	60	U	160	300	280		10/15/08	10/16/08
Carbon 14 by EERF C-01-1			pCi/L	Batch #	8296072	Yld %		F8J220000-072B
Carbon 14	2.9	U	5.1	20.0	8.5		10/22/08	10/23/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined using instrument performance only
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Laboratory Control Sample Report

Radiochemistry

Client Lot ID: F8J130132
Matrix: WATER

Parameter	Spike Amount	Result	Total Uncert. (2 σ+/-)	MDC	% Yld	% Rec	Lab Sample ID / QC Control Limits
TRITIUM (Distill) by EPA 906.0 MOD			**pCi/L**	**906.0 MOD**			**F8J150000-067C**
Tritium	4880	4640	420	270		95	(67 - 111)
	Batch #:	8289067		Analysis Date:	10/16/08		
Carbon 14 by EERF C-01-1			**pCi/L**	**C-01-1**			**F8J220000-072C**
Carbon 14	976	452	37	9		46	(38 - 112)
	Batch #:	8296072		Analysis Date:	10/23/08		

NOTE(S)

MDC is determined by instrument performance only
Calculations are performed before rounding to avoid round-off error in calculated results

Laboratory Control Sample/LCS Duplicate Report

Radiochemistry

Client Lot ID: F8J130132
Matrix: WATER

Parameter		Spike Amount	Result	Total Uncert. (2 σ+/-)	% Yld	% Rec	QC Control Limits	Precision	
Radium 226 by EPA 903.0 MOD			pCi/L	903.0 MOD			Lab Sample ID F8J130000-576C		
Radium (226)		11.3	10.1	1.1	93	89	(72 - 130)		
	Spk 2	11.3	9.4	1.0	97	84	(72 - 130)	7	%RPD
		Batch #:	8287576		Analysis Date:		10/29/08		

NOTE(S)

Calculations are performed before rounding to avoid round-off error in calculated results

MATRIX SPIKE REPORT

Radiochemistry

Client Lot Id: F8J130132 Date Sampled: 10/07/08
Matrix: WATER Date Received: 10/13/08

Parameter	Spike Amount	Spike Result	Total Uncert. (2σ +/-)	Spike Yld.	Sample Result	Total Uncert. (2 σ +/-)	QC Sample ID %YLD	QC Sample ID %REC	QC Control Limits
Carbon 14 by EERF C-01-1			**pCi/L**		**C-01-1**			**F8J130132-001**	
Carbon 14	2930	1630	130		179	17		50	(37 - 121)
	Batch #:	8296072		Analysis Date:		10/23/08			
TRITIUM (Distill) by EPA 906.0 MOD			**pCi/L**		**906.0 MOD**			**F8J130132-008**	
Tritium	4880	4290	400		-40	160		89	(27 - 150)
	Batch #:	8289067		Analysis Date:		10/16/08			

NOTE(S)

Data are incomplete without the case narrative.

Calculations are performed before rounding to avoid round-off errors in calculated results.

DUPLICATE EVALUATION REPORT

Radiochemistry

Client Lot ID: F8J130132
Matrix: WATER

Date Sampled: 10/07/08
Date Received: 10/13/08

Parameter	SAMPLE Result		Total Uncert. (2σ+/-)	% Yld	DUPLICATE Result		Total Uncert. (2 σ+/-)	% Yld	QC Sample ID Precision	
Carbon 14 by EERF C-01-1				**pCi/L**	**C-01-1**				**F8J130132-001**	
Carbon 14	179		17		149		15		18	%RPD
		Batch #:	8296072	(Sample)	8296072	(Duplicate)				
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**906.0 MOD**				**F8J130132-003**	
Tritium	100	U	170		100	U	170		7	%RPD
		Batch #:	8289067	(Sample)	8289067	(Duplicate)				

NOTE(S)

Data are incomplete without the case narrative.
Calculations are performed before rounding to avoid round-off error in calculated results

U Result is less than the sample detection limit.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

PROJECT NO. 388-1856-1-16

UC Davis

Lot #: F8J210133

Tim Utterback

Weiss Associates
5801 Christie Ave.
Suite 600
Emeryvilly, CA 94608

TESTAMERICA LABORATORIES, INC.

Michael C. Franks
Project Manager

November 13, 2008

Case Narrative
LOT NUMBER: **F8J210133**

This report contains the analytical results for the thirteen samples received under chain of custody UCD20081016 by TestAmerica St. Louis on October 21, 2008. These samples are associated with your UC Davis project.

The analytical results included in this report meet all applicable quality control procedure requirements except as noted on the following page.

The test results in this report meet all NELAP requirements for parameters in which accreditations are held by TestAmerica St. Louis. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of this report.

All chemical analysis results are based upon sample as received, wet weight, unless noted otherwise. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Observations/Nonconformances
Reference the chain of custody and condition upon receipt report for any variations on receipt conditions and temperature of samples on receipt.

Gamma Spectroscopy

Upon request of the client, Bismuth 214 is reported in the target list. Bismuth 214 was found in some samples, but the results are not reliable. This is due to the inability to effectively quantify the parent, Radium 226, in water. This is due to the loss of Radon-222, the first decay daughter of Ra226.
Affected Samples:
F8J210133 (8): GWGW2331A
F8J210133 (9): GWGW2331B
F8J210133 (10): GWGW2330
F8J210133 (11): GWGW2329
F8J210133 (12): GWGW2327

Pb-210, energy 46.54 keV, is out of our calibration range for water geometries. Results reported for Lead-210 are estimated. Results for all associated samples are below the required detection limit.
Affected Samples:
F8J210133 (8): GWGW2331A
F8J210133 (9): GWGW2331B
F8J210133 (10): GWGW2330
F8J210133 (11): GWGW2329
F8J210133 (12): GWGW2327
F8J210133 (13): EBGW0016

Strontium-90

There was insufficient sample provided to perform the analysis at the method specified amount. A reduced sample amount was prepared.
Affected Samples:
F8J210133 (8): GWGW2331A

Radium-226

There was insufficient sample provided to perform the analysis at the method specified amount. A reduced sample amount was prepared.
Affected Samples:
F8J210133 (8): GWGW2331A

Gross Alpha/Beta

The Gross Alpha Beta reporting limit was not met due to a reduction of sample size attributed to the sample's high residual mass. The analytical results are reported.
Affected Samples:
F8J210133 (8): GWGW2331A
F8J210133 (9): GWGW2331B
F8J210133 (10): GWGW2330
F8J210133 (11): GWGW2329
F8J210133 (12): GWGW2327

Isotopic Thorium

There was insufficient sample provided to perform the analysis at the method specified amount. A reduced sample amount was prepared. Count times were adjusted accordingly to meet client reporting limits.
Affected Samples:
F8J210133 (8): GWGW2331A
F8J210133 (9): GWGW2331B
F8J210133 (10): GWGW2330
F8J210133 (11): GWGW2329
F8J210133 (12): GWGW2327
F8J210133 (13): EBGW0016

Isotopic Uranium

There was insufficient sample provided to perform the analysis at the method specified amount. A reduced sample amount was prepared. Count times were adjusted accordingly to meet client reporting limits.
Affected Samples:
F8J210133 (8): GWGW2331A
F8J210133 (9): GWGW2331B
F8J210133 (10): GWGW2330
F8J210133 (11): GWGW2329
F8J210133 (12): GWGW2327
F8J210133 (13): EBGW0016

METHODS SUMMARY

F8J210133

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Carbon 14 by LSC	EERF C-01-1	
Gamma Spectroscopy - Cesium-137 & Hits	EPA 901.1 MOD	
Gross Alpha/Beta EPA 900	EPA 900.0 MOD	EPA 900.0
H-3 by Distillation & LSC	EPA 906.0 MOD	
Isotopic Thorium by Alpha Spectroscopy	EML A-01-R MOD	
Isotopic Uranium by Alpha Spectroscopy	EML A-01-R MOD	
Radium-226 by GFPC	EPA 903.0 MOD	
Strontium 90 by GFPC	EPA 905 MOD	

References:

EERF EERF

EML "ENVIRONMENTAL MEASUREMENTS LABORATORY PROCEDURES MANUAL" HASL-300 28TH EDITION, VOLUME I and II DEPARTMENT OF ENERGY

EPA "EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984

SAMPLE SUMMARY

F8J210133

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
K08HD	001	GWGW2362	10/15/08	10:50
K08JC	002	GWGW2363A	10/15/08	10:40
K08JE	003	GWGW2363B	10/15/08	10:40
K08JJ	004	GWGW2324	10/15/08	09:40
K08JR	005	GWGW2325	10/15/08	11:35
K08JX	006	GWGW2351	10/16/08	08:50
K08J4	007	TPIN0363	10/16/08	08:50
K08J8	008	GWGW2331A	10/16/08	09:40
K08LD	009	GWGW2331B	10/16/08	09:40
K08LP	010	GWGW2330	10/16/08	11:35
K08LV	011	GWGW2329	10/16/08	14:00
K08L1	012	GWGW2327	10/16/08	13:55
K08L6	013	EBGW0016	10/16/08	15:15

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

F8J210133 CLIENT ANALYSIS SUMMARY

Storage Loc: R204-206

Project Manager: MCF | Quote #: 80342 | SDG:

Project: 388-1856-1-16 | UC Davis

PO#: | Report to: Tim Utterback

Client: 1353423 Weiss Associates

#SMPS in LOT: 13

Date Received: 2008-10-21
Analytical Due Date: 2008-11-03
Report Due Date: 2008-11-05
Report Type: D Expanded Deliverable
EDD Code: 99

Sample Control: Change the Project field to the Project ID on the COC. Enter COC# in the COC field.
Enter "WAE" in Sample Name field. Enter "U" in the LPR Code field.
RADIOCHEMISTRY: Please note the required MDCs

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
1	GWGW2362			2008-10-15 / 1050	K08HD	WATER

SAMPLE COMMENTS:

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
2	GWGW2363A			2008-10-15 / 1040	K08JC	WATER

SAMPLE COMMENTS:

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
3	GWGW2363B			2008-10-15 / 1040	K08JE	WATER

SAMPLE COMMENTS: *!*!*!LIMITED VOLUME!*!*!*

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
4	GWGW2324			2008-10-15 / 940	K08JJ	WATER

SAMPLE COMMENTS:

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
5	GWGW2325			2008-10-15 / 1135	K08JR	WATER

SAMPLE COMMENTS: !*!*!*LIMITED VOLUME!*!*!*

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
6	GWGW2351			2008-10-16 / 850	K08JX	WATER

SAMPLE COMMENTS: !*!*!*LIMITED VOLUME!*!*!*

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06

F8J210133 CLIENT ANALYSIS SUMMARY

Storage Loc: R204-206

Project Manager: MCF | Quote #: 80342 | SDG:

Project: 388-1856-1-16 | UC Davis

PO#: | Report to: Tim Utterback

Client: 1353423 Weiss Associates

#SMPS in LOT: 13

Date Received: 2008-10-21
Analytical Due Date: 2008-11-03
Report Due Date: 2008-11-05
Report Type: D Expanded Deliverable
EDD Code: 99

Sample Control: Change the Project field to the Project ID on the COC. Enter COC# in the COC field.
Enter "WAE" in Sample Name field. Enter "U" in the LPR Code field.
RADIOCHEMISTRY: Please note the required MDCs

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
7	TPIN0363			2008-10-16 / 850	K08J4	WATER

SAMPLE COMMENTS:

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
8	GWGW2331A			2008-10-16 / 940	K08J8	WATER

SAMPLE COMMENTS:

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	2I	EML	A-01-R MOD	WATER, A-01-R, IsoU	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	2K	EML	A-01-R MOD	WATER, A-01-R, IsoTh	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	Y9	EPA	900.0 MOD	WATER, 900.0 MOD, Gross Alpha/Beta EPA 9	FR	Evaporative Preparation, Total	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	Z7	EPA	901.1 MOD	WATER, 901.1, Gamma Spec	G7	Direct Addition of Sample to Geometry	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZO	EPA	905 MOD	WATER, 905 MOD, SR-90	FX	Precipitate, Separation	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZY	EPA	903.0 MOD	WATER, 903.0, Radium 226	G3	Precipitate, Separation - 14 day Ingrowth	01	STANDARD TEST SET	PROT: R	WRK LOC	06
X XX	Z7	EPA	901.1 MOD	WATER, 901.1, Gamma Spec	G7	Direct Addition of Sample to Geometry	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
9	GWGW2331B			2008-10-16 / 940	K08LD	WATER

SAMPLE COMMENTS:

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	2I	EML	A-01-R MOD	WATER, A-01-R, IsoU	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	2K	EML	A-01-R MOD	WATER, A-01-R, IsoTh	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	Y9	EPA	900.0 MOD	WATER, 900.0 MOD, Gross Alpha/Beta EPA 9	FR	Evaporative Preparation, Total	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	Z7	EPA	901.1 MOD	WATER, 901.1, Gamma Spec	G7	Direct Addition of Sample to Geometry	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZO	EPA	905 MOD	WATER, 905 MOD, SR-90	FX	Precipitate, Separation	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZY	EPA	903.0 MOD	WATER, 903.0, Radium 226	G3	Precipitate, Separation - 14 day Ingrowth	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
10	GWGW2330			2008-10-16 / 1135	K08LP	WATER

SAMPLE COMMENTS:

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	2I	EML	A-01-R MOD	WATER, A-01-R, IsoU	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	2K	EML	A-01-R MOD	WATER, A-01-R, IsoTh	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06

F8J210133 CLIENT ANALYSIS SUMMARY

Storage Loc: R204-206

Date Received: 2008-10-21

Analytical Due Date: 2008-11-03

Report Due Date: 2008-11-05

Report Type: D Expanded Deliverable

EDD Code: 99

Project Manager: MCF Quote #: 80342 SDG:

Project: 388-1856-1-16 UC Davis

PO#: Report to: Tim Utterback

Client: 1353423 Weiss Associates #SMPS in LOT: 13

Sample Control: Change the Project field to the Project ID on the COC. Enter COC# in the COC field.

Enter "WAE" in Sample Name field. Enter "U" in the LPR Code field.

RADIOCHEMISTRY: Please note the required MDCs

XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	Y9	EPA	900.0 MOD	WATER, 900.0 MOD, Gross Alpha/Beta EPA 9	FR	Evaporative Preparation, Total	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	Z7	EPA	901.1 MOD	WATER, 901.1, Gamma Spec	G7	Direct Addition of Sample to Geometry	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZO	EPA	905 MOD	WATER, 905 MOD, SR-90	FX	Precipitate, Separation	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZY	EPA	903.0 MOD	WATER, 903.0, Radium 226	G3	Precipitate, Separation - 14 day Ingrowth	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
11	GWGW2329			2008-10-16 / 1400	K08LV	WATER

SAMPLE COMMENTS: *!*!*!LIMITED VOLUME!*!*!*

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	2I	EML	A-01-R MOD	WATER, A-01-R, IsoU	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	2K	EML	A-01-R MOD	WATER, A-01-R, IsoTh	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	Y9	EPA	900.0 MOD	WATER, 900.0 MOD, Gross Alpha/Beta EPA 9	FR	Evaporative Preparation, Total	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	Z7	EPA	901.1 MOD	WATER, 901.1, Gamma Spec	G7	Direct Addition of Sample to Geometry	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZO	EPA	905 MOD	WATER, 905 MOD, SR-90	FX	Precipitate, Separation	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZY	EPA	903.0 MOD	WATER, 903.0, Radium 226	G3	Precipitate, Separation - 14 day Ingrowth	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
12	GWGW2327			2008-10-16 / 1355	K08L1	WATER

SAMPLE COMMENTS:

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	2I	EML	A-01-R MOD	WATER, A-01-R, IsoU	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	2K	EML	A-01-R MOD	WATER, A-01-R, IsoTh	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	Y9	EPA	900.0 MOD	WATER, 900.0 MOD, Gross Alpha/Beta EPA 9	FR	Evaporative Preparation, Total	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	Z7	EPA	901.1 MOD	WATER, 901.1, Gamma Spec	G7	Direct Addition of Sample to Geometry	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZO	EPA	905 MOD	WATER, 905 MOD, SR-90	FX	Precipitate, Separation	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZY	EPA	903.0 MOD	WATER, 903.0, Radium 226	G3	Precipitate, Separation - 14 day Ingrowth	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
13	EBGW0016			2008-10-16 / 1515	K08L6	WATER

SAMPLE COMMENTS: !*!*!*LIMITED VOLUME*!*!*!

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	2I	EML	A-01-R MOD	WATER, A-01-R, IsoU	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	2K	EML	A-01-R MOD	WATER, A-01-R, IsoTh	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06

F8J210133 CLIENT ANALYSIS SUMMARY

Storage Loc: R204-206

Project Manager: MCF Quote #: 80342 SDG:

Project: 388-1856-1-16 UC Davis

PO#: Report to: Tim Utterback

Client: 1353423 Weiss Associates

#SMPS in LOT: 13

Date Received: 2008-10-21

Analytical Due Date: 2008-11-03

Report Due Date: 2008-11-05

Report Type: D Expanded Deliverable

EDD Code: 99

Sample Control: Change the Project field to the Project ID on the COC. Enter COC# in the COC field.

Enter "WAE" in Sample Name field. Enter "U" in the LPR Code field.

RADIOCHEMISTRY: Please note the required MDCs

XX	Y9	EPA	900.0 MOD	WATER, 900.0 MOD, Gross Alpha/Beta EPA 9	FR	Evaporative Preparation, Total	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	Z7	EPA	901.1 MOD	WATER, 901.1, Gamma Spec	G7	Direct Addition of Sample to Geometry	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZO	EPA	905 MOD	WATER, 905 MOD, SR-90	FX	Precipitate, Separation	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZY	EPA	903.0 MOD	WATER, 903.0, Radium 226	G3	Precipitate, Separation - 14 day Ingrowth	01	STANDARD TEST SET	PROT: R	WRK LOC	06

Lot# F8J210133

cur 433

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-16
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AguaTierra Associates Incorporated, DBA

TA - Test America
13715 Rider Trail North
Earth City, MO 63045
Phone 314.298.8566 fax: 314.298.8757

Client Contact	Project Manager: Bob Devany	Sampled by: KWA/JMM	Date: 10/16/08	COC Number: UCD
Weiss Associates	Tel: 510-450-6144	Lab Contact:	Carrier:	Page 1 of 2
5801 Christie Avenue, Suite 600	Analysis Turnaround Time			Job No.
Emeryville, CA 94608	Calendar (C) or Work Days (W) --- 10W			
(510) 450-6000 Phone	TAT if different from Below _____			SDG No..
(510) 547-5043 FAX	☐ 2 weeks			
	☐ 1 week			
Job Name: UC Davis	☐ 2 days			
Address: One Shields Ave, Davis	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Field Filtered (Y/N)	Tritium (EPA 906.0)	Carbon-14 (C-01-1)	SR-90 (EPA 905.0)	Gross Alpha, Gross Beta (EPA 900.0)	Gamma Spec (EPA 901.1)	Uranium + Thorium (A-01-R)	RA-226 (EPA 903.0)	Sample Specific Notes:
GWGW2362	10/15/08	1050		W	2		X	X						250G, 500P
GWGW2363A	10/15/08	1040		W	2		X	X						↓
GWGW2363B	10/15/08	1040		W	2		X	X						500P
GWGW2324	10/15/08	0940		W	2		X	X						↓ , ~~500G~~
GWGW2325	10/15/08	1135		W	2		X	X						
GWGW2351	10/16/08	0850		W	2 Broken		X	X						
TPIN0363	10/16/08	0850		W	2		X	X						250G
GWGW2331A	10/16/08	0940		W	4		X	X	X	X	X	X	X	250G, LP
GWGW2331B	10/16/08	0940		W	4		X	X	X	X	X	X	X	↓ ↓ ↓ , 4LP
									X	X	X	X	X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____ Field Filtered

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For _____ Months*

Special Instructions/QC Requirements & Comments: Level III Reporting

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
KWAN ATKINSON	WEISS ASSOC.	10/17/08 1700	[signature]	TASTL	10.20.08 0930
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

TestAmerica St. Louis

Lot# F8J210133

Chain of Custody Record

TA - Test America
13715 Rider Trail North
Earth City, MO 63045
Phone 314.298.8566 fax: 314.298.8757

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-16
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AguaTierra Associates Incorporated, DBA

Client Contact		Project Manager: Bob Devany	Sampled by: RNA / JMD	Date: 10/16/08	COC Number: UCD
Weiss Associates		Tel: 510-450-6144	Lab Contact:	Carrier:	Page 2 of 2
5801 Christie Avenue, Suite 600		Analysis Turnaround Time			Job No.
Emeryville, CA 94608		Calendar (C) or Work Days (W) --- 10W			
(510) 450-6000	Phone	TAT if different from Below _____			SDG No.
(510) 547-5043	FAX	☐ 2 weeks			
		☐ 1 week			
Job Name: UC Davis		☐ 2 days			
Address: One Shields Ave, Davis		☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Field Filtered (Y/N)	Tritium (EPA 906.0)	Carbon-14 (C-01-1)	Strontium-90 (EPA 905.0)	Radium-226 by GFPC (EPA 903.0)	Gross Alpha, Gross Beta (EPA 900.0)	Gamma Suite (EPA 901.1)	Uranium and Thorium isotopes (A-01-R)										Sample Specific Notes:
GWGW2330	10/16/08	1135		W	8		X	X	X	X	X	X	X			5XLP, 500P, 250G							
~~GWGW2329~~	~~10/16/08~~	~~1400~~		~~W~~	~~8~~		~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~			↓		did not					~~SENT IN A THIRD COOLER~~
GWGW2327	10/16/08	1355		W	8		X	X	X	X	X	X	X			↓							SW 10.21.08
EBGW001b	10/16/08	1515		W	4		X	X	X	X	X	X	X					4LP, 2LP, 500P					
							↑ Broken																
									X	X	X	X	X										

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____ Field Filtered

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: Level III Reporting

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
RNA ATUNSON	WEISS ASSOC.	10/17/08 1700	[signature]	TA STL	10.20.08 0930
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

TestAmerica St. Louis

cw 433

Chain of Custody Record

TA - Test America
13715 Rider Trail North
Earth City, MO 63045
Phone 314.298.8566 fax 314.298.8757

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-16
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043

Client Contact	Project Manager: Bob Devany	Sampled by: KAA / DAD	Date: 10/16/08	COC Number: UCD
Weiss Associates	Tel: 510-450-6144	Lab Contact:	Carrier:	Page 2 of 2
5801 Christie Avenue, Suite 600	Analysis Turnaround Time			Job No.
Emeryville, CA 94608	Calendar (C) or Work Days (W) --- 10W			
(510) 450-6000 Phone	TAT if different from Below ____			
(510) 547-5043 FAX	☐ 2 weeks			SDG No.
	☐ 1 week			
Job Name: UC Davis	☐ 2 days			
Address: One Shields Ave, Davis	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Field Filtered (Y/N)	Tritium (EPA 906.0)	Carbon-14 (C-01-1)	Strontium-90 (EPA 905.0)	Radium-226 by GFPC (EPA 903.0)	Gross Alpha, Gross Beta (EPA 900.0)	Gamma Suite (EPA 901.1)	Uranium and Thorium isotopes (A-01-R)	Sample Specific Notes:
~~GWGW2330~~	~~10/16/08~~	~~1135~~		~~W~~	~~8~~		X	X	X	X	X	X	X	KAA
GWGW2329	10/16/08	1400		W	8		X	X	X	X	X	X	X	
~~GWGW2327~~	~~10/16/08~~	~~1355~~		~~W~~	~~8~~		X	X	X	X	X	X	X	KAA
~~EBGW001~~	~~10/16/08~~	~~1515~~		~~W~~	~~4~~		X	X	X	X	X	X	X	KAA

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____ Field Filtered — X (Strontium-90), X (Radium-226), X (Gross Alpha, Gross Beta), X (Gamma Suite), X (Uranium and Thorium isotopes)

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For ____ Months*

Special Instructions/QC Requirements & Comments: Level III Reporting

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Weiss Assoc.	10/17/08 1730	[signature]	C&T	10/16/08
[signature]	C&T	10/20/08	[signature]	TA SL	10.21.08 0915

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Lot #(s): F8J210133

Condition Upon Receipt Form

Client: Weiss Assoc. COC/RFA No: UCD Date: 10.20.08
Quote No: 80342 Initiated By: SV Time: 0930

Shipping Information

Shipper Name: FedX
Multiple Packages (Y) N

Shipping # (s):*
1. 8675 1956 9700
2. 9695
3. 7960 9221 5553
4.
5.
6.
7.
8.
9.
10.

Sample Temperature (s):**
1. ambient
2. ↓
3. 2
4.
5.
6.
7.
8.
9.
10.

*Numbered shipping lines correspond to Numbered Sample Temp lines

**Sample must be received at 4°C ± 2°C- If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	Y (N)	Are there custody seals present on the cooler?	8.	Y (N)	Are there custody seals present on bottles?
2.	Y N (N/A)	Do custody seals on cooler appear to be tampered with?	9.	Y N (N/A)	Do custody seals on bottles appear to be tampered with?
3.	(Y) N	Were contents of cooler frisked after opening, but before unpacking?	10.	(Y) N N/A	Was sample received with proper pH[1]? (If not, make note below)
4.	(Y) N	Sample received with Chain of Custody?	11.	Y N	If N/A- Was pH taken by original TestAmerica lab?
5.	Y (N) N/A	Does the Chain of Custody match sample ID's on the container(s)?	12.	(Y) N	Sample received in proper containers?
6.	(Y) N	Was sample received broken?	13.	Y N (N/A)	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)
7.	Y (N)	Is sample volume sufficient for analysis?	14.	Y N	Was Internal COC/Workshare received?

[1] For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes:

Rec'd. broken; no bottle for
EBGW0016 H3
GWGW 2351 H3

Did not recv. H3 for GWGW2363B & 2325.

Did not recv'd. 4th bottle for 2331A, B.

0915 10.11.08 Recv'd. third cooler w/ sample 2329. C14 had lid off - sample in bottom of cooler; about 30ml left, probably compromised.

Corrective Action:
☐ Client Contact Name: Informed by:
☐ Sample(s) processed "as is"
☐ Sample(s) on hold until: If released, notify:
Project Management Review: Date: 10-23-08

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED IN. IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIAL AND THE DATE NEXT TO THAT ITEM.

Weiss Associates

Client Sample ID: GWGW2362

Radiochemistry

Lab Sample ID: F8J210133-001
Work Order: K08HD
Matrix: WATER

Date Collected: 10/15/08 1050
Date Received: 10/21/08 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/L**		**Batch # 8296072**	**Yld %**
Carbon 14	-4.4	U	4.8	20.0	8.6	10/22/08	10/23/08
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**		**Batch # 8297158**	**Yld %**
Tritium	-120	U	130	300	240	10/23/08	11/01/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: GWGW2363A

Radiochemistry

Lab Sample ID: F8J210133-002
Work Order: K08JC
Matrix: WATER

Date Collected: 10/15/08 1040
Date Received: 10/21/08 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/L**		**Batch # 8296072**	**Yld %**
Carbon 14	5.8	U	5.3	20.0	8.6	10/22/08	10/24/08
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**		**Batch # 8297158**	**Yld %**
Tritium	-20	U	140	300	240	10/23/08	11/02/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: GWGW2363B

Radiochemistry

Lab Sample ID: F8J210133-003
Work Order: K08JE
Matrix: WATER

Date Collected: 10/15/08 1040
Date Received: 10/21/08 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/L**	**Batch # 8296072**		**Yld %**
Carbon 14	2.8	U	5.1	20.0	8.5	10/22/08	10/24/08
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**Batch # 8297158**		**Yld %**
Tritium	40	U	140	300	240	10/23/08	11/02/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: GWGW2324

Radiochemistry

Lab Sample ID: F8J210133-004
Work Order: K08JJ
Matrix: WATER

Date Collected: 10/15/08 0940
Date Received: 10/21/08 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/L**		**Batch # 8296072**	**Yld %**
Carbon 14	3.8	U	5.2	20.0	8.5	10/22/08	10/24/08
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**		**Batch # 8297158**	**Yld %**
Tritium	10	U	140	300	240	10/23/08	11/02/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: GWGW2325

Radiochemistry

Lab Sample ID: F8J210133-005
Work Order: K08JR
Matrix: WATER

Date Collected: 10/15/08 1135
Date Received: 10/21/08 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/L**	**Batch # 8296072**		**Yld %**
Carbon 14	1.5	U	5.1	20.0	8.5	10/22/08	10/24/08
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**Batch # 8297158**		**Yld %**
Tritium	-40	U	140	300	240	10/23/08	11/02/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: GWGW2351

Radiochemistry

Lab Sample ID: F8J210133-006
Work Order: K08JX
Matrix: WATER

Date Collected: 10/16/08 0850
Date Received: 10/21/08 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/L**		**Batch # 8296072**	**Yld %**
Carbon 14	**44.0**		**7.5**	20.0	**8.6**	**10/22/08**	**10/24/08**
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**		**Batch # 8297158**	**Yld %**
Tritium	90	U	150	300	240	10/23/08	11/02/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: TPIN0363

Radiochemistry

Lab Sample ID: F8J210133-007
Work Order: K08J4
Matrix: WATER

Date Collected: 10/16/08 0850
Date Received: 10/21/08 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/L**	**Batch # 8296072**		**Yld %**
Carbon 14	2.3	U	5.1	20.0	8.5	10/22/08	10/24/08
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**Batch # 8297158**		**Yld %**
Tritium	30	U	140	300	240	10/23/08	11/02/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: GWGW2331A

Radiochemistry

Lab Sample ID: F8J210133-008
Work Order: K08J8
Matrix: WATER

Date Collected: 10/16/08 0940
Date Received: 10/21/08 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Gamma Cs-137 & Hits by EPA 901.1 MOD				**pCi/L**	**Batch # 8295437**		**Yld %**
Actinium 228	4	U	11	20	18	10/21/08	10/22/08
Bismuth 212	0.5	U	26	70	45	10/21/08	10/22/08
Bismuth 214	**90**		**13**	10	**9**	**10/21/08**	**10/22/08**
Cesium 137	-0.01	U	2.7	10.0	4.7	10/21/08	10/22/08
Cobalt 60	0.3	U	2.7	10.0	4.8	10/21/08	10/22/08
Lead 210	60	U	100	700	170	10/21/08	10/22/08
Lead 212	-4	U	13	10	11	10/21/08	10/22/08
Potassium 40	**93**	**J**	**35**	100	**29**	**10/21/08**	**10/22/08**
Sodium 22	-1.2	U	3.3	10.0	5.6	10/21/08	10/22/08
Thallium 208	4.0	U	3.1	5.0	4.9	10/21/08	10/22/08
Thorium 234	-60	U	140	350	170	10/21/08	10/22/08
Uranium 235	13	U	19	25	32	10/21/08	10/22/08
Uranium 238	-70	U	190	500	190	10/21/08	10/22/08
Radium 226 by EPA 903.0 MOD				**pCi/L**	**Batch # 8295393**		**Yld % 92**
Radium (226)	0.21	U	0.19	1.00	0.29	10/21/08	11/11/08
SR-90 BY GFPC EPA-905 MOD				**pCi/L**	**Batch # 8295395**		**Yld % 75**
Strontium 90	0.23	U	0.60	1.00	1.0	10/21/08	11/07/08
Carbon 14 by EERF C-01-1				**pCi/L**	**Batch # 8296072**		**Yld %**
Carbon 14	**26.7**		**6.5**	20.0	**8.6**	**10/22/08**	**10/24/08**
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**Batch # 8297158**		**Yld %**
Tritium	30	U	140	300	240	10/23/08	11/02/08
Iso URANIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**Batch # 8306073**		**Yld % 60**
Uranium 233/234	**3.71**		**0.996**	1.00	**0.35**	**11/01/08**	**11/03/08**
Uranium 235/236	**0.36**	**J**	**0.33**	1.00	**0.32**	**11/01/08**	**11/03/08**
Uranium 238	**2.16**		**0.75**	1.00	**0.32**	**11/01/08**	**11/03/08**
Iso THORIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**Batch # 8306072**		**Yld % 56**
Thorium 228	0.15	U	0.29	1.00	0.52	11/01/08	11/03/08
Thorium 230	**0.96**	**J**	**0.52**	1.00	**0.18**	**11/01/08**	**11/03/08**
Thorium 232	0.08	U	0.17	1.00	0.33	11/01/08	11/03/08
Gross Alpha/Beta EPA 900				**pCi/L**	**Batch # 8302160**		**Yld %**
Gross Alpha	3.0	U	4.4	2.0	7.4	10/28/08	10/31/08
Gross Beta	6.3	U	5.8	3.0	9.2	10/28/08	10/31/08

NOTE(S)

Data are incomplete without the case narrative.

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Bold results are greater than the MDC

J Result is greater than sample detection limit but less than stated reporting limit.
U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: GWGW2331B

Radiochemistry

Lab Sample ID: F8J210133-009
Work Order: K08LD
Matrix: WATER

Date Collected: 10/16/08 0940
Date Received: 10/21/08 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Gamma Cs-137 & Hits by EPA 901.1 MOD				**pCi/L**	**Batch # 8295437**		**Yld %**
Actinium 228	10	U	11	20	18	10/21/08	10/24/08
Bismuth 212	17	U	22	70	37	10/21/08	10/24/08
Bismuth 214	**60**		**11**	10	**9**	**10/21/08**	**10/24/08**
Cesium 137	0.1	U	3.2	10.0	5.5	10/21/08	10/24/08
Cobalt 60	0.09	U	3.5	10.0	6.3	10/21/08	10/24/08
Lead 210	33	U	62	700	90	10/21/08	10/24/08
Lead 212	0.2	U	5.0	10.0	7.7	10/21/08	10/24/08
Potassium 40	-60	U	190	100	90	10/21/08	10/24/08
Sodium 22	-0.5	U	3.4	10.0	6.0	10/21/08	10/24/08
Thallium 208	-4	U	12	5	7	10/21/08	10/24/08
Thorium 234	-19	U	74	350	95	10/21/08	10/24/08
Uranium 235	13	U	15	25	25	10/21/08	10/24/08
Uranium 238	60	U	170	500	280	10/21/08	10/24/08
Radium 226 by EPA 903.0 MOD				**pCi/L**	**Batch # 8295393**		**Yld % 86**
Radium (226)	0.027	U	0.072	1.00	0.13	10/21/08	11/11/08
SR-90 BY GFPC EPA-905 MOD				**pCi/L**	**Batch # 8295395**		**Yld % 57**
Strontium 90	0.17	U	0.39	1.00	0.65	10/21/08	11/07/08
Carbon 14 by EERF C-01-1				**pCi/L**	**Batch # 8296072**		**Yld %**
Carbon 14	**51.7**		**8.0**	20.0	**8.5**	**10/22/08**	**10/24/08**
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**Batch # 8297158**		**Yld %**
Tritium	130	U	150	300	240	10/23/08	11/02/08
Iso URANIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**Batch # 8306073**		**Yld % 76**
Uranium 233/234	**4.6**		**1.0**	1.0	**0.3**	**11/01/08**	**11/03/08**
Uranium 235/236	0.22	U	0.25	1.00	0.34	11/01/08	11/03/08
Uranium 238	**3.18**		**0.85**	1.00	**0.29**	**11/01/08**	**11/03/08**
Iso THORIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**Batch # 8306072**		**Yld % 65**
Thorium 228	-0.069	U	0.056	1.00	0.39	11/01/08	11/03/08
Thorium 230	**1.10**		**0.52**	1.00	**0.29**	**11/01/08**	**11/03/08**
Thorium 232	0.22	U	0.24	1.00	0.25	11/01/08	11/03/08
Gross Alpha/Beta EPA 900				**pCi/L**	**Batch # 8302160**		**Yld %**
Gross Alpha	**7.7**		**4.0**	2.0	**4.5**	**10/28/08**	**10/31/08**
Gross Beta	5.4	U	4.0	3.0	6.3	10/28/08	10/31/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: GWGW2330

Radiochemistry

Lab Sample ID: F8J210133-010
Work Order: K08LP
Matrix: WATER

Date Collected: 10/16/08 1135
Date Received: 10/21/08 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Gamma Cs-137 & Hits by EPA 901.1 MOD				**pCi/L**	**Batch # 8295437**		**Yld %**
Actinium 228	0.5	U	10	20	18	10/21/08	10/23/08
Bismuth 212	2	U	23	70	41	10/21/08	10/23/08
Bismuth 214	**76**		**11**	10	**8**	**10/21/08**	**10/23/08**
Cesium 137	-3.4	U	3.8	10.0	6.1	10/21/08	10/23/08
Cobalt 60	1.2	U	3.1	10.0	5.4	10/21/08	10/23/08
Lead 210	50	U	100	700	170	10/21/08	10/23/08
Lead 212	-6	U	18	10	11	10/21/08	10/23/08
Potassium 40	23	U	34	100	57	10/21/08	10/23/08
Sodium 22	0.09	U	3.2	10.0	5.7	10/21/08	10/23/08
Thallium 208	1.9	U	3.4	5.0	5.6	10/21/08	10/23/08
Thorium 234	70	U	110	350	170	10/21/08	10/23/08
Uranium 235	6	U	20	25	35	10/21/08	10/23/08
Uranium 238	-5	U	87	500	150	10/21/08	10/23/08
Radium 226 by EPA 903.0 MOD				**pCi/L**	**Batch # 8295393**		**Yld % 96**
Radium (226)	0.099	U	0.096	1.00	0.15	10/21/08	11/11/08
SR-90 BY GFPC EPA-905 MOD				**pCi/L**	**Batch # 8295395**		**Yld % 59**
Strontium 90	-0.03	U	0.36	1.00	0.62	10/21/08	11/07/08
Carbon 14 by EERF C-01-1				**pCi/L**	**Batch # 8296072**		**Yld %**
Carbon 14	**10.6**	**J**	**5.5**	20.0	**8.5**	**10/22/08**	**10/24/08**
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**Batch # 8297158**		**Yld %**
Tritium	60	U	140	300	240	10/23/08	11/02/08
Iso URANIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**Batch # 8306073**		**Yld % 74**
Uranium 233/234	**3.15**		**0.82**	1.00	**0.26**	**11/01/08**	**11/03/08**
Uranium 235/236	**0.34**	**J**	**0.29**	1.00	**0.25**	**11/01/08**	**11/03/08**
Uranium 238	**1.32**		**0.51**	1.00	**0.20**	**11/01/08**	**11/03/08**
Iso THORIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**Batch # 8306072**		**Yld % 71**
Thorium 228	-0.006	U	0.12	1.00	0.34	11/01/08	11/03/08
Thorium 230	**0.59**	**J**	**0.36**	1.00	**0.14**	**11/01/08**	**11/03/08**
Thorium 232	0.01	U	0.11	1.00	0.31	11/01/08	11/03/08
Gross Alpha/Beta EPA 900				**pCi/L**	**Batch # 8302160**		**Yld %**
Gross Alpha	**6.8**		**3.5**	2.0	**3.9**	**10/28/08**	**10/31/08**
Gross Beta	4.3	U	3.1	3.0	4.9	10/28/08	10/31/08

NOTE(S)

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Bold results are greater than the MDC

J Result is greater than sample detection limit but less than stated reporting limit.
U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: GWGW2329

Radiochemistry

Lab Sample ID: F8J210133-011
Work Order: K08LV
Matrix: WATER

Date Collected: 10/16/08 1400
Date Received: 10/21/08 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Gamma Cs-137 & Hits by EPA 901.1 MOD				**pCi/L**	**Batch # 8295437**		**Yld %**
Actinium 228	12	U	10	20	17	10/21/08	10/24/08
Bismuth 212	0.5	U	19	70	33	10/21/08	10/24/08
Bismuth 214	**78**		**11**	10	**7**	**10/21/08**	**10/24/08**
Cesium 137	1.2	U	3.3	10.0	5.6	10/21/08	10/24/08
Cobalt 60	0.9	U	2.9	10.0	5.1	10/21/08	10/24/08
Lead 210	90	U	100	700	170	10/21/08	10/24/08
Lead 212	-7	U	22	10	11	10/21/08	10/24/08
Potassium 40	22	U	35	100	59	10/21/08	10/24/08
Sodium 22	0.0	U	3.4	10.0	6.0	10/21/08	10/24/08
Thallium 208	1.5	U	3.6	5.0	6.1	10/21/08	10/24/08
Thorium 234	120	U	140	350	180	10/21/08	10/24/08
Uranium 235	0.1	U	20	25	35	10/21/08	10/24/08
Uranium 238	40	U	130	500	180	10/21/08	10/24/08
Radium 226 by EPA 903.0 MOD				**pCi/L**	**Batch # 8295393**		**Yld % 100**
Radium (226)	0.123	U	0.094	1.00	0.13	10/21/08	11/11/08
SR-90 BY GFPC EPA-905 MOD				**pCi/L**	**Batch # 8295395**		**Yld % 73**
Strontium 90	0.24	U	0.30	1.00	0.49	10/21/08	11/07/08
Carbon 14 by EERF C-01-1				**pCi/L**	**Batch # 8296072**		**Yld %**
Carbon 14	**11.2**	**J**	**5.5**	20.0	**8.5**	**10/22/08**	**10/24/08**
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**Batch # 8297158**		**Yld %**
Tritium	-5	U	140	300	240	10/23/08	11/02/08
Iso URANIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**Batch # 8306073**		**Yld % 78**
Uranium 233/234	**3.55**		**0.91**	1.00	**0.41**	**11/01/08**	**11/04/08**
Uranium 235/236	**0.34**	**J**	**0.30**	1.00	**0.30**	**11/01/08**	**11/04/08**
Uranium 238	**1.68**		**0.60**	1.00	**0.32**	**11/01/08**	**11/04/08**
Iso THORIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**Batch # 8306072**		**Yld % 67**
Thorium 228	0.27	U	0.32	1.00	0.46	11/01/08	11/03/08
Thorium 230	**1.34**		**0.63**	1.00	**0.19**	**11/01/08**	**11/03/08**
Thorium 232	0.0	U	0.061	1.00	0.19	11/01/08	11/03/08
Gross Alpha/Beta EPA 900				**pCi/L**	**Batch # 8302160**		**Yld %**
Gross Alpha	**4.0**		**2.9**	2.0	**3.8**	**10/28/08**	**10/31/08**
Gross Beta	4.6	U	3.0	3.0	4.7	10/28/08	10/31/08

NOTE(S)

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Bold results are greater than the MDC

J Result is greater than sample detection limit but less than stated reporting limit.
U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: GWGW2327

Radiochemistry

Lab Sample ID: F8J210133-012
Work Order: K08L1
Matrix: WATER

Date Collected: 10/16/08 1355
Date Received: 10/21/08 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Gamma Cs-137 & Hits by EPA 901.1 MOD				**pCi/L**	**Batch # 8295437**		**Yld %**
Actinium 228	0.0	U	13	20	23	10/21/08	10/25/08
Bismuth 212	17	U	18	70	30	10/21/08	10/25/08
Bismuth 214	**62**		**13**	10	**9**	**10/21/08**	**10/25/08**
Cesium 137	-0.2	U	2.7	10.0	4.8	10/21/08	10/25/08
Cobalt 60	0.05	U	3.7	10.0	6.6	10/21/08	10/25/08
Lead 210	-12	U	51	700	80	10/21/08	10/25/08
Lead 212	2.7	U	6.3	10.0	8.5	10/21/08	10/25/08
Potassium 40	-70	U	200	100	90	10/21/08	10/25/08
Sodium 22	0.0	U	2.6	10.0	4.9	10/21/08	10/25/08
Thallium 208	-3.7	U	9.4	5.0	6.3	10/21/08	10/25/08
Thorium 234	24	U	63	350	94	10/21/08	10/25/08
Uranium 235	0.1	U	11	25	19	10/21/08	10/25/08
Uranium 238	30	U	170	500	280	10/21/08	10/25/08
Radium 226 by EPA 903.0 MOD				**pCi/L**	**Batch # 8295393**		**Yld % 91**
Radium (226)	0.10	U	0.11	1.00	0.17	10/21/08	11/11/08
SR-90 BY GFPC EPA-905 MOD				**pCi/L**	**Batch # 8295395**		**Yld % 43**
Strontium 90	-0.07	U	0.51	1.00	0.88	10/21/08	11/07/08
Carbon 14 by EERF C-01-1				**pCi/L**	**Batch # 8296072**		**Yld %**
Carbon 14	3.2	U	5.2	20.0	8.6	10/22/08	10/24/08
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**Batch # 8297158**		**Yld %**
Tritium	-70	U	140	300	240	10/23/08	11/02/08
Iso URANIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**Batch # 8306073**		**Yld % 58**
Uranium 233/234	**4.5**		**1.1**	1.0	**0.3**	**11/01/08**	**11/04/08**
Uranium 235/236	0.38	U	0.37	1.00	0.40	11/01/08	11/04/08
Uranium 238	**2.91**		**0.91**	1.00	**0.32**	**11/01/08**	**11/04/08**
Iso THORIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**Batch # 8306072**		**Yld % 70**
Thorium 228	0.09	U	0.24	1.00	0.47	11/01/08	11/03/08
Thorium 230	**0.93**	**J**	**0.47**	1.00	**0.30**	**11/01/08**	**11/03/08**
Thorium 232	0.11	U	0.16	1.00	0.15	11/01/08	11/03/08
Gross Alpha/Beta EPA 900				**pCi/L**	**Batch # 8302160**		**Yld %**
Gross Alpha	3.5	U	4.2	2.0	6.6	10/28/08	10/31/08
Gross Beta	2.2	U	4.4	3.0	7.3	10/28/08	10/31/08

NOTE(S)

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U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: EBGW0016

Radiochemistry

Lab Sample ID: F8J210133-013
Work Order: K08L6
Matrix: WATER

Date Collected: 10/16/08 1515
Date Received: 10/21/08 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Gamma Cs-137 & Hits by EPA 901.1 MOD				**pCi/L**	**Batch # 8295437**		**Yld %**
Actinium 228	5.6	U	9.2	20.0	15	10/21/08	10/25/08
Bismuth 212	20	U	23	70	38	10/21/08	10/25/08
Bismuth 214	6.7	U	5.9	10.0	9.4	10/21/08	10/25/08
Cesium 137	0.0	U	3.8	10.0	6.5	10/21/08	10/25/08
Cobalt 60	-0.9	U	3.4	10.0	5.9	10/21/08	10/25/08
Lead 210	33	U	90	700	150	10/21/08	10/25/08
Lead 212	0.2	U	4.5	10.0	8.5	10/21/08	10/25/08
Potassium 40	**50**	**J**	**32**	100	**46**	**10/21/08**	**10/25/08**
Sodium 22	1.0	U	2.9	10.0	5.0	10/21/08	10/25/08
Thallium 208	3.4	U	3.4	5.0	5.5	10/21/08	10/25/08
Thorium 234	120	U	110	350	160	10/21/08	10/25/08
Uranium 235	-2	U	19	25	29	10/21/08	10/25/08
Uranium 238	220	U	160	500	250	10/21/08	10/25/08
Radium 226 by EPA 903.0 MOD				**pCi/L**	**Batch # 8295393**		**Yld % 91**
Radium (226)	0.13	U	0.10	1.00	0.14	10/21/08	11/11/08
SR-90 BY GFPC EPA-905 MOD				**pCi/L**	**Batch # 8295395**		**Yld % 73**
Strontium 90	0.06	U	0.30	1.00	0.50	10/21/08	11/07/08
Carbon 14 by EERF C-01-1				**pCi/L**	**Batch # 8296072**		**Yld %**
Carbon 14	2.6	U	5.1	20.0	8.5	10/22/08	10/24/08
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**Batch # 8297158**		**Yld %**
Tritium	50	U	140	300	240	10/23/08	11/02/08
Iso THORIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**Batch # 8306072**		**Yld % 77**
Thorium 228	0.17	U	0.20	1.00	0.26	11/01/08	11/03/08
Thorium 230	**0.47**	**J**	**0.31**	1.00	**0.24**	**11/01/08**	**11/03/08**
Thorium 232	0.17	U	0.19	1.00	0.21	11/01/08	11/03/08
Gross Alpha/Beta EPA 900				**pCi/L**	**Batch # 8302160**		**Yld %**
Gross Alpha	0.37	U	0.47	2.00	0.76	10/28/08	10/31/08
Gross Beta	-0.20	U	0.86	3.00	1.5	10/28/08	10/31/08
Iso URANIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**Batch # 8310238**		**Yld % 85**
Uranium 233/234	0.06	U	0.11	1.00	0.19	11/05/08	11/05/08
Uranium 235/236	0.045	U	0.080	1.00	0.14	11/05/08	11/05/08
Uranium 238	-0.003	U	0.050	1.00	0.15	11/05/08	11/05/08

NOTE(S)

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U Result is less than the sample detection limit.

METHOD BLANK REPORT

Radiochemistry

Client Lot ID: F8J210133
Matrix: WATER

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC		Prep Date	Analysis Date	Lab Sample ID
Radium 226 by EPA 903.0 MOD			**pCi/L**	**Batch #**	**8295393**	**Yld %**	**91**		**F8J210000-393B**
Radium (226)	-0.019	U	0.072	1.00	0.16		10/21/08	11/11/08	
SR-90 BY GFPC EPA-905 MOD			**pCi/L**	**Batch #**	**8295395**	**Yld %**	**71**		**F8J210000-395B**
Strontium 90	0.30	U	0.31	1.00	0.51		10/21/08	11/07/08	
Gamma Cs-137 & Hits by EPA 901.1 MOD			**pCi/L**	**Batch #**	**8295437**	**Yld %**			**F8J210000-437B**
Actinium 228	8.5	U	9.7	20.0	16		10/21/08	10/22/08	
Bismuth 212	1	U	21	70	37		10/21/08	10/22/08	
Bismuth 214	0.0	U	6.2	10.0	11		10/21/08	10/22/08	
Cesium 137	1.7	U	2.9	10.0	4.8		10/21/08	10/22/08	
Cobalt 60	1.2	U	3.2	10.0	5.6		10/21/08	10/22/08	
Lead 210	-9	U	49	700	79		10/21/08	10/22/08	
Lead 212	2.1	U	5.0	10.0	7.4		10/21/08	10/22/08	
Potassium 40	-80	U	390	100	90		10/21/08	10/22/08	
Sodium 22	1.2	U	2.6	10.0	4.5		10/21/08	10/22/08	
Thallium 208	-4	U	12	5	6		10/21/08	10/22/08	
Thorium 234	-45	U	80	350	85		10/21/08	10/22/08	
Uranium 235	14	U	11	25	18		10/21/08	10/22/08	
Uranium 238	-70	U	150	500	140		10/21/08	10/22/08	
Iso THORIUM (SHORT CT) DOE A-01-R MOD			**pCi/L**	**Batch #**	**8306072**	**Yld %**	**83**		**F8K010000-072B**
Thorium 228	**0.067**	**J**	**0.078**	1.00	**0.061**		**11/01/08**	**11/03/08**	
Thorium 230	**0.27**	**J**	**0.16**	1.00	**0.06**		**11/01/08**	**11/03/08**	
Thorium 232	0.022	U	0.045	1.00	0.060		11/01/08	11/03/08	
Iso URANIUM (SHORT CT) DOE A-01-R MOD			**pCi/L**	**Batch #**	**8306073**	**Yld %**	**81**		**F8K010000-073B**
Uranium 233/234	**0.12**	**J**	**0.10**	1.00	**0.06**		**11/01/08**	**11/03/08**	
Uranium 235/236	0.058	U	0.082	1.00	0.078		11/01/08	11/03/08	
Uranium 238	**0.16**	**J**	**0.12**	1.00	**0.1**		**11/01/08**	**11/03/08**	
Iso URANIUM (SHORT CT) DOE A-01-R MOD			**pCi/L**	**Batch #**	**8310238**	**Yld %**	**85**		**F8K050000-238B**
Uranium 233/234	0.047	U	0.075	1.00	0.12		11/05/08	11/05/08	
Uranium 235/236	-0.0049	U	0.0098	1.00	0.11		11/05/08	11/05/08	
Uranium 238	0.009	U	0.044	1.00	0.11		11/05/08	11/05/08	
Carbon 14 by EERF C-01-1			**pCi/L**	**Batch #**	**8296072**	**Yld %**			**F8J220000-072B**
Carbon 14	2.9	U	5.1	20.0	8.5		10/22/08	10/23/08	
TRITIUM (Distill) by EPA 906.0 MOD			**pCi/L**	**Batch #**	**8297158**	**Yld %**			**F8J230000-158B**
Tritium	20	U	140	300	240		10/23/08	11/01/08	

METHOD BLANK REPORT

Radiochemistry

Client Lot ID: F8J210133
Matrix: WATER

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC		Prep Date	Lab Sample ID Analysis Date
Gross Alpha/Beta EPA 900			**pCi/L**	**Batch #**	**8302160**	**Yld %**		**F8J280000-160B**
Gross Alpha	0.09	U	0.46	2.00	0.89		10/28/08	10/31/08
Gross Beta	0.33	U	0.73	3.00	1.2		10/28/08	10/31/08

NOTE(S)

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Laboratory Control Sample Report

Radiochemistry

Client Lot ID: F8J210133
Matrix: WATER

Parameter	Spike Amount	Result	Total Uncert. (2 σ+/-)	MDC	% Yld	% Rec	Lab Sample ID / QC Control Limits
Gamma Cs-137 & Hits by EPA 901.1 MOD			**pCi/L**	**901.1 MOD**			**F8J210000-437C**
Americium 241	141000	144000	12000	600		102	(90 - 110)
Cesium 137	53100	52100	2900	200		98	(90 - 110)
Cobalt 60	87900	83400	4700	100		95	(90 - 110)
	Batch #:	8295437		**Analysis Date:**	10/22/08		
Carbon 14 by EERF C-01-1			**pCi/L**	**C-01-1**			**F8J220000-072C**
Carbon 14	976	452	37	9		46	(38 - 112)
	Batch #:	8296072		**Analysis Date:**	10/23/08		
TRITIUM (Distill) by EPA 906.0 MOD			**pCi/L**	**906.0 MOD**			**F8J230000-158C**
Tritium	4870	4430	410	240		91	(67 - 111)
	Batch #:	8297158		**Analysis Date:**	11/01/08		
Gross Alpha/Beta EPA 900			**pCi/L**	**900.0 MOD**			**F8J280000-160C**
Gross Beta	68.1	56.1	4.9	1.2		82	(72 - 117)
	Batch #:	8302160		**Analysis Date:**	10/31/08		
Gross Alpha/Beta EPA 900			**pCi/L**	**900.0 MOD**			**F8J280000-160C**
Gross Alpha	49.4	47.4	5.4	0.9		96	(72 - 138)
	Batch #:	8302160		**Analysis Date:**	10/31/08		
Iso THORIUM (SHORT CT) DOE A-01-R MOD			**pCi/L**	**A-01-R MOD**			**F8K010000-072C**
Thorium 230	8.23	10.2	1.4	0.2	58	124	(92 - 138)
	Batch #:	8306072		**Analysis Date:**	11/03/08		
Iso URANIUM (SHORT CT) DOE A-01-R MOD			**pCi/L**	**A-01-R MOD**			**F8K010000-073C**
Uranium 233/234	13.1	12.9	1.5	0.1	82	98	(87 - 127)
Uranium 238	13.6	14.4	1.7	0.1	82	106	(87 - 128)
	Batch #:	8306073		**Analysis Date:**	11/04/08		
Iso URANIUM (SHORT CT) DOE A-01-R MOD			**pCi/L**	**A-01-R MOD**			**F8K050000-238C**
Uranium 233/234	13.1	14.6	1.7	0.2	77	112	(87 - 127)
Uranium 238	13.6	15.2	1.8	0.1	77	111	(87 - 128)
	Batch #:	8310238		**Analysis Date:**	11/05/08		

NOTE(S)

MDC is determined by instrument performance only
Calculations are performed before rounding to avoid round-off error in calculated results

Laboratory Control Sample/LCS Duplicate Report

Radiochemistry

Client Lot ID: F8J210133
Matrix: WATER

Parameter		Spike Amount	Result	Total Uncert. (2 σ+/-)	% Yld	% Rec	QC Control Limits	Precision	
Radium 226 by EPA 903.0 MOD			**pCi/L**	**903.0 MOD**				**Lab Sample ID F8J210000-393C**	
Radium (226)		11.3	12.1	1.2	92	107	(72 - 130)		
	Spk 2	11.3	12.0	1.2	97	107	(72 - 130)	0.6	%RPD
		Batch #:	8295393		**Analysis Date:**		11/11/08		
SR-90 BY GFPC EPA-905 MOD			**pCi/L**	**905 MOD**				**F8J210000-395C**	
Strontium 90		7.02	8.95	0.98	72	127	(73 - 135)		
	Spk 2	7.02	7.41	0.82	83	106	(73 - 135)	19	%RPD
		Batch #:	8295395		**Analysis Date:**		11/07/08		

NOTE(S)

Calculations are performed before rounding to avoid round-off error in calculated results

MATRIX SPIKE REPORT

Radiochemistry

Client Lot Id: F8J130132
Matrix: W

Date Sampled: 10/07/08
Date Received: 10/13/08

Parameter	Spike Amount	Spike Result	Total Uncert. (2σ +/-)	Spike Yld.	Sample Result	Total Uncert. (2 σ +/-)	QC Sample ID %YLD	QC Sample ID %REC	QC Control Limits
Carbon 14 by EERF C-01-1			**pCi/L**		**C-01-1**			**F8J130132-001**	
Carbon 14	2930	1630	130		179	17		50	(37 - 121)
	Batch #:	8296072		Analysis Date:		10/23/08			

NOTE(S)

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MATRIX SPIKE REPORT

Radiochemistry

Client Lot Id: F8J210133
Matrix: WATER

Date Sampled: 10/15/08
Date Received: 10/21/08

Parameter	Spike Amount	Spike Result	Total Uncert. (2σ +/-)	Spike Yld.	Sample Result	Total Uncert. (2 σ +/-)	QC Sample ID %YLD	QC Sample ID %REC	QC Control Limits
TRITIUM (Distill) by EPA 906.0 MOD			**pCi/L**		**906.0 MOD**			**F8J210133-002**	
Tritium	4870	4650	420		-20	140		96	(27 - 150)
	Batch #:	8297158		Analysis Date:		11/02/08			
Gross Alpha/Beta EPA 900			**pCi/L**		**900.0 MOD**			**F8J210133-009**	
Gross Beta	278	282	24		5.4	4.0		99	(66 - 147)
	Batch #:	8302160		Analysis Date:		10/31/08			
Gross Alpha/Beta EPA 900			**pCi/L**		**900.0 MOD**			**F8J210133-009**	
Gross Alpha	202	180	22		7.7	4.0		85	(44 - 150)
	Batch #:	8302160		Analysis Date:		10/31/08			

NOTE(S)

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DUPLICATE EVALUATION REPORT

Radiochemistry

Client Lot ID: F8J210133 Date Sampled: 10/15/08
Matrix: WATER Date Received: 10/21/08

Parameter	SAMPLE Result		Total Uncert. (2σ+/-)	% Yld	DUPLICATE Result		Total Uncert. (2 σ+/-)	% Yld	QC Sample ID Precision	
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**906.0 MOD**				**F8J210133-001**	
Tritium	-120	U	130		**70**	U	**140**		663	%RPD
	Batch #:		8297158	(Sample)	8297158	(Duplicate)				
Gamma Cs-137 & Hits by EPA 901.1 MOD				**pCi/L**	**901.1 MOD**				**F8J210133-008**	
Actinium 228	**4**	U	**11**		**6**	U	**10**		37	%RPD
Bismuth 212	0.5	U	26		**9**	U	**21**		180	%RPD
Bismuth 214	**90**		**13**		**72**		**11**		21	%RPD
Cesium 137	-0.01	U	2.7		0.7	U	3.2		206	%RPD
Cobalt 60	0.3	U	2.7		0.3	U	3.5		16	%RPD
Lead 210	**60**	U	**100**		4	U	49		172	%RPD
Lead 212	**-4**	U	**13**		0.3	U	4.6		234	%RPD
Potassium 40	**93**	J	**35**		-46	U	97		592	%RPD
Sodium 22	-1.2	U	3.3		0.0	U	5.4		200	%RPD
Thallium 208	4.0	U	3.1		-5	U	17		1930	%RPD
Thorium 234	**-60**	U	**140**		-13	U	73		133	%RPD
Uranium 235	13	U	19		**9**	U	**15**		38	%RPD
Uranium 238	**-70**	U	**190**		**50**	U	**190**		910	%RPD
	Batch #:		8295437	(Sample)	8295437	(Duplicate)				
Iso URANIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**A-01-R MOD**				**F8J210133-013**	
Uranium 233/234	0.06	U	0.11	85	0.014	U	0.045	87	125	%RPD
Uranium 235/236	0.045	U	0.080	85	-0.010	U	0.014	87	315	%RPD
Uranium 238	-0.003	U	0.050	85	0.014	U	0.045	87	307	%RPD
	Batch #:		8310238	(Sample)	8310238	(Duplicate)				
Gross Alpha/Beta EPA 900				**pCi/L**	**900.0 MOD**				**F8J210133-009**	
Gross Alpha	**7.7**		**4.0**		**5.3**		**3.9**		37	%RPD
Gross Beta	5.4	U	4.0		**7.1**		**4.1**		28	%RPD
	Batch #:		8302160	(Sample)	8302160	(Duplicate)				
Iso THORIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**A-01-R MOD**				**F8J210133-009**	
Thorium 228	-0.069	U	0.056	65	0.27	U	0.28	56	336	%RPD
Thorium 230	**1.10**		**0.52**	65	**0.86**	J	**0.47**	56	24	%RPD
Thorium 232	0.22	U	0.24	65	0.11	U	0.17	56	67	%RPD
	Batch #:		8306072	(Sample)	8306072	(Duplicate)				
Iso URANIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**A-01-R MOD**				**F8J210133-009**	
Uranium 233/234	**4.6**		**1.0**	76	**4.1**		**1.1**	59	11	%RPD
Uranium 235/236	0.22	U	0.25	76	0.21	U	0.28	59	3	%RPD
Uranium 238	**3.18**		**0.85**	76	**2.09**		**0.75**	59	41	%RPD
	Batch #:		8306073	(Sample)	8306073	(Duplicate)				
Carbon 14 by EERF C-01-1				**pCi/L**	**C-01-1**				**F8J130132-001**	
Carbon 14	179		17		149		15		18	%RPD
	Batch #:		8296072	(Sample)	8296072	(Duplicate)				

NOTE(S)

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J Result is greater than sample detection limit but less than stated reporting limit.
U Result is less than the sample detection limit.

Calscience Environmental Laboratories, Inc.

February 11, 2008

Joe Turner
Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Subject: **Calscience Work Order No.: 08-01-1782**
Client Reference: LEHR IRA Water Sampling

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 1/25/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Virendra R Patel

Calscience Environmental
Laboratories, Inc.
Virendra Patel
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	01/25/08
10540 White Rock Road, Suite 180		Work Order No:	08-01-1782
Rancho Cordova, CA 95670-7984		Preparation:	EPA 3010A Total
		Method:	EPA 6010B
		Units:	mg/L
Project: LEHR IRA Water Sampling			Page 1 of 1

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPEF 0355	**08-01-1782-2-C**	**01/24/08**	**Aqueous**	**ICP 5300**	**01/25/08**	**01/29/08 13:34**	**080125L08A**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Calcium	44.5	0.100	1		Potassium	0.830	0.500	1	
Magnesium	79.0	0.100	1		Sodium	39.9	0.500	1	

Method Blank	**097-01-003-7,945**	**N/A**	**Aqueous**	**ICP 5300**	**01/25/08**	**01/28/08 12:43**	**080125L08A**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Calcium	ND	0.100	1		Potassium	ND	0.500	1	
Magnesium	ND	0.100	1		Sodium	ND	0.500	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: 01/25/08
Work Order No: 08-01-1782
Preparation: EPA 3020A Total / EPA 7470A Total
Method: EPA 6020 / EPA 7470A
Units: mg/L

Project: LEHR IRA Water Sampling

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPEF 0355	**08-01-1782-2-C**	**01/24/08**	**Aqueous**	**ICP/MS A**	**01/28/08**	**01/28/08 15:50**	**080128L02**

Comment(s): -Mercury was analyzed on 1/25/2008 6:37:59 PM with batch 080125L01A

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	0.00100	1		Mercury	ND	0.000500	1	
Arsenic	0.00177	0.00100	1		Molybdenum	0.00184	0.00100	1	
Barium	0.182	0.00100	1		Nickel	0.00203	0.00100	1	
Beryllium	ND	0.00100	1		Selenium	0.00184	0.00100	1	
Cadmium	ND	0.00100	1		Silver	ND	0.00100	1	
Chromium	0.0239	0.00100	1		Thallium	ND	0.00100	1	
Cobalt	ND	0.00100	1		Vanadium	0.00720	0.00100	1	
Copper	0.00784	0.00100	1		Zinc	0.0198	0.00500	1	
Lead	ND	0.00100	1						

Method Blank	**096-06-003-1,497**	**N/A**	**Aqueous**	**ICP/MS A**	**01/28/08**	**01/28/08 15:02**	**080128L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	0.00100	1		Lead	ND	0.00100	1	
Arsenic	ND	0.00100	1		Molybdenum	ND	0.00100	1	
Barium	ND	0.00100	1		Nickel	ND	0.00100	1	
Beryllium	ND	0.00100	1		Selenium	ND	0.00100	1	
Cadmium	ND	0.00100	1		Silver	ND	0.00100	1	
Chromium	ND	0.00100	1		Thallium	ND	0.00100	1	
Cobalt	ND	0.00100	1		Vanadium	ND	0.00100	1	
Copper	ND	0.00100	1		Zinc	ND	0.00500	1	

Method Blank	**099-04-008-3,336**	**N/A**	**Aqueous**	**Mercury**	**01/25/08**	**01/25/08 12:46**	**080125L01A**

Parameter	Result	RL	DF	Qual
Mercury	ND	0.000500	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	01/25/08
10540 White Rock Road, Suite 180		Work Order No:	08-01-1782
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: LEHR IRA Water Sampling			Page 1 of 5

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPIN 0355	**08-01-1782-1-D**	**01/24/08**	**Aqueous**	**GC/MS T**	**01/30/08**	**01/31/08 6:54**	**080130L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	25	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	112	74-140		1,2-Dichloroethane-d4	109	74-146	
Toluene-d8	107	88-112		1,4-Bromofluorobenzene	99	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	01/25/08
10540 White Rock Road, Suite 180		Work Order No:	08-01-1782
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: LEHR IRA Water Sampling			Page 2 of 5

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPEF 0355	**08-01-1782-2-D**	**01/24/08**	**Aqueous**	**GC/MS T**	**01/30/08**	**01/31/08 7:24**	**080130L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	107	74-140		1,2-Dichloroethane-d4	104	74-146	
Toluene-d8	107	88-112		1,4-Bromofluorobenzene	101	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	01/25/08
10540 White Rock Road, Suite 180		Work Order No:	08-01-1782
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: LEHR IRA Water Sampling			Page 3 of 5

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TBIRA 0023	**08-01-1782-4-A**	**01/24/08**	**Aqueous**	**GC/MS T**	**01/31/08**	**01/31/08 19:38**	**080131L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	109	74-140		1,2-Dichloroethane-d4	106	74-146	
Toluene-d8	106	88-112		1,4-Bromofluorobenzene	103	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	01/25/08
10540 White Rock Road, Suite 180		Work Order No:	08-01-1782
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: LEHR IRA Water Sampling			Page 4 of 5

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-24,271**	**N/A**	**Aqueous**	**GC/MS T**	**01/30/08**	**01/31/08 1:56**	**080130L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	107	74-140		1,2-Dichloroethane-d4	103	74-146	
Toluene-d8	107	88-112		1,4-Bromofluorobenzene	97	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	01/25/08
10540 White Rock Road, Suite 180		Work Order No:	08-01-1782
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: LEHR IRA Water Sampling			Page 5 of 5

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-24,281**	**N/A**	**Aqueous**	**GC/MS T**	**01/31/08**	**01/31/08 14:39**	**080131L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	111	74-140		1,2-Dichloroethane-d4	106	74-146	
Toluene-d8	106	88-112		1,4-Bromofluorobenzene	99	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: 01/25/08
Work Order No: 08-01-1782

Project: LEHR IRA Water Sampling

Client Sample Number	Lab Sample Number	Date Collected	Matrix
TPIN 0355	**08-01-1782-1**	**01/24/08**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Carbon, Total Organic	2.2	0.50	1		mg/L	N/A	01/26/08	SM 5310 D

TPEF 0355	**08-01-1782-2**	**01/24/08**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chloride	21	5.0	5		mg/L	N/A	01/25/08	EPA 300.0
Nitrate (as N)	8.2	0.20	2		mg/L	N/A	01/25/08	EPA 300.0
Sulfate	48	5.0	5		mg/L	N/A	01/25/08	EPA 300.0
Alkalinity, Total (as CaCO3)	414	5.0	1		mg/L	N/A	01/30/08	SM 2320B
Solids, Total Dissolved	512	1.0	1		mg/L	N/A	01/28/08	SM 2540 C

ASDP 0355	**08-01-1782-3**	**01/24/08**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrate (as N)	8.0	0.20	2		mg/L	N/A	01/25/08	EPA 300.0
Solids, Total Dissolved	516	1.0	1		mg/L	N/A	01/28/08	SM 2540 C

Method Blank		**N/A**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chloride	ND	1.0	1		mg/L	N/A	01/25/08	EPA 300.0
Nitrate (as N)	ND	0.10	1		mg/L	N/A	01/25/08	EPA 300.0
Sulfate	ND	1.0	1		mg/L	N/A	01/25/08	EPA 300.0
Alkalinity, Total (as CaCO3)	ND	1.0	1		mg/L	N/A	01/30/08	SM 2320B
Solids, Total Dissolved	ND	1.0	1		mg/L	N/A	01/28/08	SM 2540 C
Carbon, Total Organic	ND	0.50	1		mg/L	N/A	01/26/08	SM 5310 D

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	01/25/08
Work Order No:	08-01-1782
Preparation:	EPA 3010A Total
Method:	EPA 6010B

Project LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-01-1758-1	**Aqueous**	**ICP 5300**	**01/25/08**	**01/28/08**	**080125S08**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Calcium	4X	4X	77-113	4X	0-11	Q
Magnesium	4X	4X	56-140	4X	0-11	Q
Potassium	111	105	83-131	3	0-7	
Sodium	4X	4X	73-127	4X	0-9	Q

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: 01/25/08
Work Order No: 08-01-1782
Preparation: EPA 3020A Total
Method: EPA 6020

Project LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
TPEF 0355	**Aqueous**	**ICP/MS A**	**01/28/08**	**01/28/08**	**080128S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	116	110	85-133	5	0-11	
Arsenic	100	97	73-127	3	0-11	
Barium	87	96	74-128	3	0-10	
Beryllium	85	85	56-122	1	0-11	
Cadmium	101	98	84-114	3	0-8	
Chromium	89	85	73-133	4	0-11	
Cobalt	82	82	79-121	0	0-10	
Copper	82	82	72-108	0	0-10	
Lead	105	102	79-121	3	0-10	
Molybdenum	106	105	83-137	2	0-10	
Nickel	86	84	68-122	2	0-10	
Selenium	95	92	59-125	3	0-12	
Silver	94	90	68-128	5	0-14	
Thallium	99	97	73-121	2	0-11	
Vanadium	83	80	77-137	3	0-15	
Zinc	97	94	43-145	3	0-39	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	01/25/08
Work Order No:	08-01-1782
Preparation:	EPA 7470A Total
Method:	EPA 7470A

Project LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-01-1516-2	**Aqueous**	**Mercury**	**01/25/08**	**01/25/08**	**080125S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	52	36	71-134	35	0-14	3,4

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	01/25/08
Work Order No:	08-01-1782
Preparation:	EPA 5030B
Method:	EPA 8260B

Project LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-01-1798-3	**Aqueous**	**GC/MS T**	**01/30/08**	**01/31/08**	**080130S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	102	102	88-118	0	0-7	
Carbon Tetrachloride	88	101	67-145	14	0-11	4
Chlorobenzene	102	103	88-118	1	0-7	
1,2-Dibromoethane	85	104	70-130	20	0-30	
1,2-Dichlorobenzene	103	104	86-116	1	0-8	
1,1-Dichloroethene	102	105	70-130	3	0-25	
Ethylbenzene	104	102	70-130	2	0-30	
Toluene	105	105	87-123	0	0-8	
Trichloroethene	104	104	79-127	0	0-10	
Vinyl Chloride	107	107	69-129	0	0-13	
Methyl-t-Butyl Ether (MTBE)	74	104	71-131	34	0-13	4
Tert-Butyl Alcohol (TBA)	147	172	36-168	16	0-45	3
Diisopropyl Ether (DIPE)	104	110	81-123	5	0-9	
Ethyl-t-Butyl Ether (ETBE)	70	105	72-126	41	0-12	3,4
Tert-Amyl-Methyl Ether (TAME)	72	103	72-126	36	0-12	4
Ethanol	160	102	53-149	27	0-31	3

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	01/25/08
Work Order No:	08-01-1782
Preparation:	EPA 5030B
Method:	EPA 8260B

Project LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-01-1806-1	**Aqueous**	**GC/MS T**	**01/31/08**	**01/31/08**	**080131S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	104	105	88-118	1	0-7	
Carbon Tetrachloride	100	105	67-145	5	0-11	
Chlorobenzene	106	109	88-118	3	0-7	
1,2-Dibromoethane	90	104	70-130	14	0-30	
1,2-Dichlorobenzene	107	105	86-116	1	0-8	
1,1-Dichloroethene	100	105	70-130	4	0-25	
Ethylbenzene	106	108	70-130	1	0-30	
Toluene	109	108	87-123	1	0-8	
Trichloroethene	107	109	79-127	1	0-10	
Vinyl Chloride	110	106	69-129	4	0-13	
Methyl-t-Butyl Ether (MTBE)	94	106	71-131	12	0-13	
Tert-Butyl Alcohol (TBA)	181	189	36-168	3	0-45	3
Diisopropyl Ether (DIPE)	110	110	81-123	0	0-9	
Ethyl-t-Butyl Ether (ETBE)	86	107	72-126	22	0-12	4
Tert-Amyl-Methyl Ether (TAME)	85	107	72-126	22	0-12	4
Ethanol	186	125	53-149	27	0-31	3

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-01-1782

Project: LEHR IRA Water Sampling

Matrix: Aqueous

Parameter	Method	Quality Control Sample ID	Date Analyzed	Date Extracted	MS% REC	MSD % REC	%REC CL	RPD	RPD CL	Qualifiers
Chloride	EPA 300.0	08-01-1810-1	01/25/08	N/A	104	105	56-134	2	0-3	
Nitrate (as N)	EPA 300.0	08-01-1810-1	01/25/08	N/A	95	96	58-142	1	0-6	
Sulfate	EPA 300.0	08-01-1810-1	01/25/08	N/A	105	106	49-133	1	0-3	
Carbon, Total Organic	SM 5310 D	08-01-1732-1	01/26/08	N/A	100	100	70-130	0	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-01-1782

Project: LEHR IRA Water Sampling

Matrix: Aqueous

Parameter	Method	QC Sample ID	Date Analyzed	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Alkalinity, Total (as CaCO3)	SM 2320B	08-01-2102-16	01/30/08	386	386	0	0-25	
Bicarbonate (as CaCO3)	SM 2320B	08-01-2102-16	01/30/08	386	386	0	0-25	
Carbonate (as CaCO3)	SM 2320B	08-01-2102-16	01/30/08	ND	ND	NA	0-25	
Hydroxide (as CaCO3)	SM 2320B	08-01-2102-16	01/30/08	ND	ND	NA	0-25	
Solids, Total Dissolved	SM 2540 C	08-01-1758-2	01/28/08	608	626	3	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-01-1782
Preparation: EPA 3010A Total
Method: EPA 6010B

Project: LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-003-7,945	**Aqueous**	**ICP 5300**	**01/25/08**	**01/28/08**	**080125L08A**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Calcium	106	120	80-120	12	0-20	
Magnesium	101	102	80-120	1	0-20	
Potassium	102	103	80-120	1	0-20	
Sodium	103	103	80-120	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-01-1782
Preparation: EPA 3020A Total
Method: EPA 6020

Project: LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
096-06-003-1,497	**Aqueous**	**ICP/MS A**	**01/28/08**	**01/28/08**	**080128L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	91	89	80-120	1	0-20	
Arsenic	106	109	80-120	3	0-20	
Barium	101	101	80-120	0	0-20	
Beryllium	99	105	80-120	5	0-20	
Cadmium	106	106	80-120	0	0-20	
Chromium	108	109	80-120	1	0-20	
Cobalt	102	101	80-120	1	0-20	
Copper	107	106	80-120	1	0-20	
Lead	101	105	80-120	3	0-20	
Molybdenum	101	103	80-120	2	0-20	
Nickel	110	110	80-120	0	0-20	
Selenium	110	113	80-120	3	0-20	
Silver	100	100	80-120	0	0-20	
Thallium	98	101	80-120	4	0-20	
Vanadium	100	99	80-120	2	0-20	
Zinc	116	118	80-120	2	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell		Date Received:	N/A
10540 White Rock Road, Suite 180		Work Order No:	08-01-1782
Rancho Cordova, CA 95670-7984		Preparation:	EPA 7470A Total
		Method:	EPA 7470A

Project: LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-04-008-3,336	**Aqueous**	**Mercury**	**01/25/08**	**01/25/08**	**080125L01A**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	97	97	85-121	0	0-4	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell		Date Received:	N/A
10540 White Rock Road, Suite 180		Work Order No:	08-01-1782
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project: LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-24,271	**Aqueous**	**GC/MS T**	**01/30/08**	**01/31/08**	**080130L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	101	101	84-120	1	0-8	
Carbon Tetrachloride	99	101	63-147	2	0-10	
Chlorobenzene	103	102	89-119	1	0-7	
1,2-Dibromoethane	102	107	80-120	5	0-20	
1,2-Dichlorobenzene	102	104	89-119	2	0-9	
1,1-Dichloroethene	89	99	77-125	12	0-16	
Ethylbenzene	102	104	80-120	1	0-20	
Toluene	104	105	83-125	1	0-9	
Trichloroethene	100	101	89-119	1	0-8	
Vinyl Chloride	102	102	63-135	0	0-13	
Methyl-t-Butyl Ether (MTBE)	102	107	82-118	5	0-13	
Tert-Butyl Alcohol (TBA)	124	113	46-154	9	0-32	
Diisopropyl Ether (DIPE)	107	106	81-123	0	0-11	
Ethyl-t-Butyl Ether (ETBE)	103	112	74-122	8	0-12	
Tert-Amyl-Methyl Ether (TAME)	99	107	76-124	8	0-10	
Ethanol	117	102	60-138	14	0-32	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-01-1782
Preparation: EPA 5030B
Method: EPA 8260B

Project: LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-24,281	**Aqueous**	**GC/MS T**	**01/31/08**	**01/31/08**	**080131L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	104	102	84-120	2	0-8	
Carbon Tetrachloride	109	103	63-147	6	0-10	
Chlorobenzene	106	107	89-119	1	0-7	
1,2-Dibromoethane	105	100	80-120	5	0-20	
1,2-Dichlorobenzene	105	106	89-119	1	0-9	
1,1-Dichloroethene	84	81	77-125	4	0-16	
Ethylbenzene	106	106	80-120	0	0-20	
Toluene	108	106	83-125	2	0-9	
Trichloroethene	106	106	89-119	1	0-8	
Vinyl Chloride	105	104	63-135	1	0-13	
Methyl-t-Butyl Ether (MTBE)	112	99	82-118	12	0-13	
Tert-Butyl Alcohol (TBA)	136	150	46-154	10	0-32	
Diisopropyl Ether (DIPE)	111	106	81-123	5	0-11	
Ethyl-t-Butyl Ether (ETBE)	114	105	74-122	8	0-12	
Tert-Amyl-Methyl Ether (TAME)	112	105	76-124	7	0-10	
Ethanol	109	114	60-138	5	0-32	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-01-1782

Project: LEHR IRA Water Sampling

Matrix: Aqueous

Parameter	Method	Quality Control Sample ID	Date Extracted	Date Analyzed	LCS % REC	LCSD % REC	%REC CL	RPD	RPD CL	Qual
Chloride	EPA 300.0	099-05-118-4,317	N/A	01/25/08	98	95	81-111	2	0-5	
Nitrate (as N)	EPA 300.0	099-05-118-4,317	N/A	01/25/08	95	95	87-111	0	0-12	
Sulfate	EPA 300.0	099-05-118-4,317	N/A	01/25/08	102	98	89-107	4	0-13	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-01-1782

Project: LEHR IRA Water Sampling

Matrix : Aqueous

Parameter	Method	Quality Control Sample ID	Date Analyzed	Date Extracted	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Carbon, Total Organic	SM 5310 D	099-05-097-2,851	01/26/08	N/A	5.00	5.30	106	80-120	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-01-1782

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

BROWN AND CALDWELL

Brown and Caldwell
Environmental Engineers and Consultants
10540 White Rock Road Suite 180
Rancho Cordova, CA 95670

Field Chain-of-Custody Form

7482

Lab Name and Address:	Project Name:	Date:	Page:	P.O.#
Virendra Patel (714) 895-5494 Calscience Environmental Laboratories, Inc 7440 Lincoln Way Garden Grove, CA 92841-1427	LEHR IRA Water Sampling		1 of 1	131261-200

	Sample ID	Collection	Matrix Code*	Sample Type**	Field Preserved (Y or N)	Number of Containers	H-3	C-14	VOA	Nitrate as N	TDS	Alkalinity	Anions	Metals	TOC	Cations Ca, Mg, Na, K	Total Chrome						Comments
1	TPIN 0355	Date: 1/24/08 Time: 1120	GW	G	Y	5	✓	✓	✓						✓								
2	TPEF 0355	Date: 1/24/08 Time: 1130	GW	G	Y	5			✓	✓	✓	✓	✓	✓		✓							
3	ASDP 0355	Date: 1/24/08 Time: 1135	GW	G	Y	1				✓	✓												
4	TBIRA 0023	Date: 1/24/08 Time: 1120	O	O	Y	2			✓														

Relinquished by: (Signature) Kyle Bryant — Date: 1/24/08 Time: 1200

Received by: (Signature) Fed Ex — Date: Time:

Relinquished by: (Signature) — Date: Time:

Cooler Numbers

Comments:
Note: This shipment is not intended to fall under the authority of a radiological use license.

Received for Laboratory By: (*Signature*) — Date: 1/25/08 Time: 1000

Method of Shipment: Airbill No.

Cooler Survey (pass / fail) _____ If FAIL do not open; contact the Program Development Department and the Radiation Safety Officer IMMEDIATELY.

Surveyed by: (*Signature*) Date: Time:

Cooler Condition Upon Receipt at Laboratory:

Seals Intact: YES____ NO____

Internal Cooler Temp: _____°C; Samples in good condition: (Y/N) _____; Samples surveyed (pass/fail) _____

*Sample Matrix Codes

SW - Surface Water	AR - Air	SD - Sediment	
GW - Ground Water	SL - Soil	WW - Waste Water	BI - Biota
TW - Treatment Water	SG - Sludge	FI - Filter	O - Other

**Sample Type Codes

G - Grab
C - Composite
O - Other

EHSCOC.FRM

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 0 1 - 1 7 8 2

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: Brown & Caldwell DATE: 1/25/08

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature.

_____ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

_____ °C Temperature blank.
5.1 °C IR thermometer.
_____ Ambient temperature.

Initial: JP

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____ Not Present: ✓

Initial: JP

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC		✓	
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)	✓		
VOA vial(s) free of headspace.	✓		
Tedlar bag(s) free of condensation			✓

Initial: JP

COMMENTS:

ENVIRONMENTAL

ANALYTICAL CHEMISTS

February 6, 2008

Lab ID : SP 801016
Customer : 2017756

Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Laboratory Report

Introduction: This report package contains total of 3 pages divided into three sections:

Case Narrative (1 Page): An overview of the work performed at FGL.
Chemical Results (1 Page): Results for each sample submitted.
Quality Control (1 Page): Supporting Quality Control (QC) results.

This report package pertains to the following sample:

Sample Description	Date Sampled	Date Received	FGL Lab Sample ID #	Matrix
TPIN 0355	01/24/2008	01/29/2008	SP 801016-01	GW

Sampling and Receipt Information: The sample was received, prepared and analyzed within the method specified holding times. All samples arrived at 4 °C. All samples were checked for pH if acid or base preservation required (except for VOAs). For details of sample receipt information, please see the attached Chain of Custody and Condition Upon Receipt Forms.

Quality Control: All samples were prepared and analyzed according to the following tables:

Radio Chemistry QC

906.0	01/31/2008:A217 All preparation quality controls are within established criteria.
	02/01/2008:A - LS201 All analysis quality controls are within established criteria.

Certification: I certify that this data package is in compliance with NELAC Standards, both technically and for completeness, except for any conditions listed above. Release of the data contained in this data package is authorized by the Laboratory Director or his designee, as verified by the following signature.

FGL ENVIRONMENTAL

KAD:ehb

Kelly A. Dunnahoo, B.S.
Laboratory Director

Corporate Offices & Laboratory
P.O. Box 272 / 853 Corporation Street
Santa Paula, CA 93061-0272
TEL: (805) 392-2000
FAX: (805) 525-4172
CA NELAP Certification No. 01110CA
CA ELAP Certification No. 1573

Office & Laboratory
2500 Stagecoach Road
Stockton, CA 95215
TEL: (209) 942-0182
FAX: (209) 942-0423
CA ELAP Certification No. 1563

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563 East Lindo Avenue
Chico, CA 95926
TEL: (530) 343-5818
FAX: (530) 343-3807

Field Office
Visalia, California
TEL: (559) 734-9473
FAX: (559) 734-8435
Mobile: (559) 737-2399

ENVIRONMENTAL

ANALYTICAL CHEMISTS

February 6, 2008

Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Description : TPIN 0355
Project : 08-01-1782

Lab ID : SP 801016-01
Customer ID: 2-17756

Sampled On : January 24, 2008-11:20
Sampled By : Not Available
Received On: January 29, 2008-12:00
Matrix : Ground Water

Sample Results - Radio

Constituents	Result ± Error	MDA	Units	MCL	Preparation Method	Preparation Date/ID	Analysis Method	Analysis Date/ID
Radio Chemistry P:1								
Tritium	0.000 ± 199	400	pCi/L	20,000	906.0	01/31/08:A217	906.0	02/01/2008:A01

MDA = Minimum Detectable Activity; Data utilized by the DHS to determine matrix interference. MCL = Maximium Contaminat Level.
Containers: (P) Plastic Preservatives: (1) Cool 4°C

CCR Section 64442: Compliance Note: If Gross Alpha (Result + (0.84 x error)) exceeds 5 pCi/L run Uranium. If Gross Alpha minus Uranium exceeds 5 pCi/L run Radium 226. Samples that exceed 5 pCi/L are held for 6 months at FGL.

Compliance:
Gross Alpha - Uranium ≤ 15 pCi/L
Uranium ≤ 20 pCi/L
Radium 226 + Radium 228 ≤ 5 pCi/L

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ENVIRONMENTAL

February 06, 2008 ANALYTICAL CHEMISTS

Calscience Environmental Laboratories

Lab ID : SP 801016
Customer : 2-17756

Quality Control - Radio

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Tritium	906.0	01/31/2008:A217	Blank	pCi/L		ND	<518	
			LCS	pCi/L	2390	101%	75-125	
			BS	pCi/L	2390	107%	75-125	
			BSD	pCi/L	2390	112%	75-125	
			BSRPD	pCi/L		4.6%	≤25	
	906.0	02/01/2008:A	00-CCB	cpm		11	12±1.7	
			00-CCV	cpm	1080	24.6%	25.5±4.5	

Definitions

Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.
BS/BSD : Blank Spikes - A blank is spiked with a known amount of analyte. It is prepared to verify that the preparation process is not affecting analyte recovery.
CCB : Continuing Calibration Blank - Analyzed to verify the instrument baseline is within criteria.
CCV : Continuing Calibration Verification - Analyzed to verify the instrument calibration is within criteria.
ND : Non-detect - Result was below the DQO listed for the analyte.
DQO : Data Quality Objective - This is the criteria against which the quality control data is compared.

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Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

TO: FGL

CHAIN OF CUSTODY RECORD

DATE: 01/25/08
PAGE: 1 OF 1

801016

LABORATORY CLIENT: Calscience Environmental Laboratories, Inc.
ADDRESS: 7440 Lincoln Way
CITY: Garden Grove, CA 92841-1427
TEL: (714) 895-5494
E-MAIL: vpatel@calscience.com

CLIENT PROJECT NAME / NUMBER: 08-01-1782
PROJECT CONTACT: Virendra Patel
SAMPLER(S): (PRINT)

P.O. NO.: 08-01-1782
QUOTE NO.:
LAB USE ONLY

TURNAROUND TIME
☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☐ 5 DAYS ☒ NORMAL

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___/___/___

SPECIAL INSTRUCTIONS
SUB. To: FGL
853 Corporation St.
Santa Paula , CA 93061-3005
(805)392-2000

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	Matrix	#Cont	Tritium EPA 906.0	Excel EDD
	TPIN 0355	01/24/08	1120	GW	1	X	X

Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
(CALSCIENCE)	GSO AB # 5088 14749	01/28/08	1700
Relinquished by: (Signature) Goldenstate overnight	Received by / Affiliation: (Signature)	1/29/08	1100.
Relinquished by: (Signature)	Received by / Affiliation: (Signature)		

4

Santa Paula - Condition Upon Receipt (Attach to COC)

Sample Receipt:

1. Number of ice chests/packages received: 1
   Note as OTC if received over the counter unpackaged.
2. Were samples received in a chilled condition? Temps: 4 / ____ / ____ / ____ / ____
   Acceptable is 2° to 6° C. Also acceptable is received on ice (ROI) for the same day of sampling or received at room temperature (RRT) if sampled within one hour of receipt. Client contact for temperature failures must be documented below. If many packages are received at one time check for tests/H.T.'s/rushes/Bacti's to prioritize further review. Please notify Microbiology personnel immediately of bacti samples received.
3. Do the number of bottles received agree with the COC? Yes No N/A
4. Were samples received intact? (i.e. no broken bottles, leaks etc.) Yes No
5. Were sample custody seals intact? N/A Yes No

Sign and date the COC, obtain LIMS sample numbers, select methods/tests and print labels.

Sample Verification, Labeling and Distribution:

1. Were all requested analyses understood and acceptable? Yes No
2. Did bottle labels correspond with the client's ID's? Yes No
3. Were all bottles requiring sample preservation properly preserved? Yes No N/A FGL
4. VOAs checked for Headspace? Yes No N/A
5. Were all analyses within holding times at time of receipt? Yes No
6. Have rush or project due dates been checked and accepted? N/A Yes No

Attach labels to the containers and include a copy of the COC for lab delivery.

Sample Receipt, Login and Verification completed by (initials): cl

Discrepancy Documentation:

Any items above which are "No" or do not meet specifications (i.e. temps) must be resolved.

1. Person Contacted:_____ Phone Number:_____
   Initiated By:_____ Date:_____
   Problem:

   Resolution:

2. Person Contacted:_____ Phone Number:_____
   Initiated By:_____ Date:_____
   Problem:

   Resolution:

(2-17756)
Calscience Environmental Laboratories
SP 0801016
IV-01/29/2008-13:09:50

GEL Laboratories LLC
a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178

www.gel.com

February 05, 2008

Mr. Virendra R. Patel
Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, California 92841-1427

Re: Carbon 14
Work Order: 201786

Dear Mr. Patel:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on January 29, 2008. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4297.

Sincerely,

Amanda Rasco
Project Manager

Purchase Order: 08-01-1782
Enclosures

Calscience Environmental Laboratories, Inc.

7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

TO: GEL Laboratories, Inc.

201786

CHAIN OF CUSTODY RECORD

DATE: 01/25/08
PAGE: 1 OF 1

LABORATORY CLIENT: Calscience Environmental Laboratories, Inc.	CLIENT PROJECT NAME / NUMBER: 08-01-1782	P.O. NO.: 08-01-1782
ADDRESS: 7440 Lincoln Way	PROJECT CONTACT: Virendra Patel	QUOTE NO.:
CITY: Garden Grove, CA 92841-1427	SAMPLER(S): (PRINT)	LAB USE ONLY
TEL: (714) 895-5494 / E-MAIL: vpatel@calscience.com		

TURNAROUND TIME
☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☐ 5 DAYS [X] NORMAL

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ____/____/____

SPECIAL INSTRUCTIONS
Ship To: GEL Laboratories, Inc.
2040 Savage Rd.
Charleston, SC 29407
Attention: Amanda Rasco 843-556-8171

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	Matrix	#Cont	Carbon-14 by EERF-C	Detection Limit of 20 pCi/L		Send PDF via Email	Send Invoice with Results
	TPIN 0355	01/24/08	1120	GW	1	X	X		X	X

Relinquished by: (Signature) (CALSCIENCE)	Received by / Affiliation: (Signature) FedEx AB # 9587-3400-1173	Date: 01/28/08	Time: 1700
Relinquished by: (Signature)	Received by / Affiliation: (Signature) GEL	Date: 1/29/08	Time: 0930
Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: CALS	**SDG/ARCOC/Work Order:** 261786
Received By: Ricky Albee	**Date Received:** 1/29/08

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
COC/Samples marked as radioactive?		✓	Maximum Counts Observed*: 40 cpm
Classified Radioactive II by RSO?		✓	
COC/Samples marked containing PCBs?		✓	
Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		✓	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (4 +/- 2 C)?	✓			Preservation Method: ice bags blue ice dry ice none other (describe) 20
3	Chain of custody documents included with shipment?	✓			
4	Sample containers intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		✓		Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		✓		Sample ID's and containers affected:
7	Are Encore containers present?			✓	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	✓			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Sample ID's affected:
11	Number of containers received match number indicated on COC?	✓			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	✓			

Comments: FedEx 9587 3400 1173

PM (or PMA) review: Initials AM Date 1/29/08

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

CALS001 Calscience Environmental Laboratory, Inc.

Client SDG: 201786 GEL Work Order: 201786

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

ND The analyte concentration is not detected above the detection limit.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Amanda Rasco.

Amanda Rasco

Reviewed by

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : Calscience Environmental Laboratories, Inc.
Address : 7440 Lincoln Way
Garden Grove, California 92841−−1427

Report Date: February 5, 2008

Contact: Mr. Virendra R. Patel
Project: **Carbon 14**

Client Sample ID:	TPIN 0355	Project:	CALS00101
Sample ID:	201786001	Client ID:	CALS001
Matrix:	Ground Water		
Collect Date:	24−JAN−08 11:20		
Receive Date:	29−JAN−08		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Rad Liquid Scintillation Analysis											
Liquid Scint C14, Liquid											
Carbon−14	U	−3.04	+/−8.42	14.7	20.0	pCi/L		MXP1 02/01/08	1723	722486	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA EERF C−01 Modified	

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: February 5, 2008
Page 1 of 2

Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, California

Contact: **Mr. Virendra R. Patel**

Workorder: **201786**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Liquid Scintillation											
Batch 722486											
QC1201505688 201786001 DUP											
Carbon-14		U	-3.04 +/-8.42	U	-5.6 +/-8.35	pCi/L	0		N/A	MXP1	02/01/08 18:47
QC1201505690 LCS											
Carbon-14	523				494 +/-18.1	pCi/L		94	(75%-125%)		02/01/08 20:12
QC1201505687 MB											
Carbon-14				U	-9.24 +/-8.25	pCi/L					02/01/08 18:05
QC1201505689 201786001 MS											
Carbon-14	1630	U	-3.04 +/-8.42		1540 +/-56.3	pCi/L		94	(75%-125%)		02/01/08 19:30

Notes:
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- M M if above MDC and less than LLD
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy--Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
- h Preparation or preservation holding time was exceeded

GEL LABORATORIES LLC
2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Workorder: **201786**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

List of current GEL Certifications as of 05 February 2008

State	Certification
Alaska	UST-062
Arizona	AZ0668
Arkansas	88-0651
CLIA	42D0904046
California	01151CA
Colorado	GenEngLabs
Connecticut	PH-0169
Dept. of Navy	NFESC 413
EPA	WG-15J
Florida/NELAP	E87156
Georgia	E87156 (FL/NELAP)
Hawaii	N/A
Idaho	N/A
Illinois	200029
Indiana	C-SC-01
Kansas	E-10332
Kentucky	90129
Louisiana	03046
Maryland	270
Massachusetts	M-SC012
Michigan	9903
Nevada	SC12
New Jersey	SC002
New Mexico	FL NELAP E87156
New York	11501
North Carolina	233
North Carolina Drinking W	45709
North Dakota	R-158
Oklahoma	9904
Pennsylvania	68-00485
South Carolina	10120001/10585001/10120002
Tennessee	02934
Texas NELAP	T104704235-07-TX
U.S. Dept. of Agriculture	S-52597
US Army Corps of Engineer	N/A
Utah	8037697376 GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Calscience Environmental Laboratories, Inc.

March 20, 2008

Joe Turner
Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Subject: **Calscience Work Order No.: 08-02-2263**
Client Reference: LEHR IRA Water Sampling

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 2/29/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Virendra Patel
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/29/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-2263
Rancho Cordova, CA 95670-7984		Preparation:	EPA 3010A Total
		Method:	EPA 6010B
		Units:	mg/L
Project: LEHR IRA Water Sampling			Page 1 of 1

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPEF 0356	**08-02-2263-2-C**	**02/28/08 08:55**	**Aqueous**	**ICP 5300**	**02/29/08**	**03/03/08 16:32**	**080229L10**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Calcium	46.8	0.100	1		Potassium	1.83	0.500	1	
Magnesium	81.6	0.100	1		Sodium	42.4	0.500	1	

Method Blank	**097-01-003-8,059**	**N/A**	**Aqueous**	**ICP 5300**	**02/29/08**	**02/29/08 17:49**	**080229L10**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Calcium	ND	0.100	1		Potassium	ND	0.500	1	
Magnesium	ND	0.100	1		Sodium	ND	0.500	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: 02/29/08
Work Order No: 08-02-2263
Preparation: EPA 3020A Total / EPA 7470A Total
Method: EPA 6020 / EPA 7470A
Units: mg/L

Project: LEHR IRA Water Sampling

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPEF 0356	**08-02-2263-2-C**	**02/28/08 08:55**	**Aqueous**	**ICP/MS A**	**02/29/08**	**02/29/08 19:36**	**080229L01**

Comment(s): -Mercury was analyzed on 2/29/2008 5:54:55 PM with batch 080229L03A

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	0.00100	1		Mercury	ND	0.000500	1	
Arsenic	0.00151	0.00100	1		Molybdenum	0.00186	0.00100	1	
Barium	0.184	0.00100	1		Nickel	0.00155	0.00100	1	
Beryllium	ND	0.00100	1		Selenium	ND	0.00100	1	
Cadmium	ND	0.00100	1		Silver	ND	0.00100	1	
Chromium	0.0253	0.00100	1		Thallium	ND	0.00100	1	
Cobalt	ND	0.00100	1		Vanadium	0.00800	0.00100	1	
Copper	ND	0.00100	1		Zinc	0.00954	0.00500	1	
Lead	ND	0.00100	1						

Method Blank	**096-06-003-1,527**	**N/A**	**Aqueous**	**ICP/MS A**	**02/29/08**	**02/29/08 15:36**	**080229L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	0.00100	1		Lead	ND	0.00100	1	
Arsenic	ND	0.00100	1		Molybdenum	ND	0.00100	1	
Barium	ND	0.00100	1		Nickel	ND	0.00100	1	
Beryllium	ND	0.00100	1		Selenium	ND	0.00100	1	
Cadmium	ND	0.00100	1		Silver	ND	0.00100	1	
Chromium	ND	0.00100	1		Thallium	ND	0.00100	1	
Cobalt	ND	0.00100	1		Vanadium	ND	0.00100	1	
Copper	ND	0.00100	1		Zinc	ND	0.00500	1	

Method Blank	**099-04-008-3,388**	**N/A**	**Aqueous**	**Mercury**	**02/29/08**	**02/29/08 17:14**	**080229L03A**

Parameter	Result	RL	DF	Qual
Mercury	ND	0.000500	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/29/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-2263
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: LEHR IRA Water Sampling			Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPIN 0356	**08-02-2263-1-E**	**02/28/08 09:05**	**Aqueous**	**GC/MS FF**	**03/08/08**	**03/08/08 17:47**	**080308L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	28	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	115	74-140		1,2-Dichloroethane-d4	114	74-146	
Toluene-d8	109	88-112		1,4-Bromofluorobenzene	98	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/29/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-2263
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: LEHR IRA Water Sampling			Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPEF 0356	**08-02-2263-2-D**	**02/28/08 08:55**	**Aqueous**	**GC/MS Q**	**03/07/08**	**03/07/08 21:41**	**080307L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	1.2	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	109	74-140		1,2-Dichloroethane-d4	110	74-146	
Toluene-d8	94	88-112		1,4-Bromofluorobenzene	90	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/29/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-2263
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: LEHR IRA Water Sampling			Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TBIRA 0024	**08-02-2263-4-A**	**02/28/08 09:00**	**Aqueous**	**GC/MS Q**	**03/07/08**	**03/07/08 22:15**	**080307L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	111	74-140		1,2-Dichloroethane-d4	108	74-146	
Toluene-d8	92	88-112		1,4-Bromofluorobenzene	91	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/29/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-2263
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: LEHR IRA Water Sampling			Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-24,711**	**N/A**	**Aqueous**	**GC/MS Q**	**03/07/08**	**03/07/08 18:55**	**080307L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	111	74-140		1,2-Dichloroethane-d4	107	74-146	
Toluene-d8	92	88-112		1,4-Bromofluorobenzene	91	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	02/29/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-2263
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: LEHR IRA Water Sampling			Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-24,717**	**N/A**	**Aqueous**	**GC/MS FF**	**03/08/08**	**03/08/08 13:53**	**080308L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	113	74-140		1,2-Dichloroethane-d4	111	74-146	
Toluene-d8	108	88-112		1,4-Bromofluorobenzene	98	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: 02/29/08
Work Order No: 08-02-2263

Project: LEHR IRA Water Sampling

Client Sample Number	Lab Sample Number	Date Collected	Matrix
TPIN 0356	**08-02-2263-1**	**02/28/08**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Carbon, Total Organic	1.4	0.50	1		mg/L	N/A	03/01/08	SM 5310 D

TPEF 0356	**08-02-2263-2**	**02/28/08**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chloride	21	5.0	5		mg/L	N/A	02/29/08	EPA 300.0
Nitrate (as N)	8.1	0.20	2		mg/L	N/A	02/29/08	EPA 300.0
Sulfate	49	5.0	5		mg/L	N/A	02/29/08	EPA 300.0
Alkalinity, Total (as CaCO3)	412	5.0	1		mg/L	N/A	03/05/08	SM 2320B
Solids, Total Dissolved	530	1.0	1		mg/L	N/A	03/03/08	SM 2540 C

ASDP 0356	**08-02-2263-3**	**02/28/08**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrate (as N)	7.8	0.20	2		mg/L	N/A	02/29/08	EPA 300.0
Solids, Total Dissolved	520	1.0	1		mg/L	N/A	03/03/08	SM 2540 C

Method Blank		**N/A**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chloride	ND	1.0	1		mg/L	N/A	02/29/08	EPA 300.0
Nitrate (as N)	ND	0.10	1		mg/L	N/A	02/29/08	EPA 300.0
Sulfate	ND	1.0	1		mg/L	N/A	02/29/08	EPA 300.0
Alkalinity, Total (as CaCO3)	ND	1.0	1		mg/L	N/A	03/05/08	SM 2320B
Solids, Total Dissolved	ND	1.0	1		mg/L	N/A	03/03/08	SM 2540 C
Carbon, Total Organic	ND	0.50	1		mg/L	N/A	03/01/08	SM 5310 D

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	02/29/08
Work Order No:	08-02-2263
Preparation:	EPA 3010A Total
Method:	EPA 6010B

Project LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-02-2165-1	**Aqueous**	**ICP 5300**	**02/29/08**	**03/03/08**	**080229S10**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Calcium	4X	4X	77-113	4X	0-11	Q
Magnesium	4X	4X	56-140	4X	0-11	Q
Potassium	117	119	83-131	1	0-7	
Sodium	4X	4X	73-127	4X	0-9	Q

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - PDS / PDSD

Brown and Caldwell		Date Received	02/29/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-2263
Rancho Cordova, CA 95670-7984		Preparation:	EPA 3010A Total
		Method:	EPA 6010B

Project: LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
08-02-2165-1	**Aqueous**	**ICP 5300**	**02/29/08**	**03/04/08**	**080229S10**

Parameter	PDS %REC	PDSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Calcium	4X	4X	75-125	4X	0-11	Q
Magnesium	4X	4X	75-125	4X	0-11	Q
Potassium	85	87	75-125	1	0-7	
Sodium	4X	4X	75-125	4X	0-9	Q

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: 02/29/08
Work Order No: 08-02-2263
Preparation: EPA 3020A Total
Method: EPA 6020

Project LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-02-1878-1	**Aqueous**	**ICP/MS A**	**02/29/08**	**02/29/08**	**080229S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	103	101	85-133	3	0-11	
Arsenic	94	84	73-127	10	0-11	
Barium	106	96	74-128	6	0-10	
Beryllium	91	86	56-122	7	0-11	
Cadmium	101	93	84-114	8	0-8	
Chromium	101	92	73-133	9	0-11	
Cobalt	97	87	79-121	11	0-10	4
Copper	96	88	72-108	7	0-10	
Lead	104	90	79-121	11	0-10	4
Molybdenum	106	99	83-137	6	0-10	
Nickel	98	89	68-122	10	0-10	
Selenium	81	74	59-125	8	0-12	
Silver	102	96	68-128	5	0-14	
Thallium	102	94	73-121	8	0-11	
Vanadium	103	94	77-137	8	0-15	
Zinc	4X	4X	43-145	4X	0-39	Q

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - PDS / PDSD

Brown and Caldwell		Date Received	02/29/08
10540 White Rock Road, Suite 180		Work Order No:	08-02-2263
Rancho Cordova, CA 95670-7984		Preparation:	EPA 3020A Total
		Method:	EPA 6020

Project: LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
08-02-1878-1	**Aqueous**	**ICP/MS A**	**02/29/08**	**02/29/08**	**080229S01**

Parameter	PDS %REC	PDSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	118	118	75-125	0	0-11	
Arsenic	92	93	75-125	1	0-11	
Barium	103	102	75-125	1	0-10	
Beryllium	91	90	75-125	1	0-11	
Cadmium	99	99	75-125	0	0-8	
Chromium	98	99	75-125	0	0-11	
Cobalt	96	96	75-125	1	0-10	
Copper	92	94	75-125	2	0-10	
Lead	102	102	75-125	0	0-10	
Molybdenum	110	110	75-125	1	0-10	
Nickel	98	98	75-125	0	0-10	
Selenium	85	83	75-125	2	0-12	
Silver	100	100	75-125	0	0-14	
Thallium	99	100	75-125	2	0-11	
Vanadium	97	96	75-125	1	0-15	
Zinc	4X	4X	75-125	4X	0-39	Q

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	02/29/08
Work Order No:	08-02-2263
Preparation:	EPA 7470A Filt.
Method:	EPA 7470A

Project LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-02-2195-2	**Aqueous**	**Mercury**	**02/29/08**	**02/29/08**	**080229S03**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	91	92	66-126	1	0-7	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	02/29/08
Work Order No:	08-02-2263
Preparation:	EPA 5030B
Method:	EPA 8260B

Project LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
TPIN 0356	**Aqueous**	**GC/MS Q**	**03/07/08**	**03/07/08**	**080307S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	90	83	88-118	9	0-7	4,3
Carbon Tetrachloride	101	95	67-145	6	0-11	
Chlorobenzene	89	82	88-118	8	0-7	4,3
1,2-Dibromoethane	99	93	70-130	7	0-30	
1,2-Dichlorobenzene	93	91	86-116	2	0-8	
1,1-Dichloroethene	77	69	70-130	11	0-25	3
Ethylbenzene	96	88	70-130	8	0-30	
Toluene	91	86	87-123	6	0-8	3
Trichloroethene	86	79	79-127	9	0-10	
Vinyl Chloride	83	78	69-129	7	0-13	
Methyl-t-Butyl Ether (MTBE)	105	99	71-131	6	0-13	
Tert-Butyl Alcohol (TBA)	78	78	36-168	0	0-45	
Diisopropyl Ether (DIPE)	68	71	81-123	5	0-9	3
Ethyl-t-Butyl Ether (ETBE)	90	87	72-126	4	0-12	
Tert-Amyl-Methyl Ether (TAME)	99	96	72-126	3	0-12	
Ethanol	9	12	53-149	3	0-31	3

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	02/29/08
Work Order No:	08-02-2263
Preparation:	EPA 5030B
Method:	EPA 8260B

Project LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-02-2152-3	**Aqueous**	**GC/MS FF**	**03/08/08**	**03/08/08**	**080308S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	99	99	88-118	0	0-7	
Carbon Tetrachloride	127	127	67-145	0	0-11	
Chlorobenzene	101	102	88-118	1	0-7	
1,2-Dibromoethane	99	104	70-130	5	0-30	
1,2-Dichlorobenzene	97	99	86-116	2	0-8	
1,1-Dichloroethene	103	104	70-130	0	0-25	
Ethylbenzene	104	104	70-130	0	0-30	
Toluene	104	104	87-123	0	0-8	
Trichloroethene	101	101	79-127	0	0-10	
Vinyl Chloride	106	107	69-129	1	0-13	
Methyl-t-Butyl Ether (MTBE)	85	89	71-131	4	0-13	
Tert-Butyl Alcohol (TBA)	137	146	36-168	6	0-45	
Diisopropyl Ether (DIPE)	100	103	81-123	2	0-9	
Ethyl-t-Butyl Ether (ETBE)	100	103	72-126	3	0-12	
Tert-Amyl-Methyl Ether (TAME)	96	99	72-126	2	0-12	
Ethanol	122	118	53-149	4	0-31	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-02-2263

Project: LEHR IRA Water Sampling

Matrix: Aqueous

Parameter	Method	Quality Control Sample ID	Date Analyzed	Date Extracted	MS% REC	MSD % REC	%REC CL	RPD	RPD CL	Qualifiers
Chloride	EPA 300.0	TPEF 0356	03/01/08	N/A	111	111	56-134	0	0-3	
Nitrate (as N)	EPA 300.0	TPEF 0356	03/01/08	N/A	105	105	58-142	0	0-6	
Sulfate	EPA 300.0	TPEF 0356	03/01/08	N/A	133	132	49-133	1	0-3	
Carbon, Total Organic	SM 5310 D	TPIN 0356	03/01/08	N/A	103	101	70-130	2	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-02-2263

Project: LEHR IRA Water Sampling

Matrix: Aqueous

Parameter	Method	QC Sample ID	Date Analyzed	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Alkalinity, Total (as CaCO3)	SM 2320B	08-02-2333-5	03/05/08	590	590	0	0-25	
Bicarbonate (as CaCO3)	SM 2320B	08-02-2333-5	03/05/08	590	590	0	0-25	
Carbonate (as CaCO3)	SM 2320B	08-02-2333-5	03/05/08	ND	ND	NA	0-25	
Hydroxide (as CaCO3)	SM 2320B	08-02-2333-5	03/05/08	ND	ND	NA	0-25	
Solids, Total Dissolved	SM 2540 C	08-02-2346-2	03/03/08	690	700	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell		Date Received:	N/A
10540 White Rock Road, Suite 180		Work Order No:	08-02-2263
Rancho Cordova, CA 95670-7984		Preparation:	EPA 3010A Total
		Method:	EPA 6010B

Project: LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-003-8,059	**Aqueous**	**ICP 5300**	**02/29/08**	**02/29/08**	**080229L10**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Calcium	96	106	80-120	10	0-20	
Magnesium	92	105	80-120	13	0-20	
Potassium	95	114	80-120	19	0-20	
Sodium	100	105	80-120	5	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-02-2263
Preparation: EPA 3020A Total
Method: EPA 6020

Project: LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
096-06-003-1,527	**Aqueous**	**ICP/MS A**	**02/29/08**	**02/29/08**	**080229L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	83	88	80-120	6	0-20	
Arsenic	99	103	80-120	4	0-20	
Barium	96	100	80-120	5	0-20	
Beryllium	94	96	80-120	1	0-20	
Cadmium	94	97	80-120	3	0-20	
Chromium	96	101	80-120	5	0-20	
Cobalt	99	102	80-120	2	0-20	
Copper	104	105	80-120	1	0-20	
Lead	98	100	80-120	3	0-20	
Molybdenum	88	92	80-120	4	0-20	
Nickel	101	102	80-120	1	0-20	
Selenium	100	104	80-120	4	0-20	
Silver	98	101	80-120	3	0-20	
Thallium	98	100	80-120	2	0-20	
Vanadium	95	99	80-120	4	0-20	
Zinc	114	109	80-120	5	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell		Date Received:	N/A
10540 White Rock Road, Suite 180		Work Order No:	08-02-2263
Rancho Cordova, CA 95670-7984		Preparation:	EPA 7470A Total
		Method:	EPA 7470A

Project: LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-04-008-3,388	**Aqueous**	**Mercury**	**02/29/08**	**02/29/08**	**080229L03A**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	91	92	85-121	2	0-4	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	N/A
Work Order No:	08-02-2263
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-24,711	**Aqueous**	**GC/MS Q**	**03/07/08**	**03/07/08**	**080307L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	98	92	84-120	6	0-8	
Carbon Tetrachloride	110	106	63-147	4	0-10	
Chlorobenzene	95	89	89-119	6	0-7	
1,2-Dibromoethane	103	98	80-120	5	0-20	
1,2-Dichlorobenzene	101	96	89-119	5	0-9	
1,1-Dichloroethene	85	82	77-125	3	0-16	
Ethylbenzene	106	100	80-120	6	0-20	
Toluene	98	94	83-125	4	0-9	
Trichloroethene	94	91	89-119	4	0-8	
Vinyl Chloride	92	89	63-135	4	0-13	
Methyl-t-Butyl Ether (MTBE)	101	97	82-118	4	0-13	
Tert-Butyl Alcohol (TBA)	98	85	46-154	15	0-32	
Diisopropyl Ether (DIPE)	74	71	81-123	4	0-11	X
Ethyl-t-Butyl Ether (ETBE)	89	87	74-122	3	0-12	
Tert-Amyl-Methyl Ether (TAME)	100	94	76-124	6	0-10	
Ethanol	69	69	60-138	1	0-32	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	N/A
Work Order No:	08-02-2263
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-24,717	**Aqueous**	**GC/MS FF**	**03/08/08**	**03/08/08**	**080308L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	97	99	84-120	2	0-8	
Carbon Tetrachloride	126	127	63-147	1	0-10	
Chlorobenzene	101	102	89-119	1	0-7	
1,2-Dibromoethane	101	104	80-120	3	0-20	
1,2-Dichlorobenzene	98	99	89-119	1	0-9	
1,1-Dichloroethene	102	104	77-125	1	0-16	
Ethylbenzene	102	103	80-120	1	0-20	
Toluene	104	104	83-125	0	0-9	
Trichloroethene	99	99	89-119	0	0-8	
Vinyl Chloride	107	106	63-135	0	0-13	
Methyl-t-Butyl Ether (MTBE)	88	90	82-118	2	0-13	
Tert-Butyl Alcohol (TBA)	135	138	46-154	3	0-32	
Diisopropyl Ether (DIPE)	104	105	81-123	2	0-11	
Ethyl-t-Butyl Ether (ETBE)	105	107	74-122	1	0-12	
Tert-Amyl-Methyl Ether (TAME)	99	102	76-124	3	0-10	
Ethanol	109	126	60-138	14	0-32	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-02-2263

Project: LEHR IRA Water Sampling

Matrix: Aqueous

Parameter	Method	Quality Control Sample ID	Date Extracted	Date Analyzed	LCS % REC	LCSD % REC	%REC CL	RPD	RPD CL	Qual
Chloride	EPA 300.0	099-05-118-4,365	N/A	02/29/08	101	96	81-111	5	0-5	
Nitrate (as N)	EPA 300.0	099-05-118-4,365	N/A	02/29/08	92	97	87-111	5	0-12	
Sulfate	EPA 300.0	099-05-118-4,365	N/A	02/29/08	100	98	89-107	1	0-13	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-02-2263

Project: LEHR IRA Water Sampling

Matrix : Aqueous

Parameter	Method	Quality Control Sample ID	Date Analyzed	Date Extracted	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Carbon, Total Organic	SM 5310 D	099-05-097-2,894	03/01/08	N/A	5.00	4.18	84	80-120	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-02-2263

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

BROWN AND CALDWELL

Brown and Caldwell
Environmental Engineers and Consultants
10540 White Rock Road Suite 180
Rancho Cordova, CA 95670

Field Chain-of-Custody Form

22263

Lab Name and Address:	Project Name:	Date:	Page: of	P.O.#
Virendra Patel (714) 895-5494 Calscience Environmental Laboratories, Inc 7440 Lincoln Way Garden Grove, CA 92841-1427	LEHR IRA Water Sampling	2/28/08	1 of 1	131261-200

	Sample ID	Collection	Matrix Code*	Sample Type**	Field Preserved (Y or N)	Number of Containers	H-3	C-14	VOA	Nitrate as N	TDS	Alkalinity	Anions	Metals	TOC	Cations Ca, Mg, Na, K	Total Chrome						Comments
1	TPIN 0356	Date: 2/28/08 Time: 905	GW	G	Y	5	✓	✓	✓						✓								
2	TPEF 0356	Date: 2/28/08 Time: 855	GW	G	Y	5			✓	✓	✓	✓	✓	✓		✓							
3	ASDP 0356	Date: 2/28/08 Time: 900	GW	G	Y	1				✓	✓												
4	TBIRA 0024	Date: 2/28/08 Time: 900	O	O	Y	2			✓														

Relinquished by: (Signature) Kyle Bryant — Date: 2/28/08 Time: 1000

Received by: (Signature) Fed Ex — Date: Time:

Relinquished by: (Signature) — Date: Time:

Cooler Numbers

Comments:
Note: This shipment is not intended to fall under the authority of a radiological use license.

Received for Laboratory By: (Signature) [signature] CEL — Date: 2/29/08 Time: 1000

Method of Shipment: FedEx — Airbill No. 8631 1772 3932

Cooler Survey (pass / fail) _____ If FAIL do not open; contact the Program Development Department and the Radiation Safety Officer IMMEDIATELY.

Surveyed by: (Signature) — Date: Time:

Cooler Condition Upon Receipt at Laboratory:

Seals Intact: YES____ NO____

Internal Cooler Temp: _____°C; Samples in good condition: (Y/N) _____; Samples surveyed (pass/fail) _____

*Sample Matrix Codes

SW - Surface Water	AR - Air	SD - Sediment	
GW - Ground Water	SL - Soil	WW - Waste Water	BI - Biota
TW - Treatment Water	SG - Sludge	FI - Filter	O - Other

**Sample Type Codes

G - Grab
C - Composite
O - Other

EHSCOC.FRM

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 0 2 - 2 2 6 ~~6~~ 3

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: B + C DATE: 2/29/08

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature.

_____ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

1.7 °C Temperature blank.
_____ °C IR thermometer.
_____ Ambient temperature.

Initial: M

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____ Not Present: ✓

Initial: M

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC	✓		
Sample container label(s) consistent with custody papers		✓	
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)	✓		
VOA vial(s) free of headspace.	✓		
Tedlar bag(s) free of condensation			✓

Initial: M

COMMENTS:

(-1) + (-2) received 6 containers each to match all analyses.
(-3) received 2 containers to match all analyses. M

GEL Laboratories LLC
a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178
www.gel.com

March 11, 2008

Mr. Virendra R. Patel
Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, California 92841-1427

Re: Carbon 14
Work Order: 203911

Dear Mr. Patel:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on March 04, 2008. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4297.

Sincerely,

Amanda Rasco
Project Manager

Purchase Order: 08-02-2263
Enclosures

Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

TO: GEL Laboratories, Inc.

203911

CHAIN OF CUSTODY RECORD

DATE: 02/29/08

PAGE: 1 OF 1

LABORATORY CLIENT: Calscience Environmental Laboratories, Inc.

ADDRESS: 7440 Lincoln Way

CITY: Garden Grove, CA 92841-1427

TEL: (714) 895-5494

E-MAIL: vpatel@calscience.com

CLIENT PROJECT NAME / NUMBER: 08-02-2263

PROJECT CONTACT: Virendra Patel

SAMPLER(S): (PRINT)

P.O. NO.: 08-02-2263

QUOTE NO.:

LAB USE ONLY

TURNAROUND TIME

☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☐ 5 DAYS ☒ NORMAL

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)

☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ____/____/____

SPECIAL INSTRUCTIONS

Ship To: GEL Laboratories, Inc.
2040 Savage Rd.
Charleston, SC 29407

Attention: Amanda Rasco 843-556-8171

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	Matrix	#Cont	Carbon-14 by EERF-C	Detection Limit of 20 pCi/L		Send PDF via Email	Send Invoice with Results
	TPIN 0356	02/28/08	0905	GW	1	X	X		X	X

Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date	Time
(CALSCIENCE)		3/3/08 ~~02/29/08~~	1530
	Tiffany Adams	3-4-08	10:00

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: Cal Science	SDG/ARCOC/Work Order: 203910, 203911
Received By: JRA	Date Received: 3-4-08 10:00

Suspected Hazard Information	Yes	No	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
Marked as radioactive?		X	Maximum Counts Observed*: 40cpm
Classified Radioactive II by RSO?		X	
Marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Identified as Foreign Soil?		X	

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (4 +/- 2 C)?		✓		Preservation Method: ice bags blue ice dry ice none other (describe) 3°C
3	Chain of custody documents included with shipment?	✓			
4	Sample containers intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		✓		Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		✓		Sample ID's and containers affected:
7	Are Encore containers present?			✓	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	✓			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Sample ID's affected:
11	Number of containers received match number indicated on COC?	✓			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	✓			

Comments: Fed Ex 9587 3400 1493

PM (or PMA) review: Initials AJR Date 3/4/08

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

CALS001 Calscience Environmental Laboratory, Inc.

Client SDG: 203911 GEL Work Order: 203911

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Amanda Rasco.

Amanda Rasco

Reviewed by

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : Calscience Environmental Laboratories, Inc.
Address : 7440 Lincoln Way
Garden Grove, California 92841−−1427

Report Date: March 11, 2008

Contact: Mr. Virendra R. Patel
Project: **Carbon 14**

Client Sample ID:	TPIN 0356	Project:	CALS00101
Sample ID:	203911001	Client ID:	CALS001
Matrix:	Ground Water		
Collect Date:	28−FEB−08 09:05		
Receive Date:	04−MAR−08		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Rad Liquid Scintillation Analysis											
Liquid Scint C14, Liquid											
Carbon−14	U	11.6	+/−9.40	15.6	20.0	pCi/L		RXE1 03/08/08	1618	733285	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA EERF C−01 Modified	

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: March 11, 2008
Page 1 of 2

Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, California

Contact: **Mr. Virendra R. Patel**

Workorder: **203911**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Liquid Scintillation										
Batch 733285										
QC1201530273 203910002 DUP										
Carbon-14		64.9 +/-10.8		62.2 +/-10.8	pCi/L	4		(0% - 100%)	RXE1	03/08/08 17:33
QC1201530275 LCS										
Carbon-14	523			501 +/-18.7	pCi/L		96	(75%-125%)		03/08/08 18:47
QC1201530272 MB										
Carbon-14			U	-0.875 +/-8.99	pCi/L					03/08/08 16:55
QC1201530274 203910002 MS										
Carbon-14	523	64.9 +/-10.8		571 +/-19.7	pCi/L		97	(75%-125%)		03/08/08 18:10

Notes:
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- M M if above MDC and less than LLD
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy--Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
- h Preparation or preservation holding time was exceeded

GEL LABORATORIES LLC
2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Workorder: 203911

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

List of current GEL Certifications as of 11 March 2008

State	Certification
Alaska	UST-062
Arizona	AZ0668
Arkansas	88-0651
CLIA	42D0904046
California	01151CA
Colorado	GenEngLabs
Connecticut	PH-0169
Dept. of Navy	NFESC 413
EPA	WG-15J
Florida/NELAP	E87156
Georgia	E87156 (FL/NELAP)
Hawaii	N/A
Idaho	N/A
Illinois	200029
Indiana	C-SC-01
Kansas	E-10332
Kentucky	90129
Louisiana	03046
Maryland	270
Massachusetts	M-SC012
Michigan	9903
Nevada	SC12
New Jersey	SC002
New Mexico	FL NELAP E87156
New York	11501
North Carolina	233
North Carolina Drinking W	45709
North Dakota	R-158
Oklahoma	9904
Pennsylvania	68-00485
South Carolina	10120001/10585001/10120002
Tennessee	02934
Texas NELAP	T104704235-07-TX
U.S. Dept. of Agriculture	S-52597
US Army Corps of Engineer	N/A
Utah	8037697376 GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

ENVIRONMENTAL

ANALYTICAL CHEMISTS

March 12, 2008

Lab ID : SP 802373
Customer : 2017756

Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Laboratory Report

Introduction: This report package contains total of 3 pages divided into three sections:

Case Narrative (1 Page): An overview of the work performed at FGL.
Chemical Results (1 Page): Results for each sample submitted.
Quality Control (1 Page): Supporting Quality Control (QC) results.

This report package pertains to the following sample:

Sample Description	Date Sampled	Date Received	FGL Lab Sample ID #	Matrix
TPIN 0356	02/28/2008	03/04/2008	SP 802373-01	GW

Sampling and Receipt Information: The sample was received, prepared and analyzed within the method specified holding times. All samples arrived at 3 °C. All samples were checked for pH if acid or base preservation required (except for VOAs). For details of sample receipt information, please see the attached Chain of Custody and Condition Upon Receipt Forms.

Quality Control: All samples were prepared and analyzed according to the following tables:

Radio Chemistry QC

906.0	03/06/2008:A217 All preparation quality controls are within established criteria.
	03/07/2008:A - LS201 All analysis quality controls are within established criteria.

Certification: I certify that this data package is in compliance with NELAC Standards, both technically and for completeness, except for any conditions listed above. Release of the data contained in this data package is authorized by the Laboratory Director or his designee, as verified by the following signature.

FGL ENVIRONMENTAL

KAD:kdm

Kelly A. Dunnahoo, B.S.
Laboratory Director

Corporate Offices & Laboratory
P.O. Box 272 / 853 Corporation Street
Santa Paula, CA 93061-0272
TEL: (805) 392-2000
FAX: (805) 525-4172
CA NELAP Certification No. 01110CA
CA ELAP Certification No. 1573

Office & Laboratory
2500 Stagecoach Road
Stockton, CA 95215
TEL: (209) 942-0182
FAX: (209) 942-0423
CA ELAP Certification No. 1563

Office & Laboratory
563 East Lindo Avenue
Chico, CA 95926
TEL: (530) 343-5818
FAX: (530) 343-3807

Field Office
Visalia, California
TEL: (559) 734-9473
FAX: (559) 734-8435
Mobile: (559) 737-2399

ENVIRONMENTAL

ANALYTICAL CHEMISTS

March 12, 2008

Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Description : TPIN 0356
Project : 08-02-2263

Lab ID : SP 802373-01
Customer ID: 2-17756

Sampled On : February 28, 2008-09:05
Sampled By : Not Available
Received On: March 4, 2008-15:25
Matrix : Ground Water

Sample Results - Radio

Constituents	Result ± Error	MDA	Units	MCL	Preparation Method	Preparation Date/ID	Analysis Method	Analysis Date/ID
Radio Chemistry P:1								
Tritium	0.000 ± 198	400	pCi/L	20,000	906.0	03/06/08:A217	906.0	03/07/2008:A01

MDA = Minimum Detectable Activity; Data utilized by the DHS to determine matrix interference. MCL = Maximium Contaminat Level.
Containers: (P) Plastic Preservatives: (1) Cool 4°C

CCR Section 64442: Compliance Note: If Gross Alpha (Result + (0.84 x error)) exceeds 5 pCi/L run Uranium. If Gross Alpha minus Uranium exceeds 5 pCi/L run Radium 226. Samples that exceed 5 pCi/L are held for 6 months at FGL.

Compliance:
Gross Alpha - Uranium ≤ 15 pCi/L
Uranium ≤ 20 pCi/L
Radium 226 + Radium 228 ≤ 5 pCi/L

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ENVIRONMENTAL ANALYTICAL CHEMISTS

March 12, 2008

Calscience Environmental Laboratories

Lab ID : SP 802373
Customer : 2-17756

Quality Control - Radio

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Tritium	906.0	03/06/2008:A217	Blank	pCi/L		ND	<518	
			LCS	pCi/L	2406	95.5%	75-125	
			BS	pCi/L	2406	101%	75-125	
			BSD	pCi/L	2406	102%	75-125	
			BSRPD	pCi/L		0.8%	≤25	
	906.0	03/07/2008:A	00-CCB	cpm		11	12±1.7	
			00-CCV	cpm	1075	24.7%	25.5±4.5	

Definitions

Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.
BS/BSD : Blank Spikes - A blank is spiked with a known amount of analyte. It is prepared to verify that the preparation process is not affecting analyte recovery.
CCB : Continuing Calibration Blank - Analyzed to verify the instrument baseline is within criteria.
CCV : Continuing Calibration Verification - Analyzed to verify the instrument calibration is within criteria.
ND : Non-detect - Result was below the DQO listed for the analyte.
DQO : Data Quality Objective - This is the criteria against which the quality control data is compared.

Corporate Offices & Laboratory
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Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

TO: FGL

CHAIN OF CUSTODY RECORD

DATE: 02/29/08
PAGE: 1 OF 1

403373

LABORATORY CLIENT: Calscience Environmental Laboratories, Inc.
ADDRESS: 7440 Lincoln Way
CITY: Garden Grove, CA 92841-1427
TEL: (714) 895-5494
E-MAIL: vpatel@calscience.com

CLIENT PROJECT NAME / NUMBER: 08-02-2263
PROJECT CONTACT: Virendra Patel
SAMPLER(S): (PRINT)

P.O. NO.: 08-02-2263
QUOTE NO.:
LAB USE ONLY

TURNAROUND TIME
☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☐ 5 DAYS ☒ NORMAL

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___/___/___

SPECIAL INSTRUCTIONS
SUB. To: FGL
853 Corporation St.
Santa Paula , CA 93061-3005
(805)392-2000

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	Matrix	#Cont	Tritium EPA 906.0	Excel EDD
	TPIN 0356	02/28/08	0905	GW	1	X	X

Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
(CALSCIENCE)		3-3-08 02/29/08	1528
Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date: 3/4/08	Time: 1525
Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:

3

Santa Paula - Condition Upon Receipt (Attach to COC)

Sample Receipt:

1. Number of ice chests/packages received: 1
   Note as OTC if received over the counter unpackaged.
2. Were samples received in a chilled condition? Temps: 3 / ____ / ____ / ____ / ____
   Acceptable is 2° to 6° C. Also acceptable is received on ice (ROI) for the same day of sampling or received at room temperature (RRT) if sampled within one hour of receipt. Client contact for temperature failures must be documented below. If many packages are received at one time check for tests/H.T.'s/rushes/Bacti's to prioritize further review. Please notify Microbiology personnel immediately of bacti samples received.
3. Do the number of bottles received agree with the COC? Yes No N/A
4. Were samples received intact? (i.e. no broken bottles, leaks etc.) Yes No
5. Were sample custody seals intact? N/A Yes No

Sign and date the COC, obtain LIMS sample numbers, select methods/tests and print labels.

Sample Verification, Labeling and Distribution:

1. Were all requested analyses understood and acceptable? Yes No
2. Did bottle labels correspond with the client's ID's? Yes No
3. Were all bottles requiring sample preservation properly preserved? Yes No N/A FGL
4. VOAs checked for Headspace? Yes No N/A
5. Were all analyses within holding times at time of receipt? Yes No
6. Have rush or project due dates been checked and accepted? N/A Yes No

Attach labels to the containers and include a copy of the COC for lab delivery.

Sample Receipt, Login and Verification completed by (initials): _____

Discrepancy Documentation:

Any items above which are "No" or do not meet specifications (i.e. temps) must be resolved.

1. Person Contacted:_____ Phone Number:_____
   Initiated By:_____ Date:_____
   Problem:

   Resolution:

2. Person Contacted:_____ Phone Number:_____
   Initiated By:_____ Date:
   Problem:

   Resolution:

(2-17756)
Calscience Environmental Laboratories
SP 0802373
SRP-03/04/2008-16:18:43

Attach label with lab number here

Calscience Environmental Laboratories, Inc.

April 02, 2008

Joe Turner
Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Subject: **Calscience Work Order No.: 08-03-1881**
Client Reference: LEHR IRA Water Sampling

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 3/21/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Virendra R Patel

Calscience Environmental
Laboratories, Inc.
Virendra Patel
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/21/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-1881
Rancho Cordova, CA 95670-7984		Preparation:	EPA 3010A Total
		Method:	EPA 6010B
		Units:	mg/L
Project: LEHR IRA Water Sampling			Page 1 of 1

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPEF 0357	**08-03-1881-2-F**	**03/20/08 10:55**	**Aqueous**	**ICP 5300**	**03/24/08**	**03/25/08 15:10**	**080324L07**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Calcium	47.7	0.100	1		Potassium	0.852	0.500	1	
Magnesium	82.7	0.100	1		Sodium	42.7	0.500	1	

Method Blank	**097-01-003-8,127**	**N/A**	**Aqueous**	**ICP 5300**	**03/24/08**	**03/24/08 17:27**	**080324L07**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Calcium	ND	0.100	1		Potassium	ND	0.500	1	
Magnesium	ND	0.100	1		Sodium	ND	0.500	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: 03/21/08
Work Order No: 08-03-1881
Preparation: EPA 3020A Total / EPA 7470A Total
Method: EPA 6020 / EPA 7470A
Units: mg/L

Project: LEHR IRA Water Sampling

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPEF 0357	**08-03-1881-2-F**	**03/20/08 10:55**	**Aqueous**	**ICP/MS A**	**03/25/08**	**03/26/08 14:10**	**080325L02**

Comment(s): -Mercury was analyzed on 3/24/2008 2:45:38 PM with batch 080324L02

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	0.00100	1		Mercury	ND	0.000500	1	
Arsenic	0.00258	0.00100	1		Molybdenum	0.00209	0.00100	1	
Barium	0.198	0.00100	1		Nickel	0.00186	0.00100	1	
Beryllium	ND	0.00100	1		Selenium	0.00264	0.00100	1	
Cadmium	ND	0.00100	1		Silver	ND	0.00100	1	
Chromium	0.0306	0.00100	1		Thallium	ND	0.00100	1	
Cobalt	ND	0.00100	1		Vanadium	0.0113	0.00100	1	
Copper	0.00120	0.00100	1		Zinc	0.0113	0.00500	1	
Lead	ND	0.00100	1						

Method Blank	**096-06-003-1,547**	**N/A**	**Aqueous**	**ICP/MS A**	**03/25/08**	**03/25/08 18:06**	**080325L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	0.00100	1		Lead	ND	0.00100	1	
Arsenic	ND	0.00100	1		Molybdenum	ND	0.00100	1	
Barium	ND	0.00100	1		Nickel	ND	0.00100	1	
Beryllium	ND	0.00100	1		Selenium	ND	0.00100	1	
Cadmium	ND	0.00100	1		Silver	ND	0.00100	1	
Chromium	ND	0.00100	1		Thallium	ND	0.00100	1	
Cobalt	ND	0.00100	1		Vanadium	ND	0.00100	1	
Copper	ND	0.00100	1		Zinc	ND	0.00500	1	

Method Blank	**099-04-008-3,422**	**N/A**	**Aqueous**	**Mercury**	**03/24/08**	**03/24/08 14:38**	**080324L02**

Parameter	Result	RL	DF	Qual
Mercury	ND	0.000500	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/21/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-1881
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: LEHR IRA Water Sampling			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPIN 0357	**08-03-1881-1-A**	**03/20/08 11:05**	**Aqueous**	**GC/MS QQ**	**03/29/08**	**03/29/08 14:03**	**080329L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	24	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	108	74-140		1,2-Dichloroethane-d4	125	74-146	
Toluene-d8	97	88-112		1,4-Bromofluorobenzene	88	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/21/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-1881
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: LEHR IRA Water Sampling			Page 2 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPEF 0357	**08-03-1881-2-A**	**03/20/08 10:55**	**Aqueous**	**GC/MS QQ**	**03/29/08**	**03/29/08 14:26**	**080329L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	108	74-140		1,2-Dichloroethane-d4	129	74-146	
Toluene-d8	99	88-112		1,4-Bromofluorobenzene	89	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/21/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-1881
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: LEHR IRA Water Sampling			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TBIRA 0025	**08-03-1881-4-A**	**03/20/08 15:40**	**Aqueous**	**GC/MS QQ**	**03/29/08**	**03/29/08 13:40**	**080329L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	106	74-140		1,2-Dichloroethane-d4	122	74-146	
Toluene-d8	98	88-112		1,4-Bromofluorobenzene	89	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	03/21/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-1881
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: LEHR IRA Water Sampling			Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-25,016**	**N/A**	**Aqueous**	**GC/MS QQ**	**03/29/08**	**03/29/08 13:17**	**080329L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	103	74-140		1,2-Dichloroethane-d4	117	74-146	
Toluene-d8	97	88-112		1,4-Bromofluorobenzene	90	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: 03/21/08
Work Order No: 08-03-1881

Project: LEHR IRA Water Sampling

Client Sample Number	Lab Sample Number	Date Collected	Matrix
TPIN 0357	**08-03-1881-1**	**03/20/08**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Carbon, Total Organic	1.4	0.50	1		mg/L	N/A	03/21/08	SM 5310 D

TPEF 0357	**08-03-1881-2**	**03/20/08**	**Aqueous**

Comment(s): (3) The reporting limit is elevated resulting from matrix interference.

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chloride	20	5.0	5		mg/L	N/A	03/22/08	EPA 300.0
Nitrate (as N) (3)	8.5	0.20	2		mg/L	N/A	03/22/08	EPA 300.0
Sulfate	46	5.0	5		mg/L	N/A	03/22/08	EPA 300.0
Alkalinity, Total (as CaCO3)	416	5.0	1		mg/L	N/A	03/25/08	SM 2320B
Solids, Total Dissolved	520	1.0	1		mg/L	N/A	03/24/08	SM 2540 C

ASDP 0357	**08-03-1881-3**	**03/20/08**	**Aqueous**

Comment(s): (3) The reporting limit is elevated resulting from matrix interference.

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrate (as N) (3)	8.0	0.20	2		mg/L	N/A	03/22/08	EPA 300.0
Solids, Total Dissolved	504	1.0	1		mg/L	N/A	03/24/08	SM 2540 C

Method Blank		**N/A**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chloride	ND	1.0	1		mg/L	N/A	03/21/08	EPA 300.0
Nitrate (as N)	ND	0.10	1		mg/L	N/A	03/21/08	EPA 300.0
Sulfate	ND	1.0	1		mg/L	N/A	03/21/08	EPA 300.0
Alkalinity, Total (as CaCO3)	ND	1.0	1		mg/L	N/A	03/25/08	SM 2320B
Solids, Total Dissolved	ND	1.0	1		mg/L	N/A	03/24/08	SM 2540 C
Carbon, Total Organic	ND	0.50	1		mg/L	N/A	03/21/08	SM 5310 D

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell		Date Received:	03/21/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-1881
Rancho Cordova, CA 95670-7984		Preparation:	EPA 3010A Total
		Method:	EPA 6010B

Project LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-03-2001-1	**Aqueous**	**ICP 5300**	**03/24/08**	**03/24/08**	**080324S07**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Calcium	4X	4X	77-113	4X	0-11	Q
Magnesium	4X	4X	56-140	4X	0-11	Q
Potassium	99	99	83-131	0	0-7	
Sodium	4X	4X	73-127	4X	0-9	Q

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: 03/21/08
Work Order No: 08-03-1881
Preparation: EPA 3005A Filt.
Method: EPA 6020

Project LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-03-1944-1	**Aqueous**	**ICP/MS A**	**03/25/08**	**03/25/08**	**080325S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	106	99	85-133	7	0-11	
Arsenic	95	87	73-127	8	0-11	
Barium	99	102	74-128	2	0-10	
Beryllium	96	96	56-122	0	0-11	
Cadmium	99	93	84-114	6	0-8	
Chromium	99	94	73-133	5	0-11	
Cobalt	99	92	79-121	7	0-10	
Copper	91	84	72-108	8	0-10	
Lead	109	105	79-121	4	0-10	
Molybdenum	110	104	83-137	5	0-10	
Nickel	92	87	68-122	5	0-10	
Selenium	91	85	59-125	6	0-12	
Silver	97	94	68-128	3	0-14	
Thallium	107	103	73-121	4	0-11	
Vanadium	98	92	77-137	4	0-15	
Zinc	80	74	43-145	7	0-39	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell		Date Received:	03/21/08
10540 White Rock Road, Suite 180		Work Order No:	08-03-1881
Rancho Cordova, CA 95670-7984		Preparation:	EPA 7470A Total
		Method:	EPA 7470A

Project LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
TPEF 0357	**Aqueous**	**Mercury**	**03/24/08**	**03/24/08**	**080324S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	105	104	66-126	1	0-7	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: 03/21/08
Work Order No: 08-03-1881
Preparation: EPA 5030B
Method: EPA 8260B

Project LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
TPEF 0357	**Aqueous**	**GC/MS QQ**	**03/29/08**	**03/29/08**	**080329S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	97	100	88-118	4	0-7	
Carbon Tetrachloride	126	127	67-145	1	0-11	
Chlorobenzene	99	102	88-118	4	0-7	
1,2-Dibromoethane	99	109	70-130	9	0-30	
1,2-Dichlorobenzene	100	105	86-116	5	0-8	
1,1-Dichloroethene	115	121	70-130	5	0-25	
Ethylbenzene	107	111	70-130	3	0-30	
Toluene	98	102	87-123	4	0-8	
Trichloroethene	103	109	79-127	5	0-10	
Vinyl Chloride	96	109	69-129	12	0-13	
Methyl-t-Butyl Ether (MTBE)	106	120	71-131	13	0-13	
Tert-Butyl Alcohol (TBA)	103	119	36-168	13	0-45	
Diisopropyl Ether (DIPE)	97	105	81-123	8	0-9	
Ethyl-t-Butyl Ether (ETBE)	105	116	72-126	10	0-12	
Tert-Amyl-Methyl Ether (TAME)	112	122	72-126	8	0-12	
Ethanol	82	102	53-149	14	0-31	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-03-1881

Project: LEHR IRA Water Sampling

Matrix: Aqueous

Parameter	Method	Quality Control Sample ID	Date Analyzed	Date Extracted	MS% REC	MSD % REC	%REC CL	RPD	RPD CL	Qualifiers
Chloride	EPA 300.0	08-03-1864-3	03/21/08	N/A	94	94	56-134	1	0-3	
Nitrate (as N)	EPA 300.0	08-03-1864-3	03/21/08	N/A	89	90	58-142	1	0-6	
Sulfate	EPA 300.0	08-03-1864-3	03/21/08	N/A	106	105	49-133	1	0-3	
Carbon, Total Organic	SM 5310 D	TPIN 0357	03/21/08	N/A	102	102	70-130	0	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-03-1881

Project: LEHR IRA Water Sampling

Matrix: Aqueous

Parameter	Method	QC Sample ID	Date Analyzed	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Alkalinity, Total (as CaCO3)	SM 2320B	08-03-1798-1	03/25/08	96.0	96.0	0	0-25	
Bicarbonate (as CaCO3)	SM 2320B	08-03-1798-1	03/25/08	96.0	96.0	0	0-25	
Carbonate (as CaCO3)	SM 2320B	08-03-1798-1	03/25/08	ND	ND	NA	0-25	
Hydroxide (as CaCO3)	SM 2320B	08-03-1798-1	03/25/08	ND	ND	NA	0-25	
Solids, Total Dissolved	SM 2540 C	08-03-1867-2	03/24/08	276	286	4	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell		Date Received:	N/A
10540 White Rock Road, Suite 180		Work Order No:	08-03-1881
Rancho Cordova, CA 95670-7984		Preparation:	EPA 3010A Total
		Method:	EPA 6010B

Project: LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-003-8,127	**Aqueous**	**ICP 5300**	**03/24/08**	**03/24/08**	**080324L07**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Calcium	108	108	80-120	0	0-20	
Magnesium	105	106	80-120	0	0-20	
Potassium	100	100	80-120	1	0-20	
Sodium	97	96	80-120	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-03-1881
Preparation: EPA 3020A Total
Method: EPA 6020

Project: LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
096-06-003-1,547	**Aqueous**	**ICP/MS A**	**03/25/08**	**03/25/08**	**080325L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	93	93	80-120	0	0-20	
Arsenic	104	106	80-120	2	0-20	
Barium	102	102	80-120	0	0-20	
Beryllium	100	105	80-120	5	0-20	
Cadmium	107	107	80-120	0	0-20	
Chromium	104	105	80-120	0	0-20	
Cobalt	103	106	80-120	3	0-20	
Copper	111	111	80-120	0	0-20	
Lead	99	100	80-120	1	0-20	
Molybdenum	98	97	80-120	2	0-20	
Nickel	105	107	80-120	2	0-20	
Selenium	101	102	80-120	1	0-20	
Silver	110	108	80-120	1	0-20	
Thallium	96	97	80-120	1	0-20	
Vanadium	104	106	80-120	2	0-20	
Zinc	106	109	80-120	2	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell		Date Received:	N/A
10540 White Rock Road, Suite 180		Work Order No:	08-03-1881
Rancho Cordova, CA 95670-7984		Preparation:	EPA 7470A Total
		Method:	EPA 7470A

Project: LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-04-008-3,422	**Aqueous**	**Mercury**	**03/24/08**	**03/24/08**	**080324L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	100	100	85-121	1	0-4	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	N/A
Work Order No:	08-03-1881
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-25,016	**Aqueous**	**GC/MS QQ**	**03/29/08**	**03/29/08**	**080329L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	99	96	84-120	2	0-8	
Carbon Tetrachloride	122	118	63-147	3	0-10	
Chlorobenzene	105	103	89-119	3	0-7	
1,2-Dibromoethane	112	109	80-120	3	0-20	
1,2-Dichlorobenzene	110	107	89-119	3	0-9	
1,1-Dichloroethene	117	114	77-125	2	0-16	
Ethylbenzene	113	111	80-120	2	0-20	
Toluene	102	100	83-125	2	0-9	
Trichloroethene	108	105	89-119	4	0-8	
Vinyl Chloride	103	102	63-135	0	0-13	
Methyl-t-Butyl Ether (MTBE)	114	115	82-118	0	0-13	
Tert-Butyl Alcohol (TBA)	106	107	46-154	0	0-32	
Diisopropyl Ether (DIPE)	99	96	81-123	2	0-11	
Ethyl-t-Butyl Ether (ETBE)	111	111	74-122	0	0-12	
Tert-Amyl-Methyl Ether (TAME)	121	119	76-124	2	0-10	
Ethanol	102	103	60-138	1	0-32	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-03-1881

Project: LEHR IRA Water Sampling

Matrix: Aqueous

Parameter	Method	Quality Control Sample ID	Date Extracted	Date Analyzed	LCS % REC	LCSD % REC	%REC CL	RPD	RPD CL	Qual
Chloride	EPA 300.0	099-05-118-4,405	N/A	03/21/08	94	93	81-111	1	0-5	
Nitrate (as N)	EPA 300.0	099-05-118-4,405	N/A	03/21/08	94	98	87-111	4	0-12	
Sulfate	EPA 300.0	099-05-118-4,405	N/A	03/21/08	96	101	89-107	5	0-13	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-03-1881

Project: LEHR IRA Water Sampling

Matrix : Aqueous

Parameter	Method	Quality Control Sample ID	Date Analyzed	Date Extracted	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Carbon, Total Organic	SM 5310 D	099-05-097-2,926	03/21/08	N/A	5.00	4.68	94	80-120	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-03-1881

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

BROWN AND CALDWELL

Brown and Caldwell
Environmental Engineers and Consultants
10540 White Rock Road Suite 180
Rancho Cordova, CA 95670

Field Chain-of-Custody Form

1881

Lab Name and Address:	Project Name:	Date:	Page: of	P.O.#
Virendra Patel (714) 895-5494 Calscience Environmental Laboratories, Inc 7440 Lincoln Way Garden Grove, CA 92841-1427	LEHR IRA Water Sampling	3/20/08	1 of 1	131261-200

	Sample ID	Collection	Matrix Code*	Sample Type**	Field Preserved (Y or N)	Number of Containers	H-3	C-14	VOA	Nitrate as N	TDS	Alkalinity	Anions	Metals	TOC	Cations Ca, Mg, Na, K	Total Chrome						Comments
1	TPIN 0357	Date: 3/20/08 Time: 1105	GW	G	Y	5	✓	✓	✓						✓								
2	TPEF 0357	Date: 3/20/08 Time: 1055	GW	G	Y	5			✓	✓	✓	✓	✓	✓		✓							
3	ASDP 0357	Date: 3/20/08 Time: 1100	GW	G	Y	1				✓	✓												
4	TBIRA 0025	Date: 1/8/08 Time: 1540	O	O	Y	2			✓														

Relinquished by: (Signature)	Date: 3/20/08 Time: 1400	Cooler Numbers
Received by: (Signature) ~~Fed Ex~~ GSO	Date: 3/20/08 Time: 1400	
Relinquished by: (Signature) GSO	Date: 3-21-08 Time: 1030	

Comments:
Note: This shipment is not intended to fall under the authority of a radiological use license.

Received for Laboratory By: (*Signature*) Wdeatu	Date: 3-21-08	Time: 1030
Method of Shipment:	Airbill No.	
Cooler Survey (pass / fail) _____ If FAIL do not open; contact the Program Development Department and the Radiation Safety Officer IMMEDIATELY.		
Surveyed by: (*Signature*)	Date:	Time:
Cooler Condition Upon Receipt at Laboratory:		
Seals Intact: YES ____ NO ____		
Internal Cooler Temp: _____°C; Samples in good condition: (Y/N) _____; Samples surveyed (pass/fail) _____		

*Sample Matrix Codes

SW - Surface Water	AR - Air	SD - Sediment	
GW - Ground Water	SL - Soil	WW - Waste Water	BI - Biota
TW - Treatment Water	SG - Sludge	FI - Filter	O - Other

**Sample Type Codes

G - Grab
C - Composite
O - Other

EHSCOC.FRM

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 0 3 - 1 8 8 1

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: Brown and Caldwell DATE: 03/21/08

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature.

_____ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

2.1 °C Temperature blank.
_____ °C IR thermometer.
_____ Ambient temperature.

Initial: KM

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____ Not Present: ✓

Initial: KM

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC	✓		
Sample container label(s) consistent with custody papers	✗ (H.L)	✓	
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)	✓		
VOA vial(s) free of headspace.	✓		
Tedlar bag(s) free of condensation			✓

Initial: KM

COMMENTS:

(-1) TPIN 0357 + (-2) TPEF 0357 received 6 containers instead of 5.
(-3) ASDP 0357 received 2 containers instead of 1
-correct containers for requested analyses in each sample.

GEL Laboratories LLC
a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178

www.gel.com

April 01, 2008

Mr. Virendra R. Patel
Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, California 92841-1427

Re: Carbon 14
Work Order: 205311

Dear Mr. Patel:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on March 25, 2008. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4297.

Sincerely,

Amanda Rasco
Project Manager

Purchase Order: 08-03-1881
Enclosures

problem solved

Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

TO: GEL Laboratories, Inc.

205311

CHAIN OF CUSTODY RECORD

DATE: 03/24/08

PAGE: 1 OF 1

LABORATORY CLIENT: Calscience Environmental Laboratories, Inc.

ADDRESS: 7440 Lincoln Way

CITY: Garden Grove, CA 92841-1427

TEL: (714) 895-5494

E-MAIL: vpatel@calscience.com

CLIENT PROJECT NAME / NUMBER: 08-03-1881

P.O. NO.: 08-03-1881

PROJECT CONTACT: Virendra Patel

QUOTE NO.:

LAB USE ONLY

SAMPLER(S): (PRINT)

TURNAROUND TIME

☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☐ 5 DAYS ☒ NORMAL

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)

☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ____/____/____

SPECIAL INSTRUCTIONS

Ship To: GEL Laboratories, Inc.
2040 Savage Rd.
Charleston, SC 29407
Attention: Amanda Rasco 843-556-8171

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	Matrix	#Cont	Carbon-14 by EERF-C	Detection Limit of 20 pCi/L		Send PDF via Email	Send Invoice with Results
	TPIN 0357	03/20/08	1105	GW	1	X	X		X	X

Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
(CALSCIENCE)	FedEx 9587-3400-1574	03/24/08	1800
Relinquished by: (Signature)	Received by / Affiliation: (Signature) Jacqueline A Jell	3/25/08	09:15
Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: CALSCIENCE	**SDG/ARCOC/Work Order:** 205311
Received By: JT	**Date Received:** 3/25/08

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
COC/Samples marked as radioactive?		X	Maximum Counts Observed*: 60CPM
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (4 +/- 2 C)?	X			Preservation Method: ice bags blue ice dry ice none other (describe) 2°
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		X		Sample ID's, containers affected and observed pH: Sample not preserved. If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?	X			Sample ID's affected:
11	Number of containers received match number indicated on COC?	X			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	X			

Comments:

Fedex 9587 3400 1574

PM (or PMA) review: Initials RA Date 3/25/08

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

CALS001 Calscience Environmental Laboratory, Inc.

Client SDG: 205311 GEL Work Order: 205311

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Amanda Rasco.

Amanda J Rasco

Reviewed by

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : Calscience Environmental Laboratories, Inc.
Address : 7440 Lincoln Way
Garden Grove, California 92841−−1427

Report Date: April 1, 2008

Contact: Mr. Virendra R. Patel
Project: **Carbon 14**

Client Sample ID:	TPIN 0357	Project:	CALS00101
Sample ID:	205311001	Client ID:	CALS001
Matrix:	Ground Water		
Collect Date:	20−MAR−08 11:05		
Receive Date:	25−MAR−08		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Rad Liquid Scintillation Analysis											
Liquid Scint C14, Liquid											
Carbon−14		20.1	+/−8.80	14.3	20.0	pCi/L		RXE1 03/29/08	0332	739251	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA EERF C−01 Modified	

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: April 1, 2008
Page 1 of 2

Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, California

Contact: **Mr. Virendra R. Patel**

Workorder: **205311**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Liquid Scintillation											
Batch 739251											
QC1201543537 205337002 DUP											
Carbon-14		U	3.94 +/-4.24	U	1.83 +/-4.20	pCi/L	0		N/A	RXE1	03/29/08 08:37
QC1201543539 LCS											
Carbon-14	262				248 +/-8.30	pCi/L		95			03/29/08 10:11
QC1201543536 MB											
Carbon-14				U	-0.391 +/-4.15	pCi/L					03/29/08 07:51
QC1201543538 205337002 MS											
Carbon-14	262	U	3.94 +/-4.24		258 +/-8.40	pCi/L		99			03/29/08 09:24

Notes:
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- M M if above MDC and less than LLD
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy--Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.

GEL LABORATORIES LLC
2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Workorder: 205311

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

h Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

List of current GEL Certifications as of 01 April 2008

State	Certification
Alaska	UST-062
Arizona	AZ0668
Arkansas	88-0651
CLIA	42D0904046
California	01151CA
Colorado	GenEngLabs
Connecticut	PH-0169
Dept. of Navy	NFESC 413
EPA	WG-15J
Florida/NELAP	E87156
Georgia	E87156 (FL/NELAP)
Hawaii	N/A
Idaho	N/A
Illinois	200029
Indiana	C-SC-01
Kansas	E-10332
Kentucky	90129
Louisiana	03046
Maryland	270
Massachusetts	M-SC012
Michigan	9903
Nevada	SC12
New Jersey	SC002
New Mexico	FL NELAP E87156
New York	11501
North Carolina	233
North Carolina Drinking W	45709
North Dakota	R-158
Oklahoma	9904
Pennsylvania	68-00485
South Carolina	10120001/10585001/10120002
Tennessee	02934
Texas NELAP	T104704235-07-TX
U.S. Dept. of Agriculture	S-52597
US Army Corps of Engineer	N/A
Utah	8037697376 GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

GEL Laboratories LLC

problem solved

P.O. Box 30712~Charleston, S.C. 29417~2040 Savage Road~29407
(843)556-8171~Fax(843)766-1178

Invoice for Analytical Services

Mr. Virendra R. Patel
Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, California 92841-1427

PO: 08-03-1881

Invoice #:	**162237**
Invoice Date:	**01-APR-08**
Terms:	**Net 30**
Client:	**Calscience Environmental Laboratory, Inc.**
Description (Order):	**Carbon 14**
Workorder/SDG:	**205311**
Project:	**CALS00101**
Project Manager:	**Amanda Rasco**

GELID: 205311001 **Matrix:** GROUND WATER **ClientID:** TPIN 0357 **Collected:** 20-MAR-08 **Received:** 25-MAR-08

Test	Description	Methods	Turn Days	Charge
LSC_14CL	Liquid Scint C14, Liquid	EPA EERF C-01 Modified	7 (Receive)	$176.00
			Sample Total:	**$176.00**

Miscellaneous Charge	Description	Charge

Invoice Total: $176.00

ENVIRONMENTAL

ANALYTICAL CHEMISTS

April 4, 2008

Lab ID : SP 803172
Customer : 2017756

Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Laboratory Report

Introduction: This report package contains total of 3 pages divided into three sections:

Case Narrative (1 Page): An overview of the work performed at FGL.
Chemical Results (1 Page): Results for each sample submitted.
Quality Control (1 Page): Supporting Quality Control (QC) results.

This report package pertains to the following sample:

Sample Description	Date Sampled	Date Received	FGL Lab Sample ID #	Matrix
TPIN 0357	03/20/2008	03/25/2008	SP 803172-01	DW

Sampling and Receipt Information: The sample was received, prepared and analyzed within the method specified holding times. All samples arrived at 4 °C. All samples were checked for pH if acid or base preservation required (except for VOAs). For details of sample receipt information, please see the attached Chain of Custody and Condition Upon Receipt Forms.

Quality Control: All samples were prepared and analyzed according to the following tables:

Radio Chemistry QC

906.0	04/01/2008:A217 All preparation quality controls are within established criteria.
	04/02/2008:A - LS201 All analysis quality controls are within established criteria.

Certification: I certify that this data package is in compliance with NELAC Standards, both technically and for completeness, except for any conditions listed above. Release of the data contained in this data package is authorized by the Laboratory Director or his designee, as verified by the following signature.

FGL ENVIRONMENTAL

KAD:jlk

Kelly A. Dunnahoo, B.S.
Laboratory Director

Corporate Offices & Laboratory
P.O. Box 272 / 853 Corporation Street
Santa Paula, CA 93061-0272
TEL: (805) 392-2000
FAX: (805) 525-4172
CA NELAP Certification No. 01110CA
CA ELAP Certification No. 1573

Office & Laboratory
2500 Stagecoach Road
Stockton, CA 95215
TEL: (209) 942-0182
FAX: (209) 942-0423
CA ELAP Certification No. 1563

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563 East Lindo Avenue
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TEL: (530) 343-5818
FAX: (530) 343-3807

Field Office
Visalia, California
TEL: (559) 734-9473
FAX: (559) 734-8435
Mobile: (559) 737-2399

ENVIRONMENTAL

ANALYTICAL CHEMISTS

April 4, 2008

Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Description : TPIN 0357
Project : 08-03-1881

Lab ID : SP 803172-01
Customer ID: 2-17756

Sampled On : March 20, 2008-11:05
Sampled By : Not Available
Received On: March 25, 2008-11:10
Matrix : Drinking Water

Sample Results - Radio

Constituents	Result ± Error	MDA	Units	MCL	Preparation Method	Preparation Date/ID	Analysis Method	Analysis Date/ID
Radio Chemistry P:1								
Tritium	0.000 ± 209	420	pCi/L	20,000	906.0	04/01/08:A217	906.0	04/02/2008:A01

MDA = Minimum Detectable Activity; Data utilized by the DHS to determine matrix interference. MCL = Maximium Contaminat Level.
Containers: (P) Plastic Preservatives: (1) Cool 4°C

CCR Section 64442: Compliance Note: If Gross Alpha (Result + (0.84 x error)) exceeds 5 pCi/L run Uranium. If Gross Alpha minus Uranium exceeds 5 pCi/L run Radium 226. Samples that exceed 5 pCi/L are held for 6 months at FGL.

Compliance:
Gross Alpha - Uranium ≤ 15 pCi/L
Uranium ≤ 20 pCi/L
Radium 226 + Radium 228 ≤ 5 pCi/L

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ENVIRONMENTAL ANALYTICAL CHEMISTS

April 04, 2008

Calscience Environmental Laboratories

Lab ID : SP 803172
Customer : 2-17756

Quality Control - Radio

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Tritium	906.0	04/01/2008:A217	Blank	pCi/L		ND	<518	
			LCS	pCi/L	2396	97.1%	75-125	
			BS	pCi/L	2396	92.5%	75-125	
			BSD	pCi/L	2396	96.8%	75-125	
			BSRPD	pCi/L		4.9%	≤25	
	906.0	04/02/2008:A	00-CCB	cpm		12	12±1.7	
			00-CCV	cpm	1070	24.5%	25.5±4.5	

Definitions

Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.
BS/BSD : Blank Spikes - A blank is spiked with a known amount of analyte. It is prepared to verify that the preparation process is not affecting analyte recovery.
CCB : Continuing Calibration Blank - Analyzed to verify the instrument baseline is within criteria.
CCV : Continuing Calibration Verification - Analyzed to verify the instrument calibration is within criteria.
ND : Non-detect - Result was below the DQO listed for the analyte.
DQO : Data Quality Objective - This is the criteria against which the quality control data is compared.

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Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

TO: FGL

803172

CHAIN OF CUSTODY RECORD

DATE: 03/24/08

PAGE: 1 OF 1

LABORATORY CLIENT: Calscience Environmental Laboratories, Inc.

ADDRESS: 7440 Lincoln Way

CITY: Garden Grove, CA 92841-1427

TEL: (714) 895-5494

E-MAIL: vpatel@calscience.com

CLIENT PROJECT NAME / NUMBER: 08-03-1881

P.O. NO.: 08-03-1881

PROJECT CONTACT: Virendra Patel

QUOTE NO.:

LAB USE ONLY

SAMPLER(S): (PRINT)

TURNAROUND TIME

☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☐ 5 DAYS ☒ NORMAL

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)

☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ____/____/____

SPECIAL INSTRUCTIONS

SUB. To: FGL
853 Corporation St.
Santa Paula , CA 93061-3005
(805)392-2000

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	Matrix	#Cont	Tritium EPA 906.0	Excel EDD
	TPIN 0357	03/20/08	1105	GW	1	X	X

Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
(CALSCIENCE)		03/24/08	
Relinquished by: (Signature) GoldenStateOvernight	Received by / Affiliation: (Signature)	Date: 3/25/08	Time: 1110.
Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:

4.

SP 803172

Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

TO: FGL

CHAIN OF CUSTODY RECORD

DATE: 03/25/08
PAGE: 1 OF 1

LABORATORY CLIENT: Calscience Environmental Laboratories, Inc.
ADDRESS: 7440 Lincoln Way
CITY: Garden Grove, CA 92841-1427
TEL: (714) 895-5494
E-MAIL: vpatel@calscience.com

CLIENT PROJECT NAME / NUMBER: 08-03-1881
PROJECT CONTACT: Virendra Patel
SAMPLER(S): (PRINT)

P.O. NO.: 08-03-1881
QUOTE NO.:
LAB USE ONLY

TURNAROUND TIME
☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☐ 5 DAYS ☒ NORMAL

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ____/____/____

SPECIAL INSTRUCTIONS
SUB. To: FGL
853 Corporation St.
Santa Paula , CA 93061-3005
(805)392-2000

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	Matrix	#Cont	Tritium EPA 906.0	Excel EDD
	TPIN 0357	03/20/08	1105	GW	1	X	X

Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
(CALSCIENCE)	GSO # 509 201795	03/24/08	1730
Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:

SP 8031/2

Subject: FW: 08-03-1881 / FGL COC
From: "Virendra Patel" <VPatel@calscience.com>
Date: Tue, 25 Mar 2008 12:08:30 -0700
To: "Vickie Taylor \(E-mail\)" <vickiet@fglinc.com>

Vickie,

My sample control failed to relinquish the samples to GSO yesterday. Please see the attached COC copy with signatures. Please call with questions.

Thanks. Hope all is well on your end.

Virendra

-----Original Message-----
From: Noel Cruise
Sent: Tuesday, March 25, 2008 11:54 AM
To: Virendra Patel
Cc: Emma Dennison; Jay Patel
Subject: 08-03-1881 / FGL COC

COC not copied and relinquished, pls re-print COC and have JP or WB relinquish it and re-send to FGL.

Sorry, I almost forgot to ship it yesterday until GSO came by and asked me if there's any package that needs to go out.

From: webship@gso.com [mailto:webship@gso.com]
Sent: Tue 3/25/2008 11:18 AM
To: Noel Cruise
Subject: GSO Shipment Delivery Notification - 509201795

DELIVERY NOTIFICATION:

Tracking Number: 509201795

Ship Date: 03/24/2008

Ship From: SAMPLE CONTROL, CAL SCIENCE

Ship To: DENNIS BURRY, FGL
853 CORPORATION STREET
SANTA PAULA CA 93061

Billing Reference: VP/08-03-1881

Delivery Date: Mar 25, 2008 11:10 AM

Signed By:

SENDER COMMENTS:
08-03-1881

Please use the following link to track the history of this shipment online:

Santa Paula - Condition Upon Receipt (Attach to COC)

Sample Receipt:

1. Number of ice chests/packages received: 1
   Note as OTC if received over the counter unpackaged.
2. Were samples received in a chilled condition? Temps: 4 / ____ / ____ / ____ / ____
   Acceptable is 2° to 6° C. Also acceptable is received on ice (ROI) for the same day of sampling or received at room temperature (RRT) if sampled within one hour of receipt. Client contact for temperature failures must be documented below. If many packages are received at one time check for tests/H.T.'s/rushes/Bacti's to prioritize further review. Please notify Microbiology personnel immediately of bacti samples received.
3. Do the number of bottles received agree with the COC? Yes No N/A
4. Were samples received intact? (i.e. no broken bottles, leaks etc.) Yes No
5. Were sample custody seals intact? N/A Yes No

Sign and date the COC, obtain LIMS sample numbers, select methods/tests and print labels.

Sample Verification, Labeling and Distribution:

1. Were all requested analyses understood and acceptable? Yes No
2. Did bottle labels correspond with the client's ID's? Yes No
3. Were all bottles requiring sample preservation properly preserved? Yes No N/A FGL
4. VOAs checked for Headspace? Yes No N/A
5. Were all analyses within holding times at time of receipt? Yes No
6. Have rush or project due dates been checked and accepted? N/A Yes No

Attach labels to the containers and include a copy of the COC for lab delivery.

Sample Receipt, Login and Verification completed by (initials): ll

Discrepancy Documentation:

Any items above which are "No" or do not meet specifications (i.e. temps) must be resolved.

1. Person Contacted:_____ Phone Number:_____
   Initiated By:_____ Date:_____
   Problem:

   Resolution:

2. Person Contacted:_____ Phone Number:_____
   Initiated By:_____ Date:_____
   Problem:

   Resolution:

(2-17756)
Calscience Environmental Laboratories
SP 0803172
IV-03/25/2008-11:13:51

Attach label with lab number here

Calscience Environmental Laboratories, Inc.

May 20, 2008

Joe Turner
Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Subject: **Calscience Work Order No.: 08-04-1829**
Client Reference: LEHR IRA Water Sampling

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 4/22/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Virendra R Patel

Calscience Environmental
Laboratories, Inc.
Virendra Patel
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	04/22/08
10540 White Rock Road, Suite 180		Work Order No:	08-04-1829
Rancho Cordova, CA 95670-7984		Preparation:	EPA 3010A Total
		Method:	EPA 6010B
		Units:	mg/L
Project: LEHR IRA Water Sampling			Page 1 of 1

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPEF 0358	**08-04-1829-2-E**	**04/21/08 13:25**	**Aqueous**	**ICP 5300**	**04/22/08**	**04/23/08 11:35**	**080422LA4A**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Calcium	46.1	0.100	1		Potassium	0.957	0.500	1	
Magnesium	82.4	0.100	1		Sodium	42.7	0.500	1	

Method Blank	**097-01-003-8,212**	**N/A**	**Aqueous**	**ICP 5300**	**04/22/08**	**04/23/08 11:08**	**080422LA4A**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Calcium	ND	0.100	1		Potassium	ND	0.500	1	
Magnesium	ND	0.100	1		Sodium	ND	0.500	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: 04/22/08
Work Order No: 08-04-1829
Preparation: EPA 3020A Total / EPA 7470A Total
Method: EPA 6020 / EPA 7470A
Units: mg/L

Project: LEHR IRA Water Sampling

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPEF 0358	**08-04-1829-2-E**	**04/21/08 13:25**	**Aqueous**	**ICP/MS A**	**04/23/08**	**04/23/08 21:18**	**080423L02**

Comment(s): -Mercury was analyzed on 4/22/2008 5:38:41 PM with batch 080422L05

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	0.00100	1		Mercury	ND	0.000500	1	
Arsenic	0.00256	0.00100	1		Molybdenum	0.00185	0.00100	1	
Barium	0.201	0.00100	1		Nickel	0.00248	0.00100	1	
Beryllium	ND	0.00100	1		Selenium	0.00153	0.00100	1	
Cadmium	ND	0.00100	1		Silver	ND	0.00100	1	
Chromium	0.0302	0.00100	1		Thallium	ND	0.00100	1	
Cobalt	ND	0.00100	1		Vanadium	0.0103	0.00100	1	
Copper	0.00124	0.00100	1		Zinc	0.0240	0.00500	1	
Lead	0.00110	0.00100	1						

Method Blank	**096-06-003-1,571**	**N/A**	**Aqueous**	**ICP/MS A**	**04/23/08**	**04/23/08 17:58**	**080423L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	0.00100	1		Lead	ND	0.00100	1	
Arsenic	ND	0.00100	1		Molybdenum	ND	0.00100	1	
Barium	ND	0.00100	1		Nickel	ND	0.00100	1	
Beryllium	ND	0.00100	1		Selenium	ND	0.00100	1	
Cadmium	ND	0.00100	1		Silver	ND	0.00100	1	
Chromium	ND	0.00100	1		Thallium	ND	0.00100	1	
Cobalt	ND	0.00100	1		Vanadium	ND	0.00100	1	
Copper	ND	0.00100	1		Zinc	ND	0.00500	1	

Method Blank	**099-04-008-3,465**	**N/A**	**Aqueous**	**Mercury**	**04/22/08**	**04/22/08 17:32**	**080422L05**

Parameter	Result	RL	DF	Qual
Mercury	ND	0.000500	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	04/22/08
10540 White Rock Road, Suite 180		Work Order No:	08-04-1829
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: LEHR IRA Water Sampling			Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPIN 0358	**08-04-1829-1-B**	**04/21/08 13:20**	**Aqueous**	**GC/MS U**	**04/24/08**	**04/25/08 03:57**	**080424L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	51	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	129	74-140		1,2-Dichloroethane-d4	123	74-146	
Toluene-d8	97	88-112		1,4-Bromofluorobenzene	99	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	04/22/08
10540 White Rock Road, Suite 180		Work Order No:	08-04-1829
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: LEHR IRA Water Sampling			Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPEF 0358	**08-04-1829-2-B**	**04/21/08 13:25**	**Aqueous**	**GC/MS U**	**04/24/08**	**04/25/08 05:52**	**080424L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	109	74-140		1,2-Dichloroethane-d4	115	74-146	
Toluene-d8	104	88-112		1,4-Bromofluorobenzene	104	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	04/22/08
10540 White Rock Road, Suite 180		Work Order No:	08-04-1829
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: LEHR IRA Water Sampling			Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TBIRA 0026	**08-04-1829-4-B**	**04/21/08 00:00**	**Aqueous**	**GC/MS U**	**04/25/08**	**04/25/08 21:50**	**080425L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	114	74-140		1,2-Dichloroethane-d4	128	74-146	
Toluene-d8	96	88-112		1,4-Bromofluorobenzene	97	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	04/22/08
10540 White Rock Road, Suite 180		Work Order No:	08-04-1829
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: LEHR IRA Water Sampling			Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-25,352**	**N/A**	**Aqueous**	**GC/MS U**	**04/24/08**	**04/25/08 03:28**	**080424L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	117	74-140		1,2-Dichloroethane-d4	115	74-146	
Toluene-d8	98	88-112		1,4-Bromofluorobenzene	102	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	04/22/08
10540 White Rock Road, Suite 180		Work Order No:	08-04-1829
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: LEHR IRA Water Sampling			Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-25,357**	**N/A**	**Aqueous**	**GC/MS U**	**01/01/95**	**04/25/08 20:53**	**080425L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	129	74-140		1,2-Dichloroethane-d4	123	74-146	
Toluene-d8	94	88-112		1,4-Bromofluorobenzene	88	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: 04/22/08
Work Order No: 08-04-1829

Project: LEHR IRA Water Sampling

Client Sample Number	Lab Sample Number	Date Collected	Matrix
TPIN 0358	**08-04-1829-1**	**04/21/08**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Carbon, Total Organic	1.3	0.50	1		mg/L	N/A	04/22/08	SM 5310 D

TPEF 0358	**08-04-1829-2**	**04/21/08**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chloride	24	5.0	5		mg/L	N/A	04/22/08	EPA 300.0
Nitrate (as N)	8.4	0.20	2		mg/L	N/A	04/22/08	EPA 300.0
Sulfate	66	10	10		mg/L	N/A	04/22/08	EPA 300.0
Alkalinity, Total (as CaCO3)	422	5.0	1		mg/L	N/A	04/22/08	SM 2320B
Solids, Total Dissolved	516	1.0	1		mg/L	N/A	04/23/08	SM 2540 C

ASDP 0358	**08-04-1829-3**	**04/21/08**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrate (as N)	9.0	0.20	2		mg/L	N/A	04/22/08	EPA 300.0
Solids, Total Dissolved	526	1.0	1		mg/L	N/A	04/23/08	SM 2540 C

Method Blank		**N/A**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chloride	ND	1.0	1		mg/L	N/A	04/22/08	EPA 300.0
Nitrate (as N)	ND	0.10	1		mg/L	N/A	04/22/08	EPA 300.0
Sulfate	ND	1.0	1		mg/L	N/A	04/22/08	EPA 300.0
Alkalinity, Total (as CaCO3)	ND	1.0	1		mg/L	N/A	04/22/08	SM 2320B
Solids, Total Dissolved	ND	1.0	1		mg/L	N/A	04/23/08	SM 2540 C
Carbon, Total Organic	ND	0.50	1		mg/L	N/A	04/22/08	SM 5310 D

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	04/22/08
Work Order No:	08-04-1829
Preparation:	EPA 3010A Total
Method:	EPA 6010B

Project LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-04-1835-1	**Aqueous**	**ICP 5300**	**04/22/08**	**04/23/08**	**080422SA4**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Calcium	4X	4X	77-113	4X	0-11	Q
Magnesium	4X	4X	56-140	4X	0-11	Q
Potassium	101	105	83-131	2	0-7	
Sodium	4X	4X	73-127	4X	0-9	Q

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: 04/22/08
Work Order No: 08-04-1829
Preparation: EPA 3020A Total
Method: EPA 6020

Project LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-04-1931-1	**Aqueous**	**ICP/MS A**	**04/23/08**	**04/23/08**	**080423S02A**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	111	108	85-133	3	0-11	
Arsenic	96	95	73-127	0	0-11	
Barium	4X	4X	74-128	4X	0-10	Q
Beryllium	92	89	56-122	3	0-11	
Cadmium	97	97	84-114	0	0-8	
Chromium	104	104	73-133	0	0-11	
Cobalt	103	103	79-121	0	0-10	
Copper	94	92	72-108	2	0-10	
Lead	74	80	79-121	5	0-10	3
Molybdenum	111	108	83-137	2	0-10	
Nickel	98	99	68-122	1	0-10	
Selenium	86	85	59-125	2	0-12	
Silver	92	90	68-128	2	0-14	
Thallium	105	105	73-121	0	0-11	
Vanadium	112	116	77-137	3	0-15	
Zinc	84	86	43-145	2	0-39	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell		Date Received:	04/22/08
10540 White Rock Road, Suite 180		Work Order No:	08-04-1829
Rancho Cordova, CA 95670-7984		Preparation:	EPA 7470A Total
		Method:	EPA 7470A

Project LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
TPEF 0358	**Aqueous**	**Mercury**	**04/22/08**	**04/22/08**	**080422S05**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	113	111	66-126	1	0-7	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	04/22/08
Work Order No:	08-04-1829
Preparation:	EPA 5030B
Method:	EPA 8260B

Project LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
TPIN 0358	**Aqueous**	**GC/MS U**	**04/24/08**	**04/25/08**	**080424S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	105	103	88-118	2	0-7	
Carbon Tetrachloride	117	119	67-145	2	0-11	
Chlorobenzene	112	114	88-118	2	0-7	
1,2-Dibromoethane	119	116	70-130	3	0-30	
1,2-Dichlorobenzene	110	104	86-116	5	0-8	
1,1-Dichloroethene	109	109	70-130	0	0-25	
Ethylbenzene	111	108	70-130	3	0-30	
Toluene	109	106	87-123	4	0-8	
Trichloroethene	110	112	79-127	1	0-10	
Vinyl Chloride	97	103	69-129	6	0-13	
Methyl-t-Butyl Ether (MTBE)	110	115	71-131	4	0-13	
Tert-Butyl Alcohol (TBA)	92	92	36-168	1	0-45	
Diisopropyl Ether (DIPE)	109	116	81-123	7	0-9	
Ethyl-t-Butyl Ether (ETBE)	110	106	72-126	3	0-12	
Tert-Amyl-Methyl Ether (TAME)	104	107	72-126	3	0-12	
Ethanol	92	85	53-149	5	0-31	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	04/22/08
Work Order No:	08-04-1829
Preparation:	EPA 5030B
Method:	EPA 8260B

Project LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
TBIRA 0026	**Aqueous**	**GC/MS U**	**01/01/95**	**04/25/08**	**080425S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	102	96	88-118	6	0-7	
Carbon Tetrachloride	102	94	67-145	8	0-11	
Chlorobenzene	96	100	88-118	4	0-7	
1,2-Dibromoethane	107	106	70-130	1	0-30	
1,2-Dichlorobenzene	99	106	86-116	7	0-8	
1,1-Dichloroethene	106	111	70-130	5	0-25	
Ethylbenzene	108	115	70-130	7	0-30	
Toluene	119	109	87-123	8	0-8	
Trichloroethene	104	96	79-127	9	0-10	
Vinyl Chloride	102	101	69-129	0	0-13	
Methyl-t-Butyl Ether (MTBE)	108	114	71-131	5	0-13	
Tert-Butyl Alcohol (TBA)	106	111	36-168	5	0-45	
Diisopropyl Ether (DIPE)	112	111	81-123	1	0-9	
Ethyl-t-Butyl Ether (ETBE)	108	114	72-126	5	0-12	
Tert-Amyl-Methyl Ether (TAME)	114	111	72-126	2	0-12	
Ethanol	114	101	53-149	12	0-31	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-04-1829

Project: LEHR IRA Water Sampling

Matrix: Aqueous

Parameter	Method	Quality Control Sample ID	Date Analyzed	Date Extracted	MS% REC	MSD % REC	%REC CL	RPD	RPD CL	Qualifiers
Chloride	EPA 300.0	08-04-1830-1	04/22/08	N/A	96	95	56-134	1	0-3	
Nitrate (as N)	EPA 300.0	08-04-1830-1	04/22/08	N/A	91	90	58-142	0	0-6	
Sulfate	EPA 300.0	08-04-1830-1	04/22/08	N/A	95	94	49-133	1	0-3	
Carbon, Total Organic	SM 5310 D	TPIN 0358	04/22/08	N/A	93	92	70-130	1	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-04-1829

Project: LEHR IRA Water Sampling

Matrix: Aqueous

Parameter	Method	QC Sample ID	Date Analyzed	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Alkalinity, Total (as CaCO3)	SM 2320B	TPEF 0358	04/22/08	422	420	0	0-25	
Solids, Total Dissolved	SM 2540 C	08-04-2009-1	04/23/08	438	452	3	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell		Date Received:	N/A
10540 White Rock Road, Suite 180		Work Order No:	08-04-1829
Rancho Cordova, CA 95670-7984		Preparation:	EPA 3010A Total
		Method:	EPA 6010B

Project: LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-003-8,212	**Aqueous**	**ICP 5300**	**04/22/08**	**04/23/08**	**080422LA4A**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Calcium	104	100	80-120	4	0-20	
Magnesium	101	99	80-120	3	0-20	
Potassium	100	101	80-120	1	0-20	
Sodium	108	107	80-120	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-04-1829
Preparation: EPA 3020A Total
Method: EPA 6020

Project: LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
096-06-003-1,571	**Aqueous**	**ICP/MS A**	**04/23/08**	**04/23/08**	**080423L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	87	90	80-120	3	0-20	
Arsenic	105	104	80-120	2	0-20	
Barium	98	99	80-120	2	0-20	
Beryllium	101	100	80-120	1	0-20	
Cadmium	100	103	80-120	2	0-20	
Chromium	105	102	80-120	3	0-20	
Cobalt	101	101	80-120	1	0-20	
Copper	110	110	80-120	0	0-20	
Lead	96	97	80-120	1	0-20	
Molybdenum	99	99	80-120	0	0-20	
Nickel	109	107	80-120	2	0-20	
Selenium	102	105	80-120	3	0-20	
Silver	104	104	80-120	0	0-20	
Thallium	89	89	80-120	0	0-20	
Vanadium	103	96	80-120	7	0-20	
Zinc	111	108	80-120	3	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell		Date Received:	N/A
10540 White Rock Road, Suite 180		Work Order No:	08-04-1829
Rancho Cordova, CA 95670-7984		Preparation:	EPA 7470A Total
		Method:	EPA 7470A

Project: LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-04-008-3,465	**Aqueous**	**Mercury**	**04/22/08**	**04/22/08**	**080422L05**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	105	106	85-121	1	0-4	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Brown and Caldwell		Date Received:	N/A
10540 White Rock Road, Suite 180		Work Order No:	08-04-1829
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project: LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-10-006-25,352	**Aqueous**	**GC/MS U**	**04/25/08**	**24APR031.rr**	**080424L02**

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Benzene	50.0	53.6	107	84-120	
Carbon Tetrachloride	50.0	58.9	118	63-147	
Chlorobenzene	50.0	54.0	108	89-119	
1,2-Dibromoethane	50.0	55.4	111	80-120	
1,2-Dichlorobenzene	50.0	53.5	107	89-119	
1,1-Dichloroethene	50.0	56.1	112	77-125	
Ethylbenzene	50.0	53.3	107	80-120	
Toluene	50.0	54.5	109	83-125	
Trichloroethene	50.0	55.7	111	89-119	
Vinyl Chloride	50.0	52.1	104	63-135	
Methyl-t-Butyl Ether (MTBE)	50.0	57.2	114	82-118	
Tert-Butyl Alcohol (TBA)	250	266	106	46-154	
Diisopropyl Ether (DIPE)	50.0	56.2	112	81-123	
Ethyl-t-Butyl Ether (ETBE)	50.0	56.5	113	74-122	
Tert-Amyl-Methyl Ether (TAME)	50.0	52.7	105	76-124	
Ethanol	500	450	90	60-138	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Brown and Caldwell		Date Received:	N/A
10540 White Rock Road, Suite 180		Work Order No:	08-04-1829
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project: LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-10-006-25,357	**Aqueous**	**GC/MS U**	**04/25/08**	**25APR011.rr**	**080425L01**

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Benzene	50.0	49.6	99	84-120	
Carbon Tetrachloride	50.0	48.8	98	63-147	
Chlorobenzene	50.0	49.5	99	89-119	
1,2-Dibromoethane	50.0	49.6	99	80-120	
1,2-Dichlorobenzene	50.0	46.6	93	89-119	
1,1-Dichloroethene	50.0	51.4	103	77-125	
Ethylbenzene	50.0	52.0	104	80-120	
Toluene	50.0	49.1	98	83-125	
Trichloroethene	50.0	51.9	104	89-119	
Vinyl Chloride	50.0	50.2	100	63-135	
Methyl-t-Butyl Ether (MTBE)	50.0	53.8	108	82-118	
Tert-Butyl Alcohol (TBA)	250	232	93	46-154	
Diisopropyl Ether (DIPE)	50.0	54.4	109	81-123	
Ethyl-t-Butyl Ether (ETBE)	50.0	55.9	112	74-122	
Tert-Amyl-Methyl Ether (TAME)	50.0	53.2	106	76-124	
Ethanol	500	497	99	60-138	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-04-1829

Project: LEHR IRA Water Sampling

Matrix: Aqueous

Parameter	Method	Quality Control Sample ID	Date Extracted	Date Analyzed	LCS % REC	LCSD % REC	%REC CL	RPD	RPD CL	Qual
Chloride	EPA 300.0	099-05-118-4,471	N/A	04/22/08	94	93	81-111	1	0-5	
Nitrate (as N)	EPA 300.0	099-05-118-4,471	N/A	04/22/08	95	91	87-111	4	0-12	
Sulfate	EPA 300.0	099-05-118-4,471	N/A	04/22/08	96	94	89-107	3	0-13	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-04-1829

Project: LEHR IRA Water Sampling

Matrix : Aqueous

Parameter	Method	Quality Control Sample ID	Date Analyzed	Date Extracted	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Carbon, Total Organic	SM 5310 D	099-05-097-2,952	04/22/08	N/A	5.00	4.42	88	80-120	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-04-1829

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

BROWN AND CALDWELL

Brown and Caldwell
Environmental Engineers and Consultants
10540 White Rock Road Suite 180
Rancho Cordova, CA 95670

Field Chain-of-Custody Form

P829

Lab Name and Address:	Project Name:	Date:	Page: of	P.O.#
Virendra Patel (714) 895-5494 Calscience Environmental Laboratories, Inc 7440 Lincoln Way Garden Grove, CA 92841-1427	LEHR IRA Water Sampling	4/21/8	1 1	131261-200

Sampled by AMB - Angela Marie Brush

Sample ID	Collection	Matrix Code*	Sample Type**	Field Preserved (Y or N)	Number of Containers	H-3	C-14	VOA	Nitrate as N	TDS	Alkalinity	Anions	Metals	TOC	Cations Ca, Mg, Na, K	Total Chrome						Comments
TPIN 0358	Date: 4.21.8 Time: 13:20	GW	G	Y	5	✓	✓	✓						✓								AMB
TPEF 0358	Date: 4.21.8 Time: 13:25	GW	G	Y	5			✓	✓	✓	✓	✓	✓		✓							AMB
ASDP 0358	Date: 4.21.8 Time: ~~13:45~~ 16:30	GW	G	Y	1				✓	✓												AMB
TBIRA 0026	Date: 4.21.8 Time: —	O	O	Y	2			✓														AMB

Relinquished by: (Signature)	Date:	Cooler Numbers
Angela Brush	4.21 Time: 17:00	1
Received by: (Signature) Fed Ex	Date: Time:	
Relinquished by: (Signature)	Date: Time:	

Comments:
Note: This shipment is not intended to fall under the authority of a radiological use license.

Received for Laboratory By: (Signature)	Date:	Time:
	4/22/08	0830

Method of Shipment: Fedex Airbill No. 8631 6480 4787

Cooler Survey (pass / fail) _____ If FAIL do not open; contact the Program Development Department and the Radiation Safety Officer IMMEDIATELY.

Surveyed by: (*Signature*) Date: Time:

Cooler Condition Upon Receipt at Laboratory:

Seals Intact: YES ____ NO ____

Internal Cooler Temp: _____ °C; Samples in good condition: (Y/N) _____; Samples surveyed (pass/fail) _____

*Sample Matrix Codes

SW - Surface Water	AR - Air	SD - Sediment	
GW - Ground Water	SL - Soil	WW - Waste Water	BI - Biota
TW - Treatment Water	SG - Sludge	FI - Filter	O - Other

**Sample Type Codes

G - Grab
C - Composite
O - Other

EHSCOC.FRM

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 0 4 - 1 8 2 9

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: Brown & Caldwell **DATE:** 4/22/08

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature.

_____ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

3.1 °C Temperature blank.
_____ °C IR thermometer.
_____ Ambient temperature.

Initial: [illegible]

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____ Not Present: ✓

Initial: [illegible]

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)	✓		
VOA vial(s) free of headspace.	✓		
Tedlar bag(s) free of condensation			✓

Initial: [illegible]

COMMENTS:

May 15, 2008

Lab ID : SP 804415
Customer : 2017756

Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Laboratory Report

Introduction: This report package contains total of 3 pages divided into three sections:

Case Narrative	(1 Page) :	An overview of the work performed at FGL.
Chemical Results	(1 Page) :	Results for each sample submitted.
Quality Control	(1 Page) :	Supporting Quality Control (QC) results.

This report package pertains to the following sample:

Sample Description	Date Sampled	Date Received	FGL Lab Sample ID #	Matrix
TPIN 0358	04/21/2008	04/24/2008	SP 804415-01	GW

Sampling and Receipt Information: The sample was received, prepared and analyzed within the method specified holding times. All samples arrived at 4 °C. All samples were checked for pH if acid or base preservation required (except for VOAs). For details of sample receipt information, please see the attached Chain of Custody and Condition Upon Receipt Forms.

Quality Control: All samples were prepared and analyzed according to the following tables:

Radio Chemistry QC

906.0	05/08/2008:A217 All preparation quality controls are within established criteria.
	05/08/2008:A - LS201 All analysis quality controls are within established criteria.

Certification: I certify that this data package is in compliance with NELAC Standards, both technically and for completeness, except for any conditions listed above. Release of the data contained in this data package is authorized by the Laboratory Director or his designee, as verified by the following signature.

FGL ENVIRONMENTAL

KAD:cea

Kelly A. Dunnahoo, B.S.
Laboratory Director

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FAX: (805) 525-4172
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CA ELAP Certification No. 1573

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Visalia, California
TEL: (559) 734-9473
FAX: (559) 734-8435
Mobile: (559) 737-2399

May 15, 2008

Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Description : TPIN 0358
Project : 08-04-1829

Lab ID : SP 804415-01
Customer ID: 2-17756

Sampled On : April 21, 2008-13:20
Sampled By : Not Available
Received On: April 24, 2008-14:00
Matrix : Ground Water

Sample Results - Radio

Constituents	Result ± Error	MDA	Units	MCL	Preparation Method	Preparation Date/ID	Analysis Method	Analysis Date/ID
Radio Chemistry P:1								
Tritium	0.000 ± 202	410	pCi/L	20,000	906.0	05/08/08:A217	906.0	05/09/2008:A01

MDA = Minimum Detectable Activity; Data utilized by the DHS to determine matrix interference. MCL = Maximium Contaminat Level.
Containers: (P) Plastic Preservatives: (1) Cool 4°C

CCR Section 64442: Compliance Note: If Gross Alpha (Result + (0.84 x error)) exceeds 5 pCi/L run Uranium. If Gross Alpha minus Uranium exceeds 5 pCi/L run Radium 226. Samples that exceed 5 pCi/L are held for 6 months at FGL.

Compliance:
Gross Alpha - Uranium ≤ 15 pCi/L
Uranium ≤ 20 pCi/L
Radium 226 + Radium 228 ≤ 5 pCi/L

Corporate Offices & Laboratory
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CA ELAP Certification No. 1573

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2500 Stagecoach Road
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CA ELAP Certification No. 1563

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563 East Lindo Avenue
Chico, CA 95926
TEL: (530) 343-5818
FAX: (530) 343-3807

Field Office
Visalia, California
TEL: (559) 734-9473
FAX: (559) 734-8435
Mobile: (559) 737-2399

May 15, 2008

Calscience Environmental Laboratories

Lab ID : SP 804415
Customer : 2-17756

Quality Control - Radio

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Tritium	906.0	05/08/2008:A217	Blank	pCi/L		ND	<518	
			LCS	pCi/L	2383	91.8%	75-125	
			BS	pCi/L	2383	98.6%	75-125	
			BSD	pCi/L	2383	95.2%	75-125	
			BSRPD	pCi/L		3.7%	≤25	
	906.0	05/08/2008:A	00-CCB	cpm		11	12±1.7	
			00-CCV	cpm	1064	24.6%	25.5±4.5	

Definitions

Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.
BS/BSD : Blank Spikes - A blank is spiked with a known amount of analyte. It is prepared to verify that the preparation process is not affecting analyte recovery.
CCB : Continuing Calibration Blank - Analyzed to verify the instrument baseline is within criteria.
CCV : Continuing Calibration Verification - Analyzed to verify the instrument calibration is within criteria.
ND : Non-detect - Result was below the DQO listed for the analyte.
DQO : Data Quality Objective - This is the criteria against which the quality control data is compared.

Corporate Offices & Laboratory
853 Corporation Street
Santa Paula, CA 93060
TEL: (805) 392-2000
FAX: (805) 525-4172
CA NELAP Certification No. 01110CA
CA ELAP Certification No. 1573

Office & Laboratory
2500 Stagecoach Road
Stockton, CA 95215
TEL: (209) 942-0182
FAX: (209) 942-0423
CA ELAP Certification No. 1563

Office & Laboratory
563 East Lindo Avenue
Chico, CA 95926
TEL: (530) 343-5818
FAX: (530) 343-3807

Field Office
Visalia, California
TEL: (559) 734-9473
FAX: (559) 734-8435
Mobile: (559) 737-2399

Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

TO: FGL

CHAIN OF CUSTODY RECORD

DATE: 04/22/08
PAGE: 1 OF 1

804415

LABORATORY CLIENT: Calscience Environmental Laboratories, Inc.
ADDRESS: 7440 Lincoln Way
CITY: Garden Grove, CA 92841-1427
TEL: (714) 895-5494
E-MAIL: vpatel@calscience.com

CLIENT PROJECT NAME/NUMBER: 08-04-1829
PROJECT CONTACT: Virendra Patel
SAMPLER(S): (PRINT)

P.O. NO.: 08-04-1829
QUOTE NO.:
LAB USE ONLY

TURNAROUND TIME
☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☐ 5 DAYS ☒ NORMAL

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___/___/___

SPECIAL INSTRUCTIONS
SUB. To: FGL
853 Corporation St.
Santa Paula , CA 93061-3005
(805)392-2000

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	Matrix	#Cont	Tritium EPA 906.0	Excel EDD
	TPIN 0358	04/21/08	13:20	GW	1	X	X

Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
(CALSCIENCE)	#509408762	04/22/08	1541
Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date: 4/22/08	Time: 1400

4°C

Santa Paula - Condition Upon Receipt (Attach to COC)

Sample Receipt:

1. Number of ice chests/packages received: 1
   Note as OTC if received over the counter unpackaged.

2. Were samples received in a chilled condition? Temps: 4 / _____ / _____ / _____ / _____
   Acceptable is 2° to 6° C. Also acceptable is received on ice (ROI) for the same day of sampling or received at room temperature (RRT) if sampled within one hour of receipt. Client contact for temperature failures must be documented below. If many packages are received at one time check for tests/H.T.'s/rushes/Bacti's to prioritize further review. Please notify Microbiology personnel immediately of bacti samples received.

3. Do the number of bottles received agree with the COC? Yes No N/A

4. Were samples received intact? (i.e. no broken bottles, leaks etc.) Yes No

5. Were sample custody seals intact? N/A Yes No

Sign and date the COC, obtain LIMS sample numbers, select methods/tests and print labels.

Sample Verification, Labeling and Distribution:

1. Were all requested analyses understood and acceptable? Yes No
2. Did bottle labels correspond with the client's ID's? Yes No
3. Were all bottles requiring sample preservation properly preserved? Yes No N/A FGL
4. VOAs checked for Headspace? Yes No N/A
5. Were all analyses within holding times at time of receipt? Yes No
6. Have rush or project due dates been checked and accepted? N/A Yes No

Attach labels to the containers and include a copy of the COC for lab delivery.

Sample Receipt, Login and Verification completed by (initials): _____

Discrepancy Documentation:
Any items above which are "No" or do not meet specifications (i.e. temps) must be resolved.

1. Person Contacted: _____ Phone Number: _____
   Initiated By: _____ Date: _____
   Problem:

   Resolution:

2. Person Contacted: _____ Phone Number: _____
   Initiated By: _____
   Problem:

   Resolution:

(2-17756)
Calscience Environmental Laboratories
SP 0804415
SRP-04/24/2008-15:00:38

Attach label with lab number here

GEL Laboratories LLC
a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178

www.gel.com

April 30, 2008

Mr. Virendra R. Patel
Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, California 92841-1427

Re: Carbon 14
Work Order: 207197

Dear Mr. Patel:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on April 23, 2008. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4297.

Sincerely,

Amanda Rasco
Project Manager

Purchase Order: 08-04-1829
Enclosures

problem solved

Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

TO: GEL Laboratories, Inc.

CHAIN OF CUSTODY RECORD

DATE:

PAGE: 1 OF 1

207197

LABORATORY CLIENT: Calscience Environmental Laboratories, Inc.	CLIENT PROJECT NAME / NUMBER: 08-04-1829
P.O. NO.: 08-04-1829	
ADDRESS: 7440 Lincoln Way	PROJECT CONTACT: Virendra Patel
QUOTE NO.:	
CITY: Garden Grove, CA 92841-1427	LAB USE ONLY
TEL: (714) 895-5494 / E-MAIL: vpatel@calscience.com	SAMPLER(S): (PRINT)

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☐ 7 DAYS [X] NORMAL

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY): ☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ____/____/____

SPECIAL INSTRUCTIONS
Ship to: GEL Laboratories, Inc
2040 Savage Rd
Charleston, SC 29407
Attention: Amanda Rasco 843-556-8171

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	Matrix	#Cont	Carbon -14 by EERF-C	Detection limit of 20 pCi/L		Send PDF via Email	Send Invoicewith Results
	TPIN 0358	04/21/08	13:20	GW	1	X	X		X	X

Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
(CALSCIENCE)	9587340016 44	04/22/08	1602
Relinquished by: (Signature)	Received by / Affiliation: (Signature) Richard Aiken / GEL	4/23/08	0900
Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: CALS	**SDG/ARCOC/Work Order:** 207197
Received By: Ruby Albee	**Date Received:** 4/23/08

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
COC/Samples marked as radioactive?		✓	Maximum Counts Observed*: 40 cpm
Classified Radioactive II by RSO?		✓	
COC/Samples marked containing PCBs?		✓	
Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		✓	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (4 +/- 2 C)?	✓			Preservation Method: ice bags blue ice dry ice none other (describe) 2a
3	Chain of custody documents included with shipment?	✓			
4	Sample containers intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		✓		Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		✓		Sample ID's and containers affected:
7	Are Encore containers present?			✓	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	✓			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Sample ID's affected:
11	Number of containers received match number indicated on COC?	✓			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	✓			

Comments: FedEx 9587 3400 1644

PM (or PMA) review: Initials RA Date 4/23/08

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

CALS001 Calscience Environmental Laboratory, Inc.

Client SDG: 207197 GEL Work Order: 207197

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Amanda Rasco.

Amanda J Rasco

Reviewed by

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : Calscience Environmental Laboratories, Inc.
Address : 7440 Lincoln Way
Garden Grove, California 92841−−1427

Report Date: April 30, 2008

Contact: Mr. Virendra R. Patel
Project: **Carbon 14**

Client Sample ID:	TPIN 0358	Project:	CALS00101
Sample ID:	207197001	Client ID:	CALS001
Matrix:	Ground Water		
Collect Date:	21−APR−08 13:20		
Receive Date:	23−APR−08		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Rad Liquid Scintillation Analysis											
Liquid Scint C14, Liquid "As Received"											
Carbon−14	U	−10.1	+/−9.81	17.4	20.0	pCi/L		SXB4 04/28/08	1839	748603	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA EERF C−01 Modified	

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: April 30, 2008
Page 1 of 2

Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, California

Contact: **Mr. Virendra R. Patel**

Workorder: **207197**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Liquid Scintillation											
Batch 748603											
QC1201563940 207197001 DUP											
Carbon-14		U	-10.1 +/-9.81	U	-5.64 +/-9.73	pCi/L	0		N/A	SXB4	04/28/08 19:43
QC1201563942 LCS											
Carbon-14	436				422 +/-25.1	pCi/L		97	(75%-125%)		04/25/08 12:26
QC1201563939 MB											
Carbon-14				U	-6.67 +/-9.15	pCi/L					04/28/08 19:11
QC1201563941 207197001 MS											
Carbon-14	436	U	-10.1 +/-9.81		436 +/-25.3	pCi/L		100	(75%-125%)		04/25/08 12:10

Notes:
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- M M if above MDC and less than LLD
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy--Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.

GEL LABORATORIES LLC
2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Workorder: 207197

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

h Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

List of current GEL Certifications as of 30 April 2008

State	Certification
Alaska	UST-062
Arizona	AZ0668
Arkansas	88-0651
CLIA	42D0904046
California	01151CA
Colorado	GenEngLabs
Connecticut	PH-0169
Dept. of Navy	NFESC 413
EPA	WG-15J
Florida/NELAP	E87156
Georgia	E87156 (FL/NELAP)
Hawaii	N/A
Idaho	N/A
Illinois	200029
Indiana	C-SC-01
Kansas	E-10332
Kentucky	90129
Louisiana	03046
Maryland	270
Massachusetts	M-SC012
Michigan	9903
Nevada	SC12
New Jersey	SC002
New Mexico	FL NELAP E87156
New York	11501
North Carolina	233
North Carolina Drinking W	45709
North Dakota	R-158
Oklahoma	9904
Pennsylvania	68-00485
South Carolina	10120001/10585001/10120002
Tennessee	02934
Texas NELAP	T104704235-07-TX
U.S. Dept. of Agriculture	S-52597
US Army Corps of Engineer	N/A
Utah	8037697376 GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

GEL Laboratories LLC

problem solved

P.O. Box 30712~Charleston, S.C. 29417~2040 Savage Road~29407
(843)556-8171~Fax(843)766-1178

Invoice for Analytical Services

Mr. Virendra R. Patel
Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, California 92841-1427

PO: 08-04-1829

Invoice #:	**163966**
Invoice Date:	**30-APR-08**
Terms:	**Net 30**
Client:	**Calscience Environmental Laboratory, Inc.**
Description (Order):	**Carbon 14**
Workorder/SDG:	**207197**
Project:	**CALS00101**
Project Manager:	**Amanda Rasco**

GELID: 207197001 **Matrix:** GROUND WATER **ClientID:** TPIN 0358 **Collected:** 21-APR-08 **Received:** 23-APR-08

Test	Description	Methods	Turn Days	Charge
LSC_14CL	Liquid Scint C14, Liquid	EPA EERF C-01 Modified	7 (Receive)	$176.00
			Sample Total:	**$176.00**

Miscellaneous Charge	Description	Charge

Invoice Total: $176.00

Calscience Environmental Laboratories, Inc.

May 27, 2008

Joe Turner
Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Subject: **Calscience Work Order No.: 08-05-1588**
Client Reference: LEHR IRA Water Sampling

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 5/16/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Virendra R Patel

Calscience Environmental
Laboratories, Inc.
Virendra Patel
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	05/16/08
10540 White Rock Road, Suite 180		Work Order No:	08-05-1588
Rancho Cordova, CA 95670-7984		Preparation:	EPA 3010A Total
		Method:	EPA 6010B
		Units:	mg/L
Project: LEHR IRA Water Sampling			Page 1 of 1

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPEF 0359	**08-05-1588-2-D**	**05/15/08 10:10**	**Aqueous**	**ICP 5300**	**05/16/08**	**05/17/08 14:50**	**080516LA6**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Calcium	44.4	0.100	1		Potassium	1.12	0.500	1	
Magnesium	80.7	0.100	1		Sodium	43.3	0.500	1	

Method Blank	**097-01-003-8,293**	**N/A**	**Aqueous**	**ICP 5300**	**05/16/08**	**05/17/08 13:43**	**080516LA6**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Calcium	ND	0.100	1		Potassium	ND	0.500	1	
Magnesium	ND	0.100	1		Sodium	ND	0.500	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: 05/16/08
Work Order No: 08-05-1588
Preparation: EPA 3020A Total / EPA 7470A Total
Method: EPA 6020 / EPA 7470A
Units: mg/L

Project: LEHR IRA Water Sampling

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPEF 0359	**08-05-1588-2-A**	**05/15/08 10:10**	**Aqueous**	**ICP/MS A**	**05/19/08**	**05/19/08 17:43**	**080519L02**

Comment(s): -Mercury was analyzed on 5/20/2008 7:08:33 PM with batch 080520L01A

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	0.00100	1		Mercury	ND	0.000500	1	
Arsenic	0.00214	0.00100	1		Molybdenum	0.00172	0.00100	1	
Barium	0.201	0.00100	1		Nickel	0.00215	0.00100	1	
Beryllium	ND	0.00100	1		Selenium	0.00254	0.00100	1	
Cadmium	ND	0.00100	1		Silver	ND	0.00100	1	
Chromium	0.0306	0.00100	1		Thallium	ND	0.00100	1	
Cobalt	ND	0.00100	1		Vanadium	0.00998	0.00100	1	
Copper	0.00225	0.00100	1		Zinc	0.0117	0.00500	1	
Lead	ND	0.00100	1						

Method Blank	**096-06-003-1,591**	**N/A**	**Aqueous**	**ICP/MS A**	**05/19/08**	**05/19/08 17:07**	**080519L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	0.00100	1		Lead	ND	0.00100	1	
Arsenic	ND	0.00100	1		Molybdenum	ND	0.00100	1	
Barium	ND	0.00100	1		Nickel	ND	0.00100	1	
Beryllium	ND	0.00100	1		Selenium	ND	0.00100	1	
Cadmium	ND	0.00100	1		Silver	ND	0.00100	1	
Chromium	ND	0.00100	1		Thallium	ND	0.00100	1	
Cobalt	ND	0.00100	1		Vanadium	ND	0.00100	1	
Copper	ND	0.00100	1		Zinc	ND	0.00500	1	

Method Blank	**099-04-008-3,496**	**N/A**	**Aqueous**	**Mercury**	**05/20/08**	**05/20/08 18:37**	**080520L01A**

Parameter	Result	RL	DF	Qual
Mercury	ND	0.000500	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	05/16/08
10540 White Rock Road, Suite 180		Work Order No:	08-05-1588
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: LEHR IRA Water Sampling			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPIN 0359	**08-05-1588-1-C**	**05/15/08 10:20**	**Aqueous**	**GC/MS OO**	**05/23/08**	**05/23/08 14:03**	**080523L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	38	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	107	74-140		1,2-Dichloroethane-d4	110	74-146	
Toluene-d8	98	88-112		1,4-Bromofluorobenzene	83	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	05/16/08
10540 White Rock Road, Suite 180		Work Order No:	08-05-1588
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: LEHR IRA Water Sampling			Page 2 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPEF 0359	**08-05-1588-2-C**	**05/15/08 10:10**	**Aqueous**	**GC/MS OO**	**05/23/08**	**05/23/08 15:45**	**080523L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	103	74-140		1,2-Dichloroethane-d4	104	74-146	
Toluene-d8	97	88-112		1,4-Bromofluorobenzene	83	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	05/16/08
10540 White Rock Road, Suite 180		Work Order No:	08-05-1588
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: LEHR IRA Water Sampling			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TBIRA 0027	**08-05-1588-4-B**	**05/15/08 10:20**	**Oil**	**GC/MS OO**	**05/23/08**	**05/23/08 16:10**	**080523L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	104	74-140		1,2-Dichloroethane-d4	105	74-146	
Toluene-d8	97	88-112		1,4-Bromofluorobenzene	83	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	05/16/08
10540 White Rock Road, Suite 180		Work Order No:	08-05-1588
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: LEHR IRA Water Sampling			Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-25,693**	**N/A**	**Aqueous**	**GC/MS OO**	**05/23/08**	**05/23/08 13:38**	**080523L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	107	74-140		1,2-Dichloroethane-d4	106	74-146	
Toluene-d8	97	88-112		1,4-Bromofluorobenzene	85	74-110	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: 05/16/08
Work Order No: 08-05-1588

Project: LEHR IRA Water Sampling

Client Sample Number	Lab Sample Number	Date Collected	Matrix
TPIN 0359	**08-05-1588-1**	**05/15/08**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Carbon, Total Organic	1.2	0.50	1		mg/L	N/A	05/17/08	SM 5310 D

TPEF 0359	**08-05-1588-2**	**05/15/08**	**Aqueous**

Comment(s): (68) Dilution analysis was performed outside the recommended holding time.

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chloride	24	5.0	5		mg/L	N/A	05/17/08	EPA 300.0
Nitrate (as N) (68)	8.4	0.50	5		mg/L	N/A	05/17/08	EPA 300.0
Sulfate	48	5.0	5		mg/L	N/A	05/17/08	EPA 300.0
Alkalinity, Total (as CaCO3)	418	5.0	1		mg/L	N/A	05/16/08	SM 2320B
Solids, Total Dissolved	534	1.0	1		mg/L	N/A	05/20/08	SM 2540 C

ASDP 0359	**08-05-1588-3**	**05/15/08**	**Aqueous**

Comment(s): (68) Dilution analysis was performed outside the recommended holding time.

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrate (as N) (68)	7.9	0.50	5		mg/L	N/A	05/17/08	EPA 300.0
Solids, Total Dissolved	534	1.0	1		mg/L	N/A	05/20/08	SM 2540 C

Method Blank		**N/A**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chloride	ND	1.0	1		mg/L	N/A	05/16/08	EPA 300.0
Nitrate (as N)	ND	0.10	1		mg/L	N/A	05/16/08	EPA 300.0
Sulfate	ND	1.0	1		mg/L	N/A	05/16/08	EPA 300.0
Alkalinity, Total (as CaCO3)	ND	1.0	1		mg/L	N/A	05/16/08	SM 2320B
Solids, Total Dissolved	ND	1.0	1		mg/L	N/A	05/20/08	SM 2540 C
Carbon, Total Organic	ND	0.50	1		mg/L	N/A	05/17/08	SM 5310 D

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	05/16/08
Work Order No:	08-05-1588
Preparation:	EPA 3010A Total
Method:	EPA 6010B

Project LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-05-1471-1	**Aqueous**	**ICP 5300**	**05/16/08**	**05/17/08**	**080516SA6**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Calcium	4X	4X	77-113	4X	0-11	Q
Magnesium	4X	4X	56-140	4X	0-11	Q
Potassium	4X	4X	83-131	4X	0-7	Q
Sodium	4X	4X	73-127	4X	0-9	Q

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: 05/16/08
Work Order No: 08-05-1588
Preparation: EPA 3020A Total
Method: EPA 6020

Project LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
TPEF 0359	**Aqueous**	**ICP/MS A**	**05/19/08**	**05/19/08**	**080519S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	109	106	85-133	3	0-11	
Arsenic	100	98	73-127	2	0-11	
Barium	97	91	74-128	2	0-10	
Beryllium	92	86	56-122	6	0-11	
Cadmium	103	102	84-114	0	0-8	
Chromium	99	96	73-133	2	0-11	
Cobalt	99	96	79-121	3	0-10	
Copper	103	100	72-108	3	0-10	
Lead	103	102	79-121	1	0-10	
Molybdenum	105	103	83-137	3	0-10	
Nickel	104	99	68-122	4	0-10	
Selenium	92	89	59-125	3	0-12	
Silver	95	93	68-128	1	0-14	
Thallium	101	98	73-121	2	0-11	
Vanadium	103	100	77-137	2	0-15	
Zinc	92	88	43-145	4	0-39	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	05/16/08
Work Order No:	08-05-1588
Preparation:	EPA 7470A Filt.
Method:	EPA 7470A

Project LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-05-1781-1	**Aqueous**	**Mercury**	**05/20/08**	**05/20/08**	**080520S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	104	104	66-126	0	0-7	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received:	05/16/08
Work Order No:	08-05-1588
Preparation:	EPA 5030B
Method:	EPA 8260B

Project LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
TPIN 0359	**Aqueous**	**GC/MS OO**	**05/23/08**	**05/23/08**	**080523S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	99	97	88-118	2	0-7	
Carbon Tetrachloride	94	87	67-145	8	0-11	
Chlorobenzene	99	98	88-118	1	0-7	
1,2-Dibromoethane	98	99	70-130	1	0-30	
1,2-Dichlorobenzene	108	108	86-116	0	0-8	
1,1-Dichloroethene	96	93	70-130	4	0-25	
Ethylbenzene	109	107	70-130	2	0-30	
Toluene	101	98	87-123	3	0-8	
Trichloroethene	96	94	79-127	2	0-10	
Vinyl Chloride	90	89	69-129	0	0-13	
Methyl-t-Butyl Ether (MTBE)	99	97	71-131	2	0-13	
Tert-Butyl Alcohol (TBA)	92	96	36-168	5	0-45	
Diisopropyl Ether (DIPE)	105	101	81-123	4	0-9	
Ethyl-t-Butyl Ether (ETBE)	105	103	72-126	2	0-12	
Tert-Amyl-Methyl Ether (TAME)	105	105	72-126	0	0-12	
Ethanol	90	87	53-149	3	0-31	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-05-1588

Project: LEHR IRA Water Sampling

Matrix: Aqueous

Parameter	Method	Quality Control Sample ID	Date Analyzed	Date Extracted	MS% REC	MSD % REC	%REC CL	RPD	RPD CL	Qualifiers
Chloride	EPA 300.0	08-05-1591-2	05/17/08	N/A	107	107	56-134	0	0-3	
Nitrate (as N)	EPA 300.0	08-05-1591-2	05/17/08	N/A	111	112	58-142	0	0-6	
Sulfate	EPA 300.0	08-05-1591-2	05/17/08	N/A	106	106	49-133	0	0-3	
Carbon, Total Organic	SM 5310 D	TPIN 0359	05/17/08	N/A	97	97	70-130	1	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-05-1588

Project: LEHR IRA Water Sampling

Matrix: Aqueous

Parameter	Method	QC Sample ID	Date Analyzed	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Alkalinity, Total (as CaCO3)	SM 2320B	08-05-1333-1	05/16/08	440	440	0	0-25	
Solids, Total Dissolved	SM 2540 C	08-05-1760-1	05/20/08	270	282	4	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell		Date Received:	N/A
10540 White Rock Road, Suite 180		Work Order No:	08-05-1588
Rancho Cordova, CA 95670-7984		Preparation:	EPA 3010A Total
		Method:	EPA 6010B

Project: LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-003-8,293	**Aqueous**	**ICP 5300**	**05/16/08**	**05/17/08**	**080516LA6**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Calcium	100	103	80-120	2	0-20	
Magnesium	99	99	80-120	1	0-20	
Potassium	90	97	80-120	7	0-20	
Sodium	103	103	80-120	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-05-1588
Preparation: EPA 3020A Total
Method: EPA 6020

Project: LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
096-06-003-1,591	**Aqueous**	**ICP/MS A**	**05/19/08**	**05/19/08**	**080519L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	101	101	80-120	0	0-20	
Arsenic	103	102	80-120	1	0-20	
Barium	106	103	80-120	3	0-20	
Beryllium	95	99	80-120	4	0-20	
Cadmium	105	105	80-120	1	0-20	
Chromium	95	96	80-120	1	0-20	
Cobalt	99	98	80-120	2	0-20	
Copper	109	109	80-120	0	0-20	
Lead	99	96	80-120	3	0-20	
Molybdenum	99	99	80-120	0	0-20	
Nickel	106	105	80-120	1	0-20	
Selenium	103	100	80-120	3	0-20	
Silver	107	105	80-120	2	0-20	
Thallium	97	92	80-120	5	0-20	
Vanadium	95	93	80-120	2	0-20	
Zinc	104	105	80-120	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell		Date Received:	N/A
10540 White Rock Road, Suite 180		Work Order No:	08-05-1588
Rancho Cordova, CA 95670-7984		Preparation:	EPA 7470A Total
		Method:	EPA 7470A

Project: LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-04-008-3,496	**Aqueous**	**Mercury**	**05/20/08**	**05/20/08**	**080520L01A**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	109	108	85-121	1	0-4	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-05-1588
Preparation: EPA 5030B
Method: EPA 8260B

Project: LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-25,693	**Aqueous**	**GC/MS OO**	**05/23/08**	**05/23/08**	**080523L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	102	100	84-120	2	0-8	
Carbon Tetrachloride	94	91	63-147	3	0-10	
Chlorobenzene	102	101	89-119	0	0-7	
1,2-Dibromoethane	102	101	80-120	1	0-20	
1,2-Dichlorobenzene	110	111	89-119	1	0-9	
1,1-Dichloroethene	98	98	77-125	0	0-16	
Ethylbenzene	110	110	80-120	0	0-20	
Toluene	104	100	83-125	3	0-9	
Trichloroethene	98	96	89-119	3	0-8	
Vinyl Chloride	97	93	63-135	5	0-13	
Methyl-t-Butyl Ether (MTBE)	100	102	82-118	2	0-13	
Tert-Butyl Alcohol (TBA)	95	97	46-154	2	0-32	
Diisopropyl Ether (DIPE)	108	106	81-123	2	0-11	
Ethyl-t-Butyl Ether (ETBE)	105	107	74-122	2	0-12	
Tert-Amyl-Methyl Ether (TAME)	108	107	76-124	2	0-10	
Ethanol	98	92	60-138	7	0-32	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-05-1588

Project: LEHR IRA Water Sampling

Matrix: Aqueous

Parameter	Method	Quality Control Sample ID	Date Extracted	Date Analyzed	LCS % REC	LCSD % REC	%REC CL	RPD	RPD CL	Qual
Chloride	EPA 300.0	099-05-118-4,516	N/A	05/16/08	98	99	81-111	1	0-5	
Nitrate (as N)	EPA 300.0	099-05-118-4,516	N/A	05/16/08	95	97	87-111	2	0-12	
Sulfate	EPA 300.0	099-05-118-4,516	N/A	05/16/08	96	94	89-107	2	0-13	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-05-1588

Project: LEHR IRA Water Sampling

Matrix : Aqueous

Parameter	Method	Quality Control Sample ID	Date Analyzed	Date Extracted	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Carbon, Total Organic	SM 5310 D	099-05-097-2,971	05/17/08	N/A	5.00	5.08	102	80-120	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-05-1588

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

BROWN AND CALDWELL

Brown and Caldwell
Environmental Engineers and Consultants
10540 White Rock Road Suite 180
Rancho Cordova, CA 95670

Field Chain-of-Custody Form

1588

Lab Name and Address:	Project Name:	Date:	Page: of	P.O.#
Virendra Patel (714) 895-5494 Calscience Environmental Laboratories, Inc 7440 Lincoln Way Garden Grove, CA 92841-1427	LEHR IRA Water Sampling	5/15/08	1 of 1	131261-200

Sample ID	Collection	Matrix Code*	Sample Type**	Field Preserved (Y or N)	Number of Containers	H-3	C-14	VOA	Nitrate as N	TDS	Alkalinity	Anions	Metals	TOC	Cations Ca, Mg, Na, K	Total Chrome						Comments
TPIN 0359	Date: 5/15/08 Time: 1020	GW	G	Y	5	✓	✓	✓						✓								
TPEF 0359	Date: 5/15/08 Time: 1010	GW	G	Y	5			✓	✓	✓	✓	✓	✓		✓							
ASDP 0359	Date: 5/15/08 Time: 1020	GW	G	Y	1				✓	✓												
TBIRA 0027	Date: 5/15/08 Time: 1020	O	O	Y	2			✓														

Relinquished by: (Signature) Kyle Bryant — Date: 5/15/08 Time: 1045

Received by: (Signature) Fed Ex — Date: Time:

Relinquished by: (Signature) Fed Ex: (863117723737) — Date: 5/16/08 Time: 1303

Cooler Numbers

Comments:
Note: This shipment is not intended to fall under the authority of a radiological use license.

Received for Laboratory By: (Signature) [illegible] — Date: 5/16/08 Time: 1303

Method of Shipment: Fed Ex — Airbill No. 863117723737

Cooler Survey (pass / fail) _____ If FAIL do not open; contact the Program Development Department and the Radiation Safety Officer IMMEDIATELY.

Surveyed by: (*Signature*) — Date: Time:

Cooler Condition Upon Receipt at Laboratory:

Seals Intact: YES____ NO____

Internal Cooler Temp: ____°C; Samples in good condition: (Y/N) ____; Samples surveyed (pass/fail) ____

*Sample Matrix Codes

SW - Surface Water	AR - Air	SD - Sediment	
GW - Ground Water	SL - Soil	WW - Waste Water	BI - Biota
TW - Treatment Water	SG - Sludge	FI - Filter	O - Other

**Sample Type Codes

G - Grab
C - Composite
O - Other

EHSCOC.FRM

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 0 5 - 1 5 8 8

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: Brown + Caldwell **DATE:** 5/16/08

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature.

_____ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

_____ °C Temperature blank.
11.6 °C IR thermometer.
_____ Ambient temperature.

Initial: [illegible]

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____ Not Present: ✓

Initial: [illegible]

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)	✓		
VOA vial(s) free of headspace.	✓		
Tedlar bag(s) free of condensation			✓

Initial: [illegible]

COMMENTS:

GEL Laboratories LLC
a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178

www.gel.com

May 28, 2008

Mr. Virendra R. Patel
Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, California 92841-1427

Re: Carbon 14
Work Order: 208718

Dear Mr. Patel:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on May 20, 2008. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4297.

Sincerely,

Amanda Rasco
Project Manager

Purchase Order: 08-05-1588
Enclosures

problem solved

Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

TO: GEL Laboratories, Inc.

208718

CHAIN OF CUSTODY RECORD

DATE: 05/19/08

PAGE: 1 OF 1

LABORATORY CLIENT: Calscience Environmental Laboratories, Inc.

ADDRESS: 7440 Lincoln Way

CITY: Garden Grove, CA 92841-1427

TEL: (714) 895-5494

E-MAIL: vpatel@calscience.com

CLIENT PROJECT NAME / NUMBER: 08-05-1588

P.O. NO.: 08-05-1588

PROJECT CONTACT: Virendra Patel

QUOTE NO.:

SAMPLER(S): (PRINT)

LAB USE ONLY

TURNAROUND TIME

☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☐ 5 DAYS ☒ NORMAL

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)

☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ____/____/____

SPECIAL INSTRUCTIONS

Ship To: GEL Laboratories, Inc.
2040 Savage Rd.
Charleston, SC 29407

Attention: Amanda Rasco 843-556-8171

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	Matrix	#Cont	Carbon-14 by EERF-C	Detection Limit of 20 pCi/L		Send PDF via Email	Send Invoice with Results
	TPIN 0359	05/15/08	1020	GW	1	X	X		X	X

Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
Wcbatu 958734001791 (CALSCIENCE)	Richard Arhee / GEL 5/20/08 @ 0745	05/19/08	1555
Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: CALS	**SDG/ARCOC/Work Order:** 208718
Received By: Ricky Albee	**Date Received:** 5/20/08

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
COC/Samples marked as radioactive?		✓	Maximum Counts Observed*: 40 cpm
Classified Radioactive II by RSO?		✓	
COC/Samples marked containing PCBs?		✓	
Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		✓	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (4 +/- 2 C)?		✓		Preservation Method: ~~ice bags~~ blue ice dry ice none other (describe) 4oc
3	Chain of custody documents included with shipment?	✓			
4	Sample containers intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		✓		Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		✓		Sample ID's and containers affected:
7	Are Encore containers present?			✓	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	✓			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Sample ID's affected:
11	Number of containers received match number indicated on COC?	✓			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	✓			

Comments: FedEx 9587 3400 1791

PM (or PMA) review: Initials AJN Date 5/20/08

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

CALS001 Calscience Environmental Laboratory, Inc.

Client SDG: 208718 GEL Work Order: 208718

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Amanda Rasco.

Amanda Rasco

Reviewed by

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : Calscience Environmental Laboratories, Inc.
Address : 7440 Lincoln Way
Garden Grove, California 92841−−1427

Report Date: May 28, 2008

Contact: Mr. Virendra R. Patel
Project: **Carbon 14**

Client Sample ID:	TPIN 0359	Project:	CALS00101
Sample ID:	208718001	Client ID:	CALS001
Matrix:	Ground Water		
Collect Date:	15−MAY−08 10:20		
Receive Date:	20−MAY−08		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Rad Liquid Scintillation Analysis											
Liquid Scint C14, Liquid "As Received"											
Carbon−14	U	−4.6	+/−9.96	17.5	20.0	pCi/L		SXB4 05/23/08	1010	757032	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA EERF C−01 Modified	

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: May 28, 2008
Page 1 of 2

Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, California

Contact: **Mr. Virendra R. Patel**

Workorder: **208718**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Liquid Scintillation											
Batch 757032											
QC1201583052 208718001 DUP											
Carbon-14		U	-4.6 +/-9.96	U	-4.64 +/-10.0	pCi/L	1		N/A	SXB4	05/23/08 10:41
QC1201583054 LCS											
Carbon-14	523				504 +/-28.9	pCi/L		96	(75%-125%)		05/22/08 09:31
QC1201583051 MB											
Carbon-14				U	0.941 +/-13.8	pCi/L					05/22/08 08:42
QC1201583053 208718001 MS											
Carbon-14	523	U	-4.6 +/-9.96		509 +/-28.7	pCi/L		97	(75%-125%)		05/22/08 09:14

Notes:
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- M M if above MDC and less than LLD
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy--Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.

GEL LABORATORIES LLC
2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Workorder: 208718

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

h Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

List of current GEL Certifications as of 28 May 2008

State	Certification
Arizona	AZ0668
Arkansas	88-0651
CLIA	42D0904046
California - NELAP	01151CA
Colorado	GEL
Connecticut	PH-0169
Dept. of Navy	NFESC 413
EPA Region 5	WG-15J
Florida - NELAP	E87156
Georgia	E87156 (FL/NELAP)
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois - NELAP	200029
Indiana	C-SC-01
Kansas - NELAP	E-10332
Kentucky	90129
Louisiana - NELAP	03046
Maryland	270
Massachusetts	M-SC012
Nevada	SC00012
New Jersey - NELAP	SC002
New Mexico	FL NELAP E87156
New York - NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania - NELAP	68-00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas - NELAP	T104704235-07B-TX
U.S. Dept. of Agriculture	S-52597
Utah - NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Calscience Environmental Laboratories, Inc.

Supplemental Report 1

May 30, 2008

Subcontract analyses are reported as a stand-alone report.

Joe Turner
Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Subject: **Calscience Work Order No.: 08-05-1588**
Client Reference: LEHR IRA Water Sampling

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 5/16/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Virendra Patel
Project Manager

BROWN AND CALDWELL

Brown and Caldwell
Environmental Engineers and Consultants
10540 White Rock Road Suite 180
Rancho Cordova, CA 95670

Field Chain-of-Custody Form

1588

Lab Name and Address:	Project Name:	Date:	Page: of	P.O.#
Virendra Patel (714) 895-5494 Calscience Environmental Laboratories, Inc 7440 Lincoln Way Garden Grove, CA 92841-1427	LEHR IRA Water Sampling	5/15/08	1 of 1	131261-200

Sample ID	Collection	Matrix Code*	Sample Type**	Field Preserved (Y or N)	Number of Containers	H-3	C-14	VOA	Nitrate as N	TDS	Alkalinity	Anions	Metals	TOC	Cations Ca, Mg, Na, K	Total Chrome						Comments
TPIN 0359	Date: 5/15/08 Time: 1020	GW	G	Y	5	✓	✓	✓						✓								
TPEF 0359	Date: 5/15/08 Time: 1010	GW	G	Y	5			✓	✓	✓	✓	✓	✓		✓							
ASDP 0359	Date: 5/15/08 Time: 1020	GW	G	Y	1				✓	✓												
TBIRA 0027	Date: 5/15/08 Time: 1020	O	O	Y	2			✓														

Relinquished by: (Signature) Kyle Bryant — Date: 5/15/08 Time: 1045

Received by: (Signature) Fed Ex — Date: Time:

Relinquished by: (Signature) Fed Ex: (863117723737) — Date: 5/16/08 Time: 1303

Cooler Numbers

Comments:
Note: This shipment is not intended to fall under the authority of a radiological use license.

Received for Laboratory By: (Signature) [illegible] — Date: 5/16/08 Time: 1303

Method of Shipment: Fed Ex — Airbill No. 863117723737

Cooler Survey (pass / fail) _____ If FAIL do not open; contact the Program Development Department and the Radiation Safety Officer IMMEDIATELY.

Surveyed by: (*Signature*) — Date: Time:

Cooler Condition Upon Receipt at Laboratory:

Seals Intact: YES____ NO____

Internal Cooler Temp: _____°C; Samples in good condition: (Y/N) _____; Samples surveyed (pass/fail) _____

*Sample Matrix Codes

SW - Surface Water	AR - Air	SD - Sediment	
GW - Ground Water	SL - Soil	WW - Waste Water	BI - Biota
TW - Treatment Water	SG - Sludge	FI - Filter	O - Other

**Sample Type Codes

G - Grab
C - Composite
O - Other

EHSCOC.FRM

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 0 5 - 1 5 8 8

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: Brown + Caldwell **DATE:** 5/16/08

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature.

_____ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

_____ °C Temperature blank.
11.6 °C IR thermometer.
_____ Ambient temperature.

Initial: [illegible]

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____ Not Present: ✓

Initial: [illegible]

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)	✓		
VOA vial(s) free of headspace.	✓		
Tedlar bag(s) free of condensation			✓

Initial: [illegible]

COMMENTS:

ANALYTICAL CHEMISTS

May 30, 2008

Lab ID : SP 805362
Customer : 2017756

Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Laboratory Report

Introduction: This report package contains total of 3 pages divided into three sections:

Case Narrative (1 Page): An overview of the work performed at FGL.
Chemical Results (1 Page): Results for each sample submitted.
Quality Control (1 Page): Supporting Quality Control (QC) results.

This report package pertains to the following sample:

Sample Description	Date Sampled	Date Received	FGL Lab Sample ID #	Matrix
TPIN 0359	05/15/2008	05/20/2008	SP 805362-01	GW

Sampling and Receipt Information: The sample was received, prepared and analyzed within the method specified holding times. All samples arrived at 8 °C. All samples were checked for pH if acid or base preservation required (except for VOAs). For details of sample receipt information, please see the attached Chain of Custody and Condition Upon Receipt Forms.

Quality Control: All samples were prepared and analyzed according to the following tables:

Radio Chemistry QC

906.0	05/29/2008:A217 All preparation quality controls are within established criteria.
	05/29/2008:B - LS201 All analysis quality controls are within established criteria.

Certification: I certify that this data package is in compliance with NELAC Standards, both technically and for completeness, except for any conditions listed above. Release of the data contained in this data package is authorized by the Laboratory Director or his designee, as verified by the following signature.

FGL ENVIRONMENTAL

KAD:vt

Kelly A. Dunnahoo, B.S.
Laboratory Director

Corporate Offices & Laboratory
853 Corporation Street
Santa Paula, CA 93060
TEL: (805) 392-2000
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Mobile: (559) 737-2399

ANALYTICAL CHEMISTS

May 30, 2008

Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Description : TPIN 0359
Project : 08-05-1588

Lab ID : SP 805362-01
Customer ID: 2-17756

Sampled On : May 15, 2008-10:20
Sampled By : Not Available
Received On: May 20, 2008-13:30
Matrix : Ground Water

Sample Results - Radio

Constituents	Result ± Error	MDA	Units	MCL	Preparation Method	Preparation Date/ID	Analysis Method	Analysis Date/ID
Radio Chemistry P:1								
Tritium	0.000 ± 200	400	pCi/L	20,000	906.0	05/29/08:A217	906.0	05/29/2008:B01

MDA = Minimum Detectable Activity; Data utilized by the DHS to determine matrix interference. MCL = Maximium Contaminat Level.
Containers: (P) Plastic Preservatives: (1) Cool 4°C

CCR Section 64442: Compliance Note: If Gross Alpha (Result + (0.84 x error)) exceeds 5 pCi/L run Uranium. If Gross Alpha minus Uranium exceeds 5 pCi/L run Radium 226. Samples that exceed 5 pCi/L are held for 6 months at FGL.

Compliance:
Gross Alpha - Uranium ≤ 15 pCi/L
Uranium ≤ 20 pCi/L
Radium 226 + Radium 228 ≤ 5 pCi/L

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May 30, 2008

Calscience Environmental Laboratories

Lab ID : SP 805362
Customer : 2-17756

Quality Control - Radio

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Tritium	906.0	05/29/2008:A217	Blank	pCi/L		ND	<518	
			LCS	pCi/L	2375	83.6%	75-125	
			BS	pCi/L	2375	99.2%	75-125	
			BSD	pCi/L	2375	96.3%	75-125	
			BSRPD	pCi/L		3.2%	≤25	
	906.0	05/29/2008:B	00-CCB	cpm		11	12±1.7	
			00-CCV	cpm	771.5	22.5%	25.5±4.5	

Definitions

Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.
BS/BSD : Blank Spikes - A blank is spiked with a known amount of analyte. It is prepared to verify that the preparation process is not affecting analyte recovery.
CCB : Continuing Calibration Blank - Analyzed to verify the instrument baseline is within criteria.
CCV : Continuing Calibration Verification - Analyzed to verify the instrument calibration is within criteria.
ND : Non-detect - Result was below the DQO listed for the analyte.
DQO : Data Quality Objective - This is the criteria against which the quality control data is compared.

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Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

TO: FGL

805362

CHAIN OF CUSTODY RECORD

DATE: 05/19/08
PAGE: 1 OF 1

LABORATORY CLIENT: Calscience Environmental Laboratories, Inc.
ADDRESS: 7440 Lincoln Way
CITY: Garden Grove, CA 92841-1427
TEL: (714) 895-5494
E-MAIL: vpatel@calscience.com

CLIENT PROJECT NAME / NUMBER: 08-05-1588
P.O. NO.: 08-05-1588
PROJECT CONTACT: Virendra Patel
QUOTE NO.:
LAB USE ONLY
SAMPLER(S): (PRINT)

TURNAROUND TIME
☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☐ 5 DAYS ☒ NORMAL

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___ / ___ / ___

SPECIAL INSTRUCTIONS
SUB. To: FGL
853 Corporation St.
Santa Paula , CA 93061-3005
(805)392-2000

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	Matrix	#Cont	Tritium EPA 906.0	Excel EDD
	TPIN 0359	05/15/08	1020	GW	1	X	X

Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
Wbatt 509596510 (CALSCIENCE)		05/19/08	1427
Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
Relinquished by: (Signature) Goldenstate overnight	Received by / Affiliation: (Signature)	Date: 5/20/08	Time: 1330

Santa Paula - Condition Upon Receipt (Attach to COC)

Sample Receipt:

1. Number of ice chests/packages received: 1
   Note as OTC if received over the counter unpackaged.
2. Were samples received in a chilled condition? Temps: 8 / ____ / ____ / ____ / ____
   Acceptable is 2° to 6° C. Also acceptable is received on ice (ROI) for the same day of sampling or received at room temperature (RRT) if sampled within one hour of receipt. Client contact for temperature failures must be documented below. If many packages are received at one time check for tests/H.T.'s/rushes/Bacti's to prioritize further review. Please notify Microbiology personnel immediately of bacti samples received.
3. Do the number of bottles received agree with the COC? Yes No N/A
4. Were samples received intact? (i.e. no broken bottles, leaks etc.) Yes No
5. Were sample custody seals intact? N/A Yes No

Sign and date the COC, obtain LIMS sample numbers, select methods/tests and print labels.

Sample Verification, Labeling and Distribution:

1. Were all requested analyses understood and acceptable? Yes No
2. Did bottle labels correspond with the client's ID's? Yes No
3. Were all bottles requiring sample preservation properly preserved? Yes No N/A FCL
4. VOAs checked for Headspace? Yes No N/A
5. Were all analyses within holding times at time of receipt? Yes No
6. Have rush or project due dates been checked and accepted? N/A Yes No

Attach labels to the containers and include a copy of the COC for lab delivery.

Sample Receipt, Login and Verification completed by (initials): ll

Discrepancy Documentation:

Any items above which are "No" or do not meet specifications (i.e. temps) must be resolved.

1. Person Contacted:_____ Phone Number:_____
   Initiated By:_____ Date:_____
   Problem:

   Resolution:

2. Person Contacted:_____ Phone Number:_____
   Initiated By:_____ Date:_____
   Problem:

   Resolution:

(2-17756)
Calscience Environmental Laboratories
SP 0805362
IV-05/20/2008-13:54:23

Calscience Environmental Laboratories, Inc.

June 20, 2008

Joe Turner
Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Subject: **Calscience Work Order No.: 08-06-1132**
Client Reference: LEHR IRA Water Sampling

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 6/12/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Virendra R Patel

Calscience Environmental
Laboratories, Inc.
Virendra Patel
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	06/12/08
10540 White Rock Road, Suite 180		Work Order No:	08-06-1132
Rancho Cordova, CA 95670-7984		Preparation:	EPA 3010A Total
		Method:	EPA 6010B
		Units:	mg/L
Project: LEHR IRA Water Sampling			Page 1 of 1

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPEF 0360	**08-06-1132-2-D**	**06/11/08 13:20**	**Aqueous**	**ICP 5300**	**06/12/08**	**06/16/08 11:52**	**080612LA5**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Calcium	47.2	0.100	1		Potassium	2.47	0.500	1	
Magnesium	82.3	0.100	1		Sodium	51.9	0.500	1	

Method Blank	**097-01-003-8,366**	**N/A**	**Aqueous**	**ICP 5300**	**06/12/08**	**06/16/08 11:34**	**080612LA5**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Calcium	ND	0.100	1		Potassium	ND	0.500	1	
Magnesium	ND	0.100	1		Sodium	ND	0.500	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: 06/12/08
Work Order No: 08-06-1132
Preparation: EPA 3020A Total / EPA 7470A Total
Method: EPA 6020 / EPA 7470A
Units: mg/L

Project: LEHR IRA Water Sampling

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPEF 0360	**08-06-1132-2-D**	**06/11/08 13:20**	**Aqueous**	**ICP/MS A**	**06/16/08**	**06/17/08 16:05**	**080616L07**

Comment(s): -Mercury was analyzed on 6/13/2008 7:31:16 PM with batch 080613L03

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	0.00100	1		Mercury	ND	0.000500	1	
Arsenic	0.00254	0.00100	1		Molybdenum	0.00171	0.00100	1	
Barium	0.212	0.00100	1		Nickel	0.00210	0.00100	1	
Beryllium	ND	0.00100	1		Selenium	0.00298	0.00100	1	
Chromium	0.0317	0.00100	1		Silver	ND	0.00100	1	
Cobalt	ND	0.00100	1		Thallium	ND	0.00100	1	
Copper	ND	0.00100	1		Vanadium	0.0101	0.00100	1	
Lead	ND	0.00100	1		Zinc	0.00600	0.00500	1	

Method Blank	**096-06-003-1,612**	**N/A**	**Aqueous**	**ICP/MS A**	**06/16/08**	**06/17/08 14:38**	**080616L07**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	0.00100	1		Molybdenum	ND	0.00100	1	
Arsenic	ND	0.00100	1		Nickel	ND	0.00100	1	
Barium	ND	0.00100	1		Selenium	ND	0.00100	1	
Beryllium	ND	0.00100	1		Silver	ND	0.00100	1	
Chromium	ND	0.00100	1		Thallium	ND	0.00100	1	
Cobalt	ND	0.00100	1		Vanadium	ND	0.00100	1	
Copper	ND	0.00100	1		Zinc	ND	0.00500	1	
Lead	ND	0.00100	1						

Method Blank	**099-04-008-3,528**	**N/A**	**Aqueous**	**Mercury**	**06/13/08**	**06/13/08 19:04**	**080613L03**

Parameter	Result	RL	DF	Qual
Mercury	ND	0.000500	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	06/12/08
10540 White Rock Road, Suite 180		Work Order No:	08-06-1132
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: LEHR IRA Water Sampling			Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPIN 0360	**08-06-1132-1-A**	**06/11/08 13:30**	**Aqueous**	**GC/MS U**	**06/13/08**	**06/14/08 07:52**	**080613L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	48	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	117	82-130		1,2-Dichloroethane-d4	113	75-141	
Toluene-d8	95	83-113		1,4-Bromofluorobenzene	85	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	06/12/08
10540 White Rock Road, Suite 180		Work Order No:	08-06-1132
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: LEHR IRA Water Sampling			Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPEF 0360	**08-06-1132-2-A**	**06/11/08 13:20**	**Aqueous**	**GC/MS U**	**06/13/08**	**06/14/08 08:21**	**080613L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	117	82-130		1,2-Dichloroethane-d4	113	75-141	
Toluene-d8	98	83-113		1,4-Bromofluorobenzene	85	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	06/12/08
10540 White Rock Road, Suite 180		Work Order No:	08-06-1132
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: LEHR IRA Water Sampling			Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TBIRA 0028	**08-06-1132-4-B**	**06/11/08 00:00**	**Aqueous**	**GC/MS U**	**06/14/08**	**06/14/08 15:52**	**080614L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	110	82-130		1,2-Dichloroethane-d4	108	75-141	
Toluene-d8	101	83-113		1,4-Bromofluorobenzene	89	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	06/12/08
10540 White Rock Road, Suite 180		Work Order No:	08-06-1132
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: LEHR IRA Water Sampling			Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-25,959**	**N/A**	**Aqueous**	**GC/MS U**	**06/13/08**	**06/14/08 04:34**	**080613L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	115	82-130		1,2-Dichloroethane-d4	112	75-141	
Toluene-d8	102	83-113		1,4-Bromofluorobenzene	89	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell		Date Received:	06/12/08
10540 White Rock Road, Suite 180		Work Order No:	08-06-1132
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: LEHR IRA Water Sampling			Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-25,966**	**N/A**	**Aqueous**	**GC/MS U**	**06/14/08**	**06/14/08 12:52**	**080614L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	50	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	110	82-130		1,2-Dichloroethane-d4	110	75-141	
Toluene-d8	101	83-113		1,4-Bromofluorobenzene	89	70-118	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: 06/12/08
Work Order No: 08-06-1132

Project: LEHR IRA Water Sampling

Client Sample Number	Lab Sample Number	Date Collected	Matrix
TPIN 0360	**08-06-1132-1**	**06/11/08**	**Aqueous**

Comment(s): (68) Dilution analysis was performed outside the recommended holding time.

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Carbon, Total Organic	2.2	0.50	1		mg/L	N/A	06/14/08	SM 5310 D

TPEF 0360	**08-06-1132-2**	**06/11/08**	**Aqueous**

Comment(s): (68) Dilution analysis was performed outside the recommended holding time.

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chloride (68)	23	5.0	5		mg/L	N/A	06/12/08	EPA 300.0
Nitrate (as N) (68)	8.5	0.50	5		mg/L	N/A	06/12/08	EPA 300.0
Sulfate (68)	50	5.0	5		mg/L	N/A	06/12/08	EPA 300.0
Alkalinity, Total (as CaCO3)	416	5.0	1		mg/L	N/A	06/18/08	SM 2320B
Solids, Total Dissolved	486	1.0	1		mg/L	N/A	06/17/08	SM 2540 C

ASDP 0360	**08-06-1132-3**	**06/11/08**	**Aqueous**

Comment(s): (68) Dilution analysis was performed outside the recommended holding time.

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrate (as N) (68)	8.3	0.50	5		mg/L	N/A	06/12/08	EPA 300.0
Solids, Total Dissolved	502	1.0	1		mg/L	N/A	06/17/08	SM 2540 C

Method Blank		**N/A**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chloride	ND	1.0	1		mg/L	N/A	06/12/08	EPA 300.0
Nitrate (as N)	ND	0.10	1		mg/L	N/A	06/12/08	EPA 300.0
Sulfate	ND	1.0	1		mg/L	N/A	06/12/08	EPA 300.0
Alkalinity, Total (as CaCO3)	ND	1.0	1		mg/L	N/A	06/18/08	SM 2320B
Solids, Total Dissolved	ND	1.0	1		mg/L	N/A	06/17/08	SM 2540 C
Carbon, Total Organic	ND	0.50	1		mg/L	N/A	06/14/08	SM 5310 D

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell		Date Received:	06/12/08
10540 White Rock Road, Suite 180		Work Order No:	08-06-1132
Rancho Cordova, CA 95670-7984		Preparation:	EPA 3010A Total
		Method:	EPA 6010B

Project LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-05-2433-1	**Aqueous**	**ICP 5300**	**06/12/08**	**06/16/08**	**080612SA5**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Calcium	4X	4X	77-113	4X	0-11	Q
Magnesium	4X	4X	56-140	4X	0-11	Q
Potassium	4X	4X	83-131	4X	0-7	Q
Sodium	4X	4X	73-127	4X	0-9	Q

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: 06/12/08
Work Order No: 08-06-1132
Preparation: EPA 3005A Filt.
Method: EPA 6020

Project LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-06-1380-1	**Aqueous**	**ICP/MS A**	**06/16/08**	**06/17/08**	**080616S07**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	100	105	85-133	4	0-11	
Arsenic	90	94	73-127	4	0-11	
Barium	113	96	74-128	3	0-10	
Beryllium	86	92	56-122	7	0-11	
Chromium	91	96	73-133	5	0-11	
Cobalt	92	97	79-121	5	0-10	
Copper	83	87	72-108	5	0-10	
Lead	111	116	79-121	5	0-10	
Molybdenum	108	112	83-137	4	0-10	
Nickel	84	87	68-122	3	0-10	
Selenium	83	84	59-125	1	0-12	
Silver	94	92	68-128	2	0-14	
Thallium	108	113	73-121	5	0-11	
Vanadium	96	101	77-137	5	0-15	
Zinc	78	81	43-145	3	0-39	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - PDS / PDSD

Brown and Caldwell		Date Received	06/12/08
10540 White Rock Road, Suite 180		Work Order No:	08-06-1132
Rancho Cordova, CA 95670-7984		Preparation:	EPA 3005A Filt.
		Method:	EPA 6020

Project: LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
08-06-1380-1	**Aqueous**	**ICP/MS A**	**06/16/08**	**06/17/08**	**080616S07**

Parameter	PDS %REC	PDSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	103	101	75-125	1	0-11	
Arsenic	93	91	75-125	2	0-11	
Barium	95	95	75-125	0	0-10	
Beryllium	96	103	75-125	7	0-11	
Chromium	96	95	75-125	0	0-11	
Cobalt	95	96	75-125	0	0-10	
Copper	85	84	75-125	1	0-10	
Lead	113	113	75-125	0	0-10	
Molybdenum	111	109	75-125	2	0-10	
Nickel	86	87	75-125	1	0-10	
Selenium	83	82	75-125	2	0-12	
Silver	75	73	75-125	2	0-14	X
Thallium	110	110	75-125	0	0-11	
Vanadium	101	101	75-125	0	0-15	
Zinc	77	76	75-125	0	0-39	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell		Date Received:	06/12/08
10540 White Rock Road, Suite 180		Work Order No:	08-06-1132
Rancho Cordova, CA 95670-7984		Preparation:	EPA 7470A Total
		Method:	EPA 7470A

Project LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-06-1084-6	**Aqueous**	**Mercury**	**06/13/08**	**06/13/08**	**080613S03**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	104	105	66-126	1	0-7	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: 06/12/08
Work Order No: 08-06-1132
Preparation: EPA 5030B
Method: EPA 8260B

Project LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-06-1062-1	**Aqueous**	**GC/MS U**	**06/13/08**	**06/14/08**	**080613S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	107	104	88-118	2	0-7	
Carbon Tetrachloride	91	96	67-145	5	0-11	
Chlorobenzene	108	109	88-118	1	0-7	
1,2-Dibromoethane	102	109	70-130	6	0-30	
1,2-Dichlorobenzene	110	108	86-116	2	0-8	
1,1-Dichloroethene	96	106	70-130	10	0-25	
Ethylbenzene	120	117	70-130	2	0-30	
Toluene	117	110	87-123	6	0-8	
Trichloroethene	107	105	79-127	1	0-10	
Vinyl Chloride	89	95	69-129	7	0-13	
Methyl-t-Butyl Ether (MTBE)	102	109	71-131	6	0-13	
Tert-Butyl Alcohol (TBA)	114	116	36-168	2	0-45	
Diisopropyl Ether (DIPE)	102	107	81-123	5	0-9	
Ethyl-t-Butyl Ether (ETBE)	103	109	72-126	6	0-12	
Tert-Amyl-Methyl Ether (TAME)	114	111	72-126	3	0-12	
Ethanol	100	110	53-149	9	0-31	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: 06/12/08
Work Order No: 08-06-1132
Preparation: EPA 5030B
Method: EPA 8260B

Project LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-06-0718-9	**Aqueous**	**GC/MS U**	**06/14/08**	**06/14/08**	**080614S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	98	96	88-118	2	0-7	
Carbon Tetrachloride	90	89	67-145	1	0-11	
Chlorobenzene	99	102	88-118	3	0-7	
1,2-Dibromoethane	103	104	70-130	1	0-30	
1,2-Dichlorobenzene	100	100	86-116	1	0-8	
1,1-Dichloroethene	97	94	70-130	3	0-25	
Ethylbenzene	107	106	70-130	1	0-30	
Toluene	101	99	87-123	2	0-8	
Trichloroethene	98	97	79-127	1	0-10	
Vinyl Chloride	87	86	69-129	1	0-13	
Methyl-t-Butyl Ether (MTBE)	99	98	71-131	2	0-13	
Tert-Butyl Alcohol (TBA)	106	102	36-168	4	0-45	
Diisopropyl Ether (DIPE)	103	99	81-123	4	0-9	
Ethyl-t-Butyl Ether (ETBE)	100	99	72-126	1	0-12	
Tert-Amyl-Methyl Ether (TAME)	103	101	72-126	1	0-12	
Ethanol	97	94	53-149	3	0-31	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-06-1132

Project: LEHR IRA Water Sampling

Matrix: Aqueous

Parameter	Method	Quality Control Sample ID	Date Analyzed	Date Extracted	MS% REC	MSD % REC	%REC CL	RPD	RPD CL	Qualifiers
Chloride	EPA 300.0	08-06-1097-1	06/13/08	N/A	104	106	56-134	1	0-3	
Nitrate (as N)	EPA 300.0	08-06-1097-1	06/13/08	N/A	91	93	58-142	2	0-6	
Sulfate	EPA 300.0	08-06-1097-1	06/13/08	N/A	110	110	49-133	0	0-3	
Carbon, Total Organic	SM 5310 D	08-06-1134-1	06/14/08	N/A	101	101	70-130	0	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-06-1132

Project: LEHR IRA Water Sampling

Matrix: Aqueous

Parameter	Method	QC Sample ID	Date Analyzed	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Alkalinity, Total (as CaCO3)	SM 2320B	08-06-1134-1	06/18/08	64.0	60.0	6	0-25	
Bicarbonate (as CaCO3)	SM 2320B	08-06-1134-1	06/18/08	64.0	60.0	6	0-25	
Carbonate (as CaCO3)	SM 2320B	08-06-1134-1	06/18/08	ND	ND	NA	0-25	
Hydroxide (as CaCO3)	SM 2320B	08-06-1134-1	06/18/08	ND	ND	NA	0-25	
Solids, Total Dissolved	SM 2540 C	08-06-1154-2	06/17/08	1210	1170	3	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell		Date Received:	N/A
10540 White Rock Road, Suite 180		Work Order No:	08-06-1132
Rancho Cordova, CA 95670-7984		Preparation:	EPA 3010A Total
		Method:	EPA 6010B

Project: LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-003-8,366	**Aqueous**	**ICP 5300**	**06/12/08**	**06/16/08**	**080612LA5**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Calcium	102	106	80-120	3	0-20	
Magnesium	98	100	80-120	2	0-20	
Potassium	95	95	80-120	0	0-20	
Sodium	103	105	80-120	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-06-1132
Preparation: EPA 3020A Total
Method: EPA 6020

Project: LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
096-06-003-1,612	**Aqueous**	**ICP/MS A**	**06/16/08**	**06/17/08**	**080616L07**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	93	94	80-120	1	0-20	
Arsenic	104	105	80-120	1	0-20	
Barium	99	99	80-120	0	0-20	
Beryllium	102	101	80-120	0	0-20	
Chromium	101	101	80-120	0	0-20	
Cobalt	105	105	80-120	0	0-20	
Copper	108	109	80-120	1	0-20	
Lead	99	101	80-120	2	0-20	
Molybdenum	96	96	80-120	0	0-20	
Nickel	106	105	80-120	0	0-20	
Selenium	103	102	80-120	0	0-20	
Silver	102	100	80-120	2	0-20	
Thallium	95	97	80-120	2	0-20	
Vanadium	100	102	80-120	2	0-20	
Zinc	103	106	80-120	2	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell		Date Received:	N/A
10540 White Rock Road, Suite 180		Work Order No:	08-06-1132
Rancho Cordova, CA 95670-7984		Preparation:	EPA 7470A Total
		Method:	EPA 7470A

Project: LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-04-008-3,528	**Aqueous**	**Mercury**	**06/13/08**	**06/13/08**	**080613L03**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	106	107	85-121	1	0-4	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell		Date Received:	N/A
10540 White Rock Road, Suite 180		Work Order No:	08-06-1132
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project: LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-25,959	**Aqueous**	**GC/MS U**	**06/13/08**	**06/14/08**	**080613L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	106	106	84-120	0	0-8	
Carbon Tetrachloride	90	91	63-147	0	0-10	
Chlorobenzene	107	109	89-119	2	0-7	
1,2-Dibromoethane	106	103	80-120	3	0-20	
1,2-Dichlorobenzene	106	109	89-119	3	0-9	
1,1-Dichloroethene	99	99	77-125	1	0-16	
Ethylbenzene	117	117	80-120	0	0-20	
Toluene	116	116	83-125	0	0-9	
Trichloroethene	105	107	89-119	2	0-8	
Vinyl Chloride	93	94	63-135	1	0-13	
Methyl-t-Butyl Ether (MTBE)	108	104	82-118	4	0-13	
Tert-Butyl Alcohol (TBA)	105	94	46-154	11	0-32	
Diisopropyl Ether (DIPE)	107	109	81-123	1	0-11	
Ethyl-t-Butyl Ether (ETBE)	103	104	74-122	1	0-12	
Tert-Amyl-Methyl Ether (TAME)	112	113	76-124	1	0-10	
Ethanol	99	100	60-138	1	0-32	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell		Date Received:	N/A
10540 White Rock Road, Suite 180		Work Order No:	08-06-1132
Rancho Cordova, CA 95670-7984		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project: LEHR IRA Water Sampling

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-25,966	**Aqueous**	**GC/MS U**	**06/14/08**	**06/14/08**	**080614L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	97	96	84-120	1	0-8	
Carbon Tetrachloride	89	88	63-147	1	0-10	
Chlorobenzene	99	97	89-119	2	0-7	
1,2-Dibromoethane	103	102	80-120	1	0-20	
1,2-Dichlorobenzene	102	98	89-119	3	0-9	
1,1-Dichloroethene	97	93	77-125	4	0-16	
Ethylbenzene	106	104	80-120	2	0-20	
Toluene	100	98	83-125	2	0-9	
Trichloroethene	99	96	89-119	3	0-8	
Vinyl Chloride	88	85	63-135	4	0-13	
Methyl-t-Butyl Ether (MTBE)	98	102	82-118	4	0-13	
Tert-Butyl Alcohol (TBA)	97	97	46-154	1	0-32	
Diisopropyl Ether (DIPE)	102	103	81-123	1	0-11	
Ethyl-t-Butyl Ether (ETBE)	99	103	74-122	3	0-12	
Tert-Amyl-Methyl Ether (TAME)	102	102	76-124	0	0-10	
Ethanol	92	91	60-138	0	0-32	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-06-1132

Project: LEHR IRA Water Sampling

Matrix: Aqueous

Parameter	Method	Quality Control Sample ID	Date Extracted	Date Analyzed	LCS % REC	LCSD % REC	%REC CL	RPD	RPD CL	Qual
Chloride	EPA 300.0	099-05-118-4,563	N/A	06/12/08	102	97	81-111	5	0-5	
Nitrate (as N)	EPA 300.0	099-05-118-4,563	N/A	06/12/08	95	91	87-111	4	0-12	
Sulfate	EPA 300.0	099-05-118-4,563	N/A	06/12/08	98	101	89-107	4	0-13	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Date Received: N/A
Work Order No: 08-06-1132

Project: LEHR IRA Water Sampling

Matrix : Aqueous

Parameter	Method	Quality Control Sample ID	Date Analyzed	Date Extracted	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Carbon, Total Organic	SM 5310 D	099-05-097-2,993	06/14/08	N/A	5.00	5.18	104	80-120	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-06-1132

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

BROWN AND CALDWELL

Brown and Caldwell
Environmental Engineers and Consultants
10540 White Rock Road Suite 180
Rancho Cordova, CA 95670

Field Chain-of-Custody Form

(1132)

Lab Name and Address:
Virendra Patel (714) 895-5494
Calscience Environmental Laboratories, Inc
7440 Lincoln Way
Garden Grove, CA 92841-1427

Project Name: LEHR IRA Water Sampling

Date: 6/11/8

Page: 1 of 1

P.O.#: 131261-200

	Sample ID	Collection	Matrix Code*	Sample Type**	Field Preserved (Y or N)	Number of Containers	H-3	C-14	VOA	Nitrate as N	TDS	Alkalinity	Anions	Metals	TOC	Cations Ca, Mg, Na, K	Total Chrome						Comments
1	TPIN 0360	Date: 6·11·8 Time: 13:30	GW	G	Y	5	✓	✓	✓						✓								
2	TPEF 0360	Date: 6·11·8 Time: ~~13:10~~ 13:20	GW	G	Y	5			✓	✓	✓	✓	✓	✓		✓							sample time = 13:2
3	ASDP 0360	Date: 6·11·8 Time: 13:10	GW	G	Y	1				✓	✓												
4	TBIRA 0028	Date: 6·11·8 Time: —	O	O	Y	2			✓														

Relinquished by: (Signature) Angela Brosh
Date: 6·11·8 Time: 15:00

Received by: (Signature) Fed Ex 8 636055765 30
Date: 6·11·8 Time: 15:00

Relinquished by: (Signature)
Date: Time:

Cooler Numbers

Comments:
Note: This shipment is not intended to fall under the authority of a radiological use license.

Received for Laboratory By: (Signature) [signature] Date: 6/12/08 Time: 1000

Method of Shipment: Airbill No.

Cooler Survey (pass / fail) _____ If FAIL do not open; contact the Program Development Department and the Radiation Safety Officer IMMEDIATELY.

Surveyed by: (Signature) Date: Time:

Cooler Condition Upon Receipt at Laboratory:

Seals Intact: YES ___ NO ___

Internal Cooler Temp: _____ °C; Samples in good condition: (Y/N) _____ Samples surveyed (pass/fail) _____

*Sample Matrix Codes

SW - Surface Water	AR - Air	SD - Sediment	
GW - Ground Water	SL - Soil	WW - Waste Water	BI - Biota
TW - Treatment Water	SG - Sludge	FI - Filter	O - Other

**Sample Type Codes

G - Grab
C - Composite
O - Other

EHSCOC.FRM

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 0 6 - 1 1 3 2

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: Brown & Caldwell **DATE:** 6/12/08

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature (For Air & Filter only).

__ __.__ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

__ __.__ °C Temperature blank.
04.2 °C IR thermometer.
_____ Ambient temperature (For Air & Filter only).

Initial: JP

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____ Not Present: ✓

Initial: JP

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)	✓		
VOA vial(s) free of headspace.	✓		
Tedlar bag(s) free of condensation			✓

Initial: JP

COMMENTS:

Calscience Environmental Laboratories, Inc.

Supplemental Report 1

June 30, 2008

Subcontract analyses are reported as a stand-alone report.

Joe Turner
Brown and Caldwell
10540 White Rock Road, Suite 180
Rancho Cordova, CA 95670-7984

Subject: **Calscience Work Order No.: 08-06-1132**
Client Reference: LEHR IRA Water Sampling

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 6/12/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Virendra Patel
Project Manager

BROWN AND CALDWELL

Brown and Caldwell
Environmental Engineers and Consultants
10540 White Rock Road Suite 180
Rancho Cordova, CA 95670

Field Chain-of-Custody Form

(1132)

Lab Name and Address:
Virendra Patel (714) 895-5494
Calscience Environmental Laboratories, Inc
7440 Lincoln Way
Garden Grove, CA 92841-1427

Project Name: LEHR IRA Water Sampling

Date: 6/11/8

Page: 1 of 1

P.O.#: 131261-200

	Sample ID	Collection	Matrix Code*	Sample Type**	Field Preserved (Y or N)	Number of Containers	H-3	C-14	VOA	Nitrate as N	TDS	Alkalinity	Anions	Metals	TOC	Cations Ca, Mg, Na, K	Total Chrome						Comments
1	TPIN 0360	Date: 6·11·8 Time: 13:30	GW	G	Y	5	✓	✓	✓						✓								
2	TPEF 0360	Date: 6·11·8 Time: ~~13:10~~ 13:20	GW	G	Y	5			✓	✓	✓	✓	✓	✓		✓							sample time = 13:2
3	ASDP 0360	Date: 6·11·8 Time: 13:16	GW	G	Y	1				✓	✓												
4	TBIRA 0028	Date: 6·11·8 Time: —	O	O	Y	2			✓														

Relinquished by: (Signature) Angela Brosh — Date: 6·11·8 Time: 15:00

Received by: (Signature) Fed Ex 8 636055765 30 — Date: 6·11·8 Time: 15:00

Relinquished by: (Signature) — Date: Time:

Cooler Numbers

Comments:
Note: This shipment is not intended to fall under the authority of a radiological use license.

Received for Laboratory By: (Signature) [signature] Date: 6/12/08 Time: 1000

Method of Shipment: Airbill No.

Cooler Survey (pass / fail) _____ If FAIL do not open; contact the Program Development Department and the Radiation Safety Officer IMMEDIATELY.

Surveyed by: (Signature) Date: Time:

Cooler Condition Upon Receipt at Laboratory:

Seals Intact: YES ___ NO ___

Internal Cooler Temp: ___ °C; Samples in good condition: (Y/N) ___ Samples surveyed (pass/fail) ___

*Sample Matrix Codes

SW - Surface Water	AR - Air	SD - Sediment	
GW - Ground Water	SL - Soil	WW - Waste Water	BI - Biota
TW - Treatment Water	SG - Sludge	FI - Filter	O - Other

**Sample Type Codes

G - Grab
C - Composite
O - Other

EHSCOC.FRM

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 0 6 - 1 1 3 2

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: Brown & Caldwell **DATE:** 6/12/08

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature (For Air & Filter only).

___ ___.___ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

___ ___.___ °C Temperature blank.
04.2 °C IR thermometer.
_____ Ambient temperature (For Air & Filter only).

Initial: JP

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____ Not Present: ✓

Initial: JP

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)	✓		
VOA vial(s) free of headspace.	✓		
Tedlar bag(s) free of condensation			✓

Initial: JP

COMMENTS:

GEL Laboratories LLC
a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178
www.gel.com

June 18, 2008

Mr. Virendra R. Patel
Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, California 92841-1427

Re: Carbon 14
Work Order: 210392

Dear Mr. Patel:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on June 14, 2008. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4297.

Sincerely,

Amanda Rasco
Project Manager

Purchase Order: 08-06-1132
Enclosures

problem solved

Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

TO: GEL Laboratories, Inc.

210392

CHAIN OF CUSTODY RECORD

DATE:

PAGE: 1 OF 1

LABORATORY CLIENT: Calscience Environmental Laboratories, Inc.

ADDRESS: 7440 Lincoln Way

CITY: Garden Grove, CA 92841-1427

TEL: (714) 895-5494

E-MAIL: vpatel@calscience.com

CLIENT PROJECT NAME / NUMBER: 08-06-1132

P.O. NO.: 08-06-1132

PROJECT CONTACT: Virendra Patel

QUOTE NO.:

SAMPLER(S): (PRINT)

LAB USE ONLY

TURNAROUND TIME

☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☐ 7 DAYS ☒ NORMAL

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)

☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___/___/___

SPECIAL INSTRUCTIONS

Ship to: GEL Laboratories, Inc
2040 Savage Rd
Charleston, SC 29407
Attention: Amanda Rasco 843-556-8171

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	Matrix	#Cont	Carbon -14 by EERF-C	Detection limit of 20 pCi/L		Send PDF via Email	Send Invoicewith Results
	TPIN 0360	06/11/08	13:30	GW	1	X	X		X	X

Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date	Time
(CALSCIENCE)	FedEx AB# 9587-3400-1861	06/12/08 ~~02/04/08~~	1630
Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date: 6-14-08	Time: 1000
Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: CEL	**SDG/ARCOC/Work Order:** 210392
Received By: MK	**Date Received:** 6-14-08

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
COC/Samples marked as radioactive?		✓	Maximum Counts Observed*: CPM 20
Classified Radioactive II by RSO?		✓	
COC/Samples marked containing PCBs?		✓	
Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		✓	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (4 +/- 2 C)?		✓		Preservation Method: ice bags blue ice dry ice none other (describe) 20 melted
3	Chain of custody documents included with shipment?	✓			
4	Sample containers intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		✓		Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		✓		Sample ID's and containers affected:
7	Are Encore containers present?			✓	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	✓			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Sample ID's affected:
11	Number of containers received match number indicated on COC?	✓			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	✓			

Comments:

FX 9587 3400 1861

PM (or PMA) review: Initials DMS Date 6/14/08

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

CALS001 Calscience Environmental Laboratory, Inc.

Client SDG: 210392 GEL Work Order: 210392

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Amanda Rasco.

Amanda J Rasco

Reviewed by

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 – (843) 556–8171 – www.gel.com

Certificate of Analysis

Company : Calscience Environmental Laboratories, Inc.
Address : 7440 Lincoln Way
Garden Grove, California 92841––1427

Report Date: June 18, 2008

Contact: Mr. Virendra R. Patel
Project: **Carbon 14**

Client Sample ID:	TPIN 0360	Project:	CALS00101
Sample ID:	210392001	Client ID:	CALS001
Matrix:	Ground Water		
Collect Date:	11–JUN–08 13:30		
Receive Date:	14–JUN–08		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Rad Liquid Scintillation Analysis											
Liquid Scint C14, Liquid "As Received"											
Carbon–14	U	–1.96	+/–8.97	15.6	20.0	pCi/L		SXB4 06/17/08	1526	765532	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA EERF C–01 Modified	

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: June 18, 2008
Page 1 of 2

Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, California

Contact: **Mr. Virendra R. Patel**

Workorder: **210392**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Liquid Scintillation												
Batch 765532												
QC1201602058 210392001 DUP												
Carbon-14		U	-1.96 +/-8.97	U	-4.25 +/-8.89	pCi/L	0		N/A	SXB4	06/17/08	16:40
QC1201602060 LCS												
Carbon-14	523				509 +/-19.5	pCi/L		97	(75%-125%)		06/17/08	17:54
QC1201602057 MB												
Carbon-14				U	-4.56 +/-8.88	pCi/L					06/17/08	16:03
QC1201602059 210392001 MS												
Carbon-14	523	U	-1.96 +/-8.97		496 +/-19.3	pCi/L		95	(75%-125%)		06/17/08	17:17

Notes:
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- M M if above MDC and less than LLD
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy--Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.

GEL LABORATORIES LLC
2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Workorder: 210392

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

h Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

List of current GEL Certifications as of 18 June 2008

State	Certification
Arizona	AZ0668
Arkansas	88-0651
CLIA	42D0904046
California - NELAP	01151CA
Colorado	GEL
Connecticut	PH-0169
Dept. of Navy	NFESC 413
EPA Region 5	WG-15J
Florida - NELAP	E87156
Georgia	E87156 (FL/NELAP)
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois - NELAP	200029
Indiana	C-SC-01
Kansas - NELAP	E-10332
Kentucky	90129
Louisiana - NELAP	03046
Maryland	270
Massachusetts	M-SC012
Nevada	SC00012
New Jersey - NELAP	SC002
New Mexico	FL NELAP E87156
New York - NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania - NELAP	68-00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas - NELAP	T104704235-07B-TX
U.S. Dept. of Agriculture	S-52597
Utah - NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

ENVIRONMENTAL

Analytical Chemists

June 24, 2008

Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Lab ID : SP 0806524
Customer : 2-17756

Laboratory Report

Introduction: This report package contains total of 3 pages divided into 3 sections:

Case Narrative	(1 Page)	: An overview of the work performed at FGL.
Sample Results	(1 page)	: Results for each sample submitted.
Quality Control	(1 page)	: Supporting Quality Control (QC) results.

Case Narrative

This Case Narrative pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab ID #	Matrix
TPIN	06/11/2008	06/13/2008	SP 0806524-001	GW

Sampling and Receipt Information: The sample was received, prepared and analyzed within the method specified holding times. All samples arrived at 3 °C. All samples were checked for pH if acid or base preservation is required (except for VOAs). For details of sample receipt information, please see the attached Chain of Custody and Condition Upon Receipt Form.

Quality Control: All samples were prepared and analyzed according to the following tables:

Radio QC

906.0	06/18/2008:206738	All analysis quality controls are within established criteria.
	06/15/2008:205853	All preparation quality controls are within established criteria.

Certification: I certify that this data package is in compliance with NELAC standards, both technically and for completeness, except for any conditions listed above. Release of the data contained in this data package is authorized by the Laboratory Director or his designee, as verified by the following electronic signature.

KD:JLK

Approved By **Kelly A. Dunnahoo, B.S.** Digitally signed by Kelly A. Dunnahoo, B.S. Title: Laboratory Director Date: 2008-06-24

ENVIRONMENTAL

Analytical Chemists

June 24, 2008

Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Lab ID : SP 0806524-001
Customer ID : 2-17756

Sampled On : June 11, 2008-13:30
Sampled By : Not Available
Received On : June 13, 2008-11:00
Matrix : Ground Water

Description : TPIN
Project : 08-06-1132

Sample Results - Radio

Constituent	Result ± Error	MDA	Units	MCL	Sample Preparation Method	Sample Preparation Date/ID	Sample Analysis Method	Sample Analysis Date/ID
Radio Chemistry P:1 Tritium	132 ± 251	408	pCi/L	20000	906.0	06/15/08:205853	906.0	06/18/08:206738

ND=Non-Detected. PQL=Practical Quantitation Limit. Containers: (P) Plastic Preservatives: N/A

MCL = Maximum Contamination Level. MDA = Minimum Detectable Activity. Data utilized by the DHS to determine matrix interference.
CCR Section 64442: Compliance Note: If Gross Alpha (Result + (0.84 x error)) exceeds 5 pCi/L run Uranium. If Gross Alpha minus Uranium exceeds 5 pCi/L run Radium 226. Samples that exceed 5 pCi/L are held for 6 months at FGL.

Compliance:
Gross Alpha minus Uranium is less than or equal to 15 pCi/L
Uranium is less than or equal to 20 pCi/L
Radium 226 + Radium 228 is less than or equal to 5 pCi/L

ENVIRONMENTAL

Analytical Chemists

June 24, 2008 | Lab ID : SP 0806524
Calscience Environmental Laboratories | Customer : 2-17756

Quality Control - Radio

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Radio								
Tritium	906.0	06/15/2008:205853	Blank	pCi/L		-220	<1000	
			LCS	pCi/L	2369	97.6 %	75-125	
			BS	pCi/L	2369	103 %	75-125	
			BSD	pCi/L	2369	114 %	75-125	
			BSRPD	pCi/L	2369	11.4%	≤25	
	906.0	06/18/2008:206738	CCV	pCi/L	47660	102 %	90-110	
			CCB	pCi/L		77	500	

Definition

CCV	: Continuing Calibration Verification - Analyzed to verify the instrument calibration is within criteria.
CCB	: Continuing Calibration Blank - Analyzed to verify the instrument baseline is within criteria.
Blank	: Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
LCS	: Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.
BS	: Blank Spikes - A blank is spiked with a known amount of analyte. It is prepared to verify that the preparation process is not affecting analyte recovery.
BSD	: Blank Spike Duplicate of BS/BSD pair - A blank duplicate is spiked with a known amount of analyte. It is prepared to verify that the preparation process is not affecting analyte recovery.
BSRPD	: BS/BSD Relative Percent Difference (RPD) - The BS relative percent difference is an indication of precision for the preparation and analysis.
ND	: Non-detect - Result was below the DQO listed for the analyte.
DQO	: Data Quality Objective - This is the criteria against which the quality control data is compared.

Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

TO: FGL

CHAIN OF CUSTODY RECORD

DATE: 06/12/08
PAGE: 1 OF 1

LABORATORY CLIENT: Calscience Environmental Laboratories, Inc.
ADDRESS: 7440 Lincoln Way
CITY: Garden Grove, CA 92841-1427
TEL: (714) 895-5494
E-MAIL: vpatel@calscience.com

CLIENT PROJECT NAME / NUMBER: 08-06-1132
PROJECT CONTACT: Virendra Patel
SAMPLER(S): (PRINT)

P.O. NO.: 08-06-1132
QUOTE NO.:
LAB USE ONLY

TURNAROUND TIME
☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☐ 5 DAYS ☒ NORMAL

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___/___/___

SPECIAL INSTRUCTIONS
SUB. To: FGL
853 Corporation St.
Santa Paula , CA 93061-3005
(805)392-2000

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	Matrix	#Cont	Tritium EPA 906.0	Excel EDD
	TPIN	06/11/08	13:30	GW	1	X	X

Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
(CALSCIENCE)	GSOAB# 509769037	06/12/08	1630
Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
	3°C	6/13/08	1100

Santa Paula - Condition Upon Receipt (Attach to COC)

Sample Receipt:

1. Number of ice chests/packages received: 1
   Note as OTC if received over the counter unpackaged.
2. Were samples received in a chilled condition? Temps: 3 / ____ / ____ / ____ / ____
   Acceptable is 2° to 6° C. Also acceptable is received on ice (ROI) for the same day of sampling or received at room temperature (RRT) if sampled within one hour of receipt. Client contact for temperature failures must be documented below. If many packages are received at one time check for tests/H.T.'s/rushes/Bacti's to prioritize further review. Please notify Microbiology personnel immediately of bacti samples received.
3. Do the number of bottles received agree with the COC? Yes No N/A
4. Were samples received intact? (i.e. no broken bottles, leaks etc.) Yes No
5. Were sample custody seals intact? N/A Yes No

Sign and date the COC, obtain LIMS sample numbers, select methods/tests and print labels.

Sample Verification, Labeling and Distribution:

1. Were all requested analyses understood and acceptable? Yes No
2. Did bottle labels correspond with the client's ID's? Yes No
3. Were all bottles requiring sample preservation properly preserved? Yes No N/A FGL
4. VOAs checked for Headspace? Yes No N/A
5. Were all analyses within holding times at time of receipt? Yes No
6. Have rush or project due dates been checked and accepted? N/A Yes No

Attach labels to the containers and include a copy of the COC for lab delivery.

Sample Receipt, Login and Verification completed by (initials): _____

Discrepancy Documentation:

Any items above which are "No" or do not meet specifications (i.e. temps) must be resolved.

1. Person Contacted:_____ Phone Number:_____
   Initiated By:_____ Date:_____
   Problem:

   Resolution:

2. Person Contacted:_____ Phone Number:_____
   Initiated By:_____ Date:_____
   Problem:

   Resolution:

(2-17756)
Calscience Environmental Laboratories
SP 0806524
SRP-06/13/2008-16:01:47

Calscience Environmental Laboratories, Inc.

December 16, 2008

Tim Utterback
Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Subject: **Calscience Work Order No.: 08-12-0585**
Client Reference: UC Davis / 388-1856-2-16

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 12/5/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Virendra R Patel

Calscience Environmental
Laboratories, Inc.
Virendra Patel
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	N/A
Emeryville, CA 94608-1939		Method:	RSK-175M

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2368A	**08-12-0585-1-D**	**12/03/08 16:15**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	24000	17.0	0.0547	10		ug/L

GWGW2368B	**08-12-0585-2-D**	**12/03/08 16:15**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	23500	17.0	0.0547	10		ug/L

GWGW2378	**08-12-0585-4-L**	**12/03/08 17:25**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	36800	17.0	0.0547	10		ug/L

GWGW2379A	**08-12-0585-5-D**	**12/03/08 16:30**	**Aqueous**	**GC 14**	**N/A**	**12/08/08 00:00**	**081208L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	4040	1.70	0.00547	1		ug/L

GWGW2379B	**08-12-0585-6-D**	**12/03/08 16:30**	**Aqueous**	**GC 14**	**N/A**	**12/08/08 00:00**	**081208L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	3860	1.70	0.00547	1		ug/L

GWGW2373	**08-12-0585-7-D**	**12/04/08 10:15**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	34100	17.0	0.0547	10		ug/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	N/A
Emeryville, CA 94608-1939		Method:	RSK-175M

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2390	**08-12-0585-9-D**	**12/04/08 10:35**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	15000	17.0	0.0547	10		ug/L

GWGW2382A	**08-12-0585-10-L**	**12/04/08 11:45**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	33400	17.0	0.0547	10		ug/L

GWGW2382B	**08-12-0585-11-K**	**12/04/08 11:45**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	33600	17.0	0.0547	10		ug/L

GWGW2377	**08-12-0585-12-H**	**12/04/08 14:30**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	21600	17.0	0.0547	10		ug/L

Method Blank	**099-12-659-36**	**N/A**	**Aqueous**	**GC 14**	**N/A**	**12/09/08 00:00**	**081209L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	ND	1.70	0.00547	1		ug/L

Method Blank	**099-12-659-37**	**N/A**	**Aqueous**	**GC 14**	**N/A**	**12/08/08 00:00**	**081208L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	ND	1.70	0.00547	1		ug/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6010B

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2368A	**08-12-0585-1-B**	**12/03/08 16:15**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:12**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	15.0	0.0500	0.0464	1		mg/L

GWGW2368B	**08-12-0585-2-B**	**12/03/08 16:15**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:07**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	15.4	0.0500	0.0464	1		mg/L

GWGW2378	**08-12-0585-4-H**	**12/03/08 17:25**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:14**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	17.1	0.0500	0.0464	1		mg/L

GWGW2379A	**08-12-0585-5-A**	**12/03/08 16:30**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:15**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	14.8	0.0500	0.0464	1		mg/L

GWGW2379B	**08-12-0585-6-A**	**12/03/08 16:30**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:17**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	14.5	0.0500	0.0464	1		mg/L

GWGW2373	**08-12-0585-7-B**	**12/04/08 10:15**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:19**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	17.4	0.0500	0.0464	1		mg/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6010B

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2390	**08-12-0585-9-A**	**12/04/08 10:35**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:24**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	18.0	0.0500	0.0464	1		mg/L

GWGW2382A	**08-12-0585-10-G**	**12/04/08 11:45**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:26**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	17.1	0.0500	0.0464	1		mg/L

GWGW2382B	**08-12-0585-11-G**	**12/04/08 11:45**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:27**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	17.3	0.0500	0.0464	1		mg/L

GWGW2377	**08-12-0585-12-E**	**12/04/08 14:30**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/11/08 16:02**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	17.3	0.0500	0.0464	1		mg/L

Method Blank	**097-01-003-8,893**	**N/A**	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08 18:03**	**081208LA6F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Silicon	ND	0.0500	0.0464	1		mg/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6020
		Units:	mg/L
Project: UC Davis / 388-1856-2-16			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2368A	**08-12-0585-1-B**	**12/03/08 16:15**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/11/08 14:09**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	0.00380	0.00200	0.000338	2		Vanadium	0.0128	0.00200	0.0000314	2	
Chromium	0.145	0.00200	0.0000368	2	B	Aluminum	0.00448	0.100	0.00377	2	J

GWGW2368B	**08-12-0585-2-B**	**12/03/08 16:15**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/10/08 19:54**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	0.00356	0.00200	0.000338	2		Vanadium	0.0129	0.00200	0.0000314	2	
Chromium	0.150	0.00200	0.0000368	2	B	Aluminum	0.00497	0.100	0.00377	2	J

GWGW2378	**08-12-0585-4-H**	**12/03/08 17:25**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/10/08 20:12**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	ND	0.00200	0.000158	2		Molybdenum	0.00118	0.00200	0.000560	2	J
Arsenic	0.00377	0.00200	0.000338	2		Nickel	0.00412	0.00200	0.0000468	2	
Barium	0.0567	0.00200	0.0000802	2		Selenium	0.00897	0.00200	0.00157	2	
Beryllium	ND	0.00200	0.000111	2		Silver	ND	0.00200	0.0000366	2	
Cadmium	ND	0.00200	0.0000302	2		Thallium	ND	0.00200	0.0000306	2	
Chromium	0.123	0.00200	0.0000368	2	B	Vanadium	0.0131	0.00200	0.0000314	2	
Cobalt	0.000578	0.00200	0.0000342	2	J	Zinc	0.0122	0.0100	0.000681	2	
Copper	0.00275	0.00200	0.0000362	2		Aluminum	0.00692	0.100	0.00377	2	J
Lead	0.0000959	0.00200	0.0000260	2	J						

GWGW2379A	**08-12-0585-5-A**	**12/03/08 16:30**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/10/08 20:16**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	0.00273	0.00100	0.000169	1		Vanadium	0.0103	0.00100	0.0000157	1	
Chromium	0.0251	0.00100	0.0000184	1	B	Aluminum	0.0168	0.0500	0.00188	1	J

GWGW2379B	**08-12-0585-6-A**	**12/03/08 16:30**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/10/08 20:21**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	0.00266	0.00100	0.000169	1		Vanadium	0.0102	0.00100	0.0000157	1	
Chromium	0.0246	0.00100	0.0000184	1	B	Aluminum	0.0215	0.0500	0.00188	1	J

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6020
		Units:	mg/L
Project: UC Davis / 388-1856-2-16			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2373	**08-12-0585-7-B**	**12/04/08 10:15**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/10/08 20:25**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	0.00347	0.00200	0.000338	2		Vanadium	0.00320	0.00200	0.0000314	2	
Chromium	0.425	0.00200	0.0000368	2	B	Aluminum	0.0237	0.100	0.00377	2	J

GWGW2390	**08-12-0585-9-A**	**12/04/08 10:35**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/10/08 20:30**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	0.00327	0.00200	0.000338	2		Vanadium	0.0118	0.00200	0.0000314	2	
Chromium	0.0460	0.00200	0.0000368	2	B	Aluminum	0.0202	0.100	0.00377	2	J

GWGW2382A	**08-12-0585-10-G**	**12/04/08 11:45**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/10/08 20:35**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	ND	0.00200	0.000158	2		Molybdenum	0.00184	0.00200	0.000560	2	J
Arsenic	0.00342	0.00200	0.000338	2		Nickel	0.00600	0.00200	0.0000468	2	
Barium	0.0491	0.00200	0.0000802	2		Selenium	0.00447	0.00200	0.00157	2	
Beryllium	ND	0.00200	0.000111	2		Silver	ND	0.00200	0.0000366	2	
Cadmium	ND	0.00200	0.0000302	2		Thallium	ND	0.00200	0.0000306	2	
Chromium	0.0695	0.00200	0.0000368	2	B	Vanadium	0.0148	0.00200	0.0000314	2	
Cobalt	0.000506	0.00200	0.0000342	2	J	Zinc	0.0129	0.0100	0.000681	2	
Copper	0.00413	0.00200	0.0000362	2		Aluminum	0.0206	0.100	0.00377	2	J
Lead	0.000116	0.00200	0.0000260	2	J						

GWGW2382B	**08-12-0585-11-G**	**12/04/08 11:45**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/10/08 20:39**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	ND	0.00200	0.000158	2		Molybdenum	0.00176	0.00200	0.000560	2	J
Arsenic	0.00362	0.00200	0.000338	2		Nickel	0.00635	0.00200	0.0000468	2	
Barium	0.0498	0.00200	0.0000802	2		Selenium	0.00488	0.00200	0.00157	2	
Beryllium	ND	0.00200	0.000111	2		Silver	ND	0.00200	0.0000366	2	
Cadmium	ND	0.00200	0.0000302	2		Thallium	ND	0.00200	0.0000306	2	
Chromium	0.0714	0.00200	0.0000368	2	B	Vanadium	0.0158	0.00200	0.0000314	2	
Cobalt	0.000519	0.00200	0.0000342	2	J	Zinc	0.0156	0.0100	0.000681	2	
Copper	0.00437	0.00200	0.0000362	2		Aluminum	0.0239	0.100	0.00377	2	J
Lead	0.000200	0.00200	0.0000260	2	J						

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6020
		Units:	mg/L
Project: UC Davis / 388-1856-2-16			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPEF0365	**08-12-0585-13-G**	**12/04/08 13:50**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/11/08 14:13**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	ND	0.00100	0.0000790	1		Nickel	0.00439	0.00100	0.0000234	1	
Arsenic	0.00237	0.00100	0.000169	1		Selenium	0.00275	0.00100	0.000783	1	
Barium	0.199	0.00100	0.0000401	1		Silver	ND	0.00100	0.0000183	1	
Beryllium	ND	0.00100	0.0000553	1		Thallium	ND	0.00100	0.0000153	1	
Cadmium	ND	0.00100	0.0000151	1		Vanadium	0.0108	0.00100	0.0000157	1	
Chromium	0.0372	0.00100	0.0000184	1	B	Zinc	0.0134	0.00500	0.000340	1	
Cobalt	0.000193	0.00100	0.0000171	1	J	Calcium	46.7	1.00	0.113	10	
Copper	0.0118	0.00100	0.0000181	1		Magnesium	77.8	0.100	0.00163	1	
Lead	0.0000746	0.00100	0.0000130	1	J	Potassium	0.908	1.00	0.0324	10	J
Molybdenum	0.00166	0.00100	0.000280	1		Sodium	47.1	1.00	0.0473	10	

Method Blank	**096-06-003-1,821**	**N/A**	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/11/08 13:33**	**081208L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	ND	0.00100	0.0000790	1		Selenium	ND	0.00100	0.000783	1	
Arsenic	ND	0.00100	0.000169	1		Silver	ND	0.00100	0.0000183	1	
Barium	ND	0.00100	0.0000401	1		Thallium	ND	0.00100	0.0000153	1	
Beryllium	ND	0.00100	0.0000553	1		Vanadium	ND	0.00100	0.0000157	1	
Cadmium	ND	0.00100	0.0000151	1		Zinc	ND	0.00500	0.000340	1	
Chromium	0.00139	0.00100	0.0000184	1		Aluminum	ND	0.0500	0.00188	1	
Cobalt	ND	0.00100	0.0000171	1		Calcium	ND	0.100	0.0113	1	
Copper	ND	0.00100	0.0000181	1		Magnesium	ND	0.100	0.00163	1	
Lead	ND	0.00100	0.0000130	1		Potassium	ND	0.100	0.00324	1	
Molybdenum	ND	0.00100	0.000280	1		Sodium	ND	0.100	0.00473	1	
Nickel	ND	0.00100	0.0000234	1							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 7470A Filt.
Emeryville, CA 94608-1939		Method:	EPA 7470A

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2378	**08-12-0585-4-H**	**12/03/08 17:25**	**Aqueous**	**Mercury**	**12/12/08**	**12/12/08 18:08**	**081212L04A**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Mercury	0.000167	0.000200	0.0000177	1	J	mg/L

GWGW2382A	**08-12-0585-10-G**	**12/04/08 11:45**	**Aqueous**	**Mercury**	**12/12/08**	**12/12/08 18:10**	**081212L04A**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Mercury	0.000125	0.000200	0.0000177	1	J	mg/L

GWGW2382B	**08-12-0585-11-G**	**12/04/08 11:45**	**Aqueous**	**Mercury**	**12/12/08**	**12/12/08 18:12**	**081212L04A**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Mercury	0.0000638	0.000200	0.0000177	1	J	mg/L

TPEF0365	**08-12-0585-13-G**	**12/04/08 13:50**	**Aqueous**	**Mercury**	**12/12/08**	**12/12/08 18:14**	**081212L04A**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Mercury	0.0000926	0.000200	0.0000177	1	J	mg/L

Method Blank	**099-12-457-99**	**N/A**	**Aqueous**	**Mercury**	**12/12/08**	**12/12/08 14:24**	**081212L04A**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Mercury	ND	0.000200	0.0000177	1		mg/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3520C
Emeryville, CA 94608-1939		Method:	EPA 8270C(M) Isotope Dilution
Project: UC Davis / 388-1856-2-16			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2368A	**08-12-0585-1-A**	**12/03/08 16:15**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/12/08 12:19**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	1.4	2.0	0.40	1	J	ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	82	56-123	

GWGW2368B	**08-12-0585-2-A**	**12/03/08 16:15**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/12/08 12:43**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	1.4	2.0	0.40	1	J	ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	82	56-123	

GWGW2383	**08-12-0585-3-A**	**12/03/08 16:50**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/12/08 13:07**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	83	56-123	

GWGW2378	**08-12-0585-4-A**	**12/03/08 17:25**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/12/08 13:31**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	81	56-123	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3520C
Emeryville, CA 94608-1939		Method:	EPA 8270C(M) Isotope Dilution
Project: UC Davis / 388-1856-2-16			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2373	**08-12-0585-7-A**	**12/04/08 10:15**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/12/08 13:55**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	77	56-123	

GWGW2404	**08-12-0585-8-A**	**12/04/08 11:10**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/12/08 14:19**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	73	56-123	

GWGW2382A	**08-12-0585-10-D**	**12/04/08 11:45**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/12/08 14:44**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	5.5	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	82	56-123	

GWGW2382B	**08-12-0585-11-D**	**12/04/08 11:45**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/12/08 15:08**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	5.9	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	76	56-123	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3520C
Emeryville, CA 94608-1939		Method:	EPA 8270C(M) Isotope Dilution
Project: UC Davis / 388-1856-2-16			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2377	**08-12-0585-12-D**	**12/04/08 14:30**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/12/08 15:32**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	76	56-123	

TPEF0365	**08-12-0585-13-D**	**12/04/08 13:50**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/12/08 15:56**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	80	56-123	

Method Blank	**099-09-004-1,156**	**N/A**	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/11/08 21:59**	**081209L13D**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	97	56-123	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3510C
Emeryville, CA 94608-1939		Method:	EPA 8081A
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2378	**08-12-0585-4-E**	**12/03/08 17:25**	**Aqueous**	**GC 41**	**12/09/08**	**12/12/08 13:42**	**081209L16M**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Alpha-BHC	ND	0.050	0.013	1		4,4'-DDE	ND	0.050	0.012	1	
Gamma-BHC	ND	0.050	0.020	1		Endrin	ND	0.050	0.012	1	
Beta-BHC	ND	0.050	0.0082	1		Endrin Aldehyde	ND	0.050	0.0052	1	
Heptachlor	ND	0.050	0.0074	1		4,4'-DDD	ND	0.050	0.012	1	
Delta-BHC	ND	0.050	0.018	1		Endosulfan II	ND	0.050	0.011	1	
Aldrin	ND	0.050	0.010	1		4,4'-DDT	ND	0.050	0.015	1	
Heptachlor Epoxide	ND	0.050	0.023	1		Endosulfan Sulfate	ND	0.050	0.0079	1	
Endosulfan I	ND	0.050	0.0052	1		Chlordane	ND	0.50	0.085	1	
Dieldrin	ND	0.050	0.012	1		Toxaphene	ND	2.0	0.31	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	77	50-135		2,4,5,6-Tetrachloro-m-Xylene	70	50-135	

GWGW2382A	**08-12-0585-10-E**	**12/04/08 11:45**	**Aqueous**	**GC 41**	**12/09/08**	**12/12/08 14:11**	**081209L16M**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Alpha-BHC	ND	0.050	0.013	1		4,4'-DDE	ND	0.050	0.012	1	
Gamma-BHC	ND	0.050	0.020	1		Endrin	ND	0.050	0.012	1	
Beta-BHC	ND	0.050	0.0082	1		Endrin Aldehyde	ND	0.050	0.0052	1	
Heptachlor	ND	0.050	0.0074	1		4,4'-DDD	ND	0.050	0.012	1	
Delta-BHC	ND	0.050	0.018	1		Endosulfan II	ND	0.050	0.011	1	
Aldrin	ND	0.050	0.010	1		4,4'-DDT	ND	0.050	0.015	1	
Heptachlor Epoxide	ND	0.050	0.023	1		Endosulfan Sulfate	ND	0.050	0.0079	1	
Endosulfan I	ND	0.050	0.0052	1		Chlordane	ND	0.50	0.085	1	
Dieldrin	ND	0.050	0.012	1		Toxaphene	ND	2.0	0.31	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	78	50-135		2,4,5,6-Tetrachloro-m-Xylene	75	50-135	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3510C
Emeryville, CA 94608-1939		Method:	EPA 8081A
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2382B	**08-12-0585-11-F**	**12/04/08 11:45**	**Aqueous**	**GC 41**	**12/09/08**	**12/12/08 14:39**	**081209L16M**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Alpha-BHC	ND	0.050	0.013	1		4,4'-DDE	ND	0.050	0.012	1	
Gamma-BHC	ND	0.050	0.020	1		Endrin	ND	0.050	0.012	1	
Beta-BHC	ND	0.050	0.0082	1		Endrin Aldehyde	ND	0.050	0.0052	1	
Heptachlor	ND	0.050	0.0074	1		4,4'-DDD	ND	0.050	0.012	1	
Delta-BHC	ND	0.050	0.018	1		Endosulfan II	ND	0.050	0.011	1	
Aldrin	ND	0.050	0.010	1		4,4'-DDT	ND	0.050	0.015	1	
Heptachlor Epoxide	ND	0.050	0.023	1		Endosulfan Sulfate	ND	0.050	0.0079	1	
Endosulfan I	ND	0.050	0.0052	1		Chlordane	ND	0.50	0.085	1	
Dieldrin	ND	0.050	0.012	1		Toxaphene	ND	2.0	0.31	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	67	50-135		2,4,5,6-Tetrachloro-m-Xylene	67	50-135	

Method Blank	**099-12-525-58**	**N/A**	**Aqueous**	**GC 41**	**12/09/08**	**12/12/08 13:14**	**081209L16M**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Alpha-BHC	ND	0.050	0.013	1		4,4'-DDE	ND	0.050	0.012	1	
Gamma-BHC	ND	0.050	0.020	1		Endrin	ND	0.050	0.012	1	
Beta-BHC	ND	0.050	0.0082	1		Endrin Aldehyde	ND	0.050	0.0052	1	
Heptachlor	ND	0.050	0.0074	1		4,4'-DDD	ND	0.050	0.012	1	
Delta-BHC	ND	0.050	0.018	1		Endosulfan II	ND	0.050	0.011	1	
Aldrin	ND	0.050	0.010	1		4,4'-DDT	ND	0.050	0.015	1	
Heptachlor Epoxide	ND	0.050	0.023	1		Endosulfan Sulfate	ND	0.050	0.0079	1	
Endosulfan I	ND	0.050	0.0052	1		Chlordane	ND	0.50	0.085	1	
Dieldrin	ND	0.050	0.012	1		Toxaphene	ND	2.0	0.31	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	105	50-135		2,4,5,6-Tetrachloro-m-Xylene	91	50-135	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3510C
Emeryville, CA 94608-1939		Method:	EPA 8082
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2378	**08-12-0585-4-E**	**12/03/08 17:25**	**Aqueous**	**GC 16**	**12/09/08**	**12/12/08 12:29**	**081209L05**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Aroclor-1016	ND	0.50	0.077	1		Aroclor-1248	ND	0.50	0.050	1	
Aroclor-1221	ND	0.50	0.050	1		Aroclor-1254	ND	0.50	0.050	1	
Aroclor-1232	ND	0.50	0.050	1		Aroclor-1260	ND	0.50	0.12	1	
Aroclor-1242	ND	0.50	0.050	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
Decachlorobiphenyl	67	50-135		2,4,5,6-Tetrachloro-m-Xylene	53	50-135	

GWGW2382A	**08-12-0585-10-G**	**12/04/08 11:45**	**Aqueous**	**GC 16**	**12/09/08**	**12/12/08 12:48**	**081209L05**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Aroclor-1016	ND	0.50	0.077	1		Aroclor-1248	ND	0.50	0.050	1	
Aroclor-1221	ND	0.50	0.050	1		Aroclor-1254	ND	0.50	0.050	1	
Aroclor-1232	ND	0.50	0.050	1		Aroclor-1260	ND	0.50	0.12	1	
Aroclor-1242	ND	0.50	0.050	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
Decachlorobiphenyl	66	50-135		2,4,5,6-Tetrachloro-m-Xylene	58	50-135	

GWGW2382B	**08-12-0585-11-F**	**12/04/08 11:45**	**Aqueous**	**GC 16**	**12/09/08**	**12/12/08 13:07**	**081209L05**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Aroclor-1016	ND	0.50	0.077	1		Aroclor-1248	ND	0.50	0.050	1	
Aroclor-1221	ND	0.50	0.050	1		Aroclor-1254	ND	0.50	0.050	1	
Aroclor-1232	ND	0.50	0.050	1		Aroclor-1260	ND	0.50	0.12	1	
Aroclor-1242	ND	0.50	0.050	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
Decachlorobiphenyl	62	50-135		2,4,5,6-Tetrachloro-m-Xylene	57	50-135	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3510C
Emeryville, CA 94608-1939		Method:	EPA 8082
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-527-62**	**N/A**	**Aqueous**	**GC 16**	**12/09/08**	**12/11/08 19:10**	**081209L05**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Aroclor-1016	ND	0.50	0.077	1		Aroclor-1248	ND	0.50	0.050	1	
Aroclor-1221	ND	0.50	0.050	1		Aroclor-1254	ND	0.50	0.050	1	
Aroclor-1232	ND	0.50	0.050	1		Aroclor-1260	ND	0.50	0.12	1	
Aroclor-1242	ND	0.50	0.050	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
Decachlorobiphenyl	106	50-135		2,4,5,6-Tetrachloro-m-Xylene	91	50-135	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 1 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2378	**08-12-0585-4-B**	**12/03/08 17:25**	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08 15:11**	**081210L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	5.0	1.5	1		1,1-Dichloroethene	ND	0.50	0.039	1	
Benzene	ND	0.50	0.50	1		c-1,2-Dichloroethene	ND	0.50	0.029	1	
Bromochloromethane	ND	0.50	0.11	1		t-1,2-Dichloroethene	ND	0.50	0.046	1	
Bromodichloromethane	ND	0.50	0.041	1		1,2-Dichloropropane	ND	0.50	0.036	1	
Bromoform	ND	0.50	0.11	1		c-1,3-Dichloropropene	ND	0.50	0.028	1	
Bromomethane	ND	0.50	0.19	1		t-1,3-Dichloropropene	ND	0.50	0.032	1	
2-Butanone	ND	5.0	1.5	1		Ethylbenzene	ND	0.50	0.079	1	
Carbon Disulfide	ND	0.50	0.13	1		2-Hexanone	ND	5.0	1.5	1	
Carbon Tetrachloride	ND	0.50	0.045	1		Methylene Chloride	ND	0.50	0.13	1	
Chlorobenzene	ND	0.50	0.38	1		4-Methyl-2-Pentanone	ND	5.0	1.3	1	
Chloroethane	ND	0.50	0.067	1		Styrene	ND	0.50	0.31	1	
Chloroform	ND	0.50	0.087	1		1,1,2,2-Tetrachloroethane	ND	0.50	0.098	1	
Chloromethane	ND	0.50	0.069	1		Tetrachloroethene	ND	0.50	0.027	1	
Dibromochloromethane	ND	0.50	0.048	1		Toluene	ND	0.50	0.46	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	0.88	1		1,1,1-Trichloroethane	ND	0.50	0.046	1	
1,2-Dibromoethane	ND	0.50	0.12	1		1,1,2-Trichloroethane	ND	0.50	0.086	1	
1,2-Dichlorobenzene	ND	0.50	0.029	1		Trichloroethene	ND	0.50	0.036	1	
1,3-Dichlorobenzene	ND	0.50	0.028	1		Vinyl Chloride	ND	0.50	0.041	1	
1,4-Dichlorobenzene	ND	0.50	0.025	1		p/m-Xylene	ND	0.50	0.13	1	
1,1-Dichloroethane	ND	0.50	0.026	1		o-Xylene	ND	0.50	0.32	1	
1,2-Dichloroethane	ND	0.50	0.080	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	94	73-157		Dibromofluoromethane	101	82-142	
Toluene-d8	91	82-112		1,4-Bromofluorobenzene	91	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 2 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2382A	**08-12-0585-10-B**	**12/04/08 11:45**	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08 15:38**	**081210L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	10	3.0	2		1,1-Dichloroethene	0.56	1.0	0.077	2	J
Benzene	ND	1.0	1.0	2		c-1,2-Dichloroethene	ND	1.0	0.059	2	
Bromochloromethane	ND	1.0	0.21	2		t-1,2-Dichloroethene	ND	1.0	0.092	2	
Bromodichloromethane	ND	1.0	0.083	2		1,2-Dichloropropane	ND	1.0	0.073	2	
Bromoform	ND	1.0	0.21	2		c-1,3-Dichloropropene	ND	1.0	0.055	2	
Bromomethane	ND	1.0	0.38	2		t-1,3-Dichloropropene	ND	1.0	0.065	2	
2-Butanone	ND	10	3.0	2		Ethylbenzene	ND	1.0	0.16	2	
Carbon Disulfide	ND	1.0	0.26	2		2-Hexanone	ND	10	3.0	2	
Carbon Tetrachloride	ND	1.0	0.090	2		Methylene Chloride	ND	1.0	0.25	2	
Chlorobenzene	ND	1.0	0.76	2		4-Methyl-2-Pentanone	ND	10	2.6	2	
Chloroethane	ND	1.0	0.13	2		Styrene	ND	1.0	0.63	2	
Chloroform	48	1.0	0.17	2		1,1,2,2-Tetrachloroethane	ND	1.0	0.20	2	
Chloromethane	ND	1.0	0.14	2		Tetrachloroethene	ND	1.0	0.055	2	
Dibromochloromethane	ND	1.0	0.096	2		Toluene	ND	1.0	0.91	2	
1,2-Dibromo-3-Chloropropane	ND	10	1.8	2		1,1,1-Trichloroethane	ND	1.0	0.093	2	
1,2-Dibromoethane	ND	1.0	0.25	2		1,1,2-Trichloroethane	ND	1.0	0.17	2	
1,2-Dichlorobenzene	ND	1.0	0.059	2		Trichloroethene	ND	1.0	0.073	2	
1,3-Dichlorobenzene	ND	1.0	0.056	2		Vinyl Chloride	ND	1.0	0.082	2	
1,4-Dichlorobenzene	ND	1.0	0.049	2		p/m-Xylene	ND	1.0	0.26	2	
1,1-Dichloroethane	1.1	1.0	0.052	2		o-Xylene	ND	1.0	0.64	2	
1,2-Dichloroethane	ND	1.0	0.16	2							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	91	73-157		Dibromofluoromethane	96	82-142	
Toluene-d8	99	82-112		1,4-Bromofluorobenzene	89	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 3 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2382B	**08-12-0585-11-B**	**12/04/08 11:45**	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08 16:05**	**081210L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	10	3.0	2		1,1-Dichloroethene	0.49	1.0	0.077	2	J
Benzene	ND	1.0	1.0	2		c-1,2-Dichloroethene	ND	1.0	0.059	2	
Bromochloromethane	ND	1.0	0.21	2		t-1,2-Dichloroethene	ND	1.0	0.092	2	
Bromodichloromethane	ND	1.0	0.083	2		1,2-Dichloropropane	ND	1.0	0.073	2	
Bromoform	ND	1.0	0.21	2		c-1,3-Dichloropropene	ND	1.0	0.055	2	
Bromomethane	ND	1.0	0.38	2		t-1,3-Dichloropropene	ND	1.0	0.065	2	
2-Butanone	ND	10	3.0	2		Ethylbenzene	ND	1.0	0.16	2	
Carbon Disulfide	ND	1.0	0.26	2		2-Hexanone	ND	10	3.0	2	
Carbon Tetrachloride	ND	1.0	0.090	2		Methylene Chloride	ND	1.0	0.25	2	
Chlorobenzene	ND	1.0	0.76	2		4-Methyl-2-Pentanone	ND	10	2.6	2	
Chloroethane	ND	1.0	0.13	2		Styrene	ND	1.0	0.63	2	
Chloroform	46	1.0	0.17	2		1,1,2,2-Tetrachloroethane	ND	1.0	0.20	2	
Chloromethane	ND	1.0	0.14	2		Tetrachloroethene	ND	1.0	0.055	2	
Dibromochloromethane	ND	1.0	0.096	2		Toluene	ND	1.0	0.91	2	
1,2-Dibromo-3-Chloropropane	ND	10	1.8	2		1,1,1-Trichloroethane	ND	1.0	0.093	2	
1,2-Dibromoethane	ND	1.0	0.25	2		1,1,2-Trichloroethane	ND	1.0	0.17	2	
1,2-Dichlorobenzene	ND	1.0	0.059	2		Trichloroethene	ND	1.0	0.073	2	
1,3-Dichlorobenzene	ND	1.0	0.056	2		Vinyl Chloride	ND	1.0	0.082	2	
1,4-Dichlorobenzene	ND	1.0	0.049	2		p/m-Xylene	ND	1.0	0.26	2	
1,1-Dichloroethane	1.0	1.0	0.052	2		o-Xylene	ND	1.0	0.64	2	
1,2-Dichloroethane	ND	1.0	0.16	2							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	89	73-157		Dibromofluoromethane	100	82-142	
Toluene-d8	99	82-112		1,4-Bromofluorobenzene	89	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 4 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GWGW2377	**08-12-0585-12-B**	**12/04/08 14:30**	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08 16:33**	**081210L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	5.0	1.5	1		1,1-Dichloroethene	ND	0.50	0.039	1	
Benzene	ND	0.50	0.50	1		c-1,2-Dichloroethene	ND	0.50	0.029	1	
Bromochloromethane	ND	0.50	0.11	1		t-1,2-Dichloroethene	ND	0.50	0.046	1	
Bromodichloromethane	ND	0.50	0.041	1		1,2-Dichloropropane	ND	0.50	0.036	1	
Bromoform	ND	0.50	0.11	1		c-1,3-Dichloropropene	ND	0.50	0.028	1	
Bromomethane	ND	0.50	0.19	1		t-1,3-Dichloropropene	ND	0.50	0.032	1	
2-Butanone	ND	5.0	1.5	1		Ethylbenzene	ND	0.50	0.079	1	
Carbon Disulfide	ND	0.50	0.13	1		2-Hexanone	ND	5.0	1.5	1	
Carbon Tetrachloride	ND	0.50	0.045	1		Methylene Chloride	ND	0.50	0.13	1	
Chlorobenzene	ND	0.50	0.38	1		4-Methyl-2-Pentanone	ND	5.0	1.3	1	
Chloroethane	ND	0.50	0.067	1		Styrene	ND	0.50	0.31	1	
Chloroform	0.25	0.50	0.087	1	J	1,1,2,2-Tetrachloroethane	ND	0.50	0.098	1	
Chloromethane	ND	0.50	0.069	1		Tetrachloroethene	ND	0.50	0.027	1	
Dibromochloromethane	ND	0.50	0.048	1		Toluene	ND	0.50	0.46	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	0.88	1		1,1,1-Trichloroethane	ND	0.50	0.046	1	
1,2-Dibromoethane	ND	0.50	0.12	1		1,1,2-Trichloroethane	ND	0.50	0.086	1	
1,2-Dichlorobenzene	ND	0.50	0.029	1		Trichloroethene	ND	0.50	0.036	1	
1,3-Dichlorobenzene	ND	0.50	0.028	1		Vinyl Chloride	ND	0.50	0.041	1	
1,4-Dichlorobenzene	ND	0.50	0.025	1		p/m-Xylene	ND	0.50	0.13	1	
1,1-Dichloroethane	ND	0.50	0.026	1		o-Xylene	ND	0.50	0.32	1	
1,2-Dichloroethane	ND	0.50	0.080	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	97	73-157		Dibromofluoromethane	104	82-142	
Toluene-d8	92	82-112		1,4-Bromofluorobenzene	82	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 5 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPEF0365	**08-12-0585-13-B**	**12/04/08 13:50**	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08 17:00**	**081210L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	5.0	1.5	1		1,1-Dichloroethene	ND	0.50	0.039	1	
Benzene	ND	0.50	0.50	1		c-1,2-Dichloroethene	ND	0.50	0.029	1	
Bromochloromethane	ND	0.50	0.11	1		t-1,2-Dichloroethene	ND	0.50	0.046	1	
Bromodichloromethane	ND	0.50	0.041	1		1,2-Dichloropropane	ND	0.50	0.036	1	
Bromoform	ND	0.50	0.11	1		c-1,3-Dichloropropene	ND	0.50	0.028	1	
Bromomethane	ND	0.50	0.19	1		t-1,3-Dichloropropene	ND	0.50	0.032	1	
2-Butanone	ND	5.0	1.5	1		Ethylbenzene	ND	0.50	0.079	1	
Carbon Disulfide	ND	0.50	0.13	1		2-Hexanone	ND	5.0	1.5	1	
Carbon Tetrachloride	ND	0.50	0.045	1		Methylene Chloride	ND	0.50	0.13	1	
Chlorobenzene	ND	0.50	0.38	1		4-Methyl-2-Pentanone	ND	5.0	1.3	1	
Chloroethane	ND	0.50	0.067	1		Styrene	ND	0.50	0.31	1	
Chloroform	ND	0.50	0.087	1		1,1,2,2-Tetrachloroethane	ND	0.50	0.098	1	
Chloromethane	ND	0.50	0.069	1		Tetrachloroethene	ND	0.50	0.027	1	
Dibromochloromethane	ND	0.50	0.048	1		Toluene	ND	0.50	0.46	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	0.88	1		1,1,1-Trichloroethane	ND	0.50	0.046	1	
1,2-Dibromoethane	ND	0.50	0.12	1		1,1,2-Trichloroethane	ND	0.50	0.086	1	
1,2-Dichlorobenzene	ND	0.50	0.029	1		Trichloroethene	ND	0.50	0.036	1	
1,3-Dichlorobenzene	ND	0.50	0.028	1		Vinyl Chloride	ND	0.50	0.041	1	
1,4-Dichlorobenzene	ND	0.50	0.025	1		p/m-Xylene	ND	0.50	0.13	1	
1,1-Dichloroethane	ND	0.50	0.026	1		o-Xylene	ND	0.50	0.32	1	
1,2-Dichloroethane	ND	0.50	0.080	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	92	73-157		Dibromofluoromethane	100	82-142	
Toluene-d8	84	82-112		1,4-Bromofluorobenzene	87	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 6 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TBGW0521	**08-12-0585-14-B**	**12/04/08 07:30**	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08 17:27**	**081210L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	5.0	1.5	1		1,1-Dichloroethene	ND	0.50	0.039	1	
Benzene	ND	0.50	0.50	1		c-1,2-Dichloroethene	ND	0.50	0.029	1	
Bromochloromethane	ND	0.50	0.11	1		t-1,2-Dichloroethene	ND	0.50	0.046	1	
Bromodichloromethane	ND	0.50	0.041	1		1,2-Dichloropropane	ND	0.50	0.036	1	
Bromoform	ND	0.50	0.11	1		c-1,3-Dichloropropene	ND	0.50	0.028	1	
Bromomethane	ND	0.50	0.19	1		t-1,3-Dichloropropene	ND	0.50	0.032	1	
2-Butanone	ND	5.0	1.5	1		Ethylbenzene	ND	0.50	0.079	1	
Carbon Disulfide	ND	0.50	0.13	1		2-Hexanone	ND	5.0	1.5	1	
Carbon Tetrachloride	ND	0.50	0.045	1		Methylene Chloride	ND	0.50	0.13	1	
Chlorobenzene	ND	0.50	0.38	1		4-Methyl-2-Pentanone	ND	5.0	1.3	1	
Chloroethane	ND	0.50	0.067	1		Styrene	ND	0.50	0.31	1	
Chloroform	ND	0.50	0.087	1		1,1,2,2-Tetrachloroethane	ND	0.50	0.098	1	
Chloromethane	ND	0.50	0.069	1		Tetrachloroethene	ND	0.50	0.027	1	
Dibromochloromethane	ND	0.50	0.048	1		Toluene	ND	0.50	0.46	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	0.88	1		1,1,1-Trichloroethane	ND	0.50	0.046	1	
1,2-Dibromoethane	ND	0.50	0.12	1		1,1,2-Trichloroethane	ND	0.50	0.086	1	
1,2-Dichlorobenzene	ND	0.50	0.029	1		Trichloroethene	ND	0.50	0.036	1	
1,3-Dichlorobenzene	ND	0.50	0.028	1		Vinyl Chloride	ND	0.50	0.041	1	
1,4-Dichlorobenzene	ND	0.50	0.025	1		p/m-Xylene	ND	0.50	0.13	1	
1,1-Dichloroethane	ND	0.50	0.026	1		o-Xylene	ND	0.50	0.32	1	
1,2-Dichloroethane	ND	0.50	0.080	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	89	73-157		Dibromofluoromethane	97	82-142	
Toluene-d8	93	82-112		1,4-Bromofluorobenzene	77	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 7 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TPIN 0365	**08-12-0585-15-B**	**12/04/08 14:10**	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08 17:54**	**081210L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	5.0	1.5	1		1,1-Dichloroethene	ND	0.50	0.039	1	
Benzene	ND	0.50	0.50	1		c-1,2-Dichloroethene	ND	0.50	0.029	1	
Bromochloromethane	ND	0.50	0.11	1		t-1,2-Dichloroethene	ND	0.50	0.046	1	
Bromodichloromethane	ND	0.50	0.041	1		1,2-Dichloropropane	ND	0.50	0.036	1	
Bromoform	ND	0.50	0.11	1		c-1,3-Dichloropropene	ND	0.50	0.028	1	
Bromomethane	ND	0.50	0.19	1		t-1,3-Dichloropropene	ND	0.50	0.032	1	
2-Butanone	ND	5.0	1.5	1		Ethylbenzene	ND	0.50	0.079	1	
Carbon Disulfide	ND	0.50	0.13	1		2-Hexanone	ND	5.0	1.5	1	
Carbon Tetrachloride	ND	0.50	0.045	1		Methylene Chloride	ND	0.50	0.13	1	
Chlorobenzene	ND	0.50	0.38	1		4-Methyl-2-Pentanone	ND	5.0	1.3	1	
Chloroethane	ND	0.50	0.067	1		Styrene	ND	0.50	0.31	1	
Chloroform	17	0.50	0.087	1		1,1,2,2-Tetrachloroethane	ND	0.50	0.098	1	
Chloromethane	ND	0.50	0.069	1		Tetrachloroethene	ND	0.50	0.027	1	
Dibromochloromethane	ND	0.50	0.048	1		Toluene	ND	0.50	0.46	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	0.88	1		1,1,1-Trichloroethane	ND	0.50	0.046	1	
1,2-Dibromoethane	ND	0.50	0.12	1		1,1,2-Trichloroethane	ND	0.50	0.086	1	
1,2-Dichlorobenzene	ND	0.50	0.029	1		Trichloroethene	ND	0.50	0.036	1	
1,3-Dichlorobenzene	ND	0.50	0.028	1		Vinyl Chloride	ND	0.50	0.041	1	
1,4-Dichlorobenzene	ND	0.50	0.025	1		p/m-Xylene	ND	0.50	0.13	1	
1,1-Dichloroethane	ND	0.50	0.026	1		o-Xylene	ND	0.50	0.32	1	
1,2-Dichloroethane	ND	0.50	0.080	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	88	73-157		Dibromofluoromethane	100	82-142	
Toluene-d8	89	82-112		1,4-Bromofluorobenzene	93	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B
		Units:	ug/L
Project: UC Davis / 388-1856-2-16			Page 8 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-025-731**	**N/A**	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08 12:56**	**081210L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	5.0	1.5	1		1,1-Dichloroethene	ND	0.50	0.039	1	
Benzene	ND	0.50	0.50	1		c-1,2-Dichloroethene	ND	0.50	0.029	1	
Bromochloromethane	ND	0.50	0.11	1		t-1,2-Dichloroethene	ND	0.50	0.046	1	
Bromodichloromethane	ND	0.50	0.041	1		1,2-Dichloropropane	ND	0.50	0.036	1	
Bromoform	ND	0.50	0.11	1		c-1,3-Dichloropropene	ND	0.50	0.028	1	
Bromomethane	ND	0.50	0.19	1		t-1,3-Dichloropropene	ND	0.50	0.032	1	
2-Butanone	ND	5.0	1.5	1		Ethylbenzene	ND	0.50	0.079	1	
Carbon Disulfide	ND	0.50	0.13	1		2-Hexanone	ND	5.0	1.5	1	
Carbon Tetrachloride	ND	0.50	0.045	1		Methylene Chloride	ND	0.50	0.13	1	
Chlorobenzene	ND	0.50	0.38	1		4-Methyl-2-Pentanone	ND	5.0	1.3	1	
Chloroethane	ND	0.50	0.067	1		Styrene	ND	0.50	0.31	1	
Chloroform	ND	0.50	0.087	1		1,1,2,2-Tetrachloroethane	ND	0.50	0.098	1	
Chloromethane	ND	0.50	0.069	1		Tetrachloroethene	ND	0.50	0.027	1	
Dibromochloromethane	ND	0.50	0.048	1		Toluene	ND	0.50	0.46	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	0.88	1		1,1,1-Trichloroethane	ND	0.50	0.046	1	
1,2-Dibromoethane	ND	0.50	0.12	1		1,1,2-Trichloroethane	ND	0.50	0.086	1	
1,2-Dichlorobenzene	ND	0.50	0.029	1		Trichloroethene	ND	0.50	0.036	1	
1,3-Dichlorobenzene	ND	0.50	0.028	1		Vinyl Chloride	ND	0.50	0.041	1	
1,4-Dichlorobenzene	ND	0.50	0.025	1		p/m-Xylene	ND	0.50	0.13	1	
1,1-Dichloroethane	ND	0.50	0.026	1		o-Xylene	ND	0.50	0.32	1	
1,2-Dichloroethane	ND	0.50	0.080	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	I Limits	Qual
1,2-Dichloroethane-d4	93	73-157		Dibromofluoromethane	98	82-142	
Toluene-d8	86	82-112		1,4-Bromofluorobenzene	87	75-105	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Date Received: 12/05/08
Work Order No: 08-12-0585

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date Collected	Matrix
GWGW2378	**08-12-0585-4**	**12/03/08**	**Aqueous**

Comment(s): (24) Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.
(68) Dilution analysis was performed outside the recommended holding time.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrate (as N) (68)	28	1.0	0.28	10		mg/L	N/A	12/05/08	EPA 300.0
Bicarbonate (as CaCO3)	722	5.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B
Carbonate (as CaCO3) (24)	ND	1.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B

GWGW2379A	**08-12-0585-5**	**12/03/08**	**Aqueous**

Comment(s): (24) Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Bicarbonate (as CaCO3)	334	5.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B
Carbonate (as CaCO3) (24)	ND	1.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B

GWGW2379B	**08-12-0585-6**	**12/03/08**	**Aqueous**

Comment(s): (24) Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Bicarbonate (as CaCO3)	338	5.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B
Carbonate (as CaCO3) (24)	ND	1.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B

GWGW2390	**08-12-0585-9**	**12/04/08**	**Aqueous**

Comment(s): (24) Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Bicarbonate (as CaCO3)	546	5.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B
Carbonate (as CaCO3) (24)	ND	1.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B

GWGW2382A	**08-12-0585-10**	**12/04/08**	**Aqueous**

Comment(s): (24) Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.
(68) Dilution analysis was performed outside the recommended holding time.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrate (as N) (68)	12	0.50	0.14	5		mg/L	N/A	12/06/08	EPA 300.0
Bicarbonate (as CaCO3)	746	5.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B
Carbonate (as CaCO3) (24)	ND	1.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Date Received: 12/05/08
Work Order No: 08-12-0585

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date Collected	Matrix
GWGW2382B	**08-12-0585-11**	**12/04/08**	**Aqueous**

Comment(s): (24) Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.
(68) Dilution analysis was performed outside the recommended holding time.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrate (as N) (68)	12	0.50	0.14	5		mg/L	N/A	12/06/08	EPA 300.0
Bicarbonate (as CaCO3)	750	5.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B
Carbonate (as CaCO3) (24)	ND	1.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B

GWGW2377	**08-12-0585-12**	**12/04/08**	**Aqueous**

Comment(s): (24) Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.
(68) Dilution analysis was performed outside the recommended holding time.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrate (as N) (68)	9.5	0.50	0.14	5		mg/L	N/A	12/06/08	EPA 300.0
Bicarbonate (as CaCO3)	646	5.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B
Carbonate (as CaCO3) (24)	ND	1.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B

TPEF0365	**08-12-0585-13**	**12/04/08**	**Aqueous**

Comment(s): (68) Dilution analysis was performed outside the recommended holding time.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chloride (68)	23	5.0	0.27	5		mg/L	N/A	12/06/08	EPA 300.0
Nitrate (as N) (68)	10	0.50	0.14	5		mg/L	N/A	12/06/08	EPA 300.0
Sulfate	60	10	0.69	10		mg/L	N/A	12/06/08	EPA 300.0
Solids, Total Dissolved	542	1.0	1.0	1		mg/L	N/A	12/06/08	SM 2540 C

TPIN 0365	**08-12-0585-15**	**12/04/08**	**Aqueous**

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Carbon, Total Organic	1.6	0.50	0.021	1		mg/L	N/A	12/05/08	SM 5310 D

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Date Received: 12/05/08
Work Order No: 08-12-0585

Project: UC Davis / 388-1856-2-16

Client Sample Number	Lab Sample Number	Date Collected	Matrix
Method Blank		**N/A**	**Aqueous**

Comment(s): (24) Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chloride (24)	ND	1.0	0.055	1		mg/L	N/A	12/05/08	EPA 300.0
Nitrate (as N) (24)	ND	0.10	0.028	1		mg/L	N/A	12/05/08	EPA 300.0
Sulfate (24)	ND	1.0	0.069	1		mg/L	N/A	12/05/08	EPA 300.0
Chloride (24)	ND	1.0	0.055	1		mg/L	N/A	12/06/08	EPA 300.0
Nitrate (as N) (24)	ND	0.10	0.028	1		mg/L	N/A	12/06/08	EPA 300.0
Sulfate (24)	ND	1.0	0.069	1		mg/L	N/A	12/06/08	EPA 300.0
Bicarbonate (as CaCO3)	ND	1.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B
Carbonate (as CaCO3)	ND	1.0	0.85	1		mg/L	N/A	12/11/08	SM 2320B
Solids, Total Dissolved (24)	ND	1.0	1.0	1		mg/L	N/A	12/06/08	SM 2540 C
Carbon, Total Organic (24)	ND	0.50	0.021	1		mg/L	N/A	12/05/08	SM 5310 D

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6010B

Project UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
GWGW2368B	**Aqueous**	**ICP 5300**	**12/08/08**	**12/09/08**	**081208SA6**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Silicon	4X	4X	24-180	4X	0-15	Q

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6020

Project UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
GWGW2368A	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/11/08**	**081208S04**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	112	108	85-133	4	0-11	
Arsenic	109	110	73-127	1	0-11	
Barium	129	131	74-128	0	0-10	3
Beryllium	105	112	56-122	7	0-11	
Cadmium	108	110	84-114	2	0-8	
Chromium	120	119	73-133	0	0-11	
Cobalt	107	109	79-121	2	0-10	
Copper	106	107	72-108	1	0-10	
Lead	107	108	79-121	1	0-10	
Molybdenum	104	104	83-137	1	0-10	
Nickel	105	105	68-122	0	0-10	
Selenium	104	108	59-125	4	0-12	
Silver	101	104	68-128	3	0-14	
Thallium	104	106	73-121	2	0-11	
Vanadium	117	120	77-137	2	0-15	
Zinc	122	106	43-145	12	0-39	
Aluminum	174	126	47-161	32	0-24	3,4
Calcium	4X	4X	80-120	4X	0-20	Q
Magnesium	4X	4X	63-123	4X	0-32	Q
Potassium	170	169	80-120	0	0-20	3
Sodium	4X	4X	80-120	4X	0-20	Q

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 7470A Total
Emeryville, CA 94608-1939		Method:	EPA 7470A

Project UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-12-1173-1	**Aqueous**	**Mercury**	**12/12/08**	**12/12/08**	**081212S04**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	111	111	66-126	0	0-7	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Weiss Associates		Date Received:	12/05/08
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B

Project UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-12-0410-3	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08**	**081210S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	112	108	86-122	3	0-8	
Carbon Tetrachloride	106	110	78-138	4	0-9	
Chlorobenzene	113	112	90-120	0	0-9	
1,2-Dibromoethane	117	112	70-130	4	0-30	
1,2-Dichlorobenzene	109	109	89-119	1	0-10	
1,1-Dichloroethene	109	114	52-142	5	0-23	
Ethylbenzene	115	115	70-130	0	0-30	
Toluene	118	112	85-127	5	0-12	
Trichloroethene	114	112	78-126	2	0-10	
Vinyl Chloride	111	124	56-140	11	0-21	
Methyl-t-Butyl Ether (MTBE)	107	95	64-136	12	0-28	
Tert-Butyl Alcohol (TBA)	101	124	27-183	21	0-60	
Diisopropyl Ether (DIPE)	102	101	78-126	0	0-16	
Ethyl-t-Butyl Ether (ETBE)	105	103	67-133	2	0-21	
Tert-Amyl-Methyl Ether (TAME)	111	100	63-141	10	0-21	
Ethanol	98	112	11-167	13	0-64	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Date Received: N/A
Work Order No: 08-12-0585

Project: UC Davis / 388-1856-2-16

Matrix: Aqueous

Parameter	Method	Quality Control Sample ID	Date Analyzed	Date Extracted	MS% REC	MSD % REC	%REC CL	RPD	RPD CL	Qualifiers
Chloride	EPA 300.0	08-12-0536-1	12/05/08	N/A	102	101	56-134	1	0-3	
Nitrate (as N)	EPA 300.0	08-12-0536-1	12/05/08	N/A	104	104	58-142	0	0-6	
Sulfate	EPA 300.0	08-12-0536-1	12/05/08	N/A	110	110	49-133	1	0-3	
Chloride	EPA 300.0	GWGW2382A	12/06/08	N/A	99	99	56-134	1	0-3	
Nitrate (as N)	EPA 300.0	GWGW2382A	12/06/08	N/A	99	101	58-142	2	0-6	
Sulfate	EPA 300.0	GWGW2382A	12/06/08	N/A	100	102	49-133	2	0-3	
Carbon, Total Organic	SM 5310 D	08-12-0558-2	12/05/08	N/A	95	94	70-130	1	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Date Received: N/A
Work Order No: 08-12-0585

Project: UC Davis / 388-1856-2-16

Matrix: Aqueous

Parameter	Method	QC Sample ID	Date Analyzed	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Alkalinity, Total (as CaCO3)	SM 2320B	08-12-0558-1	12/11/08	522	520	0	0-25	
Bicarbonate (as CaCO3)	SM 2320B	08-12-0558-1	12/11/08	522	520	0	0-25	
Carbonate (as CaCO3)	SM 2320B	08-12-0558-1	12/11/08	ND	ND	NA	0-25	
Hydroxide (as CaCO3)	SM 2320B	08-12-0558-1	12/11/08	ND	ND	NA	0-25	
Solids, Total Dissolved	SM 2540 C	08-12-0558-2	12/06/08	1700	1690	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	N/A
Emeryville, CA 94608-1939		Method:	RSK-175M

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-659-37	**Aqueous**	**GC 14**	**N/A**	**12/08/08**	**081208L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Carbon Dioxide	96	96	80-120	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	N/A
Emeryville, CA 94608-1939		Method:	RSK-175M

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-659-36	**Aqueous**	**GC 14**	**N/A**	**12/09/08**	**081209L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Carbon Dioxide	95	95	80-120	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6010B

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
097-01-003-8,893	**Aqueous**	**ICP 5300**	**12/09/08**	**081208-la-6**	**081208LA6F**

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Silicon	0.500	0.538	108	80-120	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3005A Filt.
Emeryville, CA 94608-1939		Method:	EPA 6020

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
096-06-003-1,821	**Aqueous**	**ICP/MS A**	**12/08/08**	**12/11/08**	**081208L04F**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Antimony	89	90	80-120	73-127	1	0-20	
Arsenic	96	97	80-120	73-127	0	0-20	
Barium	95	97	80-120	73-127	2	0-20	
Beryllium	104	105	80-120	73-127	1	0-20	
Cadmium	100	101	80-120	73-127	1	0-20	
Chromium	98	99	80-120	73-127	1	0-20	
Cobalt	99	97	80-120	73-127	2	0-20	
Copper	102	100	80-120	73-127	2	0-20	
Lead	95	96	80-120	73-127	1	0-20	
Molybdenum	93	93	80-120	73-127	0	0-20	
Nickel	99	97	80-120	73-127	1	0-20	
Selenium	95	96	80-120	73-127	0	0-20	
Silver	102	103	80-120	73-127	2	0-20	
Thallium	93	93	80-120	73-127	0	0-20	
Vanadium	96	97	80-120	73-127	1	0-20	
Zinc	98	98	80-120	73-127	1	0-20	
Aluminum	108	108	80-120	73-127	0	0-20	
Calcium	108	109	80-120	73-127	1	0-20	
Magnesium	110	111	80-120	73-127	1	0-20	
Potassium	97	97	80-120	73-127	0	0-20	
Sodium	99	99	80-120	73-127	0	0-20	

Total number of LCS compounds : 21
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 7470A Filt.
Emeryville, CA 94608-1939		Method:	EPA 7470A

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-457-99	**Aqueous**	**Mercury**	**12/12/08**	**12/12/08**	**081212L04A**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	107	107	90-122	0	0-14	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3520C
Emeryville, CA 94608-1939		Method:	EPA 8270C(M) Isotope Dilution

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-09-004-1,156	**Aqueous**	**GC/MS AAA**	**12/09/08**	**12/11/08**	**081209L13D**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
1,4-Dioxane	114	122	50-130	7	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3510C
Emeryville, CA 94608-1939		Method:	EPA 8081A

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-525-58	**Aqueous**	**GC 41**	**12/09/08**	**12/12/08**	**081209L16M**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gamma-BHC	94	90	50-135	3	0-25	
Heptachlor	88	85	50-135	3	0-25	
Endosulfan I	92	89	50-135	3	0-25	
Dieldrin	81	78	50-135	3	0-25	
Endrin	98	95	50-135	3	0-25	
4,4'-DDT	99	97	50-135	2	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 3510C
Emeryville, CA 94608-1939		Method:	EPA 8082

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-527-62	**Aqueous**	**GC 16**	**12/09/08**	**12/11/08**	**081209L05**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Aroclor-1260	90	112	50-135	22	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates		Date Received:	N/A
5801 Christie Avenue		Work Order No:	08-12-0585
Suite 600		Preparation:	EPA 5030B
Emeryville, CA 94608-1939		Method:	EPA 8260B

Project: UC Davis / 388-1856-2-16

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-025-731	**Aqueous**	**GC/MS L**	**12/10/08**	**12/10/08**	**081210L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	108	107	87-117	82-122	1	0-7	
Carbon Tetrachloride	108	106	78-132	69-141	2	0-8	
Chlorobenzene	110	109	88-118	83-123	2	0-8	
1,2-Dibromoethane	117	106	80-120	73-127	10	0-20	
1,2-Dichlorobenzene	112	110	88-118	83-123	2	0-8	
1,1-Dichloroethene	110	107	71-131	61-141	3	0-14	
Ethylbenzene	110	110	80-120	73-127	0	0-20	
Toluene	114	112	85-127	78-134	2	0-7	
Trichloroethene	113	111	85-121	79-127	2	0-11	
Vinyl Chloride	115	118	64-136	52-148	2	0-10	
Methyl-t-Butyl Ether (MTBE)	106	101	67-133	56-144	5	0-16	
Tert-Butyl Alcohol (TBA)	109	95	34-154	14-174	14	0-19	
Diisopropyl Ether (DIPE)	109	105	80-122	73-129	4	0-8	
Ethyl-t-Butyl Ether (ETBE)	109	107	73-127	64-136	2	0-11	
Tert-Amyl-Methyl Ether (TAME)	110	108	69-135	58-146	3	0-12	
Ethanol	97	88	34-124	19-139	10	0-44	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Date Received: N/A
Work Order No: 08-12-0585

Project: UC Davis / 388-1856-2-16

Matrix: Aqueous

Parameter	Method	Quality Control Sample ID	Date Extracted	Date Analyzed	LCS % REC	LCSD % REC	%REC CL	RPD	RPD CL	Qual
Chloride	EPA 300.0	099-05-118-4,918	N/A	12/05/08	93	92	81-111	2	0-5	
Nitrate (as N)	EPA 300.0	099-05-118-4,918	N/A	12/05/08	104	103	87-111	1	0-12	
Sulfate	EPA 300.0	099-05-118-4,918	N/A	12/05/08	97	99	89-107	1	0-13	
Chloride	EPA 300.0	099-05-118-4,923	N/A	12/06/08	95	97	81-111	2	0-5	
Nitrate (as N)	EPA 300.0	099-05-118-4,923	N/A	12/06/08	103	104	87-111	1	0-12	
Sulfate	EPA 300.0	099-05-118-4,923	N/A	12/06/08	103	100	89-107	2	0-13	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Weiss Associates
5801 Christie Avenue
Suite 600
Emeryville, CA 94608-1939

Date Received: N/A
Work Order No: 08-12-0585

Project: UC Davis / 388-1856-2-16

Matrix : Aqueous

Parameter	Method	Quality Control Sample ID	Date Analyzed	Date Extracted	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Carbon, Total Organic	SM 5310 D	099-05-097-3,166	12/05/08	N/A	5.00	5.14	103	80-120	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-12-0585

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Revised COC received on 12/08/08 at 15:24 - VP

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AquaTerra Associates Incorporated, DBA

0585

Calscience Environmental Lab
5063 Commercial Circle, Suite H
Concord, CA 94520
phone: (925) 689-9022

Project ID: 388-1856-2-16
Protocol No.: ROD

Client Contact		Project Manager: Bob Devany	Sampled by: JMD / KHA	Date: 12/4/08	COC Number: UCD
Weiss Associates		Tel: 510-450-6144	Lab Contact: Micah Smith	Carrier:	Page 2 of 3
5801 Christie Avenue, Suite 600		Analysis Turnaround Time			Job No.
Emeryville, CA 94608		Calendar (C) or Work Days (W) --- 5W			
(510) 450-6000	Phone	TAT if different from Below _____			SDG No.
(510) 547-5043	FAX	☐ 2 weeks			
		☐ 1 week			
Job Name: UC Davis		☐ 2 days			
Address: One Shields Ave, Davis		☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	Carbonate/Bicarbonate (SM2320B)	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
10	GWGW2382A	12/4	1145	L	W	12		X		X	X	X	X		X	X						X	X	Title 22 + Al + Si
11	GWGW2382B	12/4	1145	|	|	12		X		X	X	X	X		X	X						X	X	Title 22 + Al + Si
12	GWGW2377	12/4	1430	|	|	9		X	X	X	X	X										X		
13	TPEF0365	12/4	1350	|	|	9					X	X	X				X		X	X	X	X		Title 22 + Ca, K, Mg, Na
																				X				
14	~~GPTN0365~~																							
	TRU 12/8/08																							
15	~~Travel Blank~~ TBGW0521	0730	12/4	L	W						X													~~HOLD~~ TRU 12/8/08
						Field Filtered	X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For _____ Months*

Special Instructions/QC Requirements & Comments: Level II Reporting with Initial Calibration Curves and Continuing Calibration **Note: Nitrate 48 hour hold time!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	WEISS	1505, 12/4/08	[signature] CEL		12/4/08 1505
[signature] to GSD		12-4-08 1730	[signature]	CEL	12/05/08 1030

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

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AguaTierra Associates Incorporated, DBA

0585

Calscience Environmental Lab
5063 Commercial Circle, Suite H
Concord, CA 94520
phone: (925) 689-9022

Project ID: 388-1856-2-16
Protocol No.: ROD

Client Contact	
Weiss Associates	
5801 Christie Avenue, Suite 600	
Emeryville, CA 94608	
(510) 450-6000	Phone
(510) 547-5043	FAX
Job Name:	UC Davis
Address:	One Shields Ave, Davis

Project Manager: Bob Devany
Tel: 510-450-6144

Analysis Turnaround Time
Calendar (C) or Work Days (W) --- 5W
TAT if different from Below _____
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sampled by: JmD/KHA
Lab Contact: Micah Smith
Date: 12/4/08
Carrier:
COC Number: UCD
Page 1 of 3
Job No.
SDG No.

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	Carbonate/Bicarbonate (SM2320B)	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
1	GWGW2368A	12/3	1615	L	W	5	X	X	X													X	X	
2	GWGW2368B	12/3	1615			5	X	X	X													X	X	
3	GWGW2383	12/3	1650			1																X		
4	GWGW2378	12/3	1725			12		X		X	X	X	X		X	X						X	X	Al, Si + Title 22 6010B
5	GWGW2379A	12/3	1630			5	X	X	X	X													X	
6	GWGW2379B	12/3	1630			5	X	X	X	X													X	
7	GWGW2373	12/4	1015			9	X	X	X													X	X	
8	GWGW2404	12/4	1110			1																X		
9	GWGW2390	12/4	1035			5	X	X	X	X													X	
						Field Filtered	X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: Level II Reporting with Initial Calibration Curves and Continuing Calibration **Note: Nitrate 48 hour hold time!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	WEISS	1505, 12/4/08	Tom Ompley	CEC	12/4/08 1505
[signature] To CSO		12-4-08 1730	[signature]	CEC	12/5/08 1030
510857382 510857383					

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
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Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

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phone: (925) 689-9022

Project ID: 388-1856-2-16
Protocol No.: ROD

Client Contact	
Weiss Associates	
5801 Christie Avenue, Suite 600	
Emeryville, CA 94608	
(510) 450-6000	Phone
(510) 547-5043	FAX
Job Name:	UC Davis
Address:	One Shields Ave, Davis

Project Manager: Bob Devany
Tel: 510-450-6144

Analysis Turnaround Time
Calendar (C) or Work Days (W) --- 5W
TAT if different from Below _____
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sampled by: JMD / KHA
Lab Contact: Micah Smith
Date: 12/4/08
Carrier:

COC Number: UCD
Page 2 of 3

Job No.

SDG No.

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	Carbonate/Bicarbonate (SM2320B)	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
10	GWGW2382A	12/4	1145	L	W	12		X		X	X	X	X		X	X					X	X	X	Title 22 + Al + Si
11	GWGW2382B	12/4	1145	|	|	12		X		X	X	X	X		X	X					X	X	X	Title 22 + Al + Si
12	GWGW2377	12/4	1430	|	|	9		X	X	X	X	X									X	X		
13	TPEF0365	12/4	1350	|	|	9					X	X	X				X		X	X	X	X		Title 22 + Ca, K, Mg, Na
																				X				
14	GPTN0365																							
15	Travel Blank	0730	12/4	L	W						X													HOLD
						Field Filtered	X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For _____ Months*

Special Instructions/QC Requirements & Comments: Level II Reporting with Initial Calibration Curves and Continuing Calibration **Note: Nitrate 48 hour hold time!**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	WEISS	1505, 12/4/08	Tom O'Malley	CEL	12/4/08 1505
[signature] to GSD		12-4-08 1730	[signature]	CEL	12/05/08 1030

Chain of Custody Record

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Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
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Specify analytic/prep method and detection limit in report.
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0585

Calscience Environmental Lab
5063 Commercial Circle, Suite H
Concord, CA 94520
phone: (925) 689-9022

Project ID: 388-1856-2-16
Protocol No.: ROD

Client Contact	
Weiss Associates	
5801 Christie Avenue, Suite 600	
Emeryville, CA 94608	
(510) 450-6000	Phone
(510) 547-5043	FAX
Job Name:	UC Davis
Address:	One Shields Ave, Davis

Project Manager: Bob Devany
Tel: 510-450-6144

Analysis Turnaround Time
Calendar (C) or Work Days (W) --- 5W
TAT if different from Below _____
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sampled by: JMD
Lab Contact: Micah Smith
Date: 12/4/08
Carrier:

COC Number: UCD
Page 3 of 3

Job No.

SDG No.

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Cr, Al, As, V (6010B)	CO2 (dissolved) (RSK-175)	Si (6010B)	Carbonate/Bicarbonate (SM2320B)	VOCs (8260)	Nitrate (EPA 300) * 48 Hour Hold *	Title 22 Metals (6010B)	Al, U (6010B)	Pesticides (8081)	PCBs (8082)	Sulfate, Chloride (EPA 300.0)	Ca, K, Mg, Na (6010B)	Alkalinity (SM2320B)	TDS (SM2540C)	TOC (SM5310C)	1,4-Dioxane (EPA 8270 SIM)	Uranium (EPA 200.8)	Sample Specific Notes:
15 TPIN 0365	12/4	1410	W	W	4					X										X			
Field Filtered						X		X				X	X				X					X	

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: Level II Reporting with Initial Calibration Curves and Continuing Calibration

Note: Nitrate 48 hour hold time!

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	WEISS	1505 / 12/4	[signature]	CEL	12/4/08 1505
[signature] to GSD		12-4-08 1730	[signature]	CEL	12/5/08 1030

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 0 8 - 1 2 - 0 5 0 5

SAMPLE RECEIPT FORM

Cooler 1 of 2

CLIENT: Weiss Associates

DATE: 12/5/08

TEMPERATURE: (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 2.1 °C - 0.2 °C (CF) = 1.9 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by:_____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only **Initial:** JP

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Initial:** JP

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** WB

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	☑	☐	☐
COC document(s) received complete.....	☑	☐	☐
Sampler's name indicated on COC.....	☑	☐	☐
Sample container label(s) consistent with COC.....	☑	☐	☐
Sample container(s) intact and good condition.....	☑	☐	☐
Correct containers and volume for analyses requested.....	☑	☐	☐
Analyses received within holding time.....	☑	☐	☐
Proper preservation noted on sample label(s).....	☑	☐	☐
Volatile analysis container(s) free of headspace.....	☑	☐	☐
Tedlar bag(s) free of condensation.....	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☑VOAh ☐VOAna$_2$ ☑125AGB ☐125AGBh ☐125AGBpo$_4$ ☐1AGB ☑1AGBna$_2$ ☐1AGBs ☐500AGB ☐500AGBs ☐250CGB ☑250CGBs ☑1PB ☐500PB ☐500PBna ☐250PB ☑250PBn ☑125PB ☐125PBznna ☐100PBsterile ☐100PBna$_2$ ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® ☐_____

Checked/Labeled by: WB

Reviewed by: D.C

Scanned by: WB

Container: C:Clear A:Amber P:Poly/Plastic G:Glass J:Jar B:Bottle

Preservative: h:HCL n:HNO_3 na$_2$:$Na_2S_2O_3$ na:NaOH po$_4$:H_3PO_4 s:H_2SO_4 znna:$ZnAc_2$+NaOH

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 0 8 - 1 2 - 0 5 8 5

SAMPLE RECEIPT FORM

Cooler 2 of 2

CLIENT: Weiss Associates

DATE: 12/5/08

TEMPERATURE: (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 1.7 °C - 0.2 °C (CF) = 1.5 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by:_____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only **Initial:** JP

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Initial:** JP

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** WB

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	☑	☐	☐
COC document(s) received complete.....	☑	☐	☐
Sampler's name indicated on COC.....	☑	☐	☐
Sample container label(s) consistent with COC.....	☑	☐	☐
Sample container(s) intact and good condition.....	☑	☐	☐
Correct containers and volume for analyses requested.....	☑	☐	☐
Analyses received within holding time.....	☑	☐	☐
Proper preservation noted on sample label(s).....	☑	☐	☐
Volatile analysis container(s) free of headspace.....	☑	☐	☐
Tedlar bag(s) free of condensation.....	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☑VOAh ☐VOAna$_2$ ☑125AGB ☐125AGBh ☐125AGBpo$_4$ ☐1AGB ☑1AGBna$_2$ ☐1AGBs ☐500AGB ☐500AGBs ☐250CGB ☑250CGBs ☑1PB ☐500PB ☐500PBna ☐250PB ☑250PBn ☑125PB ☐125PBznna ☐100PBsterile ☐100PBna$_2$ ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® ☐_____

Checked/Labeled by: WB

Reviewed by: D.L

Scanned by: WB

Container: C:Clear A:Amber P:Poly/Plastic G:Glass J:Jar B:Bottle

Preservative: h:HCL n:HNO_3 na$_2$:$Na_2S_2O_3$ na:NaOH po$_4$:H_3PO_4 s:H_2SO_4 znna:$ZnAc_2$+NaOH

Work Order#: 08-12-0585

Client: WEISS Associates

RSK-175M

Calibration

☐ EPA METHOD 25 ☐ SCAQMD METHOD 25.1
☐ SCAQMD METHOD 25.1M (Low VOCs) ☐ SCAQMD METHOD 25.1M (Non-Condensable Fraction

QUALITY CONTROL DATA SHEET

Work Order Number: 08-12-0585
Instrument ID: GC14
Batch Number (LCS/MS/SA): 08120801

Analyst: _____ Date ___/___/___
QC Review: _____ Date ___/___/___
Date Analyzed: 12/08/08

LCS/LCS Duplicate

Thermal Conductivity Detector (TCD) Analysis ☐ % by Volume ☐ ppm(v/v) ☐ other _____

Analyte	Conc Added	LCS REC	LCS %REC	LCSD REC	LCSD %REC	Control Limit(%REC)	RPD	Control Limit(RPD)
Oxygen	20.0					80-120		0-20
Nitrogen	75.1					80-120		0-20
Carbon Dioxide	4.92					80-120		0-20

Flame Ionization Detector (FID) Analysis ☐ ppm(v/v) ☐ other _____

Methane	99.9	103	103	102	102	80-120	1	0-20
Carbon Monoxide	100	107	107	107	107	80-120	0	0-20
TGNMO (as Methane) (Total Gaseous Non-Methane Organic compounds)	385	404	105	402	104	80-120	0	0-20

Daily Midpoint Calibration Check

Thermal Conductivity Detector (TCD) Analysis ☐ % by Volume ☐ ppm(v/v) ☐ other _____

Analyte	Conc Added	Conc Recovered	% D	Control Limit
Oxygen	3.50			0 - 15
Nitrogen	10.03			0 - 15
Methane	10.03			0 - 15
Carbon Monoxide	9.96			0 - 15
Carbon Dioxide	10.0			0 - 15

Flame Ionization Detector (FID) Analysis ☐ ppm(v/v) ☐ other _____

Analyte	Conc Added	Conc Recovered	% D	Control Limit
Methane	308	317	3	0 - 15
Carbon Monoxide	304	314	3	0 - 15
Carbon Dioxide	302	308	2	0 - 15
TGNMO (as Methane) (Total Gaseous Non-Methane Organic compounds)	918	920	0	0 - 15

Analyst's Comments: _____

☐ EPA METHOD 25 ☐ SCAQMD METHOD 25.1
☐ SCAQMD METHOD 25.1M (Low VOCs) ☐ SCAQMD METHOD 25.1M (Non-Condensable Fraction

QUALITY CONTROL DATA SHEET

Work Order Number: 08-12-0585
Instrument ID: GC14
Batch Number (LCS/MS/SA): 081209L01
Analyst: _____ Date ___/___/___
QC Review: _____ Date ___/___/___
Date Analyzed: 12/09/08

LCS/LCS Duplicate

Thermal Conductivity Detector (TCD) Analysis ☐ % by Volume ☐ ppm(v/v) ☐ other _____

Analyte	Conc Added	LCS REC	LCS %REC	LCSD REC	LCSD %REC	Control Limit(%REC)	RPD	Control Limit(RPD)
Oxygen	20.0					80-120		0-20
Nitrogen	75.1					80-120		0-20
Carbon Dioxide	4.92					80-120		0-20

Flame Ionization Detector (FID) Analysis ☐ ppm(v/v) ☐ other _____

Analyte	Conc Added	LCS REC	LCS %REC	LCSD REC	LCSD %REC	Control Limit(%REC)	RPD	Control Limit(RPD)
Methane	99.9	101	101	100	100	80-120	1	0-20
Carbon Monoxide	100	106	106	105	105	80-120	1	0-20
TGNMO (as Methane) (Total Gaseous Non-Methane Organic compounds)	385	391	102	398	103	80-120	2	0-20

pc 12/09/08

Daily Midpoint Calibration Check

Thermal Conductivity Detector (TCD) Analysis ☐ % by Volume ☐ ppm(v/v) ☐ other _____

Analyte	Conc Added	Conc Recovered	% D	Control Limit
Oxygen	3.50			0 - 15
Nitrogen	10.03			0 - 15
Methane	10.03			0 - 15
Carbon Monoxide	9.96			0 - 15
Carbon Dioxide	10.0			0 - 15

Flame Ionization Detector (FID) Analysis ☐ ppm(v/v) ☐ other _____

Analyte	Conc Added	Conc Recovered	% D	Control Limit
Methane	308	315	2	0 - 15
Carbon Monoxide	304	312	3	0 - 15
Carbon Dioxide	302	306	1	0 - 15
TGNMO (as Methane) (Total Gaseous Non-Methane Organic compounds)	918	909	1	0 - 15

Analyst's Comments: _____

Data File C:\HPCHEM\2\DATA\081208\SIG10004.D Sample Name: FID CCV 1mL

```
==========================================================================
Injection Date  : 12/8/2008 9:36:57 AM
Sample Name     : FID CCV 1mL                    Location : Vial 1
Acq. Operator   : GC 14
                                                 Inj Volume : Manually
Acq. Method     : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed    : 10/3/2008 1:49:33 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M\071908.M
Last changed    : 12/8/2008 9:55:16 AM by GC 14
                  (modified after loading)
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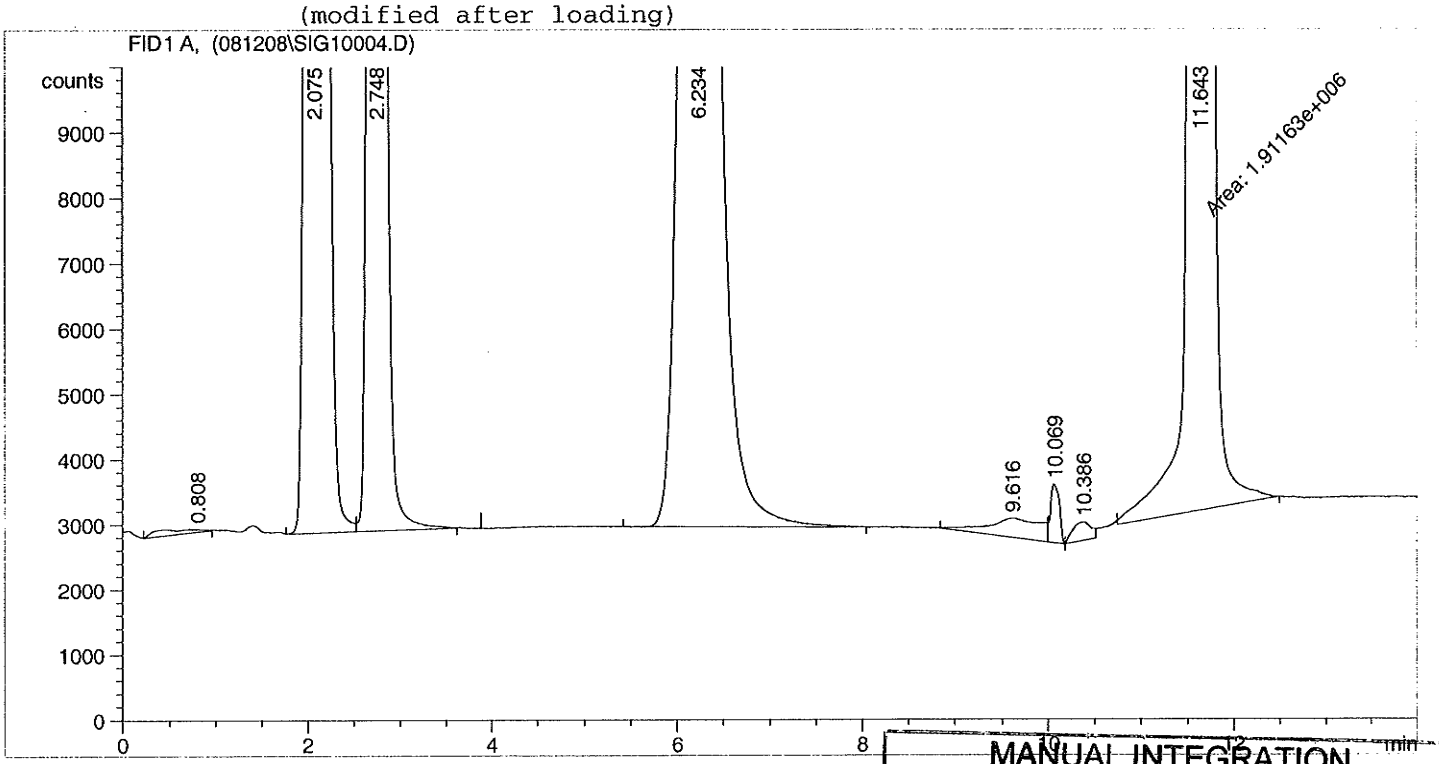


MANUAL INTEGRATION
BEFORE / AFTER
Date: 12/08/08
Chemist: JC GL: W
Reason: BASELINE CORR., PEAK ID CORR.
Other :
This stamp appears in red ink on original copy.

```
==========================================================================
                        External Standard Report
==========================================================================

Sorted By              :      Signal
Calib. Data Modified   :      12/8/2008 9:55:13 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: FID1 A,
```

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.075	PV	6.39802e5	4.91062e-4	314.18242		Carbon Monoxide
2.748	VV	6.40484e5	4.94479e-4	316.70610		Methane
6.234	BV	6.44112e5	4.77635e-4	307.65035		Carbon Dioxide
11.643	MM	1.91163e6	4.81128e-4	919.73904		TGNMO

Totals : 1858.27790

Results obtained with standard integrator!

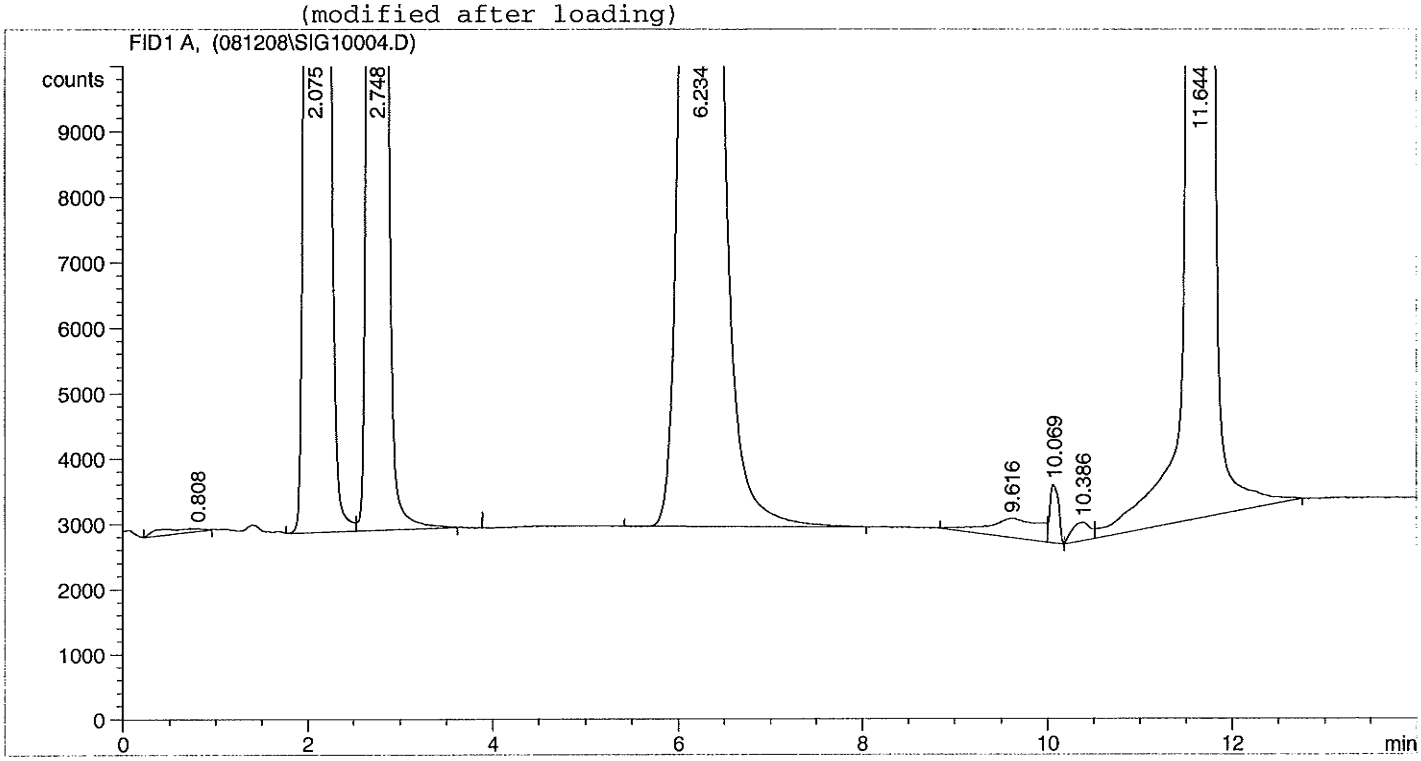
==========

*** End of Report ***

Data File C:\HPCHEM\2\DATA\081208\SIG10004.D Sample Name: FID CCV 1mL

==========

Injection Date : 12/8/2008 9:36:57 AM
Sample Name : FID CCV 1mL Location : Vial 1
Acq. Operator : GC 14
Inj Volume : Manually
Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 10/3/2008 1:49:33 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M\071908.M
Last changed : 12/6/2008 12:34:37 PM by GC 14
(modified after loading)



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External Standard Report

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MANUAL INTEGRATION
BEFORE / AFTER
Date:
Chemist: GL:
Reason: BASELINE CORR., PEAK ID CORR.
Other :
This stamp appears in red ink on original copy.

Sorted By : Signal
Calib. Data Modified : 12/6/2008 12:30:58 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.075	PV	6.39802e5	4.91062e-4	314.18242		Carbon Monoxide
2.748	VV	6.40484e5	4.94479e-4	316.70610		Methane
6.234	BV	6.44112e5	4.77635e-4	307.65035		Carbon Dioxide
11.644	VV	1.92673e6	4.81128e-4	927.00516		TGNMO

Totals : 1865.54402

Results obtained with standard integrator!

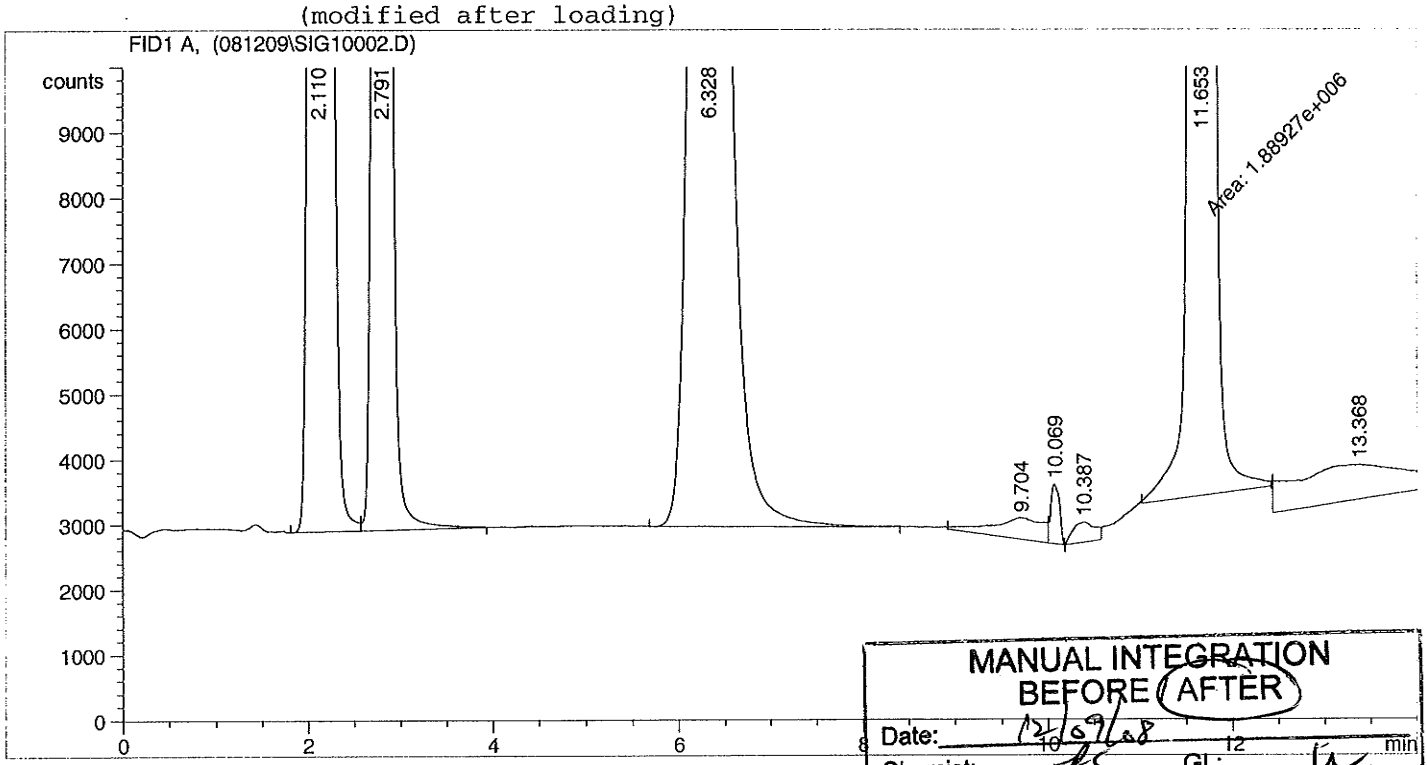
==========

*** End of Report ***

Data File C:\HPCHEM\2\DATA\081209\SIG10002.D Sample Name: FID CCV 1mL

==========

Injection Date : 12/9/2008 9:14:55 AM
Sample Name : FID CCV 1mL Location : Vial 1
Acq. Operator : GC 14
Inj Volume : Manually
Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 10/3/2008 1:49:33 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M\071908.M
Last changed : 12/9/2008 9:36:18 AM by GC 14
(modified after loading)



MANUAL INTEGRATION
BEFORE / AFTER
Date: 12/09/08
Chemist: GL:
Reason: BASELINE CORR., PEAK ID CORR.
Other:
This stamp appears in red ink on original copy.

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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 12/9/2008 9:36:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.110	BV	6.34792e5	4.91062e-4	311.72226		Carbon Monoxide
2.791	VB	6.36451e5	4.94479e-4	314.71138		Methane
6.328	BB	6.40763e5	4.77635e-4	306.05075		Carbon Dioxide
11.653	MM	1.88927e6	4.81128e-4	908.97981		TGNMO

Totals : 1841.46419

Results obtained with standard integrator!

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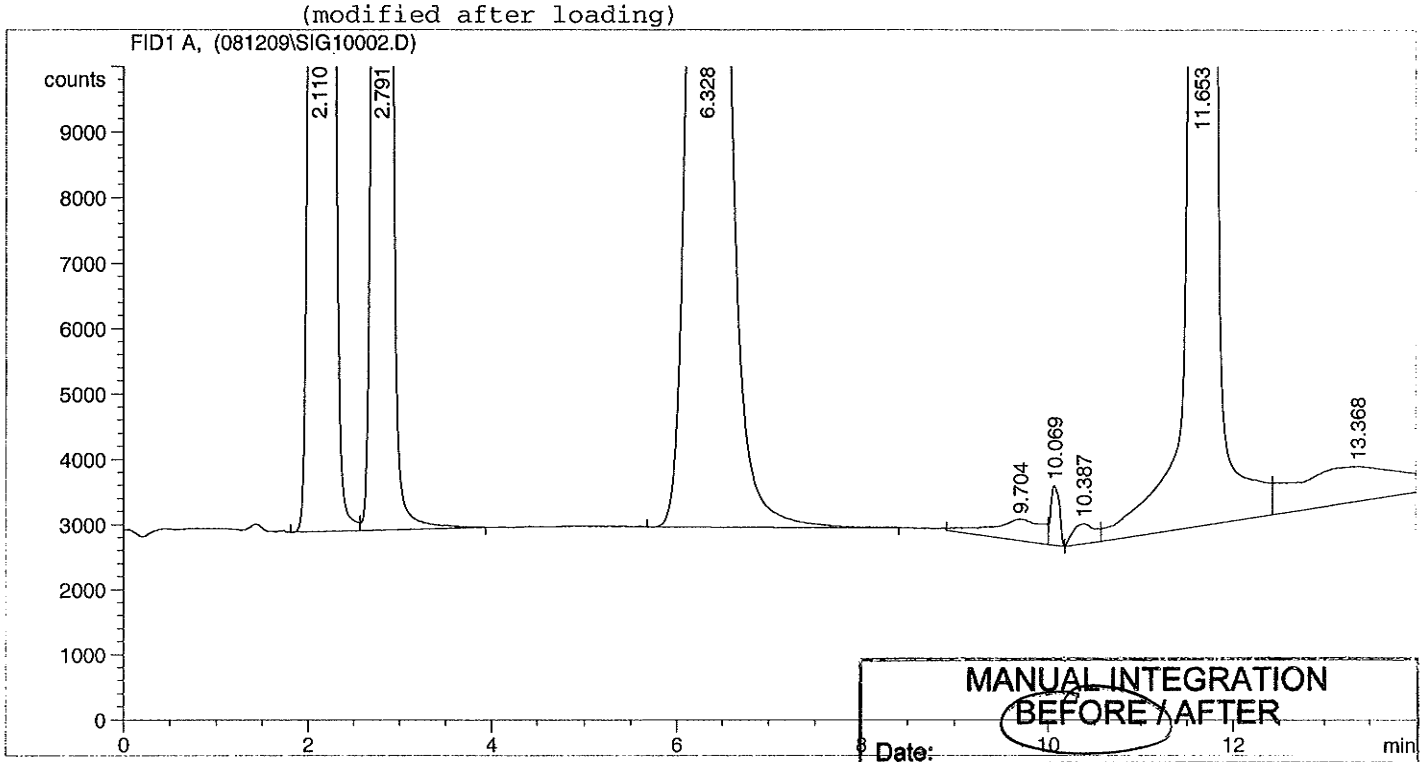
*** End of Report ***

Data File C:\HPCHEM\2\DATA\081209\SIG10002.D Sample Name: FID CCV 1mL

==========

Injection Date : 12/9/2008 9:14:55 AM
Sample Name : FID CCV 1mL Location : Vial 1
Acq. Operator : GC 14
Inj Volume : Manually
Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 10/3/2008 1:49:33 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M\071908.M
Last changed : 12/8/2008 12:45:54 PM by GC 14
(modified after loading)



MANUAL INTEGRATION
BEFORE / AFTER
Date:
Chemist: GL:
Reason: ~~BASELINE~~ CORR., PEAK ID CORR.
Other :
This stamp appears in red ink on original copy.

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External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : 12/8/2008 12:45:52 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.110	BV	6.34792e5	4.91062e-4	311.72226		Carbon Monoxide
2.791	VB	6.36451e5	4.94479e-4	314.71138		Methane
6.328	BB	6.40763e5	4.77635e-4	306.05075		Carbon Dioxide
10.387	PV	5033.19775	4.81128e-4	2.42161		TGNMO

Totals : 934.90599

Results obtained with standard integrator!

==========

*** End of Report ***

GC 14 25.1 METHOD 071908
Multipoint Calibration

C0		5ppm	300ppm	5000ppm		Average	SD	RSD
Conc.ppm		5.06	304	5110				
Area		11148	608729	9727630		3449169		
RF		2203.162	2002.398	1903.646		2036.402	152.626	7.494886

Methane	1ppm	5ppm	300ppm	5000ppm				
Conc.ppm	1.01	5.07	308	4950				
Area	2226	9790	612460	9774190		2599667		
RF	2203.96	1930.966	1988.506	1974.584		2024.504	122.1225	6.032217

C02	1ppm	5ppm	300ppm	5000ppm				
Conc.ppm	1.07	5.37	302	4980				
Area	2416	10976	623378	10044400		2670293		
RF	2257.944	2043.948	2064.166	2016.948		2095.751	109.8449	5.241313

TGNMO	1ppm	5ppm	300ppm	5000ppm				
Conc.ppm	3.06	15.3	918	2082				
Area	7467	29582	1772460	4179080		1497147		
RF	2440.196	1933.464	1930.784	2007.243		2077.922	244.1008	11.74735

Air Analysis Logbook

DATE	DIRECTORY	DATA FILE	CEL ID #	TEST METHOD	STANDARD LOT # / ID	LOOP VOL (mL)	ANALYST	COMMENTS
07/18/08	080718	SIG100009	ICAL std #1	TGMNO	01-13-08	200µL	NV	
		10	ICAL std #3		01-13-07	1mL		
		11	ICAL STD #4		01-13-14		NV	
		12	MB		N/A			
		13	MDL #1		01-13-08			
		14	2					
		15	3					
		16	4					
		17	5					
		18	6					
		19	7					
		20	ICAL #4		01-13-09			
07/19/08	080719	SIG1000	BLANK	TGMNO	N/A	1	EY	
		02	ICAL std #3		01-10-15		LL	25.1 300 ppm
		03	blank		NA			
		04	ICAL std #1		01-13-08	200ul		1ppm (~5ppm)
		05	ICAL std #2			1		5 ppm
		06	ICAL std #3		01-10-15			300 ppm
		07	ICAL std ~~#3~~		~~01-10-15~~ 07/19			~~5000~~ 300 ppm LL 07/19/08
		08	ICAL std #3		~~01-13-09~~			5000 ppm
		09	ICAL STD #4					
		10	Blank		NA	1		~~5 ppm~~ LL 07/19
		11	MDL #1		01-13-08		EY	5 ppm
		12	ICAL std #1			200ul		
		13	ICAL std #2			1		
		14	blank		NA		LL	
		15	#10 CCV		01-10-15			
		16	LCS		01-13-07			

Reviewed by: _____ Date ____/____/____

Air Analysis Logbook

DATE	DIRECTORY	DATA FILE	CEL ID #	TEST METHOD	STANDARD LOT # / ID	LOOP VOL (mL)	ANALYST	COMMENTS
07/19/08	080719	SIG100017	LCSD	TGNMO	01-13-07	1	LL	
		18	BLANK		NA			
		19	ICAL STD #1		01-13-08	200µL		
		20	1					
		21	2		~~01-10-15~~			
		22	3		~~01-13-09~~			01-10-15
		23	4		01-13-09			
		24	4		01-13-09			
		25	3		01-10-15			
		26	2		01-13-08			
		27	1			200µL		
		28	1					
		29	4		01-13-09	1		mislabled
		30	4					
		31	2		01-13-08			
		32	2					
07/20/08	080720	SIG100001	Blank	TGNMO	NA	1	NL	
		2	FID CCV		01-10-15		PM	
		3						
		4	LCS		01-13-07		NL	
		5	LCSD		1			
		6	Blank		NA			
		7	08-07-1427-1A		1		LL	
		8	-2A					
		9	-2A					
		10	3A				PM	
		11	4A					
		12	08-07-1431-1A					

Reviewed by: _____ Date ____/____/____

Calibration Table

Calib. Data Modified : Sunday, July 20, 2008 11:10:47 AM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 20.000 %
Abs. Reference Window : 0.000 min
Rel. Non-ref. Window : 20.000 %
Abs. Non-ref. Window : 0.000 min
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times : No, only for identified peaks

Curve Type : Power
Origin : Ignored
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: FID1 A,

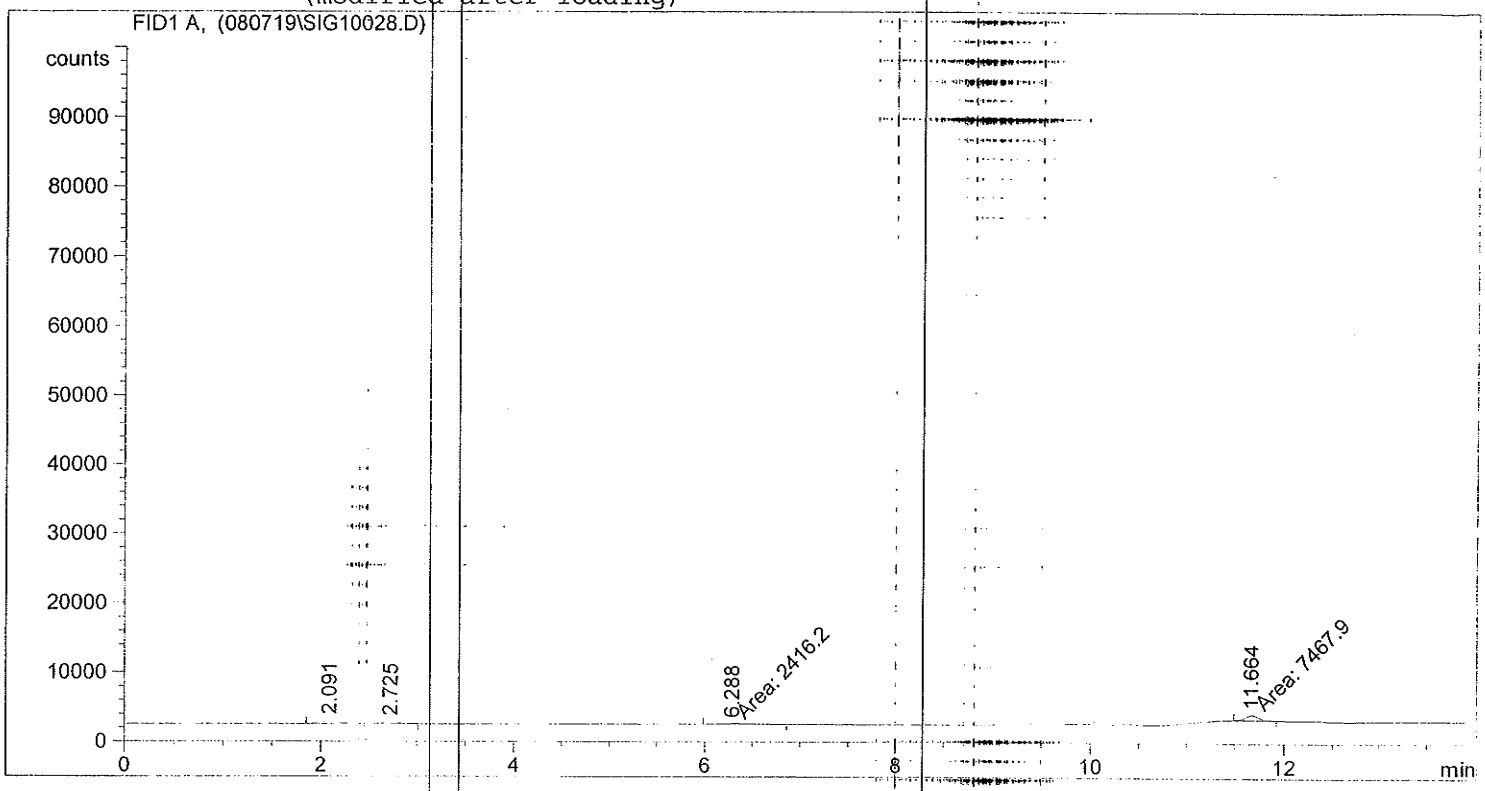
RetTime [min]	Sig	Lvl	Amount [ppm v/v]	Area	Amt/Area	Ref	Grp	Name
2.218	1	2	5.06000	1.11479e4	4.53898e-4			Carbon Monoxide
		3	304.00000	6.08729e5	4.99401e-4			
		4	5110.00000	9.72763e6	5.25308e-4			
2.817	1	1	1.01400	2226.19580	4.55486e-4			Methane
		2	5.07000	9790.16699	5.17867e-4			
		3	308.00000	6.12460e5	5.02890e-4			
		4	4950.00000	9.77419e6	5.06436e-4			
6.396	1	1	1.07400	2416.20410	4.44499e-4			Carbon Dioxide
		2	5.37000	1.09761e4	4.89244e-4			
		3	302.00000	6.23378e5	4.84457e-4			
		4	4980.00000	1.00444e7	4.95799e-4			
11.667	1	1	3.06000	7467.90234	4.09754e-4			TGNMO
		2	15.30000	2.95820e4	5.17207e-4			
		3	918.00000	1.77246e6	5.17925e-4			
		4	2082.00000	4.17908e6	4.98196e-4			

Peak Sum Table

No Entries in table

==========

Injection Date : 7/19/2008 11:46:49 PM
Sample Name : ICAL #1 200uL Location : Vial 1
Acq. Operator : GC 14
Inj Volume : Manually
Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 10:59:10 AM by GC 14
(modified after loading)



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 7/20/2008 10:59:08 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.091	BB	5333.47119	2.20085e-4	1.17382		Carbon Monoxide
2.725	BB	2226.19580	4.81720e-4	1.07240		Methane
6.288	MM	2416.20410	2.55639e-4	6.17675e-1		Carbon Dioxide
11.664	MM	7467.90234	4.72564e-4	3.52906		TGNMO
Totals :				6.39296		

Results obtained with standard integrator!

==========

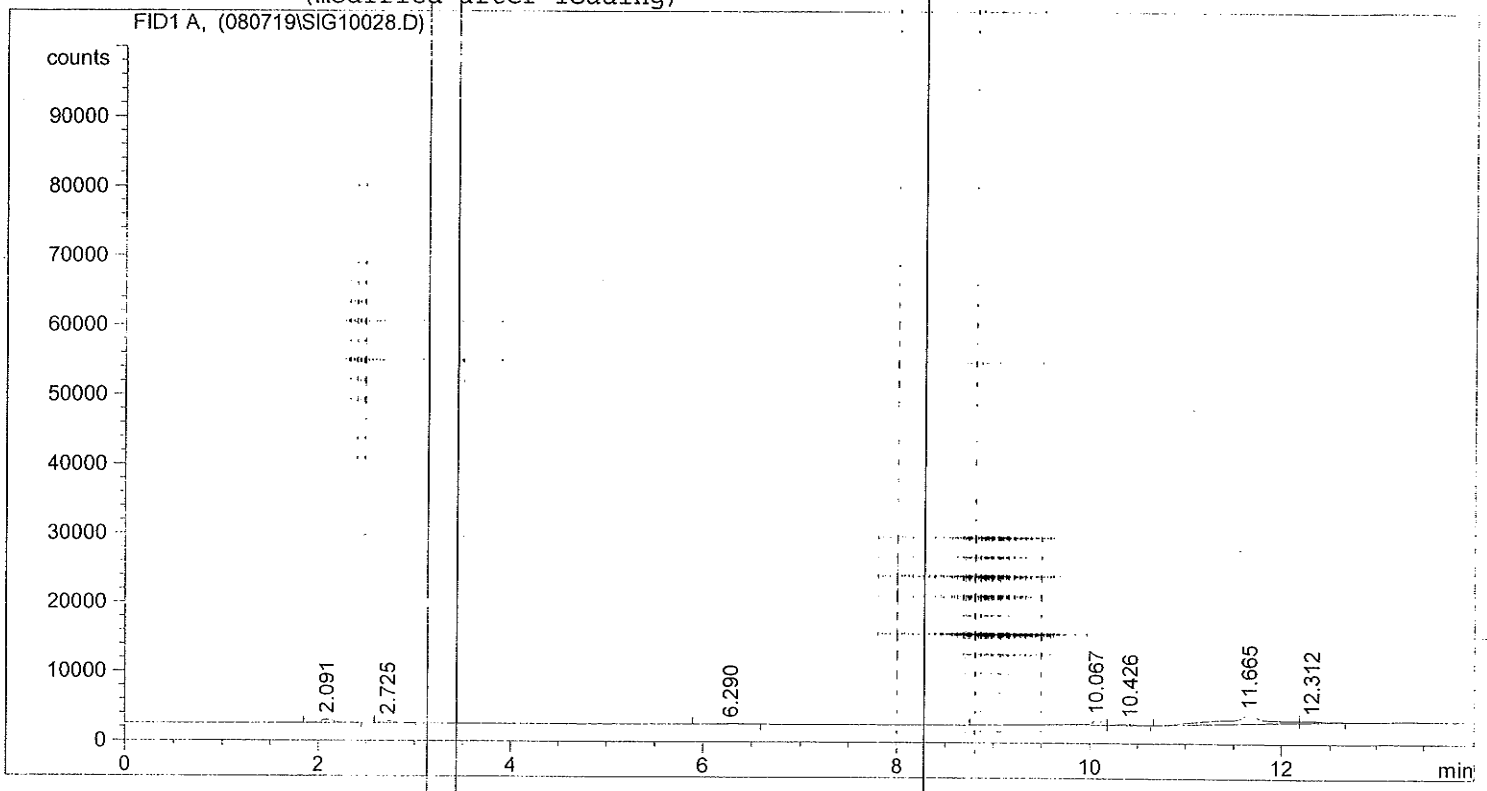
*** End of Report ***

==========

Injection Date : 7/19/2008 11:46:49 PM
Sample Name : ICAL #1 200uL
Acq. Operator : GC 14

Location : Vial 1
Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 10:59:10 AM by GC 14
(modified after loading)



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External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : 7/20/2008 10:59:08 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.091	BB	5333.47119	2.20085e-4	1.17382		Carbon Monoxide
2.725	BB	2226.19580	4.81720e-4	1.07240		Methane
6.290	BB	1793.48889	2.46801e-4	4.42634e-1		Carbon Dioxide
11.665	BV	4.09466e4	5.00967e-4	20.51291		TGNMO

Totals : 23.20177

Results obtained with standard integrator!

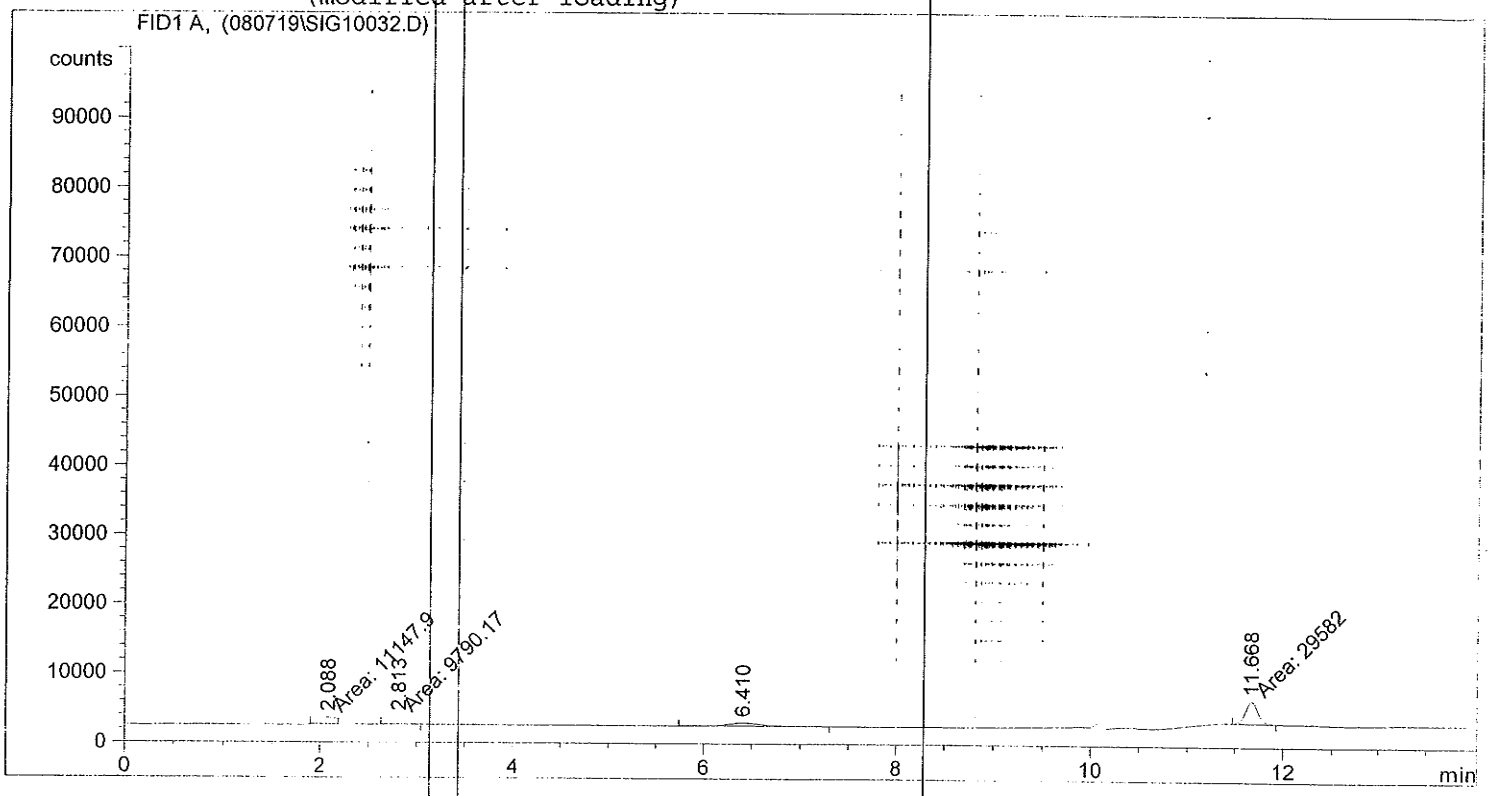
==========

*** End of Report ***

Injection Date : 7/20/2008 1:12:23 AM
Sample Name : ICAL #2 1mL
Acq. Operator : GC 14

Location : Vial 1
Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 11:08:23 AM by GC 14
(modified after loading)



External Standard Report

Sorted By : Signal
Calib. Data Modified : Sunday, July 20, 2008 11:08:23 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.088	MF	1.11479e4	4.34978e-4	4.84908		Carbon Monoxide
2.813	MM	9790.16699	4.86574e-4	4.76364		Methane
6.410	BB	1.09761e4	4.68418e-4	5.14142		Carbon Dioxide
11.668	MM	2.95820e4	4.67871e-4	13.84055		TGNMO

Totals : 28.59469

Results obtained with standard integrator!

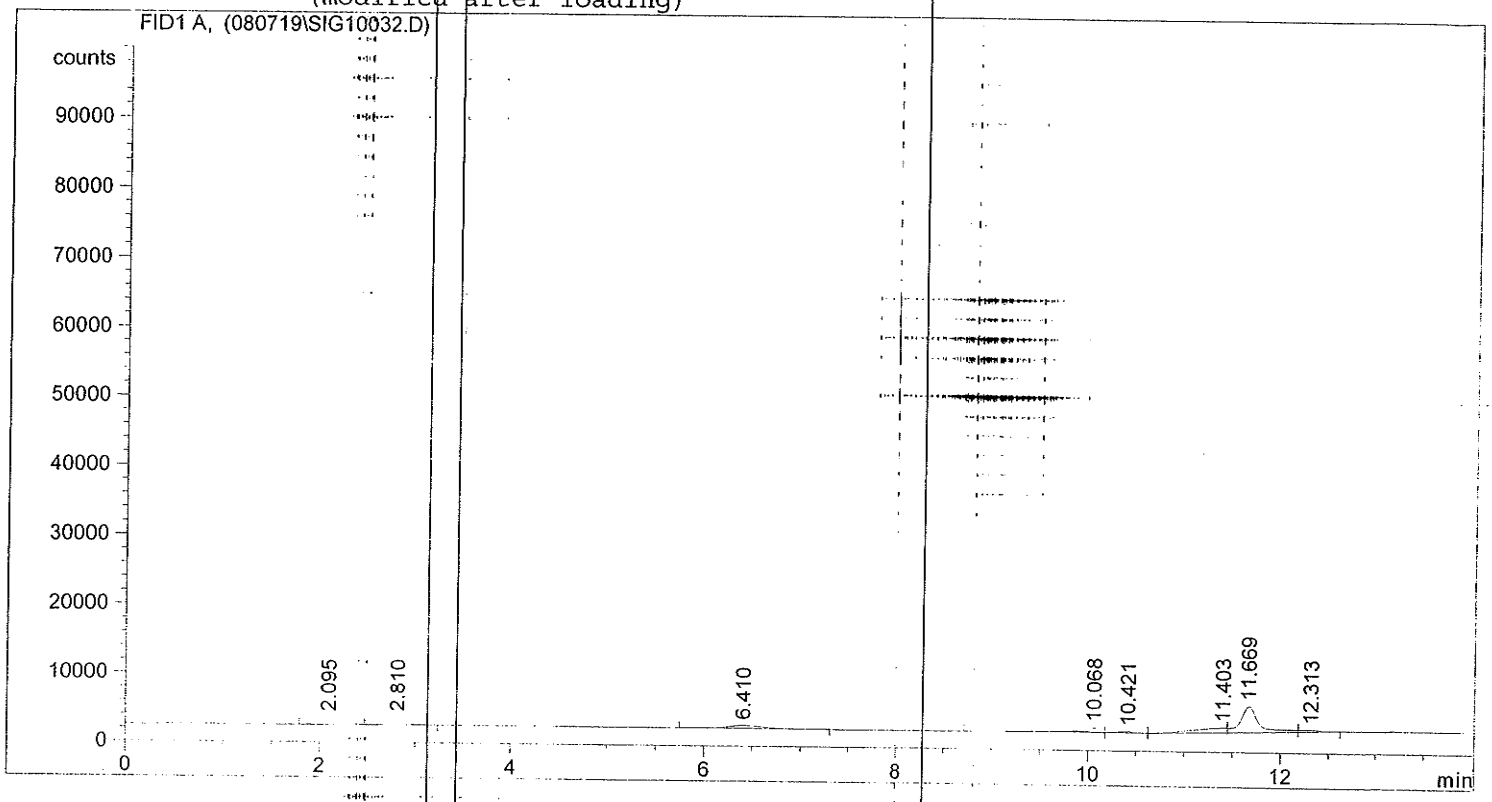
*** End of Report ***

Injection Date : 7/20/2008 1:12:23 AM
Sample Name : ICAL #2 1mL
Acq. Operator : GC 14

Location : Vial 1

Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 11:02:59 AM by GC 14
(modified after loading)



External Standard Report

Sorted By : Signal
Calib. Data Modified : Sunday, July 20, 2008 11:02:59 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.095	BV	1.74076e4	2.66416e-4	4.63767		Carbon Monoxide
2.810	VB	1.16931e4	4.63584e-4	5.42075		Methane
6.410	BB	1.09761e4	4.49500e-4	4.93377		Carbon Dioxide
11.669	VV	4.94595e4	4.66855e-4	23.09040		TGNMO

Totals : 38.08258

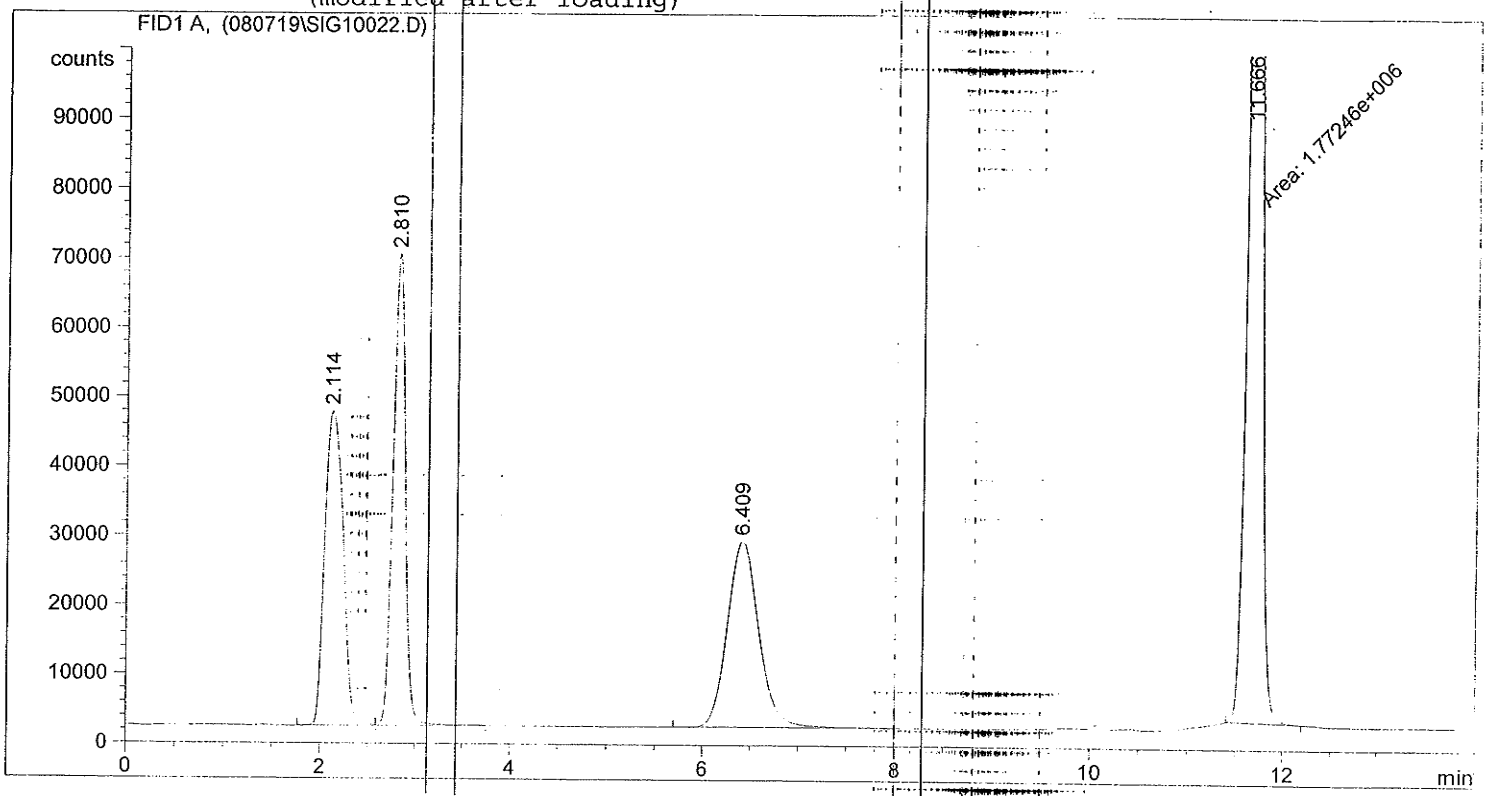
Results obtained with standard integrator!

*** End of Report ***

Injection Date : 7/19/2008 7:54:26 PM
Sample Name : ICAL #3 1mL
Acq. Operator : GC 14

Location : Vial 1
Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 10:41:13 AM by GC 14
(modified after loading)



External Standard Report

Sorted By : Signal
Calib. Data Modified : Sunday, July 20, 2008 10:41:12 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.114	BV	6.08729e5	5.18394e-4	315.56139		Carbon Monoxide
2.810	VB	6.12460e5	5.51524e-4	337.78630		Methane
6.409	BV	6.23378e5	4.76516e-4	297.04967		Carbon Dioxide
11.666	MM	1.77246e6	5.81475e-4	1030.63989		TGNMO

Totals : 1981.03725

Results obtained with standard integrator!

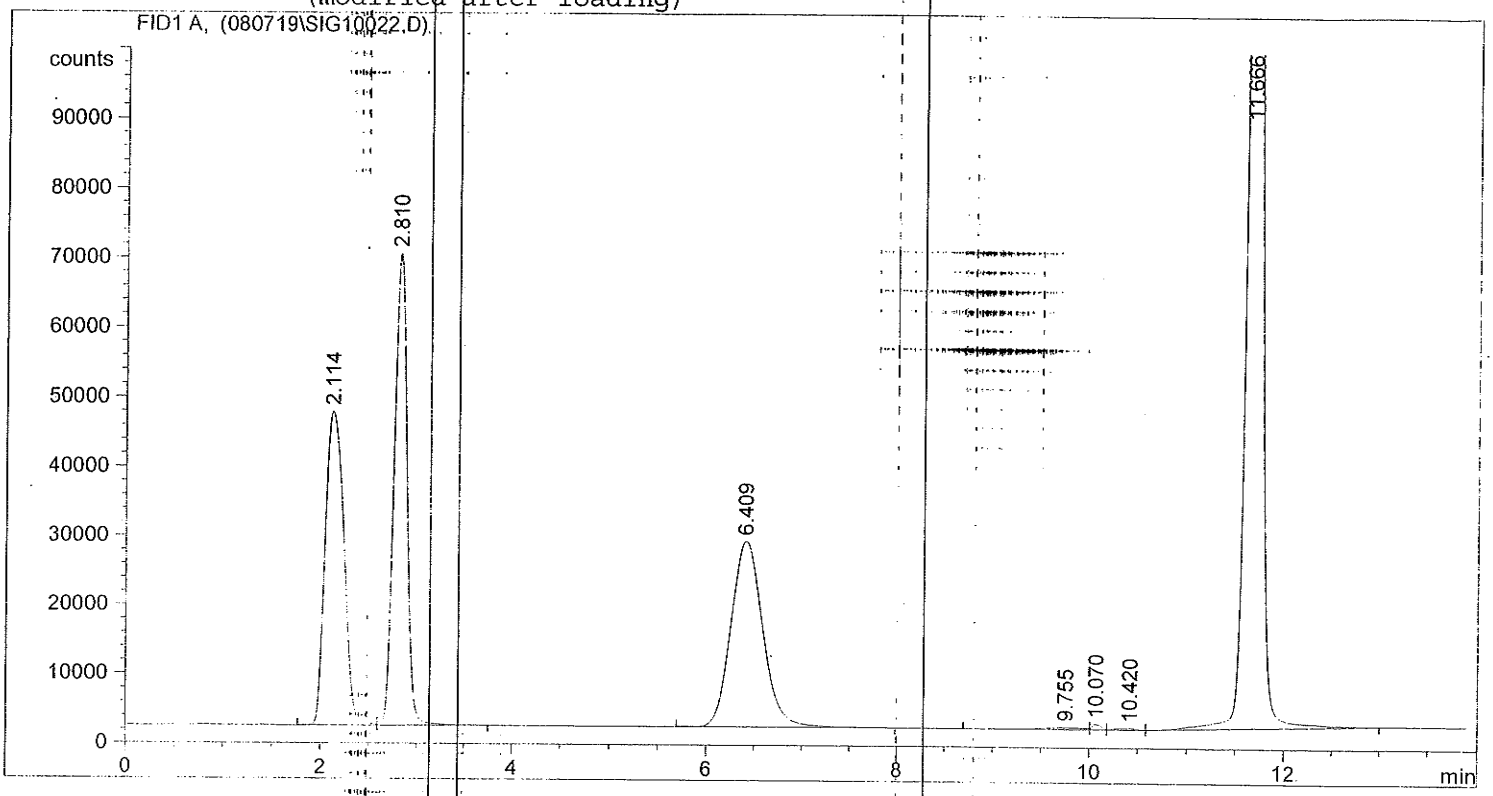
*** End of Report ***

Injection Date : 7/19/2008 7:54:26 PM
Sample Name : ICAL #3 1mL
Acq. Operator : GC 14

Location : Vial 1

Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 10:37:22 AM by GC 14
(modified after loading)



External Standard Report

Sorted By : Signal
Calib. Data Modified : 7/20/2008 10:37:20 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.114	BV	6.08729e5	4.82486e-4	293.70355		Carbon Monoxide
2.810	VB	6.12460e5	5.08124e-4	311.20580		Methane
6.409	BV	6.23378e5	4.39930e-4	274.24266		Carbon Dioxide
11.666	PV	1.84478e6	5.27180e-4	972.53302		TGNMO

Totals : 1851.68502

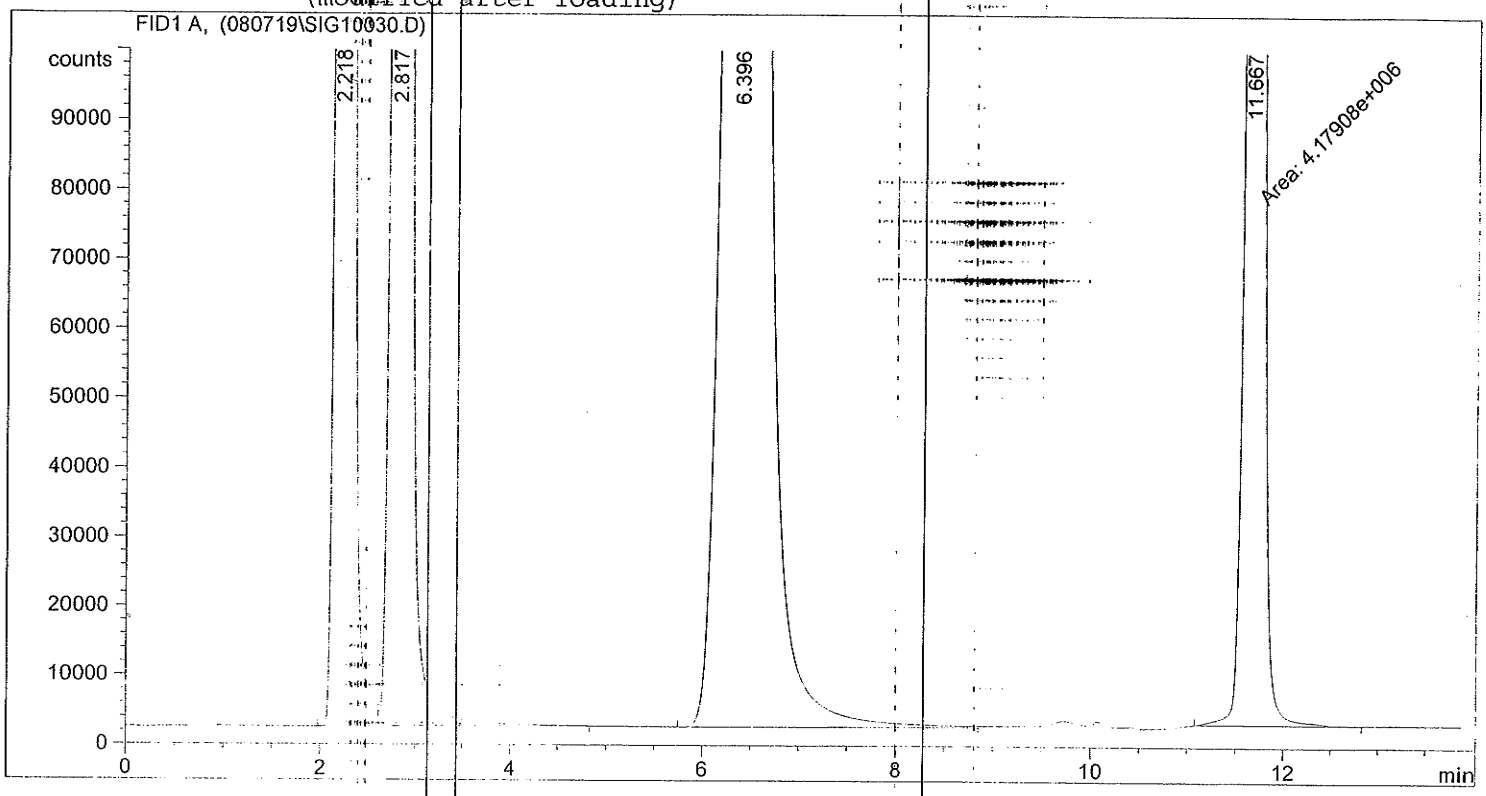
Results obtained with standard integrator!

*** End of Report ***

Injection Date : 7/20/2008 12:31:29 AM
Sample Name : ICAL #4 1mL
Acq. Operator : GC 14

Location : Vial 1
Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 11:10:47 AM by GC 14
(modified after loading)



External Standard Report

Sorted By : Signal
Calib. Data Modified : Sunday, July 20, 2008 11:10:47 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.218	BV	9.72763e6	5.27203e-4	5128.43195		Carbon Monoxide
2.817	VB	9.77419e6	5.13222e-4	5016.33247		Methane
6.396	BV	1.00444e7	4.99095e-4	5013.11061		Carbon Dioxide
11.667	MM	4.17908e6	5.19835e-4	2172.43283		TGNMO
Totals :				1.73303e4		

Results obtained with standard integrator!

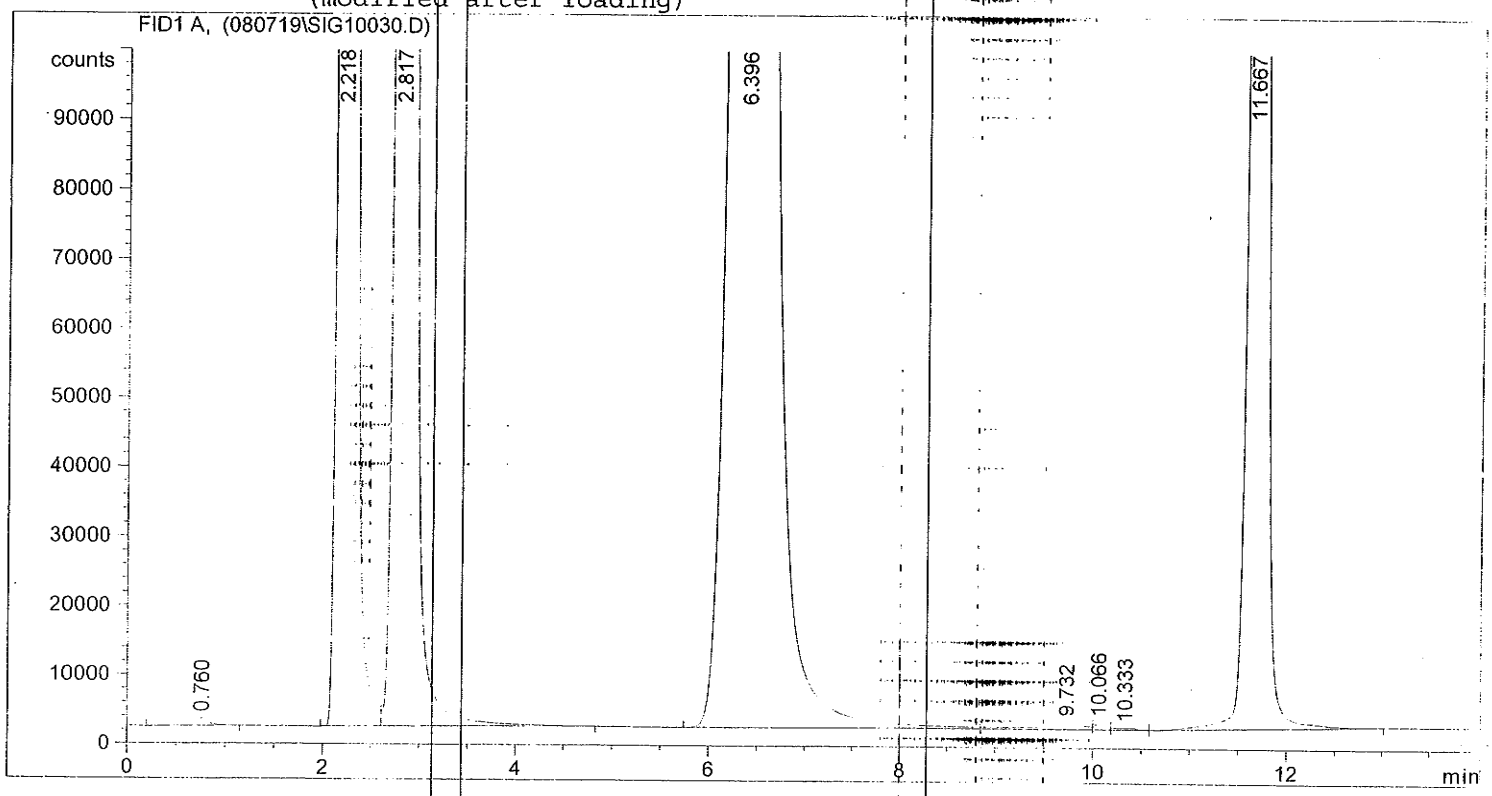
*** End of Report ***

Injection Date : 7/20/2008 12:31:29 AM
Sample Name : ICAL #4 1mL
Acq. Operator : GC 14

Location : Vial 1

Inj Volume : Manually

Acq. Method : C:\HPCHEM\2\METHODS\TGMNO.M
Last changed : 11/5/2007 6:36:24 PM by GC 14
Analysis Method : C:\HPCHEM\2\METHODS\071908.M
Last changed : 7/20/2008 11:08:23 AM by GC 14
(modified after loading)



External Standard Report

Sorted By : Signal
Calib. Data Modified : Sunday, July 20, 2008 11:08:23 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm v/v]	Grp	Name
2.218	BV	9.72763e6	6.55749e-4	6378.87873		Carbon Monoxide
2.817	VB	9.77419e6	6.26868e-4	6127.12819		Methane
6.396	BV	1.00444e7	5.94616e-4	5972.55680		Carbon Dioxide
11.667	PV	4.21085e6	6.03754e-4	2542.31342		TGNMO

Totals : 2.10209e4

Results obtained with standard integrator!

*** End of Report ***

Work Order#: 08-12-0585

Client: WEISS Associates

EPA 6010B

Calibration

Sequence No.: 8
Sample ID: icv si
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:

Autosampler Location: 157
Date Collected: 12/9/2008 10:53:33 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: icv si

Analyte	Back Pressure	Flow
All	170.0 kPa	0.60 L/min

Mean Data: icv si

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ho 339.898	62290.7	5.004	mg/L	0.0778				1.56%
Ho 345.600	102700.9	5.014	mg/L	0.0739				1.47%
Tb 350.917	25310.9	4.991	mg/L	0.0853				1.71%
Tb 384.873	13503.4	4.967	mg/L	0.0891				1.79%
Y 324.227	167530.6	5.015	mg/L	0.1143				2.28%
Y 371.029	271938.4	4.996	mg/L	0.0942				1.89%
Ag 328.068*†	-1.5	0.0000	mg/L	0.00053	0.0000	mg/L	0.00053	>999.9%
Ag 338.289†	76.7	0.0014	mg/L	0.00102	0.0014	mg/L	0.00102	73.66%
Al 308.215*†	374.6	0.0283	mg/L	0.00334	0.0283	mg/L	0.00334	11.83%
Al 396.153†	3081.2	0.0296	mg/L	0.00002	0.0296	mg/L	0.00002	0.08%
As 188.979†	13.2	0.0052	mg/L	0.00001	0.0052	mg/L	0.00001	0.19%
As 193.696*†	8.0	0.0040	mg/L	0.00116	0.0040	mg/L	0.00116	29.08%
B 249.677*†	2183.7	0.0850	mg/L	0.00240	0.0850	mg/L	0.00240	2.83%
B 249.772†	3238.0	0.0839	mg/L	0.00241	0.0839	mg/L	0.00241	2.87%
Ba 455.403†	292.6	0.0020	mg/L	0.00015	0.0020	mg/L	0.00015	7.43%
Ba 233.527*†	216.0	0.0016	mg/L	0.00029	0.0016	mg/L	0.00029	17.94%
Be 313.107†	160.1	0.0001	mg/L	0.00021	0.0001	mg/L	0.00021	184.41%
Be 313.042*†	300.2	0.0001	mg/L	0.00005	0.0001	mg/L	0.00005	43.94%
Bi 190.171†	3.2	0.0021	mg/L	0.00049	0.0021	mg/L	0.00049	23.56%
Bi 223.061*†	5.2	0.0012	mg/L	0.00014	0.0012	mg/L	0.00014	11.14%
Ca 422.673†	209.6	0.0422	mg/L	0.00130	0.0422	mg/L	0.00130	3.08%
Ca 317.933*†	56.3	0.0296	mg/L	0.00755	0.0296	mg/L	0.00755	25.53%
Cd 226.502*†	20.9	0.0003	mg/L	0.00015	0.0003	mg/L	0.00015	50.91%
Cd 228.802†	30.6	0.0004	mg/L	0.00014	0.0004	mg/L	0.00014	34.49%
Co 230.786†	29.1	0.0007	mg/L	0.00027	0.0007	mg/L	0.00027	41.43%
Co 228.616*†	12.8	0.0002	mg/L	0.00003	0.0002	mg/L	0.00003	11.10%
Cr 357.869†	6.9	0.0002	mg/L	0.00137	0.0002	mg/L	0.00137	828.87%
Cr 267.716*†	7.0	0.0001	mg/L	0.00042	0.0001	mg/L	0.00042	284.38%
Cu 324.752*†	182.6	0.0016	mg/L	0.00001	0.0016	mg/L	0.00001	0.84%
Cu 327.393†	150.2	0.0026	mg/L	0.00044	0.0026	mg/L	0.00044	16.80%
Fe 239.562†	3.9	0.0200	mg/L	0.00041	0.0200	mg/L	0.00041	2.05%
Fe 259.939†	7.8	0.0101	mg/L	0.00126	0.0101	mg/L	0.00126	12.46%
Fe 273.955*†	221.1	0.0103	mg/L	0.00718	0.0103	mg/L	0.00718	69.52%
K 766.490*†	46.0	0.0677	mg/L	0.00031	0.0677	mg/L	0.00031	0.47%
Li 610.362*†	197.1	0.0007	mg/L	0.00157	0.0007	mg/L	0.00157	211.33%
Mg 279.077*†	40.8	0.0046	mg/L	0.00401	0.0046	mg/L	0.00401	87.97%
Mg 280.271†	51.3	0.0039	mg/L	0.00002	0.0039	mg/L	0.00002	0.54%
Mn 257.610*†	361.1	0.0006	mg/L	0.00011	0.0006	mg/L	0.00011	19.32%
Mn 259.372†	267.3	0.0005	mg/L	0.00005	0.0005	mg/L	0.00005	9.27%
Mo 202.031*†	2.8	0.0002	mg/L	0.00054	0.0002	mg/L	0.00054	273.56%
Mo 203.845†	7.0	0.0007	mg/L	0.00049	0.0007	mg/L	0.00049	66.94%
Na 589.592*†	235.8	0.0593	mg/L	0.00273	0.0593	mg/L	0.00273	4.61%
Na 330.237†	85.7	0.2820	mg/L	0.08198	0.2820	mg/L	0.08198	29.07%
Ni 231.604*†	-5.4	-0.0002	mg/L	0.00000	-0.0002	mg/L	0.00000	2.28%
Ni 232.003†	-2.5	-0.0001	mg/L	0.00047	-0.0001	mg/L	0.00047	340.43%
P 213.617*†	0.2	0.0001	mg/L	0.00426	0.0001	mg/L	0.00426	>999.9%
P 214.914†	13.5	0.0058	mg/L	0.00032	0.0058	mg/L	0.00032	5.53%
Pb 217.000†	9.4	0.0043	mg/L	0.00580	0.0043	mg/L	0.00580	134.66%
Pb 220.353*†	15.8	0.0020	mg/L	0.00036	0.0020	mg/L	0.00036	17.37%
S 181.975*†	2.3	0.0034	mg/L	0.00379	0.0034	mg/L	0.00379	112.75%
S 180.669†	4.3	0.0050	mg/L	0.00276	0.0050	mg/L	0.00276	55.17%
S 182.563†	-3.0	-0.0097	mg/L	0.00549	-0.0097	mg/L	0.00549	56.78%
Sb 217.582*†	-3.6	-0.0013	mg/L	0.00233	-0.0013	mg/L	0.00233	174.04%
Sb 206.836†	-15.1	-0.0035	mg/L	0.00563	-0.0035	mg/L	0.00563	160.48%
Sb 206†	12.0	0.0033	mg/L	0.00026	0.0033	mg/L	0.00026	7.85%

Se 196.026*†	-3.1	-0.0012 mg/L	0.00078	-0.0012 mg/L	0.00078	65.82%
Se 203.985†	-24.0	-0.0146 mg/L	0.00411	-0.0146 mg/L	0.00411	28.20%
Si 251.611*†	350923.4	10.60 mg/L	0.038	10.60 mg/L	0.038	0.36%
Si 288.158†	103269.0	10.63 mg/L	0.023	10.63 mg/L	0.023	0.21%
Sn 242.170†	-22.8	-0.0081 mg/L	0.02428	-0.0081 mg/L	0.02428	301.26%
Sn 189.927*†	18.8	0.0029 mg/L	0.00075	0.0029 mg/L	0.00075	26.25%
Sr 407.771*†	124.0	0.0003 mg/L	0.00003	0.0003 mg/L	0.00003	11.87%
Sr 421.552†	1331.5	0.0002 mg/L	0.00000	0.0002 mg/L	0.00000	2.34%
Ti 334.940†	109.8	0.0003 mg/L	0.00029	0.0003 mg/L	0.00029	85.14%
Ti 336.121*†	95.6	0.0003 mg/L	0.00011	0.0003 mg/L	0.00011	31.30%
Tl†	16.9	0.0046 mg/L	0.00042	0.0046 mg/L	0.00042	9.13%
Tl 351.924†	6.5	0.0017 mg/L	0.00177	0.0017 mg/L	0.00177	103.11%
Tl 190.801*†	22.3	0.0052 mg/L	0.00037	0.0052 mg/L	0.00037	7.07%
V 310.230†	-50.6	-0.0003 mg/L	0.00095	-0.0003 mg/L	0.00095	323.42%
V 292.402*†	76.9	0.0009 mg/L	0.00026	0.0009 mg/L	0.00026	29.87%
Zn 206.200*†	308.7	0.0052 mg/L	0.00012	0.0052 mg/L	0.00012	2.27%
Zn 213.857*†	331.9	0.0052 mg/L	0.00006	0.0052 mg/L	0.00006	1.19%
Zn 202.548†	411.1	0.0051 mg/L	0.00016	0.0051 mg/L	0.00016	3.12%

Sequence No.: 3
Sample ID: CCV
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/9/2008 5:59:18 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	171.0 kPa	0.60 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ho 339.898	64856.5	5.020	mg/L	0.0175				0.35%
Ho 345.600	106379.0	5.015	mg/L	0.0323				0.64%
Tb 384.873	14474.2	4.813	mg/L	0.0391				0.81%
Tb 350.917	27729.1	5.014	mg/L	0.0377				0.75%
Y 324.227	168353.8	4.932	mg/L	0.0333				0.68%
Y 371.029	297974.5	4.896	mg/L	0.0404				0.82%
Ag 328.068*†	37558.8	0.3822	mg/L	0.00039	0.3822	mg/L	0.00039	0.10%
QC value within limits for Ag 328.068* Recovery = 101.93%								
Ag 338.289†	21731.3	0.3852	mg/L	0.00165	0.3852	mg/L	0.00165	0.43%
Al 308.215*†	181869.9	13.58	mg/L	0.008	13.58	mg/L	0.008	0.06%
QC value within limits for Al 308.215* Recovery = 100.57%								
Al 396.153†	1494826.1	13.95	mg/L	0.284	13.95	mg/L	0.284	2.03%
As 188.979†	10068.2	3.850	mg/L	0.0323	3.850	mg/L	0.0323	0.84%
QC value within limits for As 188.979 Recovery = 102.67%								
As 193.696*†	7951.9	3.835	mg/L	0.0329	3.835	mg/L	0.0329	0.86%
QC value within limits for As 193.696* Recovery = 102.27%								
B 249.677*†	101219.1	3.854	mg/L	0.0103	3.854	mg/L	0.0103	0.27%
QC value within limits for B 249.677* Recovery = 102.77%								
B 249.772†	160555.0	3.849	mg/L	0.0033	3.849	mg/L	0.0033	0.09%
Ba 455.403†	1010749.9	7.687	mg/L	0.0081	7.687	mg/L	0.0081	0.11%
Ba 233.527*†	1120517.0	7.871	mg/L	0.0009	7.871	mg/L	0.0009	0.01%
QC value within limits for Ba 233.527* Recovery = 104.95%								
Be 313.107†	796022.6	0.5796	mg/L	0.00151	0.5796	mg/L	0.00151	0.26%
Be 313.042*†	1591087.3	0.5723	mg/L	0.00021	0.5723	mg/L	0.00021	0.04%
QC value within limits for Be 313.042* Recovery = 101.75%								
Ca 422.673†	168971.2	30.59	mg/L	0.080	30.59	mg/L	0.080	0.26%
Ca 317.933*†	64424.3	31.26	mg/L	0.055	31.26	mg/L	0.055	0.18%
QC value within limits for Ca 317.933* Recovery = 104.19%								
Cd 226.502*†	56728.9	0.7800	mg/L	0.00127	0.7800	mg/L	0.00127	0.16%
QC value within limits for Cd 226.502* Recovery = 104.00%								
Cd 228.802†	57158.6	0.7696	mg/L	0.00196	0.7696	mg/L	0.00196	0.25%
Co 230.786†	89546.3	1.954	mg/L	0.0014	1.954	mg/L	0.0014	0.07%
Co 228.616*†	106994.4	1.951	mg/L	0.0018	1.951	mg/L	0.0018	0.09%
QC value within limits for Co 228.616* Recovery = 104.03%								
Cr 357.869†	25081.5	0.5973	mg/L	0.00035	0.5973	mg/L	0.00035	0.06%
Cr 267.716*†	30214.0	0.6238	mg/L	0.00019	0.6238	mg/L	0.00019	0.03%
QC value within limits for Cr 267.716* Recovery = 103.97%								
Cu 324.752*†	107456.9	0.9575	mg/L	0.00290	0.9575	mg/L	0.00290	0.30%
QC value within limits for Cu 324.752* Recovery = 102.13%								
Cu 327.393†	59004.3	0.9634	mg/L	0.00071	0.9634	mg/L	0.00071	0.07%
Fe 259.939†	3208.9	3.811	mg/L	0.0233	3.811	mg/L	0.0233	0.61%
Fe 273.955*†	83500.9	3.887	mg/L	0.0055	3.887	mg/L	0.0055	0.14%
QC value within limits for Fe 273.955* Recovery = 103.65%								
Fe 239.562†	760.6	3.836	mg/L	0.0532	3.836	mg/L	0.0532	1.39%
K 766.490*†	20139.0	27.99	mg/L	0.271	27.99	mg/L	0.271	0.97%
QC value within limits for K 766.490* Recovery = 103.68%								
Li 610.362*†	885219.2	3.100	mg/L	0.0017	3.100	mg/L	0.0017	0.05%
QC value within limits for Li 610.362* Recovery = 103.35%								
Mg 279.077*†	69014.1	7.786	mg/L	0.0185	7.786	mg/L	0.0185	0.24%
QC value within limits for Mg 279.077* Recovery = 103.81%								
Mg 280.271†	113347.1	7.795	mg/L	0.0293	7.795	mg/L	0.0293	0.38%
Mn 257.610*†	523976.2	0.7772	mg/L	0.00008	0.7772	mg/L	0.00008	0.01%
QC value within limits for Mn 257.610* Recovery = 103.63%								
Mn 259.372†	375275.1	0.7762	mg/L	0.00138	0.7762	mg/L	0.00138	0.18%
Mo 202.031*†	9222.9	0.6163	mg/L	0.00470	0.6163	mg/L	0.00470	0.76%

QC value within limits for Mo 202.031* Recovery = 102.71%						
Mo 203.845†	6293.5	0.6211 mg/L	0.00560	0.6211 mg/L	0.00560	0.90%
Na 589.592*†	146103.1	36.91 mg/L	0.049	36.91 mg/L	0.049	0.13%
QC value within limits for Na 589.592* Recovery = 102.53%						
Na 330.237†	11226.4	33.82 mg/L	0.262	33.82 mg/L	0.262	0.77%
Ni 231.604*†	18108.5	0.6241 mg/L	0.00339	0.6241 mg/L	0.00339	0.54%
QC value within limits for Ni 231.604* Recovery = 104.01%						
Ni 232.003†	11245.8	0.6138 mg/L	0.00656	0.6138 mg/L	0.00656	1.07%
P 213.617*†	16204.1	6.104 mg/L	0.0536	6.104 mg/L	0.0536	0.88%
QC value within limits for P 213.617* Recovery = 101.74%						
P 214.914†	14443.6	6.114 mg/L	0.0598	6.114 mg/L	0.0598	0.98%
Pb 217.000†	8782.1	3.821 mg/L	0.0333	3.821 mg/L	0.0333	0.87%
Pb 220.353*†	31967.6	3.907 mg/L	0.0027	3.907 mg/L	0.0027	0.07%
QC value within limits for Pb 220.353* Recovery = 104.18%						
Sb 206†	16948.5	4.623 mg/L	0.0384	4.623 mg/L	0.0384	0.83%
Sb 217.582*†	13074.4	4.604 mg/L	0.0424	4.604 mg/L	0.0424	0.92%
QC value within limits for Sb 217.582* Recovery = 102.30%						
Sb 206.836†	21160.0	4.623 mg/L	0.0075	4.623 mg/L	0.0075	0.16%
Se 203.985†	2611.1	1.530 mg/L	0.0187	1.530 mg/L	0.0187	1.22%
Se 196.026*†	4299.7	1.545 mg/L	0.0162	1.545 mg/L	0.0162	1.05%
QC value within limits for Se 196.026* Recovery = 102.99%						
Si 288.158†	61326.2	6.310 mg/L	0.0189	6.310 mg/L	0.0189	0.30%
Si 251.611*†	219648.2	6.305 mg/L	0.0004	6.305 mg/L	0.0004	0.01%
QC value within limits for Si 251.611* Recovery = 105.08%						
Sn 189.927*†	21198.4	3.103 mg/L	0.0321	3.103 mg/L	0.0321	1.03%
QC value within limits for Sn 189.927* Recovery = 103.42%						
Sn 242.170†	8957.9	3.064 mg/L	0.0354	3.064 mg/L	0.0354	1.16%
Sr 421.552†	2545803.2	0.3158 mg/L	0.00630	0.3158 mg/L	0.00630	2.00%
Sr 407.771*†	162158.5	0.3070 mg/L	0.00095	0.3070 mg/L	0.00095	0.31%
QC value within limits for Sr 407.771* Recovery = 102.33%						
Ti 336.121*†	179106.8	0.6166 mg/L	0.00055	0.6166 mg/L	0.00055	0.09%
QC value within limits for Ti 336.121* Recovery = 102.76%						
Ti 334.940†	211475.8	0.6161 mg/L	0.00105	0.6161 mg/L	0.00105	0.17%
Tl†	5870.1	1.551 mg/L	0.0115	1.551 mg/L	0.0115	0.74%
Tl 351.924†	5853.1	1.532 mg/L	0.0022	1.532 mg/L	0.0022	0.14%
Tl 190.801*†	6997.7	1.551 mg/L	0.0116	1.551 mg/L	0.0116	0.75%
QC value within limits for Tl 190.801* Recovery = 103.43%						
V 292.402*†	174838.0	1.929 mg/L	0.0004	1.929 mg/L	0.0004	0.02%
QC value within limits for V 292.402* Recovery = 102.86%						
V 310.230†	336156.6	1.925 mg/L	0.0004	1.925 mg/L	0.0004	0.02%
Zn 213.857*†	175783.4	2.581 mg/L	0.0014	2.581 mg/L	0.0014	0.05%
QC value within limits for Zn 213.857* Recovery = 103.23%						
Zn 202.548†	222861.6	2.590 mg/L	0.0015	2.590 mg/L	0.0015	0.06%
Zn 206.200*†	167459.1	2.599 mg/L	0.0014	2.599 mg/L	0.0014	0.05%
QC value within limits for Zn 206.200* Recovery = 103.95%						

All analyte(s) passed QC.

Sequence No.: 11
Sample ID: CCV
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/9/2008 6:20:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	171.0 kPa	0.60 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Ho 345.600	106099.6	5.002	mg/L	0.0173				0.34%
Ho 339.898	64814.4	5.016	mg/L	0.0222				0.44%
Tb 384.873	14432.5	4.799	mg/L	0.0269				0.56%
Tb 350.917	27831.6	5.033	mg/L	0.0550				1.09%
Y 324.227	166664.9	4.883	mg/L	0.0326				0.67%
Y 371.029	296873.7	4.878	mg/L	0.0268				0.55%
Si 251.611*†	219744.0	6.308	mg/L	0.0292	6.308	mg/L	0.0292	0.46%
QC value within limits for Si 251.611* Recovery = 105.14%								
Si 288.158	61096.9	6.286	mg/L	0.0374	6.286	mg/L	0.0374	0.60%

All analyte(s) passed QC.

Sequence No.: 23
Sample ID: CCV
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/9/2008 6:41:16 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	171.0 kPa	0.60 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ho 345.600	107892.5	5.087	mg/L	0.0050				0.10%
Ho 339.898	65817.4	5.094	mg/L	0.0075				0.15%
Tb 384.873	14646.5	4.870	mg/L	0.0255				0.52%
Tb 350.917	28378.4	5.132	mg/L	0.0455				0.89%
Y 324.227	169991.8	4.980	mg/L	0.0144				0.29%
Y 371.029	302111.4	4.964	mg/L	0.0140				0.28%
Si 251.611*†	218105.3	6.261	mg/L	0.0454	6.261	mg/L	0.0454	0.73%
QC value within limits for Si 251.611* Recovery = 104.35%								
Si 288.158	61722.4	6.350	mg/L	0.0018	6.350	mg/L	0.0018	0.03%

All analyte(s) passed QC.

Sequence No.: 8
Sample ID: icv-si
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:
User canceled analysis.

Autosampler Location: 157
Date Collected: 12/11/2008 9:40:13 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Sequence No.: 8
Sample ID: icv-si
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:

Autosampler Location: 157
Date Collected: 12/11/2008 9:43:29 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: icv-si

Analyte	Back Pressure	Flow
All	166.0 kPa	0.60 L/min

Mean Data: icv-si

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ho 339.898	63874.7	5.095	mg/L	0.0309				0.61%
Ho 345.600	108902.0	5.135	mg/L	0.0291				0.57%
Tb 350.917	26431.3	5.125	mg/L	0.0456				0.89%
Tb 384.873	14138.1	5.115	mg/L	0.0162				0.32%
Y 324.227	185295.9	5.184	mg/L	0.0420				0.81%
Y 371.029	283284.5	5.108	mg/L	0.0430				0.84%
Ag 328.068*†	-13.2	-0.0001	mg/L	0.00030	-0.0001	mg/L	0.00030	210.52%
Ag 338.289†	-82.0	-0.0015	mg/L	0.00125	-0.0015	mg/L	0.00125	82.62%
Al 308.215*†	39.2	0.0030	mg/L	0.00172	0.0030	mg/L	0.00172	58.04%
Al 396.153†	600.3	0.0059	mg/L	0.00159	0.0059	mg/L	0.00159	27.15%
As 188.979†	5.9	0.0024	mg/L	0.00152	0.0024	mg/L	0.00152	64.71%
As 193.696*†	-0.6	-0.0003	mg/L	0.00226	-0.0003	mg/L	0.00226	734.63%
B 249.677*†	1548.9	0.0610	mg/L	0.00057	0.0610	mg/L	0.00057	0.93%
B 249.772†	2235.8	0.0600	mg/L	0.00035	0.0600	mg/L	0.00035	0.59%
Ba 455.403†	38.4	0.0002	mg/L	0.00021	0.0002	mg/L	0.00021	87.36%
Ba 233.527*†	43.2	0.0003	mg/L	0.00009	0.0003	mg/L	0.00009	27.69%
Be 313.107†	82.3	0.0001	mg/L	0.00015	0.0001	mg/L	0.00015	244.91%
Be 313.042*†	550.0	0.0002	mg/L	0.00002	0.0002	mg/L	0.00002	7.81%
Bi 190.171†	0.1	0.0001	mg/L	0.00733	0.0001	mg/L	0.00733	>999.9%
Bi 223.061*†	15.2	0.0035	mg/L	0.00021	0.0035	mg/L	0.00021	6.06%
Ca 422.673†	19.0	0.0042	mg/L	0.00911	0.0042	mg/L	0.00911	219.54%
Ca 317.933*†	4.2	0.0022	mg/L	0.00390	0.0022	mg/L	0.00390	177.05%
Cd 226.502*†	15.3	0.0002	mg/L	0.00002	0.0002	mg/L	0.00002	8.14%
Cd 228.802†	6.6	0.0001	mg/L	0.00003	0.0001	mg/L	0.00003	32.90%
Co 230.786†	23.2	0.0005	mg/L	0.00013	0.0005	mg/L	0.00013	23.48%
Co 228.616*†	22.1	0.0004	mg/L	0.00003	0.0004	mg/L	0.00003	7.13%
Cr 357.869†	-30.3	-0.0007	mg/L	0.00126	-0.0007	mg/L	0.00126	174.97%
Cr 267.716*†	15.4	0.0003	mg/L	0.00021	0.0003	mg/L	0.00021	62.74%
Cu 324.752*†	5.5	0.0000	mg/L	0.00025	0.0000	mg/L	0.00025	524.74%
Cu 327.393†	50.2	0.0009	mg/L	0.00071	0.0009	mg/L	0.00071	79.36%
Fe 239.562†	1.8	0.0091	mg/L	0.00528	0.0091	mg/L	0.00528	57.82%
Fe 259.939†	-2.0	-0.0027	mg/L	0.00266	-0.0027	mg/L	0.00266	98.95%
Fe 273.955*†	-45.5	-0.0022	mg/L	0.00037	-0.0022	mg/L	0.00037	16.99%
K 766.490*†	11.8	0.0177	mg/L	0.00613	0.0177	mg/L	0.00613	34.69%
Li 610.362*†	461.3	0.0018	mg/L	0.00121	0.0018	mg/L	0.00121	66.98%
Mg 279.077*†	-7.4	-0.0008	mg/L	0.00188	-0.0008	mg/L	0.00188	226.49%
Mg 280.271†	5.1	0.0004	mg/L	0.00008	0.0004	mg/L	0.00008	19.77%
Mn 257.610*†	176.0	0.0003	mg/L	0.00002	0.0003	mg/L	0.00002	7.78%
Mn 259.372†	161.8	0.0003	mg/L	0.00000	0.0003	mg/L	0.00000	0.15%
Mo 202.031*†	3.1	0.0002	mg/L	0.00007	0.0002	mg/L	0.00007	29.23%
Mo 203.845†	-3.9	-0.0004	mg/L	0.00002	-0.0004	mg/L	0.00002	3.98%
Na 589.592*†	-434.2	-0.1094	mg/L	0.02367	-0.1094	mg/L	0.02367	21.64%
Na 330.237†	47.7	0.1602	mg/L	0.18485	0.1602	mg/L	0.18485	115.37%
Ni 231.604*†	14.5	0.0005	mg/L	0.00026	0.0005	mg/L	0.00026	50.34%
Ni 232.003†	-10.5	-0.0006	mg/L	0.00039	-0.0006	mg/L	0.00039	64.50%
P 213.617*†	-9.8	-0.0039	mg/L	0.00050	-0.0039	mg/L	0.00050	12.74%
P 214.914†	8.0	0.0036	mg/L	0.00369	0.0036	mg/L	0.00369	103.92%

Pb 217.000†	-1.5	-0.0007 mg/L	0.00250	-0.0007 mg/L	0.00250	349.58%
Pb 220.353*†	8.9	0.0012 mg/L	0.00105	0.0012 mg/L	0.00105	87.39%
S 181.975*†	-34.9	-0.0492 mg/L	0.01195	-0.0492 mg/L	0.01195	24.29%
S 180.669†	-59.7	-0.0685 mg/L	0.00253	-0.0685 mg/L	0.00253	3.69%
S 182.563†	-21.3	-0.0668 mg/L	0.00847	-0.0668 mg/L	0.00847	12.67%
Sb 217.582*†	-3.5	-0.0013 mg/L	0.00024	-0.0013 mg/L	0.00024	18.09%
Sb 206.836†	10.9	0.0027 mg/L	0.01332	0.0027 mg/L	0.01332	500.35%
Sb 206†	-0.8	-0.0002 mg/L	0.00019	-0.0002 mg/L	0.00019	89.86%
Se 196.026*†	6.2	0.0024 mg/L	0.00142	0.0024 mg/L	0.00142	58.14%
Se 203.985†	-18.4	-0.0115 mg/L	0.00674	-0.0115 mg/L	0.00674	58.54%
Si 251.611*†	334318.2	10.19 mg/L	0.012	10.19 mg/L	0.012	0.12%
Si 288.158†	100865.9	10.25 mg/L	0.003	10.25 mg/L	0.003	0.02%
Sn 242.170†	57.1	0.0205 mg/L	0.00559	0.0205 mg/L	0.00559	27.31%
Sn 189.927*†	12.1	0.0019 mg/L	0.00064	0.0019 mg/L	0.00064	34.23%
Sr 407.771*†	123.6	0.0003 mg/L	0.00008	0.0003 mg/L	0.00008	28.43%
Sr 421.552†	1395.4	0.0002 mg/L	0.00000	0.0002 mg/L	0.00000	1.65%
Ti 334.940†	23.1	0.0001 mg/L	0.00009	0.0001 mg/L	0.00009	120.03%
Ti 336.121*†	35.7	0.0001 mg/L	0.00003	0.0001 mg/L	0.00003	26.64%
Tl†	7.4	0.0021 mg/L	0.00135	0.0021 mg/L	0.00135	63.76%
Tl 351.924†	-53.3	-0.0142 mg/L	0.01001	-0.0142 mg/L	0.01001	70.70%
Tl 190.801*†	13.3	0.0032 mg/L	0.00261	0.0032 mg/L	0.00261	81.11%
V 310.230†	-129.7	-0.0008 mg/L	0.00100	-0.0008 mg/L	0.00100	129.89%
V 292.402*†	65.0	0.0008 mg/L	0.00035	0.0008 mg/L	0.00035	44.89%
Zn 206.200*†	11.6	0.0002 mg/L	0.00011	0.0002 mg/L	0.00011	50.89%
Zn 213.857*†	11.7	0.0002 mg/L	0.00006	0.0002 mg/L	0.00006	28.82%
Zn 202.548†	12.1	0.0002 mg/L	0.00004	0.0002 mg/L	0.00004	22.95%

Sequence No.: 2
Sample ID: CCV
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/11/2008 3:57:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	174.0 kPa	0.60 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ho 339.898	64122.2	5.115	mg/L	0.0427				0.83%
Ho 345.600	110869.5	5.228	mg/L	0.0376				0.72%
Tb 384.873	13624.8	4.929	mg/L	0.0726				1.47%
Tb 350.917	26616.6	5.161	mg/L	0.0796				1.54%
Y 324.227	188118.6	5.263	mg/L	0.0487				0.93%
Y 371.029	275753.5	4.972	mg/L	0.0522				1.05%
Ag 328.068*†	33728.1	0.3589	mg/L	0.00174	0.3589	mg/L	0.00174	0.49%
QC value within limits for Ag 328.068* Recovery = 95.69%								
Ag 338.289†	19462.5	0.3602	mg/L	0.00200	0.3602	mg/L	0.00200	0.56%
Al 308.215*†	174102.1	13.18	mg/L	0.056	13.18	mg/L	0.056	0.43%
QC value within limits for Al 308.215* Recovery = 97.67%								
Al 396.153†	1337394.2	13.04	mg/L	0.201	13.04	mg/L	0.201	1.54%
As 188.979†	9380.6	3.756	mg/L	0.0545	3.756	mg/L	0.0545	1.45%
QC value within limits for As 188.979 Recovery = 100.17%								
As 193.696*†	7341.0	3.744	mg/L	0.0426	3.744	mg/L	0.0426	1.14%
QC value within limits for As 193.696* Recovery = 99.84%								
B 249.677*†	92644.4	3.648	mg/L	0.0002	3.648	mg/L	0.0002	0.01%
QC value within limits for B 249.677* Recovery = 97.27%								
B 249.772†	132562.8	3.558	mg/L	0.0029	3.558	mg/L	0.0029	0.08%
Ba 455.403†	1094314.3	6.950	mg/L	0.0562	6.950	mg/L	0.0562	0.81%
Ba 233.527*†	923530.7	7.221	mg/L	0.1577	7.221	mg/L	0.1577	2.18%
QC value within limits for Ba 233.527* Recovery = 96.28%								
Be 313.107†	760714.7	0.5598	mg/L	0.01349	0.5598	mg/L	0.01349	2.41%
Be 313.042*†	1314189.9	0.5463	mg/L	0.01191	0.5463	mg/L	0.01191	2.18%
QC value within limits for Be 313.042* Recovery = 97.12%								
Ca 422.673†	144386.3	31.59	mg/L	0.396	31.59	mg/L	0.396	1.25%
Ca 317.933*†	54496.3	28.36	mg/L	0.332	28.36	mg/L	0.332	1.17%
QC value within limits for Ca 317.933* Recovery = 94.55%								
Cd 226.502*†	51561.0	0.7520	mg/L	0.00278	0.7520	mg/L	0.00278	0.37%
QC value within limits for Cd 226.502* Recovery = 100.27%								
Cd 228.802†	55253.0	0.7589	mg/L	0.00363	0.7589	mg/L	0.00363	0.48%
Co 230.786†	81545.9	1.900	mg/L	0.0084	1.900	mg/L	0.0084	0.44%
Co 228.616*†	99765.8	1.921	mg/L	0.0058	1.921	mg/L	0.0058	0.30%
QC value within limits for Co 228.616* Recovery = 102.46%								
Cr 357.869†	49859.5	1.184	mg/L	0.0471	1.184	mg/L	0.0471	3.98%
Cr 267.716*†	53429.9	1.181	mg/L	0.0450	1.181	mg/L	0.0450	3.81%
QC value greater than the upper limit for Cr 267.716* Recovery = 196.91%								
Cu 324.752*†	106188.3	0.9310	mg/L	0.00411	0.9310	mg/L	0.00411	0.44%
QC value within limits for Cu 324.752* Recovery = 99.31%								
Cu 327.393†	50787.0	0.9009	mg/L	0.00150	0.9009	mg/L	0.00150	0.17%
Fe 259.939†	2640.9	3.511	mg/L	0.0491	3.511	mg/L	0.0491	1.40%
Fe 273.955*†	80526.3	3.851	mg/L	0.0138	3.851	mg/L	0.0138	0.36%
QC value within limits for Fe 273.955* Recovery = 102.68%								
Fe 239.562†	734.4	3.660	mg/L	0.0372	3.660	mg/L	0.0372	1.02%
K 766.490*†	18042.6	27.03	mg/L	0.401	27.03	mg/L	0.401	1.48%
QC value within limits for K 766.490* Recovery = 100.11%								
Mg 279.077*†	68278.8	7.667	mg/L	0.0104	7.667	mg/L	0.0104	0.14%
QC value within limits for Mg 279.077* Recovery = 102.23%								
Mg 280.271†	96385.7	7.271	mg/L	0.0896	7.271	mg/L	0.0896	1.23%
Mn 257.610*†	451054.3	0.7351	mg/L	0.00217	0.7351	mg/L	0.00217	0.30%
QC value within limits for Mn 257.610* Recovery = 98.02%								
Mn 259.372†	366520.6	0.7600	mg/L	0.00372	0.7600	mg/L	0.00372	0.49%
Mo 202.031*†	8004.4	0.5855	mg/L	0.00735	0.5855	mg/L	0.00735	1.26%
QC value within limits for Mo 202.031* Recovery = 97.58%								
Mo 203.845†	5441.3	0.5871	mg/L	0.00909	0.5871	mg/L	0.00909	1.55%

Na 589.592*†	143455.7	36.13	mg/L	0.340	36.13	mg/L	0.340	0.94%
QC value within limits for Na 589.592* Recovery = 100.37%								
Na 330.237†	9594.3	32.23	mg/L	0.025	32.23	mg/L	0.025	0.08%
Ni 231.604*†	17032.9	0.6053	mg/L	0.00955	0.6053	mg/L	0.00955	1.58%
QC value within limits for Ni 231.604* Recovery = 100.88%								
Ni 232.003†	10871.6	0.6240	mg/L	0.00994	0.6240	mg/L	0.00994	1.59%
Pb 217.000†	7541.0	3.588	mg/L	0.0556	3.588	mg/L	0.0556	1.55%
Pb 220.353*†	27391.8	3.700	mg/L	0.0044	3.700	mg/L	0.0044	0.12%
QC value within limits for Pb 220.353* Recovery = 98.67%								
Sb 206†	16758.9	4.626	mg/L	0.0739	4.626	mg/L	0.0739	1.60%
Sb 217.582*†	11594.4	4.392	mg/L	0.0619	4.392	mg/L	0.0619	1.41%
QC value within limits for Sb 217.582* Recovery = 97.61%								
Sb 206.836†	17497.8	4.257	mg/L	0.0622	4.257	mg/L	0.0622	1.46%
Se 203.985†	2510.9	1.570	mg/L	0.0286	1.570	mg/L	0.0286	1.82%
Se 196.026*†	3779.2	1.485	mg/L	0.0197	1.485	mg/L	0.0197	1.33%
QC value within limits for Se 196.026* Recovery = 98.99%								
Si 288.158†	63685.7	6.474	mg/L	0.0385	6.474	mg/L	0.0385	0.59%
Si 251.611*†	205016.8	6.251	mg/L	0.0318	6.251	mg/L	0.0318	0.51%
QC value within limits for Si 251.611* Recovery = 104.18%								
Tl†	5303.2	1.507	mg/L	0.0197	1.507	mg/L	0.0197	1.31%
Tl 351.924†	5626.6	1.493	mg/L	0.0242	1.493	mg/L	0.0242	1.62%
Tl 190.801*†	6246.6	1.507	mg/L	0.0182	1.507	mg/L	0.0182	1.21%
QC value within limits for Tl 190.801* Recovery = 100.45%								
V 292.402*†	154915.9	1.838	mg/L	0.0096	1.838	mg/L	0.0096	0.52%
QC value within limits for V 292.402* Recovery = 98.05%								
V 310.230†	308351.0	1.831	mg/L	0.0082	1.831	mg/L	0.0082	0.45%
Zn 213.857*†	152069.5	2.471	mg/L	0.0058	2.471	mg/L	0.0058	0.23%
QC value within limits for Zn 213.857* Recovery = 98.85%								
Zn 202.548†	187381.4	2.456	mg/L	0.0027	2.456	mg/L	0.0027	0.11%

QC Failed. Continue with analysis.

Sequence No.: 8
Sample ID: CCV
Analyst: johnguyen icp 5300
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 12/11/2008 4:18:46 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	173.0 kPa	0.60 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ho 339.898	64281.5	5.128	mg/L	0.0796				1.55%
Ho 345.600	110689.4	5.219	mg/L	0.0950				1.82%
Tb 384.873	13670.5	4.946	mg/L	0.1123				2.27%
Tb 350.917	26599.4	5.158	mg/L	0.1131				2.19%
Y 324.227	188138.2	5.264	mg/L	0.1238				2.35%
Y 371.029	276001.0	4.977	mg/L	0.1025				2.06%
Al 308.215*†	173360.6	13.13	mg/L	0.021	13.13	mg/L	0.021	0.16%
QC value within limits for Al 308.215* Recovery = 97.25%								
Al 396.153†	1360824.5	13.27	mg/L	0.120	13.27	mg/L	0.120	0.91%
B 249.677*†	92809.8	3.656	mg/L	0.0068	3.656	mg/L	0.0068	0.18%
QC value within limits for B 249.677* Recovery = 97.49%								
B 249.772†	133001.4	3.570	mg/L	0.0023	3.570	mg/L	0.0023	0.06%
Ba 455.403†	1080456.3	6.862	mg/L	0.1620	6.862	mg/L	0.1620	2.36%
Ba 233.527*†	941859.8	7.366	mg/L	0.1198	7.366	mg/L	0.1198	1.63%
QC value within limits for Ba 233.527* Recovery = 98.21%								
Ca 422.673†	141948.8	31.06	mg/L	0.605	31.06	mg/L	0.605	1.95%
Ca 317.933*†	53874.4	28.04	mg/L	0.261	28.04	mg/L	0.261	0.93%
QC value within limits for Ca 317.933* Recovery = 93.47%								
Fe 259.939†	2652.7	3.527	mg/L	0.0634	3.527	mg/L	0.0634	1.80%
Fe 273.955*†	80484.1	3.849	mg/L	0.0040	3.849	mg/L	0.0040	0.10%
QC value within limits for Fe 273.955* Recovery = 102.63%								
Fe 239.562†	733.9	3.658	mg/L	0.0659	3.658	mg/L	0.0659	1.80%
K 766.490*†	17977.6	26.93	mg/L	0.208	26.93	mg/L	0.208	0.77%
QC value within limits for K 766.490* Recovery = 99.75%								
Mg 279.077*†	68435.2	7.685	mg/L	0.0175	7.685	mg/L	0.0175	0.23%
QC value within limits for Mg 279.077* Recovery = 102.46%								
Mg 280.271†	95614.9	7.213	mg/L	0.0574	7.213	mg/L	0.0574	0.80%
Mn 257.610*†	449923.1	0.7335	mg/L	0.00053	0.7335	mg/L	0.00053	0.07%
QC value within limits for Mn 257.610* Recovery = 97.80%								
Mn 259.372†	365854.8	0.7586	mg/L	0.00003	0.7586	mg/L	0.00003	0.00%
Na 589.592*†	142913.8	36.00	mg/L	0.854	36.00	mg/L	0.854	2.37%
QC value within limits for Na 589.592* Recovery = 99.99%								
Na 330.237†	9465.3	31.79	mg/L	0.110	31.79	mg/L	0.110	0.35%
Si 288.158†	63397.5	6.445	mg/L	0.0021	6.445	mg/L	0.0021	0.03%
Si 251.611*†	204250.5	6.228	mg/L	0.0012	6.228	mg/L	0.0012	0.02%
QC value within limits for Si 251.611* Recovery = 103.80%								

All analyte(s) passed QC.

Work Order#: 08-12-0585

Client: WEISS Associates

EPA 6020

Calibration

SAMPLE INFORMATION

Sample ID: ICV

Sample Description:

Autosampler Position: 6

Sample Date/Time: Wednesday, December 10, 2008 11:25:26

Method File: C:\elandata\Method\cel\CEL_STD_T22_w.mth

Dataset File: C:\elandata\Dataset\Data\08121001\ICV.009

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass		Meas. Intens. Mean	Conc. Mean	Report Unit	Meas. Intens. RSD	Blank Intensity
Li	6		81094		ppb	4.4	88020
Be	9		43873	100.2230	ppb	0.0	40
B	11		61358	110.1604	ppb	0.4	704
B	10		12591	108.6202	ppb	0.1	160
Sc	45	>	1898428		ppb	3.4	1982938
Al	27		1175376	109.3673	ppb	3.9	14309
Mg	24		736307	111.9050	ppb	0.7	2160
Ti	47		159848	97.6812	ppb	0.1	502
Ti	49		132688	97.9597	ppb	1.4	3780
V	51		1796667	97.6420	ppb	0.8	-19899
Cr	52		1704314	100.4829	ppb	0.4	43227
Mn	55		2606275	102.6996	ppb	1.4	2205
Fe	54		196941	111.8693	ppb	0.1	54351
Fe	57		69566	112.1865	ppb	1.7	13851
Co	59		1988937	106.2515	ppb	0.2	131
Ni	60		441243	106.2866	ppb	0.5	195
Cu	65		465936	109.0362	ppb	0.5	513
Ge	74	>	557749		mg/L	2.9	586621
As	75		315381	103.0669	ppb	0.2	-2104
As-1	75		313260	102.8539	ppb	0.4	10720
Se	78		91120	100.7016	ppb	1.4	12816
Se	82		34208	101.7264	ppb	0.8	17
Sr	88		3779979	100.8751	ppb	0.8	834
Zn	66		272423	104.2686	ppb	0.5	2810
Zn	68		198991	104.2636	ppb	0.4	3202
Y	89		3455300		ppb	2.5	3552351
Mo	95		587543	99.8296	ppb	0.4	71
In	115	>	3038503		ppb	3.7	3080988
Ag	107		797393	55.6620	ppb	0.6	304
Cd	111		370537	104.7665	ppb	1.3	2390
Cd	114		789508	105.7231	ppb	1.4	80
Sn	118		957064	103.5962	ppb	0.3	1207
Sb	123		773047	91.9461	ppb	2.9	421
Ba	135		290369	101.8875	ppb	3.1	146
Tb	159		3779277	-210.8499	ppb	3.1	3798289
Tl	203		1143814	97.2613	ppb	0.7	137
Pb	207		4153883	98.7727	ppb	0.3	784
Bi	209	>	2775187		ppb	3.5	2728116

QC Out Of Limits

Mass	Analyte	Out of Limits Message
11	B	
24	Mg	
107	Ag	

SAMPLE INFORMATION

Sample ID: CCV

Sample Description:

Autosampler Position: 4

Sample Date/Time: Wednesday, December 10, 2008 19:02:51

Method File: C:\elandata\Method\cel\CEL_STD_T22_w.mth

Dataset File: C:\elandata\Dataset\Data\08121001\CCV.129

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass		Meas. Intens. Mean	Conc. Mean	Report Unit	Meas. Intens. RSD	Blank Intensity
Li	6		131590		ppb	2.2	148779
Be	9		45057	102.7518	ppb	0.9	22
B	11		147701	249.2632	ppb	2.7	3737
B	10		30685	243.8010	ppb	1.7	790
Sc	45	>	1998801		ppb	2.7	2107484
Al	27		1135598	112.0852	ppb	2.1	13403
Mg	24		33703194	5132.6835	ppb	3.1	3220
Ti	47		151335	99.2001	ppb	0.7	449
Ti	49		124892	99.0106	ppb	1.7	3097
V	51		1674297	100.3889	ppb	2.6	-16701
Cr	52		1579159	102.3538	ppb	1.2	39279
Mn	55		2326646	98.2554	ppb	1.4	2532
Fe	54		5994093	5059.9363	ppb	1.6	51494
Fe	57		2325347	5002.6963	ppb	2.2	12274
Co	59		1735252	98.5993	ppb	0.3	124
Ni	60		376950	99.7505	ppb	0.6	192
Cu	65		383422	100.1778	ppb	1.3	381
Ge	74	>	558711		mg/L	1.1	597288
As	75		269747	97.9685	ppb	0.9	-1890
As-1	75		268682	97.8914	ppb	0.8	9538
Se	78		80484	98.0628	ppb	0.5	11373
Se	82		29919	98.2941	ppb	0.8	-2
Sr	88		3295568	96.4029	ppb	1.5	1308
Zn	66		235373	98.8613	ppb	0.7	2940
Zn	68		172511	99.2105	ppb	1.2	3842
Y	89		3519868		ppb	1.4	3667811
Mo	95		509821	95.8648	ppb	1.5	264
In	115	>	3127741		ppb	1.2	3274247
Ag	107		1302816	99.4052	ppb	2.7	384
Cd	111		317924	96.6037	ppb	1.1	2929
Cd	114		686156	99.0892	ppb	0.8	94
Sn	118		860221	98.9020	ppb	1.2	1361
Sb	123		772837	99.9324	ppb	0.6	509
Ba	135		259184	98.0119	ppb	0.2	170
Tb	159		4155525	171.1931	ppb	1.2	4031559
Tl	203		946642	98.5783	ppb	0.8	867
Pb	207		3410708	98.1246	ppb	0.2	620
Bi	209	>	2561683		ppb	0.7	2553012

QC Out Of Limits

Mass	Analyte	Out of Limits Message
27	Al	

SAMPLE INFORMATION

Sample ID: CCV

Sample Description:

Autosampler Position: 4

Sample Date/Time: Wednesday, December 10, 2008 20:58:16

Method File: C:\elandata\Method\cel\CEL_STD_T22_w.mth

Dataset File: C:\elandata\Dataset\Data\08121001\CCV.154

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass		Meas. Intens. Mean	Conc. Mean	Report Unit	Meas. Intens. RSD	Blank Intensity
Li	6		106222		ppb	5.6	148779
Be	9		38405	103.7873	ppb	0.4	22
B	11		127283	254.7116	ppb	3.1	3737
B	10		26028	245.0937	ppb	2.9	790
Sc	45	>	1686185		ppb	0.6	2107484
Al	27		903966	105.6749	ppb	0.3	13403
Mg	24		25646694	4630.0385	ppb	1.1	3220
Ti	47		122863	95.4145	ppb	0.4	449
Ti	49		102531	96.2692	ppb	0.3	3097
V	51		1363405	96.9334	ppb	0.8	-16701
Cr	52		1344273	103.2723	ppb	0.2	39279
Mn	55		1945656	97.3732	ppb	0.7	2532
Fe	54		4865815	4866.2949	ppb	1.3	51494
Fe	57		1950795	4974.7996	ppb	2.0	12274
Co	59		1497347	96.2030	ppb	0.5	124
Ni	60		325327	97.3440	ppb	0.7	192
Cu	65		332755	98.3073	ppb	0.8	381
Ge	74	>	494089		mg/L	0.2	597288
As	75		235296	96.6394	ppb	0.4	-1890
As-1	75		234285	96.4733	ppb	0.4	9538
Se	78		70136	96.4060	ppb	1.2	11373
Se	82		26102	96.9676	ppb	1.3	-2
Sr	88		2867838	94.8641	ppb	1.4	1308
Zn	66		201601	95.7104	ppb	0.8	2940
Zn	68		147741	96.0119	ppb	0.2	3842
Y	89		3135513		ppb	1.2	3667811
Mo	95		466473	92.6723	ppb	0.8	264
In	115	>	2961555		ppb	2.9	3274247
Ag	107		1220444	98.3989	ppb	0.8	384
Cd	111		297291	95.4364	ppb	1.0	2929
Cd	114		637667	97.2999	ppb	0.7	94
Sn	118		813485	98.8012	ppb	1.5	1361
Sb	123		722489	98.7011	ppb	0.7	509
Ba	135		248705	99.3561	ppb	1.7	170
Tb	159		4262581	-225.6444	ppb	2.4	4031559
Tl	203		1028019	97.9421	ppb	2.3	867
Pb	207		3676124	96.7632	ppb	1.9	620
Bi	209	>	2799873		ppb	2.2	2553012

QC Out Of Limits

Mass	Analyte	Out of Limits Message

SAMPLE INFORMATION

Sample ID: CCV

Sample Description:

Autosampler Position: 4

Sample Date/Time: Wednesday, December 10, 2008 19:59:05

Method File: C:\elandata\Method\cel\CEL_STD_T22_w.mth

Dataset File: C:\elandata\Dataset\Data\08121001\CCV.141

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass		Meas. Intens. Mean	Conc. Mean	Report Unit	Meas. Intens. RSD	Blank Intensity
Li	6		124999		ppb	3.9	148779
Be	9		43137	**104.4355**	ppb	1.9	22
B	11		140046	**250.9985**	ppb	1.0	3737
B	10		29476	**248.7412**	ppb	0.5	790
Sc	45	>	1882382		ppb	0.8	2107484
Al	27		1033072	**108.2094**	ppb	0.7	13403
Mg	24		30236078	**4889.6503**	ppb	1.1	3220
Ti	47		136383	**94.8759**	ppb	0.5	449
Ti	49		113182	**95.1659**	ppb	0.9	3097
V	51		1523672	**97.0372**	ppb	0.7	-16701
Cr	52		1459669	**100.3820**	ppb	0.6	39279
Mn	55		2112189	**94.6881**	ppb	0.8	2532
Fe	54		5420573	**4855.9252**	ppb	1.7	51494
Fe	57		2117597	**4836.0148**	ppb	1.2	12274
Co	59		1605269	**98.2144**	ppb	1.1	124
Ni	60		348861	**99.4076**	ppb	0.5	192
Cu	65		352889	**99.2827**	ppb	1.3	381
Ge	74	>	518848		mg/L	0.5	597288
As	75		247601	**96.8397**	ppb	0.8	-1890
As-1	75		246022	**96.4706**	ppb	1.0	9538
Se	78		73722	**96.5137**	ppb	1.3	11373
Se	82		27626	**97.7350**	ppb	0.8	-2
Sr	88		3053468	**96.1857**	ppb	0.8	1308
Zn	66		216033	**97.6918**	ppb	0.7	2940
Zn	68		157828	**97.7118**	ppb	0.2	3842
Y	89		3319929		ppb	1.1	3667811
Mo	95		481551	**92.8082**	ppb	1.9	264
In	115	>	3051480		ppb	1.3	3274247
Ag	107		1250266	**97.7865**	ppb	1.8	384
Cd	111		307287	**95.7018**	ppb	2.2	2929
Cd	114		662325	**98.0345**	ppb	1.4	94
Sn	118		833132	**98.1811**	ppb	1.1	1361
Sb	123		742804	**98.4477**	ppb	0.9	509
Ba	135		249343	**96.6410**	ppb	1.2	170
Tb	159		4225778	**-72.9019**	ppb	1.6	4031559
Tl	203		964171	**94.9823**	ppb	1.7	867
Pb	207		3504930	**95.3926**	ppb	1.6	620
Bi	209	>	2708204		ppb	2.6	2553012

QC Out Of Limits

Mass	Analyte	Out of Limits Message

Work Order#: 08-12-0585

Client: WEISS Associates

EPA 8270C (M) Isotope Dilution

Calibration

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\081107\
Data File : 07NOV007.D
Acq On : 7 Nov 2008 2:05 pm
Operator :
Sample : ICV S101308G
ALS Vial : 8 Sample Multiplier: 1
InstName : GCMS AAA

Quant Time: Nov 07 17:57:53 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Fri Nov 07 17:56:50 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M

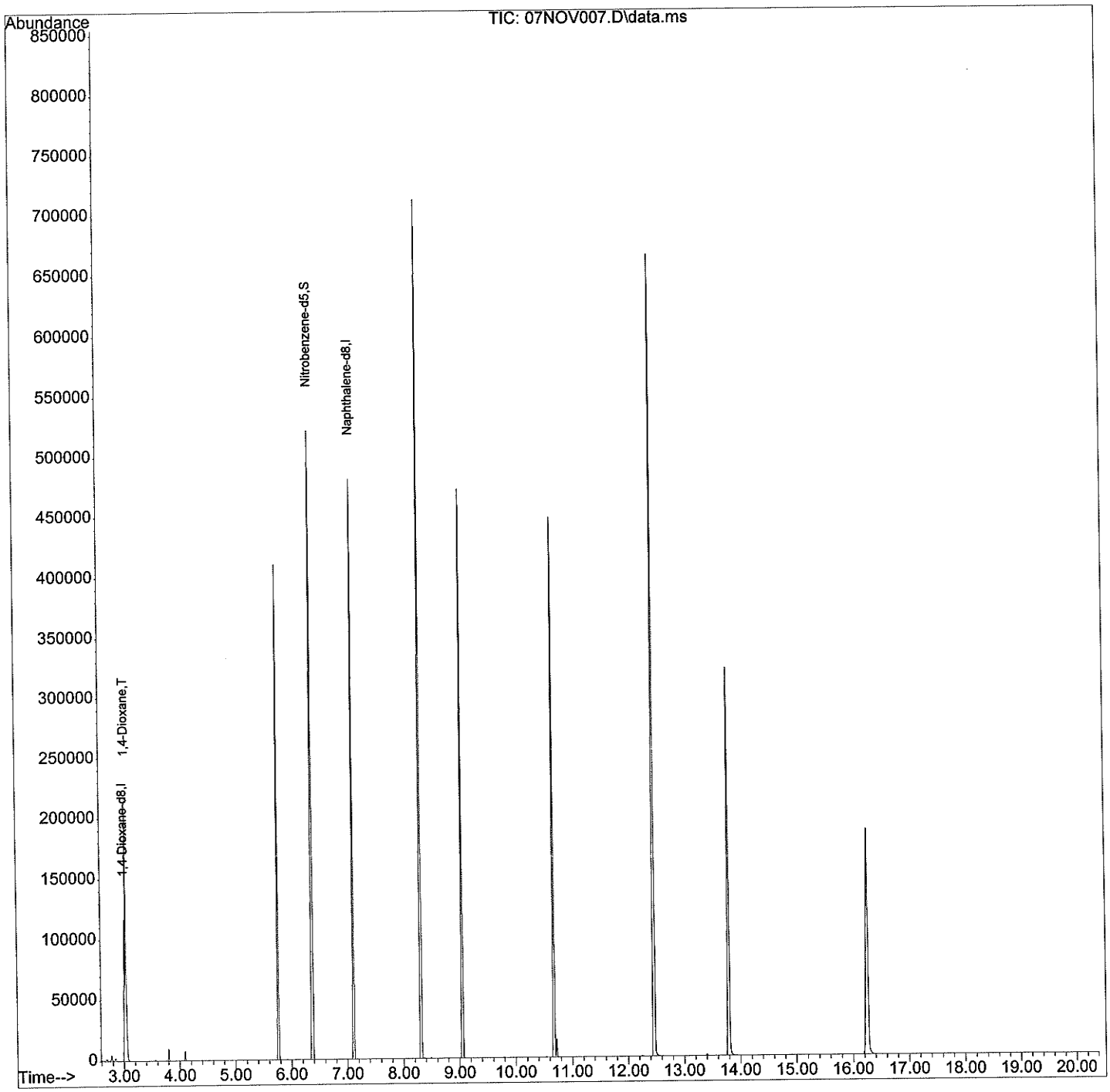
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dioxane-d8	3.010	96	46060	40.00 mg/l	# 0.00
3) Naphthalene-d8	7.112	136	226354	40.00 mg/l	# 0.00
System Monitoring Compounds					
4) Nitrobenzene-d5	6.379	82	274608	79.29 mg/l	0.00
Target Compounds					Qvalue
2) 1,4-Dioxane	3.036	88	86006	73.61 mg/l #	71

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\081107\
Data File : 07NOV007.D
Acq On : 7 Nov 2008 2:05 pm
Operator :
Sample : ICV S101308G
ALS Vial : 8 Sample Multiplier: 1
InstName : GCMS AAA

Quant Time: Nov 07 17:57:53 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Fri Nov 07 17:56:50 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\081212\
Data File : 12dec002.D
Acq On : 12 Dec 2008 9:55 am
Operator :
Sample : DIOX-80 S101308D
ALS Vial : 2 Sample Multiplier: 1
InstName : GCMS AAA

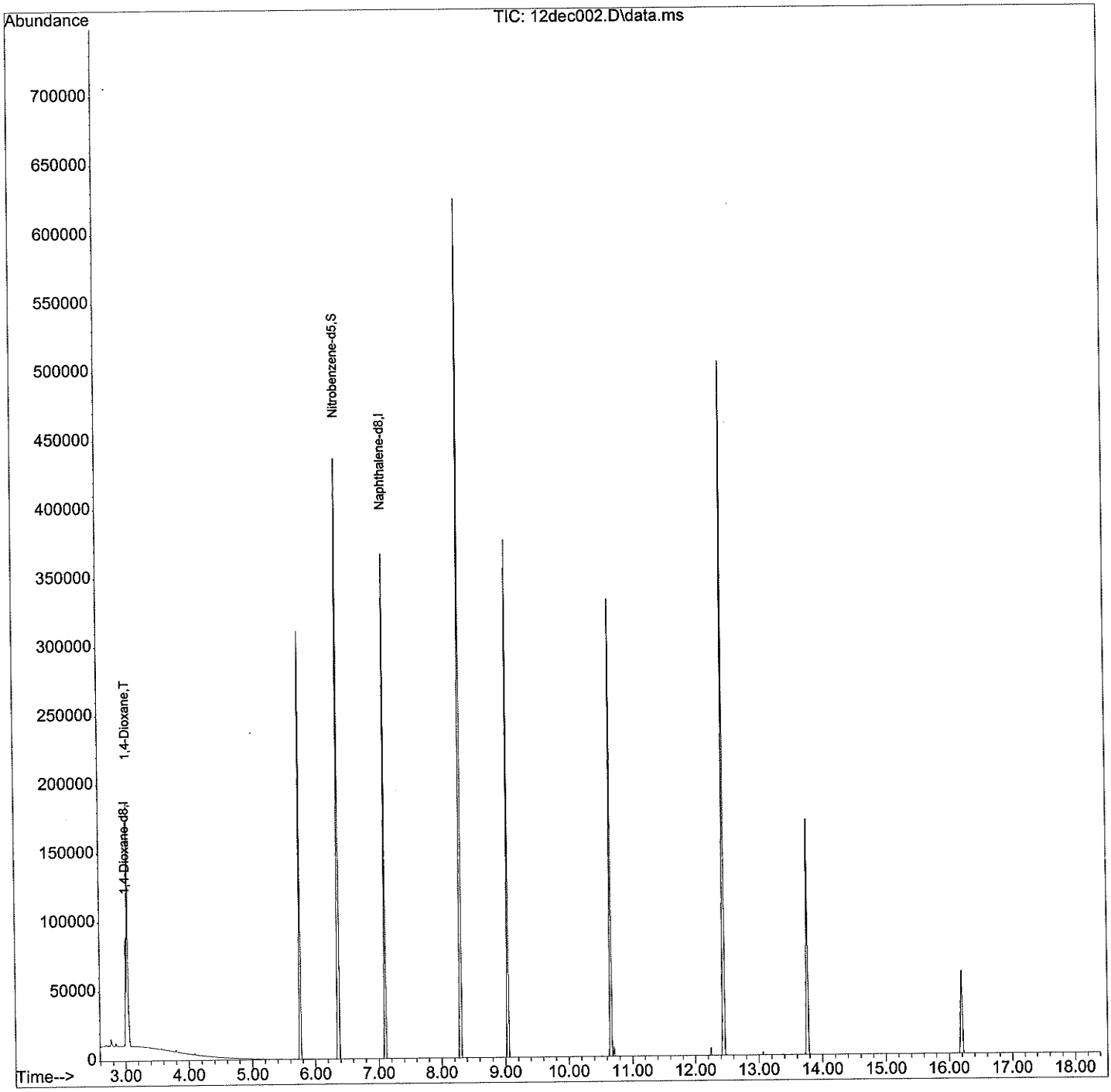
Quant Time: Dec 12 10:18:56 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Wed Nov 19 09:17:53 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dioxane-d8	3.004	96	28021	40.00 mg/l	# 0.00
3) Naphthalene-d8	7.101	136	151463	40.00 mg/l	# 0.00
System Monitoring Compounds					
4) Nitrobenzene-d5	6.374	82	194665	84.00 mg/l	0.00
Target Compounds					Qvalue
2) 1,4-Dioxane	3.031	88	57980	81.57 mg/l #	45

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\MSDCHEM\1\DATA\081212\
Data File : 12dec002.D
Acq On : 12 Dec 2008 9:55 am
Operator :
Sample : DIOX-80 S101308D
ALS Vial : 2 Sample Multiplier: 1
InstName : GCMS AAA

Quant Time: Dec 12 10:18:56 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Wed Nov 19 09:17:53 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\081107\
Data File : 07NOV004.D
Acq On : 7 Nov 2008 12:46 pm
Operator :
Sample : DIOX 80PPM S101308D
ALS Vial : 4 Sample Multiplier: 1
InstName : GCMS AAA

Quant Time: Nov 07 17:55:21 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Fri Nov 07 17:55:11 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M

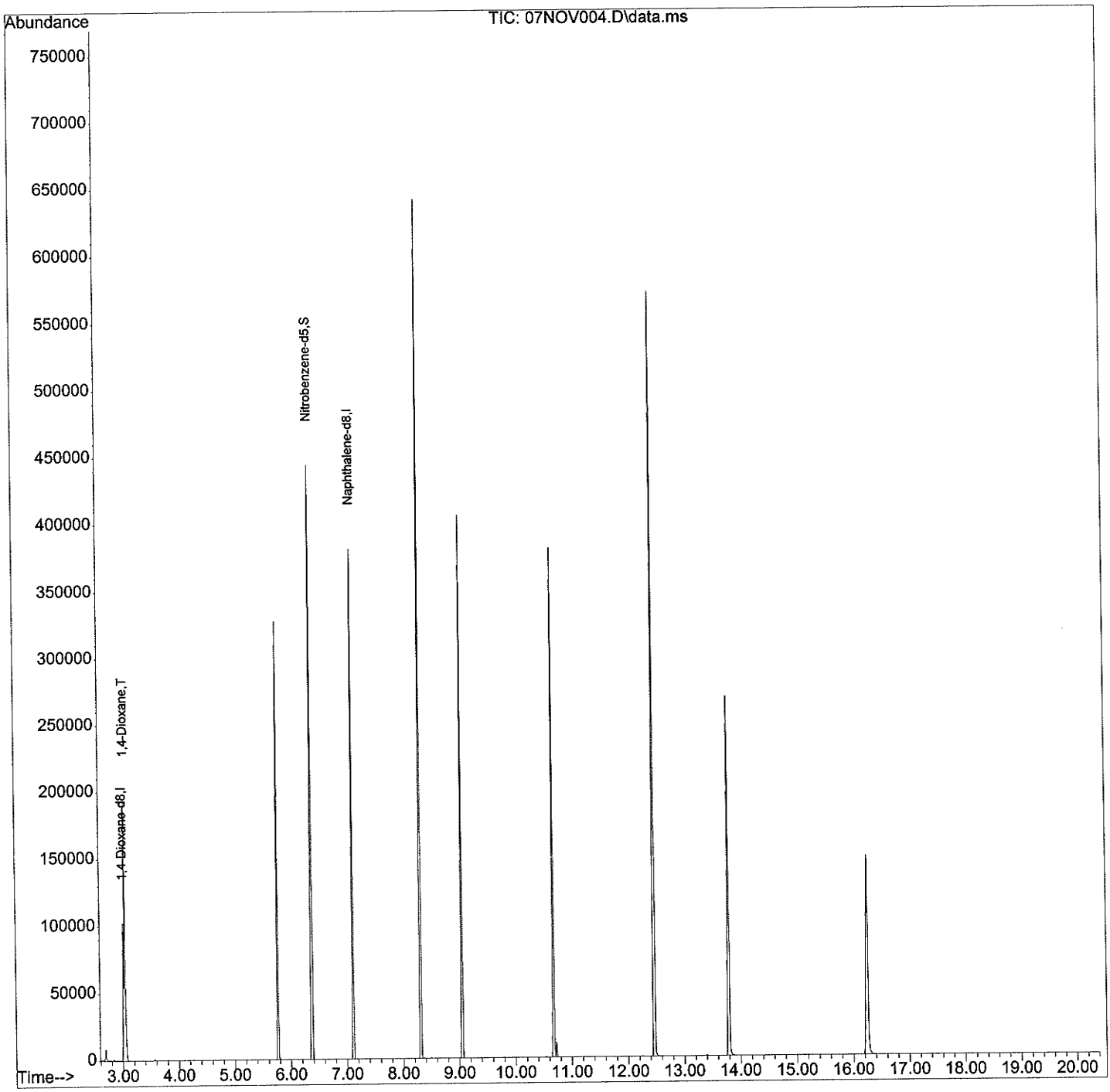
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dioxane-d8	3.009	96	39293	40.00 mg/l	# 0.00
3) Naphthalene-d8	7.112	136	178255	40.00 mg/l	# 0.00
System Monitoring Compounds					
4) Nitrobenzene-d5	6.374	82	215387	81.07 mg/l	0.00
Target Compounds					Qvalue
2) 1,4-Dioxane	3.036	88	76923	76.08 mg/l #	70

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\081107\
Data File : 07NOV004.D
Acq On : 7 Nov 2008 12:46 pm
Operator :
Sample : DIOX 80PPM S101308D
ALS Vial : 4 Sample Multiplier: 1
InstName : GCMS AAA

Quant Time: Nov 07 17:55:21 2008
Quant Method : C:\MSDCHEM\1\METHODS\DIOX081107.M
Quant Title : BNA 8270/625 CALIBRATION
QLast Update : Fri Nov 07 17:55:11 2008
Response via : Initial Calibration
DataAcq Meth:SVOA.M



Work Order#: 08-12-0585

Client: WEISS Associates

EPA 7470A

Calibration

==========

Analysis Begun

Logged In Analyst: Xue-Wen Xu
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-400, S/N B050-9560
Autosampler Model: AS-90

Sample Information File: C:\data-AA\xue-wen xu\Sample Information\081212D1.sif
Batch ID: 081212D1
Results Data Set: 081212D1
Results Library: C:\data-AA\xue-wen xu\Results\Results.mdb

==========

Method Loaded
Method Name: Hg
Method Last Saved: 12/12/2008 10:23:39 AM
Method Description:

==========

Sequence No.: 1
Autosampler Location: 6
Sample ID: Calib blank 1
Date Collected: 12/12/2008 11:22:40 AM
Analyst:
Data Type: Original

Replicate Data: Calib blank 1

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	-0.0000	-0.0026	-0.0000	11:23:46	Yes
2		[0.00]	0.0000	-0.0012	0.0000	11:24:30	Yes
Mean:		[0.00]	0.0000				
SD:		0.00	0.0000				
%RSD:		0.00	187.90				

Auto-zero performed.

==========

Sequence No.: 2
Autosampler Location: 1
Sample ID: 0.25ppb
Date Collected: 12/12/2008 11:24:56 AM
Analyst:
Data Type: Original

Replicate Data: 0.25ppb

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.250000]	0.0010	0.0019	0.0010	11:26:00	Yes
2		[0.250000]	0.0009	0.0018	0.0009	11:26:44	Yes
Mean:		[0.250000]	0.0009				
SD:		0.000000	0.0001				
%RSD:		0.000000	7.51				

Standard number 1 applied. [0.250000]
Correlation Coef.: 1.000000 Slope: 0.00374 Intercept: 0.00000

==========

Sequence No.: 3
Autosampler Location: 2
Sample ID: 1.00ppb
Date Collected: 12/12/2008 11:27:08 AM
Analyst:
Data Type: Original

Replicate Data: 1.00ppb

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[1.000000]	0.0039	0.0120	0.0039	11:28:11	Yes
2		[1.000000]	0.0039	0.0115	0.0039	11:28:55	Yes
Mean:		[1.000000]	0.0039				
SD:		0.000000	0.0000				
%RSD:		0.000000	0.27				

Standard number 2 applied. [1.000000]
Correlation Coef.: 0.999950 Slope: 0.00389 Intercept: -0.00002

==========

Sequence No.: 4
Autosampler Location: 3
Sample ID: 2.00ppb
Date Collected: 12/12/2008 11:29:20 AM
Analyst:
Data Type: Original

Replicate Data: 2.00ppb

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.000000]	0.0075	0.0241	0.0075	11:30:24	Yes
2		[2.000000]	0.0076	0.0243	0.0076	11:31:08	Yes
Mean:		[2.000000]	0.0075				
SD:		0.000000	0.0001				
%RSD:		0.000000	1.18				

Standard number 3 applied. [2.000000]
Correlation Coef.: 0.999867 Slope: 0.00378 Intercept: 0.00002

Sequence No.: 5 **Autosampler Location: 4**
Sample ID: 5.00ppb **Date Collected: 12/12/2008 11:31:33 AM**
Analyst: **Data Type: Original**

Replicate Data: 5.00ppb

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.000000]	0.0191	0.0641	0.0191	11:32:38	Yes
2		[5.000000]	0.0191	0.0638	0.0191	11:33:22	Yes
Mean:		[5.000000]	0.0191				
SD:		0.000000	0.0000				
%RSD:		0.000000	0.16				

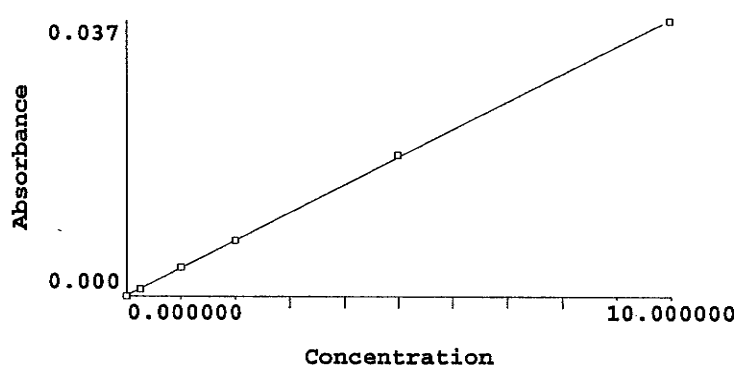
Standard number 4 applied. [5.000000]
Correlation Coef.: 0.999973 Slope: 0.00382 Intercept: -0.00001

Sequence No.: 6 **Autosampler Location: 5**
Sample ID: 10.00ppb **Date Collected: 12/12/2008 11:33:47 AM**
Analyst: **Data Type: Original**

Replicate Data: 10.00ppb

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.00000]	0.0374	0.1232	0.0374	11:34:53	Yes
2		[10.00000]	0.0373	0.1242	0.0373	11:35:37	Yes
Mean:		[10.00000]	0.0374				
SD:		0.00000	0.0001				
%RSD:		0.00000	0.16				

Standard number 5 applied. [10.00000]
Correlation Coef.: 0.999934 Slope: 0.00374 Intercept: 0.00009



Calibration data for Hg 253.7 **Equation: Linear, Calculated Intercept**

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib blank 1	0.0000	0	-0.023539	0.00	187.9
0.25ppb	0.0009	0.250000	0.225976	0.00	7.5
1.00ppb	0.0039	1.000000	1.013407	0.00	0.3
2.00ppb	0.0075	2.000000	1.992018	0.00	1.2
5.00ppb	0.0191	5.000000	5.082562	0.00	0.2
10.00ppb	0.0374	10.00000	9.959575	0.00	0.2

Correlation Coef.: 0.999934 Slope: 0.00374 Intercept: 0.00009

==========

Analysis Begun

Logged In Analyst: Xue-Wen Xu
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-400, S/N B050-9560
Autosampler Model: AS-90

Sample Information File: C:\data-AA\xue-wen xu\Sample Information\081212D1.sif
Batch ID: 081212D1
Results Data Set: 081212D1
Results Library: C:\data-AA\xue-wen xu\Results\Results.mdb

==========

Method Loaded
Method Name: Hg
Method Last Saved: 12/12/2008 10:23:39 AM
Method Description:

==========

Sequence No.: 1
Autosampler Location: 7
Sample ID: ICV
Date Collected: 12/12/2008 11:37:09 AM
Analyst:
Data Type: Original

Replicate Data: ICV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00504	5.04	0.0190	0.0631	0.0190	11:38:15	Yes
2	0.00506	5.06	0.0190	0.0631	0.0190	11:38:59	Yes
Mean:	0.00505	5.05	0.0190				
SD:	0.000013	0.0130	0.0000				
%RSD:	0.257	0.257	0.26				

QC value within limits for Hg 253.7 Recovery = 101.07%
All analyte(s) passed QC.

==========

Sequence No.: 2
Autosampler Location: 6
Sample ID: ICB
Date Collected: 12/12/2008 11:39:26 AM
Analyst:
Data Type: Original

Replicate Data: ICB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.000024	-0.0239	-0.0000	-0.0016	0.0000	11:40:32	Yes
2	-0.000027	-0.0272	-0.0000	-0.0020	-0.0000	11:41:16	Yes
Mean:	-0.000026	-0.0255	-0.0000				
SD:	0.000002	0.00235	0.0000				
%RSD:	9.20	9.20	118.03				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 3
Autosampler Location: 9
Sample ID: CRDL 0.50 PPB
Date Collected: 12/12/2008 11:41:42 AM
Analyst:
Data Type: Original

Replicate Data: CRDL 0.50 PPB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000479	0.479	0.0019	0.0046	0.0019	11:42:45	Yes
2	0.000523	0.523	0.0020	0.0055	0.0020	11:43:29	Yes
Mean:	0.000501	0.501	0.0020				
SD:	0.000031	0.0308	0.0001				
%RSD:	6.14	6.14	5.87				

==========

Sequence No.: 4
Autosampler Location: 3
Sample ID: CCV
Date Collected: 12/12/2008 11:43:53 AM
Analyst:
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00196	1.96	0.0074	0.0235	0.0074	11:44:58	Yes
2	0.00201	2.01	0.0076	0.0243	0.0076	11:45:42	Yes
Mean:	0.00198	1.98	0.0075				
SD:	0.000034	0.0343	0.0001				
%RSD:	1.73	1.73	1.71				

QC value within limits for Hg 253.7 Recovery = 99.15%
All analyte(s) passed QC.

==========

Sequence No.: 5
Sample ID: CCB
Analyst:

Autosampler Location: 6
Date Collected: 12/12/2008 11:46:06 AM
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.000023	-0.0234	0.0000	-0.0015	0.0000	11:47:12	Yes
2	-0.000020	-0.0200	0.0000	-0.0015	0.0000	11:47:57	Yes
Mean:	-0.000022	-0.0217	0.0000				
SD:	0.000002	0.00244	0.0000				
%RSD:	11.2	11.2	130.88				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Analysis Begun

Logged In Analyst: Xue-Wen Xu
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-400, S/N B050-9560
Autosampler Model: AS-90

Sample Information File: C:\data-AA\xue-wen xu\Sample Information\081212D1.sif
Batch ID: 081212D1
Results Data Set: 081212D1
Results Library: C:\data-AA\xue-wen xu\Results\Results.mdb

==========

Sequence No.: 1
Autosampler Location: 3
Sample ID: CCV
Date Collected: 12/12/2008 5:59:28 PM
Analyst:
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00219	2.19	0.0083	0.0230	0.0083	18:00:32	Yes
2	0.00213	2.13	0.0080	0.0285	0.0081	18:01:17	Yes
Mean:	0.00216	2.16	0.0082				
SD:	0.000047	0.0471	0.0002				
%RSD:	2.18	2.18	2.16				

QC value within limits for Hg 253.7 Recovery = 107.96%
All analyte(s) passed QC.

==========

Sequence No.: 2
Autosampler Location: 6
Sample ID: CCB
Date Collected: 12/12/2008 6:01:41 PM
Analyst:
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000004	0.00397	0.0001	0.0006	0.0001	18:02:47	Yes
2	0.000707	0.707	0.0027	-0.0255	0.0027	18:03:31	Yes
Mean:	0.000356	0.356	0.0014				
SD:	0.000497	0.497	0.0019				
%RSD:	140	140	131.16				

QC value greater than the upper limit for Hg 253.7 Recovery = Not calculated
QC Failed. Continue with analysis.
User canceled analysis.

==========

Analysis Begun

Logged In Analyst: Xue-Wen Xu
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-400, S/N B050-9560
Autosampler Model: AS-90

Sample Information File: C:\data-AA\xue-wen xu\Sample Information\081212D1.sif
Batch ID: 081212D1
Results Data Set: 081212D1
Results Library: C:\data-AA\xue-wen xu\Results\Results.mdb

==========

Sequence No.: 2
Autosampler Location: 6
Sample ID: CCB
Date Collected: 12/12/2008 6:04:28 PM
Analyst:
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.000008	-0.00759	0.0001	0.0007	0.0001	18:05:20	Yes
2	-0.000006	-0.00643	0.0001	0.0005	0.0001	18:06:04	Yes
Mean:	-0.000007	-0.00701	0.0001				
SD:	0.000001	0.000821	0.0000				
%RSD:	11.7	11.7	4.96				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 3
Sample ID: 08-12-0585-4
Analyst:
Autosampler Location: 81
Date Collected: 12/12/2008 6:06:31 PM
Data Type: Original

Replicate Data: 08-12-0585-4

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000159	0.0793	0.0004	0.0014	0.0004	18:07:34	Yes
2	0.000174	0.0872	0.0004	0.0020	0.0004	18:08:18	Yes
Mean:	0.000167	0.0833	0.0004				
SD:	0.000011	0.00556	0.0000				
%RSD:	6.67	6.67	5.20				

Sequence No.: 4
Sample ID: 08-12-0585-10
Analyst:
Autosampler Location: 82
Date Collected: 12/12/2008 6:08:41 PM
Data Type: Original

Replicate Data: 08-12-0585-10

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000147	0.0736	0.0004	0.0028	0.0004	18:09:44	Yes
2	0.000102	0.0511	0.0003	0.0014	0.0003	18:10:29	Yes
Mean:	0.000125	0.0623	0.0003				
SD:	0.000032	0.0159	0.0001				
%RSD:	25.4	25.4	18.47				

Sequence No.: 5
Sample ID: 08-12-0585-11
Analyst:
Autosampler Location: 83
Date Collected: 12/12/2008 6:10:52 PM
Data Type: Original

Replicate Data: 08-12-0585-11

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000066	0.0332	0.0002	0.0009	0.0002	18:11:56	Yes
2	0.000061	0.0306	0.0002	0.0010	0.0002	18:12:40	Yes
Mean:	0.000064	0.0319	0.0002				
SD:	0.000004	0.00182	0.0000				
%RSD:	5.72	5.72	3.29				

Sequence No.: 6
Sample ID: 08-12-0585-13
Analyst:
Autosampler Location: 84
Date Collected: 12/12/2008 6:13:04 PM
Data Type: Original

Replicate Data: 08-12-0585-13

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000096	0.0480	0.0003	0.0012	0.0003	18:14:08	Yes
2	0.000089	0.0445	0.0003	0.0003	0.0003	18:14:51	Yes
Mean:	0.000093	0.0463	0.0003				
SD:	0.000005	0.00242	0.0000				
%RSD:	5.24	5.24	3.47				

Sequence No.: 7
Sample ID: CCV
Analyst:
Autosampler Location: 3
Date Collected: 12/12/2008 6:15:16 PM
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	0.00316	3.16	0.0119	0.0426	0.0119	18:16:20	Yes
2	0.00318	3.18	0.0120	0.0433	0.0120	18:17:04	Yes
Mean:	0.00317	3.17	0.0120				
SD:	0.000018	0.0177	0.0001				
%RSD:	0.557	0.557	0.55				

QC value greater than the upper limit for Hg 253.7 Recovery = 158.62%
QC Failed. Retry.

==========

Sequence No.: 8
Sample ID: CCV
Analyst:

Autosampler Location: 3
Date Collected: 12/12/2008 6:17:29 PM
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00277	2.77	0.0105	0.0452	0.0105	18:18:33	Yes
2	0.00216	2.16	0.0082	0.0422	0.0082	18:19:17	Yes
Mean:	0.00247	2.47	0.0093				
SD:	0.000430	0.430	0.0016				
%RSD:	17.4	17.4	17.26				

QC value greater than the upper limit for Hg 253.7 Recovery = 123.33%
QC Failed. Continue with analysis.
User canceled analysis.

==========

Analysis Begun

Logged In Analyst: Xue-Wen Xu
Spectrometer Model: FIMS-400, S/N B050-9560

Technique: AA FIMS-MHS
Autosampler Model: AS-90

Sample Information File: C:\data-AA\xue-wen xu\Sample Information\081212D1.sif
Batch ID: 081212D1
Results Data Set: 081212D1
Results Library: C:\data-AA\xue-wen xu\Results\Results.mdb

==========

Sequence No.: 8
Sample ID: CCV
Analyst:

Autosampler Location: 3
Date Collected: 12/12/2008 6:19:58 PM
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00206	2.06	0.0078	0.0409	0.0078	18:21:02	Yes
2	0.00209	2.09	0.0079	0.0412	0.0079	18:21:46	Yes
Mean:	0.00208	2.08	0.0079				
SD:	0.000019	0.0186	0.0001				
%RSD:	0.897	0.897	0.89				

QC value within limits for Hg 253.7 Recovery = 103.78%
All analyte(s) passed QC.

==========

Sequence No.: 9
Sample ID: CCB
Analyst:

Autosampler Location: 6
Date Collected: 12/12/2008 6:22:11 PM
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.000017	-0.0169	0.0000	0.0000	0.0000	18:23:17	Yes
2	-0.000008	-0.00797	0.0001	0.0002	0.0001	18:24:01	Yes
Mean:	-0.000012	-0.0124	0.0000				
SD:	0.000006	0.00631	0.0000				
%RSD:	50.8	50.8	56.87				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Work Order#: 08-12-0585

Client: WEISS Associates

EPA 8081A

Calibration

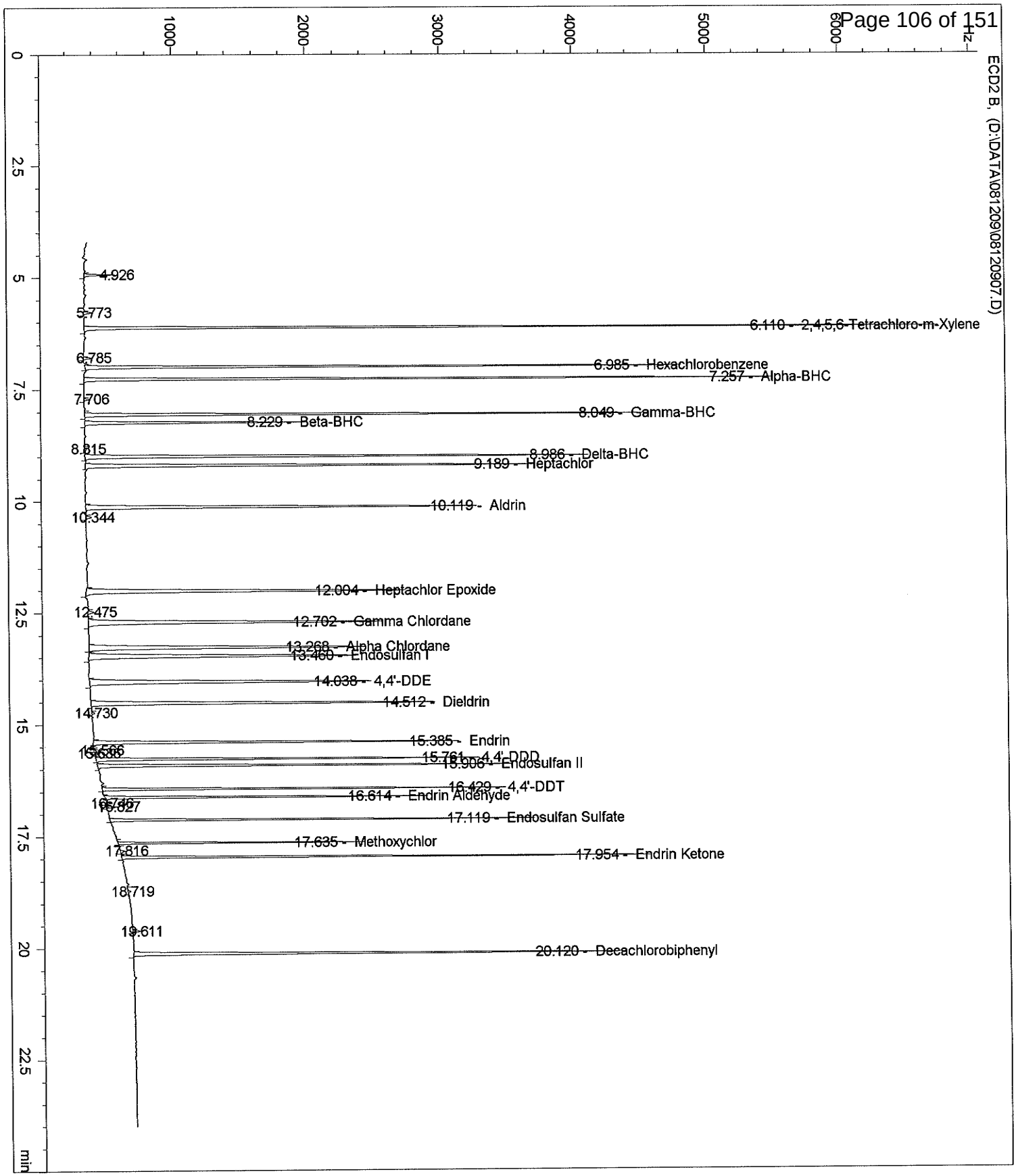
External Standard Report

Data File Name : D:\DATA\081209\08120907.D
Operator :
Instrument : GC 41
Sample Name : PEST 40 ICV
Run Time Bar Code:
Acquired on : 12/9/2008 1:30:49 PM
Report Created on: 12 Dec 08 02:34 pm
Calibrated on : 22 Aug 03 05:56 pm
Analysis Method : C:\CHEM32\1\METHODS\PEST081209R.M

Page Number :
Vial Number : Vial 7
Injection Number : 1
Sequence Line : 7
Instrument Method: D:\DATA\081209\8081.M
Sample Amount :
Last Modified on : 12Dec08

Sig. ECD2B, D:\DATA\081209\08120907.D

Ret Time	Area	Type	Width	Ref #	ppb	Name
6.110	11579.5	BB	0.028		82.753	2,4,5,6-Tetrachloro-m-Xylene
6.985	9018.7	VB	0.032		40.799	Hexachlorobenzene
7.257	10204.7	BB	0.031		42.107	Alpha-BHC
8.049	9246.9	VB	0.035		42.044	Gamma-BHC
8.229	3806.3	BB	0.036		41.472	Beta-BHC
8.986	9286.7	VB	0.039		42.316	Delta-BHC
9.189	8451.6	BB	0.040		41.644	Heptachlor
10.119	8011.2	BB	0.043		41.189	Aldrin
12.004	7817.0	BV	0.050		41.418	Heptachlor Epoxide
12.702	7517.4	BB	0.053		39.444	Gamma Chlordane
13.268	7304.4	BV	0.053		41.278	Alpha Chlordane
13.460	7196.5	VB	0.055		41.198	Endosulfan I
14.038	7439.7	BB	0.055		41.283	4,4'-DDE
14.512	7650.2	BB	0.047		41.656	Dieldrin
15.385	6484.3	BB	0.037		42.131	Endrin
15.761	5925.1	VB	0.033		41.762	4,4'-DDD
15.906	6543.3	BB	0.033		41.884	Endosulfan II
16.429	5455.5	BB	0.028		42.203	4,4'-DDT
16.614	4503.5	BB	0.030		40.370	Endrin Aldehyde
17.119	5540.4	BB	0.027		41.763	Endosulfan Sulfate
17.635	2826.3	BB	0.025		42.036	Methoxychlor
17.954	6679.9	VB	0.027		41.963	Endrin Ketone
20.120	8267.7	BB	0.035		81.647	Decachlorobiphenyl
0.000	0.0		0.000		0.000	Chlordane
0.000	0.0		0.000		0.000	Toxaphene


ECD2 B, (D:\DATA\081209\08120907.D)
4.926
5.773
6.110 - 2,4,5,6-Tetrachloro-m-Xylene
6.785
6.985 - Hexachlorobenzene
7.257 - Alpha-BHC
7.706
8.049 - Gamma-BHC
8.229 - Beta-BHC
8.815
8.986 - Delta-BHC
9.189 - Heptachlor
10.119 - Aldrin
10.344
12.004 - Heptachlor Epoxide
12.475
12.702 - Gamma Chlordane
13.268 - Alpha Chlordane
13.460 - Endosulfan I
14.038 - 4,4'-DDE
14.512 - Dieldrin
14.730
15.385 - Endrin
15.586
15.761 - 4,4'-DDD
15.906 - Endosulfan II
16.429 - 4,4'-DDT
16.614 - Endrin Aldehyde
16.827
17.119 - Endosulfan Sulfate
17.635 - Methoxychlor
17.816
17.954 - Endrin Ketone
18.719
19.611
20.120 - Decachlorobiphenyl
min

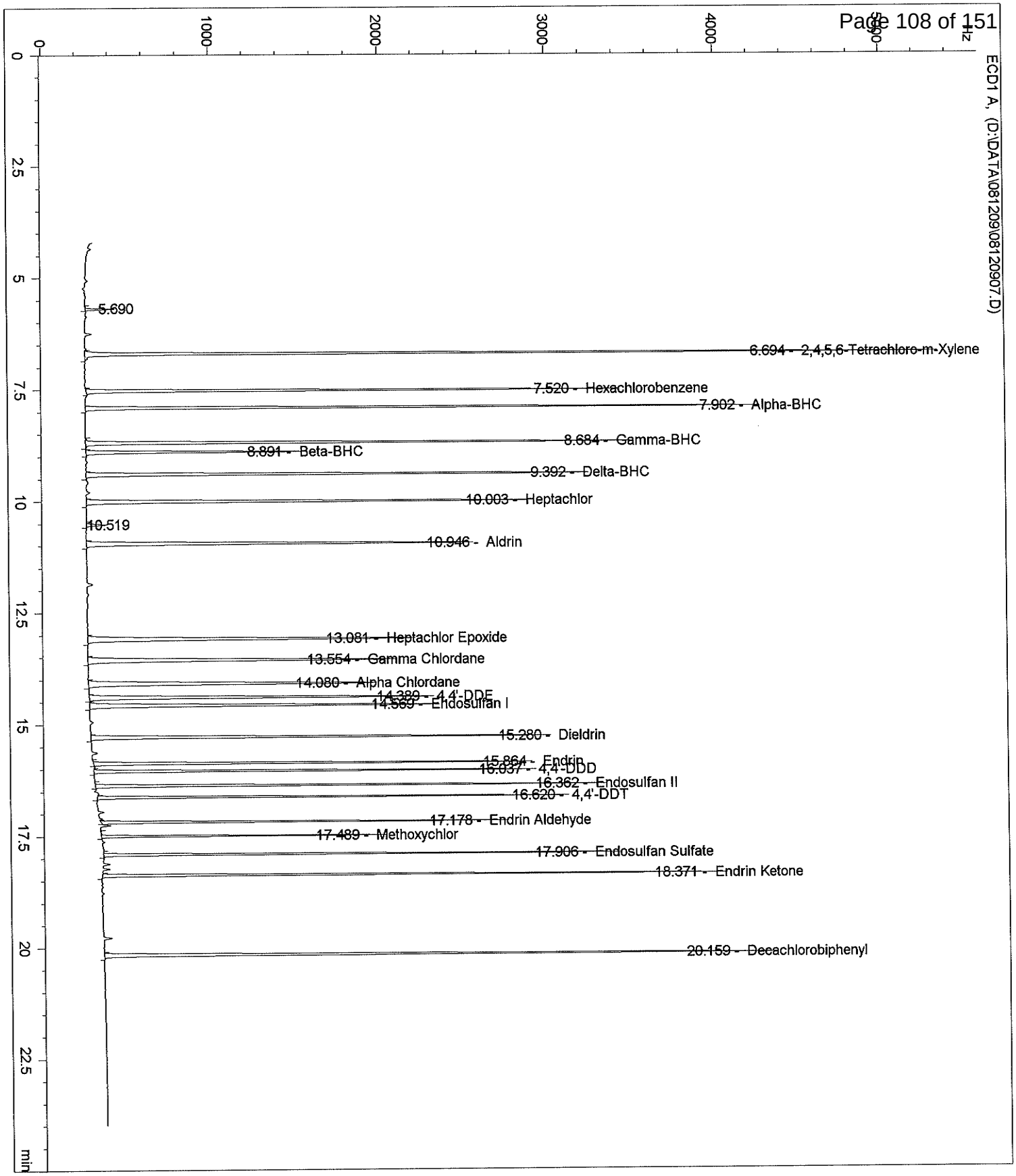
External Standard Report

Data File Name : D:\DATA\081209\08120907.D
Operator :
Instrument : GC 41
Sample Name : PEST 40 ICV
Run Time Bar Code:
Acquired on : 12/9/2008 1:30:49 PM
Report Created on: 12 Dec 08 02:34 pm
Calibrated on : 22 Aug 03 05:56 pm
Analysis Method : C:\CHEM32\1\METHODS\PEST081209F.M

Page Number :
Vial Number : Vial 7
Injection Number : 1
Sequence Line : 7
Instrument Method: D:\DATA\081209\8081.M
Sample Amount :
Last Modified on : 09Dec08

Sig. ECD1 A, D:\DATA\081209\08120907.D

Ret Time	Area	Type	Width	Ref #	ppb	Name
6.694	10590.5	VB	0.033		83.908	2,4,5,6-Tetrachloro-m-Xylene
7.520	7229.6	BB	0.036		41.033	Hexachlorobenzene
7.902	8852.9	BB	0.035		43.119	Alpha-BHC
8.684	8009.4	BB	0.039		43.198	Gamma-BHC
8.891	3307.1	BB	0.040		42.105	Beta-BHC
9.392	7825.4	BB	0.041		43.356	Delta-BHC
10.003	7304.9	BB	0.044		41.939	Heptachlor
10.946	6831.8	BB	0.046		42.465	Aldrin
13.081	6738.7	BB	0.054		40.565	Heptachlor Epoxide
13.554	6376.7	BB	0.053		42.333	Gamma Chlordane
14.080	6155.9	BB	0.056		41.467	Alpha Chlordane
14.389	6140.0	BB	0.047		42.976	4,4'-DDE
14.569	6272.0	BB	0.048		42.417	Endosulfan I
15.280	6833.6	BB	0.039		42.906	Dieldrin
15.864	5840.6	BB	0.035		43.167	Endrin
16.037	5449.5	BB	0.033		43.249	4,4'-DDD
16.362	6272.9	BB	0.032		42.721	Endosulfan II
16.620	5235.6	BB	0.030		43.240	4,4'-DDT
17.178	4533.4	BB	0.029		40.855	Endrin Aldehyde
17.489	2825.4	BB	0.027		42.041	Methoxychlor
17.906	5657.6	BB	0.029		42.583	Endosulfan Sulfate
18.371	7074.5	BB	0.030		42.456	Endrin Ketone
20.159	9553.2	BB	0.038		82.456	Decachlorobiphenyl
0.000	0.0		0.000		0.000	Chlordane
0.000	0.0		0.000		0.000	Toxaphene


ECD1 A, (D:\DATA\081209\08120907.D)
Hz
1000
2000
3000
4000
5000
0
2.5
5
7.5
10
12.5
15
17.5
20
22.5
min
5.690
6.694 - 2,4,5,6-Tetrachloro-m-Xylene
7.520 - Hexachlorobenzene
7.902 - Alpha-BHC
8.684 - Gamma-BHC
8.891 - Beta-BHC
9.392 - Delta-BHC
10.003 - Heptachlor
10.519
10.946 - Aldrin
13.081 - Heptachlor Epoxide
13.554 - Gamma Chlordane
14.080 - Alpha Chlordane
14.389 - 4,4'-DDE
14.569 - Endosulfan I
15.280 - Dieldrin
15.864 - Endrin
16.037 - 4,4'-DDD
16.362 - Endosulfan II
16.620 - 4,4'-DDT
17.178 - Endrin Aldehyde
17.489 - Methoxychlor
17.906 - Endosulfan Sulfate
18.371 - Endrin Ketone
20.159 - Decachlorobiphenyl

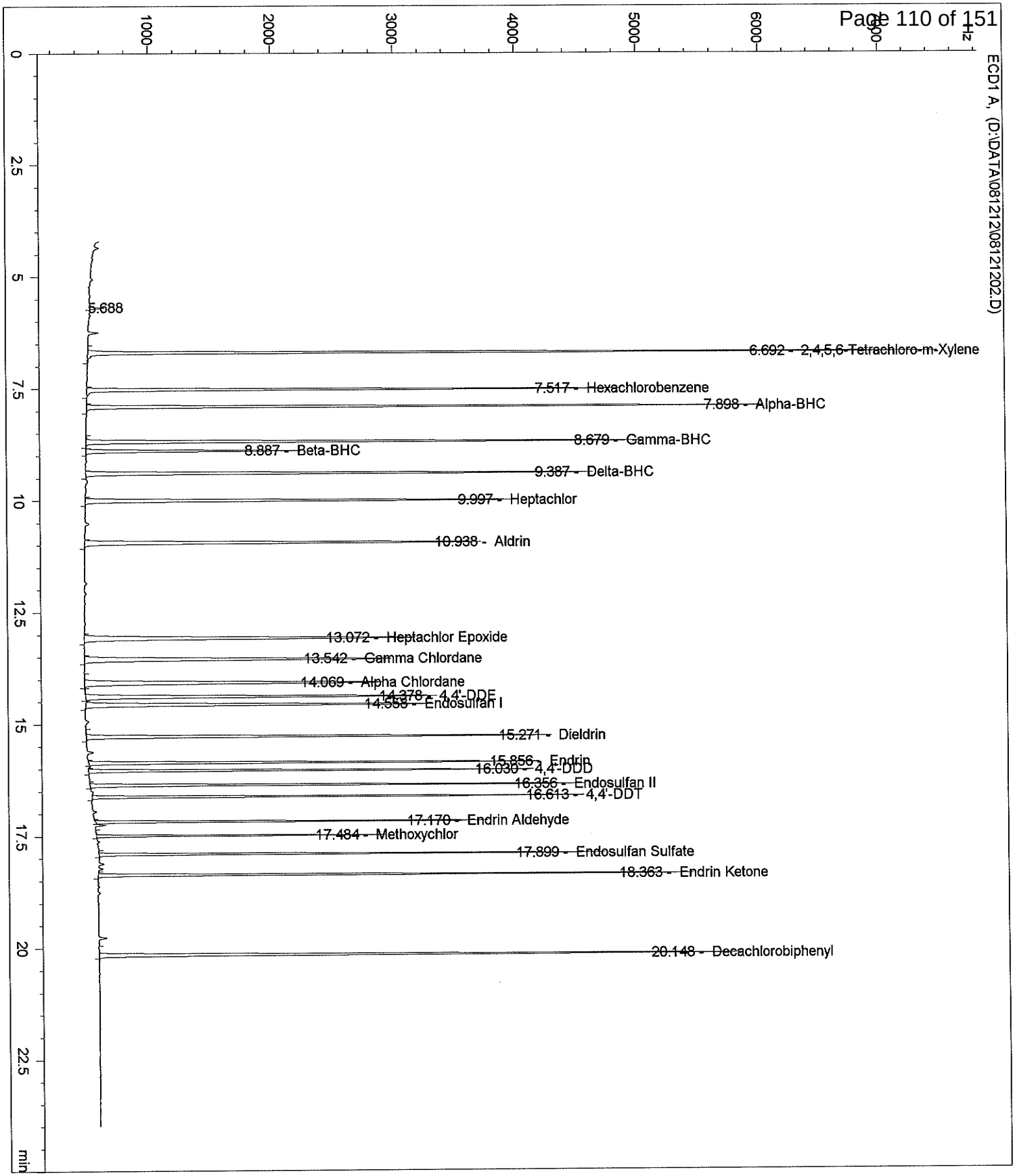
External Standard Report

Data File Name : D:\DATA\081212\08121202.D
Operator :
Instrument : GC 41
Sample Name : PEST 60
Run Time Bar Code:
Acquired on : 12/12/2008 11:21:52 AM
Report Created on: 12 Dec 08 02:32 pm
Calibrated on : 22 Aug 03 05:56 pm
Analysis Method : C:\CHEM32\1\METHODS\PEST081209F.M

Page Number :
Vial Number : Vial 2
Injection Number : 1
Sequence Line : 4
Instrument Method: D:\DATA\081212\8081.M
Sample Amount :
Last Modified on : 09Dec08

Sig. ECD1 A, D:\DATA\081212\08121202.D

Ret Time	Area	Type	Width	Ref #	ppb	Name
6.692	14683.7	BB	0.033		116.339	2,4,5,6-Tetrachloro-m-Xylene
7.517	10122.1	BB	0.036		57.451	Hexachlorobenzene
7.898	12690.6	BB	0.036		61.811	Alpha-BHC
8.679	11408.6	BB	0.039		61.531	Gamma-BHC
8.887	4600.9	BB	0.041		58.577	Beta-BHC
9.387	11091.9	BB	0.042		61.455	Delta-BHC
9.997	9917.0	BB	0.045		56.936	Heptachlor
10.938	9923.4	BB	0.048		61.681	Aldrin
13.072	9613.4	BB	0.056		57.869	Heptachlor Epoxide
13.542	9087.5	BB	0.057		60.330	Gamma Chlordane
14.069	8981.7	BB	0.057		60.502	Alpha Chlordane
14.378	8762.4	BB	0.049		61.331	4,4'-DDE
14.558	8860.8	BB	0.048		59.925	Endosulfan I
15.271	9741.7	BB	0.040		61.165	Dieldrin
15.856	8436.7	BB	0.036		62.355	Endrin
16.030	7534.0	BB	0.031		59.793	4,4'-DDD
16.356	8530.2	BB	0.033		58.094	Endosulfan II
16.613	7628.4	BB	0.029		63.002	4,4'-DDT
17.170	5985.4	BB	0.029		53.940	Endrin Aldehyde
17.484	3995.3	BB	0.027		59.448	Methoxychlor
17.899	7486.3	BB	0.028		56.347	Endosulfan Sulfate
18.363	9491.2	BB	0.030		56.959	Endrin Ketone
20.148	12584.2	BB	0.038		108.618	Decachlorobiphenyl
0.000	0.0		0.000		0.000	Chlordane
0.000	0.0		0.000		0.000	Toxaphene


ECD1 A, (D:\DATA\08121212\08121202.D)
5.688
6.692 - 2,4,5,6-Tetrachloro-m-Xylene
7.517 - Hexachlorobenzene
7.898 - Alpha-BHC
8.679 - Gamma-BHC
8.887 - Beta-BHC
9.387 - Delta-BHC
9.997 - Heptachlor
10.938 - Aldrin
13.072 - Heptachlor Epoxide
13.542 - Gamma Chlordane
14.069 - Alpha Chlordane
14.378 - 4,4'-DDE
14.558 - Endosulfan I
15.271 - Dieldrin
15.856 - Endrin
16.030 - 4,4'-DDD
16.356 - Endosulfan II
16.613 - 4,4'-DDT
17.170 - Endrin Aldehyde
17.484 - Methoxychlor
17.899 - Endosulfan Sulfate
18.363 - Endrin Ketone
20.148 - Decachlorobiphenyl
min

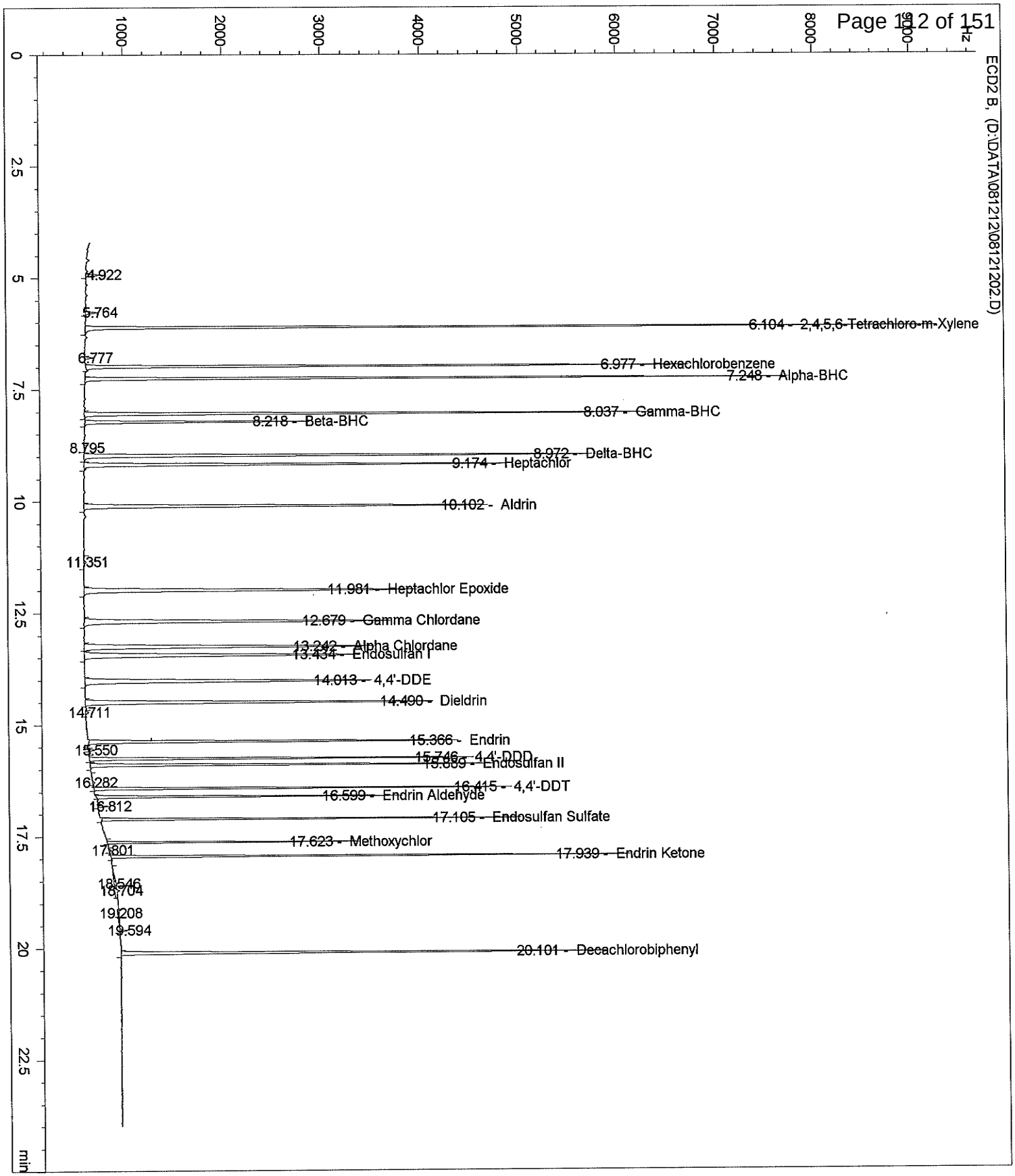
External Standard Report

Data File Name : D:\DATA\081212\08121202.D
Operator :
Instrument : GC 41
Sample Name : PEST 60
Run Time Bar Code:
Acquired on : 12/12/2008 11:21:52 AM
Report Created on: 12 Dec 08 02:32 pm
Calibrated on : 22 Aug 03 05:56 pm
Analysis Method : C:\CHEM32\1\METHODS\PEST081209R.M

Page Number :
Vial Number : Vial 2
Injection Number : 1
Sequence Line : 4
Instrument Method: D:\DATA\081212\8081.M
Sample Amount :
Last Modified on : 12Dec08

Sig. ECD2 B, D:\DATA\081212\08121202.D

Ret Time	Area	Type	Width	Ref #	ppb	Name
6.104	15992.4	BB	0.029		114.290	2,4,5,6-Tetrachloro-m-Xylene
6.977	12429.0	VB	0.032		56.227	Hexachlorobenzene
7.248	14339.4	BB	0.032		59.168	Alpha-BHC
8.037	12980.0	VB	0.035		59.018	Gamma-BHC
8.218	5212.0	BB	0.036		56.788	Beta-BHC
8.972	12920.5	BV	0.038		58.874	Delta-BHC
9.174	11100.3	VB	0.040		54.696	Heptachlor
10.102	11467.4	BB	0.045		58.958	Aldrin
11.981	10956.9	BB	0.051		58.055	Heptachlor Epoxide
12.679	10639.1	BB	0.053		55.823	Gamma Chlordane
13.242	10312.2	BV	0.055		58.276	Alpha Chlordane
13.434	10167.4	VB	0.056		58.205	Endosulfan I
14.013	10395.8	BB	0.057		57.687	4,4'-DDE
14.490	10789.5	BV	0.048		58.749	Dieldrin
15.366	9034.4	BV	0.038		58.700	Endrin
15.746	8018.0	VV	0.032		56.513	4,4'-DDD
15.889	8814.0	VB	0.034		56.419	Endosulfan II
16.415	7690.0	BB	0.028		59.489	4,4'-DDT
16.599	5867.9	BB	0.030		52.601	Endrin Aldehyde
17.105	7296.5	BB	0.027		55.001	Endosulfan Sulfate
17.623	3902.6	BV	0.024		58.045	Methoxychlor
17.939	8830.0	VB	0.026		55.471	Endrin Ketone
20.101	10997.4	BB	0.035		108.604	Decachlorobiphenyl
0.000	0.0		0.000		0.000	Chlordane
0.000	0.0		0.000		0.000	Toxaphene


ECD2 B, (D:\DATA\081212\08121202.D)
4.922
5.764
6.104 - 2,4,5,6-Tetrachloro-m-Xylene
6.777
6.977 - Hexachlorobenzene
7.248 - Alpha-BHC
8.037 - Gamma-BHC
8.218 - Beta-BHC
8.795
8.972 - Delta-BHC
9.174 - Heptachlor
10.102 - Aldrin
11.351
11.981 - Heptachlor Epoxide
12.679 - Gamma Chlordane
13.242 - Alpha Chlordane
13.434 - Endosulfan I
14.013 - 4,4'-DDE
14.490 - Dieldrin
14.711
15.366 - Endrin
15.550
15.746 - 4,4'-DDD
15.889 - Endosulfan II
16.282
16.415 - 4,4'-DDT
16.599 - Endrin Aldehyde
16.812
17.105 - Endosulfan Sulfate
17.623 - Methoxychlor
17.801
17.939 - Endrin Ketone
18.546
18.704
19.208
19.594
20.101 - Decachlorobiphenyl
min

Work Order#: 08-12-0585

Client: WEISS Associates

EPA 8082

Calibration

External Standard Report

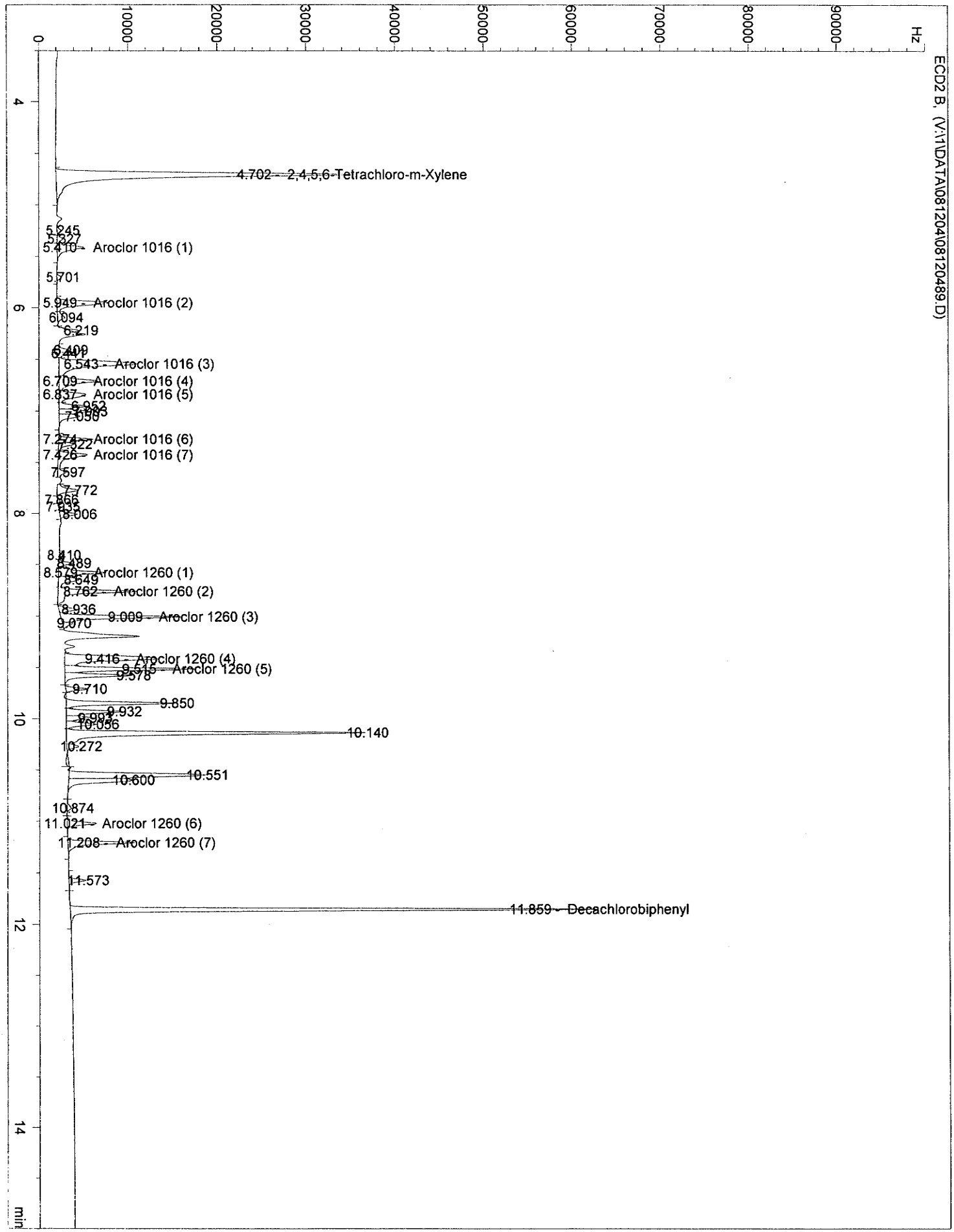
Data File Name : V:\1\DATA\081204\08120489.D
Operator :
Instrument : GC 31
Sample Name : PCB 500 1cu
Run Time Bar Code: Winter
Acquired on : 12/4/2008 9:01:07 PM
Report Created on: 05 Dec 08 11:46 am
Calibrated on : 24 Sep 04 04:14 pm
Analysis Method : V:\1\METHODS\081204R.M\P101660R.M

Page Number :
Vial Number : Vial 1
Injection Number : 1
Sequence Line : 12
Instrument Method: 8082.M
Sample Amount :
Last Modified on : 05Dec08

Sig. ECD2 B, V:\1\DATA\081204\08120489.D

Ret Time	Area	Type	Width	Ref #	ppb	Name
4.702	108826.9	BB	0.046		95.536	2,4,5,6-Tetrachloro-m-Xylene
5.410	9362.0	VB	0.043		0.000	Aroclor 1016 (1)
5.949	17431.3	BV	0.048		0.000	Aroclor 1016 (2)
6.543	32932.1	VV	0.053		0.000	Aroclor 1016 (3)
6.709	14399.5	VV	0.047		0.000	Aroclor 1016 (4)
6.837	10574.4	VV	0.049		0.000	Aroclor 1016 (5)
7.274	7924.0	BV	0.031		0.000	Aroclor 1016 (6)
7.426	11153.8	VV	0.048		0.000	Aroclor 1016 (7)
8.579	12957.5	VV	0.035		0.000	Aroclor 1260 (1)
8.762	21311.6	VV	0.036		0.000	Aroclor 1260 (2)
9.009	28400.5	VV	0.032		0.000	Aroclor 1260 (3)
9.416	35562.3	VV	0.054		0.000	Aroclor 1260 (4)
9.515	28094.4	VV	0.030		0.000	Aroclor 1260 (5)
11.021	7437.3	PV	0.033		0.000	Aroclor 1260 (6)
11.208	16430.2	BB	0.033		0.000	Aroclor 1260 (7)
11.859	106796.2	BB	0.028		101.293	Decachlorobiphenyl
0.000	0.0		0.000		0.000	Aroclor-1016
0.000	0.0		0.000		0.000	Aroclor-1221
0.000	0.0		0.000		0.000	Aroclor-1232
0.000	0.0		0.000		0.000	Aroclor-1242
0.000	0.0		0.000		0.000	Aroclor-1248
0.000	0.0		0.000		0.000	Aroclor-1254
0.000	0.0		0.000		0.000	Aroclor-1260
0.000	0.0		0.000		0.000	Aroclor-1262
0.000	0.0		0.000		0.000	Aroclor-1268

Area Sum	Comp. Group Nam
103777.1	Aroclor 1016
150193.8	Aroclor 1260


ECD2 B, (V:\1\DATA\081204\08120489.D)
Hz
0
10000
20000
30000
40000
50000
60000
70000
80000
90000
4.702 - 2,4,5,6-Tetrachloro-m-Xylene
5.245
5.327
5.410 - Aroclor 1016 (1)
5.701
5.949 - Aroclor 1016 (2)
6.094
6.219
6.409
6.441
6.543 - Aroclor 1016 (3)
6.709 - Aroclor 1016 (4)
6.837 - Aroclor 1016 (5)
6.952
7.050
7.274 - Aroclor 1016 (6)
7.322
7.426 - Aroclor 1016 (7)
7.597
7.772
7.866
7.935
8.006
8.410
8.489
8.579 - Aroclor 1260 (1)
8.649
8.762 - Aroclor 1260 (2)
8.936
9.009 - Aroclor 1260 (3)
9.070
9.416 - Aroclor 1260 (4)
9.515 - Aroclor 1260 (5)
9.578
9.710
9.850
9.932
9.993
10.056
10.140
10.272
10.551
10.600
10.874
11.021 - Aroclor 1260 (6)
11.208 - Aroclor 1260 (7)
11.573
11.859 - Decachlorobiphenyl
4
6
8
10
12
14
min

PCB CCV Calculations GC 31

Calculations: ***500PPB***

Components	Total Area	RF	Ave RF	%D(<15%)	Pass?
Aroclor-1016-R	**103777.1**	207.6	206	0.9	YES
Aroclor-1260R	**150193.8**	300.4	291	3.2	YES

External Standard Report

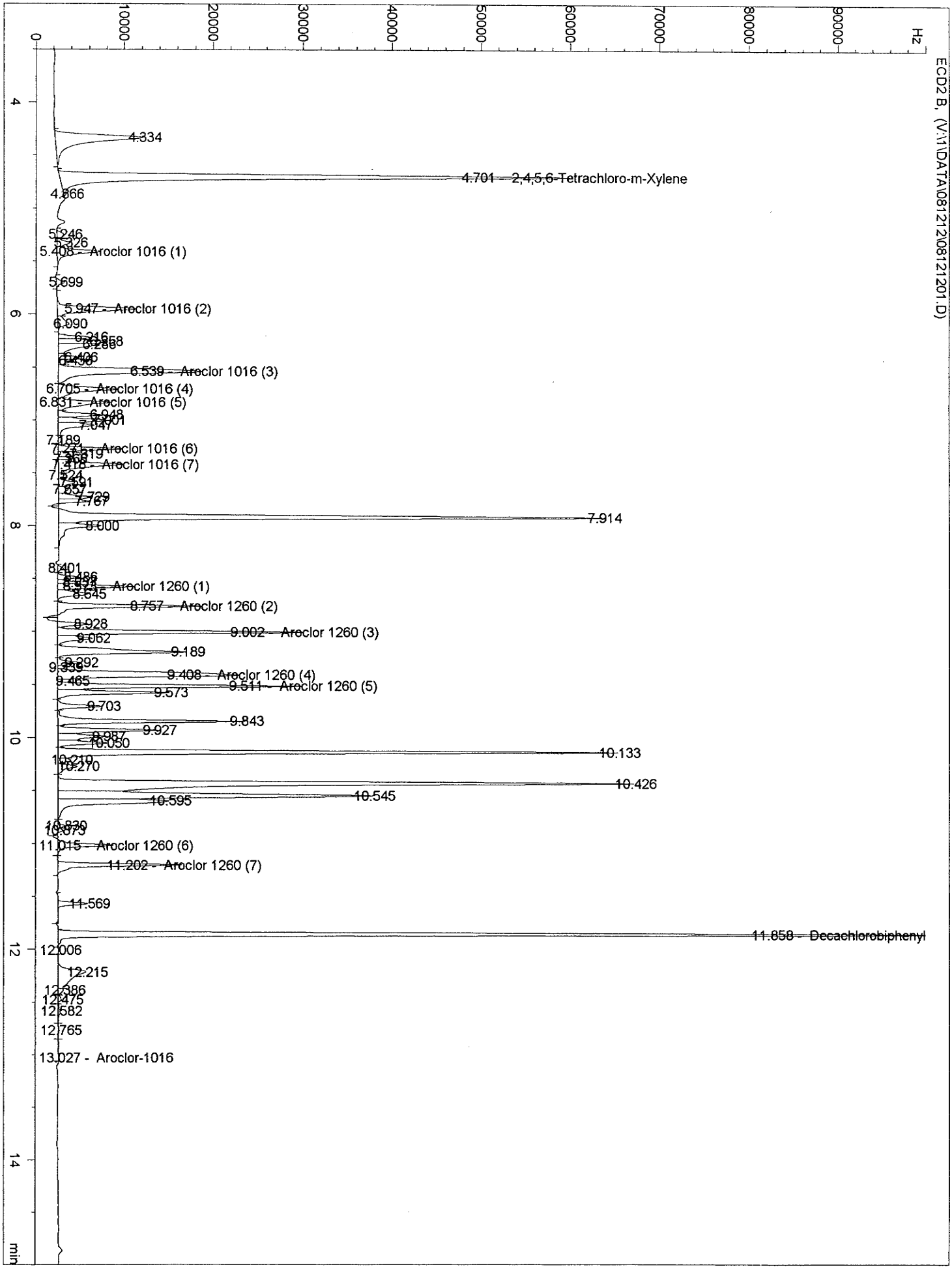
Data File Name : V:\1\DATA\081212\08121201.D
Operator :
Instrument : GC 31
Sample Name : PCB 750
Run Time Bar Code:
Acquired on : 12/12/2008 12:10:35 PM
Report Created on: 12 Dec 08 03:24 pm
Calibrated on : 24 Sep 04 04:14 pm
Analysis Method : V:\1\METHODS\081204R.M\P101660R.M

Page Number :
Vial Number : Vial 1
Injection Number : 1
Sequence Line : 2
Instrument Method: 8082.M
Sample Amount :
Last Modified on : 05Dec08

Sig. ECD2B, V:\1\DATA\081212\08121201.D

Ret Time	Area	Type	Width	Ref #	ppb	Name
4.701	160651.2	BV	0.040		138.613	2,4,5,6-Tetrachloro-m-Xylene
5.408	14013.1	VB	0.041		0.000	Aroclor 1016 (1)
5.947	26126.9	BV	0.047		0.000	Aroclor 1016 (2)
6.539	53966.3	VV	0.055		0.000	Aroclor 1016 (3)
6.705	20226.2	VV	0.050		0.000	Aroclor 1016 (4)
6.831	16881.0	VV	0.048		0.000	Aroclor 1016 (5)
7.271	13669.9	VV	0.031		0.000	Aroclor 1016 (6)
7.418	21492.9	VV	0.048		0.000	Aroclor 1016 (7)
8.573	16151.5	VV	0.031		0.000	Aroclor 1260 (1)
8.757	31060.6	VV	0.032		0.000	Aroclor 1260 (2)
9.002	49680.8	VV	0.030		0.000	Aroclor 1260 (3)
9.408	60203.7	VV	0.049		0.000	Aroclor 1260 (4)
9.511	48067.2	VV	0.029		0.000	Aroclor 1260 (5)
11.015	12668.3	VV	0.034		0.000	Aroclor 1260 (6)
11.202	26269.0	VV	0.031		0.000	Aroclor 1260 (7)
11.858	175499.7	VV	0.028		161.209	Decachlorobiphenyl
13.027	361.7	VM	0.106		0.000	Aroclor-1016
0.000	0.0		0.000		0.000	Aroclor-1221
0.000	0.0		0.000		0.000	Aroclor-1232
0.000	0.0		0.000		0.000	Aroclor-1242
0.000	0.0		0.000		0.000	Aroclor-1248
0.000	0.0		0.000		0.000	Aroclor-1254
0.000	0.0		0.000		0.000	Aroclor-1260
0.000	0.0		0.000		0.000	Aroclor-1262
0.000	0.0		0.000		0.000	Aroclor-1268

Area Sum	Comp. Group Nam
166376.3	Aroclor 1016
244101.2	Aroclor 1260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10000
20000
30000
40000
50000
60000
70000
80000
90000
4
6
8
10
12
14
min
4.334
4.701 - 2,4,5,6-Tetrachloro-m-Xylene
4.866
5.246
5.326
5.408 - Aroclor 1016 (1)
5.699
5.947 - Aroclor 1016 (2)
6.090
6.216
6.258
6.406
6.450
6.539 - Aroclor 1016 (3)
6.705 - Aroclor 1016 (4)
6.831 - Aroclor 1016 (5)
6.948
7.001
7.047
7.189
7.319
Aroclor 1016 (6)
7.418 - Aroclor 1016 (7)
7.524
7.591
7.657
7.729
7.767
7.914
8.000
8.401
8.486
8.591
Aroclor 1260 (1)
8.645
8.757 - Aroclor 1260 (2)
8.928
9.002 - Aroclor 1260 (3)
9.062
9.189
9.292
9.339
9.408 - Aroclor 1260 (4)
9.465
9.511 - Aroclor 1260 (5)
9.573
9.703
9.843
9.927
9.987
10.050
10.133
10.219
10.270
10.426
10.545
10.595
10.839
10.879
11.015 - Aroclor 1260 (6)
11.202 - Aroclor 1260 (7)
11.569
11.858 - Decachlorobiphenyl
12.006
12.215
12.386
12.475
12.582
12.765
13.027 - Aroclor-1016

PCB CCV Calculations GC 31

Calculations: ***750PPB***

Components	Total Area	RF	Ave RF	%D(<15%)	Pass?
Aroclor-1016-R	**166376.3**	222	206	7.9	YES
Aroclor-1260-R	**244101.2**	325	291	11.8	YES

Work Order#: 08-12-0585

Client: WEISS Associates

EPA 8260B

Calibration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D
Acq On : 3 Dec 2008 3:12 pm
Sample : ICV/LCS V111908D/V112608B
Misc : V120308A
MS Integration Params: RTEINT.P
Quant Time: Dec 03 15:47:56 2008

Vial: 24
Operator:
Inst : GCMS_L
Multiplr: 1.00
Quant Results File: 081203_BP.RES

Quant Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Tert-Butyl Alcohol-d9	3.8865	65	28844	50.0000 ug/l	-0
4) Pentafluorobenzene	6.4012	168	424065	10.0000 ug/l	0
47) 1,4-Difluorobenzene	7.3265	114	545475	10.0000 ug/l	0
63) Chlorobenzene-d5	10.9182	117	422275	10.0000 ug/l	0
87) 1,4-Dichlorobenzene-d4	13.7936	152	223638	10.0000 ug/l	0

System Monitoring Compounds					
41) Dibromofluoromethane	6.3018	113	161198	9.64 ug/l	0.0
Spiked Amount 10.000	Range 53 - 141		Recovery	= 96.40%	
46) 1,2-Dichloroethane-d4	6.7305	65	144382	8.92 ug/l	0.0
Spiked Amount 10.000	Range 50 - 150		Recovery	= 89.20%	
60) Toluene-d8	9.1616	98	605274	10.45 ug/l	0.0
Spiked Amount 10.000	Range 69 - 134		Recovery	= 104.50%	
80) 1,4-Bromofluorobenzene	12.3611	95	174937	10.50 ug/l	0.0
Spiked Amount 10.000	Range 51 - 152		Recovery	= 105.00%	

Target Compounds					Qvalue
2) Ethanol	2.7520	45	8955	98.7768 ug/l	
3) Tert-Butyl Alcohol (TBA)	4.0224	59	27037	43.2509 ug/l	
5) Dichlorodifluoromethane	1.5600	85	262525	10.7621 ug/l	
6) Chloromethane	1.7273	50	280280	10.7022 ug/l	
7) Vinyl Chloride	1.8423	62	283358	10.8929 ug/l	
8) Bromomethane	2.1770	94	177331	10.2001 ug/l	
9) Chloroethane	2.2867	64	163810	10.7455 ug/l	
10) Trichlorofluoromethane	2.5690	101	404509	9.7828 ug/l	
11) Diethyl Ether	2.8984	45	75134	9.1520 ug/l	
12) Acetone	3.2173	43	18271	9.2761 ug/l	
13) Iodomethane	3.3428	142	244361	14.3479 ug/l	
14) 1,1-Dichloroethene	3.1650	61	313070	10.2122 ug/l	
15) 1,1,2-Trichloro-1,2,2-Trif	3.1807	101	211509	10.4074 ug/l	
16) Carbon Disulfide	3.4317	76	585329	10.5179 ug/l	
17) Acetonitrile	3.6303	41	355436	10.3171 ug/l	
18) Acrylonitrile	4.1531	53	22568	8.7847 ug/l #	
19) Allyl Chloride	3.6303	41	349482	10.1325 ug/l	
20) Acrolein	3.0291	56	15606	21.1622 ug/l	
21) Methyl Acetate	3.6721	43	56058	8.4071 ug/l	
22) Methylene Chloride	3.7976	84	168631	9.6228 ug/l	
23) t-1,2-Dichloroethene	4.2211	96	208398	10.0213 ug/l	
24) Isobutyl Alcohol	3.6721	43	56058	8.9841 ug/l	
25) Methyl-t-Butyl Ether (MTBE	4.2577	73	294560	9.0958 ug/l	
26) Hexane	4.6602	57	323382	10.4897 ug/l	
27) 1,1-Dichloroethane	4.8275	63	365742	9.5512 ug/l	

(#) = qualifier out of range (m) = manual integration

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D Vial: 24
Acq On : 3 Dec 2008 3:12 pm Operator:
Sample : ICV/LCS V111908D/V112608B Inst : GCMS_L
Misc : V120308A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 03 15:47:56 2008 Quant Results File: 081203_BP.RES

Quant Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
28) Vinyl Acetate	4.9478	86	18568	9.3596 ug/l	#
29) Diisopropyl Ether (DIPE)	4.9948	45	548039	9.6932 ug/l	
30) Chloroprene	4.9687	53	370046	10.1898 ug/l	
31) Ethyl-t-Butyl Ether (ETBE)	5.5124	59	372778	9.4608 ug/l	
32) c-1,2-Dichloroethene	5.6536	96	201268	9.8534 ug/l	
33) 2,2-Dichloropropane	5.6431	77	326271	9.6253 ug/l	
34) 2-Butanone	5.6902	43	30132	9.4451 ug/l	
35) Propionitrile	5.7372	54	8138	9.9047 ug/l	
36) Methacrylonitrile	5.9568	41	47181	9.2983 ug/l	
37) Propanedinitrile	5.9620	66	8361	8.8060 ug/l	
38) Bromochloromethane	5.9725	130	93788	9.5125 ug/l	
39) Tetrahydrofuran	6.0614	42	18570	9.1903 ug/l	
40) Chloroform	6.0927	83	335188	9.5025 ug/l	
42) 1,1,1-Trichloroethane	6.3332	97	318154	9.5310 ug/l	
43) Cyclohexane	6.4116	84	307782	9.4906 ug/l	
44) 1,1-Dichloropropene	6.5528	75	279671	10.0255 ug/l	
45) Carbon Tetrachloride	6.5580	117	279041	9.8157 ug/l	
48) Benzene	6.8142	78	740847	10.0458 ug/l	
49) 1,2-Dichloroethane	6.8299	62	170972	8.9862 ug/l	
50) Tert-Amyl-Methyl Ether (TA	7.0129	73	273087	9.3398 ug/l	
51) Thiophene	7.0808	84	319546	9.9647 ug/l	
52) Trichloroethene	7.6507	95	186590	10.0765 ug/l	
53) 1,2-Dichloropropane	7.9173	63	153740	9.3217 ug/l	
54) Methylcyclohexane	7.9016	83	328562	10.0874 ug/l	
55) Dibromomethane	8.0585	93	55892	9.3092 ug/l	
56) Methyl Methacrylate	8.1107	69	40865	9.5124 ug/l	
57) Bromodichloromethane	8.2623	83	190955	9.2961 ug/l	
58) 2-Chloroethyl Vinyl Ether	8.6649	63	44517	8.5468 ug/l	
59) c-1,3-Dichloropropene	8.8270	75	206053	9.6417 ug/l	
61) Toluene	9.2400	91	697614	10.1924 ug/l	
62) 4-Methyl-2-Pentanone	9.1563	58	4915	14.6828 ug/l	
64) t-1,3-Dichloropropene	9.5118	75	156814	9.9286 ug/l	
65) Ethyl Methacrylate	9.6478	69	84497	9.7639 ug/l	
66) 1,1,2-Trichloroethane	9.7262	83	68520	9.7461 ug/l	
67) Tetrachloroethene	9.9248	166	242385	10.1024 ug/l	
68) 1,3-Dichloropropane	9.9301	76	157836	9.6435 ug/l	
69) 2-Hexanone	10.0556	58	13507	9.3630 ug/l	
70) Dibromochloromethane	10.2072	129	105738	10.0363 ug/l	
71) 1,2-Dibromoethane	10.3379	107	77450	9.6633 ug/l	
72) Chlorobenzene	10.9548	112	417096	9.8661 ug/l	
73) 1,1,1,2-Tetrachloroethane	11.0541	131	154180	10.1227 ug/l	

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D
Acq On : 3 Dec 2008 3:12 pm
Sample : ICV/LCS V111908D/V112608B
Misc : V120308A
MS Integration Params: RTEINT.P
Quant Time: Dec 03 15:47:56 2008

Vial: 24
Operator:
Inst : GCMS_L
Multiplr: 1.00
Quant Results File: 081203_BP.RES

Quant Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
74)	Ethylbenzene	11.1011	91	785840	10.7903	ug/l	
75)	p/m-Xylene	11.2475	91	1165099	21.0150	ug/l	
76)	o-Xylene	11.7285	91	568688	10.6254	ug/l	
77)	Styrene	11.7442	104	438553	10.7030	ug/l	
78)	Bromoform	11.9533	173	50945	11.3184	ug/l	
79)	Isopropylbenzene	12.1886	105	782745	11.1343	ug/l	
81)	1,2,3-Trichloropropane	12.5859	75	96128	10.2239	ug/l	
82)	Bromobenzene	12.5441	156	171066	10.4499	ug/l	
83)	n-Propylbenzene	12.6957	91	885137	10.8359	ug/l	
84)	t-1,4-Dichloro-2-Butene	12.6120	53	21407	10.4142	ug/l	
85)	2-Chlorotoluene	12.7950	91	492077	10.6585	ug/l	
86)	1,3,5-Trimethylbenzene	12.9153	105	614940	10.9102	ug/l	
88)	4-Chlorotoluene	12.9257	91	584602	10.6378	ug/l	
89)	1,1,2,2-Tetrachloroethane	12.5336	83	76613	9.6235	ug/l	
90)	1,2,4-Trimethylbenzene	13.3753	105	598219	10.8114	ug/l	
91)	tert-Butylbenzene	13.3231	119	624166	10.8272	ug/l	
92)	p-Isopropyltoluene	13.7727	119	723823	10.8584	ug/l	
93)	sec-Butylbenzene	13.5949	105	856394	11.1148	ug/l	
94)	1,3-Dichlorobenzene	13.7152	146	347034	10.4040	ug/l	
95)	1,4-Dichlorobenzene	13.8249	146	334057	9.7335	ug/l	
96)	1,2-Dichlorobenzene	14.2798	146	273914	9.8216	ug/l	
97)	n-Butylbenzene	14.2850	91	637311	10.7920	ug/l	
98)	1,2-Dibromo-3-Chloropropan	15.2417	75	9509	9.8117	ug/l	
99)	1,2,4-Trichlorobenzene	16.2873	180	204087	10.0816	ug/l	
100)	Hexachloro-1,3-Butadiene	16.5226	225	177288	10.1949	ug/l	
101)	Naphthalene	16.5853	128	213858	9.3894	ug/l	
102)	1,2,3-Trichlorobenzene	16.2873	180	204087	10.0805	ug/l	

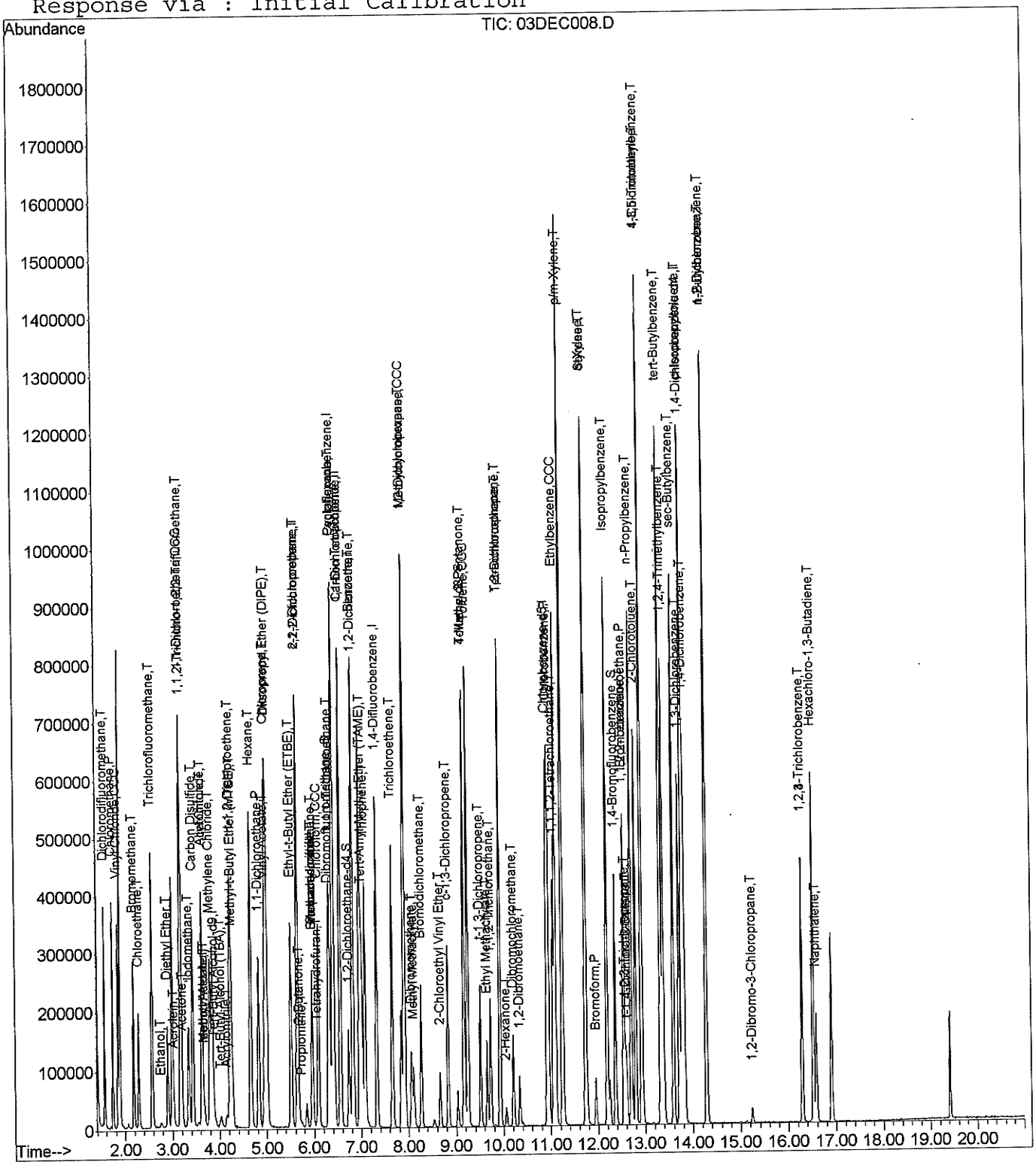
(#) = qualifier out of range (m) = manual integration

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D
Acq On : 3 Dec 2008 3:12 pm
Sample : ICV/LCS V111908D/V112608B
Misc : V120308A
MS Integration Params: RTEINT.P
Quant Time: Dec 3 15:47 2008

Vial: 24
Operator:
Inst : GCMS_L
Multiplr: 1.00

Quant Results File: 081203_BP.

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D
Acq On : 3 Dec 2008 3:12 pm
Sample : ICV/LCS V111908D/V112608B
Misc : V120308A
MS Integration Params: RTEINT.P

Vial: 24
Operator:
Inst : GCMS_L
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Tert-Butyl Alcohol-d9	1.000	1.000	0.0	106	-0.01
2	T	Ethanol	0.157	0.155	1.3	113	0.00
3	T	Tert-Butyl Alcohol (TBA)	1.084	0.937	13.6	99	0.00
4	I	Pentafluorobenzene	1.000	1.000	0.0	115	0.00
5	T	Dichlorodifluoromethane	0.575	0.619	-7.7	125	0.00
6	P	Chloromethane	0.618	0.661	-7.0	121	0.00
7	CCC	Vinyl Chloride	0.613	0.668	-9.0	123	0.00
8	T	Bromomethane	0.410	0.418	-2.0	122	0.00
9	T	Chloroethane	0.359	0.386	-7.5	124	0.00
10	T	Trichlorofluoromethane	0.975	0.954	2.2	111	0.00
11	T	Diethyl Ether	0.194	0.177	8.8	102	0.00
12	T	Acetone	0.046	0.043#	6.5	114	0.00
13	T	Iodomethane	0.402	0.576	-43.3#	146	0.00
14	CCC	1,1-Dichloroethene	0.723	0.738	-2.1	113	0.00
15	T	1,1,2-Trichloro-1,2,2-Trifl	0.479	0.499	-4.2	116	0.00
16	T	Carbon Disulfide	1.312	1.380	-5.2	113	0.00
17	T	Acetonitrile	0.812	0.838	-3.2	116	0.00
18	T	Acrylonitrile	0.061	0.053#	13.1	102	0.00
19	T	Allyl Chloride	0.813	0.824	-1.4	114	0.00
20	T	Acrolein	0.017	0.018#	-5.9	115	0.00
21	T	Methyl Acetate	0.157	0.132	15.9	102	0.00
22	T	Methylene Chloride	0.413	0.398	3.6	107	0.00
23	T	t-1,2-Dichloroethene	0.490	0.491	-0.2	112	0.00
24	T	Isobutyl Alcohol	0.147	0.132	10.2	102	0.00
25	T	Methyl-t-Butyl Ether (MTBE)	0.764	0.695	9.0	103	0.00
26	T	Hexane	0.727	0.763	-5.0	118	0.00
27	P	1,1-Dichloroethane	0.903	0.862	4.5	108	0.00
28	T	Vinyl Acetate	0.047	0.044#	6.4	106	0.00
29	T	Diisopropyl Ether (DIPE)	1.333	1.292	3.1	110	0.00
30	T	Chloroprene	0.856	0.873	-2.0	110	0.00
31	T	Ethyl-t-Butyl Ether (ETBE)	0.929	0.879	5.4	104	0.00
32	T	c-1,2-Dichloroethene	0.482	0.475	1.5	111	0.00
33	T	2,2-Dichloropropane	0.799	0.769	3.8	111	0.00
34	T	2-Butanone	0.075	0.071#	5.3	123	-0.01
35	T	Propionitrile	0.019	0.019#	0.0	99	-0.01
36	T	Methacrylonitrile	0.120	0.111	7.5	105	0.00
37	T	Propanedinitrile	0.022	0.020#	9.1	104	0.00
38	T	Bromochloromethane	0.232	0.221	4.7	104	0.00
39	T	Tetrahydrofuran	0.048	0.044#	8.3	113	0.00
40	CCC	Chloroform	0.832	0.790	5.0	106	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D
Acq On : 3 Dec 2008 3:12 pm
Sample : ICV/LCS V111908D/V112608B
Misc : V120308A
MS Integration Params: RTEINT.P

Vial: 24
Operator:
Inst : GCMS_L
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	S	Dibromofluoromethane	0.394	0.380	3.6	107	0.00
42	T	1,1,1-Trichloroethane	0.787	0.750	4.7	106	0.00
43	T	Cyclohexane	0.765	0.726	5.1	112	0.00
44	T	1,1-Dichloropropene	0.658	0.660	-0.3	110	0.00
45	T	Carbon Tetrachloride	0.670	0.658	1.8	108	0.00
46	S	1,2-Dichloroethane-d4	0.381	0.340	10.8	100	0.00
47	I	1,4-Difluorobenzene	1.000	1.000	0.0	109	0.00
48	T	Benzene	1.352	1.358	-0.4	107	0.00
49	T	1,2-Dichloroethane	0.349	0.313	10.3	97	0.00
50	T	Tert-Amyl-Methyl Ether (TAM	0.536	0.501	6.5	97	0.00
51	T	Thiophene	0.588	0.586	0.3	105	0.00
52	T	Trichloroethene	0.339	0.342	-0.9	105	0.00
53	CCC	1,2-Dichloropropane	0.302	0.282	6.6	99	0.00
54	T	Methylcyclohexane	0.597	0.602	-0.8	109	0.00
55	T	Dibromomethane	0.110	0.102	7.3	96	0.00
56	T	Methyl Methacrylate	0.079	0.075#	5.1	101	0.00
57	T	Bromodichloromethane	0.377	0.350	7.2	102	0.00
58	T	2-Chloroethyl Vinyl Ether	0.095	0.082#	13.7	101	0.00
59	T	c-1,3-Dichloropropene	0.392	0.378	3.6	104	0.00
60	S	Toluene-d8	1.062	1.110	-4.5	113	0.00
61	CCC	Toluene	1.255	1.279	-1.9	105	0.00
62	T	4-Methyl-2-Pentanone	0.006	0.009#	-50.0#	207#	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	106	0.00
64	T	t-1,3-Dichloropropene	0.374	0.371	0.8	101	0.00
65	T	Ethyl Methacrylate	0.205	0.200	2.4	96	0.00
66	T	1,1,2-Trichloroethane	0.166	0.162	2.4	97	0.00
67	T	Tetrachloroethene	0.568	0.574	-1.1	108	0.00
68	T	1,3-Dichloropropane	0.388	0.374	3.6	96	0.00
69	T	2-Hexanone	0.034	0.032#	5.9	97	0.00
70	T	Dibromochloromethane	0.249	0.250	-0.4	105	0.00
71	T	1,2-Dibromoethane	0.190	0.183	3.7	100	0.00
72	P	Chlorobenzene	1.001	0.988	1.3	102	0.00
73	T	1,1,1,2-Tetrachloroethane	0.361	0.365	-1.1	104	0.00
74	CCC	Ethylbenzene	1.725	1.861	-7.9	109	0.00
75	T	p/m-Xylene	1.313	1.380	-5.1	106	0.00
76	T	o-Xylene	1.267	1.347	-6.3	105	0.00
77	T	Styrene	0.970	1.039	-7.1	103	0.00
78	P	Bromoform	0.107	0.121	-13.1	98	0.00
79	T	Isopropylbenzene	1.665	1.854	-11.4	108	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\081203\03DEC008.D
Acq On : 3 Dec 2008 3:12 pm
Sample : ICV/LCS V111908D/V112608B
Misc : V120308A
MS Integration Params: RTEINT.P

Vial: 24
Operator:
Inst : GCMS_L
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
80	S	1,4-Bromofluorobenzene	0.395	0.414	-4.8	107	0.00
81	T	1,2,3-Trichloropropane	0.223	0.228	-2.2	95	0.00
82	T	Bromobenzene	0.388	0.405	-4.4	103	0.00
83	T	n-Propylbenzene	1.934	2.096	-8.4	105	0.00
84	T	t-1,4-Dichloro-2-Butene	0.049	0.051#	-4.1	97	0.00
85	T	2-Chlorotoluene	1.093	1.165	-6.6	107	0.00
86	T	1,3,5-Trimethylbenzene	1.335	1.456	-9.1	107	0.00
87	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	0.00
88	T	4-Chlorotoluene	2.457	2.614	-6.4	106	0.00
89	P	1,1,2,2-Tetrachloroethane	0.356	0.343	3.7	97	0.00
90	T	1,2,4-Trimethylbenzene	2.474	2.675	-8.1	105	0.00
91	T	tert-Butylbenzene	2.578	2.791	-8.3	105	0.00
92	T	p-Isopropyltoluene	2.981	3.237	-8.6	108	0.00
93	T	sec-Butylbenzene	3.445	3.829	-11.1	110	0.00
94	T	1,3-Dichlorobenzene	1.492	1.552	-4.0	103	0.00
95	T	1,4-Dichlorobenzene	1.535	1.494	2.7	99	0.00
96	T	1,2-Dichlorobenzene	1.247	1.225	1.8	98	0.00
97	T	n-Butylbenzene	2.641	2.850	-7.9	107	0.00
98	T	1,2-Dibromo-3-Chloropropane	0.043	0.043#	0.0	104	0.00
99	T	1,2,4-Trichlorobenzene	0.905	0.913	-0.9	101	0.00
100	T	Hexachloro-1,3-Butadiene	0.778	0.793	-1.9	106	0.00
101	T	Naphthalene	1.018	0.956	6.1	89	0.00
102	T	1,2,3-Trichlorobenzene	0.905	0.913	-0.9	101	0.00

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\081210\10DEC002.D Vial: 17
Acq On : 10 Dec 2008 11:08 am Operator:
Sample : CCV 10PPB V120408A/V120508A Inst : GCMS_L
Misc : V120308A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 10 11:33:20 2008 Quant Results File: 081203_BP.RES

Quant Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Tert-Butyl Alcohol-d9	3.9052	65	25587	50.0000 ug/l	0
4) Pentafluorobenzene	6.3990	168	335115	10.0000 ug/l	0
47) 1,4-Difluorobenzene	7.3348	114	423751	10.0000 ug/l	0
63) Chlorobenzene-d5	10.9212	117	311193	10.0000 ug/l	0
87) 1,4-Dichlorobenzene-d4	13.7966	152	178836	10.0000 ug/l	0

System Monitoring Compounds					
41) Dibromofluoromethane	6.2996	113	122206	9.25 ug/l	0.0
Spiked Amount 10.000	Range 53 - 141		Recovery	= 92.50%	
46) 1,2-Dichloroethane-d4	6.7388	65	113353	8.87 ug/l	0.0
Spiked Amount 10.000	Range 50 - 150		Recovery	= 88.70%	
60) Toluene-d8	9.1646	98	430312	9.56 ug/l	0.0
Spiked Amount 10.000	Range 69 - 134		Recovery	= 95.60%	
80) 1,4-Bromofluorobenzene	12.3641	95	126218	10.28 ug/l	0.0
Spiked Amount 10.000	Range 51 - 152		Recovery	= 102.80%	

Target Compounds					Qvalue
2) Ethanol	2.7655	45	7292	90.6718 ug/l	
3) Tert-Butyl Alcohol (TBA)	4.0307	59	25561	46.0946 ug/l	
5) Dichlorodifluoromethane	1.5579	85	187758	9.7401 ug/l	
6) Chloromethane	1.7304	50	201811	9.7513 ug/l	
7) Vinyl Chloride	1.8402	62	237613	11.5589 ug/l	
8) Bromomethane	2.1748	94	142581	10.3781 ug/l	
9) Chloroethane	2.2845	64	120217	9.9791 ug/l	
10) Trichlorofluoromethane	2.5721	101	306865	9.3912 ug/l	
11) Diethyl Ether	2.9015	45	65452	10.0888 ug/l	
12) Acetone	3.2151	43	13892	8.9249 ug/l	
13) Iodomethane	3.3458	142	196241	14.5809 ug/l	
14) 1,1-Dichloroethene	3.1681	61	263710	10.8854 ug/l	
15) 1,1,2-Trichloro-1,2,2-Trif	3.1837	101	185267	11.5359 ug/l	
16) Carbon Disulfide	3.4347	76	516116	11.7358 ug/l	
17) Acetonitrile	3.6334	41	277535	10.1942 ug/l	
18) Acrylonitrile	4.1509	53	21307	10.4953 ug/l	
19) Allyl Chloride	3.6334	41	273501	10.0344 ug/l	
20) Acrolein	3.0269	56	16883	28.9705 ug/l	
21) Methyl Acetate	3.6804	43	50942	9.6677 ug/l	
22) Methylene Chloride	3.8007	84	146730	10.5955 ug/l	
23) t-1,2-Dichloroethene	4.2241	96	171436	10.4321 ug/l	
24) Isobutyl Alcohol	3.6804	43	50940	10.3308 ug/l	
25) Methyl-t-Butyl Ether (MTBE	4.2555	73	266879	10.4284 ug/l	
26) Hexane	4.6581	57	263581	10.8193 ug/l	
27) 1,1-Dichloroethane	4.8254	63	305965	10.1109 ug/l	

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\081210\10DEC002.D Vial: 17
Acq On : 10 Dec 2008 11:08 am Operator:
Sample : CCV 10PPB V120408A/V120508A Inst : GCMS_L
Misc : V120308A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 10 11:33:20 2008 Quant Results File: 081203_BP.RES

Quant Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
28) Vinyl Acetate	4.9404	86	16875	10.7640 ug/l	#
29) Diisopropyl Ether (DIPE)	5.0031	45	428836	9.5981 ug/l	
30) Chloroprene	4.9665	53	300107	10.4574 ug/l	
31) Ethyl-t-Butyl Ether (ETBE)	5.5155	59	318961	10.2436 ug/l	
32) c-1,2-Dichloroethene	5.6514	96	171479	10.6234 ug/l	
33) 2,2-Dichloropropane	5.6461	77	273892	10.2248 ug/l	
34) 2-Butanone	5.7036	43	24188	9.5944 ug/l	
35) Propionitrile	5.7455	54	6412	9.8754 ug/l	
36) Methacrylonitrile	5.9650	41	40018	9.9800 ug/l	
37) Propanedinitrile	5.9546	66	7643	10.1865 ug/l	#
38) Bromochloromethane	5.9650	130	82765	10.6227 ug/l	
39) Tetrahydrofuran	6.0644	42	16107	10.0872 ug/l	
40) Chloroform	6.0957	83	278701	9.9983 ug/l	
42) 1,1,1-Trichloroethane	6.3362	97	268168	10.1659 ug/l	
43) Cyclohexane	6.4147	84	269780	10.5269 ug/l	
44) 1,1-Dichloropropene	6.5558	75	228751	10.3767 ug/l	
45) Carbon Tetrachloride	6.5558	117	235555	10.4853 ug/l	
48) Benzene	6.8172	78	621764	10.8529 ug/l	
49) 1,2-Dichloroethane	6.8329	62	149508	10.1153 ug/l	
50) Tert-Amyl-Methyl Ether (TA	7.0159	73	248470	10.9389 ug/l	
51) Thiophene	7.0786	84	274905	11.0351 ug/l	
52) Trichloroethene	7.6537	95	160710	11.1719 ug/l	
53) 1,2-Dichloropropane	7.9203	63	132931	10.3753 ug/l	
54) Methylcyclohexane	7.9046	83	278941	11.0240 ug/l	
55) Dibromomethane	8.0615	93	52139	11.1787 ug/l	
56) Methyl Methacrylate	8.1137	69	38370	11.4972 ug/l	
57) Bromodichloromethane	8.2706	83	159086	9.9693 ug/l	
58) 2-Chloroethyl Vinyl Ether	8.6627	63	37867	9.3585 ug/l	
59) c-1,3-Dichloropropene	8.8300	75	165126	9.9461 ug/l	
61) Toluene	9.2482	91	583606	10.9760 ug/l	
62) 4-Methyl-2-Pentanone	9.1698	58	3363	12.9323 ug/l	
64) t-1,3-Dichloropropene	9.5096	75	130194	11.1856 ug/l	
65) Ethyl Methacrylate	9.6560	69	72346	11.3438 ug/l	
66) 1,1,2-Trichloroethane	9.7292	83	61513	11.8726 ug/l	
67) Tetrachloroethene	9.9227	166	210458	11.9028 ug/l	
68) 1,3-Dichloropropane	9.9279	76	133474	11.0660 ug/l	
69) 2-Hexanone	10.0586	58	11229	10.5625 ug/l	
70) Dibromochloromethane	10.2102	129	92316	11.8900 ug/l	
71) 1,2-Dibromoethane	10.3409	107	67568	11.4396 ug/l	
72) Chlorobenzene	10.9578	112	362758	11.6437 ug/l	
73) 1,1,1,2-Tetrachloroethane	11.0624	131	129381	11.5267 ug/l	

(#) = qualifier out of range (m) = manual integration

Data File : C:\MSDCHEM\1\DATA\081210\10DEC002.D Vial: 17
Acq On : 10 Dec 2008 11:08 am Operator:
Sample : CCV 10PPB V120408A/V120508A Inst : GCMS_L
Misc : V120308A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 10 11:33:20 2008 Quant Results File: 081203_BP.RES

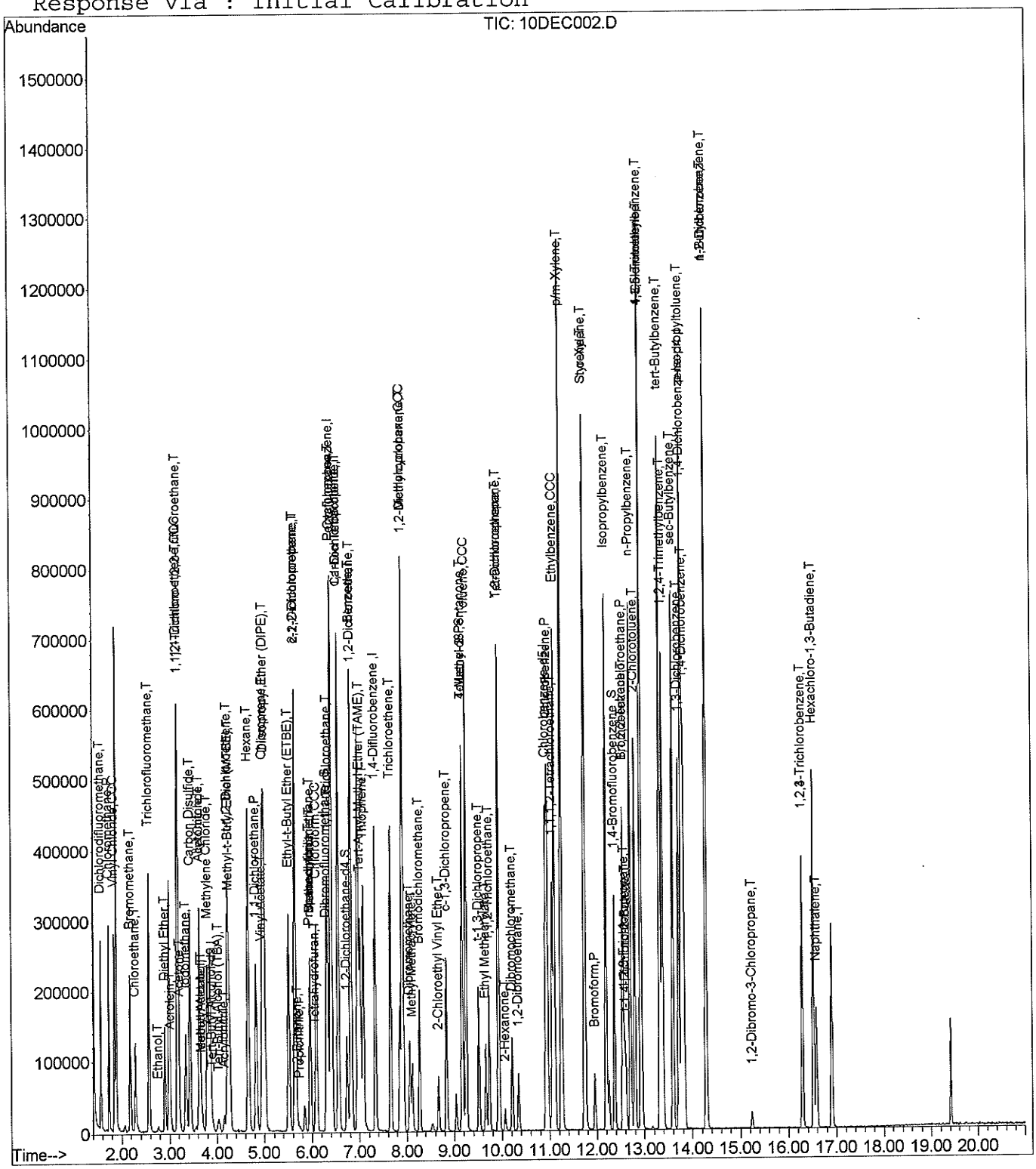
Quant Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
74) Ethylbenzene	11.1042	91	631907	11.7739 ug/l	
75) p/m-Xylene	11.2506	91	953370	23.3342 ug/l	
76) o-Xylene	11.7315	91	460012	11.6628 ug/l	
77) Styrene	11.7472	104	374121	12.3897 ug/l	
78) Bromoform	11.9511	173	50177	15.1270 ug/l	
79) Isopropylbenzene	12.1916	105	618066	11.9301 ug/l	
81) 1,2,3-Trichloropropane	12.5889	75	88507	12.7735 ug/l	
82) Bromobenzene	12.5471	156	151282	12.5401 ug/l	
83) n-Propylbenzene	12.6987	91	734261	12.1975 ug/l	
84) t-1,4-Dichloro-2-Butene	12.6098	53	18976	12.5268 ug/l	
85) 2-Chlorotoluene	12.7928	91	405626	11.9221 ug/l	
86) 1,3,5-Trimethylbenzene	12.9183	105	537705	12.9453 ug/l	
88) 4-Chlorotoluene	12.9288	91	504687	11.4843 ug/l	
89) 1,1,2,2-Tetrachloroethane	12.5419	83	71796	11.2778 ug/l	
90) 1,2,4-Trimethylbenzene	13.3783	105	489621	11.0656 ug/l	
91) tert-Butylbenzene	13.3209	119	519769	11.2750 ug/l	
92) p-Isopropyltoluene	13.7757	119	602030	11.2938 ug/l	
93) sec-Butylbenzene	13.5927	105	685621	11.1277 ug/l	
94) 1,3-Dichlorobenzene	13.7182	146	304618	11.4202 ug/l	
95) 1,4-Dichlorobenzene	13.8227	146	297425	10.8372 ug/l	
96) 1,2-Dichlorobenzene	14.2828	146	249400	11.1829 ug/l	
97) n-Butylbenzene	14.2828	91	511087	10.8228 ug/l	
98) 1,2-Dibromo-3-Chloropropan	15.2448	75	8402	10.8413 ug/l	
99) 1,2,4-Trichlorobenzene	16.2904	180	179832	11.1089 ug/l	
100) Hexachloro-1,3-Butadiene	16.5204	225	147562	10.6113 ug/l	
101) Naphthalene	16.5883	128	199053	10.9287 ug/l	
102) 1,2,3-Trichlorobenzene	16.2904	180	179832	11.1078 ug/l	

(#) = qualifier out of range (m) = manual integration

Data File : C:\MSDCHEM\1\DATA\081210\10DEC002.D Vial: 17
Acq On : 10 Dec 2008 11:08 am Operator:
Sample : CCV 10PPB V120408A/V120508A Inst : GCMS_L
Misc : V120308A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 10 11:33 2008 Quant Results File: 081203_BP.

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\081210\10DEC002.D
Acq On : 10 Dec 2008 11:08 am
Sample : CCV 10PPB V120408A/V120508A
Misc : V120308A
MS Integration Params: RTEINT.P

Vial: 17
Operator:
Inst : GCMS_L
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Tert-Butyl Alcohol-d9	1.000	1.000	0.0	94	0.00
2	T	Ethanol	0.157	0.142	9.6	92	0.00
3	T	Tert-Butyl Alcohol (TBA)	1.084	0.999	7.8	93	0.00
4	I	Pentafluorobenzene	1.000	1.000	0.0	91	0.00
5	T	Dichlorodifluoromethane	0.575	0.560	2.6	90	0.00
6	P	Chloromethane	0.618	0.602	2.6	87	0.00
7	CCC	Vinyl Chloride	0.613	0.709	-15.7	103	0.00
8	T	Bromomethane	0.410	0.425	-3.7	98	0.00
9	T	Chloroethane	0.359	0.359	0.0	91	0.00
10	T	Trichlorofluoromethane	0.975	0.916	6.1	84	0.00
11	T	Diethyl Ether	0.194	0.195	-0.5	89	0.00
12	T	Acetone	0.046	0.041#	10.9	87	0.00
13	T	Iodomethane	0.402	0.586	-45.8#	117	0.00
14	CCC	1,1-Dichloroethene	0.723	0.787	-8.9	95	0.00
15	T	1,1,2-Trichloro-1,2,2-Trifl	0.479	0.553	-15.4	101	0.00
16	T	Carbon Disulfide	1.312	1.540	-17.4	99	0.00
17	T	Acetonitrile	0.812	0.828	-2.0	90	0.00
18	T	Acrylonitrile	0.061	0.064#	-4.9	97	-0.01
19	T	Allyl Chloride	0.813	0.816	-0.4	89	0.00
20	T	Acrolein	0.017	0.025#	-47.1#	125	0.00
21	T	Methyl Acetate	0.157	0.152	3.2	93	0.00
22	T	Methylene Chloride	0.413	0.438	-6.1	93	0.00
23	T	t-1,2-Dichloroethene	0.490	0.512	-4.5	92	0.00
24	T	Isobutyl Alcohol	0.147	0.152	-3.4	93	0.00
25	T	Methyl-t-Butyl Ether (MTBE)	0.764	0.796	-4.2	93	0.00
26	T	Hexane	0.727	0.787	-8.3	96	0.00
27	P	1,1-Dichloroethane	0.903	0.913	-1.1	91	0.00
28	T	Vinyl Acetate	0.047	0.050#	-6.4	96	0.00
29	T	Diisopropyl Ether (DIPE)	1.333	1.280	4.0	86	0.00
30	T	Chloroprene	0.856	0.896	-4.7	89	0.00
31	T	Ethyl-t-Butyl Ether (ETBE)	0.929	0.952	-2.5	89	0.00
32	T	c-1,2-Dichloroethene	0.482	0.512	-6.2	94	0.00
33	T	2,2-Dichloropropane	0.799	0.817	-2.3	93	0.00
34	T	2-Butanone	0.075	0.072#	4.0	99	0.00
35	T	Propionitrile	0.019	0.019#	0.0	78	0.00
36	T	Methacrylonitrile	0.120	0.119	0.8	89	0.00
37	T	Propanedinitrile	0.022	0.023#	-4.5	95	0.00
38	T	Bromochloromethane	0.232	0.247	-6.5	92	0.00
39	T	Tetrahydrofuran	0.048	0.048#	0.0	98	0.00
40	CCC	Chloroform	0.832	0.832	0.0	88	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\081210\10DEC002.D
Acq On : 10 Dec 2008 11:08 am
Sample : CCV 10PPB V120408A/V120508A
Misc : V120308A
MS Integration Params: RTEINT.P

Vial: 17
Operator:
Inst : GCMS_L
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	S	Dibromofluoromethane	0.394	0.365	7.4	81	0.00
42	T	1,1,1-Trichloroethane	0.787	0.800	-1.7	90	0.00
43	T	Cyclohexane	0.765	0.805	-5.2	98	0.00
44	T	1,1-Dichloropropene	0.658	0.683	-3.8	90	0.00
45	T	Carbon Tetrachloride	0.670	0.703	-4.9	91	0.00
46	S	1,2-Dichloroethane-d4	0.381	0.338	11.3	79	0.00
47	I	1,4-Difluorobenzene	1.000	1.000	0.0	84	0.00
48	T	Benzene	1.352	1.467	-8.5	90	0.00
49	T	1,2-Dichloroethane	0.349	0.353	-1.1	84	0.00
50	T	Tert-Amyl-Methyl Ether (TAM	0.536	0.586	-9.3	88	0.00
51	T	Thiophene	0.588	0.649	-10.4	91	0.00
52	T	Trichloroethene	0.339	0.379	-11.8	91	0.00
53	CCC	1,2-Dichloropropane	0.302	0.314	-4.0	85	0.00
54	T	Methylcyclohexane	0.597	0.658	-10.2	92	0.00
55	T	Dibromomethane	0.110	0.123	-11.8	90	0.00
56	T	Methyl Methacrylate	0.079	0.091#	-15.2	95	0.00
57	T	Bromodichloromethane	0.377	0.375	0.5	85	0.00
58	T	2-Chloroethyl Vinyl Ether	0.095	0.089#	6.3	86	0.00
59	T	c-1,3-Dichloropropene	0.392	0.390	0.5	83	0.00
60	S	Toluene-d8	1.062	1.015	4.4	80	0.00
61	CCC	Toluene	1.255	1.377	-9.7	88	0.00
62	T	4-Methyl-2-Pentanone	0.006	0.008#	-33.3#	141	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	78	0.00
64	T	t-1,3-Dichloropropene	0.374	0.418	-11.8	84	0.00
65	T	Ethyl Methacrylate	0.205	0.232	-13.2	83	0.00
66	T	1,1,2-Trichloroethane	0.166	0.198	-19.3	87	0.00
67	T	Tetrachloroethene	0.568	0.676	-19.0	93	0.00
68	T	1,3-Dichloropropane	0.388	0.429	-10.6	81	0.00
69	T	2-Hexanone	0.034	0.036#	-5.9	80	0.00
70	T	Dibromochloromethane	0.249	0.297	-19.3	92	0.00
71	T	1,2-Dibromoethane	0.190	0.217	-14.2	88	0.00
72	P	Chlorobenzene	1.001	1.166	-16.5	89	0.00
73	T	1,1,1,2-Tetrachloroethane	0.361	0.416	-15.2	87	0.00
74	CCC	Ethylbenzene	1.725	2.031	-17.7	88	0.00
75	T	p/m-Xylene	1.313	1.532	-16.7	87	0.00
76	T	o-Xylene	1.267	1.478	-16.7	85	0.00
77	T	Styrene	0.970	1.202	-23.9#	88	0.00
78	P	Bromoform	0.107	0.161	-50.5#	96	0.00
79	T	Isopropylbenzene	1.665	1.986	-19.3	86	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\081210\10DEC002.D
Acq On : 10 Dec 2008 11:08 am
Sample : CCV 10PPB V120408A/V120508A
Misc : V120308A
MS Integration Params: RTEINT.P

Vial: 17
Operator:
Inst : GCMS_L
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\081203_BP.M (RTE Integrator)
Title : EPA 8260B
Last Update : Wed Dec 03 15:06:14 2008
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
80	S	1,4-Bromofluorobenzene	0.395	0.406	-2.8	77	0.00
81	T	1,2,3-Trichloropropane	0.223	0.284	-27.4#	87	0.00
82	T	Bromobenzene	0.388	0.486	-25.3#	91	0.00
83	T	n-Propylbenzene	1.934	2.360	-22.0#	87	0.00
84	T	t-1,4-Dichloro-2-Butene	0.049	0.061#	-24.5#	86	0.00
85	T	2-Chlorotoluene	1.093	1.303	-19.2	88	0.00
86	T	1,3,5-Trimethylbenzene	1.335	1.728	-29.4#	93	0.00
87	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	81	0.00
88	T	4-Chlorotoluene	2.457	2.822	-14.9	91	0.00
89	P	1,1,2,2-Tetrachloroethane	0.356	0.401	-12.6	91	0.00
90	T	1,2,4-Trimethylbenzene	2.474	2.738	-10.7	86	0.00
91	T	tert-Butylbenzene	2.578	2.906	-12.7	87	0.00
92	T	p-Isopropyltoluene	2.981	3.366	-12.9	89	0.00
93	T	sec-Butylbenzene	3.445	3.834	-11.3	88	0.00
94	T	1,3-Dichlorobenzene	1.492	1.703	-14.1	90	0.00
95	T	1,4-Dichlorobenzene	1.535	1.663	-8.3	88	0.00
96	T	1,2-Dichlorobenzene	1.247	1.395	-11.9	89	0.00
97	T	n-Butylbenzene	2.641	2.858	-8.2	85	0.00
98	T	1,2-Dibromo-3-Chloropropane	0.043	0.047#	-9.3	92	0.00
99	T	1,2,4-Trichlorobenzene	0.905	1.006	-11.2	89	0.00
100	T	Hexachloro-1,3-Butadiene	0.778	0.825	-6.0	88	0.00
101	T	Naphthalene	1.018	1.113	-9.3	82	0.00
102	T	1,2,3-Trichlorobenzene	0.905	1.006	-11.2	89	0.00

Work Order#: 08-12-0585

Client: WEISS Associates

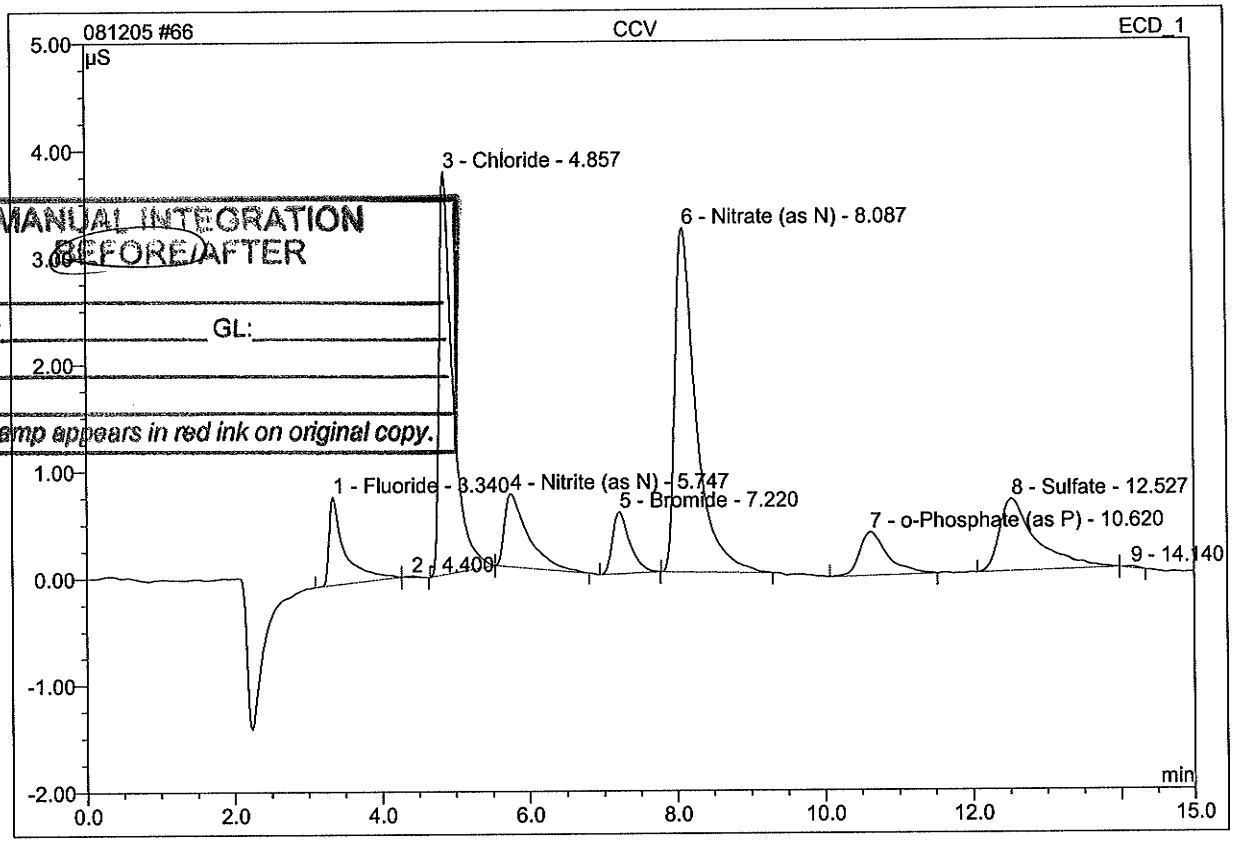
EPA 300.0

Calibration

Operator:Eleo Ng Timebase:ICS_1000 Sequence:081205

66 CCV

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**0**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**AS14 US EPA Method 300_0**	*Bandwidth:*	**n.a.**
Quantif. Method:	**AS14 US EPA Method 300_0**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/6/2008 2:40**	*Sample Weight:*	**1.0000**
Run Time (min):	**15.00**	*Sample Amount:*	**1.0000**



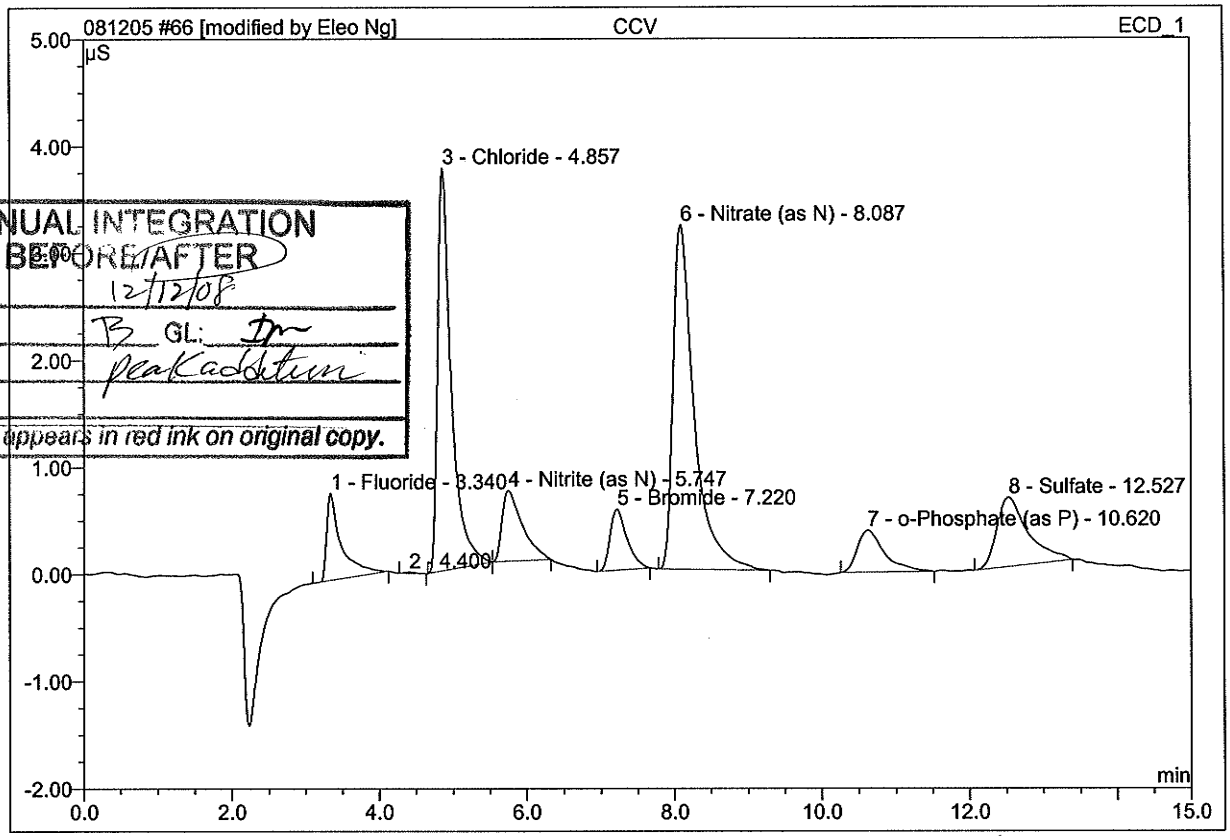
MANUAL INTEGRATION
BEFORE/AFTER
Date:
Chemist: GL:
Reason:
This stamp appears in red ink on original copy.

No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.34	Fluoride	0.821	0.203	6.66	1.180	BMb
2	4.40	n.a.	0.011	0.002	0.06	n.a.	bMB
3	4.86	Chloride	3.765	0.808	26.44	3.843	BMb
4	5.75	Nitrite (as N)	0.680	0.250	8.20	1.423	bMB
5	7.22	Bromide	0.577	0.158	5.18	2.135	BMB
6	8.09	Nitrate (as N)	3.219	1.065	34.87	2.077	BMB
7	10.62	o-Phosphate (as P)	0.405	0.178	5.81	1.174	BMB
8	12.53	Sulfate	0.671	0.387	12.67	4.923	BMB
9	14.14	n.a.	0.016	0.003	0.10	n.a.	bMB
Total:			10.166	3.055	100.00	16.756	

Operator:Eleo Ng Timebase:ICS_1000 Sequence:081205

66 CCV

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**0**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**AS14 US EPA Method 300_0**	*Bandwidth:*	**n.a.**
Quantif. Method:	**AS14 US EPA Method 300_0**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/6/2008 2:40**	*Sample Weight:*	**1.0000**
Run Time (min):	**15.00**	*Sample Amount:*	**1.0000**



MANUAL INTEGRATION
BEFORE/AFTER
Date: 12/12/08
Chemist: B GL: Dm
Reason: peak addition
This stamp appears in red ink on original copy.

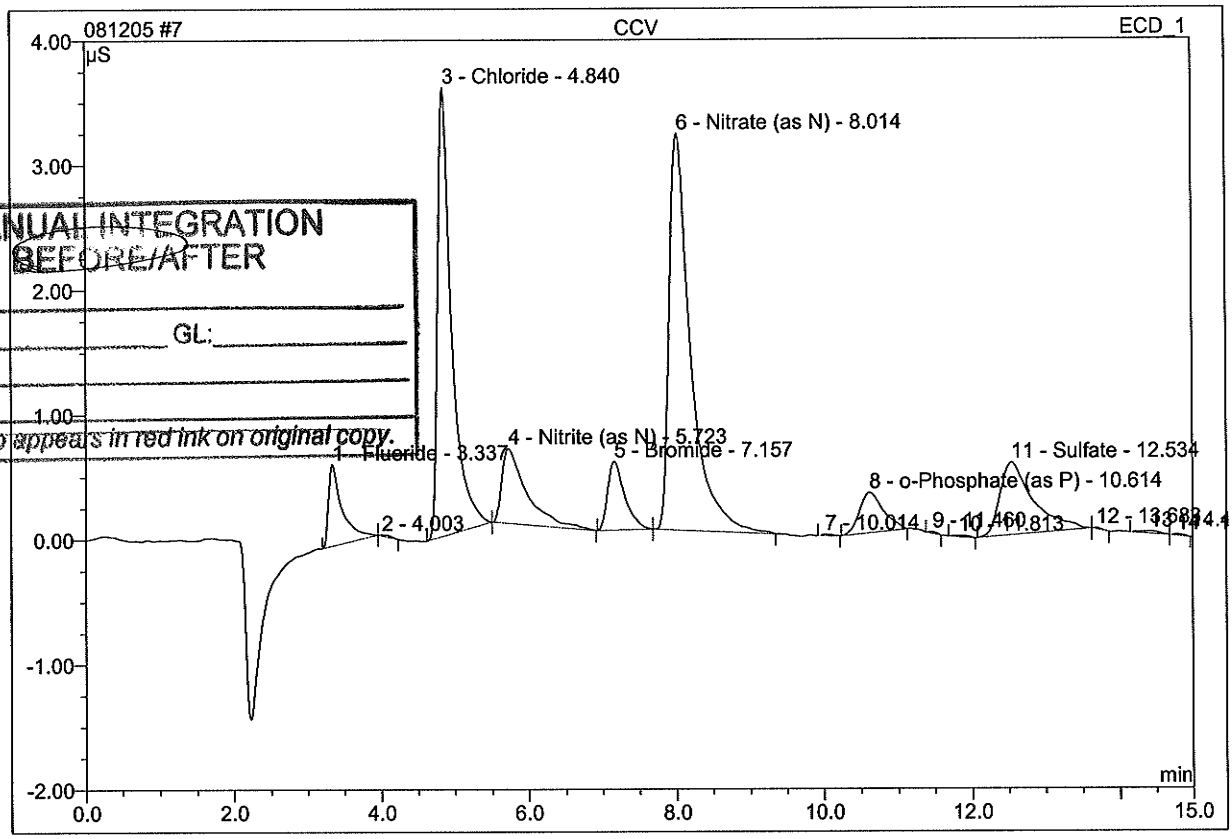
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.34	Fluoride	0.815	0.187	6.42	1.085	BMB*
2	4.40	n.a.	0.011	0.002	0.07	n.a.	BMB*
3	4.86	Chloride	3.765	0.808	27.75	3.843	BMb
4	5.75	Nitrite (as N)	0.661	0.210	7.22	1.195	bMB*
5	7.22	Bromide	0.572	0.153	5.25	2.059	BMB*
6	8.09	Nitrate (as N)	3.219	1.065	36.61	2.077	BMB
7	10.62	o-Phosphate (as P)	0.394	0.166	5.71	1.100	BMB*
8	12.53	Sulfate	0.646	0.319	10.96	4.056	BMB*
Total:			10.083	2.910	100.00	15.415	

Operator:Eleo Ng Timebase:ICS_1000 Sequence:081205

12/12/2008 11:51 AM

7 CCV

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**0**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**AS14 US EPA Method 300_0**	*Bandwidth:*	**n.a.**
Quantif. Method:	**AS14 US EPA Method 300_0**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/5/2008 9:33**	*Sample Weight:*	**1.0000**
Run Time (min):	**15.00**	*Sample Amount:*	**1.0000**



MANUAL INTEGRATION BEFORE/AFTER
Date:
Chemist: GL:
Reason:
This stamp appears in red ink on original copy.

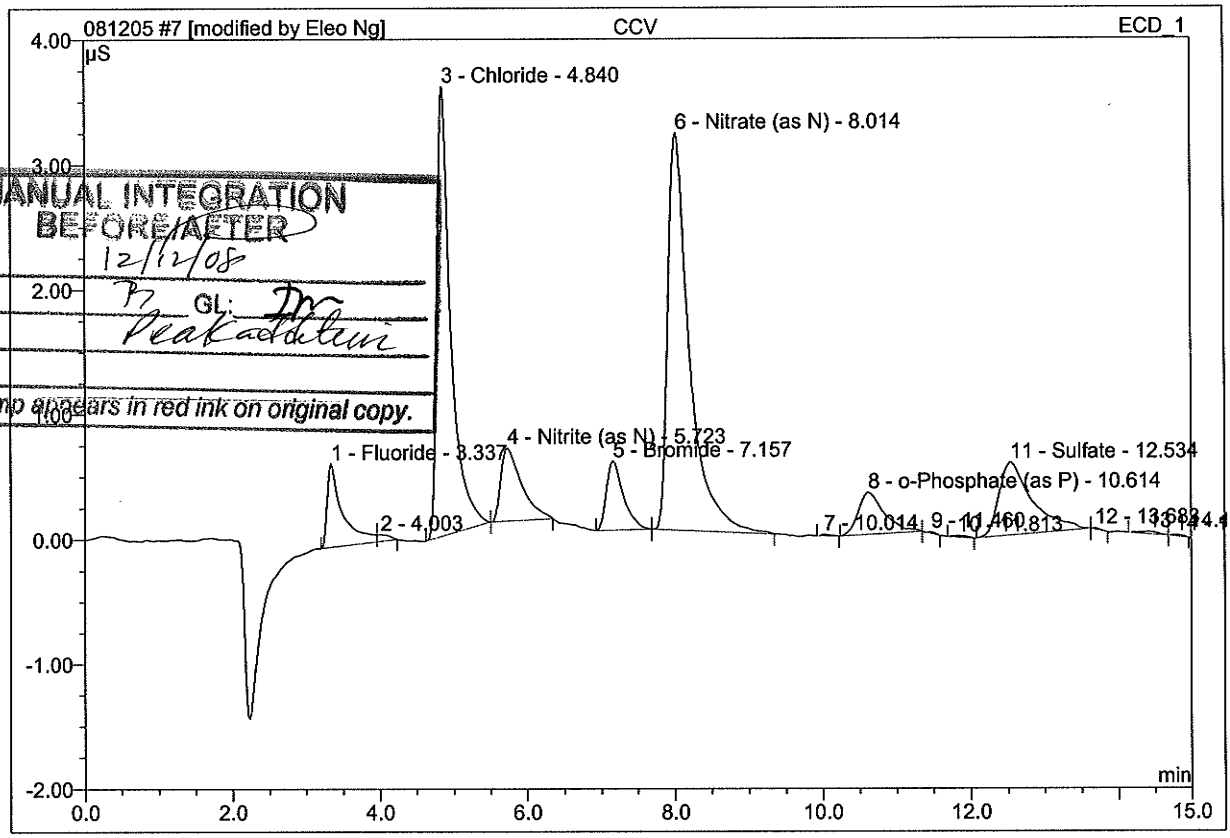
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.34	Fluoride	0.655	0.140	4.97	0.813	BMb
2	4.00	n.a.	0.007	0.002	0.08	n.a.	bMB
3	4.84	Chloride	3.594	0.790	27.99	3.759	BMb
4	5.72	Nitrite (as N)	0.600	0.234	8.30	1.331	bMB
5	7.16	Bromide	0.550	0.146	5.18	1.972	BMb
6	8.01	Nitrate (as N)	3.175	1.068	37.85	2.083	bMB
7	10.01	n.a.	0.011	0.002	0.06	n.a.	BMB
8	10.61	o-Phosphate (as P)	0.324	0.121	4.30	0.802	BMB
9	11.46	n.a.	0.014	0.002	0.06	n.a.	BMB
10	11.81	n.a.	0.012	0.003	0.09	n.a.	BMB
11	12.53	Sulfate	0.584	0.305	10.81	3.880	BMb

12	13.68	n.a.	0.011	0.001	0.05	n.a.	bMB
13	14.42	n.a.	0.018	0.005	0.19	n.a.	BMB
14	14.78	n.a.	0.012	0.002	0.07	n.a.	bMB
Total:			9.568	2.822	100.00	14.639	

Operator:Eleo Ng Timebase:ICS_1000 Sequence:081205

7 CCV

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**0**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**AS14 US EPA Method 300_0**	*Bandwidth:*	**n.a.**
Quantif. Method:	**AS14 US EPA Method 300_0**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/5/2008 9:33**	*Sample Weight:*	**1.0000**
Run Time (min):	**15.00**	*Sample Amount:*	**1.0000**



MANUAL INTEGRATION
BEFORE/AFTER
Date: 12/12/08
Chemist: PJ GL: DM
Reason: Peak addition
This stamp appears in red ink on original copy.

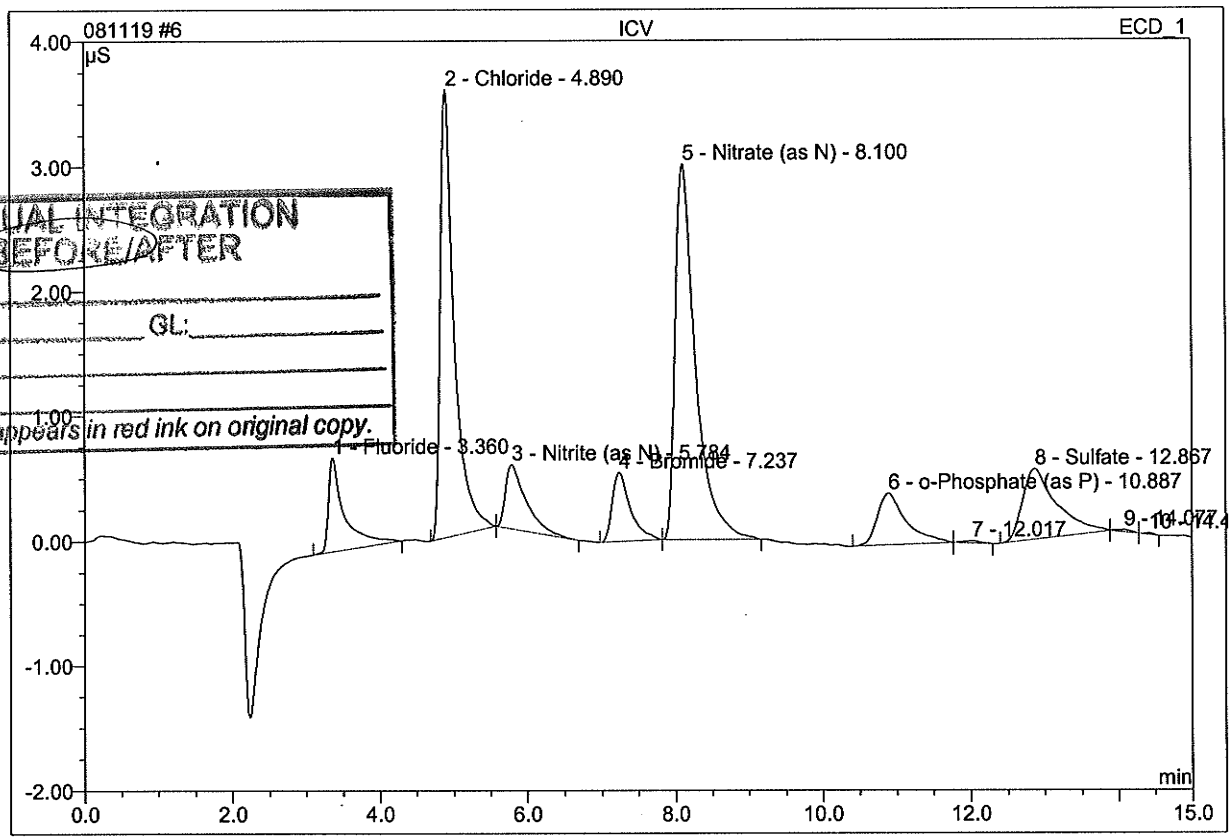
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.34	Fluoride	0.665	0.161	5.72	0.937	BM *
2	4.00	n.a.	0.054	0.010	0.35	n.a.	MB*
3	4.84	Chloride	3.594	0.790	27.98	3.759	BMb
4	5.72	Nitrite (as N)	0.583	0.191	6.77	1.087	bMB*
5	7.16	Bromide	0.550	0.146	5.18	1.972	BMb
6	8.01	Nitrate (as N)	3.175	1.068	37.83	2.083	bMB
7	10.01	n.a.	0.011	0.002	0.06	n.a.	BMB
8	10.61	o-Phosphate (as P)	0.335	0.137	4.85	0.906	BMb*
9	11.46	n.a.	0.012	0.001	0.04	n.a.	bMB*
10	11.81	n.a.	0.012	0.003	0.09	n.a.	BMB
11	12.53	Sulfate	0.584	0.305	10.81	3.880	BMb

12	13.68	n.a.	0.011	0.001	0.05	n.a.	bMB
13	14.42	n.a.	0.018	0.005	0.19	n.a.	BMb*
14	14.78	n.a.	0.012	0.002	0.07	n.a.	bMB
Total:			9.616	2.823	100.00	14.623	

Operator:Eleo Ng Timebase:ICS_1000 Sequence:081119

6 ICV

Sample Name:	**ICV**	*Injection Volume:*	**25.0**
Vial Number:	**0**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**AS14 US EPA Method 300_0**	*Bandwidth:*	**n.a.**
Quantif. Method:	**AS14 US EPA Method 300_0**	*Dilution Factor:*	**1.0000**
Recording Time:	**11/19/2008 10:23**	*Sample Weight:*	**1.0000**
Run Time (min):	**15.00**	*Sample Amount:*	**1.0000**



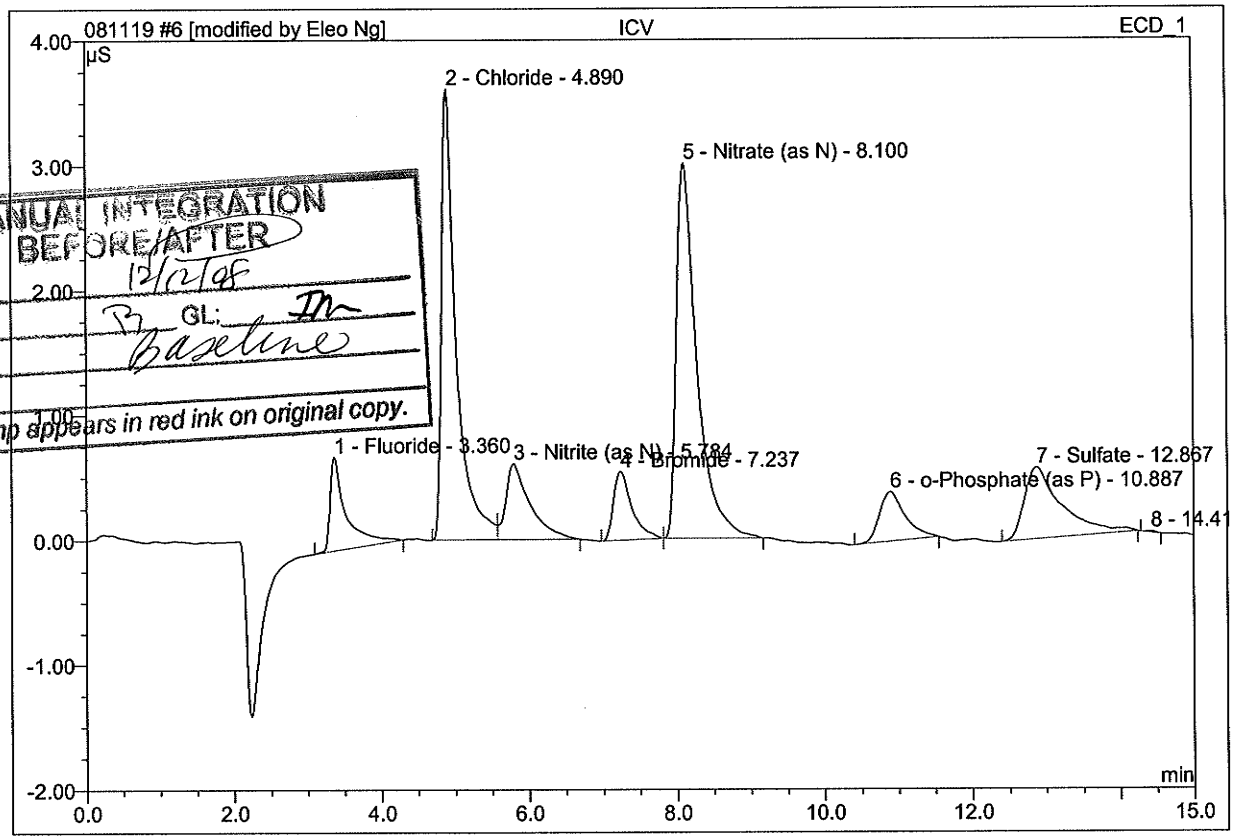
MANUAL INTEGRATION
BEFORE/AFTER
Date:
Chemist: GL:
Reason:
This stamp appears in red ink on original copy.

No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.36	Fluoride	0.748	0.189	6.86	0.967	BMB
2	4.89	Chloride	3.583	0.786	28.51	3.707	BMb
3	5.78	Nitrite (as N)	0.512	0.164	5.96	0.777	bMB
4	7.24	Bromide	0.550	0.158	5.73	2.130	BMB
5	8.10	Nitrate (as N)	3.005	0.964	34.95	1.849	BMB
6	10.89	o-Phosphate (as P)	0.413	0.186	6.73	1.289	BMb
7	12.02	n.a.	0.019	0.005	0.18	n.a.	bMB
8	12.87	Sulfate	0.562	0.301	10.90	3.308	BMb
9	14.08	n.a.	0.017	0.004	0.13	n.a.	bMB
10	14.42	n.a.	0.011	0.001	0.05	n.a.	BMB
Total:			9.420	2.758	100.00	14.028	

Operator:Eleo Ng Timebase:ICS_1000 Sequence:081119

6 ICV

Sample Name:	**ICV**	*Injection Volume:*	**25.0**
Vial Number:	**0**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**AS14 US EPA Method 300_0**	*Bandwidth:*	**n.a.**
Quantif. Method:	**AS14 US EPA Method 300_0**	*Dilution Factor:*	**1.0000**
Recording Time:	**11/19/2008 10:23**	*Sample Weight:*	**1.0000**
Run Time (min):	**15.00**	*Sample Amount:*	**1.0000**



MANUAL INTEGRATION BEFORE/AFTER
Date: 12/12/08
Chemist: B GL: IM
Reason: Baseline
This stamp appears in red ink on original copy.

No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.36	Fluoride	0.748	0.189	6.58	0.967	BMB
2	4.89	Chloride	3.609	0.838	29.14	3.951	BM *
3	5.78	Nitrite (as N)	0.606	0.229	7.98	1.086	MB*
4	7.24	Bromide	0.550	0.158	5.49	2.130	BMB
5	8.10	Nitrate (as N)	3.005	0.964	33.52	1.849	BMB
6	10.89	o-Phosphate (as P)	0.396	0.159	5.54	1.106	BMB*
7	12.87	Sulfate	0.574	0.337	11.72	3.707	BMB*
8	14.42	n.a.	0.011	0.001	0.04	n.a.	BMB
Total:			9.499	2.876	100.00	14.796	

Work Order#: 08-12-0585

Client: WEISS Associates

EPA SM 5310 D Total Organic Carbon

Calibration

TOC 2

Pos/ Vial	Run Type	Rep #	Run Date	Run Time	Data Filename	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (ppm)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (ppm)	TC Area (cts)	TC Mass (ugC)	TC Conc (ppm)	
1	Spl	1	14Oct2008	14:16	1014M001	-	-	-	497	0.289	0.0578	-	-	-	
1	Spl	2	14Oct2008	14:26	1014M002	-	-	-	362	0.133	0.0266				METHOD BLANK
1	Spl	Avg	-	-	-	-	-	-	429	0.211	0.0422				
1	Spl	SDev	-	-	-	-	-	-	95.46	-	-	-	-	-	
1	Spl	%RSD	-	-	-	-	-	-	22.23	-	-	-	-	-	
2	Spl	1	14Oct2008	14:35	1014M003	-	-	-	682	0.503	0.1006	-	-	-	
2	Spl	2	14Oct2008	14:45	1014M004	-	-	-	741	0.571	0.1142				
2	Spl	Avg	-	-	-	-	-	-	711	0.537	0.1074				CCB
2	Spl	SDev	-	-	-	-	-	-	41.72	-	-	-	-	-	
2	Spl	%RSD	-	-	-	-	-	-	5.86	-	-	-	-	-	
3	Std1	1	14Oct2008	14:55	1014M005	-	-	-	2580	2.500	0.5000				0.5 ppm
4	Std2	1	14Oct2008	15:14	1014M006	-	-	-	10521	12.500	2.5000	-	-	-	
4	Std2	2	14Oct2008	15:24	1014M007	-	-	-	10499	12.500	2.5000				
4	Std	Avg	-	-	-	-	-	-	10510	12.500	2.5000				2.5 ppm
4	Std	SDev	-	-	-	-	-	-	15.56	-	-	-	-	-	
4	Std	%RSD	-	-	-	-	-	-	0.15	-	-	-	-	-	
** Calibration:			RF (ugC/k-cnt):		1.2530300 **										
**			R-Squared:		0.9999 **										
5	Std3	1	14Oct2008	15:33	1014M008	-	-	-	21117	25.000	5.0000				5.0 ppm
6	Std4	1	14Oct2008	15:52	1014M009	-	-	-	40867	50.000	10.0000	-	-	-	
6	Std4	2	14Oct2008	16:02	1014M010	-	-	-	40981	50.000	10.0000				
6	Std	Avg	-	-	-	-	-	-	40924	50.000	10.0000				10.0 ppm
6	Std	SDev	-	-	-	-	-	-	80.61	-	-	-	-	-	
6	Std	%RSD	-	-	-	-	-	-	0.20	-	-	-	-	-	
** Calibration:			RF (ugC/k-cnt):		1.2346400 **										
**			R-Squared:		0.9998 **										
7	Std5	1	14Oct2008	16:12	1014M011	-	-	-	82979	100.000	20.0000	-	-	-	
7	Std5	2	14Oct2008	16:21	1014M012	-	-	-	84058	100.000	20.0000				
7	Std	Avg	-	-	-	-	-	-	83518	100.000	20.0000				20.0 ppm
7	Std	SDev	-	-	-	-	-	-	762.97	-	-	-	-	-	
7	Std	%RSD	-	-	-	-	-	-	0.91	-	-	-	-	-	
** Calibration:			RF (ugC/k-cnt):		1.2041799 **										
**			R-Squared:		0.9997 **										
8	Spl	1	14Oct2008	16:31	1014M013	-	-	-	21396	25.467	5.0934	-	-	-	
8	Spl	2	14Oct2008	16:41	1014M014	-	-	-	20931	24.907	4.9814				ICV
8	Spl	Avg	-	-	-	-	-	-	21163	25.187	5.0374				
8	Spl	SDev	-	-	-	-	-	-	328.80	-	-	-	-	-	
8	Spl	%RSD	-	-	-	-	-	-	1.55	-	-	-	-	-	
9	Spl	1	14Oct2008	16:50	1014M015	-	-	-	21103	25.114	5.0229	-	-	-	
9	Spl	2	14Oct2008	17:00	1014M016	-	-	-	20579	24.483	4.8967				
9	Spl	Avg	-	-	-	-	-	-	20841	24.799	4.9598				CCV
9	Spl	SDev	-	-	-	-	-	-	370.52	-	-	-	-	-	
9	Spl	%RSD	-	-	-	-	-	-	1.78	-	-	-	-	-	
10	Spl	1	14Oct2008	17:09	1014M017	-	-	-	21157	25.179	5.0359	-	-	-	
10	Spl	2	14Oct2008	17:19	1014M018	-	-	-	21068	25.072	5.0144				
10	Spl	Avg	-	-	-	-	-	-	21112	25.126	5.0252				LCS
10	Spl	SDev	-	-	-	-	-	-	62.93	-	-	-	-	-	
10	Spl	%RSD	-	-	-	-	-	-	0.30	-	-	-	-	-	

TOC 2

Pos/ Vial	Run Type	Rep #	Run Date	Run Time	Data Filename	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (ppm)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (ppm)	TC Area (cts)	TC Mass (ugC)	TC Conc (ppm)	
1	Spl	1	05Dec2008	17:32	1205N001	-	-	-	1554	1.591	0.3182	-	-	-	
1	Spl	2	05Dec2008	17:41	1205N002	-	-	-	1684	1.747	0.3494	-	-	-	METHOD BLANK
1	Spl	Avg	-	-	-	-	-	-	1619	1.669	0.3338	-	-	-	
1	Spl	SDev	-	-	-	-	-	-	91.92	-	-	-	-	-	
1	Spl	%RSD	-	-	-	-	-	-	5.68	-	-	-	-	-	
2	Spl	1	05Dec2008	17:51	1205N003	-	-	-	837	0.729	0.1457	-	-	-	
2	Spl	2	05Dec2008	18:01	1205N004	-	-	-	656	0.511	0.1022	-	-	-	CCB
2	Spl	Avg	-	-	-	-	-	-	746	0.620	0.1240	-	-	-	
2	Spl	SDev	-	-	-	-	-	-	127.99	-	-	-	-	-	
2	Spl	%RSD	-	-	-	-	-	-	17.14	-	-	-	-	-	
3	Spl	1	05Dec2008	18:10	1205N005	-	-	-	21790	25.923	5.1847	-	-	-	
3	Spl	2	05Dec2008	18:20	1205N006	-	-	-	21735	25.857	5.1714	-	-	-	CCV
3	Spl	Avg	-	-	-	-	-	-	21762	25.890	5.1780	-	-	-	
3	Spl	SDev	-	-	-	-	-	-	38.89	-	-	-	-	-	
3	Spl	%RSD	-	-	-	-	-	-	0.18	-	-	-	-	-	
4	Spl	1	05Dec2008	18:30	1205N007	-	-	-	21722	25.842	5.1683	-	-	-	
4	Spl	2	05Dec2008	18:39	1205N008	-	-	-	21482	25.553	5.1106	-	-	-	CCS
4	Spl	Avg	-	-	-	-	-	-	21602	25.697	5.1394	-	-	-	
4	Spl	SDev	-	-	-	-	-	-	169.71	-	-	-	-	-	
4	Spl	%RSD	-	-	-	-	-	-	0.79	-	-	-	-	-	
5	Spl	1	05Dec2008	18:49	1205N009	-	-	-	21598	25.692	5.1385	-	-	-	
5	Spl	2	05Dec2008	18:59	1205N010	-	-	-	21819	25.958	5.1916	-	-	-	CCSA
5	Spl	Avg	-	-	-	-	-	-	21708	25.825	5.1651	-	-	-	
5	Spl	SDev	-	-	-	-	-	-	156.27	-	-	-	-	-	
5	Spl	%RSD	-	-	-	-	-	-	0.72	-	-	-	-	-	
6	Spl	1	05Dec2008	19:08	1205N011	-	-	-	19908	23.660	4.7321	-	-	-	
6	Spl	2	05Dec2008	19:18	1205N012	-	-	-	19902	23.653	4.7306	-	-	-	05-12 0461-4C 1/10
6	Spl	Avg	-	-	-	-	-	-	19905	23.657	4.7313	-	-	-	
6	Spl	SDev	-	-	-	-	-	-	4.24	-	-	-	-	-	
6	Spl	%RSD	-	-	-	-	-	-	0.02	-	-	-	-	-	
7	Spl	1	05Dec2008	19:27	1205N013	-	-	-	13152	15.537	3.1073	-	-	-	
7	Spl	2	05Dec2008	19:37	1205N014	-	-	-	13038	15.400	3.0799	-	-	-	05-12 0461-7C 20/0
7	Spl	Avg	-	-	-	-	-	-	13095	15.468	3.0936	-	-	-	
7	Spl	SDev	-	-	-	-	-	-	80.61	-	-	-	-	-	
7	Spl	%RSD	-	-	-	-	-	-	0.62	-	-	-	-	-	

BATCH TIME
Time (24 Hr): 0322
Initials:

Pos/ Vial	Run Type	Rep #	Run Date	Run Time	Data Filename	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (ppm)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (ppm)	TC Area (cts)	TC Mass (ugC)	TC Conc (ppm)
8	Spl	1	05Dec2008	20:01	1205N015	-	-	-	60791	72.819	14.5639	-	-	-
8	Spl	2	05Dec2008	20:10	1205N016	-	-	-	61396	73.547	14.7094	08-12-0406-1F 20X		
8	Spl	Avg	-	-	-	-	-	-	61093	73.183	14.6366			
8	Spl	SDev	-	-	-	-	-	-	427.80	-	-	-	-	-
8	Spl	%RSD	-	-	-	-	-	-	0.70	-	-	-	-	-
9	Spl	1	05Dec2008	20:20	1205N017	-	-	-	20247	24.068	4.8136	-	-	-
9	Spl	2	05Dec2008	20:30	1205N018	-	-	-	19950	23.711	4.7422	08-12-0461-1E 10X		
9	Spl	Avg	-	-	-	-	-	-	20098	23.889	4.7779			
9	Spl	SDev	-	-	-	-	-	-	210.01	-	-	-	-	-
9	Spl	%RSD	-	-	-	-	-	-	1.04	-	-	-	-	-
10	Spl	1	05Dec2008	20:39	1205N019	-	-	-	13369	15.798	3.1595	-	-	-
10	Spl	2	05Dec2008	20:49	1205N020	-	-	-	13549	16.014	3.2028	08-12-0461-2E 20X		
10	Spl	Avg	-	-	-	-	-	-	13459	15.906	3.1812			
10	Spl	SDev	-	-	-	-	-	-	127.28	-	-	-	-	-
10	Spl	%RSD	-	-	-	-	-	-	0.95	-	-	-	-	-
11	Spl	1	05Dec2008	20:58	1205N021	-	-	-	25401	30.265	6.0531	-	-	-
11	Spl	2	05Dec2008	21:08	1205N022	-	-	-	29182	34.812	6.9623	08-12-0558-1P		
11	Spl	Avg	-	-	-	-	-	-	27291	32.538	6.5077			
11	Spl	SDev	-	-	-	-	-	-	2673.57	-	-	-	-	-
11	Spl	%RSD	-	-	-	-	-	-	9.80	-	-	-	-	-
12	Spl	1	05Dec2008	21:17	1205N023	-	-	-	17926	21.277	4.2554	-	-	-
12	Spl	2	05Dec2008	21:27	1205N024	-	-	-	19909	23.661	4.7323	08-12-0558-2H2		
12	Spl	Avg	-	-	-	-	-	-	18917	22.469	4.4939			
12	Spl	SDev	-	-	-	-	-	-	1402.19	-	-	-	-	-
12	Spl	%RSD	-	-	-	-	-	-	7.41	-	-	-	-	-
13	Spl	1	05Dec2008	21:37	1205N025	-	-	-	37377	44.666	8.9331	-	-	-
13	Spl	2	05Dec2008	21:46	1205N026	-	-	-	40148	47.998	9.5995	08-12-0558-2J2H2		
13	Spl	Avg	-	-	-	-	-	-	38762	46.332	9.2663			
13	Spl	SDev	-	-	-	-	-	-	1959.39	-	-	-	-	-
13	Spl	%RSD	-	-	-	-	-	-	5.05	-	-	-	-	-
14	Spl	1	05Dec2008	21:56	1205N027	-	-	-	37674	45.023	9.0045	-	-	-
14	Spl	2	05Dec2008	22:06	1205N028	-	-	-	39445	47.152	9.4304	08-12-0558-2J2H2S		
14	Spl	Avg	-	-	-	-	-	-	38559	46.087	9.2175			
14	Spl	SDev	-	-	-	-	-	-	1252.29	-	-	-	-	-
14	Spl	%RSD	-	-	-	-	-	-	3.25	-	-	-	-	-
15	Spl	1	05Dec2008	22:15	1205N029	-	-	-	12642	14.923	2.9847	-	-	-
15	Spl	2	05Dec2008	22:25	1205N030	-	-	-	16166	19.161	3.8322	08-12-0558-8P		
15	Spl	Avg	-	-	-	-	-	-	14404	17.042	3.4084			
15	Spl	SDev	-	-	-	-	-	-	2491.84	-	-	-	-	-
15	Spl	%RSD	-	-	-	-	-	-	17.30	-	-	-	-	-
16	Spl	1	05Dec2008	22:34	1205N031	-	-	-	30699	36.636	7.3272	-	-	-
16	Spl	2	05Dec2008	22:44	1205N032	-	-	-	36307	43.379	8.6758	08-12-0558-4P		
16	Spl	Avg	-	-	-	-	-	-	33503	40.007	8.0015			
16	Spl	SDev	-	-	-	-	-	-	3965.46	-	-	-	-	-
16	Spl	%RSD	-	-	-	-	-	-	11.84	-	-	-	-	-
17	Spl	1	05Dec2008	22:54	1205N033	-	-	-	305278	366.799	73.3598	08-12-0558-8P		
17	Spl	2	05Dec2008	23:03	1205N034	-	-	-	315295	378.844	75.7687			
17	Spl	Avg	-	-	-	-	-	-	310286	372.821	74.5643	-	-	-
17	Spl	SDev	-	-	-	-	-	-	7083.09	-	-	-	-	-
17	Spl	%RSD	-	-	-	-	-	-	2.28	-	-	-	-	-
18	Spl	1	05Dec2008	23:13	1205N035	-	-	-	79649	95.495	19.0990	-	-	-

18	Spl	2	05Dec2008	23:23	1205N036	-	-	-	80978	97.093	19.4186			
18	Spl	Avg	-	-	-	-	-	-	80313	96.294	19.2588			
18	Spl	SDev	-	-	-	-	-	-	939.74	-	-	-	-	-
18	Spl	%RSD	-	-	-	-	-	-	1.17	-	-	-	-	-
19	Spl	1	05Dec2008	23:32	1205N037	-	-	-	305662	367.261	73.4521	-	-	-
19	Spl	2	05Dec2008	23:42	1205N038	-	-	-	313901	377.167	75.4335			
19	Spl	Avg	-	-	-	-	-	-	309781	372.214	74.4428			
19	Spl	SDev	-	-	-	-	-	-	5825.85	-	-	-	-	-
19	Spl	%RSD	-	-	-	-	-	-	1.88	-	-	-	-	-
20	Spl	1	05Dec2008	23:51	1205N039	-	-	-	79411	95.209	19.0417	-	-	-
20	Spl	2	06Dec2008	00:01	1205N040	-	-	-	81286	97.463	19.4927			
20	Spl	Avg	-	-	-	-	-	-	80348	96.336	19.2672	-	-	-
20	Spl	SDev	-	-	-	-	-	-	1325.82	-	-	-	-	-
20	Spl	%RSD	-	-	-	-	-	-	1.65	-	-	-	-	-
21	Spl	1	06Dec2008	00:10	1205N041	-	-	-	11954	14.096	2.8192	-	-	-
21	Spl	2	06Dec2008	00:20	1205N042	-	-	-	13497	15.951	3.1903			
21	Spl	Avg	-	-	-	-	-	-	12725	15.024	3.0048	-	-	-
21	Spl	SDev	-	-	-	-	-	-	1091.07	-	-	-	-	-
21	Spl	%RSD	-	-	-	-	-	-	8.57	-	-	-	-	-
22	Spl	1	06Dec2008	00:30	1205N043	-	-	-	7065	8.217	1.6435			
22	Spl	2	06Dec2008	00:39	1205N044	-	-	-	7942	9.272	1.8544			
22	Spl	Avg	-	-	-	-	-	-	7503	8.745	1.7489	-	-	-
22	Spl	SDev	-	-	-	-	-	-	620.13	-	-	-	-	-
22	Spl	%RSD	-	-	-	-	-	-	8.26	-	-	-	-	-
23	Spl	1	06Dec2008	00:49	1205N045	-	-	-	20847	24.789	4.9579			
23	Spl	2	06Dec2008	00:59	1205N046	-	-	-	22053	26.240	5.2479			
23	Spl	Avg	-	-	-	-	-	-	21450	25.514	5.1029	-	-	-
23	Spl	SDev	-	-	-	-	-	-	852.77	-	-	-	-	-
23	Spl	%RSD	-	-	-	-	-	-	3.98	-	-	-	-	-
24	Spl	1	06Dec2008	01:08	1205N047	-	-	-	5660	6.528	1.3056			
24	Spl	2	06Dec2008	01:18	1205N048	-	-	-	8474	9.912	1.9823	-	-	-
24	Spl	Avg	-	-	-	-	-	-	7067	8.220	1.6440	-	-	-
24	Spl	SDev	-	-	-	-	-	-	1989.80	-	-	-	-	-
24	Spl	%RSD	-	-	-	-	-	-	28.16	-	-	-	-	-
25	Spl	1	06Dec2008	01:27	1205N049	-	-	-	19570	23.254	4.6508	-	-	-
25	Spl	2	06Dec2008	01:37	1205N050	-	-	-	25188	30.009	6.0018			
25	Spl	Avg	-	-	-	-	-	-	22379	26.632	5.3263	-	-	-
25	Spl	SDev	-	-	-	-	-	-	3972.53	-	-	-	-	-
25	Spl	%RSD	-	-	-	-	-	-	17.75	-	-	-	-	-
26	Spl	1	06Dec2008	01:46	1205N051	-	-	-	40733	48.701	9.7402	-	-	-
26	Spl	2	06Dec2008	01:56	1205N052	-	-	-	50893	60.918	12.1835			
26	Spl	Avg	-	-	-	-	-	-	45813	54.809	10.9619	-	-	-
26	Spl	SDev	-	-	-	-	-	-	7184.21	-	-	-	-	-
26	Spl	%RSD	-	-	-	-	-	-	15.68	-	-	-	-	-
27	Spl	1	06Dec2008	02:06	1205N053	-	-	-	17829	21.160	4.2321			
27	Spl	2	06Dec2008	02:15	1205N054	-	-	-	19479	23.144	4.6289			
27	Spl	Avg	-	-	-	-	-	-	18654	22.152	4.4305	-	-	-
27	Spl	SDev	-	-	-	-	-	-	1166.73	-	-	-	-	-
27	Spl	%RSD	-	-	-	-	-	-	6.25	-	-	-	-	-
28	Spl	1	06Dec2008	02:25	1205N055	-	-	-	14281	16.894	3.3788	-	-	-
28	Spl	2	06Dec2008	02:34	1205N056	-	-	-	19377	23.022	4.6044			
28	Spl	Avg	-	-	-	-	-	-	16829	19.958	3.9916	-	-	-
28	Spl	SDev	-	-	-	-	-	-	3603.42	-	-	-	-	-
28	Spl	%RSD	-	-	-	-	-	-	21.41	-	-	-	-	-

29	Spl	1	06Dec2008	02:44	1205N057	-	-	-	76732	91.987	18.3975	-	-	-
29	Spl	2	06Dec2008	02:54	1205N058	-	-	-	81933	98.241	19.6483			
29	Spl	Avg	-	-	-	-	-	-	79332	95.114	19.0229			
29	Spl	SDev	-	-	-	-	-	-	3677.66	-	-	-	-	-
29	Spl	%RSD	-	-	-	-	-	-	4.64	-	-	-	-	-
30	Spl	1	06Dec2008	03:03	1205N059	-	-	-	20209	24.022	4.8044	-	-	-
30	Spl	2	06Dec2008	03:13	1205N060	-	-	-	21393	25.446	5.0892			
30	Spl	Avg	-	-	-	-	-	-	20801	24.734	4.9468			
30	Spl	SDev	-	-	-	-	-	-	837.21	-	-	-	-	-
30	Spl	%RSD	-	-	-	-	-	-	4.02	-	-	-	-	-
31	Spl	1	06Dec2008	03:22	1205N061	-	-	-	14387	17.022	3.4043	-	-	-
31	Spl	2	06Dec2008	03:32	1205N062	-	-	-	21260	25.286	5.0572			
31	Spl	Avg	-	-	-	-	-	-	17823	21.154	4.2308	-	-	-
31	Spl	SDev	-	-	-	-	-	-	4859.94	-	-	-	-	-
31	Spl	%RSD	-	-	-	-	-	-	27.27	-	-	-	-	-
32	Spl	1	06Dec2008	03:41	1205N063	-	-	-	1943	2.059	0.4117	-	-	-
32	Spl	2	06Dec2008	03:51	1205N064	-	-	-	2572	2.815	0.5630	-	-	-
32	Spl	Avg	-	-	-	-	-	-	2257	2.437	0.4873	-	-	-
32	Spl	SDev	-	-	-	-	-	-	444.77	-	-	-	-	-
32	Spl	%RSD	-	-	-	-	-	-	19.70	-	-	-	-	-
33	Spl	1	06Dec2008	04:01	1205N065	-	-	-	21971	26.141	5.2282	-	-	-
33	Spl	2	06Dec2008	04:10	1205N066	-	-	-	22605	26.903	5.3807	-	-	-
33	Spl	Avg	-	-	-	-	-	-	22288	26.522	5.3044	-	-	-
33	Spl	SDev	-	-	-	-	-	-	448.31	-	-	-	-	-
33	Spl	%RSD	-	-	-	-	-	-	2.01	-	-	-	-	-
34	Spl	1	06Dec2008	04:20	1205N067	-	-	-	1148	1.103	0.2205	-	-	-
34	Spl	2	06Dec2008	04:29	1205N068	-	-	-	1500	1.526	0.3052	-	-	-
34	Spl	Avg	-	-	-	-	-	-	1324	1.314	0.2629			
34	Spl	SDev	-	-	-	-	-	-	248.90	-	-	-	-	-
34	Spl	%RSD	-	-	-	-	-	-	18.80	-	-	-	-	-
35	Spl	1	06Dec2008	04:39	1205N069	-	-	-	1101	1.046	0.2092	-	-	-
35	Spl	2	06Dec2008	04:49	1205N070	-	-	-	1216	1.184	0.2369	-	-	-
35	Spl	Avg	-	-	-	-	-	-	1158	1.115	0.2231	-	-	-
35	Spl	SDev	-	-	-	-	-	-	81.32	-	-	-	-	-
35	Spl	%RSD	-	-	-	-	-	-	7.02	-	-	-	-	-
36	Spl	1	06Dec2008	04:58	1205N071	-	-	-	21381	25.431	5.0863	-	-	-
36	Spl	2	06Dec2008	05:08	1205N072	-	-	-	21714	25.832	5.1664	-	-	-
36	Spl	Avg	-	-	-	-	-	-	21547	25.632	5.1263	-	-	-
36	Spl	SDev	-	-	-	-	-	-	235.47	-	-	-	-	-
36	Spl	%RSD	-	-	-	-	-	-	1.09	-	-	-	-	-
37	Spl	1	06Dec2008	05:17	1205N073	-	-	-	21478	25.548	5.1096	-	-	-
37	Spl	2	06Dec2008	05:27	1205N074	-	-	-	21597	25.691	5.1382	-	-	-
37	Spl	Avg	-	-	-	-	-	-	21537	25.620	5.1239	-	-	-
37	Spl	SDev	-	-	-	-	-	-	84.15	-	-	-	-	-
37	Spl	%RSD	-	-	-	-	-	-	0.39	-	-	-	-	-
38	Spl	1	06Dec2008	05:36	1205N075	-	-	-	21406	25.462	5.0923	-	-	-
38	Spl	2	06Dec2008	05:46	1205N076	-	-	-	21481	25.552	5.1103	-	-	-
38	Spl	Avg	-	-	-	-	-	-	21443	25.507	5.1013	-	-	-
38	Spl	SDev	-	-	-	-	-	-	53.03	-	-	-	-	-
38	Spl	%RSD	-	-	-	-	-	-	0.25	-	-	-	-	-
39	Spl	1	06Dec2008	05:56	1205N077	-	-	-	29952	35.738	7.1475	-	-	-
39	Spl	2	06Dec2008	06:05	1205N078	-	-	-	35789	42.756	8.5512	-	-	-
39	Spl	Avg	-	-	-	-	-	-	32870	39.247	7.8494	-	-	-
39	Spl	SDev	-	-	-	-	-	-	4127.38	-	-	-	-	-
39	Spl	%RSD	-	-	-	-	-	-	12.56	-	-	-	-	-

40	Spl	1	06Dec2008	06:15	1205N079	-	-	-	15700	18.600	3.7201	-	-	
40	Spl	2	06Dec2008	06:25	1205N080	-	-	-	18292	21.717	4.3434	-	-	08-12-07161P
40	Spl	Avg	-	-	-	-	-	-	16996	20.159	4.0318	-	-	
40	Spl	SDev	-	-	-	-	-	-	1832.82	-	-	-	-	
40	Spl	%RSD	-	-	-	-	-	-	10.78	-	-	-	-	
41	Spl	1	06Dec2008	06:34	1205N081	-	-	-	21728	25.849	5.1697	-	-	
41	Spl	2	06Dec2008	06:44	1205N082	-	-	-	24676	29.393	5.8787	-	-	08-12-07241P
41	Spl	Avg	-	-	-	-	-	-	23202	27.621	5.5242	-	-	
41	Spl	SDev	-	-	-	-	-	-	2084.55	-	-	-	-	
41	Spl	%RSD	-	-	-	-	-	-	8.98	-	-	-	-	
42	Spl	1	06Dec2008	06:53	1205N083	-	-	-	58617	70.205	14.0411	-	-	
42	Spl	2	06Dec2008	07:03	1205N084	-	-	-	65796	78.838	15.7675	-	-	08-12-07242P
42	Spl	Avg	-	-	-	-	-	-	62206	74.521	14.9043	-	-	
42	Spl	SDev	-	-	-	-	-	-	5076.32	-	-	-	-	
42	Spl	%RSD	-	-	-	-	-	-	8.16	-	-	-	-	
43	Spl	1	06Dec2008	07:12	1205N085	-	-	-	20209	24.022	4.8044	-	-	
43	Spl	2	06Dec2008	07:22	1205N086	-	-	-	21426	25.486	5.0971	-	-	08-12-07243P5X
43	Spl	Avg	-	-	-	-	-	-	20817	24.754	4.9508	-	-	
43	Spl	SDev	-	-	-	-	-	-	860.55	-	-	-	-	
43	Spl	%RSD	-	-	-	-	-	-	4.13	-	-	-	-	
44	Spl	1	06Dec2008	07:32	1205N087	-	-	-	22236	26.460	5.2919	-	-	
44	Spl	2	06Dec2008	07:41	1205N088	-	-	-	23516	27.999	5.5997	-	-	08-12-07244P5X
44	Spl	Avg	-	-	-	-	-	-	22876	27.229	5.4458	-	-	
44	Spl	SDev	-	-	-	-	-	-	905.10	-	-	-	-	
44	Spl	%RSD	-	-	-	-	-	-	3.96	-	-	-	-	
45	Spl	1	06Dec2008	07:51	1205N089	-	-	-	37241	44.502	8.9004	-	-	
45	Spl	2	06Dec2008	08:00	1205N090	-	-	-	43840	52.437	10.4874	-	-	08-12-07245P
45	Spl	Avg	-	-	-	-	-	-	40540	48.470	9.6939	-	-	
45	Spl	SDev	-	-	-	-	-	-	4666.20	-	-	-	-	
45	Spl	%RSD	-	-	-	-	-	-	11.51	-	-	-	-	
46	Spl	1	06Dec2008	08:10	1205N091	-	-	-	37603	44.937	8.9875	-	-	
46	Spl	2	06Dec2008	08:20	1205N092	-	-	-	44314	53.007	10.6014	-	-	08-12-07246P
46	Spl	Avg	-	-	-	-	-	-	40958	48.972	9.7944	-	-	
46	Spl	SDev	-	-	-	-	-	-	4745.39	-	-	-	-	
46	Spl	%RSD	-	-	-	-	-	-	11.59	-	-	-	-	
47	Spl	1	06Dec2008	08:29	1205N093	-	-	-	50155	60.030	12.0061	-	-	
47	Spl	2	06Dec2008	08:39	1205N094	-	-	-	53308	63.822	12.7643	-	-	08-12-07247P
47	Spl	Avg	-	-	-	-	-	-	51731	61.926	12.3852	-	-	
47	Spl	SDev	-	-	-	-	-	-	2229.51	-	-	-	-	
47	Spl	%RSD	-	-	-	-	-	-	4.31	-	-	-	-	
48	Spl	1	06Dec2008	08:49	1205N095	-	-	-	12138	14.317	2.8635	-	-	
48	Spl	2	06Dec2008	08:58	1205N096	-	-	-	13548	16.013	3.2026	-	-	08-12-07248P5X
48	Spl	Avg	-	-	-	-	-	-	12843	15.165	3.0330	-	-	
48	Spl	SDev	-	-	-	-	-	-	997.02	-	-	-	-	
48	Spl	%RSD	-	-	-	-	-	-	7.76	-	-	-	-	
49	Spl	1	06Dec2008	09:08	1205N097	-	-	-	28375	33.841	6.7683	-	-	
49	Spl	2	06Dec2008	09:17	1205N098	-	-	-	34406	41.093	8.2186	-	-	08-12-07249P
49	Spl	Avg	-	-	-	-	-	-	31390	37.467	7.4934	-	-	
49	Spl	SDev	-	-	-	-	-	-	4264.56	-	-	-	-	
49	Spl	%RSD	-	-	-	-	-	-	13.59	-	-	-	-	
50	Spl	1	06Dec2008	09:27	1205N099	-	-	-	50085	59.946	11.9892	-	-	
50	Spl	2	06Dec2008	09:37	1205N100	-	-	-	54232	64.933	12.9865	-	-	08-12-07250P 10S
50	Spl	Avg	-	-	-	-	-	-	52158	62.439	12.4879	-	-	
50	Spl	SDev	-	-	-	-	-	-	2932.37	-	-	-	-	

50	Spl	%RSD	-	-	-	-	-	-	5.62	-	-	-	-	-
51	Spl	1	06Dec2008	09:46	1205N101	-	-	-	49996	59.839	11.9678	-	-	-
51	Spl	2	06Dec2008	09:56	1205N102	-	-	-	53481	64.030	12.8059			
51	Spl	Avg	-	-	-	-	-	-	51738	61.934	12.3869	-	-	-
51	Spl	SDev	-	-	-	-	-	-	2464.27	-	-	-	-	-
51	Spl	%RSD	-	-	-	-	-	-	4.76	-	-	-	-	-
52	Spl	1	06Dec2008	10:05	1205N103	-	-	-	2075	2.217	0.4435	-	-	-
52	Spl	2	06Dec2008	10:15	1205N104	-	-	-	2623	2.876	0.5752	-	-	-
52	Spl	Avg	-	-	-	-	-	-	2349	2.547	0.5094	-	-	-
52	Spl	SDev	-	-	-	-	-	-	387.49	-	-	-	-	-
52	Spl	%RSD	-	-	-	-	-	-	16.50	-	-	-	-	-
53	Spl	1	06Dec2008	10:25	1205N105	-	-	-	21952	26.118	5.2236	-	-	-
53	Spl	2	06Dec2008	10:34	1205N106	-	-	-	22453	26.720	5.3441	-	-	-
53	Spl	Avg	-	-	-	-	-	-	22202	26.419	5.2839			-
53	Spl	SDev	-	-	-	-	-	-	354.26	-	-	-	-	-
53	Spl	%RSD	-	-	-	-	-	-	1.60	-	-	-	-	-

BATCH TIME
Time (24 Hr): 0908
Initials:

205664

Chain of Custody Record

Curtis & Tompkins
2323 Fifth Street
Berkeley, California
phone: (510) 486-0900

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Agata Sulczynski (aas@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-11
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AguaTierra Associates Incorporated, DBA

UCD0808291

Client Contact	Project Manager: Bob Devany	Sampled by: DB	Date: 8-29-08	COC Number: ~~UCD080830~~
Weiss Associates	Tel: 510-450-6144	Lab Contact:	Carrier: Weiss	1 of 1 COCs
5801 Christie Avenue, Suite 600	Analysis Turnaround Time			Job No.
Emeryville, CA 94608	Calendar (C) or Work Days (W) —			
(510) 450-6000 Phone	TAT if different from Below _____			SDG No.
(510) 547-5043 FAX	1 week			
Job Name: UC Davis				
Address: One Shields Ave, Davis				

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	VOCs (Method 8260)	TOC (SM5310C)	nitrate-N, sulfate, chloride (EPA 300.0)	metals, Ca, K, Mg, Na (Method 6020)	TDS, Alkalinity (SM2540C, SM2320B)	Sample Specific Notes:
1	TPIN 0361	8-29-08	900	W		4	X	X				
2	TPEF 0361	8-29-08	955	W		6	X		X	X	X	
							1					

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For _____ Months*

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Weiss	8-29-08 12:15	[signature]	C&T	8/29/08 12:15
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 2056064 Date Received 8-29-08 Number of coolers 1
Client Weiss Project UC Davis

Date Opened 8-29-08 By (print) F Nichols (sign) [signature]
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc)? ..... YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? ..... YES NO (N/A)
3. Were custody papers dry and intact when received? ..... (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? ..... (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ..... (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

   ☒ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

   Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 3°

   ☐ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ..... YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? ..... (YES) NO
10. Are samples in the appropriate containers for indicated tests? ..... (YES) NO
11. Are sample labels present, in good condition and complete? ..... (YES) NO
12. Do the sample labels agree with custody papers? ..... (YES) NO
13. Was sufficient amount of sample sent for tests requested? ..... (YES) NO
14. Are the samples appropriately preserved? ..... (YES) NO N/A
15. Are bubbles > 6mm absent in VOA samples? ..... (YES) NO N/A
16. Was the client contacted concerning this sample delivery? ..... YES NO
    If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	TPIN 0361	Batch#:	142113
Lab ID:	205664-001	Sampled:	08/29/08
Matrix:	Water	Received:	08/29/08
Units:	ug/L	Analyzed:	09/04/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	14	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	TPIN 0361	Batch#:	142113
Lab ID:	205664-001	Sampled:	08/29/08
Matrix:	Water	Received:	08/29/08
Units:	ug/L	Analyzed:	09/04/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-125
1,2-Dichloroethane-d4	101	80-137
Toluene-d8	107	80-120
Bromofluorobenzene	100	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	TPEF 0361	Batch#:	142113
Lab ID:	205664-002	Sampled:	08/29/08
Matrix:	Water	Received:	08/29/08
Units:	ug/L	Analyzed:	09/04/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	TPEF 0361	Batch#:	142113
Lab ID:	205664-002	Sampled:	08/29/08
Matrix:	Water	Received:	08/29/08
Units:	ug/L	Analyzed:	09/04/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	104	80-137
Toluene-d8	106	80-120
Bromofluorobenzene	92	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	142113
Units:	ug/L	Analyzed:	09/04/08
Diln Fac:	1.000		

Type: BS Lab ID: QC458642

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	26.64	107	73-133
Benzene	25.00	28.17	113	80-120
Trichloroethene	25.00	29.00	116	80-120
Toluene	25.00	27.36	109	80-120
Chlorobenzene	25.00	25.27	101	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	97	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	94	80-122

Type: BSD Lab ID: QC458643

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	24.79	99	73-133	7	20
Benzene	25.00	26.06	104	80-120	8	20
Trichloroethene	25.00	27.93	112	80-120	4	20
Toluene	25.00	26.35	105	80-120	4	20
Chlorobenzene	25.00	25.54	102	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	91	80-125
1,2-Dichloroethane-d4	97	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	95	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC458644	Batch#:	142113
Matrix:	Water	Analyzed:	09/04/08
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC458644	Batch#:	142113
Matrix:	Water	Analyzed:	09/04/08
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	88	80-125
1,2-Dichloroethane-d4	99	80-137
Toluene-d8	105	80-120
Bromofluorobenzene	95	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Metals Analytical Report

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 6020
Field ID:	TPEF 0361	Sampled:	08/29/08
Matrix:	Water	Received:	08/29/08
Units:	ug/L	Prepared:	09/03/08
Batch#:	142089		

Type:	SAMPLE	Diln Fac:	5.000
Lab ID:	205664-002	Analyzed:	09/10/08

Analyte	Result	RL
Calcium	45,000	50
Magnesium	76,000	50
Potassium	1,300	50
Sodium	40,000	60

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC458554	Analyzed:	09/09/08

Analyte	Result	RL
Calcium	ND	50
Magnesium	ND	50
Potassium	ND	50
Sodium	ND	50

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 6020
Matrix:	Water	Batch#:	142089
Units:	ug/L	Prepared:	09/03/08
Diln Fac:	1.000	Analyzed:	09/09/08

Type: BS Lab ID: QC458555

Analyte	Spiked	Result	%REC	Limits
Calcium	10,000	10,350	104	80-120
Magnesium	10,000	10,160	102	80-120
Potassium	10,000	10,260	103	80-120
Sodium	10,000	10,280	103	80-120

Type: BSD Lab ID: QC458556

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Calcium	10,000	10,320	103	80-120	0	20
Magnesium	10,000	10,100	101	80-120	1	20
Potassium	10,000	10,140	101	80-120	1	20
Sodium	10,000	10,380	104	80-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Batch#:	142089
MSS Lab ID:	205614-001	Sampled:	08/27/08
Matrix:	Water	Received:	08/28/08
Units:	ug/L	Prepared:	09/03/08
Diln Fac:	5.000		

Type: MS Analyzed: 09/09/08
Lab ID: QC458557

Analyte	MSS Result	Spiked	Result	%REC	Limits
Calcium	172,500	10,000	181,100 >LR	87 NM	64-132
Magnesium	52,850	10,000	61,200	84 NM	67-125
Potassium	3,156	10,000	12,500	93	74-122
Sodium	90,550	10,000	99,350	88 NM	65-128

Type: MSD Analyzed: 09/10/08
Lab ID: QC458558

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Calcium	10,000	189,300 >LR	169 NM	64-132	NC	28
Magnesium	10,000	64,700	119 NM	67-125	6	20
Potassium	10,000	12,740	96	74-122	2	20
Sodium	10,000	104,300 >LR	137 NM	65-128	NC	20

NC= Not Calculated
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Diln Fac:	25.00
Type:	Serial Dilution	Batch#:	142089
MSS Lab ID:	205532-001	Sampled:	08/22/08
Lab ID:	QC458559	Received:	08/22/08
Matrix:	Water	Analyzed:	09/10/08
Units:	ug/L		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim
Calcium	287.5	50.00	ND	250.0	NC	10
Magnesium	107.1	50.00	62.35 J	250.0	NC	10
Potassium	2,431	50.03	2,443	250.2	0	10
Sodium	1,084	60.33	658.8	301.6	39 *	10

*= Value outside of QC limits; see narrative
J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	205664	Project#:	STANDARD
Client:	Weiss Associates	Location:	UC Davis
Field ID:	TPEF 0361	Units:	ug/L
Lab ID:	205664-002	Sampled:	08/29/08
Matrix:	Water	Received:	08/29/08

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	1.0	5.000	142089	09/03/08	09/10/08	EPA 200.8	EPA 6020
Arsenic	2.2	1.0	5.000	142089	09/03/08	09/10/08	EPA 200.8	EPA 6020
Barium	180	1.0	5.000	142089	09/03/08	09/10/08	EPA 200.8	EPA 6020
Beryllium	ND	1.0	5.000	142089	09/03/08	09/10/08	EPA 200.8	EPA 6020
Cadmium	ND	1.0	5.000	142089	09/03/08	09/10/08	EPA 200.8	EPA 6020
Chromium	36	1.0	5.000	142089	09/03/08	09/10/08	EPA 200.8	EPA 6020
Cobalt	ND	1.0	5.000	142089	09/03/08	09/10/08	EPA 200.8	EPA 6020
Copper	3.6	1.0	5.000	142089	09/03/08	09/10/08	EPA 200.8	EPA 6020
Lead	ND	1.0	5.000	142089	09/03/08	09/10/08	EPA 200.8	EPA 6020
Mercury	ND	0.20	1.000	142161	09/05/08	09/05/08	METHOD	EPA 7470A
Molybdenum	1.2	1.0	5.000	142089	09/03/08	09/10/08	EPA 200.8	EPA 6020
Nickel	ND	1.0	5.000	142089	09/03/08	09/10/08	EPA 200.8	EPA 6020
Selenium	2.9	1.0	5.000	142089	09/03/08	09/10/08	EPA 200.8	EPA 6020
Silver	ND	1.0	5.000	142089	09/03/08	09/10/08	EPA 200.8	EPA 6020
Thallium	ND	1.0	5.000	142089	09/03/08	09/10/08	EPA 200.8	EPA 6020
Vanadium	9.8	1.0	5.000	142089	09/03/08	09/10/08	EPA 200.8	EPA 6020
Zinc	14	5.0	5.000	142089	09/03/08	09/10/08	EPA 200.8	EPA 6020

ND= Not Detected
RL= Reporting Limit

18.0

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC458554	Batch#:	142089
Matrix:	Water	Prepared:	09/03/08
Units:	ug/L		

Analyte	Result	RL	Analyzed
Antimony	ND	1.0	09/09/08
Arsenic	ND	1.0	09/09/08
Barium	ND	1.0	09/10/08
Beryllium	ND	1.0	09/09/08
Cadmium	ND	1.0	09/09/08
Chromium	ND	1.0	09/09/08
Cobalt	ND	1.0	09/09/08
Copper	ND	1.0	09/09/08
Lead	ND	1.0	09/09/08
Molybdenum	ND	1.0	09/09/08
Nickel	ND	1.0	09/09/08
Selenium	ND	1.0	09/09/08
Silver	ND	1.0	09/09/08
Thallium	ND	1.0	09/09/08
Vanadium	ND	1.0	09/09/08
Zinc	ND	5.0	09/09/08

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 6020
Matrix:	Water	Batch#:	142089
Units:	ug/L	Prepared:	09/03/08
Diln Fac:	1.000		

Type: BS Lab ID: QC458555

Analyte	Spiked	Result	%REC	Limits	Analyzed
Antimony	100.0	104.3	104	80-120	09/09/08
Arsenic	100.0	96.80	97	80-120	09/09/08
Barium	100.0	94.65	95	80-120	09/10/08
Beryllium	100.0	99.65	100	80-120	09/09/08
Cadmium	100.0	97.50	98	80-120	09/09/08
Chromium	100.0	102.7	103	80-120	09/09/08
Cobalt	100.0	102.8	103	80-120	09/09/08
Copper	100.0	99.44	99	80-120	09/09/08
Lead	100.0	101.5	102	80-120	09/09/08
Molybdenum	100.0	101.8	102	80-120	09/09/08
Nickel	100.0	102.2	102	80-120	09/09/08
Selenium	100.0	91.92	92	80-120	09/09/08
Silver	100.0	105.9	106	75-120	09/09/08
Thallium	50.00	51.07	102	80-120	09/09/08
Vanadium	100.0	102.6	103	80-120	09/09/08
Zinc	100.0	96.86	97	80-120	09/09/08

Type: BSD Lab ID: QC458556

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
Antimony	100.0	104.0	104	80-120	0	20	09/09/08
Arsenic	100.0	99.19	99	80-120	2	20	09/09/08
Barium	100.0	93.63	94	80-120	1	20	09/10/08
Beryllium	100.0	102.5	103	80-120	3	20	09/09/08
Cadmium	100.0	97.25	97	80-120	0	20	09/09/08
Chromium	100.0	103.3	103	80-120	1	20	09/09/08
Cobalt	100.0	103.6	104	80-120	1	20	09/09/08
Copper	100.0	99.93	100	80-120	0	20	09/09/08
Lead	100.0	101.2	101	80-120	0	20	09/09/08
Molybdenum	100.0	101.4	101	80-120	0	20	09/09/08
Nickel	100.0	103.2	103	80-120	1	20	09/09/08
Selenium	100.0	93.64	94	80-120	2	20	09/09/08
Silver	100.0	104.1	104	75-120	2	20	09/09/08
Thallium	50.00	50.01	100	80-120	2	20	09/09/08
Vanadium	100.0	103.3	103	80-120	1	20	09/09/08
Zinc	100.0	101.0	101	80-120	4	20	09/09/08

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Batch#:	142089
MSS Lab ID:	205614-001	Sampled:	08/27/08
Matrix:	Water	Received:	08/28/08
Units:	ug/L	Prepared:	09/03/08
Diln Fac:	5.000		

Type: MS Lab ID: QC458557

Analyte	MSS Result	Spiked	Result	%REC	Limits	Analyzed
Antimony	0.4510	100.0	87.10	87	73-120	09/09/08
Arsenic	49.64	100.0	141.4	92	79-120	09/09/08
Barium	478.1	100.0	563.0	85 NM	71-123	09/10/08
Beryllium	0.2450	100.0	93.15	93	76-120	09/09/08
Cadmium	0.2190	100.0	91.25	91	77-120	09/09/08
Chromium	0.6365	100.0	94.05	93	74-120	09/09/08
Cobalt	3.762	100.0	96.10	92	75-120	09/09/08
Copper	2.517	100.0	89.55	87	66-126	09/09/08
Lead	0.3210	100.0	84.10	84	75-120	09/09/08
Molybdenum	0.4610	100.0	85.40	85	72-120	09/09/08
Nickel	1.580	100.0	93.75	92	69-125	09/09/08
Selenium	0.4250	100.0	90.30	90	72-127	09/09/08
Silver	0.1405	100.0	86.50	86	61-120	09/09/08
Thallium	0.2090	50.00	40.47	81	70-120	09/09/08
Vanadium	1.011	100.0	94.75	94	78-120	09/09/08
Zinc	8.910	100.0	94.90	86	61-131	09/09/08

Type: MSD Analyzed: 09/10/08
Lab ID: QC458558

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	100.0	89.75	89	73-120	3	20
Arsenic	100.0	145.7	96	79-120	3	20
Barium	100.0	589.5	111 NM	71-123	5	20
Beryllium	100.0	93.30	93	76-120	0	20
Cadmium	100.0	94.05	94	77-120	3	20
Chromium	100.0	96.70	96	74-120	3	20
Cobalt	100.0	98.05	94	75-120	2	20
Copper	100.0	91.80	89	66-126	2	29
Lead	100.0	85.80	85	75-120	2	20
Molybdenum	100.0	88.05	88	72-120	3	20
Nickel	100.0	95.50	94	69-125	2	20
Selenium	100.0	91.90	91	72-127	2	20
Silver	100.0	88.30	88	61-120	2	20
Thallium	50.00	41.19	82	70-120	2	20
Vanadium	100.0	97.55	97	78-120	3	20
Zinc	100.0	91.85	83	61-131	3	32

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Diln Fac:	25.00
Type:	Serial Dilution	Batch#:	142089
MSS Lab ID:	205532-001	Sampled:	08/22/08
Lab ID:	QC458559	Received:	08/22/08
Matrix:	Water	Analyzed:	09/10/08
Units:	ug/L		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim
Antimony	0.1885	1.000	ND	2.500	NC	10
Arsenic	0.3570	1.000	0.6025 J	2.500	NC	10
Barium	0.7425	1.000	1.010 J	2.500	NC	10
Beryllium	0.1275	1.000	ND	2.500	NC	10
Cadmium	0.1195	1.000	ND	2.500	NC	10
Chromium	0.1105	1.000	ND	2.500	NC	10
Cobalt	0.1550	1.000	ND	2.500	NC	10
Copper	393.8	1.000	369.5	2.704	6	10
Lead	0.09500	1.000	ND	2.500	NC	10
Molybdenum	ND	1.000	ND	2.634	NC	10
Nickel	ND	1.000	ND	2.500	NC	10
Selenium	0.08600	1.000	ND	2.500	NC	10
Silver	0.09700	1.000	ND	2.500	NC	10
Thallium	0.06500	1.000	ND	1.250	NC	10
Vanadium	0.4055	1.000	0.6350 J	2.500	NC	10
Zinc	2.851	5.000	ND	24.08	NC	10

J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

23.0

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	142161
Lab ID:	QC458861	Prepared:	09/05/08
Matrix:	Water	Analyzed:	09/05/08
Units:	ug/L		

Result	RL
ND	0.20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	142161
Matrix:	Water	Prepared:	09/05/08
Units:	ug/L	Analyzed:	09/05/08
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC458862	5.000	4.900	98	80-120		
BSD	QC458863	5.000	5.110	102	80-120	4	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	142161
MSS Lab ID:	205625-001	Sampled:	08/27/08
Lab ID:	QC458867	Received:	08/28/08
Matrix:	Water	Analyzed:	09/05/08

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	142161
Field ID:	ZZZZZZZZZZ	Sampled:	08/27/08
MSS Lab ID:	205625-001	Received:	08/28/08
Matrix:	Water	Prepared:	09/05/08
Units:	ug/L	Analyzed:	09/05/08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC458868	<0.04502	5.000	4.960	99	71-124		
MSD	QC458869		5.000	4.970	99	71-124	0	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Field ID:	TPEF 0361	Batch#:	141965
Matrix:	Water	Sampled:	08/29/08 09:55
Units:	mg/L	Received:	08/29/08

Type: SAMPLE Lab ID: 205664-002

Analyte	Result	RL	Diln Fac	Analyzed
Chloride	20	0.20	1.000	08/29/08 14:43
Nitrogen, Nitrate	10	0.25	5.000	08/29/08 15:00
Sulfate	48	0.50	1.000	08/29/08 14:43

Type: BLANK Diln Fac: 1.000
Lab ID: QC458014 Analyzed: 08/29/08 10:27

Analyte	Result	RL
Chloride	ND	0.20
Nitrogen, Nitrate	ND	0.05
Sulfate	ND	0.50

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Matrix:	Water	Diln Fac:	1.000
Units:	mg/L	Batch#:	141965

Type: BS Analyzed: 08/29/08 10:44
Lab ID: QC458015

Analyte	Spiked	Result	%REC	Limits
Chloride	4.000	4.017	100	80-120
Nitrogen, Nitrate	1.000	1.011	101	80-120
Sulfate	10.00	9.831	98	80-120

Type: BSD Analyzed: 08/29/08 11:02
Lab ID: QC458016

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Chloride	4.000	4.010	100	80-120	0	20
Nitrogen, Nitrate	1.000	0.9820	98	80-120	3	20
Sulfate	10.00	9.758	98	80-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Field ID:	ZZZZZZZZZZ	Diln Fac:	25.00
MSS Lab ID:	205662-002	Batch#:	141965
Matrix:	Water	Sampled:	08/28/08 09:24
Units:	mg/L	Received:	08/29/08

Type: MS Analyzed: 08/29/08 15:56
Lab ID: QC458017

Analyte	MSS Result	Spiked	Result	%REC	Limits
Chloride	167.4	50.00	216.3	98	80-120
Nitrogen, Nitrate	0.01601	12.50	12.61	101	80-120
Sulfate	60.12	125.0	183.9	99	80-120

Type: MSD Analyzed: 08/29/08 16:14
Lab ID: QC458018

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Chloride	50.00	216.3	98	80-120	0	20
Nitrogen, Nitrate	12.50	12.52	100	80-120	1	20
Sulfate	125.0	185.1	100	80-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM2320B
Field ID:	TPEF 0361	Sampled:	08/29/08
Matrix:	Water	Received:	08/29/08
Units:	mg/L	Analyzed:	09/04/08
Batch#:	142140		

Type: SAMPLE Diln Fac: 6.700
Lab ID: 205664-002

Analyte	Result	RL
Alkalinity, Bicarbonate	440	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	440	6.7

Type: BLANK Diln Fac: 1.000
Lab ID: QC458752

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	4.000
Lab ID:	QC458753	Batch#:	142140
Matrix:	Water	Analyzed:	09/04/08

Spiked	Result	%REC	Limits
200.0	190.4	95	90-110

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	4.000
Field ID:	ZZZZZZZZZZ	Batch#:	142140
MSS Lab ID:	205736-006	Sampled:	09/03/08
Matrix:	Water	Received:	09/03/08
Units:	mg/L	Analyzed:	09/04/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC458754	433.3	200.0	610.0	88	80-120		
MSD	QC458755		200.0	606.8	87	80-120	1	25

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM2540C
Analyte:	Total Dissolved Solids	Sampled:	08/29/08
Field ID:	TPEF 0361	Received:	08/29/08
Matrix:	Water	Prepared:	08/29/08
Units:	mg/L	Analyzed:	09/04/08
Batch#:	141983		

Type	Lab ID	Result	RL	Diln Fac
SAMPLE	205664-002	570	11	1.111
BLANK	QC458090	ND	10	1.000

ND= Not Detected
RL= Reporting Limit

5.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Dissolved Solids (TDS)

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM2540C
Analyte:	Total Dissolved Solids	Batch#:	141983
Field ID:	ZZZZZZZZZZ	Sampled:	08/26/08
MSS Lab ID:	205613-001	Received:	08/28/08
Matrix:	Water	Prepared:	08/29/08
Units:	mg/L	Analyzed:	09/04/08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim
BS	QC458091		104.0	92.00		88	73-120		
BSD	QC458092		104.0	94.00		90	73-120	2	22
SDUP	QC458093	104.0		90.00	10.00			14	20

RL= Reporting Limit
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Organic Carbon (TOC)

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Diln Fac:	1.000
Field ID:	TPIN 0361	Batch#:	142124
Matrix:	Water	Sampled:	08/29/08
Units:	mg/L	Received:	08/29/08

Type	Lab ID	Result	RL	Analyzed
SAMPLE	205664-001	0.95	0.50	09/05/08
BLANK	QC458685	ND	0.50	09/04/08

ND= Not Detected
RL= Reporting Limit

15.1

Curtis & Tompkins, Ltd.

Batch QC Report

Total Organic Carbon (TOC)

Lab #:	205664	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Batch#:	142124
Field ID:	ZZZZZZZZZZ	Sampled:	08/21/08
MSS Lab ID:	205509-001	Received:	08/22/08
Matrix:	Water	Analyzed:	09/04/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
LCS	QC458686		10.00	10.05	101	90-110			1.000
MS	QC458687	3.573	10.00	13.33	98	62-124			2.000
MSD	QC458688		10.00	13.41	98	62-124	1	20	2.000

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TPIN0362	Batch#:	143176
Lab ID:	206389-001	Sampled:	09/26/08
Matrix:	Water	Received:	09/26/08
Units:	ug/L	Analyzed:	10/02/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	6.7	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TPIN0362	Batch#:	143176
Lab ID:	206389-001	Sampled:	09/26/08
Matrix:	Water	Received:	09/26/08
Units:	ug/L	Analyzed:	10/02/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-125
1,2-Dichloroethane-d4	98	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	98	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TPIEF0362	Batch#:	143176
Lab ID:	206389-002	Sampled:	09/26/08
Matrix:	Water	Received:	09/26/08
Units:	ug/L	Analyzed:	10/02/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TPIEF0362	Batch#:	143176
Lab ID:	206389-002	Sampled:	09/26/08
Matrix:	Water	Received:	09/26/08
Units:	ug/L	Analyzed:	10/02/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	91	80-125
1,2-Dichloroethane-d4	98	80-137
Toluene-d8	98	80-120
Bromofluorobenzene	96	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2303	Batch#:	143185
Lab ID:	206389-003	Sampled:	09/26/08
Matrix:	Water	Received:	09/26/08
Units:	ug/L	Analyzed:	10/02/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	11	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

23.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2303	Batch#:	143185
Lab ID:	206389-003	Sampled:	09/26/08
Matrix:	Water	Received:	09/26/08
Units:	ug/L	Analyzed:	10/02/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-125
1,2-Dichloroethane-d4	100	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	114	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TBGW0512	Batch#:	143222
Lab ID:	206389-004	Sampled:	09/26/08
Matrix:	Water	Received:	09/26/08
Units:	ug/L	Analyzed:	10/03/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TBGW0512	Batch#:	143222
Lab ID:	206389-004	Sampled:	09/26/08
Matrix:	Water	Received:	09/26/08
Units:	ug/L	Analyzed:	10/03/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-125
1,2-Dichloroethane-d4	107	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	101	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	143176
Units:	ug/L	Analyzed:	10/02/08
Diln Fac:	1.000		

Type: BS Lab ID: QC463201

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	19.83	99	73-133
Benzene	20.00	19.89	99	80-120
Trichloroethene	20.00	20.48	102	80-120
Toluene	20.00	19.93	100	80-120
Chlorobenzene	20.00	19.58	98	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-125
1,2-Dichloroethane-d4	101	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	102	80-122

Type: BSD Lab ID: QC463202

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	20.00	19.20	96	73-133	3	20
Benzene	20.00	19.57	98	80-120	2	20
Trichloroethene	20.00	20.49	102	80-120	0	20
Toluene	20.00	19.70	99	80-120	1	20
Chlorobenzene	20.00	19.15	96	80-120	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-125
1,2-Dichloroethane-d4	102	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	99	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC463203	Batch#:	143176
Matrix:	Water	Analyzed:	10/02/08
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC463203	Batch#:	143176
Matrix:	Water	Analyzed:	10/02/08
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-125
1,2-Dichloroethane-d4	103	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	98	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	143185
Units:	ug/L	Analyzed:	10/02/08
Diln Fac:	1.000		

Type: BS Lab ID: QC463238

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	21.83	109	73-133
Benzene	20.00	21.31	107	80-120
Trichloroethene	20.00	20.48	102	80-120
Toluene	20.00	20.46	102	80-120
Chlorobenzene	20.00	20.41	102	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-125
1,2-Dichloroethane-d4	88	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	83	80-122

Type: BSD Lab ID: QC463239

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	20.00	20.50	102	73-133	6	20
Benzene	20.00	20.87	104	80-120	2	20
Trichloroethene	20.00	19.72	99	80-120	4	20
Toluene	20.00	19.88	99	80-120	3	20
Chlorobenzene	20.00	19.75	99	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-125
1,2-Dichloroethane-d4	89	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	87	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC463348	Batch#:	143185
Matrix:	Water	Analyzed:	10/02/08
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5

b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC463348	Batch#:	143185
Matrix:	Water	Analyzed:	10/02/08
Units:	ug/L		

Analyte	Result	RL
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	1.0 b	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	93	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	106	80-122

b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	143222
Units:	ug/L	Analyzed:	10/03/08
Diln Fac:	1.000		

Type: BS Lab ID: QC463407

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	20.30	101	73-133
Benzene	20.00	20.47	102	80-120
Trichloroethene	20.00	20.73	104	80-120
Toluene	20.00	20.69	103	80-120
Chlorobenzene	20.00	19.54	98	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-125
1,2-Dichloroethane-d4	105	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	100	80-122

Type: BSD Lab ID: QC463408

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	20.00	19.40	97	73-133	5	20
Benzene	20.00	20.29	101	80-120	1	20
Trichloroethene	20.00	20.60	103	80-120	1	20
Toluene	20.00	20.39	102	80-120	1	20
Chlorobenzene	20.00	19.83	99	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-125
1,2-Dichloroethane-d4	104	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	102	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC463409	Batch#:	143222
Matrix:	Water	Analyzed:	10/03/08
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC463409	Batch#:	143222
Matrix:	Water	Analyzed:	10/03/08
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-125
1,2-Dichloroethane-d4	113	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	99	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Metals Analytical Report

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 200.8
Project#:	388-1856	Analysis:	EPA 6020
Field ID:	TPIEF0362	Sampled:	09/26/08
Units:	ug/L	Received:	09/26/08
Batch#:	143088	Prepared:	09/30/08

Type:	SAMPLE	Diln Fac:	5.000
Lab ID:	206389-002	Analyzed:	10/02/08
Matrix:	Water		

Analyte	Result	RL
Calcium	51,000	50
Magnesium	85,000	50
Potassium	890	57
Sodium	41,000	50

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC462839	Analyzed:	10/01/08
Matrix:	Filtrate		

Analyte	Result	RL
Calcium	ND	50
Magnesium	ND	50
Potassium	ND	50
Sodium	ND	50

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 200.8
Project#:	388-1856	Analysis:	EPA 6020
Matrix:	Filtrate	Batch#:	143088
Units:	ug/L	Prepared:	09/30/08
Diln Fac:	1.000	Analyzed:	10/01/08

Type: BS Lab ID: QC462840

Analyte	Spiked	Result	%REC	Limits
Calcium	10,000	10,980	110	80-120
Magnesium	10,000	11,270	113	80-120
Potassium	10,000	10,890	109	80-120
Sodium	10,000	10,700	107	80-120

Type: BSD Lab ID: QC462841

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Calcium	10,000	10,120	101	80-120	8	20
Magnesium	10,000	10,190	102	80-120	10	20
Potassium	10,000	9,998	100	80-120	9	20
Sodium	10,000	10,610	106	80-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 200.8
Project#:	388-1856	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Batch#:	143088
MSS Lab ID:	206379-015	Sampled:	09/24/08
Matrix:	Filtrate	Received:	09/25/08
Units:	ug/L	Prepared:	09/30/08
Diln Fac:	5.000	Analyzed:	10/01/08

Type: MS Lab ID: QC462842

Analyte	MSS Result	Spiked	Result	%REC	Limits
Calcium	70,450	10,000	80,300	99 NM	64-132
Magnesium	14,850	10,000	25,340	105	67-125
Potassium	4,862	10,000	14,960	101	74-122
Sodium	40,400	10,000	50,700	103 NM	65-128

Type: MSD Lab ID: QC462843

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Calcium	10,000	81,550	111 NM	64-132	2	28
Magnesium	10,000	25,540	107	67-125	1	20
Potassium	10,000	15,130	103	74-122	1	20
Sodium	10,000	50,450	101 NM	65-128	0	20

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 200.8
Project#:	388-1856	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Units:	ug/L
Type:	Serial Dilution	Batch#:	143088
MSS Lab ID:	206379-015	Sampled:	09/24/08
Lab ID:	QC462844	Received:	09/25/08
Matrix:	Filtrate		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln Fac	Analyzed
Calcium	73,550	100.0	69,050	500.0	6	10	50.00	10/02/08
Magnesium	14,850	50.00	15,560	250.0	5	10	25.00	10/01/08
Potassium	4,862	57.49	5,120	287.5	5	10	25.00	10/01/08
Sodium	40,400	50.00	42,650	250.0	6	10	25.00	10/01/08

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 200.8
Project#:	388-1856	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Units:	ug/L
Type:	Post Digest Spike	Batch#:	143088
MSS Lab ID:	206379-015	Sampled:	09/24/08
Lab ID:	QC462845	Received:	09/25/08
Matrix:	Filtrate		

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln Fac	Analyzed
Calcium	73,550	100,000	165,300	92	75-125	10.00	10/02/08
Magnesium	14,850	50,000	61,400	93	75-125	5.000	10/01/08
Potassium	4,862	50,000	51,450	93	75-125	5.000	10/01/08
Sodium	40,400	50,000	85,250	90	75-125	5.000	10/01/08

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	206389	Project#:	388-1856
Client:	Weiss Associates	Location:	UC Davis
Field ID:	TPIEF0362	Units:	ug/L
Lab ID:	206389-002	Sampled:	09/26/08
Matrix:	Water	Received:	09/26/08

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	1.0	5.000	143088	09/30/08	10/02/08	EPA 200.8	EPA 6020
Arsenic	2.3	1.0	5.000	143088	09/30/08	10/02/08	EPA 200.8	EPA 6020
Barium	220	1.0	5.000	143088	09/30/08	10/02/08	EPA 200.8	EPA 6020
Beryllium	ND	1.0	5.000	143088	09/30/08	10/08/08	EPA 200.8	EPA 6020
Cadmium	ND	1.0	5.000	143088	09/30/08	10/02/08	EPA 200.8	EPA 6020
Chromium	43	1.0	5.000	143088	09/30/08	10/02/08	EPA 200.8	EPA 6020
Cobalt	ND	1.0	5.000	143088	09/30/08	10/02/08	EPA 200.8	EPA 6020
Copper	3.5	1.2	5.000	143088	09/30/08	10/02/08	EPA 200.8	EPA 6020
Lead	ND	1.0	5.000	143088	09/30/08	10/02/08	EPA 200.8	EPA 6020
Mercury	ND	0.20	1.000	143292	10/06/08	10/06/08	METHOD	EPA 7470A
Molybdenum	1.6	1.0	5.000	143088	09/30/08	10/02/08	EPA 200.8	EPA 6020
Nickel	ND	1.0	5.000	143088	09/30/08	10/02/08	EPA 200.8	EPA 6020
Selenium	3.3	1.0	5.000	143088	09/30/08	10/02/08	EPA 200.8	EPA 6020
Silver	ND	1.0	5.000	143088	09/30/08	10/02/08	EPA 200.8	EPA 6020
Thallium	ND	1.0	5.000	143088	09/30/08	10/02/08	EPA 200.8	EPA 6020
Vanadium	10	1.0	5.000	143088	09/30/08	10/02/08	EPA 200.8	EPA 6020
Zinc	ND	5.0	5.000	143088	09/30/08	10/02/08	EPA 200.8	EPA 6020

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 200.8
Project#:	388-1856	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC462839	Batch#:	143088
Matrix:	Filtrate	Prepared:	09/30/08
Units:	ug/L	Analyzed:	10/01/08

Analyte	Result	RL
Antimony	ND	1.0
Arsenic	ND	1.0
Barium	ND	1.0
Beryllium	ND	1.0
Cadmium	ND	1.0
Chromium	ND	1.0
Cobalt	ND	1.0
Copper	ND	1.0
Lead	ND	1.0
Molybdenum	ND	1.0
Nickel	ND	1.0
Selenium	ND	1.0
Silver	ND	1.0
Thallium	ND	1.0
Vanadium	ND	1.0
Zinc	ND	5.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 200.8
Project#:	388-1856	Analysis:	EPA 6020
Matrix:	Filtrate	Batch#:	143088
Units:	ug/L	Prepared:	09/30/08
Diln Fac:	1.000		

Type: BS Lab ID: QC462840

Analyte	Spiked	Result	%REC	Limits	Analyzed
Antimony	100.0	106.4	106	80-120	10/01/08
Arsenic	100.0	98.25	98	80-120	10/01/08
Barium	100.0	105.9	106	80-120	10/01/08
Beryllium	100.0	105.3	105	80-120	10/08/08
Cadmium	100.0	105.3	105	80-120	10/01/08
Chromium	100.0	107.8	108	80-120	10/01/08
Cobalt	100.0	108.0	108	80-120	10/01/08
Copper	100.0	102.1	102	80-120	10/01/08
Lead	100.0	116.7	117	80-120	10/02/08
Molybdenum	100.0	110.4	110	80-120	10/01/08
Nickel	100.0	107.6	108	80-120	10/01/08
Selenium	100.0	101.7	102	80-120	10/01/08
Silver	100.0	92.97	93	75-120	10/01/08
Thallium	50.00	49.22	98	80-120	10/01/08
Vanadium	100.0	104.0	104	80-120	10/01/08
Zinc	100.0	94.84	95	80-120	10/01/08

Type: BSD Lab ID: QC462841

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
Antimony	100.0	97.63	98	80-120	9	20	10/01/08
Arsenic	100.0	96.69	97	80-120	2	20	10/01/08
Barium	100.0	97.00	97	80-120	9	20	10/01/08
Beryllium	100.0	104.1	104	80-120	1	20	10/08/08
Cadmium	100.0	96.36	96	80-120	9	20	10/01/08
Chromium	100.0	106.5	107	80-120	1	20	10/01/08
Cobalt	100.0	106.7	107	80-120	1	20	10/01/08
Copper	100.0	101.6	102	80-120	0	20	10/01/08
Lead	100.0	114.3	114	80-120	2	20	10/02/08
Molybdenum	100.0	100.4	100	80-120	9	20	10/01/08
Nickel	100.0	107.2	107	80-120	0	20	10/01/08
Selenium	100.0	98.44	98	80-120	3	20	10/01/08
Silver	100.0	85.63	86	75-120	8	20	10/01/08
Thallium	50.00	46.82	94	80-120	5	20	10/01/08
Vanadium	100.0	103.1	103	80-120	1	20	10/01/08
Zinc	100.0	92.77	93	80-120	2	20	10/01/08

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 200.8
Project#:	388-1856	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Batch#:	143088
MSS Lab ID:	206379-015	Sampled:	09/24/08
Matrix:	Filtrate	Received:	09/25/08
Units:	ug/L	Prepared:	09/30/08
Diln Fac:	5.000		

Type: MS Lab ID: QC462842

Analyte	MSS Result	Spiked	Result	%REC	Limits	Analyzed
Antimony	0.4320	100.0	95.85	95	73-120	10/01/08
Arsenic	3.175	100.0	102.4	99	79-120	10/01/08
Barium	210.0	100.0	305.2	95	71-123	10/01/08
Beryllium	0.3895	100.0	96.95	97	76-120	10/08/08
Cadmium	0.3390	100.0	97.05	97	77-120	10/01/08
Chromium	1.691	100.0	104.5	103	74-120	10/01/08
Cobalt	0.7570	100.0	105.6	105	75-120	10/01/08
Copper	<0.3851	100.0	100.6	101	66-126	10/01/08
Lead	0.3875	100.0	104.6	104	75-120	10/01/08
Molybdenum	2.025	100.0	99.00	97	72-120	10/01/08
Nickel	0.7975	100.0	106.4	106	69-125	10/01/08
Selenium	<0.1538	100.0	102.9	103	72-127	10/01/08
Silver	0.2820	100.0	84.90	85	61-120	10/01/08
Thallium	0.2750	50.00	44.81	89	70-120	10/01/08
Vanadium	0.4890	100.0	102.3	102	78-120	10/01/08
Zinc	3.765	100.0	104.1	100	61-131	10/01/08

Type: MSD Lab ID: QC462843

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
Antimony	100.0	98.45	98	73-120	3	20	10/01/08
Arsenic	100.0	102.8	100	79-120	0	20	10/01/08
Barium	100.0	310.1	100	71-123	2	20	10/01/08
Beryllium	100.0	93.65	93	76-120	3	20	10/08/08
Cadmium	100.0	98.40	98	77-120	1	20	10/01/08
Chromium	100.0	105.5	104	74-120	1	20	10/01/08
Cobalt	100.0	106.0	105	75-120	0	20	10/01/08
Copper	100.0	99.35	99	66-126	1	29	10/01/08
Lead	100.0	105.4	105	75-120	1	20	10/01/08
Molybdenum	100.0	102.5	100	72-120	3	20	10/01/08
Nickel	100.0	107.1	106	69-125	1	20	10/01/08
Selenium	100.0	101.5	102	72-127	1	20	10/01/08
Silver	100.0	86.80	87	61-120	2	20	10/01/08
Thallium	50.00	45.70	91	70-120	2	20	10/01/08
Vanadium	100.0	103.4	103	78-120	1	20	10/01/08
Zinc	100.0	102.4	99	61-131	2	32	10/01/08

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 200.8
Project#:	388-1856	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Diln Fac:	25.00
Type:	Serial Dilution	Batch#:	143088
MSS Lab ID:	206379-015	Sampled:	09/24/08
Lab ID:	QC462844	Received:	09/25/08
Matrix:	Filtrate	Analyzed:	10/01/08
Units:	ug/L		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim
Antimony	0.4320	1.000	0.6550 J	2.500	NC	10
Arsenic	3.175	1.000	3.235	2.500	NC	10
Barium	210.0	1.000	208.8	2.500	1	10
Beryllium	0.3895	1.000	0.4350 J	2.500	NC	10
Cadmium	0.3390	1.000	0.5925 J	2.500	NC	10
Chromium	1.691	1.000	0.6700 J	2.500	NC	10
Cobalt	0.7570	1.000	1.180 J	2.500	NC	10
Copper	ND	1.155	ND	5.776	NC	10
Lead	0.3875	1.000	0.4900 J	2.500	NC	10
Molybdenum	2.025	1.000	4.645	2.500	NC	10
Nickel	0.7975	1.000	1.155 J	2.500	NC	10
Selenium	ND	1.000	ND	2.500	NC	10
Silver	0.2820	1.000	0.4500 J	2.500	NC	10
Thallium	0.2750	1.000	ND	1.250	NC	10
Vanadium	0.4890	1.000	ND	2.500	NC	10
Zinc	3.765	5.000	ND	9.806	NC	10

J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 200.8
Project#:	388-1856	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Units:	ug/L
Type:	Post Digest Spike	Batch#:	143088
MSS Lab ID:	206379-015	Sampled:	09/24/08
Lab ID:	QC462845	Received:	09/25/08
Matrix:	Filtrate		

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln Fac	Analyzed
Antimony	0.4320	500.0	441.2	88	75-125	5.000	10/01/08
Arsenic	3.175	500.0	452.6	90	75-125	5.000	10/01/08
Barium	210.0	500.0	650.5	88	75-125	5.000	10/01/08
Beryllium	<0.1403	1,000	844.8	84	75-125	10.00	10/02/08
Cadmium	0.3390	500.0	447.8	89	75-125	5.000	10/01/08
Chromium	1.691	500.0	476.0	95	75-125	5.000	10/01/08
Cobalt	0.7570	500.0	478.7	96	75-125	5.000	10/01/08
Copper	<0.3851	500.0	449.1	90	75-125	5.000	10/01/08
Lead	0.3875	500.0	500.0	100	75-125	5.000	10/01/08
Molybdenum	2.025	500.0	457.7	91	75-125	5.000	10/01/08
Nickel	0.7975	500.0	471.1	94	75-125	5.000	10/01/08
Selenium	<0.1538	500.0	469.7	94	75-125	5.000	10/01/08
Silver	0.2820	500.0	430.1	86	75-125	5.000	10/01/08
Thallium	0.2750	250.0	218.3	87	75-125	5.000	10/01/08
Vanadium	0.4890	500.0	472.8	94	75-125	5.000	10/01/08
Zinc	3.765	500.0	431.5	86	75-125	5.000	10/01/08

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	143292
Lab ID:	QC463688	Prepared:	10/06/08
Matrix:	Water	Analyzed:	10/06/08
Units:	ug/L		

Result	RL
ND	0.20

ND= Not Detected
RL= Reporting Limit

34.0

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	143292
Matrix:	Water	Prepared:	10/06/08
Units:	ug/L	Analyzed:	10/06/08
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC463689	5.000	4.920	98	80-120		
BSD	QC463690	5.000	4.970	99	80-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	143292
MSS Lab ID:	206601-001	Sampled:	09/30/08
Lab ID:	QC463697	Received:	10/03/08
Matrix:	Water	Analyzed:	10/06/08

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

38.0

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	143292
Field ID:	ZZZZZZZZZZ	Sampled:	09/30/08
MSS Lab ID:	206601-001	Received:	10/03/08
Matrix:	Water	Prepared:	10/06/08
Units:	ug/L	Analyzed:	10/06/08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC463698	<0.04502	5.000	4.930	99	71-124		
MSD	QC463699		5.000	4.990	100	71-124	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Field ID:	TPIEF0362	Batch#:	142976
Matrix:	Water	Sampled:	09/26/08 13:35
Units:	mg/L	Received:	09/26/08

Type: SAMPLE Lab ID: 206389-002

Analyte	Result	RL	Diln Fac	Analyzed
Chloride	19	0.20	1.000	09/26/08 17:37
Nitrogen, Nitrate	10	0.25	5.000	09/26/08 19:04
Sulfate	49	0.50	1.000	09/26/08 17:37

Type: BLANK Diln Fac: 1.000
Lab ID: QC462314 Analyzed: 09/26/08 12:12

Analyte	Result	RL
Chloride	ND	0.20
Nitrogen, Nitrate	ND	0.05
Sulfate	ND	0.50

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Matrix:	Water	Diln Fac:	1.000
Units:	mg/L	Batch#:	142976

Type: BS Analyzed: 09/26/08 20:14
Lab ID: QC462315

Analyte	Spiked	Result	%REC	Limits
Chloride	4.000	4.114	103	80-120
Nitrogen, Nitrate	1.000	0.9915	99	80-120
Sulfate	10.00	10.18	102	80-120

Type: BSD Analyzed: 09/26/08 20:31
Lab ID: QC462316

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Chloride	4.000	4.135	103	80-120	0	20
Nitrogen, Nitrate	1.000	1.001	100	80-120	1	20
Sulfate	10.00	10.24	102	80-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Field ID:	ZZZZZZZZZZ	Diln Fac:	25.00
MSS Lab ID:	206367-005	Batch#:	142976
Matrix:	Water	Sampled:	09/25/08 04:05
Units:	mg/L	Received:	09/26/08

Type: MS Analyzed: 09/26/08 19:39
Lab ID: QC462317

Analyte	MSS Result	Spiked	Result	%REC	Limits
Chloride	213.5	50.00	262.8	99 NM	80-120
Nitrogen, Nitrate	7.730	12.50	20.32	101	80-120
Sulfate	80.89	125.0	211.0	104	80-120

Type: MSD Analyzed: 09/26/08 19:57
Lab ID: QC462318

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Chloride	50.00	264.3	102 NM	80-120	1	20
Nitrogen, Nitrate	12.50	20.39	101	80-120	0	20
Sulfate	125.0	208.8	102	80-120	1	20

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Field ID:	TPIEF0362	Sampled:	09/26/08
Matrix:	Water	Received:	09/26/08
Units:	mg/L	Analyzed:	09/30/08
Batch#:	143108		

Type: SAMPLE Diln Fac: 6.700
Lab ID: 206389-002

Analyte	Result	RL
Alkalinity, Bicarbonate	410	6.7
Alkalinity, Carbonate	57	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	470	6.7

Type: BLANK Diln Fac: 1.000
Lab ID: QC462934

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	4.000
Lab ID:	QC462935	Batch#:	143108
Matrix:	Water	Analyzed:	09/30/08

Spiked	Result	%REC	Limits
200.0	191.6	96	90-110

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	4.000
Field ID:	TPIEF0362	Batch#:	143108
MSS Lab ID:	206389-002	Sampled:	09/26/08
Matrix:	Water	Received:	09/26/08
Units:	mg/L	Analyzed:	09/30/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC462936	470.0	200.0	658.0	94	80-120		
MSD	QC462937		200.0	653.6	92	80-120	1	25

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2540C
Analyte:	Total Dissolved Solids	Sampled:	09/26/08
Field ID:	TPIEF0362	Received:	09/26/08
Matrix:	Water	Prepared:	09/29/08
Units:	mg/L	Analyzed:	09/30/08
Batch#:	143058		

Type	Lab ID	Result	RL	Diln Fac
SAMPLE	206389-002	610	11	1.111
BLANK	QC462700	ND	10	1.000

ND= Not Detected
RL= Reporting Limit

5.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Dissolved Solids (TDS)

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2540C
Analyte:	Total Dissolved Solids	Batch#:	143058
Field ID:	ZZZZZZZZZZ	Sampled:	09/26/08
MSS Lab ID:	206390-002	Received:	09/26/08
Matrix:	Water	Prepared:	09/29/08
Units:	mg/L	Analyzed:	09/30/08

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim	Diln Fac
BS	QC462701		104.0	96.00		92	73-120			1.000
BSD	QC462702		104.0	100.0		96	73-120	4	22	1.000
SDUP	QC462703	893.3		906.7	11.11			1	20	1.111

RL= Reporting Limit
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Organic Carbon (TOC)

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Batch#:	143183
Field ID:	TPIN0362	Sampled:	09/26/08
Matrix:	Water	Received:	09/26/08
Units:	mg/L	Analyzed:	10/02/08
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	206389-001	1.3	0.50
BLANK	QC463228	ND	0.50

ND= Not Detected
RL= Reporting Limit

16.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Organic Carbon (TOC)

Lab #:	206389	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Batch#:	143183
Field ID:	ZZZZZZZZZZ	Sampled:	09/18/08
MSS Lab ID:	206169-001	Received:	09/19/08
Matrix:	Water	Analyzed:	10/02/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
LCS	QC463229		10.00	9.749	97	90-110			1.000
MS	QC463230	2.267	10.00	13.05	108	62-124			2.000
MSD	QC463231		10.00	12.50	102	62-124	4	20	2.000

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TPIN0363	Batch#:	144094
Lab ID:	206946-002	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	9.4	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

82.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TPIN0363	Batch#:	144094
Lab ID:	206946-002	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-125
1,2-Dichloroethane-d4	96	80-137
Toluene-d8	106	80-120
Bromofluorobenzene	104	80-122

ND= Not Detected
RL= Reporting Limit

82.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TPEF0363	Batch#:	144094
Lab ID:	206946-003	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

83.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TPEF0363	Batch#:	144094
Lab ID:	206946-003	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-125
1,2-Dichloroethane-d4	95	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	102	80-122

ND= Not Detected
RL= Reporting Limit

83.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2331A	Batch#:	144094
Lab ID:	206946-004	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	0.7	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	1.2	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	52	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

84.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2331A	Batch#:	144094
Lab ID:	206946-004	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-125
1,2-Dichloroethane-d4	99	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	108	80-122

ND= Not Detected
RL= Reporting Limit

84.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2331B	Batch#:	144094
Lab ID:	206946-005	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	1.0	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	1.3	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	54	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

85.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2331B	Batch#:	144094
Lab ID:	206946-005	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-125
1,2-Dichloroethane-d4	98	80-137
Toluene-d8	105	80-120
Bromofluorobenzene	105	80-122

ND= Not Detected
RL= Reporting Limit

85.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2330	Batch#:	144094
Lab ID:	206946-006	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

86.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2330	Batch#:	144094
Lab ID:	206946-006	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-125
1,2-Dichloroethane-d4	98	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	112	80-122

ND= Not Detected
RL= Reporting Limit

86.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2329	Batch#:	144094
Lab ID:	206946-007	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

87.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2329	Batch#:	144094
Lab ID:	206946-007	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-125
1,2-Dichloroethane-d4	99	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	108	80-122

ND= Not Detected
RL= Reporting Limit

87.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2327	Batch#:	144094
Lab ID:	206946-008	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

88.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2327	Batch#:	144094
Lab ID:	206946-008	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	2.8	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-125
1,2-Dichloroethane-d4	99	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	106	80-122

ND= Not Detected
RL= Reporting Limit

88.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TBGW0519	Batch#:	144094
Lab ID:	206946-013	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

89.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TBGW0519	Batch#:	144094
Lab ID:	206946-013	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-125
1,2-Dichloroethane-d4	95	80-137
Toluene-d8	109	80-120
Bromofluorobenzene	101	80-122

ND= Not Detected
RL= Reporting Limit

89.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	EBGW0016	Batch#:	144094
Lab ID:	206946-014	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

90.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	EBGW0016	Batch#:	144094
Lab ID:	206946-014	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-125
1,2-Dichloroethane-d4	94	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	106	80-122

ND= Not Detected
RL= Reporting Limit

90.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC467122	Batch#:	144094
Matrix:	Water	Analyzed:	10/25/08
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

91.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC467122	Batch#:	144094
Matrix:	Water	Analyzed:	10/25/08
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-125
1,2-Dichloroethane-d4	91	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	111	80-122

ND= Not Detected
RL= Reporting Limit

91.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	144094
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Type: BS Lab ID: QC467123

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	32.44	130	73-133
Benzene	25.00	27.64	111	80-120
Trichloroethene	25.00	27.28	109	80-120
Toluene	25.00	27.10	108	80-120
Chlorobenzene	25.00	25.66	103	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-125
1,2-Dichloroethane-d4	91	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	95	80-122

Type: BSD Lab ID: QC467124

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	30.75	123	73-133	5	20
Benzene	25.00	27.24	109	80-120	1	20
Trichloroethene	25.00	26.95	108	80-120	1	20
Toluene	25.00	26.47	106	80-120	2	20
Chlorobenzene	25.00	26.27	105	80-120	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-125
1,2-Dichloroethane-d4	90	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	96	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

1,4-Dioxane by 8270-SIM

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C-SIM
Matrix:	Water	Sampled:	10/16/08
Units:	ug/L	Received:	10/16/08
Diln Fac:	1.000	Prepared:	10/20/08
Batch#:	143896	Analyzed:	10/21/08

Field ID: GWGW2331A Lab ID: 206946-004
Type: SAMPLE

Analyte	Result	RL
1,4-Dioxane	14	0.94

Surrogate	%REC	Limits
Nitrobenzene-d5	67	48-130
2-Fluorobiphenyl	65	54-120

Field ID: GWGW2331B Lab ID: 206946-005
Type: SAMPLE

Analyte	Result	RL
1,4-Dioxane	13	0.94

Surrogate	%REC	Limits
Nitrobenzene-d5	66	48-130
2-Fluorobiphenyl	69	54-120

Field ID: GWGW2330 Lab ID: 206946-006
Type: SAMPLE

Analyte	Result	RL
1,4-Dioxane	7.6	0.94

Surrogate	%REC	Limits
Nitrobenzene-d5	75	48-130
2-Fluorobiphenyl	76	54-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

1,4-Dioxane by 8270-SIM

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C-SIM
Matrix:	Water	Sampled:	10/16/08
Units:	ug/L	Received:	10/16/08
Diln Fac:	1.000	Prepared:	10/20/08
Batch#:	143896	Analyzed:	10/21/08

Field ID: GWGW2329 Lab ID: 206946-007
Type: SAMPLE

Analyte	Result	RL
1,4-Dioxane	ND	0.94

Surrogate	%REC	Limits
Nitrobenzene-d5	60	48-130
2-Fluorobiphenyl	66	54-120

Field ID: GWGW2327 Lab ID: 206946-008
Type: SAMPLE

Analyte	Result	RL
1,4-Dioxane	ND	0.94

Surrogate	%REC	Limits
Nitrobenzene-d5	70	48-130
2-Fluorobiphenyl	76	54-120

Type: BLANK Lab ID: QC466294

Analyte	Result	RL
1,4-Dioxane	ND	1.0

Surrogate	%REC	Limits
Nitrobenzene-d5	63	48-130
2-Fluorobiphenyl	79	54-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

1,4-Dioxane by 8270-SIM

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8270C-SIM
Matrix:	Water	Batch#:	143896
Units:	ug/L	Prepared:	10/20/08
Diln Fac:	1.000	Analyzed:	10/21/08

Type: BS Lab ID: QC466295

Analyte	Spiked	Result	%REC	Limits
1,4-Dioxane	3.000	2.157	72	28-120

Surrogate	%REC	Limits
Nitrobenzene-d5	55	48-130
2-Fluorobiphenyl	65	54-120

Type: BSD Lab ID: QC466296

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,4-Dioxane	3.000	2.456	82	28-120	13	32

Surrogate	%REC	Limits
Nitrobenzene-d5	63	48-130
2-Fluorobiphenyl	71	54-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8081A
Field ID:	GWGW2331A	Batch#:	143814
Lab ID:	206946-004	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Prepared:	10/17/08
Diln Fac:	1.000	Analyzed:	10/20/08

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND #	0.09
Endrin aldehyde	ND	0.09
4,4'-DDT	ND	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	54	37-120
Decachlorobiphenyl	45	29-141

#= CCV drift outside limits; average CCV drift within limits per method requirements
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8081A
Field ID:	GWGW2331B	Batch#:	143814
Lab ID:	206946-005	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Prepared:	10/17/08
Diln Fac:	1.000	Analyzed:	10/20/08

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND #	0.09
Endrin aldehyde	ND	0.09
4,4'-DDT	ND	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	51	37-120
Decachlorobiphenyl	30	29-141

#= CCV drift outside limits; average CCV drift within limits per method requirements
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8081A
Field ID:	GWGW2330	Batch#:	143814
Lab ID:	206946-006	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Prepared:	10/17/08
Diln Fac:	1.000	Analyzed:	10/20/08

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND	0.09
Endrin aldehyde	ND	0.09
4,4'-DDT	ND	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	59	37-120
Decachlorobiphenyl	52	29-141

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8081A
Field ID:	GWGW2329	Batch#:	143814
Lab ID:	206946-007	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Prepared:	10/17/08
Diln Fac:	1.000	Analyzed:	10/20/08

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND	0.09
Endrin aldehyde	ND	0.09
4,4'-DDT	ND	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	51	37-120
Decachlorobiphenyl	40	29-141

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8081A
Field ID:	GWGW2327	Batch#:	143814
Lab ID:	206946-008	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Prepared:	10/17/08
Diln Fac:	1.000	Analyzed:	10/20/08

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND	0.09
Endrin aldehyde	ND	0.09
4,4'-DDT	ND	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	73	37-120
Decachlorobiphenyl	61	29-141

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8081A
Field ID:	EBGW0016	Batch#:	143814
Lab ID:	206946-014	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Prepared:	10/17/08
Diln Fac:	1.000	Analyzed:	10/20/08

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND	0.09
Endrin aldehyde	ND	0.09
4,4'-DDT	ND	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	66	37-120
Decachlorobiphenyl	59	29-141

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC465932	Batch#:	143814
Matrix:	Water	Prepared:	10/17/08
Units:	ug/L	Analyzed:	10/20/08

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND #	0.1
Endrin aldehyde	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	68	37-120
Decachlorobiphenyl	65	29-141

#= CCV drift outside limits; average CCV drift within limits per method requirements
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8081A
Matrix:	Water	Batch#:	143814
Units:	ug/L	Prepared:	10/17/08
Diln Fac:	1.000	Analyzed:	10/20/08

Type: BS Lab ID: QC465933

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	0.2000	0.1767	88	63-126
Heptachlor	0.2000	0.1640	82	48-127
Aldrin	0.2000	0.1722	86	45-127
Dieldrin	0.4000	0.3629	91	61-135
Endrin	0.4000	0.3757	94	56-142
4,4'-DDT	0.4000	0.3946	99	49-140

Surrogate	%REC	Limits
TCMX	60	37-120
Decachlorobiphenyl	67	29-141

Type: BSD Lab ID: QC465934

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.2000	0.2044	102	63-126	15	20
Heptachlor	0.2000	0.1536	77	48-127	7	30
Aldrin	0.2000	0.1962	98	45-127	13	28
Dieldrin	0.4000	0.4141	104	61-135	13	23
Endrin	0.4000	0.4328	108	56-142	14	31
4,4'-DDT	0.4000	0.4913	123	49-140	22	29

Surrogate	%REC	Limits
TCMX	68	37-120
Decachlorobiphenyl	67	29-141

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8082
Matrix:	Water	Sampled:	10/16/08
Units:	ug/L	Received:	10/16/08
Diln Fac:	1.000	Prepared:	10/17/08
Batch#:	143813		

Field ID:	GWGW2331A	Analyzed:	10/20/08
Type:	SAMPLE	Cleanup Method:	EPA 3665A
Lab ID:	206946-004		

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	74	53-124
Decachlorobiphenyl	27	23-120

Field ID:	GWGW2331B	Analyzed:	10/20/08
Type:	SAMPLE	Cleanup Method:	EPA 3665A
Lab ID:	206946-005		

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	80	53-124
Decachlorobiphenyl	24	23-120

Field ID:	GWGW2330	Analyzed:	10/20/08
Type:	SAMPLE	Cleanup Method:	EPA 3665A
Lab ID:	206946-006		

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	87	53-124
Decachlorobiphenyl	64	23-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8082
Matrix:	Water	Sampled:	10/16/08
Units:	ug/L	Received:	10/16/08
Diln Fac:	1.000	Prepared:	10/17/08
Batch#:	143813		

Field ID:	GWGW2329	Analyzed:	10/20/08
Type:	SAMPLE	Cleanup Method:	EPA 3665A
Lab ID:	206946-007		

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	89	53-124
Decachlorobiphenyl	50	23-120

Field ID:	GWGW2327	Analyzed:	10/21/08
Type:	SAMPLE	Cleanup Method:	EPA 3665A
Lab ID:	206946-008		

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	85	53-124
Decachlorobiphenyl	58	23-120

Field ID:	EBGW0016	Analyzed:	10/21/08
Type:	SAMPLE	Cleanup Method:	EPA 3665A
Lab ID:	206946-014		

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	88	53-124
Decachlorobiphenyl	64	23-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8082
Matrix:	Water	Sampled:	10/16/08
Units:	ug/L	Received:	10/16/08
Diln Fac:	1.000	Prepared:	10/17/08
Batch#:	143813		

Type:	BLANK	Analyzed:	10/20/08
Lab ID:	QC465928	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	79	53-124
Decachlorobiphenyl	90	23-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC465929	Batch#:	143813
Matrix:	Water	Prepared:	10/17/08
Units:	ug/L	Analyzed:	10/20/08

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	5.000	4.932	99	71-139
Aroclor-1260	5.000	5.490	110	75-141

Surrogate	%REC	Limits
TCMX	75	53-124
Decachlorobiphenyl	75	23-120

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3520C
Project#:	388-1856	Analysis:	EPA 8082
Field ID:	ZZZZZZZZZZ	Batch#:	143813
MSS Lab ID:	206841-005	Sampled:	10/13/08
Matrix:	Water	Received:	10/14/08
Units:	ug/L	Prepared:	10/17/08
Diln Fac:	1.000	Analyzed:	10/20/08

Type: MS Cleanup Method: EPA 3665A
Lab ID: QC465930

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<0.1105	4.854	5.009	103	32-146
Aroclor-1260	<0.1489	4.854	5.526	114	53-127

Surrogate	%REC	Limits
TCMX	87	53-124
Decachlorobiphenyl	63	23-120

Type: MSD Cleanup Method: EPA 3665A
Lab ID: QC465931

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	4.854	4.874	100	32-146	3	34
Aroclor-1260	4.854	5.424	112	53-127	2	37

Surrogate	%REC	Limits
TCMX	87	53-124
Decachlorobiphenyl	59	23-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Analyte:	Chromium	Batch#:	143788
Field ID:	GWGW2351	Sampled:	10/16/08
Lab ID:	206946-001	Received:	10/16/08
Matrix:	Filtrate	Prepared:	10/17/08
Units:	ug/L	Analyzed:	10/21/08
Diln Fac:	1.000		

Result	RL
33	5.0

RL= Reporting Limit

57.0

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	TPEF0363	Batch#:	143788
Lab ID:	206946-003	Sampled:	10/16/08
Matrix:	Filtrate	Received:	10/16/08
Units:	ug/L	Prepared:	10/17/08
Diln Fac:	1.000	Analyzed:	10/21/08

Analyte	Result	RL
Calcium	49,000	500
Magnesium	86,000	500
Potassium	760	500
Sodium	44,000	500

RL= Reporting Limit

58.0

Curtis & Tompkins, Ltd.

Dissolved Metals Analytical Report

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	GWGW2327	Sampled:	10/16/08
Lab ID:	206946-008	Received:	10/16/08
Matrix:	Filtrate	Prepared:	10/17/08
Units:	ug/L	Analyzed:	10/21/08
Batch#:	143788		

Analyte	Result	RL	Diln Fac
Boron	1,100	100	1.000
Calcium	70,000	500	1.000
Iron	ND	100	1.000
Magnesium	180,000	1,000	5.000
Manganese	9.3	5.0	1.000
Potassium	2,800	500	1.000
Sodium	91,000	500	1.000

ND= Not Detected
RL= Reporting Limit

59.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC465807	Batch#:	143788
Matrix:	Filtrate	Prepared:	10/17/08
Units:	ug/L	Analyzed:	10/21/08

Analyte	Result	RL
Boron	ND	100
Calcium	ND	500
Chromium	ND	5.0
Iron	ND	100
Magnesium	ND	500
Manganese	ND	5.0
Potassium	ND	500
Sodium	ND	500

ND= Not Detected
RL= Reporting Limit

60.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Matrix:	Filtrate	Batch#:	143788
Units:	ug/L	Prepared:	10/17/08
Diln Fac:	1.000	Analyzed:	10/21/08

Type: BS Lab ID: QC465808

Analyte	Spiked	Result	%REC	Limits
Boron	1,000	982.1	98	80-120
Calcium	20,000	20,330	102	80-120
Chromium	200.0	195.4	98	80-120
Iron	1,000	1,099	110	80-120
Magnesium	20,000	20,370	102	80-120
Manganese	50.00	51.97	104	80-120
Potassium	10,000	10,210	102	80-120
Sodium	20,000	20,650	103	80-120

Type: BSD Lab ID: QC465809

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Boron	1,000	1,002	100	80-120	2	20
Calcium	20,000	19,390	97	80-120	5	20
Chromium	200.0	195.7	98	80-120	0	20
Iron	1,000	1,009	101	80-120	9	20
Magnesium	20,000	19,330	97	80-120	5	20
Manganese	50.00	51.52	103	80-120	1	20
Potassium	10,000	9,898	99	80-120	3	20
Sodium	20,000	19,690	98	80-120	5	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	143788
MSS Lab ID:	206762-001	Sampled:	10/09/08
Matrix:	Filtrate	Received:	10/10/08
Units:	ug/L	Prepared:	10/17/08
Diln Fac:	1.000	Analyzed:	10/21/08

Type: MS Lab ID: QC465810

Analyte	MSS Result	Spiked	Result	%REC	Limits
Boron	58.22	1,000	1,087	103	79-121
Calcium	77,740	20,000	93,060	77	63-130
Chromium	0.6709	200.0	195.2	97	78-120
Iron	13,420	1,000	13,720	30 NM	66-126
Magnesium	37,210	20,000	54,180	85	66-126
Manganese	2,005	50.00	2,031	53 NM	73-121
Potassium	684.3	10,000	11,130	104	68-125
Sodium	94,800	20,000	120,000 >LR	126 NM	60-131

Type: MSD Lab ID: QC465811

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Boron	1,000	1,090	103	79-121	0	20
Calcium	20,000	94,840	86	63-130	2	20
Chromium	200.0	195.4	97	78-120	0	20
Iron	1,000	14,060	64 NM	66-126	2	20
Magnesium	20,000	55,190	90	66-126	2	20
Manganese	50.00	2,116	222 NM	73-121	4	20
Potassium	10,000	10,820	101	68-125	3	20
Sodium	20,000	121,300 >LR	132 NM	60-131	NC	20

NC= Not Calculated
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Units:	ug/L
Type:	Serial Dilution	Batch#:	143788
MSS Lab ID:	206762-001	Sampled:	10/09/08
Lab ID:	QC465812	Received:	10/10/08
Matrix:	Filtrate	Analyzed:	10/21/08

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln Fac
Boron	58.22	100.0	78.27 J	500.0	NC	10	5.000
Calcium	77,740	500.0	75,070	1,000	3	10	5.000
Chromium	0.6709	5.000	ND	25.00	NC	10	5.000
Iron	13,420	100.0	12,990	500.0	3	10	5.000
Magnesium	37,210	500.0	36,080	1,000	3	10	5.000
Manganese	2,005	5.000	1,939	25.00	3	10	5.000
Potassium	684.3	500.0	ND	2,500	NC	10	5.000
Sodium	94,800	2,500	82,430	12,500	13 *	10	25.00

*= Value outside of QC limits; see narrative
J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals Analytical Report

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Units:	ug/L
Type:	Post Digest Spike	Batch#:	143788
MSS Lab ID:	206762-001	Sampled:	10/09/08
Lab ID:	QC465813	Received:	10/10/08
Matrix:	Filtrate	Analyzed:	10/21/08

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln Fac
Boron	58.22	1,000	1,074	102	75-125	1.000
Calcium	77,740	20,000	93,910	81	75-125	1.000
Chromium	0.6709	200.0	193.0	96	75-125	1.000
Iron	13,420	1,000	13,850	44 NM	75-125	1.000
Magnesium	37,210	20,000	55,060	89	75-125	1.000
Manganese	2,005	50.00	2,039	68 NM	75-125	1.000
Potassium	684.3	10,000	10,860	102	75-125	1.000
Sodium	94,800	100,000	198,500	104	75-125	5.000

NM= Not Meaningful: Sample concentration > 4X spike concentration

64.0

Curtis & Tompkins, Ltd.

Dissolved California Title 22 Metals

Lab #:	206946	Project#:	388-1856
Client:	Weiss Associates	Location:	UC Davis
Field ID:	TPEF0363	Diln Fac:	1.000
Lab ID:	206946-003	Sampled:	10/16/08
Matrix:	Filtrate	Received:	10/16/08
Units:	ug/L		

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Arsenic	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Barium	210	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Beryllium	ND	2.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Cadmium	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Chromium	41	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Cobalt	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Copper	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Lead	ND	3.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Mercury	ND	0.20	143855	10/20/08	10/20/08	METHOD	EPA 7470A
Molybdenum	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Nickel	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Selenium	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Silver	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Thallium	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Vanadium	9.9	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Zinc	ND	20	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B

ND= Not Detected
RL= Reporting Limit

37.0

Curtis & Tompkins, Ltd.

Dissolved California Title 22 Metals

Lab #:	206946	Project#:	388-1856
Client:	Weiss Associates	Location:	UC Davis
Field ID:	GWGW2331A	Diln Fac:	1.000
Lab ID:	206946-004	Sampled:	10/16/08
Matrix:	Filtrate	Received:	10/16/08
Units:	ug/L		

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Arsenic	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Barium	56	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Beryllium	ND	2.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Cadmium	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Chromium	73	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Cobalt	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Copper	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Lead	ND	3.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Mercury	ND	0.20	143855	10/20/08	10/20/08	METHOD	EPA 7470A
Molybdenum	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Nickel	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Selenium	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Silver	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Thallium	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Vanadium	13	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Zinc	ND	20	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B

ND= Not Detected
RL= Reporting Limit

38.0

Curtis & Tompkins, Ltd.

Dissolved California Title 22 Metals

Lab #:	206946	Project#:	388-1856
Client:	Weiss Associates	Location:	UC Davis
Field ID:	GWGW2331B	Diln Fac:	1.000
Lab ID:	206946-005	Sampled:	10/16/08
Matrix:	Filtrate	Received:	10/16/08
Units:	ug/L		

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Arsenic	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Barium	55	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Beryllium	ND	2.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Cadmium	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Chromium	72	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Cobalt	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Copper	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Lead	ND	3.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Mercury	ND	0.20	143855	10/20/08	10/20/08	METHOD	EPA 7470A
Molybdenum	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Nickel	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Selenium	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Silver	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Thallium	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Vanadium	12	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Zinc	ND	20	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B

ND= Not Detected
RL= Reporting Limit

39.0

Curtis & Tompkins, Ltd.

Dissolved California Title 22 Metals

Lab #:	206946	Project#:	388-1856
Client:	Weiss Associates	Location:	UC Davis
Field ID:	GWGW2330	Diln Fac:	1.000
Lab ID:	206946-006	Sampled:	10/16/08
Matrix:	Filtrate	Received:	10/16/08
Units:	ug/L		

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Arsenic	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Barium	110	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Beryllium	ND	2.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Cadmium	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Chromium	67	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Cobalt	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Copper	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Lead	ND	3.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Mercury	ND	0.20	143855	10/20/08	10/20/08	METHOD	EPA 7470A
Molybdenum	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Nickel	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Selenium	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Silver	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Thallium	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Vanadium	10	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Zinc	ND	20	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B

ND= Not Detected
RL= Reporting Limit

40.0

Curtis & Tompkins, Ltd.

Dissolved California Title 22 Metals

Lab #:	206946	Project#:	388-1856
Client:	Weiss Associates	Location:	UC Davis
Field ID:	GWGW2329	Diln Fac:	1.000
Lab ID:	206946-007	Sampled:	10/16/08
Matrix:	Filtrate	Received:	10/16/08
Units:	ug/L		

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Arsenic	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Barium	140	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Beryllium	ND	2.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Cadmium	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Chromium	40	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Cobalt	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Copper	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Lead	ND	3.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Mercury	ND	0.20	143855	10/20/08	10/20/08	METHOD	EPA 7470A
Molybdenum	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Nickel	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Selenium	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Silver	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Thallium	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Vanadium	9.6	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Zinc	ND	20	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B

ND= Not Detected
RL= Reporting Limit

41.0

Curtis & Tompkins, Ltd.

Dissolved California Title 22 Metals

Lab #:	206946	Project#:	388-1856
Client:	Weiss Associates	Location:	UC Davis
Field ID:	GWGW2327	Diln Fac:	1.000
Lab ID:	206946-008	Sampled:	10/16/08
Matrix:	Filtrate	Received:	10/16/08
Units:	ug/L		

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Arsenic	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Barium	56	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Beryllium	ND	2.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Cadmium	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Chromium	120	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Cobalt	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Copper	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Lead	ND	3.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Mercury	ND	0.20	143855	10/20/08	10/20/08	METHOD	EPA 7470A
Molybdenum	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Nickel	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Selenium	12	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Silver	ND	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Thallium	ND	10	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Vanadium	11	5.0	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B
Zinc	ND	20	143788	10/17/08	10/21/08	EPA 3010A	EPA 6010B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved California Title 22 Metals

Lab #:	206946	Project#:	388-1856
Client:	Weiss Associates	Location:	UC Davis
Field ID:	EBGW0016	Diln Fac:	1.000
Lab ID:	206946-014	Sampled:	10/16/08
Matrix:	Filtrate	Received:	10/16/08
Units:	ug/L	Analyzed:	10/21/08

Analyte	Result	RL	Batch#	Prepared	Prep	Analysis
Antimony	ND	10	143788	10/17/08	EPA 3010A	EPA 6010B
Arsenic	ND	5.0	143788	10/17/08	EPA 3010A	EPA 6010B
Barium	ND	5.0	143788	10/17/08	EPA 3010A	EPA 6010B
Beryllium	ND	2.0	143788	10/17/08	EPA 3010A	EPA 6010B
Cadmium	ND	5.0	143788	10/17/08	EPA 3010A	EPA 6010B
Chromium	ND	5.0	143788	10/17/08	EPA 3010A	EPA 6010B
Cobalt	ND	5.0	143788	10/17/08	EPA 3010A	EPA 6010B
Copper	ND	5.0	143788	10/17/08	EPA 3010A	EPA 6010B
Lead	ND	3.0	143788	10/17/08	EPA 3010A	EPA 6010B
Mercury	ND	0.20	143910	10/21/08	METHOD	EPA 7470A
Molybdenum	ND	5.0	143788	10/17/08	EPA 3010A	EPA 6010B
Nickel	ND	5.0	143788	10/17/08	EPA 3010A	EPA 6010B
Selenium	ND	10	143788	10/17/08	EPA 3010A	EPA 6010B
Silver	ND	5.0	143788	10/17/08	EPA 3010A	EPA 6010B
Thallium	ND	10	143788	10/17/08	EPA 3010A	EPA 6010B
Vanadium	ND	5.0	143788	10/17/08	EPA 3010A	EPA 6010B
Zinc	ND	20	143788	10/17/08	EPA 3010A	EPA 6010B

ND= Not Detected
RL= Reporting Limit

43.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC465807	Batch#:	143788
Matrix:	Filtrate	Prepared:	10/17/08
Units:	ug/L	Analyzed:	10/21/08

Analyte	Result	RL
Antimony	ND	10
Arsenic	ND	5.0
Barium	ND	5.0
Beryllium	ND	2.0
Cadmium	ND	5.0
Chromium	ND	5.0
Cobalt	ND	5.0
Copper	ND	5.0
Lead	ND	3.0
Molybdenum	ND	5.0
Nickel	ND	5.0
Selenium	ND	10
Silver	ND	5.0
Thallium	ND	10
Vanadium	ND	5.0
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Matrix:	Filtrate	Batch#:	143788
Units:	ug/L	Prepared:	10/17/08
Diln Fac:	1.000	Analyzed:	10/21/08

Type: BS Lab ID: QC465808

Analyte	Spiked	Result	%REC	Limits
Antimony	500.0	484.9	97	80-120
Arsenic	100.0	95.72	96	80-120
Barium	2,000	1,902	95	80-120
Beryllium	50.00	53.01	106	80-120
Cadmium	50.00	46.92	94	80-120
Chromium	200.0	195.4	98	80-120
Cobalt	500.0	461.0	92	80-120
Copper	250.0	236.3	95	80-120
Lead	100.0	99.98	100	80-120
Molybdenum	400.0	397.7	99	80-120
Nickel	500.0	470.2	94	80-120
Selenium	100.0	92.20	92	80-120
Silver	50.00	49.78	100	80-120
Thallium	100.0	97.42	97	80-120
Vanadium	500.0	493.2	99	80-120
Zinc	500.0	470.1	94	80-120

Type: BSD Lab ID: QC465809

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	500.0	481.5	96	80-120	1	20
Arsenic	100.0	95.35	95	80-120	0	20
Barium	2,000	1,909	95	80-120	0	20
Beryllium	50.00	52.98	106	80-120	0	20
Cadmium	50.00	46.78	94	80-120	0	20
Chromium	200.0	195.7	98	80-120	0	20
Cobalt	500.0	466.2	93	80-120	1	20
Copper	250.0	238.1	95	80-120	1	20
Lead	100.0	96.21	96	80-120	4	20
Molybdenum	400.0	398.1	100	80-120	0	20
Nickel	500.0	476.2	95	80-120	1	20
Selenium	100.0	93.96	94	80-120	2	20
Silver	50.00	49.90	100	80-120	0	20
Thallium	100.0	97.95	98	80-120	1	20
Vanadium	500.0	496.1	99	80-120	1	20
Zinc	500.0	475.2	95	80-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	143788
MSS Lab ID:	206762-001	Sampled:	10/09/08
Matrix:	Filtrate	Received:	10/10/08
Units:	ug/L	Prepared:	10/17/08
Diln Fac:	1.000	Analyzed:	10/21/08

Type: MS Lab ID: QC465810

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	<2.749	500.0	501.3	100	75-120
Arsenic	9.358	100.0	108.1	99	79-125
Barium	53.65	2,000	1,980	96	80-120
Beryllium	<0.1415	50.00	54.11	108	80-120
Cadmium	<1.469	50.00	45.91	92	80-120
Chromium	0.6709	200.0	195.2	97	78-120
Cobalt	3.735	500.0	455.6	90	76-120
Copper	<0.9723	250.0	243.6	97	75-120
Lead	<0.9197	100.0	77.33	77	71-120
Molybdenum	3.027	400.0	410.4	102	80-120
Nickel	1.867	500.0	457.9	91	74-120
Selenium	<2.464	100.0	98.93	99	73-125
Silver	<1.605	50.00	49.42	99	69-120
Thallium	<1.767	100.0	94.73	95	72-120
Vanadium	<0.9127	500.0	503.3	101	79-120
Zinc	<4.210	500.0	460.5	92	74-122

Type: MSD Lab ID: QC465811

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	500.0	502.7	101	75-120	0	20
Arsenic	100.0	106.2	97	79-125	2	20
Barium	2,000	1,981	96	80-120	0	20
Beryllium	50.00	53.87	108	80-120	0	20
Cadmium	50.00	45.47	91	80-120	1	20
Chromium	200.0	195.4	97	78-120	0	20
Cobalt	500.0	450.5	89	76-120	1	20
Copper	250.0	243.3	97	75-120	0	20
Lead	100.0	76.12	76	71-120	2	20
Molybdenum	400.0	406.6	101	80-120	1	20
Nickel	500.0	458.7	91	74-120	0	20
Selenium	100.0	98.18	98	73-125	1	20
Silver	50.00	49.66	99	69-120	0	20
Thallium	100.0	92.68	93	72-120	2	20
Vanadium	500.0	503.0	101	79-120	0	20
Zinc	500.0	455.8	91	74-122	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	143788
MSS Lab ID:	206762-001	Sampled:	10/09/08
Lab ID:	QC465812	Received:	10/10/08
Matrix:	Filtrate	Analyzed:	10/21/08
Units:	ug/L		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim
Antimony	ND	10.00	ND	41.23	NC	10
Arsenic	9.358	5.000	5.106 J	25.00	NC	10
Barium	53.65	5.000	55.10	25.00	3	10
Beryllium	ND	2.000	ND	10.00	NC	10
Cadmium	ND	5.000	ND	25.00	NC	10
Chromium	0.6709	5.000	ND	25.00	NC	10
Cobalt	3.735	5.000	3.539 J	25.00	NC	10
Copper	ND	5.000	ND	25.00	NC	10
Lead	ND	3.000	ND	15.00	NC	10
Molybdenum	3.027	5.000	5.338 J	25.00	NC	10
Nickel	1.867	5.000	ND	25.00	NC	10
Selenium	ND	10.00	ND	36.95	NC	10
Silver	ND	5.000	ND	25.00	NC	10
Thallium	ND	10.00	ND	26.51	NC	10
Vanadium	ND	5.000	ND	25.00	NC	10
Zinc	ND	20.00	ND	100.0	NC	10

J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	143788
MSS Lab ID:	206762-001	Sampled:	10/09/08
Lab ID:	QC465813	Received:	10/10/08
Matrix:	Filtrate	Analyzed:	10/21/08
Units:	ug/L		

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	<2.749	500.0	497.4	99	75-125
Arsenic	9.358	100.0	106.4	97	75-125
Barium	53.65	2,000	1,940	94	75-125
Beryllium	<0.1415	50.00	53.10	106	75-125
Cadmium	<1.469	50.00	45.26	91	75-125
Chromium	0.6709	200.0	193.0	96	75-125
Cobalt	3.735	500.0	446.9	89	75-125
Copper	<0.9723	250.0	240.1	96	75-125
Lead	<0.9197	100.0	74.83	75	75-125
Molybdenum	3.027	400.0	400.1	99	75-125
Nickel	1.867	500.0	452.3	90	75-125
Selenium	<2.464	100.0	95.17	95	75-125
Silver	<1.605	50.00	39.85	80	75-125
Thallium	<1.767	100.0	92.65	93	75-125
Vanadium	<0.9127	500.0	494.6	99	75-125
Zinc	<4.210	500.0	453.7	91	75-125

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	143855
Lab ID:	QC466122	Prepared:	10/20/08
Matrix:	Filtrate	Analyzed:	10/20/08
Units:	ug/L		

Result	RL
ND	0.20

ND= Not Detected
RL= Reporting Limit

45.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	143855
Matrix:	Filtrate	Prepared:	10/20/08
Units:	ug/L	Analyzed:	10/20/08
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC466123	5.000	5.200	104	80-120		
BSD	QC466124	5.000	5.190	104	80-120	0	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	143855
Field ID:	ZZZZZZZZZZ	Sampled:	10/09/08
MSS Lab ID:	206743-001	Received:	10/09/08
Matrix:	Filtrate	Prepared:	10/20/08
Units:	ug/L	Analyzed:	10/20/08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC466125	<0.05879	5.000	5.280	106	71-124		
MSD	QC466126		5.000	5.270	105	71-124	0	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	143855
MSS Lab ID:	206743-001	Sampled:	10/09/08
Lab ID:	QC466127	Received:	10/09/08
Matrix:	Filtrate	Analyzed:	10/20/08

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

53.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	143910
Lab ID:	QC466344	Prepared:	10/21/08
Matrix:	Water	Analyzed:	10/21/08
Units:	ug/L		

Result	RL
ND	0.20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	143910
Matrix:	Water	Prepared:	10/21/08
Units:	ug/L	Analyzed:	10/21/08
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC466345	5.000	5.470	109	80-120		
BSD	QC466346	5.000	5.480	110	80-120	0	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	143910
Field ID:	ZZZZZZZZZZ	Sampled:	10/13/08
MSS Lab ID:	206824-011	Received:	10/13/08
Matrix:	Filtrate	Prepared:	10/21/08
Units:	ug/L	Analyzed:	10/21/08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC466347	<0.04502	5.000	6.050	121	71-124		
MSD	QC466348		5.000	6.010	120	71-124	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	143910
MSS Lab ID:	206824-011	Sampled:	10/13/08
Lab ID:	QC466349	Received:	10/13/08
Matrix:	Filtrate	Analyzed:	10/21/08

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Nitrate Nitrogen

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Units:	mg/L
Matrix:	Water	Received:	10/16/08

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Sampled	Analyzed
GWGW2351	SAMPLE	206946-001	5.5	0.10	2.000	143778	10/16/08 08:50	10/17/08 16:36
GWGW2331A	SAMPLE	206946-004	13	0.50	10.00	143797	10/16/08 09:40	10/17/08 19:23
GWGW2331B	SAMPLE	206946-005	13	0.50	10.00	143797	10/16/08 09:40	10/17/08 14:04
GWGW2330	SAMPLE	206946-006	3.9	0.10	2.000	143797	10/16/08 11:35	10/17/08 19:05
GWGW2329	SAMPLE	206946-007	0.65	0.05	1.000	143797	10/16/08 14:00	10/17/08 16:01
	BLANK	QC465762	ND	0.05	1.000	143778		10/17/08 07:48
	BLANK	QC465861	ND	0.05	1.000	143797		10/17/08 12:18

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Nitrate Nitrogen

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Received:	10/16/08
Units:	mg/L		

Field ID	Type	MSS Lab ID	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Analyzed
	BS		QC465763	Water		1.000	0.9735	97	80-120			1.000	143778		10/17/08 08:39
	BSD		QC465764	Water		1.000	0.9714	97	80-120	0	20	1.000	143778		10/17/08 08:57
TPEF0363	MS	206946-003	QC465923	Filtrate	9.658	2.500	12.02	95	80-120			5.000	143778	10/16/08 08:30	10/17/08 17:28
TPEF0363	MSD	206946-003	QC465924	Filtrate		2.500	11.95	92	80-120	1	20	5.000	143778	10/16/08 08:30	10/17/08 17:45
	BS		QC465862	Water		1.000	1.035	103	80-120			1.000	143797		10/17/08 12:37
	BSD		QC465863	Water		1.000	1.018	102	80-120	2	20	1.000	143797		10/17/08 12:55
GWGW2331A	MS	206946-004	QC465910	Water	12.66	10.00	23.09	104	80-120			20.00	143797	10/16/08 09:40	10/17/08 16:56
GWGW2331A	MSD	206946-004	QC465911	Water		10.00	22.83	102	80-120	1	20	20.00	143797	10/16/08 09:40	10/17/08 17:13

RPD= Relative Percent Difference

20.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins, Ltd.

Dissolved Curtis & Tompkins Laboratories Analytical Report

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Analysis:	EPA 300.0
Project#:	388-1856		
Units:	mg/L	Received:	10/16/08
Batch#:	143778		

Field ID:	TPEF0363	Matrix:	Filtrate
Type:	SAMPLE	Sampled:	10/16/08 08:30
Lab ID:	206946-003		

Analyte	Result	RL	Diln Fac	Analyzed
Chloride	19	0.20	1.000	10/17/08 09:42
Nitrogen, Nitrate	9.7	0.25	5.000	10/17/08 16:53
Sulfate	49	0.50	1.000	10/17/08 09:42

Field ID:	GWGW2327	Matrix:	Filtrate
Type:	SAMPLE	Sampled:	10/16/08 13:55
Lab ID:	206946-008		

Analyte	Result	RL	Diln Fac	Analyzed
Fluoride	0.28	0.10	1.000	10/17/08 10:00
Chloride	56	2.0	10.00	10/17/08 17:11
Nitrogen, Nitrate	27	0.50	10.00	10/17/08 17:11
Sulfate	160	5.0	10.00	10/17/08 17:11

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC465762	Analyzed:	10/17/08 07:48
Matrix:	Water		

Analyte	Result	RL
Fluoride	ND	0.10
Chloride	ND	0.20
Nitrogen, Nitrate	ND	0.05
Sulfate	ND	0.50

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Curtis & Tompkins Laboratories Analytical Report

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Analysis:	EPA 300.0
Project#:	388-1856		
Matrix:	Water	Diln Fac:	1.000
Units:	mg/L	Batch#:	143778

Type: BS Analyzed: 10/17/08 08:39
Lab ID: QC465763

Analyte	Spiked	Result	%REC	Limits
Fluoride	2.000	2.066	103	74-120
Chloride	4.000	4.001	100	80-120
Nitrogen, Nitrate	1.000	0.9735	97	80-120
Sulfate	10.00	9.869	99	80-120

Type: BSD Analyzed: 10/17/08 08:57
Lab ID: QC465764

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Fluoride	2.000	1.994	100	74-120	4	20
Chloride	4.000	3.929	98	80-120	2	20
Nitrogen, Nitrate	1.000	0.9714	97	80-120	0	20
Sulfate	10.00	9.437	94	80-120	4	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Curtis & Tompkins Laboratories Analytical Report

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Analysis:	EPA 300.0
Project#:	388-1856		
Field ID:	TPEF0363	Diln Fac:	5.000
MSS Lab ID:	206946-003	Batch#:	143778
Matrix:	Filtrate	Sampled:	10/16/08 08:30
Units:	mg/L	Received:	10/16/08

Type: MS Analyzed: 10/17/08 17:28
Lab ID: QC465923

Analyte	MSS Result	Spiked	Result	%REC	Limits
Fluoride	<0.03347	5.000	5.895	118	66-120
Chloride	18.93	10.00	29.06	101	80-120
Nitrogen, Nitrate	9.658	2.500	12.02	95	80-120
Sulfate	48.83	25.00	70.47	87	80-120

Type: MSD Analyzed: 10/17/08 17:45
Lab ID: QC465924

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Fluoride	5.000	5.456	109	66-120	8	20
Chloride	10.00	28.66	97	80-120	1	20
Nitrogen, Nitrate	2.500	11.95	92	80-120	1	20
Sulfate	25.00	70.85	88	80-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Hexavalent Chromium

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Field ID:	EBGW0016	Batch#:	143756
Matrix:	Water	Sampled:	10/16/08 15:15
Units:	ug/L	Received:	10/16/08

Type	Lab ID	Result	RL	Analyzed
SAMPLE	206946-014	ND	1.0	10/16/08 18:54
BLANK	QC465684	ND	1.0	10/16/08 13:19

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Hexavalent Chromium

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	143756
MSS Lab ID:	206941-004	Sampled:	10/16/08 08:26
Matrix:	Water	Received:	10/16/08
Units:	ug/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
BS	QC465685		20.00	20.07	100	90-110			10/16/08 13:32
BSD	QC465686		20.00	19.60	98	90-110	2	20	10/16/08 13:44
MS	QC465687	<0.1302	10.00	8.082	81 *	85-115			10/16/08 19:39
MSD	QC465688		10.00	8.012	80 *	85-115	1	20	10/16/08 19:51

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Hexavalent Chromium

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Batch#:	143756
Field ID:	GWGW2327	Sampled:	10/16/08 13:55
Units:	ug/L	Received:	10/16/08
Diln Fac:	1.000		

Type	Lab ID	Matrix	Result	RL	Analyzed
SAMPLE	206946-008	Filtrate	120	1.0	10/16/08 20:05
BLANK	QC465684	Water	ND	1.0	10/16/08 13:19

ND= Not Detected
RL= Reporting Limit

9.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Hexavalent Chromium

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7199
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	143756
MSS Lab ID:	206941-004	Sampled:	10/16/08 08:26
Matrix:	Water	Received:	10/16/08
Units:	ug/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
BS	QC465685		20.00	20.07	100	90-110			10/16/08 13:32
BSD	QC465686		20.00	19.60	98	90-110	2	20	10/16/08 13:44
MS	QC465687	<0.1302	10.00	8.082	81 *	85-115			10/16/08 19:39
MSD	QC465688		10.00	8.012	80 *	85-115	1	20	10/16/08 19:51

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Matrix:	Water	Sampled:	10/16/08
Units:	mg/L	Received:	10/16/08
Batch#:	143883	Analyzed:	10/20/08

Field ID:	TPEF0363	Lab ID:	206946-003
Type:	SAMPLE	Diln Fac:	6.700

Analyte	Result	RL
Alkalinity, Bicarbonate	460	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	460	6.7

Field ID:	GWGW2327	Lab ID:	206946-008
Type:	SAMPLE	Diln Fac:	6.700

Analyte	Result	RL
Alkalinity, Bicarbonate	740	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	740	6.7

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC466226		

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	4.000
Lab ID:	QC466227	Batch#:	143883
Matrix:	Water	Analyzed:	10/20/08

Spiked	Result	%REC	Limits
200.0	193.2	97	90-110

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	4.000
Field ID:	ZZZZZZZZZZ	Batch#:	143883
MSS Lab ID:	206961-001	Sampled:	10/15/08
Matrix:	Water	Received:	10/17/08
Units:	mg/L	Analyzed:	10/20/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC466228	806.7	200.0	991.6	92	80-120		
MSD	QC466229		200.0	993.6	93	80-120	0	25

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Organic Carbon (DOC)

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Dissolved Organic Carbon	Batch#:	143777
Field ID:	GWGW2327	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	mg/L	Analyzed:	10/17/08
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	206946-008	1.1	1.0
BLANK	QC465758	ND	1.0

ND= Not Detected
RL= Reporting Limit

5.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Organic Carbon (DOC)

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Dissolved Organic Carbon	Batch#:	143777
Field ID:	ZZZZZZZZZZ	Sampled:	10/16/08
MSS Lab ID:	206947-001	Received:	10/16/08
Matrix:	Water	Analyzed:	10/17/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
LCS	QC465759		10.00	10.70	107	90-110			1.000
MS	QC465760	0.9204	10.00	12.02	111	80-121			2.000
MSD	QC465761		10.00	11.84	109	80-121	2	20	2.000

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Ferrous Iron (Fe+2)

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM3500FE-B
Analyte:	Ferrous Iron (Fe+2)	Diln Fac:	1.000
Field ID:	GWGW2327	Batch#:	143763
Matrix:	Water	Sampled:	10/16/08 13:55
Units:	mg/L	Received:	10/16/08

Type	Lab ID	Result	RL	Prepared	Analyzed
SAMPLE	206946-008	ND	0.10	10/16/08 20:45	10/16/08 20:49
BLANK	QC465713	ND	0.10	10/16/08 19:45	10/16/08 19:52

ND= Not Detected
RL= Reporting Limit

35.0

Curtis & Tompkins, Ltd.

Batch QC Report

Ferrous Iron (Fe+2)

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM3500FE-B
Analyte:	Ferrous Iron (Fe+2)	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	143763
MSS Lab ID:	206944-008	Sampled:	10/16/08 13:45
Matrix:	Water	Received:	10/16/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Prepared	Analyzed
LCS	QC465714		0.8000	0.7959	99	90-110			10/16/08 19:45	10/16/08 19:52
MS	QC465715	11.06	100.0	102.1	91	73-136			10/16/08 20:30	10/16/08 20:39
MSD	QC465716		100.0	100.7	90	73-136	1	20	10/16/08 20:30	10/16/08 20:39

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2540C
Analyte:	Total Dissolved Solids	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	mg/L	Prepared:	10/17/08
Batch#:	143800	Analyzed:	10/20/08

Field ID	Type	Lab ID	Result	RL	Diln Fac
TPEF0363	SAMPLE	206946-003	580	11	1.111
GWGW2327	SAMPLE	206946-008	1,150	13	1.250
	BLANK	QC465878	ND	10	1.000

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Dissolved Solids (TDS)

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2540C
Analyte:	Total Dissolved Solids	Batch#:	143800
Field ID:	ZZZZZZZZZZ	Sampled:	10/14/08
MSS Lab ID:	206852-002	Received:	10/14/08
Matrix:	Water	Prepared:	10/17/08
Units:	mg/L	Analyzed:	10/20/08

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim	Diln Fac
BS	QC465879		104.0	88.00		85	73-120			1.000
BSD	QC465880		104.0	98.00		94	73-120	11	22	1.000
SDUP	QC465881	41,100		41,900	500.0			2	20	50.00

RL= Reporting Limit
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Organic Carbon (TOC)

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Batch#:	143927
Matrix:	Water	Sampled:	10/16/08
Units:	mg/L	Received:	10/16/08
Diln Fac:	1.000	Analyzed:	10/21/08

Field ID	Type	Lab ID	Result	RL
TPIN0363	SAMPLE	206946-002	0.74	0.50
GWGW2327	SAMPLE	206946-008	1.1	0.50
	BLANK	QC466428	ND	0.50

ND= Not Detected
RL= Reporting Limit

65.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Organic Carbon (TOC)

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Batch#:	143927
Field ID:	ZZZZZZZZZZ	Sampled:	10/13/08
MSS Lab ID:	206839-001	Received:	10/14/08
Matrix:	Water	Analyzed:	10/21/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
LCS	QC466429		10.00	9.632	96	90-110			1.000
MS	QC466430	1.160	10.00	10.63	95	62-124			2.000
MSD	QC466431		10.00	10.72	96	62-124	1	20	2.000

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Orthophosphate Phosphorous

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Analysis:	SM4500P-E
Project#:	388-1856		
Analyte:	Orthophosphate (as P)	Batch#:	143826
Field ID:	GWGW2327	Sampled:	10/16/08 13:55
Matrix:	Filtrate	Received:	10/16/08
Units:	mg/L	Analyzed:	10/18/08 11:00
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	206946-008	0.17	0.030
BLANK	QC465980	ND	0.030

ND= Not Detected
RL= Reporting Limit

17.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Orthophosphate Phosphorous

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Analysis:	SM4500P-E
Project#:	388-1856		
Analyte:	Orthophosphate (as P)	Diln Fac:	1.000
Field ID:	GWGW2327	Batch#:	143826
MSS Lab ID:	206946-008	Sampled:	10/16/08 13:55
Matrix:	Filtrate	Received:	10/16/08
Units:	mg/L	Analyzed:	10/18/08 11:00

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC465981		0.4000	0.3978	99	80-120		
MS	QC465982	0.1738	0.4000	0.5663	98	80-136		
MSD	QC465983		0.4000	0.5694	99	80-136	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved Total Phosphorous

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Analysis:	SM4500P-E
Project#:	388-1856		
Analyte:	Phosphorous	Sampled:	10/16/08
Units:	mg/L	Received:	10/16/08
Batch#:	143776	Analyzed:	10/17/08

Field ID	Type	Lab ID	Matrix	Result	RL	Diln Fac
GWGW2327	SAMPLE	206946-008	Filtrate	0.18	0.050	1.667
GWGW2310	SAMPLE	206946-009	Filtrate	0.17	0.050	1.667
GWGW2308	SAMPLE	206946-010	Filtrate	0.25	0.050	1.667
GWGW2317	SAMPLE	206946-011	Filtrate	0.12	0.050	1.667
GWGW2307	SAMPLE	206946-012	Filtrate	0.16	0.050	1.667
	BLANK	QC465754	Water	ND	0.030	1.000

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Total Phosphorous

Lab #:	206946	Location:	UC Davis
Client:	Weiss Associates	Analysis:	SM4500P-E
Project#:	388-1856		
Analyte:	Phosphorous	Batch#:	143776
Field ID:	GWGW2360	Sampled:	10/13/08
MSS Lab ID:	206823-006	Received:	10/13/08
Matrix:	Water	Analyzed:	10/17/08
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
LCS	QC465755		0.3960	0.4179	106	72-134			1.000
MS	QC465756	0.1079	0.3960	0.5041	100	19-182			1.667
MSD	QC465757		0.3960	0.5207	104	19-182	3	26	1.667

RPD= Relative Percent Difference

Chain of Custody Record

Curtis and Thompkins

2324 Fifth Street
Berkeley, CA 94710
800-522-1878

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Agata Sulczynski (aas@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-2-11
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AguaTierra Associates Incorporated, DBA

Client Contact	Project Manager: Bob Devany	Sampled by: DMB	Date: 11-13-08	COC Number:
Weiss Associates	Tel: 510-450-6144	Lab Contact:	Carrier: CWB	Page 1 of 1 pages
5801 Christie Avenue, Suite 600	Analysis Turnaround Time			Job No. 207348
Emeryville, CA 94608	Calendar (C) or Work Days (W) ---			
(510) 450-6119 Phone	TAT if different from Below _____			SDG No.
(510) 547-5043 FAX	1 week			
Job Name: UC Davis				
Address: One Shields Ave, Davis				

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	VOCs SW846 8260	TOC SM5310C	Nitrate-N, sulfate,chloride EPA 300.0	Title 22 Metals: Sw846 6010	Ca,K,Mg,Na: Sw846 6010	TDS Alkalinity SM2540C/SM2320B	Sample Specific Notes:
1	TPIN0364	11-13-08	1330	4		4	x	x	~~x~~	~~x~~ NA	~~x~~ DMB	~~x~~	
2	TPEF0364		1345			6	x	~~x~~ NA	x	x	x	x	Nitrate 48 hr hold
3	GWGW2366		1233			3	x	DMB					
4	TBGW0520		500	2		3	X						
							1						

Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4=HNO3, 5=NaOH; 6= Other _____

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **Level III Reporting**
Nitrate 48 hr hold

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
DMB	WEISS	11-13-08 1745	JMD	WEISS	11/14/08 1600
JMD	WEISS	11/14/08 1600		CET	11/14/08 1600

contact Cold Rm

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd

Login # 207848 Date Received 11-14-08 Number of coolers 1
Client WA Project UC Davis

Date Opened 11-14-08 By (print) J. Krausser (sign)
Date Logged in ↓ By (print) S. Evans (sign)

1. Did cooler come with a shipping slip (airbill, etc)? ..... YES ~~NO~~
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____

2B. Were custody seals intact upon arrival? ..... YES NO ~~N/A~~

3. Were custody papers dry and intact when received? ..... YES NO
4. Were custody papers filled out properly (ink, signed, etc)? ..... YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ..... YES NO
6. Indicate the packing in cooler: (if other, describe) _____

   ☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

   Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) _____

   ☒ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ..... YES NO
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? ..... YES NO
10. Are samples in the appropriate containers for indicated tests? ..... YES NO
11. Are sample labels present, in good condition and complete? ..... YES NO
12. Do the sample labels agree with custody papers? ..... YES NO
13. Was sufficient amount of sample sent for tests requested? ..... YES NO
14. Are the samples appropriately preserved? ..... YES NO N/A
15. Are bubbles > 6mm absent in VOA samples? ..... YES NO N/A
16. Was the client contacted concerning this sample delivery? ..... YES ~~NO~~
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TPIN0364	Batch#:	145173
Lab ID:	207848-001	Sampled:	11/13/08
Matrix:	Water	Received:	11/14/08
Units:	ug/L	Analyzed:	11/21/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	25	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TPIN0364	Batch#:	145173
Lab ID:	207848-001	Sampled:	11/13/08
Matrix:	Water	Received:	11/14/08
Units:	ug/L	Analyzed:	11/21/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-125
1,2-Dichloroethane-d4	95	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	117	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TPEF0364	Batch#:	145173
Lab ID:	207848-002	Sampled:	11/13/08
Matrix:	Water	Received:	11/14/08
Units:	ug/L	Analyzed:	11/21/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TPEF0364	Batch#:	145173
Lab ID:	207848-002	Sampled:	11/13/08
Matrix:	Water	Received:	11/14/08
Units:	ug/L	Analyzed:	11/21/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-125
1,2-Dichloroethane-d4	96	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	116	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2366	Batch#:	145173
Lab ID:	207848-003	Sampled:	11/13/08
Matrix:	Water	Received:	11/14/08
Units:	ug/L	Analyzed:	11/21/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	0.5	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	GWGW2366	Batch#:	145173
Lab ID:	207848-003	Sampled:	11/13/08
Matrix:	Water	Received:	11/14/08
Units:	ug/L	Analyzed:	11/21/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-125
1,2-Dichloroethane-d4	94	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	115	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TBGW0520	Batch#:	145173
Lab ID:	207848-004	Sampled:	11/13/08
Matrix:	Water	Received:	11/14/08
Units:	ug/L	Analyzed:	11/20/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Field ID:	TBGW0520	Batch#:	145173
Lab ID:	207848-004	Sampled:	11/13/08
Matrix:	Water	Received:	11/14/08
Units:	ug/L	Analyzed:	11/20/08
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-125
1,2-Dichloroethane-d4	92	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	117	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC471684	Batch#:	145173
Matrix:	Water	Analyzed:	11/20/08
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC471684	Batch#:	145173
Matrix:	Water	Analyzed:	11/20/08
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-125
1,2-Dichloroethane-d4	93	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	119	80-122

ND= Not Detected
RL= Reporting Limit

34.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 5030B
Project#:	388-1856	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	145173
Units:	ug/L	Analyzed:	11/20/08
Diln Fac:	1.000		

Type: BS Lab ID: QC471685

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	22.50	25.58	114	73-133
Benzene	22.50	24.34	108	80-120
Trichloroethene	22.50	22.66	101	80-120
Toluene	22.50	23.44	104	80-120
Chlorobenzene	22.50	22.35	99	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-125
1,2-Dichloroethane-d4	92	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	100	80-122

Type: BSD Lab ID: QC471686

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	22.50	26.15	116	73-133	2	20
Benzene	22.50	24.78	110	80-120	2	20
Trichloroethene	22.50	23.21	103	80-120	2	20
Toluene	22.50	23.64	105	80-120	1	20
Chlorobenzene	22.50	23.30	104	80-120	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-125
1,2-Dichloroethane-d4	90	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	99	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Metals Analytical Report

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	TPEF0364	Batch#:	144963
Matrix:	Water	Sampled:	11/13/08
Units:	ug/L	Received:	11/14/08
Diln Fac:	1.000	Prepared:	11/16/08

Type: SAMPLE Analyzed: 11/18/08
Lab ID: 207848-002

Analyte	Result	RL
Calcium	44,000	500
Magnesium	77,000	500
Potassium	660	500
Sodium	41,000	500

Type: BLANK Analyzed: 11/17/08
Lab ID: QC470824

Analyte	Result	RL
Calcium	ND	500
Magnesium	ND	500
Potassium	ND	500
Sodium	ND	500

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Matrix:	Water	Batch#:	144963
Units:	ug/L	Prepared:	11/16/08
Diln Fac:	1.000	Analyzed:	11/18/08

Type: BS Lab ID: QC470825

Analyte	Spiked	Result	%REC	Limits
Calcium	20,000	17,450	87	80-120
Magnesium	20,000	17,730	89	80-120
Potassium	10,000	8,482	85	80-120
Sodium	20,000	17,810	89	80-120

Type: BSD Lab ID: QC470826

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Calcium	20,000	19,820	99	80-120	13	20
Magnesium	20,000	20,140	101	80-120	13	20
Potassium	10,000	9,623	96	80-120	13	20
Sodium	20,000	20,170	101	80-120	12	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	144963
MSS Lab ID:	207819-001	Sampled:	11/13/08
Matrix:	Water	Received:	11/14/08
Units:	ug/L	Prepared:	11/16/08
Diln Fac:	1.000	Analyzed:	11/18/08

Type: MS Lab ID: QC470827

Analyte	MSS Result	Spiked	Result	%REC	Limits
Calcium	<41.36	20,000	18,290	91	63-130
Magnesium	<21.20	20,000	18,780	94	66-126
Potassium	<91.21	10,000	8,838	88	68-125
Sodium	<90.04	20,000	18,600	93	60-131

Type: MSD Lab ID: QC470828

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Calcium	20,000	18,310	92	63-130	0	20
Magnesium	20,000	18,080	90	66-126	4	20
Potassium	10,000	8,889	89	68-125	1	20
Sodium	20,000	18,540	93	60-131	0	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Units:	ug/L
Type:	Serial Dilution	Diln Fac:	5.000
MSS Lab ID:	207819-001	Batch#:	144963
Lab ID:	QC470829	Sampled:	11/13/08
Matrix:	Water	Received:	11/14/08

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Analyzed
Calcium	ND	500.0	ND	1,664	NC	10	11/17/08
Magnesium	ND	500.0	ND	1,641	NC	10	11/17/08
Potassium	167.4	500.0	580.6 J	2,500	NC	10	11/16/08
Sodium	ND	500.0	ND	2,500	NC	10	11/17/08

J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	144963
MSS Lab ID:	207819-001	Sampled:	11/13/08
Lab ID:	QC470830	Received:	11/14/08
Matrix:	Water	Analyzed:	11/18/08
Units:	ug/L		

Analyte	MSS Result	Spiked	Result	%REC	Limits
Calcium	<41.36	20,000	15,420	77	75-125
Magnesium	<21.20	20,000	16,000	80	75-125
Potassium	<91.21	10,000	5,397	54 *	75-125
Sodium	<90.04	20,000	13,100	66 *	75-125

*= Value outside of QC limits; see narrative

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	207848	Project#:	388-1856
Client:	Weiss Associates	Location:	UC Davis
Field ID:	TPEF0364	Diln Fac:	1.000
Lab ID:	207848-002	Sampled:	11/13/08
Matrix:	Water	Received:	11/14/08
Units:	ug/L		

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	10	144963	11/16/08	11/16/08	EPA 3010A	EPA 6010B
Arsenic	ND	5.0	144963	11/16/08	11/16/08	EPA 3010A	EPA 6010B
Barium	190	5.0	144963	11/16/08	11/16/08	EPA 3010A	EPA 6010B
Beryllium	ND	2.0	144963	11/16/08	11/16/08	EPA 3010A	EPA 6010B
Cadmium	ND	5.0	144963	11/16/08	11/16/08	EPA 3010A	EPA 6010B
Chromium	35	5.0	144963	11/16/08	11/16/08	EPA 3010A	EPA 6010B
Cobalt	ND	5.0	144963	11/16/08	11/16/08	EPA 3010A	EPA 6010B
Copper	5.1	5.0	144963	11/16/08	11/16/08	EPA 3010A	EPA 6010B
Lead	ND	3.0	144963	11/16/08	11/16/08	EPA 3010A	EPA 6010B
Mercury	ND	0.20	145095	11/19/08	11/19/08	METHOD	EPA 7470A
Molybdenum	ND	5.0	144963	11/16/08	11/17/08	EPA 3010A	EPA 6010B
Nickel	ND	5.0	144963	11/16/08	11/16/08	EPA 3010A	EPA 6010B
Selenium	ND	10	144963	11/16/08	11/16/08	EPA 3010A	EPA 6010B
Silver	ND	5.0	144963	11/16/08	11/16/08	EPA 3010A	EPA 6010B
Thallium	ND	10	144963	11/16/08	11/16/08	EPA 3010A	EPA 6010B
Vanadium	9.2	5.0	144963	11/16/08	11/16/08	EPA 3010A	EPA 6010B
Zinc	ND	20	144963	11/16/08	11/17/08	EPA 3010A	EPA 6010B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC470824	Batch#:	144963
Matrix:	Water	Prepared:	11/16/08
Units:	ug/L		

Analyte	Result	RL	Analyzed
Antimony	ND	10	11/16/08
Arsenic	ND	5.0	11/16/08
Barium	ND	5.0	11/16/08
Beryllium	ND	2.0	11/16/08
Cadmium	ND	5.0	11/16/08
Chromium	ND	5.0	11/16/08
Cobalt	ND	5.0	11/16/08
Copper	ND	5.0	11/16/08
Lead	ND	3.0	11/16/08
Molybdenum	ND	5.0	11/16/08
Nickel	ND	5.0	11/16/08
Selenium	ND	10	11/16/08
Silver	ND	5.0	11/16/08
Thallium	ND	10	11/16/08
Vanadium	ND	5.0	11/16/08
Zinc	ND	20	11/17/08

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Matrix:	Water	Batch#:	144963
Units:	ug/L	Prepared:	11/16/08
Diln Fac:	1.000		

Type: BS Lab ID: QC470825

Analyte	Spiked	Result	%REC	Limits	Analyzed
Antimony	500.0	483.0	97	80-120	11/16/08
Arsenic	100.0	90.41	90	80-120	11/16/08
Barium	2,000	1,934	97	80-120	11/16/08
Beryllium	50.00	49.00	98	80-120	11/16/08
Cadmium	50.00	48.58	97	80-120	11/16/08
Chromium	200.0	183.8	92	80-120	11/16/08
Cobalt	500.0	453.6	91	80-120	11/16/08
Copper	250.0	225.3	90	80-120	11/16/08
Lead	100.0	97.18	97	80-120	11/16/08
Molybdenum	400.0	397.8	99	80-120	11/16/08
Nickel	500.0	466.2	93	80-120	11/16/08
Selenium	100.0	92.40	92	80-120	11/16/08
Silver	50.00	46.90	94	80-120	11/16/08
Thallium	100.0	96.12	96	80-120	11/16/08
Vanadium	500.0	470.5	94	80-120	11/16/08
Zinc	500.0	469.5	94	80-120	11/18/08

Type: BSD Lab ID: QC470826

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
Antimony	500.0	498.6	100	80-120	3	20	11/16/08
Arsenic	100.0	94.30	94	80-120	4	20	11/16/08
Barium	2,000	2,005	100	80-120	4	20	11/16/08
Beryllium	50.00	51.05	102	80-120	4	20	11/16/08
Cadmium	50.00	49.61	99	80-120	2	20	11/16/08
Chromium	200.0	187.8	94	80-120	2	20	11/16/08
Cobalt	500.0	470.1	94	80-120	4	20	11/16/08
Copper	250.0	235.3	94	80-120	4	20	11/16/08
Lead	100.0	98.74	99	80-120	2	20	11/16/08
Molybdenum	400.0	408.5	102	80-120	3	20	11/16/08
Nickel	500.0	476.2	95	80-120	2	20	11/16/08
Selenium	100.0	92.90	93	80-120	1	20	11/16/08
Silver	50.00	48.48	97	80-120	3	20	11/16/08
Thallium	100.0	98.46	98	80-120	2	20	11/16/08
Vanadium	500.0	486.8	97	80-120	3	20	11/16/08
Zinc	500.0	473.1	95	80-120	1	20	11/18/08

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	144963
MSS Lab ID:	207819-001	Sampled:	11/13/08
Matrix:	Water	Received:	11/14/08
Units:	ug/L	Prepared:	11/16/08
Diln Fac:	1.000		

Type: MS Lab ID: QC470827

Analyte	MSS Result	Spiked	Result	%REC	Limits	Analyzed
Antimony	<3.317	500.0	467.6	94	75-120	11/16/08
Arsenic	<1.514	100.0	86.56	87	79-125	11/16/08
Barium	<0.3788	2,000	1,840	92	80-120	11/16/08
Beryllium	<0.1372	50.00	46.18	92	80-120	11/16/08
Cadmium	<0.3309	50.00	46.21	92	80-120	11/16/08
Chromium	<0.4253	200.0	175.3	88	78-120	11/16/08
Cobalt	<0.3378	500.0	427.0	85	76-120	11/16/08
Copper	<0.5276	250.0	210.8	84	75-120	11/16/08
Lead	<0.8532	100.0	92.69	93	71-120	11/16/08
Molybdenum	<0.7097	400.0	382.2	96	80-120	11/16/08
Nickel	<0.2313	500.0	443.3	89	74-120	11/16/08
Selenium	<2.787	100.0	84.19	84	73-125	11/16/08
Silver	<1.054	50.00	44.26	89	69-120	11/16/08
Thallium	<1.327	100.0	90.84	91	72-120	11/16/08
Vanadium	<0.4156	500.0	445.8	89	79-120	11/16/08
Zinc	<2.795	500.0	460.6	92	74-122	11/17/08

Type: MSD Lab ID: QC470828

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
Antimony	500.0	469.4	94	75-120	0	20	11/16/08
Arsenic	100.0	87.23	87	79-125	1	20	11/16/08
Barium	2,000	1,870	94	80-120	2	20	11/16/08
Beryllium	50.00	46.95	94	80-120	2	20	11/16/08
Cadmium	50.00	46.57	93	80-120	1	20	11/16/08
Chromium	200.0	175.9	88	78-120	0	20	11/16/08
Cobalt	500.0	435.5	87	76-120	2	20	11/16/08
Copper	250.0	214.6	86	75-120	2	20	11/16/08
Lead	100.0	93.25	93	71-120	1	20	11/16/08
Molybdenum	400.0	385.8	96	80-120	1	20	11/16/08
Nickel	500.0	447.2	89	74-120	1	20	11/16/08
Selenium	100.0	89.74	90	73-125	6	20	11/16/08
Silver	50.00	44.83	90	69-120	1	20	11/16/08
Thallium	100.0	92.21	92	72-120	1	20	11/16/08
Vanadium	500.0	451.3	90	79-120	1	20	11/16/08
Zinc	500.0	465.2	93	74-122	1	20	11/17/08

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Units:	ug/L
Type:	Serial Dilution	Diln Fac:	5.000
MSS Lab ID:	207819-001	Batch#:	144963
Lab ID:	QC470829	Sampled:	11/13/08
Matrix:	Water	Received:	11/14/08

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Analyzed
Antimony	ND	10.00	ND	49.76	NC	10	11/16/08
Arsenic	ND	5.000	ND	25.00	NC	10	11/16/08
Barium	ND	5.000	ND	25.00	NC	10	11/16/08
Beryllium	ND	2.000	ND	10.00	NC	10	11/16/08
Cadmium	ND	5.000	ND	25.00	NC	10	11/16/08
Chromium	ND	5.000	ND	25.00	NC	10	11/16/08
Cobalt	ND	5.000	ND	25.00	NC	10	11/16/08
Copper	ND	5.000	2.752 J	25.00	NC	10	11/16/08
Lead	ND	3.000	ND	15.00	NC	10	11/16/08
Molybdenum	ND	5.000	ND	25.00	NC	10	11/16/08
Nickel	ND	5.000	ND	25.00	NC	10	11/16/08
Selenium	ND	10.00	ND	41.81	NC	10	11/16/08
Silver	ND	5.000	ND	25.00	NC	10	11/16/08
Thallium	ND	10.00	ND	25.00	NC	10	11/16/08
Vanadium	ND	5.000	ND	25.00	NC	10	11/16/08
Zinc	ND	20.00	ND	100.0	NC	10	11/17/08

J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	EPA 3010A
Project#:	388-1856	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Units:	ug/L
Type:	Post Digest Spike	Diln Fac:	1.000
MSS Lab ID:	207819-001	Batch#:	144963
Lab ID:	QC470830	Sampled:	11/13/08
Matrix:	Water	Received:	11/14/08

Analyte	MSS Result	Spiked	Result	%REC	Limits	Analyzed
Antimony	<3.317	500.0	454.3	91	75-125	11/16/08
Arsenic	<1.514	100.0	88.43	88	75-125	11/16/08
Barium	<0.3788	2,000	1,834	92	75-125	11/16/08
Beryllium	<0.1372	50.00	47.37	95	75-125	11/16/08
Cadmium	<0.3309	50.00	47.23	94	75-125	11/16/08
Chromium	<0.4253	200.0	178.1	89	75-125	11/16/08
Cobalt	<0.3378	500.0	438.5	88	75-125	11/16/08
Copper	<0.5276	250.0	214.7	86	75-125	11/16/08
Lead	<0.8532	100.0	91.91	92	75-125	11/16/08
Molybdenum	<0.7097	400.0	380.4	95	75-125	11/16/08
Nickel	<0.2313	500.0	451.4	90	75-125	11/16/08
Selenium	<2.787	100.0	85.10	85	75-125	11/16/08
Silver	<1.054	50.00	31.40	63 *	75-125	11/16/08
Thallium	<1.327	100.0	93.20	93	75-125	11/16/08
Vanadium	<0.4156	500.0	455.1	91	75-125	11/16/08
Zinc	<2.795	500.0	469.2	94	75-125	11/17/08

*= Value outside of QC limits; see narrative

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	145095
Lab ID:	QC471400	Prepared:	11/19/08
Matrix:	Filtrate	Analyzed:	11/19/08
Units:	ug/L		

Result	RL
ND	0.20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	145095
Matrix:	Filtrate	Prepared:	11/19/08
Units:	ug/L	Analyzed:	11/19/08
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC471401	5.000	4.750	95	80-120		
BSD	QC471402	5.000	4.580	92	80-120	4	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	145095
Field ID:	ZZZZZZZZZZ	Sampled:	11/06/08
MSS Lab ID:	207602-003	Received:	11/07/08
Matrix:	Filtrate	Prepared:	11/19/08
Units:	ug/L	Analyzed:	11/19/08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC471403	<0.04502	5.000	4.840	97	71-124		
MSD	QC471404		5.000	4.970	99	71-124	3	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	145095
MSS Lab ID:	207602-003	Sampled:	11/06/08
Lab ID:	QC471405	Received:	11/07/08
Matrix:	Filtrate	Analyzed:	11/19/08

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 300.0
Field ID:	TPEF0364	Batch#:	144917
Matrix:	Water	Sampled:	11/13/08 13:45
Units:	mg/L	Received:	11/14/08

Type:	SAMPLE	Diln Fac:	5.000
Lab ID:	207848-002	Analyzed:	11/14/08 18:21

Analyte	Result	RL
Chloride	22	1.0
Nitrogen, Nitrate	10	0.25
Sulfate	50	2.5

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC470638	Analyzed:	11/14/08 09:58

Analyte	Result	RL
Chloride	ND	0.20
Nitrogen, Nitrate	ND	0.05
Sulfate	ND	0.50

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 300.0
Matrix:	Water	Diln Fac:	1.000
Units:	mg/L	Batch#:	144917

Type: BS Analyzed: 11/14/08 10:15
Lab ID: QC470639

Analyte	Spiked	Result	%REC	Limits
Chloride	4.000	4.274	107	80-120
Nitrogen, Nitrate	1.000	1.100	110	80-120
Sulfate	10.00	10.46	105	80-120

Type: BSD Analyzed: 11/14/08 10:33
Lab ID: QC470640

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Chloride	4.000	4.212	105	80-120	1	20
Nitrogen, Nitrate	1.000	1.104	110	80-120	0	20
Sulfate	10.00	10.48	105	80-120	0	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 300.0
Field ID:	ZZZZZZZZZZ	Diln Fac:	10.00
MSS Lab ID:	207821-001	Batch#:	144917
Matrix:	Water	Sampled:	11/13/08 15:25
Units:	mg/L	Received:	11/14/08

Type: MS Analyzed: 11/14/08 13:01
Lab ID: QC470645

Analyte	MSS Result	Spiked	Result	%REC	Limits
Chloride	156.3	20.00	174.3	90 NM	80-120
Nitrogen, Nitrate	8.547	5.000	14.01	109	80-120
Sulfate	126.5	50.00	177.9	103	80-120

Type: MSD Analyzed: 11/14/08 13:18
Lab ID: QC470646

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Chloride	20.00	176.1	99 NM	80-120	1	20
Nitrogen, Nitrate	5.000	14.10	111	80-120	1	20
Sulfate	50.00	183.0	113	80-120	3	20

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM2320B
Field ID:	TPEF0364	Sampled:	11/13/08
Matrix:	Water	Received:	11/14/08
Units:	mg/L	Analyzed:	11/17/08
Batch#:	145004		

Type: SAMPLE Diln Fac: 6.700
Lab ID: 207848-002

Analyte	Result	RL
Alkalinity, Bicarbonate	400	6.7
Alkalinity, Carbonate	49	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	450	6.7

Type: BLANK Diln Fac: 1.000
Lab ID: QC471013

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	4.000
Lab ID:	QC471014	Batch#:	145004
Matrix:	Water	Analyzed:	11/17/08

Spiked	Result	%REC	Limits
200.0	198.0	99	90-110

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM2320B
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	4.000
Field ID:	ZZZZZZZZZZ	Batch#:	145004
MSS Lab ID:	207723-005	Sampled:	11/11/08
Matrix:	Water	Received:	11/11/08
Units:	mg/L	Analyzed:	11/17/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC471015	476.0	200.0	674.8	99	80-120		
MSD	QC471016		200.0	676.8	100	80-120	0	25

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2540C
Analyte:	Total Dissolved Solids	Batch#:	145072
Field ID:	TPEF0364	Sampled:	11/13/08
Matrix:	Water	Received:	11/14/08
Units:	mg/L	Prepared:	11/18/08
Diln Fac:	1.000	Analyzed:	11/19/08

Type	Lab ID	Result	RL
SAMPLE	207848-002	610	10
BLANK	QC471282	ND	10

ND= Not Detected
RL= Reporting Limit

19.0

Batch QC Report

Total Dissolved Solids (TDS)

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM2540C
Analyte:	Total Dissolved Solids	Batch#:	145072
Field ID:	ZZZZZZZZZZ	Prepared:	11/18/08
Matrix:	Water	Analyzed:	11/19/08
Units:	mg/L		

Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim	Diln Fac	Sampled	Received
BS		QC471283		104.0	98.00		94	73-120			1.000		
BSD		QC471284		104.0	94.00		90	73-120	4	22	1.000		
SDUP	207726-001	QC471285	413.3		380.0	11.11			8	20	1.111	11/11/08	11/12/08
SDUP	207833-006	QC471286	3,344		3,376	20.00			1	20	2.000	11/13/08	11/14/08
SDUP	207834-001	QC471287	4,036		4,060	20.00			1	20	2.000	11/13/08	11/14/08

RL= Reporting Limit
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Curtis & Tompkins, Ltd.

Total Organic Carbon (TOC)

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Batch#:	145047
Field ID:	TPIN0364	Sampled:	11/13/08
Matrix:	Water	Received:	11/14/08
Units:	mg/L	Analyzed:	11/18/08
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	207848-001	0.53	0.50
BLANK	QC471185	ND	0.50

ND= Not Detected
RL= Reporting Limit

16.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Organic Carbon (TOC)

Lab #:	207848	Location:	UC Davis
Client:	Weiss Associates	Prep:	METHOD
Project#:	388-1856	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	145047
MSS Lab ID:	207890-001	Sampled:	11/14/08
Matrix:	Water	Received:	11/17/08
Units:	mg/L	Analyzed:	11/18/08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC471186		10.00	9.673	97	90-110		
MS	QC471187	9.648	2.000	11.81	108 NM	62-124		
MSD	QC471188		2.000	11.93	114 NM	62-124	1	20

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Weiss Associates

Client Sample ID: INFLUENT

GC/MS Volatiles

Lot-Sample #...: F8G290241-001 **Work Order #...:** KTCJN1A5 **Matrix.....:** WATER
Date Sampled...: 07/25/08 12:20 **Date Received..:** 07/29/08
Prep Date.....: 08/03/08 **Analysis Date..:** 08/04/08
Prep Batch #...: 8217108 **Analysis Time..:** 00:38
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
1,2-Dibromoethane	ND	1.0	ug/L
1,2-Dibromo-3-chloro-propane	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Acetone	**2.0 B**	**2.0**	**ug/L**
1,1-Dichloroethene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
Chloroform	**8.0 B**	**1.0**	**ug/L**
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L
Styrene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

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Weiss Associates

Client Sample ID: INFLUENT

GC/MS Volatiles

Lot-Sample #...: F8G290241-001 **Work Order #...:** KTCJN1A5 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	101	(76 - 115)
Dibromofluoromethane	102	(81 - 123)
1,2-Dichloroethane-d4	99	(70 - 130)
4-Bromofluorobenzene	100	(79 - 115)

NOTE(S):

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Weiss Associates

Client Sample ID: INFLUENT

TOTAL Metals

Lot-Sample #...: F8G290241-001 **Matrix.....:** WATER
Date Sampled...: 07/25/08 12:20 **Date Received..:** 07/29/08

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8214216						
Boron	**531**	**500**	**ug/L**	**SW846 6010B**	**08/01-08/05/08**	**KTCJN1AA**
		Dilution Factor: 5		Analysis Time..: 15:47		
Molybdenum	ND	40.0	ug/L	SW846 6010B	08/01-08/12/08	KTCJN1AC
		Dilution Factor: 1		Analysis Time..: 13:04		
Silicon	**40000 J**	**2000**	**ug/L**	**SW846 6010B**	**08/01-08/13/08**	**KTCJN1AD**
		Dilution Factor: 5		Analysis Time..: 10:58		
Aluminum	ND	1000	ug/L	SW846 6010B	08/01-08/05/08	KTCJN1AE
		Dilution Factor: 5		Analysis Time..: 15:47		
Antimony	ND	10.0	ug/L	SW846 6010B	08/01-08/12/08	KTCJN1AF
		Dilution Factor: 1		Analysis Time..: 13:04		
Arsenic	ND	10.0	ug/L	SW846 6010B	08/01-08/12/08	KTCJN1AG
		Dilution Factor: 1		Analysis Time..: 13:04		
Barium	**206**	**50.0**	**ug/L**	**SW846 6010B**	**08/01-08/12/08**	**KTCJN1AH**
		Dilution Factor: 1		Analysis Time..: 13:04		
Beryllium	ND	5.0	ug/L	SW846 6010B	08/01-08/12/08	KTCJN1AJ
		Dilution Factor: 1		Analysis Time..: 13:04		
Cadmium	ND	5.0	ug/L	SW846 6010B	08/01-08/12/08	KTCJN1AK
		Dilution Factor: 1		Analysis Time..: 13:04		
Calcium	**45000**	**5000**	**ug/L**	**SW846 6010B**	**08/01-08/05/08**	**KTCJN1AL**
		Dilution Factor: 5		Analysis Time..: 15:47		
Chromium	**37.9**	**10.0**	**ug/L**	**SW846 6010B**	**08/01-08/12/08**	**KTCJN1AM**
		Dilution Factor: 1		Analysis Time..: 13:04		
Cobalt	ND	50.0	ug/L	SW846 6010B	08/01-08/12/08	KTCJN1AN
		Dilution Factor: 1		Analysis Time..: 13:04		
Copper	ND	25.0	ug/L	SW846 6010B	08/01-08/12/08	KTCJN1AP
		Dilution Factor: 1		Analysis Time..: 13:04		

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Weiss Associates

Client Sample ID: INFLUENT

TOTAL Metals

Lot-Sample #...: F8G290241-001 Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	500	ug/L	SW846 6010B	08/01-08/05/08	KTCJN1AQ
		Dilution Factor: 5		Analysis Time..: 15:47		
Lead	ND	10.0	ug/L	SW846 6010B	08/01-08/12/08	KTCJN1AR
		Dilution Factor: 1		Analysis Time..: 13:04		
Magnesium	**75700**	**5000**	**ug/L**	**SW846 6010B**	**08/01-08/05/08**	**KTCJN1AT**
		Dilution Factor: 5		Analysis Time..: 15:47		
Manganese	**1.0 B**	**15.0**	**ug/L**	**SW846 6010B**	**08/01-08/12/08**	**KTCJN1AU**
		Dilution Factor: 1		Analysis Time..: 13:04		
Nickel	ND	40.0	ug/L	SW846 6010B	08/01-08/12/08	KTCJN1AV
		Dilution Factor: 1		Analysis Time..: 13:04		
Potassium	ND	5000	ug/L	SW846 6010B	08/01-08/05/08	KTCJN1AW
		Dilution Factor: 1		Analysis Time..: 14:51		
Selenium	**5.0 B**	**15.0**	**ug/L**	**SW846 6010B**	**08/01-08/12/08**	**KTCJN1AX**
		Dilution Factor: 1		Analysis Time..: 13:04		
Silver	ND	10.0	ug/L	SW846 6010B	08/01-08/12/08	KTCJN1A0
		Dilution Factor: 1		Analysis Time..: 13:04		
Sodium	**39700**	**1000**	**ug/L**	**SW846 6010B**	**08/01-08/05/08**	**KTCJN1A1**
		Dilution Factor: 1		Analysis Time..: 14:51		
Thallium	ND	20.0	ug/L	SW846 6010B	08/01-08/12/08	KTCJN1A2
		Dilution Factor: 1		Analysis Time..: 13:04		
Vanadium	**8.3 B**	**50.0**	**ug/L**	**SW846 6010B**	**08/01-08/12/08**	**KTCJN1A3**
		Dilution Factor: 1		Analysis Time..: 13:04		
Zinc	**5.2 B**	**20.0**	**ug/L**	**SW846 6010B**	**08/01-08/12/08**	**KTCJN1A4**
		Dilution Factor: 1		Analysis Time..: 13:04		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

Weiss Associates

Client Sample ID: INFLUENT

General Chemistry

Lot-Sample #...: F8G290241-001 Work Order #...: KTCJN Matrix.....: WATER
Date Sampled...: 07/25/08 12:20 Date Received..: 07/29/08

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Alkalinity	410	10.0	mg/L	MCAWW 310.1	08/04/08	8217086
		Dilution Factor: 2		Analysis Time..: 00:00		
Total Dissolved Solids	583	5.0	mg/L	MCAWW 160.1	08/01-08/04/08	8211406
		Dilution Factor: 1		Analysis Time..: 00:00		
Total Organic Carbon	0.43 B	1.0	mg/L	MCAWW 415.1	08/12/08	8225357
		Dilution Factor: 1		Analysis Time..: 00:00		

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

Weiss Associates

Client Sample ID: EFFLUENT

GC/MS Volatiles

Lot-Sample #...: F8G290241-002 **Work Order #...:** KTCKE1A5 **Matrix.....:** WATER
Date Sampled...: 07/25/08 12:15 **Date Received..:** 07/29/08
Prep Date.....: 08/03/08 **Analysis Date..:** 08/04/08
Prep Batch #...: 8217108 **Analysis Time..:** 00:13
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
1,2-Dibromo-3-chloro-propane	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
1,2-Dibromoethane	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Acetone	**2.6 B**	**2.0**	**ug/L**
1,1-Dichloroethene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Carbon disulfide	**0.18 J**	**1.0**	**ug/L**
1,1-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
Chloroform	ND	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
2-Hexanone	ND	5.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L
Styrene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L

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Weiss Associates

Client Sample ID: EFFLUENT

GC/MS Volatiles

Lot-Sample #...: F8G290241-002 **Work Order #...:** KTCKE1A5 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	100	(76 - 115)
Dibromofluoromethane	100	(81 - 123)
1,2-Dichloroethane-d4	101	(70 - 130)
4-Bromofluorobenzene	100	(79 - 115)

NOTE(S):

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

J Estimated result. Result is less than RL.

Weiss Associates

Client Sample ID: EFFLUENT

TOTAL Metals

Lot-Sample #...: F8G290241-002 **Matrix.....:** WATER
Date Sampled...: 07/25/08 12:15 **Date Received..:** 07/29/08

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8214216						
Boron	**578**	**500**	**ug/L**	**SW846 6010B**	**08/01-08/05/08**	**KTCKE1AA**
		Dilution Factor: 5		Analysis Time..: 16:12		
Molybdenum	ND	40.0	ug/L	SW846 6010B	08/01-08/12/08	KTCKE1AC
		Dilution Factor: 1		Analysis Time..: 13:29		
Silicon	**16600 J**	**2000**	**ug/L**	**SW846 6010B**	**08/01-08/13/08**	**KTCKE1AD**
		Dilution Factor: 5		Analysis Time..: 11:22		
Aluminum	ND	1000	ug/L	SW846 6010B	08/01-08/05/08	KTCKE1AE
		Dilution Factor: 5		Analysis Time..: 16:12		
Antimony	ND	10.0	ug/L	SW846 6010B	08/01-08/12/08	KTCKE1AF
		Dilution Factor: 1		Analysis Time..: 13:29		
Arsenic	ND	10.0	ug/L	SW846 6010B	08/01-08/12/08	KTCKE1AG
		Dilution Factor: 1		Analysis Time..: 13:29		
Barium	**213**	**50.0**	**ug/L**	**SW846 6010B**	**08/01-08/12/08**	**KTCKE1AH**
		Dilution Factor: 1		Analysis Time..: 13:29		
Beryllium	ND	5.0	ug/L	SW846 6010B	08/01-08/12/08	KTCKE1AJ
		Dilution Factor: 1		Analysis Time..: 13:29		
Cadmium	ND	5.0	ug/L	SW846 6010B	08/01-08/12/08	KTCKE1AK
		Dilution Factor: 1		Analysis Time..: 13:29		
Calcium	**45900**	**5000**	**ug/L**	**SW846 6010B**	**08/01-08/05/08**	**KTCKE1AL**
		Dilution Factor: 5		Analysis Time..: 16:12		
Chromium	**39.6**	**10.0**	**ug/L**	**SW846 6010B**	**08/01-08/12/08**	**KTCKE1AM**
		Dilution Factor: 1		Analysis Time..: 13:29		
Cobalt	ND	50.0	ug/L	SW846 6010B	08/01-08/12/08	KTCKE1AN
		Dilution Factor: 1		Analysis Time..: 13:29		
Copper	ND	25.0	ug/L	SW846 6010B	08/01-08/12/08	KTCKE1AP
		Dilution Factor: 1		Analysis Time..: 13:29		

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Weiss Associates

Client Sample ID: EFFLUENT

TOTAL Metals

Lot-Sample #...: F8G290241-002 Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	ND	500	ug/L	SW846 6010B	08/01-08/05/08	KTCKE1AQ
		Dilution Factor: 5		Analysis Time..: 16:12		
Lead	ND	10.0	ug/L	SW846 6010B	08/01-08/12/08	KTCKE1AR
		Dilution Factor: 1		Analysis Time..: 13:29		
Magnesium	**78200**	**5000**	**ug/L**	**SW846 6010B**	**08/01-08/05/08**	**KTCKE1AT**
		Dilution Factor: 5		Analysis Time..: 16:12		
Manganese	**1.2 B**	**15.0**	**ug/L**	**SW846 6010B**	**08/01-08/12/08**	**KTCKE1AU**
		Dilution Factor: 1		Analysis Time..: 13:29		
Nickel	ND	40.0	ug/L	SW846 6010B	08/01-08/12/08	KTCKE1AV
		Dilution Factor: 1		Analysis Time..: 13:29		
Potassium	ND	5000	ug/L	SW846 6010B	08/01-08/05/08	KTCKE1AW
		Dilution Factor: 1		Analysis Time..: 15:29		
Selenium	**3.4 B**	**15.0**	**ug/L**	**SW846 6010B**	**08/01-08/12/08**	**KTCKE1AX**
		Dilution Factor: 1		Analysis Time..: 13:29		
Silver	ND	10.0	ug/L	SW846 6010B	08/01-08/12/08	KTCKE1A0
		Dilution Factor: 1		Analysis Time..: 13:29		
Sodium	**40700**	**1000**	**ug/L**	**SW846 6010B**	**08/01-08/05/08**	**KTCKE1A1**
		Dilution Factor: 1		Analysis Time..: 15:29		
Thallium	ND	20.0	ug/L	SW846 6010B	08/01-08/12/08	KTCKE1A2
		Dilution Factor: 1		Analysis Time..: 13:29		
Vanadium	**10.1 B**	**50.0**	**ug/L**	**SW846 6010B**	**08/01-08/12/08**	**KTCKE1A3**
		Dilution Factor: 1		Analysis Time..: 13:29		
Zinc	**5.3 B**	**20.0**	**ug/L**	**SW846 6010B**	**08/01-08/12/08**	**KTCKE1A4**
		Dilution Factor: 1		Analysis Time..: 13:29		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

Weiss Associates

Client Sample ID: EFFLUENT

General Chemistry

Lot-Sample #...: F8G290241-002 Work Order #...: KTCKE Matrix.....: WATER
Date Sampled...: 07/25/08 12:15 Date Received..: 07/29/08

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	18.8	2.0	mg/L	MCAWW 300.0A	08/11/08	8224180
		Dilution Factor: 10		Analysis Time..: 01:04		
Sulfate	45.3	5.0	mg/L	MCAWW 300.0A	08/11/08	8224181
		Dilution Factor: 10		Analysis Time..: 01:04		
Total Alkalinity	399	5.0	mg/L	MCAWW 310.1	08/04/08	8217086
		Dilution Factor: 1		Analysis Time..: 00:00		
Total Dissolved Solids	570	5.0	mg/L	MCAWW 160.1	08/01-08/04/08	8211406
		Dilution Factor: 1		Analysis Time..: 00:00		
Total Organic Carbon	0.51 B	1.0	mg/L	MCAWW 415.1	08/12/08	8225357
		Dilution Factor: 1		Analysis Time..: 00:00		

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 720-15512-1
Sdg Number: F8G290241

General Chemistry

Client Sample ID: INFLUENT

Lab Sample ID: 720-15512-1
Client Matrix: Water

Date Sampled: 07/25/2008 1220
Date Received: 07/25/2008 1545

Analyte	Result	Qual	Units	RL	Dil	Method
Nitrate as N	9.9		mg/L	2.3	10	300.0

Anly Batch: 720-39576 Date Analyzed 07/25/2008 2202

Client Sample ID: EFFLUENT

Lab Sample ID: 720-15512-2
Client Matrix: Water

Date Sampled: 07/25/2008 1215
Date Received: 07/25/2008 1545

Analyte	Result	Qual	Units	RL	Dil	Method
Nitrate as N	9.9		mg/L	2.3	10	300.0

Anly Batch: 720-39576 Date Analyzed 07/25/2008 2236

Weiss Associates

Client Sample ID: INFLUENT

Radiochemistry

Lab Sample ID: F8G290241-001
Work Order: KTCJN
Matrix: WATER

Date Collected: 07/25/08 1220
Date Received: 07/29/08 0930

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/L**		**Batch # 8220103**	**Yld %**
Carbon 14	1.9	U	5.0	20.0	8.4	08/07/08	08/09/08
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**		**Batch # 8214256**	**Yld %**
Tritium	120	U	140	300	230	08/01/08	08/02/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

PROJECT NO. 388-1856-1-11

UC Davis

Lot #: F8I040143

Tim Utterback

Weiss Associates
350 East Middlefield Rd.
Mountain View, CA 94043

TESTAMERICA LABORATORIES, INC.

Michael C. Franks
Project Manager

September 18, 2008

Case Narrative
LOT NUMBER: **F8I040143**

This report contains the analytical results for the sample received by TestAmerica St. Louis on September 4, 2008. This sample is associated with your UC Davis project (W.O. 0804).

The analytical results included in this report meet all applicable quality control procedure requirements.

The test results in this report meet all NELAP requirements for parameters in which accreditations are held by TestAmerica St. Louis. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of this report.

All chemical analysis results are based upon sample as received, wet weight, unless noted otherwise. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Observations/Nonconformances
Reference the chain of custody and condition upon receipt report for any variations on receipt conditions and temperature of samples on receipt.

There are no observations or nonconformances associated to the analysis in this report.

METHODS SUMMARY

F8I040143

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Carbon 14 by LSC	EERF C-01-1	
H-3 by Distillation & LSC	EPA 906.0 MOD	

References:

EERF EERF

EPA "EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984

SAMPLE SUMMARY

F8I040143

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
KV808	001	TPIN 0361	08/29/08	09:00

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Weiss Associates

Client Sample ID: TPIN 0361

Radiochemistry

Lab Sample ID: F8I040143-001
Work Order: KV808
Matrix: WATER

Date Collected: 08/29/08 0900
Date Received: 09/04/08 1000

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/L**		**Batch # 8249285**	**Yld %**
Carbon 14	2.6	U	4.9	20.0	8.2	09/05/08	09/09/08
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**		**Batch # 8252119**	**Yld %**
Tritium	50	U	150	300	250	09/08/08	09/09/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

METHOD BLANK REPORT

Radiochemistry

Client Lot ID: F8I040143
Matrix: WATER

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC		Prep Date	Lab Sample ID / Analysis Date
Carbon 14 by EERF C-01-1			**pCi/L**	**Batch #**	**8249285**	**Yld %**		**F8I050000-285B**
Carbon 14	0.6	U	4.9	20.0	8.3		09/05/08	09/09/08
TRITIUM (Distill) by EPA 906.0 MOD			**pCi/L**	**Batch #**	**8252119**	**Yld %**		**F8I080000-119B**
Tritium	100	U	150	300	250		09/08/08	09/09/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined using instrument performance only
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Laboratory Control Sample Report

Radiochemistry

Client Lot ID: F8I040143
Matrix: WATER

Parameter	Spike Amount	Result	Total Uncert. (2 σ+/-)	MDC	% Yld	% Rec	Lab Sample ID / QC Control Limits
Carbon 14 by EERF C-01-1			**pCi/L**	**C-01-1**			**F8I050000-285C**
Carbon 14	976	538	43	8		55	(38 - 112)
	Batch #:	8249285		**Analysis Date:**	09/09/08		
TRITIUM (Distill) by EPA 906.0 MOD			**pCi/L**	**906.0 MOD**			**F8I080000-119C**
Tritium	4910	4530	420	250		92	(67 - 111)
	Batch #:	8252119		**Analysis Date:**	09/09/08		

NOTE(S)

MDC is determined by instrument performance only
Calculations are performed before rounding to avoid round-off error in calculated results

MATRIX SPIKE REPORT

Radiochemistry

Client Lot Id: F8I040143
Matrix: WATER

Date Sampled: 08/29/08
Date Received: 09/04/08

Parameter	Spike Amount	Spike Result	Total Uncert. (2σ +/-)	Spike Yld.	Sample Result	Total Uncert. (2 σ +/-)	QC Sample ID %YLD	QC Sample ID %REC	QC Control Limits
Carbon 14 by EERF C-01-1			**pCi/L**		**C-01-1**			**F8I040143-001**	
Carbon 14	2930	2400	190		2.6	4.9		82	(37 - 121)
	Batch #:	8249285		Analysis Date:		09/09/08			
TRITIUM (Distill) by EPA 906.0 MOD			**pCi/L**		**906.0 MOD**			**F8I040143-001**	
Tritium	4910	4350	410		50	150		88	(27 - 150)
	Batch #:	8252119		Analysis Date:		09/09/08			

NOTE(S)

Data are incomplete without the case narrative.
Calculations are performed before rounding to avoid round-off errors in calculated results.

DUPLICATE EVALUATION REPORT

Radiochemistry

Client Lot ID: F8I040143
Matrix: WATER

Date Sampled: 08/29/08
Date Received: 09/04/08

Parameter	SAMPLE Result		Total Uncert. (2σ+/-)	% Yld	DUPLICATE Result		Total Uncert. (2 σ+/-)	% Yld	QC Sample ID Precision	
Carbon 14 by EERF C-01-1				**pCi/L**	**C-01-1**				**F8I040143-001**	
Carbon 14	2.6	U	4.9		5.7	U	5.1		73	%RPD
		Batch #:	8249285	(Sample)	8249285	(Duplicate)				
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**906.0 MOD**				**F8I040143-001**	
Tritium	50	U	150		60	U	150		11	%RPD
		Batch #:	8252119	(Sample)	8252119	(Duplicate)				

NOTE(S)

Data are incomplete without the case narrative.
Calculations are performed before rounding to avoid round-off error in calculated results

U Result is less than the sample detection limit.

Lot# F8I040143

Fed Ex Tracking # 8473 3152 5954

Chain of Custody Record

TestAmerica St. Louis

13715 Rider Trail North
Earth City, Mo. 63045
phone: (314) 298-8566

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Agata Sulczynski (aas@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-11
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AguaTierra Associates Incorporated, DBA

Client Contact	Project Manager: Bob Devany	Sampled by: DM	Date: 8-29-08	COC Number: UD080329 2
Weiss Associates	Tel: 510-450-6144	Lab Contact:	Carrier:	1 of 1 COCs
5801 Christie Avenue, Suite 600	Analysis Turnaround Time			Job No.
Emeryville, CA 94608	Calendar (C) or Work Days (W) ---			
(510) 450-6000 Phone	TAT if different from Below _____			SDG No.
(510) 547-5043 FAX	1 week			
Job Name: UC Davis				
Address: One Shields Ave, Davis				

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Tritium (EPA 906.0)	Carbon-14 (C-01-1)	Sample Specific Notes:
TPIN 0301	8-29-08	400	W		2	X	X	
						1		

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For _____ Months*

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	WEISS	8-29-08 1400	[signature]	TASL	9-4-08 10:00
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

TestAmerica St. Louis

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Lot #(s): F8I040143
- 4179 -

Condition Upon Receipt Form

Client: Weiss
Quote No: 80392
COC/RFA No: OLD0808292
Initiated By: AB
Date: 9-4-08
Time:

Shipping Information

Shipper Name: FE
Shipping # (s):*
1. 8473 3152 5954
2.
3.
4.
5.
6.
7.
8.
9.
10.

Multiple Packages Y (N)
Sample Temperature (s):**
1. 6
2.
3.
4.
5.
6.
7.
8.
9.
10.

*Numbered shipping lines correspond to Numbered Sample Temp lines

**Sample must be received at 4°C ± 2°C- If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	Y (N)	Are there custody seals present on the cooler?	8.	Y (N)	Are there custody seals present on bottles?
2.	Y N (N/A)	Do custody seals on cooler appear to be tampered with?	9.	Y N (N/A)	Do custody seals on bottles appear to be tampered with?
3.	(Y) N	Were contents of cooler frisked after opening, but before unpacking?	10.	Y N (N/A)	Was sample received with proper pH[1]? (If not, make note below)
4.	(Y) N	Sample received with Chain of Custody?	11.	Y N	If N/A- Was pH taken by original TestAmerica lab?
5.	(Y) N N/A	Does the Chain of Custody match sample ID's on the container(s)?	12.	(Y) N AB 9-4-08	Sample received in proper containers?
6.	Y (N)	Was sample received broken?	13.	Y N (N/A)	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)
7.	(Y) N	Is sample volume sufficient for analysis?	14.	Y N	Was Internal COC/Workshare received?

[1] For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes:

Received tritium in a poly

Corrective Action:
- ☐ Client Contact Name: Informed by:
- ☐ Sample(s) processed "as is"
- ☐ Sample(s) on hold until: If released, notify:

Project Management Review: Date: 09-05-08

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED IN. IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIAL AND THE DATE NEXT TO THAT ITEM.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

PROJECT NO. 388-1856-2-11

UC Davis

Lot #: F8J030153

Tim Utterback

Weiss Associates
350 East Middlefield Rd.
Mountain View, CA 94043

TESTAMERICA LABORATORIES, INC.

Michael C. Franks
Project Manager

October 13, 2008

Case Narrative
LOT NUMBER: **F8J030153**

This report contains the analytical results for the sample received under chain of custody by TestAmerica St. Louis on October 3, 2008. This sample is associated with your UC Davis project.

The analytical results included in this report meet all applicable quality control procedure requirements except as noted on the following page.

The test results in this report meet all NELAP requirements for parameters in which accreditations are held by TestAmerica St. Louis. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of this report.

All chemical analysis results are based upon sample as received, wet weight, unless noted otherwise. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Observations/Nonconformances
Reference the chain of custody and condition upon receipt report for any variations on receipt conditions and temperature of samples on receipt.

Tritium by EPA 906.0

The Tritium sample duplicate RPD was outside the control limits in the original extraction. Sample were extracted with acceptable RPD. There was insufficient sample provided to perform the re-extraction at the method specified amount. A reduced sample amount was prepared.
Affected Samples:
F8J030153 (1): TPIN03612

METHODS SUMMARY

F8J030153

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Carbon 14 by LSC	EERF C-01-1	
H-3 by Distillation & LSC	EPA 906.0 MOD	

References:

EERF	EERF
EPA	"EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984

SAMPLE SUMMARY

F8J030153

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
KX4W8	001	TPIN03612	09/26/08	13:55

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

F8J030153

CLIENT ANALYSIS SUMMARY

Storage Loc: R160

Project Manager: MCF
Quote #: 80342
SDG:
Project: 388-1856-2-11
UC Davis
PO#:
Report to: Tim Utterback
Client: 1353423 Weiss Associates

RUSH

#SMPS in LOT: 1

Date Received: 2008-10-03
Analytical Due Date: 2008-10-10
Report Due Date: 2008-10-10
Report Type: D Expanded Deliverable
EDD Code: 99

Sample Control: Change the Project field to the Project ID on the COC. Enter COC# in the COC field.
Enter "WAE" in Sample Name field. Enter "U" in the LPR Code field.
RADIOCHEMISTRY: Please note the required MDCs

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
1	TPIN03612		W	2008-09-26 / 1355	KX4W8	WATER

SAMPLE COMMENTS:

	XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
	XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
S	XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
X	XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06

COR 303

Chain of Custody Record

TestAmerica St. Louis

13715 Rider Trail North
Earth City, Mo. 63045
phone: (314) 298-8566

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Agata Sulczynski (aas@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-2-11
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
A Geotrans Associates Incorporated, Company

Client Contact	Project Manager: Bob Devany	Sampled by: BMB	Date: 9-26-08	COC Number:
Weiss Associates	Tel: 510-450-6144	Lab Contact:	Carrier: WESS	Page 1 of 1 pages
5801 Christie Avenue, Suite 600	Analysis Turnaround Time			Job No.
Emeryville, CA 94608	Calendar (C) or Work Days (W) ---			
(510) 450-6119 Phone	TAT if different from Below _____			SDG No.
(510) 547-5043 FAX	1 week			
Job Name: UC Davis				
Address: One Shields Ave, Davis				

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Tritium (EPA 906.0)	Carbon-14 (C-01-1)	Sample Specific Notes:
TPIN03612	9-26-08	1355	W		2	X	X	LD, 500ml
						1		

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	WESS	9-26-08 1800			
[signature] Suppa	WESS	10-2-08 1330	[signature]	TA	10/3/08 0930
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Lot# F8J030153

TestAmerica St. Louis

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Lot #(s): F8J030153

- 303 -

Condition Upon Receipt Form

Client: Weiss Assoc. COC/RFA No: N/A Date: 10/3/08
Quote No: 80342 Initiated By: bn Time: 0930

Shipping Information

Shipper Name: FE
Multiple Packages Y (N)

Shipping # (s):*
1. 7919 6335 6037
2.
3.
4.
5.
6.
7.
8.
9.
10.

Sample Temperature (s):**
1. 4
2.
3.
4.
5.
6.
7.
8.
9.
10.

*Numbered shipping lines correspond to Numbered Sample Temp lines

**Sample must be received at 4°C ± 2°C- If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	Y (N)	Are there custody seals present on the cooler?	8.	Y (N)	Are there custody seals present on bottles?
2.	Y N (N/A)	Do custody seals on cooler appear to be tampered with?	9.	Y N (N/A)	Do custody seals on bottles appear to be tampered with?
3.	(Y) N	Were contents of cooler frisked after opening, but before unpacking?	10.	Y N (N/A)	Was sample received with proper pH[1]? (If not, make note below)
4.	(Y) N	Sample received with Chain of Custody?	11.	Y N	If N/A- Was pH taken by original TestAmerica lab?
5.	(Y) N N/A	Does the Chain of Custody match sample ID's on the container(s)?	12.	Y (N)	Sample received in proper containers?
6.	Y (N)	Was sample received broken?	13.	Y N (N/A)	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)
7.	(Y) N	Is sample volume sufficient for analysis?	14.	Y N	Was Internal COC/Workshare received?

[1] For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes: Tritium received in plastic. OK per MF

Corrective Action:
☐ Client Contact Name: Informed by:
☐ Sample(s) processed "as is"
☐ Sample(s) on hold until: If released, notify:
Project Management Review: Date: 10-07-08

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED IN. IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIAL AND THE DATE NEXT TO THAT ITEM.

Weiss Associates

Client Sample ID: TPIN03612

Radiochemistry

Lab Sample ID: F8J030153-001
Work Order: KX4W8
Matrix: WATER

Date Collected: 09/26/08 1355
Date Received: 10/03/08 0930

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/L**		**Batch # 8283409**	**Yld %**
Carbon 14	4.4	U	6.4	20.0	11	10/09/08	10/10/08
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**		**Batch # 8281359**	**Yld %**
Tritium	-70	U	140	300	250	10/07/08	10/08/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

METHOD BLANK REPORT

Radiochemistry

Client Lot ID: F8J030153
Matrix: WATER

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC		Prep Date	Lab Sample ID Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD			pCi/L	Batch #	8281359	Yld %		F8J070000-359B
Tritium	5	U	150	300	250		10/07/08	10/08/08
Carbon 14 by EERF C-01-1			pCi/L	Batch #	8283409	Yld %		F8J090000-409B
Carbon 14	-2.0	U	6.0	20.0	11		10/09/08	10/10/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined using instrument performance only
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Laboratory Control Sample Report

Radiochemistry

Client Lot ID: F8J030153
Matrix: WATER

Parameter	Spike Amount	Result	Total Uncert. (2 σ+/-)	MDC	% Yld	% Rec	Lab Sample ID / QC Control Limits
TRITIUM (Distill) by EPA 906.0 MOD			**pCi/L**	**906.0 MOD**			**F8J070000-359C**
Tritium	4890	4400	380	240		90	(67 - 111)
	Batch #:	8281359		Analysis Date:	10/08/08		
Carbon 14 by EERF C-01-1			**pCi/L**	**C-01-1**			**F8J090000-409C**
Carbon 14	976	499	41	11		51	(38 - 112)
	Batch #:	8283409		Analysis Date:	10/10/08		

NOTE(S)

MDC is determined by instrument performance only
All calculations are performed before rounding to avoid round-off error in calculated results

MATRIX SPIKE REPORT

Radiochemistry

Client Lot Id: F8J030153
Matrix: WATER

Date Sampled: 09/26/08
Date Received: 10/03/08

Parameter	Spike Amount	Spike Result	Total Uncert. (2σ+/-)	Spike Yld.	Sample Result	Total Uncert. (2 σ +/-)	QC Sample ID %YLD	QC Sample ID %REC	QC Control Limits
TRITIUM (Distill) by EPA 906.0 MOD			**pCi/L**		**906.0 MOD**			**F8J030153-001**	
Tritium	6560	5460	440		-70	140		84	(27 - 150)
	Batch #:	8281359		Analysis Date:		10/08/08			
Carbon 14 by EERF C-01-1			**pCi/L**		**C-01-1**			**F8J030153-001**	
Carbon 14	2930	2090	170		4.4	6.4		71	(37 - 121)
	Batch #:	8283409		Analysis Date:		10/10/08			

NOTE(S)

Data are incomplete without the case narrative.

Calculations are performed before rounding to avoid round-off errors in calculated results.

DUPLICATE EVALUATION REPORT

Radiochemistry

Client Lot ID: F8J030153
Matrix: WATER

Date Sampled: 09/26/08
Date Received: 10/03/08

Parameter	SAMPLE Result		Total Uncert. (2σ+/-)	% Yld	DUPLICATE Result		Total Uncert. (2 σ+/-)	% Yld	QC Sample ID Precision	
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**906.0 MOD**				**F8J030153-001**	
Tritium	-70	U	140		-50	U	140		31	%RPD
		Batch #:	8281359	(Sample)	8281359	(Duplicate)				
Carbon 14 by EERF C-01-1				**pCi/L**	**C-01-1**				**F8J030153-001**	
Carbon 14	4.4	U	6.4		-0.2	U	6.1		217	%RPD
		Batch #:	8283409	(Sample)	8283409	(Duplicate)				

NOTE(S)

Data are incomplete without the case narrative.
Calculations are performed before rounding to avoid round-off error in calculated results

U Result is less than the sample detection limit.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

PROJECT NO. 388-1856-1-16

UC Davis

Lot #: F8J210133

Tim Utterback

Weiss Associates
5801 Christie Ave.
Suite 600
Emeryvilly, CA 94608

TESTAMERICA LABORATORIES, INC.

Michael C. Franks
Project Manager

November 13, 2008

Case Narrative
LOT NUMBER: **F8J210133**

This report contains the analytical results for the thirteen samples received under chain of custody UCD20081016 by TestAmerica St. Louis on October 21, 2008. These samples are associated with your UC Davis project.

The analytical results included in this report meet all applicable quality control procedure requirements except as noted on the following page.

The test results in this report meet all NELAP requirements for parameters in which accreditations are held by TestAmerica St. Louis. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of this report.

All chemical analysis results are based upon sample as received, wet weight, unless noted otherwise. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Observations/Nonconformances
Reference the chain of custody and condition upon receipt report for any variations on receipt conditions and temperature of samples on receipt.

Gamma Spectroscopy

Upon request of the client, Bismuth 214 is reported in the target list. Bismuth 214 was found in some samples, but the results are not reliable. This is due to the inability to effectively quantify the parent, Radium 226, in water. This is due to the loss of Radon-222, the first decay daughter of Ra226.
Affected Samples:
F8J210133 (8): GWGW2331A
F8J210133 (9): GWGW2331B
F8J210133 (10): GWGW2330
F8J210133 (11): GWGW2329
F8J210133 (12): GWGW2327

Pb-210, energy 46.54 keV, is out of our calibration range for water geometries. Results reported for Lead-210 are estimated. Results for all associated samples are below the required detection limit.
Affected Samples:
F8J210133 (8): GWGW2331A
F8J210133 (9): GWGW2331B
F8J210133 (10): GWGW2330
F8J210133 (11): GWGW2329
F8J210133 (12): GWGW2327
F8J210133 (13): EBGW0016

Strontium-90

There was insufficient sample provided to perform the analysis at the method specified amount. A reduced sample amount was prepared.
Affected Samples:
F8J210133 (8): GWGW2331A

Radium-226

There was insufficient sample provided to perform the analysis at the method specified amount. A reduced sample amount was prepared.
Affected Samples:
F8J210133 (8): GWGW2331A

Gross Alpha/Beta

The Gross Alpha Beta reporting limit was not met due to a reduction of sample size attributed to the sample's high residual mass. The analytical results are reported.
Affected Samples:
F8J210133 (8): GWGW2331A
F8J210133 (9): GWGW2331B
F8J210133 (10): GWGW2330
F8J210133 (11): GWGW2329
F8J210133 (12): GWGW2327

Isotopic Thorium

There was insufficient sample provided to perform the analysis at the method specified amount. A reduced sample amount was prepared. Count times were adjusted accordingly to meet client reporting limits.
Affected Samples:
F8J210133 (8): GWGW2331A
F8J210133 (9): GWGW2331B
F8J210133 (10): GWGW2330
F8J210133 (11): GWGW2329
F8J210133 (12): GWGW2327
F8J210133 (13): EBGW0016

Isotopic Uranium

There was insufficient sample provided to perform the analysis at the method specified amount. A reduced sample amount was prepared. Count times were adjusted accordingly to meet client reporting limits.
Affected Samples:
F8J210133 (8): GWGW2331A
F8J210133 (9): GWGW2331B
F8J210133 (10): GWGW2330
F8J210133 (11): GWGW2329
F8J210133 (12): GWGW2327
F8J210133 (13): EBGW0016

METHODS SUMMARY

F8J210133

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Carbon 14 by LSC	EERF C-01-1	
Gamma Spectroscopy - Cesium-137 & Hits	EPA 901.1 MOD	
Gross Alpha/Beta EPA 900	EPA 900.0 MOD	EPA 900.0
H-3 by Distillation & LSC	EPA 906.0 MOD	
Isotopic Thorium by Alpha Spectroscopy	EML A-01-R MOD	
Isotopic Uranium by Alpha Spectroscopy	EML A-01-R MOD	
Radium-226 by GFPC	EPA 903.0 MOD	
Strontium 90 by GFPC	EPA 905 MOD	

References:

EERF EERF

EML "ENVIRONMENTAL MEASUREMENTS LABORATORY PROCEDURES MANUAL" HASL-300 28TH EDITION, VOLUME I and II DEPARTMENT OF ENERGY

EPA "EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984

SAMPLE SUMMARY

F8J210133

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
K08HD	001	GWGW2362	10/15/08	10:50
K08JC	002	GWGW2363A	10/15/08	10:40
K08JE	003	GWGW2363B	10/15/08	10:40
K08JJ	004	GWGW2324	10/15/08	09:40
K08JR	005	GWGW2325	10/15/08	11:35
K08JX	006	GWGW2351	10/16/08	08:50
K08J4	007	TPIN0363	10/16/08	08:50
K08J8	008	GWGW2331A	10/16/08	09:40
K08LD	009	GWGW2331B	10/16/08	09:40
K08LP	010	GWGW2330	10/16/08	11:35
K08LV	011	GWGW2329	10/16/08	14:00
K08L1	012	GWGW2327	10/16/08	13:55
K08L6	013	EBGW0016	10/16/08	15:15

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

F8J210133 CLIENT ANALYSIS SUMMARY

Storage Loc: R204-206

Project Manager: MCF | Quote #: 80342 | SDG:

Project: 388-1856-1-16 | UC Davis

PO#: | Report to: Tim Utterback

Client: 1353423 Weiss Associates

#SMPS in LOT: 13

Date Received: 2008-10-21
Analytical Due Date: 2008-11-03
Report Due Date: 2008-11-05
Report Type: D Expanded Deliverable
EDD Code: 99

Sample Control: Change the Project field to the Project ID on the COC. Enter COC# in the COC field.
Enter "WAE" in Sample Name field. Enter "U" in the LPR Code field.
RADIOCHEMISTRY: Please note the required MDCs

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
1	GWGW2362			2008-10-15 / 1050	K08HD	WATER

SAMPLE COMMENTS:

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
2	GWGW2363A			2008-10-15 / 1040	K08JC	WATER

SAMPLE COMMENTS:

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
3	GWGW2363B			2008-10-15 / 1040	K08JE	WATER

SAMPLE COMMENTS: *!*!*!LIMITED VOLUME!*!*!*

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
4	GWGW2324			2008-10-15 / 940	K08JJ	WATER

SAMPLE COMMENTS:

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
5	GWGW2325			2008-10-15 / 1135	K08JR	WATER

SAMPLE COMMENTS: !*!*!*LIMITED VOLUME!*!*!*

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
6	GWGW2351			2008-10-16 / 850	K08JX	WATER

SAMPLE COMMENTS: !*!*!*LIMITED VOLUME!*!*!*

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06

F8J210133 CLIENT ANALYSIS SUMMARY

Storage Loc: R204-206

Project Manager: MCF | Quote #: 80342 | SDG:

Project: 388-1856-1-16 | UC Davis

PO#: | Report to: Tim Utterback

Client: 1353423 Weiss Associates

#SMPS in LOT: 13

Date Received: 2008-10-21
Analytical Due Date: 2008-11-03
Report Due Date: 2008-11-05
Report Type: D Expanded Deliverable
EDD Code: 99

Sample Control: Change the Project field to the Project ID on the COC. Enter COC# in the COC field.
Enter "WAE" in Sample Name field. Enter "U" in the LPR Code field.
RADIOCHEMISTRY: Please note the required MDCs

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
7	TPIN0363			2008-10-16 / 850	K08J4	WATER

SAMPLE COMMENTS:

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
8	GWGW2331A			2008-10-16 / 940	K08J8	WATER

SAMPLE COMMENTS:

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	2I	EML	A-01-R MOD	WATER, A-01-R, IsoU	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	2K	EML	A-01-R MOD	WATER, A-01-R, IsoTh	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	Y9	EPA	900.0 MOD	WATER, 900.0 MOD, Gross Alpha/Beta EPA 9	FR	Evaporative Preparation, Total	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	Z7	EPA	901.1 MOD	WATER, 901.1, Gamma Spec	G7	Direct Addition of Sample to Geometry	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZO	EPA	905 MOD	WATER, 905 MOD, SR-90	FX	Precipitate, Separation	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZY	EPA	903.0 MOD	WATER, 903.0, Radium 226	G3	Precipitate, Separation - 14 day Ingrowth	01	STANDARD TEST SET	PROT: R	WRK LOC	06
X XX	Z7	EPA	901.1 MOD	WATER, 901.1, Gamma Spec	G7	Direct Addition of Sample to Geometry	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
9	GWGW2331B			2008-10-16 / 940	K08LD	WATER

SAMPLE COMMENTS:

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	2I	EML	A-01-R MOD	WATER, A-01-R, IsoU	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	2K	EML	A-01-R MOD	WATER, A-01-R, IsoTh	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	Y9	EPA	900.0 MOD	WATER, 900.0 MOD, Gross Alpha/Beta EPA 9	FR	Evaporative Preparation, Total	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	Z7	EPA	901.1 MOD	WATER, 901.1, Gamma Spec	G7	Direct Addition of Sample to Geometry	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZO	EPA	905 MOD	WATER, 905 MOD, SR-90	FX	Precipitate, Separation	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZY	EPA	903.0 MOD	WATER, 903.0, Radium 226	G3	Precipitate, Separation - 14 day Ingrowth	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
10	GWGW2330			2008-10-16 / 1135	K08LP	WATER

SAMPLE COMMENTS:

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	2I	EML	A-01-R MOD	WATER, A-01-R, IsoU	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	2K	EML	A-01-R MOD	WATER, A-01-R, IsoTh	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06

F8J210133 CLIENT ANALYSIS SUMMARY

Storage Loc: R204-206

Date Received: 2008-10-21

Analytical Due Date: 2008-11-03

Report Due Date: 2008-11-05

Report Type: D Expanded Deliverable

EDD Code: 99

Project Manager: MCF Quote #: 80342 SDG:

Project: 388-1856-1-16 UC Davis

PO#: Report to: Tim Utterback

Client: 1353423 Weiss Associates #SMPS in LOT: 13

Sample Control: Change the Project field to the Project ID on the COC. Enter COC# in the COC field.

Enter "WAE" in Sample Name field. Enter "U" in the LPR Code field.

RADIOCHEMISTRY: Please note the required MDCs

XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	Y9	EPA	900.0 MOD	WATER, 900.0 MOD, Gross Alpha/Beta EPA 9	FR	Evaporative Preparation, Total	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	Z7	EPA	901.1 MOD	WATER, 901.1, Gamma Spec	G7	Direct Addition of Sample to Geometry	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZO	EPA	905 MOD	WATER, 905 MOD, SR-90	FX	Precipitate, Separation	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZY	EPA	903.0 MOD	WATER, 903.0, Radium 226	G3	Precipitate, Separation - 14 day Ingrowth	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
11	GWGW2329			2008-10-16 / 1400	K08LV	WATER

SAMPLE COMMENTS: *!*!*!LIMITED VOLUME!*!*!*

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	2I	EML	A-01-R MOD	WATER, A-01-R, IsoU	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	2K	EML	A-01-R MOD	WATER, A-01-R, IsoTh	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	Y9	EPA	900.0 MOD	WATER, 900.0 MOD, Gross Alpha/Beta EPA 9	FR	Evaporative Preparation, Total	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	Z7	EPA	901.1 MOD	WATER, 901.1, Gamma Spec	G7	Direct Addition of Sample to Geometry	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZO	EPA	905 MOD	WATER, 905 MOD, SR-90	FX	Precipitate, Separation	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZY	EPA	903.0 MOD	WATER, 903.0, Radium 226	G3	Precipitate, Separation - 14 day Ingrowth	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
12	GWGW2327			2008-10-16 / 1355	K08L1	WATER

SAMPLE COMMENTS:

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	2I	EML	A-01-R MOD	WATER, A-01-R, IsoU	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	2K	EML	A-01-R MOD	WATER, A-01-R, IsoTh	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	Y9	EPA	900.0 MOD	WATER, 900.0 MOD, Gross Alpha/Beta EPA 9	FR	Evaporative Preparation, Total	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	Z7	EPA	901.1 MOD	WATER, 901.1, Gamma Spec	G7	Direct Addition of Sample to Geometry	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZO	EPA	905 MOD	WATER, 905 MOD, SR-90	FX	Precipitate, Separation	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZY	EPA	903.0 MOD	WATER, 903.0, Radium 226	G3	Precipitate, Separation - 14 day Ingrowth	01	STANDARD TEST SET	PROT: R	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
13	EBGW0016			2008-10-16 / 1515	K08L6	WATER

SAMPLE COMMENTS: !*!*!*LIMITED VOLUME*!*!*!

XX	ZV		RAD SCREEN	WATER, RAD SCREEN, RAD SCREEN, Special L	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	2I	EML	A-01-R MOD	WATER, A-01-R, IsoU	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	2K	EML	A-01-R MOD	WATER, A-01-R, IsoTh	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	4E	EERF	C-01-1	WATER, C-01-1, Carbon 14	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06

F8J210133 CLIENT ANALYSIS SUMMARY

Storage Loc: R204-206

Project Manager: MCF Quote #: 80342 SDG:

Project: 388-1856-1-16 UC Davis

PO#: Report to: Tim Utterback

Client: 1353423 Weiss Associates

#SMPS in LOT: 13

Date Received: 2008-10-21

Analytical Due Date: 2008-11-03

Report Due Date: 2008-11-05

Report Type: D Expanded Deliverable

EDD Code: 99

Sample Control: Change the Project field to the Project ID on the COC. Enter COC# in the COC field.

Enter "WAE" in Sample Name field. Enter "U" in the LPR Code field.

RADIOCHEMISTRY: Please note the required MDCs

XX	Y9	EPA	900.0 MOD	WATER, 900.0 MOD, Gross Alpha/Beta EPA 9	FR	Evaporative Preparation, Total	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	Z7	EPA	901.1 MOD	WATER, 901.1, Gamma Spec	G7	Direct Addition of Sample to Geometry	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZC	EPA	906.0 MOD	WATER, 906.0, Tritium	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZO	EPA	905 MOD	WATER, 905 MOD, SR-90	FX	Precipitate, Separation	01	STANDARD TEST SET	PROT: R	WRK LOC	06
XX	ZY	EPA	903.0 MOD	WATER, 903.0, Radium 226	G3	Precipitate, Separation - 14 day Ingrowth	01	STANDARD TEST SET	PROT: R	WRK LOC	06

Lot# F8J210133

cur 433

Chain of Custody Record

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-16
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AguaTierra Associates Incorporated, DBA

TA - Test America
13715 Rider Trail North
Earth City, MO 63045
Phone 314.298.8566 fax: 314.298.8757

Client Contact	Project Manager: Bob Devany	Sampled by: KWA/JMM	Date: 10/16/08	COC Number: UCD
Weiss Associates	Tel: 510-450-6144	Lab Contact:	Carrier:	Page 1 of 2
5801 Christie Avenue, Suite 600	Analysis Turnaround Time			Job No.
Emeryville, CA 94608	Calendar (C) or Work Days (W) --- 10W			
(510) 450-6000 Phone	TAT if different from Below _____			SDG No..
(510) 547-5043 FAX	☐ 2 weeks			
	☐ 1 week			
Job Name: UC Davis	☐ 2 days			
Address: One Shields Ave, Davis	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Field Filtered (Y/N)	Tritium (EPA 906.0)	Carbon-14 (C-01-1)	SR-90 (EPA 905.0)	Gross Alpha, Gross Beta (EPA 900.0)	Gamma Spec (EPA 901.1)	Uranium + Thorium (A-01-R)	RA-226 (EPA 903.0)	Sample Specific Notes:
GWGW2362	10/15/08	1050		W	2		X	X						250G, 500P
GWGW2363A	10/15/08	1040		W	2		X	X						↓
GWGW2363B	10/15/08	1040		W	2		X	X						500P
GWGW2324	10/15/08	0940		W	2		X	X						↓ , ~~500G~~
GWGW2325	10/15/08	1135		W	2		X	X						
GWGW2351	10/16/08	0850		W	2 Broken		X	X						
TPIN0363	10/16/08	0850		W	2		X	X						250G
GWGW2331A	10/16/08	0940		W	4		X	X	X	X	X	X	X	250G, LP
GWGW2331B	10/16/08	0940		W	4		X	X	X	X	X	X	X	↓ ↓ ↓ , 4LP
									X	X	X	X	X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____ Field Filtered

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For _____ Months*

Special Instructions/QC Requirements & Comments: Level III Reporting

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
KWAN ATKINSON	WEISS ASSOC.	10/17/08 1700	[signature]	TASTL	10.20.08 0930
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

TestAmerica St. Louis

Lot# F8J210133

Chain of Custody Record

TA - Test America
13715 Rider Trail North
Earth City, MO 63045
Phone 314.298.8566 fax: 314.298.8757

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-16
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? ☒ Yes ☐ No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AguaTierra Associates Incorporated, DBA

Client Contact		Project Manager: Bob Devany	Sampled by: RNA / JMD	Date: 10/16/08	COC Number: UCD
Weiss Associates		Tel: 510-450-6144	Lab Contact:	Carrier:	Page 2 of 2
5801 Christie Avenue, Suite 600		Analysis Turnaround Time			Job No.
Emeryville, CA 94608		Calendar (C) or Work Days (W) --- 10W			
(510) 450-6000	Phone	TAT if different from Below _____			SDG No.
(510) 547-5043	FAX	☐ 2 weeks			
		☐ 1 week			
Job Name: UC Davis		☐ 2 days			
Address: One Shields Ave, Davis		☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Field Filtered (Y/N)	Tritium (EPA 906.0)	Carbon-14 (C-01-1)	Strontium-90 (EPA 905.0)	Radium-226 by GFPC (EPA 903.0)	Gross Alpha, Gross Beta (EPA 900.0)	Gamma Suite (EPA 901.1)	Uranium and Thorium isotopes (A-01-R)										Sample Specific Notes:
GWGW2330	10/16/08	1135		W	8		X	X	X	X	X	X	X			5XLP, 500P, 250G							
~~GWGW2329~~	~~10/16/08~~	~~1400~~		~~W~~	~~8~~		~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~			↓		did not					~~SENT IN A THIRD COOLER~~
GWGW2327	10/16/08	1355		W	8		X	X	X	X	X	X	X			↓							SW 10.21.08
EBGW001b	10/16/08	1515		W	4		X	X	X	X	X	X	X					4LP, 2LP, 500P					
							↑ Broken																
									X	X	X	X	X										

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____ Field Filtered

Possible Hazard Identification
Non-Hazard *Flammable* *Skin Irritant* *Poison B* *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client *Disposal By Lab* *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: Level III Reporting

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
RNA ATUNSON	WEISS ASSOC.	10/17/08 1700	[signature]	TA STL	10.20.08 0930
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

TestAmerica St. Louis

wu 433

Chain of Custody Record

TA - Test America
13715 Rider Trail North
Earth City, MO 63045
Phone 314.298.8566 fax 314.298.8757

Please send analytic results, EDD, EDF, and the original chain-of-custody form to:
Anja Verce (av@weiss.com)
Tim Utterback (tru@weiss.com)
Jim Martin (jam@weiss.com)
Project ID: 388-1856-1-16
Protocol No.: ROD

INSTRUCTIONS FOR LAB PERSONNEL:
GeoTracker EDF required? [X] Yes [ ] No
Include laboratory QA/QC data with report.
Specify analytic/prep method and detection limit in report.
Notify us of any anomalous peaks in GC or other scans.
Call immediately with any questions or problems.

Weiss Associates
Environmental Science, Engineering and Management Services
5801 Christie Avenue, Suite 600, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043

Client Contact	
Weiss Associates	
5801 Christie Avenue, Suite 600	
Emeryville, CA 94608	
(510) 450-6000	Phone
(510) 547-5043	FAX
Job Name:	UC Davis
Address:	One Shields Ave, Davis

Project Manager: Bob Devany
Tel: 510-450-6144

Analysis Turnaround Time
Calendar (C) or Work Days (W) --- 10W
TAT if different from Below ____
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sampled by: KW / DWD Date: 10/16/08
Lab Contact: Carrier:

COC Number: UCD
Page 2 of 2
Job No.
SDG No.

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Field Filtered (Y/N)	Tritium (EPA 906.0)	Carbon-14 (C-01-1)	Strontium-90 (EPA 905.0)	Radium-226 by GFPC (EPA 903.0)	Gross Alpha, Gross Beta (EPA 900.0)	Gamma Suite (EPA 901.1)	Uranium and Thorium isotopes (A-01-R)	Sample Specific Notes:
~~GWGW2330~~	~~10/16/08~~	~~1135~~		~~W~~	~~8~~		X	X	X	X	X	X	X	KW
GWGW2329	10/16/08	1400		W	8		X	X	X	X	X	X	X	
~~GWGW2327~~	~~10/16/08~~	~~1355~~		~~W~~	~~8~~		X	X	X	X	X	X	X	KW
~~EBGW001~~	~~10/16/08~~	~~1515~~		~~W~~	~~4~~		X	X	X	X	X	X	X	KWA
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____					Field Filtered				x	x	x	x	x	

Possible Hazard Identification
Non-Hazard Flammable Skin Irritant Poison B Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client Disposal By Lab Archive For ____ Months

Special Instructions/QC Requirements & Comments: Level III Reporting

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Weiss Assoc.	10/17/08 1700	[signature]	C&T	10/16/08
[signature]	C&T	10/20/08	[signature]	TA SL	10.21.08 0915

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Lot #(s): F8J210133

Condition Upon Receipt Form

Client: Weiss Assoc. COC/RFA No: UCD Date: 10.20.08
Quote No: 80342 Initiated By: SV Time: 0930

Shipping Information

Shipper Name: FedX
Multiple Packages (Y) N

Shipping # (s):*
1. 8675 1956 9700
2. 9695
3. 7960 9221 5553
4.
5.
6.
7.
8.
9.
10.

Sample Temperature (s):**
1. ambient
2. ↓
3. 2
4.
5.
6.
7.
8.
9.
10.

*Numbered shipping lines correspond to Numbered Sample Temp lines

**Sample must be received at 4°C ± 2°C- If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	Y (N)	Are there custody seals present on the cooler?	8.	Y (N)	Are there custody seals present on bottles?
2.	Y N (N/A)	Do custody seals on cooler appear to be tampered with?	9.	Y N (N/A)	Do custody seals on bottles appear to be tampered with?
3.	(Y) N	Were contents of cooler frisked after opening, but before unpacking?	10.	(Y) N N/A	Was sample received with proper pH[1]? (If not, make note below)
4.	(Y) N	Sample received with Chain of Custody?	11.	Y N	If N/A- Was pH taken by original TestAmerica lab?
5.	Y (N) N/A	Does the Chain of Custody match sample ID's on the container(s)?	12.	(Y) N	Sample received in proper containers?
6.	(Y) N	Was sample received broken?	13.	Y N (N/A)	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)
7.	Y (N)	Is sample volume sufficient for analysis?	14.	Y N	Was Internal COC/Workshare received?

[1] For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes:

Rec'd. broken; no bottle for
EBGW0016 H3
GWGW 2351 H3

Did not recv. H3 for GWGW2363B & 2325.

Did not recv'd. 4th bottle for 2331A, B.

0915 10.11.08 Recv'd. third cooler w/ sample 2329. C14 had lid off - sample in bottom of cooler; about 30ml left, probably compromised.

Corrective Action:
☐ Client Contact Name: Informed by:
☐ Sample(s) processed "as is"
☐ Sample(s) on hold until: If released, notify:
Project Management Review: Date: 10-23-08

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED IN. IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIAL AND THE DATE NEXT TO THAT ITEM.

Weiss Associates

Client Sample ID: GWGW2362

Radiochemistry

Lab Sample ID: F8J210133-001
Work Order: K08HD
Matrix: WATER

Date Collected: 10/15/08 1050
Date Received: 10/21/08 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/L**		**Batch # 8296072**	**Yld %**
Carbon 14	-4.4	U	4.8	20.0	8.6	10/22/08	10/23/08
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**		**Batch # 8297158**	**Yld %**
Tritium	-120	U	130	300	240	10/23/08	11/01/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: GWGW2363A

Radiochemistry

Lab Sample ID: F8J210133-002
Work Order: K08JC
Matrix: WATER

Date Collected: 10/15/08 1040
Date Received: 10/21/08 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/L**		**Batch # 8296072**	**Yld %**
Carbon 14	5.8	U	5.3	20.0	8.6	10/22/08	10/24/08
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**		**Batch # 8297158**	**Yld %**
Tritium	-20	U	140	300	240	10/23/08	11/02/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: GWGW2363B

Radiochemistry

Lab Sample ID: F8J210133-003
Work Order: K08JE
Matrix: WATER

Date Collected: 10/15/08 1040
Date Received: 10/21/08 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/L**	**Batch # 8296072**		**Yld %**
Carbon 14	2.8	U	5.1	20.0	8.5	10/22/08	10/24/08
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**Batch # 8297158**		**Yld %**
Tritium	40	U	140	300	240	10/23/08	11/02/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: GWGW2324

Radiochemistry

Lab Sample ID: F8J210133-004
Work Order: K08JJ
Matrix: WATER

Date Collected: 10/15/08 0940
Date Received: 10/21/08 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/L**		**Batch # 8296072**	**Yld %**
Carbon 14	3.8	U	5.2	20.0	8.5	10/22/08	10/24/08
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**		**Batch # 8297158**	**Yld %**
Tritium	10	U	140	300	240	10/23/08	11/02/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: GWGW2325

Radiochemistry

Lab Sample ID: F8J210133-005
Work Order: K08JR
Matrix: WATER

Date Collected: 10/15/08 1135
Date Received: 10/21/08 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/L**	**Batch # 8296072**		**Yld %**
Carbon 14	1.5	U	5.1	20.0	8.5	10/22/08	10/24/08
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**Batch # 8297158**		**Yld %**
Tritium	-40	U	140	300	240	10/23/08	11/02/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: GWGW2351

Radiochemistry

Lab Sample ID: F8J210133-006
Work Order: K08JX
Matrix: WATER

Date Collected: 10/16/08 0850
Date Received: 10/21/08 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/L**		**Batch # 8296072**	**Yld %**
Carbon 14	**44.0**		**7.5**	20.0	**8.6**	**10/22/08**	**10/24/08**
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**		**Batch # 8297158**	**Yld %**
Tritium	90	U	150	300	240	10/23/08	11/02/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: TPIN0363

Radiochemistry

Lab Sample ID: F8J210133-007
Work Order: K08J4
Matrix: WATER

Date Collected: 10/16/08 0850
Date Received: 10/21/08 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Carbon 14 by EERF C-01-1				**pCi/L**	**Batch # 8296072**		**Yld %**
Carbon 14	2.3	U	5.1	20.0	8.5	10/22/08	10/24/08
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**Batch # 8297158**		**Yld %**
Tritium	30	U	140	300	240	10/23/08	11/02/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: GWGW2331A

Radiochemistry

Lab Sample ID: F8J210133-008
Work Order: K08J8
Matrix: WATER

Date Collected: 10/16/08 0940
Date Received: 10/21/08 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Gamma Cs-137 & Hits by EPA 901.1 MOD				**pCi/L**	**Batch # 8295437**		**Yld %**
Actinium 228	4	U	11	20	18	10/21/08	10/22/08
Bismuth 212	0.5	U	26	70	45	10/21/08	10/22/08
Bismuth 214	**90**		**13**	10	**9**	**10/21/08**	**10/22/08**
Cesium 137	-0.01	U	2.7	10.0	4.7	10/21/08	10/22/08
Cobalt 60	0.3	U	2.7	10.0	4.8	10/21/08	10/22/08
Lead 210	60	U	100	700	170	10/21/08	10/22/08
Lead 212	-4	U	13	10	11	10/21/08	10/22/08
Potassium 40	**93**	**J**	**35**	100	**29**	**10/21/08**	**10/22/08**
Sodium 22	-1.2	U	3.3	10.0	5.6	10/21/08	10/22/08
Thallium 208	4.0	U	3.1	5.0	4.9	10/21/08	10/22/08
Thorium 234	-60	U	140	350	170	10/21/08	10/22/08
Uranium 235	13	U	19	25	32	10/21/08	10/22/08
Uranium 238	-70	U	190	500	190	10/21/08	10/22/08
Radium 226 by EPA 903.0 MOD				**pCi/L**	**Batch # 8295393**		**Yld % 92**
Radium (226)	0.21	U	0.19	1.00	0.29	10/21/08	11/11/08
SR-90 BY GFPC EPA-905 MOD				**pCi/L**	**Batch # 8295395**		**Yld % 75**
Strontium 90	0.23	U	0.60	1.00	1.0	10/21/08	11/07/08
Carbon 14 by EERF C-01-1				**pCi/L**	**Batch # 8296072**		**Yld %**
Carbon 14	**26.7**		**6.5**	20.0	**8.6**	**10/22/08**	**10/24/08**
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**Batch # 8297158**		**Yld %**
Tritium	30	U	140	300	240	10/23/08	11/02/08
Iso URANIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**Batch # 8306073**		**Yld % 60**
Uranium 233/234	**3.71**		**0.996**	1.00	**0.35**	**11/01/08**	**11/03/08**
Uranium 235/236	**0.36**	**J**	**0.33**	1.00	**0.32**	**11/01/08**	**11/03/08**
Uranium 238	**2.16**		**0.75**	1.00	**0.32**	**11/01/08**	**11/03/08**
Iso THORIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**Batch # 8306072**		**Yld % 56**
Thorium 228	0.15	U	0.29	1.00	0.52	11/01/08	11/03/08
Thorium 230	**0.96**	**J**	**0.52**	1.00	**0.18**	**11/01/08**	**11/03/08**
Thorium 232	0.08	U	0.17	1.00	0.33	11/01/08	11/03/08
Gross Alpha/Beta EPA 900				**pCi/L**	**Batch # 8302160**		**Yld %**
Gross Alpha	3.0	U	4.4	2.0	7.4	10/28/08	10/31/08
Gross Beta	6.3	U	5.8	3.0	9.2	10/28/08	10/31/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

J Result is greater than sample detection limit but less than stated reporting limit.
U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: GWGW2331B

Radiochemistry

Lab Sample ID: F8J210133-009
Work Order: K08LD
Matrix: WATER

Date Collected: 10/16/08 0940
Date Received: 10/21/08 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Gamma Cs-137 & Hits by EPA 901.1 MOD				**pCi/L**	**Batch # 8295437**		**Yld %**
Actinium 228	10	U	11	20	18	10/21/08	10/24/08
Bismuth 212	17	U	22	70	37	10/21/08	10/24/08
Bismuth 214	**60**		**11**	10	**9**	**10/21/08**	**10/24/08**
Cesium 137	0.1	U	3.2	10.0	5.5	10/21/08	10/24/08
Cobalt 60	0.09	U	3.5	10.0	6.3	10/21/08	10/24/08
Lead 210	33	U	62	700	90	10/21/08	10/24/08
Lead 212	0.2	U	5.0	10.0	7.7	10/21/08	10/24/08
Potassium 40	-60	U	190	100	90	10/21/08	10/24/08
Sodium 22	-0.5	U	3.4	10.0	6.0	10/21/08	10/24/08
Thallium 208	-4	U	12	5	7	10/21/08	10/24/08
Thorium 234	-19	U	74	350	95	10/21/08	10/24/08
Uranium 235	13	U	15	25	25	10/21/08	10/24/08
Uranium 238	60	U	170	500	280	10/21/08	10/24/08
Radium 226 by EPA 903.0 MOD				**pCi/L**	**Batch # 8295393**		**Yld % 86**
Radium (226)	0.027	U	0.072	1.00	0.13	10/21/08	11/11/08
SR-90 BY GFPC EPA-905 MOD				**pCi/L**	**Batch # 8295395**		**Yld % 57**
Strontium 90	0.17	U	0.39	1.00	0.65	10/21/08	11/07/08
Carbon 14 by EERF C-01-1				**pCi/L**	**Batch # 8296072**		**Yld %**
Carbon 14	**51.7**		**8.0**	20.0	**8.5**	**10/22/08**	**10/24/08**
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**Batch # 8297158**		**Yld %**
Tritium	130	U	150	300	240	10/23/08	11/02/08
Iso URANIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**Batch # 8306073**		**Yld % 76**
Uranium 233/234	**4.6**		**1.0**	1.0	**0.3**	**11/01/08**	**11/03/08**
Uranium 235/236	0.22	U	0.25	1.00	0.34	11/01/08	11/03/08
Uranium 238	**3.18**		**0.85**	1.00	**0.29**	**11/01/08**	**11/03/08**
Iso THORIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**Batch # 8306072**		**Yld % 65**
Thorium 228	-0.069	U	0.056	1.00	0.39	11/01/08	11/03/08
Thorium 230	**1.10**		**0.52**	1.00	**0.29**	**11/01/08**	**11/03/08**
Thorium 232	0.22	U	0.24	1.00	0.25	11/01/08	11/03/08
Gross Alpha/Beta EPA 900				**pCi/L**	**Batch # 8302160**		**Yld %**
Gross Alpha	**7.7**		**4.0**	2.0	**4.5**	**10/28/08**	**10/31/08**
Gross Beta	5.4	U	4.0	3.0	6.3	10/28/08	10/31/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: GWGW2330

Radiochemistry

Lab Sample ID: F8J210133-010
Work Order: K08LP
Matrix: WATER

Date Collected: 10/16/08 1135
Date Received: 10/21/08 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Gamma Cs-137 & Hits by EPA 901.1 MOD				**pCi/L**	**Batch # 8295437**		**Yld %**
Actinium 228	0.5	U	10	20	18	10/21/08	10/23/08
Bismuth 212	2	U	23	70	41	10/21/08	10/23/08
Bismuth 214	**76**		**11**	10	**8**	**10/21/08**	**10/23/08**
Cesium 137	-3.4	U	3.8	10.0	6.1	10/21/08	10/23/08
Cobalt 60	1.2	U	3.1	10.0	5.4	10/21/08	10/23/08
Lead 210	50	U	100	700	170	10/21/08	10/23/08
Lead 212	-6	U	18	10	11	10/21/08	10/23/08
Potassium 40	23	U	34	100	57	10/21/08	10/23/08
Sodium 22	0.09	U	3.2	10.0	5.7	10/21/08	10/23/08
Thallium 208	1.9	U	3.4	5.0	5.6	10/21/08	10/23/08
Thorium 234	70	U	110	350	170	10/21/08	10/23/08
Uranium 235	6	U	20	25	35	10/21/08	10/23/08
Uranium 238	-5	U	87	500	150	10/21/08	10/23/08
Radium 226 by EPA 903.0 MOD				**pCi/L**	**Batch # 8295393**		**Yld % 96**
Radium (226)	0.099	U	0.096	1.00	0.15	10/21/08	11/11/08
SR-90 BY GFPC EPA-905 MOD				**pCi/L**	**Batch # 8295395**		**Yld % 59**
Strontium 90	-0.03	U	0.36	1.00	0.62	10/21/08	11/07/08
Carbon 14 by EERF C-01-1				**pCi/L**	**Batch # 8296072**		**Yld %**
Carbon 14	**10.6**	**J**	**5.5**	20.0	**8.5**	**10/22/08**	**10/24/08**
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**Batch # 8297158**		**Yld %**
Tritium	60	U	140	300	240	10/23/08	11/02/08
Iso URANIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**Batch # 8306073**		**Yld % 74**
Uranium 233/234	**3.15**		**0.82**	1.00	**0.26**	**11/01/08**	**11/03/08**
Uranium 235/236	**0.34**	**J**	**0.29**	1.00	**0.25**	**11/01/08**	**11/03/08**
Uranium 238	**1.32**		**0.51**	1.00	**0.20**	**11/01/08**	**11/03/08**
Iso THORIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**Batch # 8306072**		**Yld % 71**
Thorium 228	-0.006	U	0.12	1.00	0.34	11/01/08	11/03/08
Thorium 230	**0.59**	**J**	**0.36**	1.00	**0.14**	**11/01/08**	**11/03/08**
Thorium 232	0.01	U	0.11	1.00	0.31	11/01/08	11/03/08
Gross Alpha/Beta EPA 900				**pCi/L**	**Batch # 8302160**		**Yld %**
Gross Alpha	**6.8**		**3.5**	2.0	**3.9**	**10/28/08**	**10/31/08**
Gross Beta	4.3	U	3.1	3.0	4.9	10/28/08	10/31/08

NOTE(S)

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MDC is determined by instrument performance only.
Bold results are greater than the MDC

J Result is greater than sample detection limit but less than stated reporting limit.
U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: GWGW2329

Radiochemistry

Lab Sample ID: F8J210133-011
Work Order: K08LV
Matrix: WATER

Date Collected: 10/16/08 1400
Date Received: 10/21/08 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Gamma Cs-137 & Hits by EPA 901.1 MOD				**pCi/L**	**Batch # 8295437**		**Yld %**
Actinium 228	12	U	10	20	17	10/21/08	10/24/08
Bismuth 212	0.5	U	19	70	33	10/21/08	10/24/08
Bismuth 214	**78**		**11**	10	**7**	**10/21/08**	**10/24/08**
Cesium 137	1.2	U	3.3	10.0	5.6	10/21/08	10/24/08
Cobalt 60	0.9	U	2.9	10.0	5.1	10/21/08	10/24/08
Lead 210	90	U	100	700	170	10/21/08	10/24/08
Lead 212	-7	U	22	10	11	10/21/08	10/24/08
Potassium 40	22	U	35	100	59	10/21/08	10/24/08
Sodium 22	0.0	U	3.4	10.0	6.0	10/21/08	10/24/08
Thallium 208	1.5	U	3.6	5.0	6.1	10/21/08	10/24/08
Thorium 234	120	U	140	350	180	10/21/08	10/24/08
Uranium 235	0.1	U	20	25	35	10/21/08	10/24/08
Uranium 238	40	U	130	500	180	10/21/08	10/24/08
Radium 226 by EPA 903.0 MOD				**pCi/L**	**Batch # 8295393**		**Yld % 100**
Radium (226)	0.123	U	0.094	1.00	0.13	10/21/08	11/11/08
SR-90 BY GFPC EPA-905 MOD				**pCi/L**	**Batch # 8295395**		**Yld % 73**
Strontium 90	0.24	U	0.30	1.00	0.49	10/21/08	11/07/08
Carbon 14 by EERF C-01-1				**pCi/L**	**Batch # 8296072**		**Yld %**
Carbon 14	**11.2**	**J**	**5.5**	20.0	**8.5**	**10/22/08**	**10/24/08**
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**Batch # 8297158**		**Yld %**
Tritium	-5	U	140	300	240	10/23/08	11/02/08
Iso URANIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**Batch # 8306073**		**Yld % 78**
Uranium 233/234	**3.55**		**0.91**	1.00	**0.41**	**11/01/08**	**11/04/08**
Uranium 235/236	**0.34**	**J**	**0.30**	1.00	**0.30**	**11/01/08**	**11/04/08**
Uranium 238	**1.68**		**0.60**	1.00	**0.32**	**11/01/08**	**11/04/08**
Iso THORIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**Batch # 8306072**		**Yld % 67**
Thorium 228	0.27	U	0.32	1.00	0.46	11/01/08	11/03/08
Thorium 230	**1.34**		**0.63**	1.00	**0.19**	**11/01/08**	**11/03/08**
Thorium 232	0.0	U	0.061	1.00	0.19	11/01/08	11/03/08
Gross Alpha/Beta EPA 900				**pCi/L**	**Batch # 8302160**		**Yld %**
Gross Alpha	**4.0**		**2.9**	2.0	**3.8**	**10/28/08**	**10/31/08**
Gross Beta	4.6	U	3.0	3.0	4.7	10/28/08	10/31/08

NOTE(S)

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MDC is determined by instrument performance only.
Bold results are greater than the MDC

J Result is greater than sample detection limit but less than stated reporting limit.
U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: GWGW2327

Radiochemistry

Lab Sample ID: F8J210133-012
Work Order: K08L1
Matrix: WATER

Date Collected: 10/16/08 1355
Date Received: 10/21/08 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Gamma Cs-137 & Hits by EPA 901.1 MOD				**pCi/L**	**Batch # 8295437**		**Yld %**
Actinium 228	0.0	U	13	20	23	10/21/08	10/25/08
Bismuth 212	17	U	18	70	30	10/21/08	10/25/08
Bismuth 214	**62**		**13**	10	**9**	**10/21/08**	**10/25/08**
Cesium 137	-0.2	U	2.7	10.0	4.8	10/21/08	10/25/08
Cobalt 60	0.05	U	3.7	10.0	6.6	10/21/08	10/25/08
Lead 210	-12	U	51	700	80	10/21/08	10/25/08
Lead 212	2.7	U	6.3	10.0	8.5	10/21/08	10/25/08
Potassium 40	-70	U	200	100	90	10/21/08	10/25/08
Sodium 22	0.0	U	2.6	10.0	4.9	10/21/08	10/25/08
Thallium 208	-3.7	U	9.4	5.0	6.3	10/21/08	10/25/08
Thorium 234	24	U	63	350	94	10/21/08	10/25/08
Uranium 235	0.1	U	11	25	19	10/21/08	10/25/08
Uranium 238	30	U	170	500	280	10/21/08	10/25/08
Radium 226 by EPA 903.0 MOD				**pCi/L**	**Batch # 8295393**		**Yld % 91**
Radium (226)	0.10	U	0.11	1.00	0.17	10/21/08	11/11/08
SR-90 BY GFPC EPA-905 MOD				**pCi/L**	**Batch # 8295395**		**Yld % 43**
Strontium 90	-0.07	U	0.51	1.00	0.88	10/21/08	11/07/08
Carbon 14 by EERF C-01-1				**pCi/L**	**Batch # 8296072**		**Yld %**
Carbon 14	3.2	U	5.2	20.0	8.6	10/22/08	10/24/08
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**Batch # 8297158**		**Yld %**
Tritium	-70	U	140	300	240	10/23/08	11/02/08
Iso URANIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**Batch # 8306073**		**Yld % 58**
Uranium 233/234	**4.5**		**1.1**	1.0	**0.3**	**11/01/08**	**11/04/08**
Uranium 235/236	0.38	U	0.37	1.00	0.40	11/01/08	11/04/08
Uranium 238	**2.91**		**0.91**	1.00	**0.32**	**11/01/08**	**11/04/08**
Iso THORIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**Batch # 8306072**		**Yld % 70**
Thorium 228	0.09	U	0.24	1.00	0.47	11/01/08	11/03/08
Thorium 230	**0.93**	**J**	**0.47**	1.00	**0.30**	**11/01/08**	**11/03/08**
Thorium 232	0.11	U	0.16	1.00	0.15	11/01/08	11/03/08
Gross Alpha/Beta EPA 900				**pCi/L**	**Batch # 8302160**		**Yld %**
Gross Alpha	3.5	U	4.2	2.0	6.6	10/28/08	10/31/08
Gross Beta	2.2	U	4.4	3.0	7.3	10/28/08	10/31/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

J Result is greater than sample detection limit but less than stated reporting limit.
U Result is less than the sample detection limit.

Weiss Associates

Client Sample ID: EBGW0016

Radiochemistry

Lab Sample ID: F8J210133-013
Work Order: K08L6
Matrix: WATER

Date Collected: 10/16/08 1515
Date Received: 10/21/08 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Gamma Cs-137 & Hits by EPA 901.1 MOD				**pCi/L**	**Batch # 8295437**		**Yld %**
Actinium 228	5.6	U	9.2	20.0	15	10/21/08	10/25/08
Bismuth 212	20	U	23	70	38	10/21/08	10/25/08
Bismuth 214	6.7	U	5.9	10.0	9.4	10/21/08	10/25/08
Cesium 137	0.0	U	3.8	10.0	6.5	10/21/08	10/25/08
Cobalt 60	-0.9	U	3.4	10.0	5.9	10/21/08	10/25/08
Lead 210	33	U	90	700	150	10/21/08	10/25/08
Lead 212	0.2	U	4.5	10.0	8.5	10/21/08	10/25/08
Potassium 40	**50**	**J**	**32**	100	**46**	**10/21/08**	**10/25/08**
Sodium 22	1.0	U	2.9	10.0	5.0	10/21/08	10/25/08
Thallium 208	3.4	U	3.4	5.0	5.5	10/21/08	10/25/08
Thorium 234	120	U	110	350	160	10/21/08	10/25/08
Uranium 235	-2	U	19	25	29	10/21/08	10/25/08
Uranium 238	220	U	160	500	250	10/21/08	10/25/08
Radium 226 by EPA 903.0 MOD				**pCi/L**	**Batch # 8295393**		**Yld % 91**
Radium (226)	0.13	U	0.10	1.00	0.14	10/21/08	11/11/08
SR-90 BY GFPC EPA-905 MOD				**pCi/L**	**Batch # 8295395**		**Yld % 73**
Strontium 90	0.06	U	0.30	1.00	0.50	10/21/08	11/07/08
Carbon 14 by EERF C-01-1				**pCi/L**	**Batch # 8296072**		**Yld %**
Carbon 14	2.6	U	5.1	20.0	8.5	10/22/08	10/24/08
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**Batch # 8297158**		**Yld %**
Tritium	50	U	140	300	240	10/23/08	11/02/08
Iso THORIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**Batch # 8306072**		**Yld % 77**
Thorium 228	0.17	U	0.20	1.00	0.26	11/01/08	11/03/08
Thorium 230	**0.47**	**J**	**0.31**	1.00	**0.24**	**11/01/08**	**11/03/08**
Thorium 232	0.17	U	0.19	1.00	0.21	11/01/08	11/03/08
Gross Alpha/Beta EPA 900				**pCi/L**	**Batch # 8302160**		**Yld %**
Gross Alpha	0.37	U	0.47	2.00	0.76	10/28/08	10/31/08
Gross Beta	-0.20	U	0.86	3.00	1.5	10/28/08	10/31/08
Iso URANIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**Batch # 8310238**		**Yld % 85**
Uranium 233/234	0.06	U	0.11	1.00	0.19	11/05/08	11/05/08
Uranium 235/236	0.045	U	0.080	1.00	0.14	11/05/08	11/05/08
Uranium 238	-0.003	U	0.050	1.00	0.15	11/05/08	11/05/08

NOTE(S)

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MDC is determined by instrument performance only.
Bold results are greater than the MDC

J Result is greater than sample detection limit but less than stated reporting limit.
U Result is less than the sample detection limit.

METHOD BLANK REPORT

Radiochemistry

Client Lot ID: F8J210133
Matrix: WATER

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC		Prep Date	Analysis Date	Lab Sample ID
Radium 226 by EPA 903.0 MOD			**pCi/L**	**Batch #**	**8295393**	**Yld %**	**91**		**F8J210000-393B**
Radium (226)	-0.019	U	0.072	1.00	0.16		10/21/08	11/11/08	
SR-90 BY GFPC EPA-905 MOD			**pCi/L**	**Batch #**	**8295395**	**Yld %**	**71**		**F8J210000-395B**
Strontium 90	0.30	U	0.31	1.00	0.51		10/21/08	11/07/08	
Gamma Cs-137 & Hits by EPA 901.1 MOD			**pCi/L**	**Batch #**	**8295437**	**Yld %**			**F8J210000-437B**
Actinium 228	8.5	U	9.7	20.0	16		10/21/08	10/22/08	
Bismuth 212	1	U	21	70	37		10/21/08	10/22/08	
Bismuth 214	0.0	U	6.2	10.0	11		10/21/08	10/22/08	
Cesium 137	1.7	U	2.9	10.0	4.8		10/21/08	10/22/08	
Cobalt 60	1.2	U	3.2	10.0	5.6		10/21/08	10/22/08	
Lead 210	-9	U	49	700	79		10/21/08	10/22/08	
Lead 212	2.1	U	5.0	10.0	7.4		10/21/08	10/22/08	
Potassium 40	-80	U	390	100	90		10/21/08	10/22/08	
Sodium 22	1.2	U	2.6	10.0	4.5		10/21/08	10/22/08	
Thallium 208	-4	U	12	5	6		10/21/08	10/22/08	
Thorium 234	-45	U	80	350	85		10/21/08	10/22/08	
Uranium 235	14	U	11	25	18		10/21/08	10/22/08	
Uranium 238	-70	U	150	500	140		10/21/08	10/22/08	
Iso THORIUM (SHORT CT) DOE A-01-R MOD			**pCi/L**	**Batch #**	**8306072**	**Yld %**	**83**		**F8K010000-072B**
Thorium 228	**0.067**	**J**	**0.078**	1.00	**0.061**		**11/01/08**	**11/03/08**	
Thorium 230	**0.27**	**J**	**0.16**	1.00	**0.06**		**11/01/08**	**11/03/08**	
Thorium 232	0.022	U	0.045	1.00	0.060		11/01/08	11/03/08	
Iso URANIUM (SHORT CT) DOE A-01-R MOD			**pCi/L**	**Batch #**	**8306073**	**Yld %**	**81**		**F8K010000-073B**
Uranium 233/234	**0.12**	**J**	**0.10**	1.00	**0.06**		**11/01/08**	**11/03/08**	
Uranium 235/236	0.058	U	0.082	1.00	0.078		11/01/08	11/03/08	
Uranium 238	**0.16**	**J**	**0.12**	1.00	**0.1**		**11/01/08**	**11/03/08**	
Iso URANIUM (SHORT CT) DOE A-01-R MOD			**pCi/L**	**Batch #**	**8310238**	**Yld %**	**85**		**F8K050000-238B**
Uranium 233/234	0.047	U	0.075	1.00	0.12		11/05/08	11/05/08	
Uranium 235/236	-0.0049	U	0.0098	1.00	0.11		11/05/08	11/05/08	
Uranium 238	0.009	U	0.044	1.00	0.11		11/05/08	11/05/08	
Carbon 14 by EERF C-01-1			**pCi/L**	**Batch #**	**8296072**	**Yld %**			**F8J220000-072B**
Carbon 14	2.9	U	5.1	20.0	8.5		10/22/08	10/23/08	
TRITIUM (Distill) by EPA 906.0 MOD			**pCi/L**	**Batch #**	**8297158**	**Yld %**			**F8J230000-158B**
Tritium	20	U	140	300	240		10/23/08	11/01/08	

METHOD BLANK REPORT

Radiochemistry

Client Lot ID: F8J210133
Matrix: WATER

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC		Prep Date	Lab Sample ID Analysis Date
Gross Alpha/Beta EPA 900			**pCi/L**	**Batch #**	**8302160**	**Yld %**		**F8J280000-160B**
Gross Alpha	0.09	U	0.46	2.00	0.89		10/28/08	10/31/08
Gross Beta	0.33	U	0.73	3.00	1.2		10/28/08	10/31/08

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined using instrument performance only
Bold results are greater than the MDC

J Result is greater than sample detection limit but less than stated reporting limit.
U Result is less than the sample detection limit.

Laboratory Control Sample Report

Radiochemistry

Client Lot ID: F8J210133
Matrix: WATER

Parameter	Spike Amount	Result	Total Uncert. (2 σ+/-)	MDC	% Yld	% Rec	Lab Sample ID / QC Control Limits
Gamma Cs-137 & Hits by EPA 901.1 MOD			**pCi/L**	**901.1 MOD**			**F8J210000-437C**
Americium 241	141000	144000	12000	600		102	(90 - 110)
Cesium 137	53100	52100	2900	200		98	(90 - 110)
Cobalt 60	87900	83400	4700	100		95	(90 - 110)
	Batch #:	8295437		**Analysis Date:**	10/22/08		
Carbon 14 by EERF C-01-1			**pCi/L**	**C-01-1**			**F8J220000-072C**
Carbon 14	976	452	37	9		46	(38 - 112)
	Batch #:	8296072		**Analysis Date:**	10/23/08		
TRITIUM (Distill) by EPA 906.0 MOD			**pCi/L**	**906.0 MOD**			**F8J230000-158C**
Tritium	4870	4430	410	240		91	(67 - 111)
	Batch #:	8297158		**Analysis Date:**	11/01/08		
Gross Alpha/Beta EPA 900			**pCi/L**	**900.0 MOD**			**F8J280000-160C**
Gross Beta	68.1	56.1	4.9	1.2		82	(72 - 117)
	Batch #:	8302160		**Analysis Date:**	10/31/08		
Gross Alpha/Beta EPA 900			**pCi/L**	**900.0 MOD**			**F8J280000-160C**
Gross Alpha	49.4	47.4	5.4	0.9		96	(72 - 138)
	Batch #:	8302160		**Analysis Date:**	10/31/08		
Iso THORIUM (SHORT CT) DOE A-01-R MOD			**pCi/L**	**A-01-R MOD**			**F8K010000-072C**
Thorium 230	8.23	10.2	1.4	0.2	58	124	(92 - 138)
	Batch #:	8306072		**Analysis Date:**	11/03/08		
Iso URANIUM (SHORT CT) DOE A-01-R MOD			**pCi/L**	**A-01-R MOD**			**F8K010000-073C**
Uranium 233/234	13.1	12.9	1.5	0.1	82	98	(87 - 127)
Uranium 238	13.6	14.4	1.7	0.1	82	106	(87 - 128)
	Batch #:	8306073		**Analysis Date:**	11/04/08		
Iso URANIUM (SHORT CT) DOE A-01-R MOD			**pCi/L**	**A-01-R MOD**			**F8K050000-238C**
Uranium 233/234	13.1	14.6	1.7	0.2	77	112	(87 - 127)
Uranium 238	13.6	15.2	1.8	0.1	77	111	(87 - 128)
	Batch #:	8310238		**Analysis Date:**	11/05/08		

NOTE(S)

MDC is determined by instrument performance only
Calculations are performed before rounding to avoid round-off error in calculated results

Laboratory Control Sample/LCS Duplicate Report

Radiochemistry

Client Lot ID: F8J210133
Matrix: WATER

Parameter		Spike Amount	Result	Total Uncert. (2 σ+/-)	% Yld	% Rec	QC Control Limits	Precision	
Radium 226 by EPA 903.0 MOD			**pCi/L**	**903.0 MOD**				**Lab Sample ID F8J210000-393C**	
Radium (226)		11.3	12.1	1.2	92	107	(72 - 130)		
	Spk 2	11.3	12.0	1.2	97	107	(72 - 130)	0.6	%RPD
		Batch #:	8295393		**Analysis Date:**		11/11/08		
SR-90 BY GFPC EPA-905 MOD			**pCi/L**	**905 MOD**				**F8J210000-395C**	
Strontium 90		7.02	8.95	0.98	72	127	(73 - 135)		
	Spk 2	7.02	7.41	0.82	83	106	(73 - 135)	19	%RPD
		Batch #:	8295395		**Analysis Date:**		11/07/08		

NOTE(S)

Calculations are performed before rounding to avoid round-off error in calculated results

MATRIX SPIKE REPORT

Radiochemistry

Client Lot Id: F8J130132
Matrix: W

Date Sampled: 10/07/08
Date Received: 10/13/08

Parameter	Spike Amount	Spike Result	Total Uncert. (2σ +/-)	Spike Yld.	Sample Result	Total Uncert. (2 σ +/-)	QC Sample ID %YLD	QC Sample ID %REC	QC Control Limits
Carbon 14 by EERF C-01-1			**pCi/L**		**C-01-1**			**F8J130132-001**	
Carbon 14	2930	1630	130		179	17		50	(37 - 121)
	Batch #:	8296072		Analysis Date:		10/23/08			

NOTE(S)

Data are incomplete without the case narrative.

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE REPORT

Radiochemistry

Client Lot Id: F8J210133
Matrix: WATER

Date Sampled: 10/15/08
Date Received: 10/21/08

Parameter	Spike Amount	Spike Result	Total Uncert. (2σ +/-)	Spike Yld.	Sample Result	Total Uncert. (2 σ +/-)	QC Sample ID %YLD	QC Sample ID %REC	QC Control Limits
TRITIUM (Distill) by EPA 906.0 MOD			**pCi/L**		**906.0 MOD**			**F8J210133-002**	
Tritium	4870	4650	420		-20	140		96	(27 - 150)
	Batch #:	8297158		Analysis Date:		11/02/08			
Gross Alpha/Beta EPA 900			**pCi/L**		**900.0 MOD**			**F8J210133-009**	
Gross Beta	278	282	24		5.4	4.0		99	(66 - 147)
	Batch #:	8302160		Analysis Date:		10/31/08			
Gross Alpha/Beta EPA 900			**pCi/L**		**900.0 MOD**			**F8J210133-009**	
Gross Alpha	202	180	22		7.7	4.0		85	(44 - 150)
	Batch #:	8302160		Analysis Date:		10/31/08			

NOTE(S)

Data are incomplete without the case narrative.
Calculations are performed before rounding to avoid round-off errors in calculated results.

DUPLICATE EVALUATION REPORT

Radiochemistry

Client Lot ID: F8J210133 Date Sampled: 10/15/08
Matrix: WATER Date Received: 10/21/08

Parameter	SAMPLE Result		Total Uncert. (2σ+/-)	% Yld	DUPLICATE Result		Total Uncert. (2 σ+/-)	% Yld	QC Sample ID Precision	
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**906.0 MOD**				**F8J210133-001**	
Tritium	-120	U	130		**70**	U	**140**		663	%RPD
	Batch #:		8297158	(Sample)	8297158	(Duplicate)				
Gamma Cs-137 & Hits by EPA 901.1 MOD				**pCi/L**	**901.1 MOD**				**F8J210133-008**	
Actinium 228	**4**	U	**11**		**6**	U	**10**		37	%RPD
Bismuth 212	0.5	U	26		**9**	U	**21**		180	%RPD
Bismuth 214	**90**		**13**		**72**		**11**		21	%RPD
Cesium 137	-0.01	U	2.7		0.7	U	3.2		206	%RPD
Cobalt 60	0.3	U	2.7		0.3	U	3.5		16	%RPD
Lead 210	**60**	U	**100**		4	U	49		172	%RPD
Lead 212	**-4**	U	**13**		0.3	U	4.6		234	%RPD
Potassium 40	**93**	J	**35**		-46	U	97		592	%RPD
Sodium 22	-1.2	U	3.3		0.0	U	5.4		200	%RPD
Thallium 208	4.0	U	3.1		-5	U	17		1930	%RPD
Thorium 234	**-60**	U	**140**		-13	U	73		133	%RPD
Uranium 235	13	U	19		**9**	U	**15**		38	%RPD
Uranium 238	**-70**	U	**190**		**50**	U	**190**		910	%RPD
	Batch #:		8295437	(Sample)	8295437	(Duplicate)				
Iso URANIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**A-01-R MOD**				**F8J210133-013**	
Uranium 233/234	0.06	U	0.11	85	0.014	U	0.045	87	125	%RPD
Uranium 235/236	0.045	U	0.080	85	-0.010	U	0.014	87	315	%RPD
Uranium 238	-0.003	U	0.050	85	0.014	U	0.045	87	307	%RPD
	Batch #:		8310238	(Sample)	8310238	(Duplicate)				
Gross Alpha/Beta EPA 900				**pCi/L**	**900.0 MOD**				**F8J210133-009**	
Gross Alpha	**7.7**		**4.0**		**5.3**		**3.9**		37	%RPD
Gross Beta	5.4	U	4.0		**7.1**		**4.1**		28	%RPD
	Batch #:		8302160	(Sample)	8302160	(Duplicate)				
Iso THORIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**A-01-R MOD**				**F8J210133-009**	
Thorium 228	-0.069	U	0.056	65	0.27	U	0.28	56	336	%RPD
Thorium 230	**1.10**		**0.52**	65	**0.86**	J	**0.47**	56	24	%RPD
Thorium 232	0.22	U	0.24	65	0.11	U	0.17	56	67	%RPD
	Batch #:		8306072	(Sample)	8306072	(Duplicate)				
Iso URANIUM (SHORT CT) DOE A-01-R MOD				**pCi/L**	**A-01-R MOD**				**F8J210133-009**	
Uranium 233/234	**4.6**		**1.0**	76	**4.1**		**1.1**	59	11	%RPD
Uranium 235/236	0.22	U	0.25	76	0.21	U	0.28	59	3	%RPD
Uranium 238	**3.18**		**0.85**	76	**2.09**		**0.75**	59	41	%RPD
	Batch #:		8306073	(Sample)	8306073	(Duplicate)				
Carbon 14 by EERF C-01-1				**pCi/L**	**C-01-1**				**F8J130132-001**	
Carbon 14	179		17		149		15		18	%RPD
	Batch #:		8296072	(Sample)	8296072	(Duplicate)				

NOTE(S)

Data are incomplete without the case narrative.
Calculations are performed before rounding to avoid round-off error in calculated results

J Result is greater than sample detection limit but less than stated reporting limit.
U Result is less than the sample detection limit.

Report of Total Mercury In Waters

Project: LEHR/RWSW
Samples Collected: February 13, 2008
Report Date: February 26, 2009

Prepared for:
Tim Utterback
Weiss Associates
5801 Christie Avenue, Suite 600
Emeryville CA 94608

Brooks Rand Labs
Project ID: WEI-EM0801
Work Order: 0907034

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Table of Contents

Case Narrative 3

Report Information..... 5

Sample Information 6

Batch Summary..... 6

Sample Results 6

Accuracy & Precision Summary 7

Method Blanks & Reporting Limits 7

Instrument Calibration 8

Sample Containers..... 9

Shipping Containers 9

Chain-of-Custody Form(s)..... 10

Waybill(s) 11

Total Mercury Data Sequence 0900160, Batch B090197 12

Case Narrative

Shipping and Receiving

On February 14, 2009, Brooks Rand Labs (BRL) received three (3) water samples at 11:15 A.M. in a cooler with ice and at a temperature of 1.4 °C. The chain-of-custody form requested analysis for total mercury (THg). The samples were received and stored securely according to BRL standard operating procedures (SOP) and EPA methodology.

Preservation and Holding Time

All method and SOP requirements for preservation and holding time were satisfied.

Total Mercury in Water by EPA Method 1631 (SOP BR-0006)

All samples are prepared and analyzed in accordance with EPA Method 1631. Samples are oxidized with bromine monochloride (BrCl) and then analyzed with stannous chloride ($SnCl_2$) reduction, single gold amalgamation, and cold vapor atomic fluorescence spectroscopy (CVAFS) detection using a BRL Model III CVAFS Mercury Analyzer.

The results were method blank-corrected as described in the calculations section of the relevant BRL SOP(s) and may have been evaluated using reporting limits that have been adjusted to account for sample aliquot size. Please refer to the *Sample Results* page for sample-specific MDLs, MRLs, and other details.

Sequence 0900160

Instrument calibration, meeting all quality control criteria, was successfully achieved on the day of sample analysis.

Batch B090197

All data was reported without qualification and all associated quality control sample results met the acceptance criteria.

We certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. BRL, an accredited laboratory, certifies that the reported results of all analyses for which BRL is NELAP accredited meet all NELAP requirements. For more details please see the *Report Information* page in your report. Please feel free to contact us if you have any questions regarding this report.

Tiffany Stilwater
Project Manager
tiffany@brooksrand.com

Andrea Pratt
Project Coordinator
andrea@brooksrand.com

Report Information

Laboratory Accreditation

BRL is accredited by the *National Environmental Laboratory Accreditation Program* (NELAP) through the State of Florida Department of Health, Bureau of Laboratories (E87982) and is certified to perform many environmental analyses. BRL is also certified by many other states to perform environmental analyses. For a current list of our accreditations /certifications, please visit our website at <http://www.brooksrand.com/default.asp?contentID=586>. Results reported relate only to the samples listed in the report.

Common Abbreviations

BLK	method blank	**MS**	matrix spike
BRL	Brooks Rand Labs	**MSD**	matrix spike duplicate
BS	laboratory fortified blank	**ND**	non-detect
CAL	calibration standard	**NR**	non-reportable
CCV	continuing calibration verification	**PS**	post preparation spike
COC	chain of custody record	**REC**	percent recovery
CRM	certified reference material	**RPD**	relative percent difference
D	dissolved fraction	**RSD**	relative standard deviation
DUP	duplicate	**SCV**	secondary calibration verification
ICV	initial calibration verification	**SOP**	standard operating procedure
MDL	method detection limit	**SRM**	standard reference material
MRL	method reporting limit	**T**	total recoverable fraction

Definition of Data Qualifiers

(Effective 6/12/08)

B Detected by the instrument, the result is > the MDL but ≤ the MRL. Result is reported and considered an estimate.
E An estimated value due to the presence of interferences. A full explanation is presented in the narrative.
H Holding time and/or preservation requirements not met. Result is estimated.
J Estimated value. A full explanation is presented in the narrative.
J-M Duplicate precision (RPD) for associated QC sample was not within acceptance criteria. Result is estimated.
J-N Spike recovery for associated QC sample was not within acceptance criteria. Result is estimated.
M Duplicate precision (RPD) was not within acceptance criteria. Result is estimated.
N Spike recovery was not within acceptance criteria. Result is estimated.
R Rejected, unusable value. A full explanation is presented in the narrative.
U Result is ≤ the MDL or client requested reporting limit (CRRL). Result reported as the MDL or CRRL.

These qualifiers are based on those previously utilized by Brooks Rand, Ltd., those found in the EPA SOW ILM03.0, Exhibit B, Section III, pg. B-18, and the USEPA Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses; USEPA; July 2002. These supersede all previous qualifiers ever employed by BRL.

Project ID: WEI-EM0801
PM: Tiffany Stilwater

Client PM: Tim Utterback

Sample Information

Sample	Lab ID	Report Matrix	Type	Sampled	Received
RWSW0050	0907034-01	Water	Sample	02/13/2009	02/14/2009
RWSW0050FB	0907034-02	Water	Field Blank	02/13/2009	02/14/2009
RWSW0051	0907034-03	Water	Sample	02/13/2009	02/14/2009

Batch Summary

Analyte	Lab Matrix	Method	Prepared	Analyzed	Batch	Sequence
Hg	Water	EPA Method 1631	02/23/2009	02/24/2009	B090197	0900160

Sample Results

Sample	Analyte	Report Matrix	Fraction	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
RWSW0050										
0907034-01	Hg	Water	T	96.0		0.15	0.41	ng/L	B090197	0900160
RWSW0050FB										
0907034-02	Hg	Water	T	0.15	U	0.15	0.40	ng/L	B090197	0900160
RWSW0051										
0907034-03	Hg	Water	T	97.2		0.15	0.40	ng/L	B090197	0900160

Project ID: WEI-EM0801
PM: Tiffany Stilwater

Client PM: Tim Utterback

Accuracy & Precision Summary

Batch: B090197
Lab Matrix: Water

Method: EPA Method 1631
BRL SOP: BR-0006

Sample	Analyte	Native	Spike	Result	Units	REC & Limits		RPD & Limits	
B090197-SRM1	**Certified Reference Material (0841008, NIST 1641d)**								
	Hg		16.01	15.95	ng/L	100%	85-115		
B090197-MS2	**Matrix Spike (0907029-04)**								
	Hg	89.50	255.1	370.6	ng/L	110%	71-125		
B090197-MSD2	**Matrix Spike Duplicate (0907029-04)**								
	Hg	89.50	255.1	375.9	ng/L	112%	71-125	1%	24

Method Blanks & Reporting Limits

Batch: B090197
Matrix: Water
Analyte: Hg

Method: EPA Method 1631
SOP: BR-0006

Sample	Result	Units
B090197-BLK1	0.15	ng/L
B090197-BLK2	0.19	ng/L
B090197-BLK3	0.17	ng/L
B090197-BLK4	0.13	ng/L

Average: 0.16 **Standard Deviation:** 0.03 **MDL:** 0.15 ng/L
Limit: 0.50 **Limit:** 0.10 **MRL:** 0.41 ng/L

Project ID: WEI-EM0801
PM: Tiffany Stilwater

Client PM: Tim Utterback

Instrument Calibration

Sequence: 0900160
Instrument: THG-10
Date: 02/24/2009
Analyte: Hg

Total Mercury and Mercury Speciation by CVAFS
Method: EPA Method 1631
SOP: BR-0006

Lab ID	True Value	Result	Units	REC & Limits	
0900160-CAL1	25.00	25.67	pg of Hg	103%	
0900160-CAL2	100.0	100.9	pg of Hg	101%	
0900160-CAL3	500.0	498.9	pg of Hg	100%	
0900160-CAL4	2500	2453	pg of Hg	98%	
0900160-CAL5	10000	9863	pg of Hg	99%	
0900160-ICV1	1601	1595	pg of Hg	100%	85-115
0900160-CCV1	500.0	518.6	pg of Hg	104%	77-123
0900160-CCV2	500.0	516.3	pg of Hg	103%	77-123
0900160-CCV3	500.0	518.6	pg of Hg	104%	77-123
0900160-CCV4	500.0	504.4	pg of Hg	101%	77-123
0900160-CCV5	500.0	522.9	pg of Hg	105%	77-123
0900160-CCV6	500.0	533.7	pg of Hg	107%	77-123

Project ID: WEI-EM0801
PM: Tiffany Stilwater

Client PM: Tim Utterback

Sample Containers

Lab ID: 0907034-01
Sample: RWSW0050
Report Matrix: Water
Sample Type: Sample
Collected: 02/13/2009
Received: 02/14/2009

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.	Comments
A	Bottle FLPE Hg-T	500mL	652130	None	N/A		Cooler	

Lab ID: 0907034-02
Sample: RWSW0050FB
Report Matrix: Water
Sample Type: Field Blank
Collected: 02/13/2009
Received: 02/14/2009

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.	Comments
A	Bottle FLPE Hg-T	250mL	656579	None	N/A		Cooler	

Lab ID: 0907034-03
Sample: RWSW0051
Report Matrix: Water
Sample Type: Sample
Collected: 02/13/2009
Received: 02/14/2009

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.	Comments
A	Bottle FLPE Hg-T	250mL	656579	None	N/A		Cooler	

Shipping Containers

Cooler

Received: February 14, 2009 11:51
Tracking No: 847331526104 via FedEx
Coolant Type: Ice
Temperature: 1.4°C

Description: Cooler
Damaged in transit? No
Returned to client? No

Custody seals present? Yes
Custody seals intact? Yes
COC present? Yes

0967034

Weiss Associates Environmental Science, Engineering and Management
5801 Christie Avenue, Suite 600, Emeryville, CA 94608-1939 Fax: 510-547-5043 Phone: 510-450-6000

LEHR Chain-of-Custody Record

Lab Name: Brooks Rand
Lab Address: 3958 6th Ave. NW
Seattle, WA 98107 Ph: 206-632-6206
Lab Login:

Project Name LEHR/RWSW
Project Number 130-4113-139-1
Sampled by DMB
Samplers Signature:

Control Number: LEHR-RWSW
Send Results To: Tim Utterback
Email: data@weiss.com
Fax: (510) 547-5043

Fedex # 8473 3152 6104

Sample ID	Sample Date	Sample Time	Matrix (1) / Container (2)	Number of Containers	Preservative Y/N	Analysis Requested: Low Level Mercury (EPA 1631)	Additional Comments: Turnaround Time: Normal
RWSW0050	2-13-09	850	W/P	1	N	X	
RWSW0050FB			W/P	1	N	X	
RWSW0051			W/P	1	N	X	

Signature		Company	Date	Time
Relinquished by:	DMB	Weiss	2-13-09	1315
Received by:		BRL LLC	2/14/09	11:15
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

1 of 1

(1) Matrix: S - Soil, W - Water, O - Other (describe)
(2) Container:
V = VOA Vial
P = Polyethylene Bottle
G = Glass Bottle/Jar
T = BrassTube
O = Other (describe)

332

500

FedEx Express US Airbill

FedEx Tracking Number 0907034 8473 3152 6104

Form ID No. 0215

1 From This portion can be removed for Recipient's records.

Date 2-13-09 FedEx Tracking Number 847331526104

Sender's Name Mr. Kil Box Phone 510 450-6000

Company WEISS ASSOCIATES

Address 5801 CHRISTIE AVE STE 600 Dept./Floor/Suite/Room

City EMERYVILLE State CA ZIP 94608-1939

2 Your Internal Billing Reference 130-4113-139-1

3 To

Recipient's Name Phone

Company Brook Rand

Recipient's Address Dept./Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address 3958 6th Ave. N.W.

To request a package be held at a specific FedEx location, print FedEx address here.

City Seattle State Wa ZIP 98107

8473 3152 6104

RECIPIENT: PEEL HERE

NO POUCH NEEDED.

See back for peel and stick application instructions.

4a Express Package Service

- [x] FedEx Priority Overnight — Next business morning*
- [ ] FedEx Standard Overnight — Next business afternoon*
- [ ] FedEx 2Day — Second business day*
- [ ] FedEx Express Saver — Third business day*

FedEx Envelope rate not available. Minimum charge: One-pound rate

4b Express Freight Service

- [ ] FedEx 1Day Freight* — Next business day**
- [ ] FedEx 2Day Freight — Second business day**

* Call for Confirmation:

5 Packaging

- [x] FedEx Envelope*
- [ ] FedEx Pak* — Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak
- [ ] FedEx Box

6 Special Handling — Include FedEx address in Se

- [x] SATURDAY Delivery — Available ONLY for FedEx Priority Overnight, FedEx 2Day, FedEx 1Day Freight, and FedEx 2Day Freight to select ZIP codes
- [ ] HOLD Weekday at FedEx Location — Not available for FedEx First Overnight

Does this shipment contain dangerous goods? One box must be checked.

- [ ] No
- [ ] Yes — As per attached Shipper's Declaration
- [ ] Yes — Shipper's Declaration not required
- [ ] Dry Ice — Dry Ice, 9, UN

Dangerous goods (including Dry Ice) cannot be shipped in FedEx packaging.

7 Payment *Bill to:* Enter FedEx Acct. No. or Credit Card No. below.

- [ ] Sender — Acct. No. in Section 1 will be billed.
- [ ] Recipient
- [ ] Third Party
- [ ] Credit

Total Packages 1 Total Weight 19

†Our liability is limited to $100 unless you declare a higher value. See the *FedEx Service Guide*

8 Sign to Authorize Delivery Without a Signature

By signing you authorize us to deliver this shipment without obtaining a signatur

ANALYSIS SEQUENCE

0900160

Brooks Rand Labs

Instrument: THG-10

Lab Number	Batch #	Analysis	Order	STD ID	Source ID	BRL Project #	Due	Comments
0900160-IBL1	0900160	QC	1		-			
0900160-IBL2	0900160	QC	2		-			
0900160-IBL3	0900160	QC	3		-			
0900160-IBL4	0900160	QC	4		-			
0900160-CAL1	0900160	QC	5	0907001	-			
0900160-CAL2	0900160	QC	6	0907002	-			
0900160-CAL3	0900160	QC	7	0907003	-			
0900160-CAL4	0900160	QC	8	0907004	-			
0900160-CAL5	0900160	QC	9	0907005	-			
0900160-ICV1	0900160	QC	10	0907007	-			
B090222-SRM1	B090222	QC	11		-			
B090197-SRM1	B090197	QC	12		-			
B090215-SRM1	B090215	QC	13		-			
B090222-BLK1	B090222	QC	14		-			
B090222-BLK2	B090222	QC	15		-			
0900160-CCB1	0900160	QC	16		-			
B090222-BLK3	B090222	QC	17		-			
B090222-BLK4	B090222	QC	18		-			
0908020-02	B090222	Hg-W-BrCl-CVAFS-Diss	19			H2M-MV0901	2/25/2009	
0908020-03	B090222	Hg-W-BrCl-CVAFS-Diss	20			H2M-MV0901	2/25/2009	
0908020-04	B090222	Hg-W-BrCl-CVAFS-TR	21			H2M-MV0901	2/25/2009	
0908016-17	B090222	Hg-W-BrCl-CVAFS-TR	22			MMC-LI0801	2/23/2009	
0908020-01	B090222	Hg-W-BrCl-CVAFS-Diss	23			H2M-MV0901	2/25/2009	
0908016-19	B090222	Hg-W-BrCl-CVAFS-TR	24			MMC-LI0801	2/23/2009	
0908016-21	B090222	Hg-W-BrCl-CVAFS-TR	25			MMC-LI0801	2/23/2009	
0908016-21	B090222	Hg-W-BrCl-CVAFS-Diss	26			MMC-LI0801	1/1/1980	BatchQC

ANALYSIS SEQUENCE

0900160

Brooks Rand Labs

Instrument: THG-10

Lab Number	Batch #	Analysis	Order	STD ID	Source ID	BRL Project #	Due	Comments
0908016-22	B090222	Hg-W-BrCl-CVAFS-Diss	27			MMC-LI0801	2/23/2009	
0908020-02RE1	B090222	Hg-W-BrCl-CVAFS-Diss	28			H2M-MV0901	2/25/2009	Added 2/24/2009 by BEK
B090222-MS1	B090222	QC	29		0908016-21			
B090222-MSD1	B090222	QC	30		0908016-21			
0900160-CCV1	0900160	QC	31	0907006	-			
B090197-BLK1	B090197	QC	32		-			
B090197-BLK2	B090197	QC	33		-			
B090197-BLK3	B090197	QC	34		-			
B090197-BLK4	B090197	QC	35		-			
0906030-03	B090197	Hg-W-BrCl-CVAFS-TR	36			PUD002	3/2/2009	
0907034-02	B090197	Hg-W-BrCl-CVAFS-TR	37			WEI-EM0801	3/10/2009	
0908009-01	B090197	Hg-W-BrCl-CVAFS-TR	38			LAF001	3/11/2009	use in house historical concentrations for spiking
0908009-02	B090197	Hg-W-BrCl-CVAFS-TR	39			LAF001	3/11/2009	use in house historical concentrations for spiking
0907016-01	B090197	Hg-W-BrCl-CVAFS-TR	40			MAC005	3/6/2009	
0907016-01	B090197	Hg-W-BrCl-CVAFS-Diss	41			MAC005	1/1/1980	BatchQC
0907016-02	B090197	Hg-W-BrCl-CVAFS-TR	42			MAC005	3/6/2009	
0907016-03	B090197	Hg-W-BrCl-CVAFS-TR	43			MAC005	3/6/2009	
0907016-04	B090197	Hg-W-BrCl-CVAFS-TR	44			MAC005	3/6/2009	
0907029-04	B090197	Hg-W-BrCl-CVAFS-TR	45			MSS-PU0801	3/9/2009	
0907029-04	B090197	Hg-W-BrCl-CVAFS-Diss	46			MSS-PU0801	1/1/1980	BatchQC
0907029-05	B090197	Hg-W-BrCl-CVAFS-TR	47			MSS-PU0801	3/9/2009	
0907029-05	B090197	Hg-W-BrCl-CVAFS-Diss	48			MSS-PU0801	1/1/1980	BatchQC
B090197-MS1	B090197	QC	49		0907016-01			
B090197-MSD1	B090197	QC	50		0907016-01			
0900160-CCV2	0900160	QC	51	0907006	-			
0907021-01	B090197	Hg-W-BrCl-CVAFS-TR	52			NOA-BF0802	3/6/2009	

ANALYSIS SEQUENCE

0900160

Brooks Rand Labs

Instrument: THG-10

Lab Number	Batch #	Analysis	Order	STD ID	Source ID	BRL Project #	Due	Comments
0907021-02	B090197	Hg-W-BrCl-CVAFS-Diss	53			NOA-BF0802	3/6/2009	
0907021-03	B090197	Hg-W-BrCl-CVAFS-TR	54			NOA-BF0802	3/6/2009	
0907021-04	B090197	Hg-W-BrCl-CVAFS-Diss	55			NOA-BF0802	3/6/2009	
0907021-05	B090197	Hg-W-BrCl-CVAFS-TR	56			NOA-BF0802	3/6/2009	
0907021-06	B090197	Hg-W-BrCl-CVAFS-Diss	57			NOA-BF0802	3/6/2009	
0907021-07	B090197	Hg-W-BrCl-CVAFS-TR	58			NOA-BF0802	3/6/2009	
0907021-08	B090197	Hg-W-BrCl-CVAFS-Diss	59			NOA-BF0802	3/6/2009	
0907021-09	B090197	Hg-W-BrCl-CVAFS-TR	60			NOA-BF0802	3/6/2009	
0907021-10	B090197	Hg-W-BrCl-CVAFS-Diss	61			NOA-BF0802	3/6/2009	
B090197-MS2	B090197	QC	62		0907029-04			
B090197-MSD2	B090197	QC	63		0907029-04			
0900160-CCV3	0900160	QC	64	0907006	-			
0907021-11	B090197	Hg-W-BrCl-CVAFS-TR	65			NOA-BF0802	3/6/2009	
0906030-01	B090197	Hg-W-BrCl-CVAFS-TR	66			PUD002	3/2/2009	
0906030-02	B090197	Hg-W-BrCl-CVAFS-TR	67			PUD002	3/2/2009	
0907034-01	B090197	Hg-W-BrCl-CVAFS-TR	68			WEI-EM0801	3/10/2009	
0907034-03	B090197	Hg-W-BrCl-CVAFS-TR	69			WEI-EM0801	3/10/2009	
0908017-01	B090197	Hg-W-BrCl-CVAFS-TR	70			WRI-TP0802	3/13/2009	
B090197-MS3	B090197	QC	71		0907029-05			
B090197-MSD3	B090197	QC	72		0907029-05			
0900160-CCV4	0900160	QC	73	0907006	-			
B090215-BLK1	B090215	QC	74		-			
B090215-BLK2	B090215	QC	75		-			
B090215-BLK3	B090215	QC	76		-			
B090215-BLK4	B090215	QC	77		-			
0906036-06RE2	B090215	Hg-W-BrCl-CVAFS-Diss	78			CHM-GA0802C	3/2/2009	QC 10%; See Project Notes

ANALYSIS SEQUENCE

0900160

Brooks Rand Labs

Instrument: THG-10

Lab Number	Batch #	Analysis	Order	STD ID	Source ID	BRL Project #	Due	Comments
B090215-MS1	B090215	QC	79		0906036-06RE2			
0900160-CCV5	0900160	QC	80	0907006	-			
0906006-06RE1	B090199	Hg-S-AR-CVAFS	81			ERA001	2/25/2009	Expected 1-35 mg/kg (1000-35000 ng/g)
B090199-DUP4	B090199	QC	82		0906006-06RE1			
0900160-CCV6	0900160	QC	83	0907006	-			

Hg Analysis Sheet: (T-Hg) / Other: _____ Page 1 of 4

Sequence: 0900160 Batch(es): B090222

Analyst: AC/BK Date: 2-24-09 Instrument ID: BR-10

10ng/mL std ID: 0906029 1ng/mL std ID: 0906028 ICV std ID: 0906030

$NH_2OH \cdot HCl$ #: 0908098 $SnCl_2$ #: 0906001

Initial offset: 4702 Initial PMT: 527

Run #	Split Bottle	Trap	Bubb.	Brooks Rand Sample ID	Analy. Vol. (mL)	Dilution Factor	Analysis comments / For spiked QC: Source sample, standard ID, and spiked volume (mL)
1	1	T2	1	SEQ-IBL1	---		
2	2	T3	2	SEQ-IBL2	---		
3	3	T4	3	SEQ-IBL3	---		
4	4	T5	4	SEQ-IBL4	---		
5	1	T6	1	SEQ-CAL1	0.025		1ng/mL
6	2	T7	2	SEQ-CAL2	0.100		1ng/mL
7	3	T8	3	SEQ-CAL3	0.050		10ng/mL
8	4	T9	4	SEQ-CAL4	0.250		10ng/mL
9	1	T10	1	SEQ-CAL5	1.00		10ng/mL
10	2	T11	2	SEQ-ICV1	1.00		NIST 1641d
11	3	T12	3	B090222-BLK1	100.27		
12	4	T2	4	↓ -BLK2	101.60		
13	1	T3	1	SEQ-CCB1	---		
14	2	T4	2	B090222-BLK3	99.74		
15	3	T5	3	↓ -BLK4	99.96		
16	4	T6	4	0908020-02	22.20		
17	1	T8	1	↓ -03	99.64		
18	2	T9	2	↓ -04	101.33		
19	3	T10	3	0908016-17	101.48		
20	4	T11	4	0908020-01	100.17		
21	1	T12	1	0908016-19	100.17		
22	2	T1	2	↓ -21	99.72		
23	3	T2	3	↓ -22	101.56		
24	4	T3	4	0908020-02RE1	100.97		

Comments:

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Hg Analysis Sheet: T-Hg / Other: ____ Page 2 of 4

Sequence: 0900160 Analyst: BEK Date: 2/24/09

Run #	Split Bottle	Trap	Bubb.	Brooks Rand Sample ID	Analy. Vol. (mL)	Dilution Factor	Analysis comments / For spiked QC: Source sample, standard ID, and spiked volume (mL)
25	1	T4	1	B090222-MS1	100.42		source (0908016-21) ~~(0.02~~ BK 2/24/09 (0.200mL of 1ng/mL)
26	2	T5	2	B090222-MSD1	100.71		↓ ↓ ↑
27	3	T6	3	SEQ-CCV1	0.050		10ng/mL
28	4	T8	4	B090197-BLK1	100.93		
29	1	T9	1	B090197-BLK2	100.37		
30	2	T10	2	B090197-BLK3	99.95		
31	3	T11	3	B090197-BLK4	99.75		
32	4	T12	4	0906030-03	100.96		
33	1	T1	1	0907034-02	99.95		
34	2	T2	2	0908009-01	99.59		
35	3	T3	3	0908009-02	99.28		
36	4	T4	4	0907016-01	100.67		
37	1	T5	1	0907016-02	100.69		
38	2	T6	2	0907016-03	99.80		
39	3	T8	3	0907016-04	100.10		
40	4	T9	4	0907029-04	20.00		
41	1	T10	1	0907029-05	100.88		
42	2	T11	2	B090197-MS1	99.94		source (0907016-01) (0.2mL of 1ng/mL)
43	3	T12	3	B090197-MSD1	100.27		↓ ↓ ↓
44	4	T1	4	SEQ-CCV2	0.050		10ng/mL
45	1	T2	1	0907021-01	99.60		
46	2	T3	2	0907021-02	99.50		
47	3	T4	3	0907021-03	99.14		
48	4	T5	4	0907021-04	99.75		
49	1	T6	1	0907021-05	99.47		
50	2	T8	2	0907021-06	99.94		
51	3	T9	3	0907021-07	99.74		
52	4	T10	4	0907021-08	99.83		
53	1	T11	1	0907021-09	99.39		
54	2	T12	2	0907021-10	100.62		
55	3	T1	3	B090179-MS2	20.00		source (0907029-04) (0.5mL of 10ng/mL)
56	4	T2	4	B090179-MSD2	20.00		↓ ↓ ↓

Comments: ____

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Hg Analysis Sheet: (T-Hg) / Other: ____ Page 3 of 4

Sequence: 0900160 Analyst: BEK Date: 2/24/09

Run #	Split Bottle	Trap	Bubb.	Brooks Rand Sample ID	Analy. Vol. (mL)	Dilution Factor	Analysis comments / For spiked QC: Source sample, standard ID, and spiked volume (mL)
57	1	T3	1	SEQ-CCV3	0.050		10 ng/L
58	2	T4	2	0907021-11	100.31		
59	3	T5	3	0906030-01	99.92		
60	4	T6	4	0906030-02	10.00		
61	1	T8	1	0907034-01	99.93		
62	2	T9	2	0907034-03	100.47		
63	3	T10	3	0908017-01	99.11		
64	4	T11	4	B090197-MS3	100.61		source (0907029-05) (0.5mL of 10 ng/L)
65	1	T12	1	B090197-MSD3	99.39		↓ ↓ ↓
66	2	T1	2	SEQ-CCV4	0.050		
67	3	T2	3	B090215-BLK1	100.51		
68	4	T3	4	B090215-BLK2	99.12		
69	1	T4	1	B090215-BLK3	100.17		
70	2	T5	2	B090215-BLK4	99.48		
71	3	T6	3	0906036-06RE2	34.29		
72	4	T8	4	B090215-MS1	35.59		source (0906036-06) (0.2mL of 1 ng/L)
73	1	T9	1	SEQ-CCV5	0.050		10 ng/L
74	2	T10	2	0906006-06RE1	0.100	x10	
75	3	T11	3	B090199-DUP4	0.100	x10	
76	4	T12	4	SEQ-CCV6	0.050		10 ng/L
77	1	T1	1	Hg II MMHg TORT2	0.100		
78	2	T2	2	Hg II MMHg TORT2	0.100		
79	3	T3	3	Hg II MMHg TORT2	0.100		
80	4	T4	4	Hg II MMHg TORT2	0.100		
81	1	T5	1	Hg II MMHg DOLT4	0.100		
82	2	T6	2	Hg II MMHg DOLT4	0.100		
83	3	T8	3	Hg II MMHg DOLT4	0.100		
84	4	T9	4	Hg II MMHg DOLT4	0.100		
85	1	T10	1	Hg II MMHg DORM3	0.100		
86	2	T11	2	Hg II MMHg DORM3	0.100		
87	3	T12	3	Hg II MMHg DORM3	0.100		
88	4	T1	4	Hg II MMHg DORM3	0.100		

Comments: ____

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Hg Analysis Sheet: T-Hg / Other: ____ Page 4 of 4

Sequence: 0900160 Analyst: BEK Date: 2/24/09

Run #	Split Bottle	Trap	Bubb.	Brooks Rand Sample ID	Analy. Vol. (mL)	Dilution Factor	Analysis comments / For spiked QC: Source sample, standard ID, and spiked volume (mL)
89	1	T 2	1	Hg II MMHg BS15	0.100		
90	2	T 3	2	Hg II MMHg BS16	0.100		
91	3	T 4	3	SEQ-CCV7.	0.050		10ng/L

BK 2/24/09

Comments: ____

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Brooks Rand Labs

THg Water Prep Benchsheet

Prepped By: JH Batch: B090197

Prep Date: 23-Feb BrCl ID: 0903052

					only fill out if additional BrCl is added		
Sample ID	Sample Aliquot (mL)	BrCl added (mL)	**%BrCl**	24 hr Check (date/initial)	Additional BrCl Added (mL)	24 hr Check (date/initial)	Adjusted %BrCl
0906030-01	250	5.00	2.0	2/24/09 BF			
0906030-02	↓	↓	↓	↓			
0906030-03	↓	↓	↓	↓			
0907016-01	500	5.00	1.0	↓			
0907016-02	↓	↓	↓	↓			
0907016-03	↓	↓	↓	↓			
0907016-04	↓	10.00	2.0	↓			
0907021-01	250	2.50	1.0	↓			
0907021-02	↓	↓	↓	↓			
0907021-03	↓	↓	↓	↓			
0907021-04	↓	↓	↓	↓			
0907021-05	↓	↓	↓	↓			
0907021-06	↓	↓	↓	↓			
0907021-07	↓	↓	↓	↓			
0907021-08	↓	↓	↓	↓			
0907021-09	↓	↓	↓	↓			
0907021-10	↓	↓	↓	↓			
0907021-11	↓	↓	↓	↓			
0907029-04	↓	5.00	2.0	↓			
0907029-05	500	↓	1.0	↓			
0907034-01	↓	10.00	2.0	↓			
0907034-02	250	2.50	1.0	↓			
0907034-03	↓	↓	↓	↓			
0908009-01	↓	↓	↓	↓			
0908009-02	↓	↓	↓	↓			
0908017-01	↓	5.00	2.0	↓			
B090197-BLK1	250	2.5	1	↓			
B090197-BLK2	↓	↓	↓	↓			
B090197-BLK3	↓	↓	↓	↓			
B090197-BLK4	↓	↓	↓	↓			

Brooks Rand Labs

THg Water Prep Benchsheet

Prepped By: MSU Batch: B090222

Prep Date: 20-Feb BrCl ID: 0903052

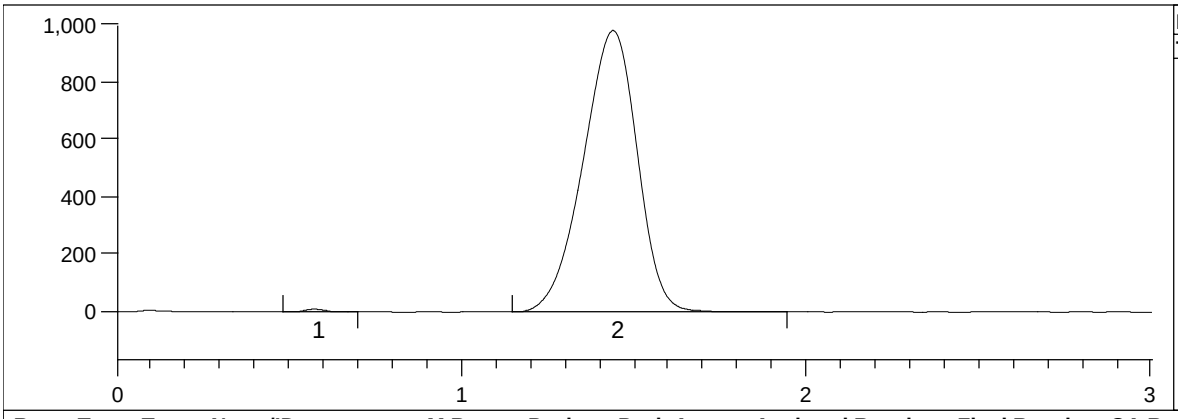
					only fill out if additional BrCl is added		
Sample ID	Sample Aliquot (mL)	BrCl added (mL)	**%BrCl**	24 hr Check (date/initial)	Additional BrCl Added (mL)	24 hr Check (date/initial)	Adjusted %BrCl
0908020-01	250	2.50	1%	2/23/09 BK			
0908020-02	↓	↓	↓	↓			
0908020-03	↓	↓	↓	↓			
0908020-04	↓	↓	↓	↓			
0908016-17	↓	↓	↓	↓			
0908016-19	↓	↓	↓	↓			
0908016-21	1000	10.0	↓	↓			
0908016-22	↓	↓	↓	↓			
B090222-BLK1	250	2.50	↓	↓			
B090222-BLK2	↓	↓	↓	↓			
B090222-BLK3	↓	↓	↓	↓			
B090222-BLK4	↓	↓	↓	↓			

Peak Report

Batch Number: B090222
Method Number: 1631E

Project Number(s): 0900160
Instrument ID: BR-10

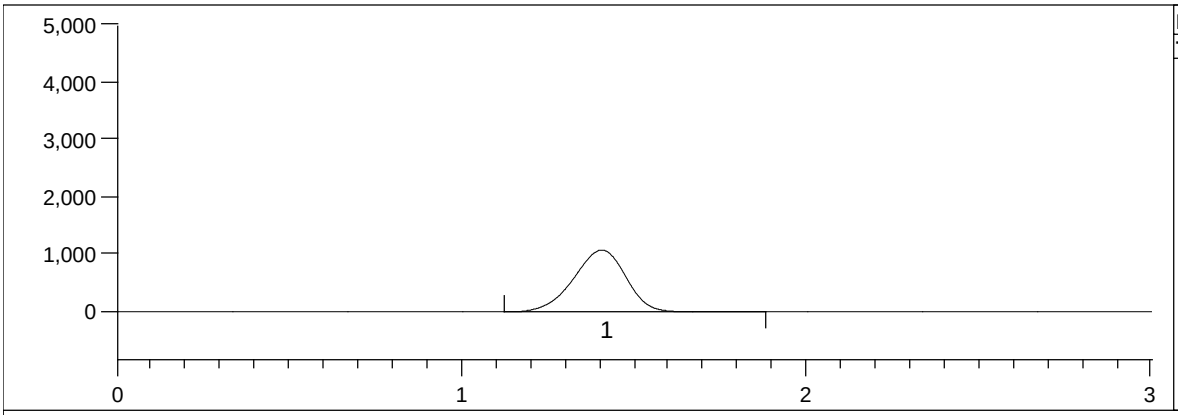
Date Analyzed: 2/24/09
Analyst Name: AC/BK



Date: 2/24/09
Time: 9:23 AM

Peak	rt	Area
1	0.57	590
2	1.43	107,761

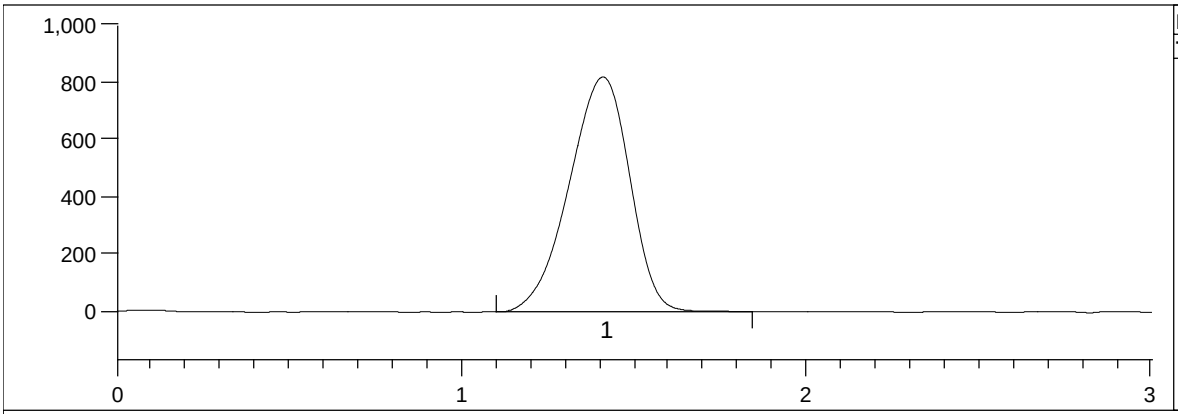
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
1		IBL	SEQ-IBL1		2	107,761	9.52		9.52	< 50	accept
Notes											



Date: 2/24/09
Time: 9:28 AM

Peak	rt	Area
1	1.40	115,597

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
2		IBL	SEQ-IBL2		1	115,597	10.2		10.2	< 50	accept
Notes											



Date: 2/24/09
Time: 9:32 AM

Peak	rt	Area
1	1.40	101,057

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
3		IBL	SEQ-IBL3		1	101,057	8.92		8.92	< 50	accept
Notes											

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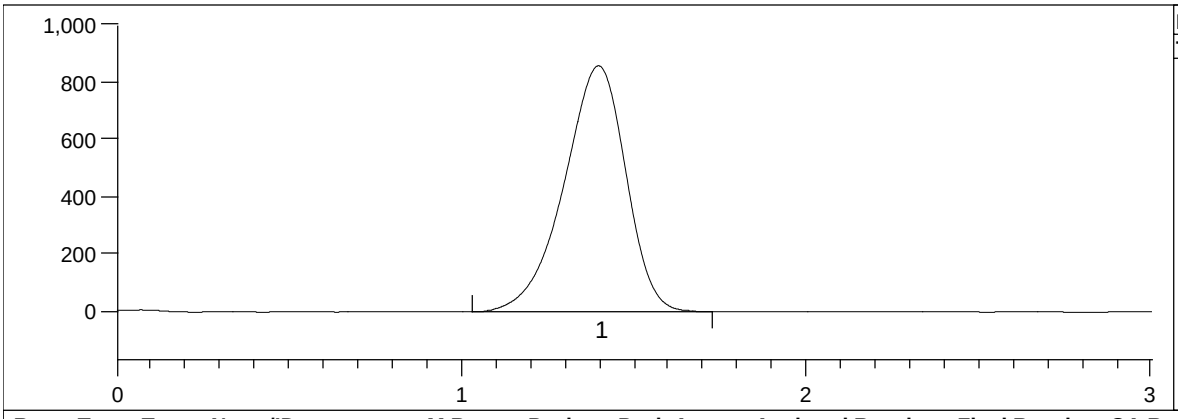
Peak Report

Batch Number: B090222
Method Number: 1631E

Project Number(s): 0900160
Instrument ID: BR-10

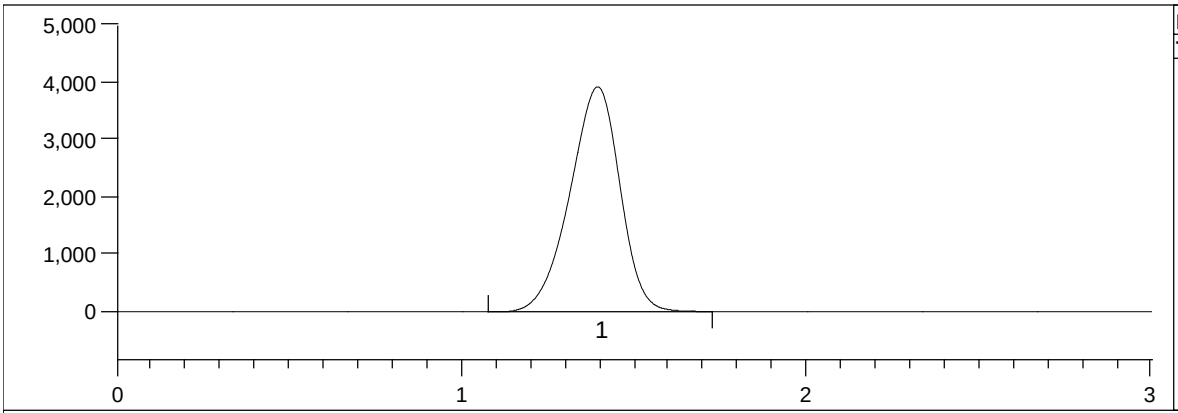
Date Analyzed: 2/24/09
Analyst Name: AC/BK



Date: 2/24/09
Time: 9:37 AM

Peak	rt	Area
1	1.39	107,981

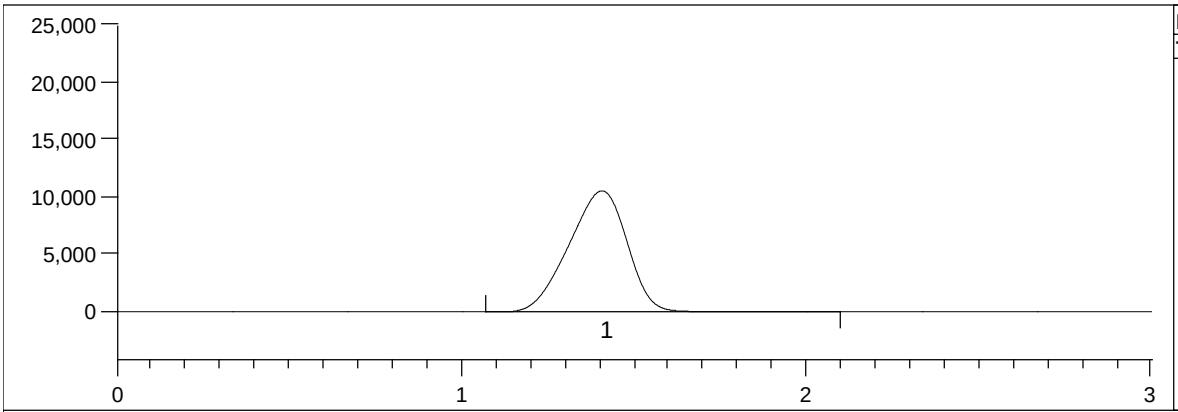
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
4		IBL	SEQ-IBL4		1	107,981	9.54		9.54	< 50	accept
Notes											



Date: 2/24/09
Time: 9:43 AM

Peak	rt	Area
1	1.39	398,740

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
5		CAL	SEQ-CAL1		1	398,740	25.7		103	75-125	accept
Notes											



Date: 2/24/09
Time: 9:48 AM

Peak	rt	Area
1	1.40	1,251,051

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
6		CAL	SEQ-CAL2		1	1,251,051	101		101	75-125	accept
Notes											

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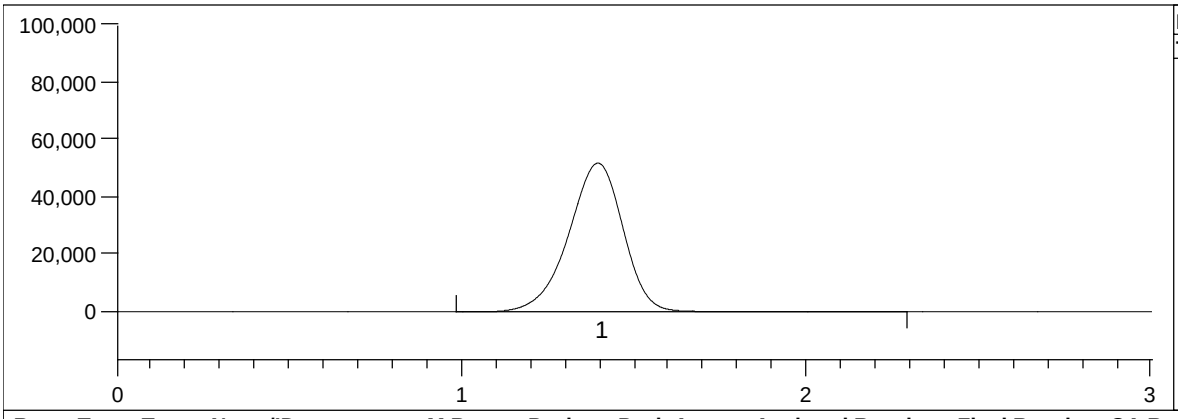
Peak Report

Batch Number: B090222
Method Number: 1631E

Project Number(s): 0900160
Instrument ID: BR-10

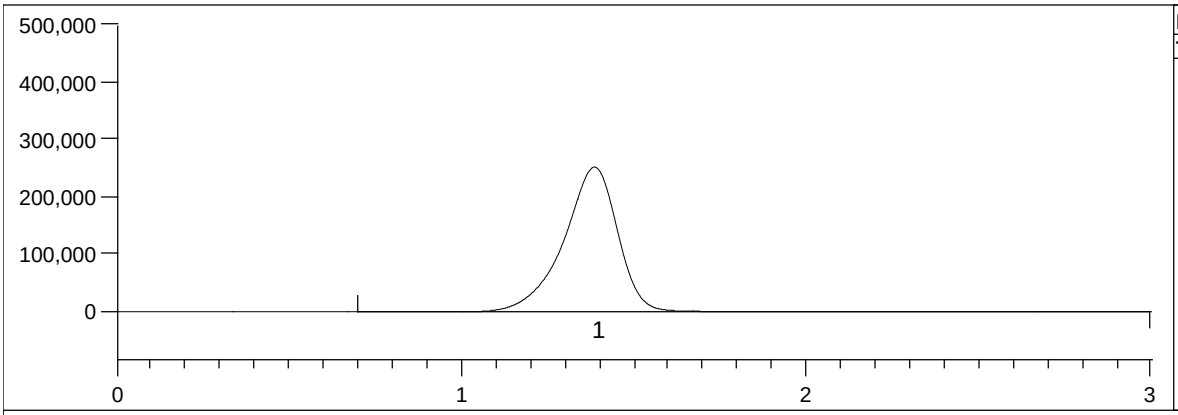
Date Analyzed: 2/24/09
Analyst Name: AC/BK



Date: 2/24/09
Time: 9:53 AM

Peak	rt	Area
1	1.39	5,757,305

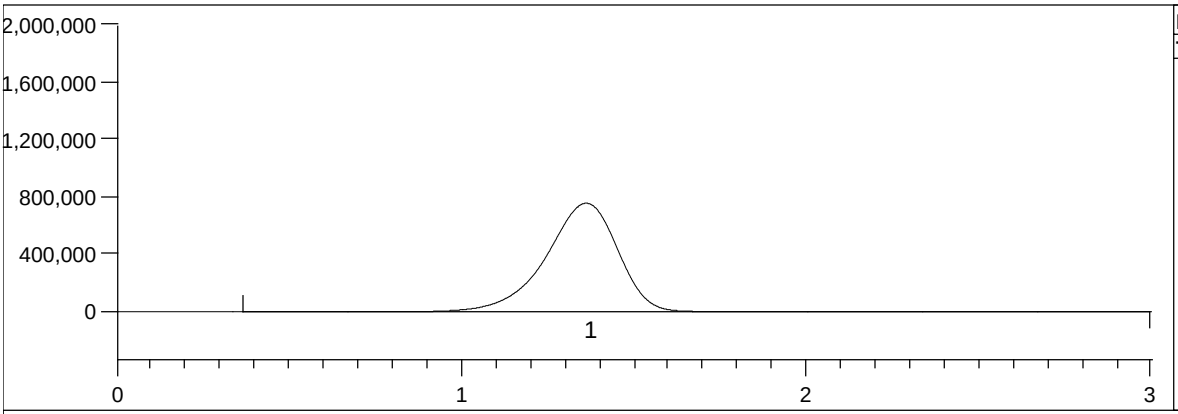
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
7		CAL	SEQ-CAL3		1	5,757,305	499		99.8	75-125	accept
Notes											



Date: 2/24/09
Time: 9:58 AM

Peak	rt	Area
1	1.38	27,883,033

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
8		CAL	SEQ-CAL4		1	27,883,033	2,450		98.1	75-125	accept
Notes											



Date: 2/24/09
Time: 10:03 AM

Peak	rt	Area
1	1.36	111,794,606

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
9		CAL	SEQ-CAL5		1	111,794,606	9,860		98.6	75-125	accept
Notes											

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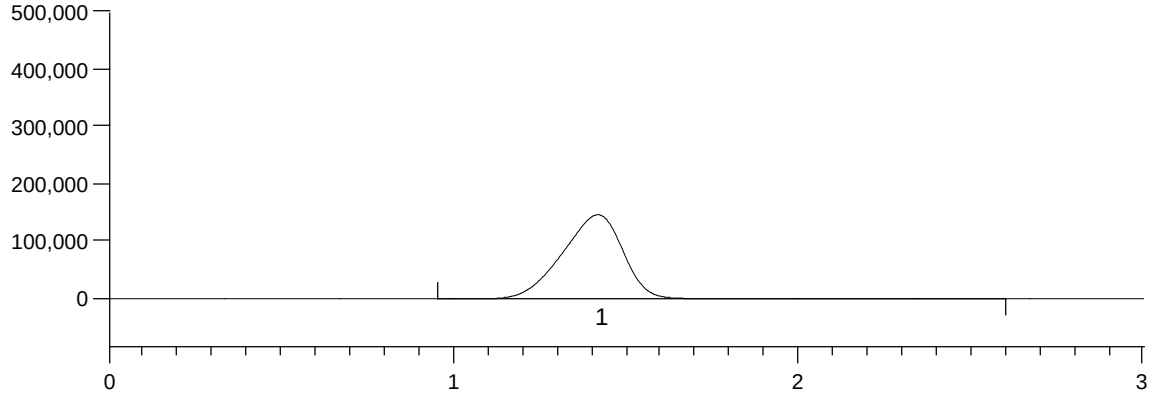
Peak Report

Batch Number: B090222
Method Number: 1631E

Project Number(s): 0900160
Instrument ID: BR-10

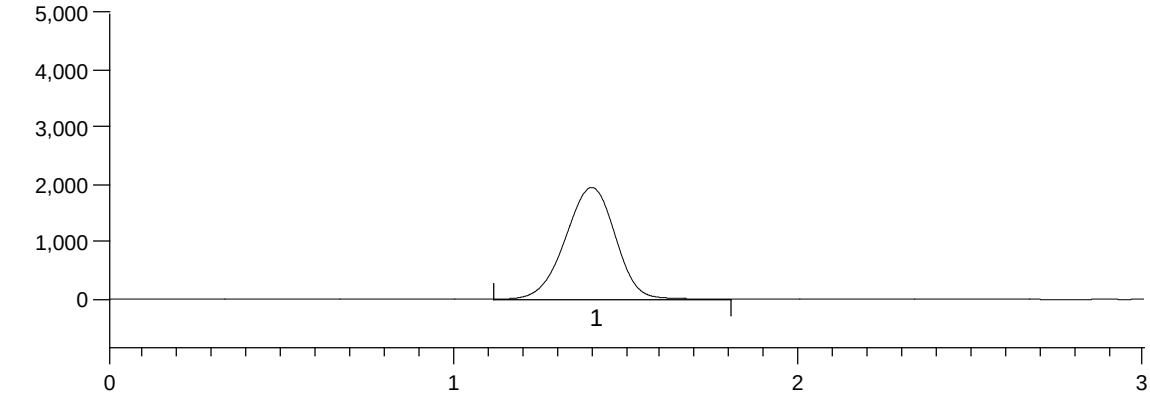
Date Analyzed: 2/24/09
Analyst Name: AC/BK



Date: 2/24/09
Time: 10:09 AM

Peak	rt	Area
1	1.41	18,168,826

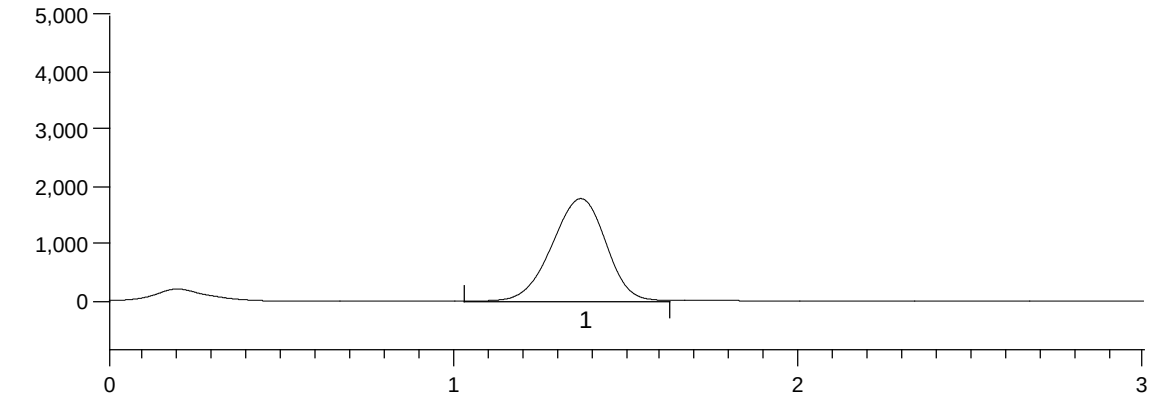
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
10		S	B090215-SRM1		1	18,168,826	1,590	0.00		< HS	reject
Notes											



Date: 2/24/09
Time: 10:13 AM

Peak	rt	Area
1	1.40	196,434

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
11		MBA	B090222-BLK1		1	196,434	7.80	0.00	0.00	< 0.5	accept
Notes											



Date: 2/24/09
Time: 10:18 AM

Peak	rt	Area
1	1.36	194,105

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
12		MBA	B090222-BLK2		1	194,105	7.60	0.00	0.00	< 0.5	accept
Notes											

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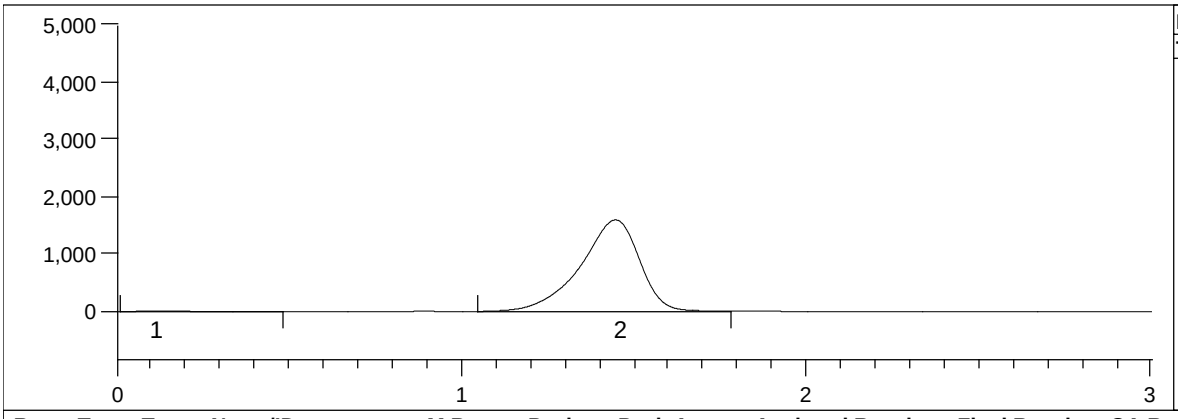
Peak Report

Batch Number: B090222
Method Number: 1631E

Project Number(s): 0900160
Instrument ID: BR-10

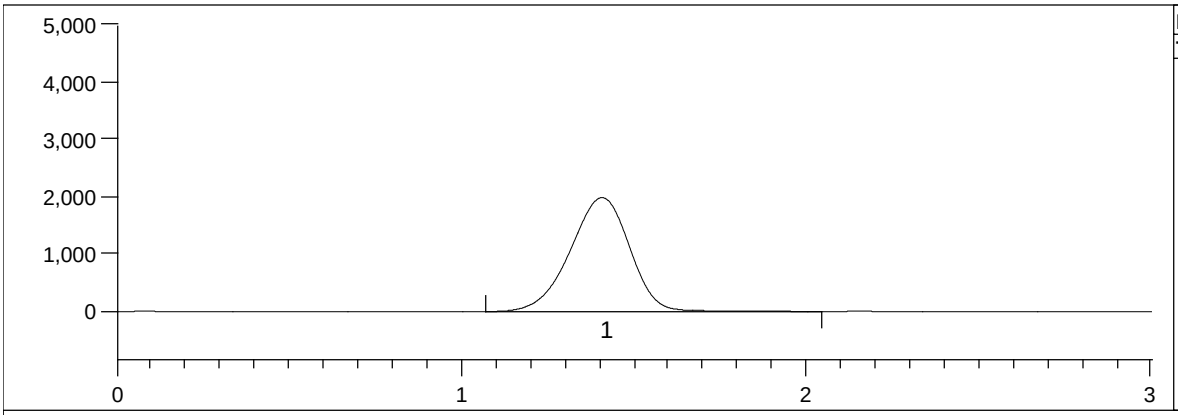
Date Analyzed: 2/24/09
Analyst Name: AC/BK



Date: 2/24/09
Time: 10:24 AM

Peak	rt	Area
1	0.09	837
2	1.44	190,107

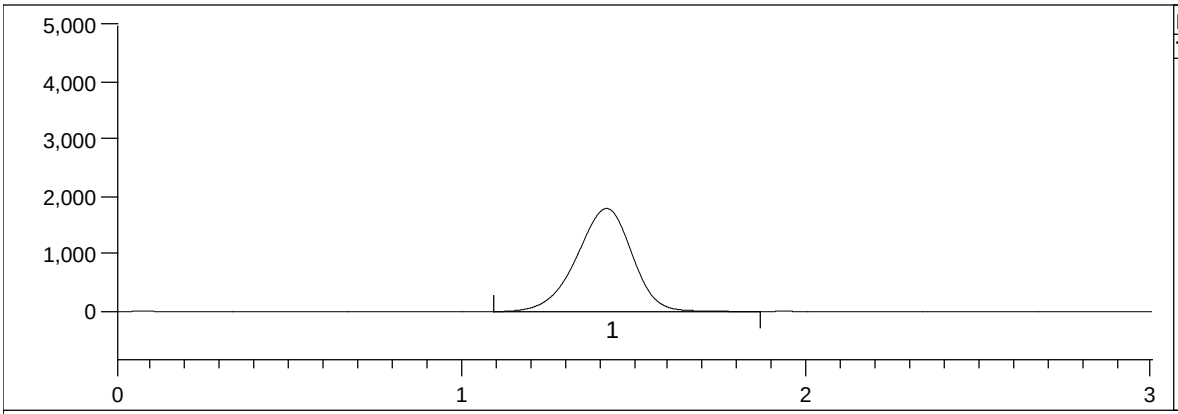
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
13		CCB	SEQ-CCB1		2	190,107	16.8		16.8	< 50	accept
Notes											



Date: 2/24/09
Time: 10:28 AM

Peak	rt	Area
1	1.40	239,415

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
14		MBA	B090222-BLK3		1	239,415	11.6	0.00	0.00	< 0.5	accept
Notes											



Date: 2/24/09
Time: 10:33 AM

Peak	rt	Area
1	1.42	201,916

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
15		MBA	B090222-BLK4		1	201,916	8.29	0.00	0.00	< 0.5	accept
Notes											

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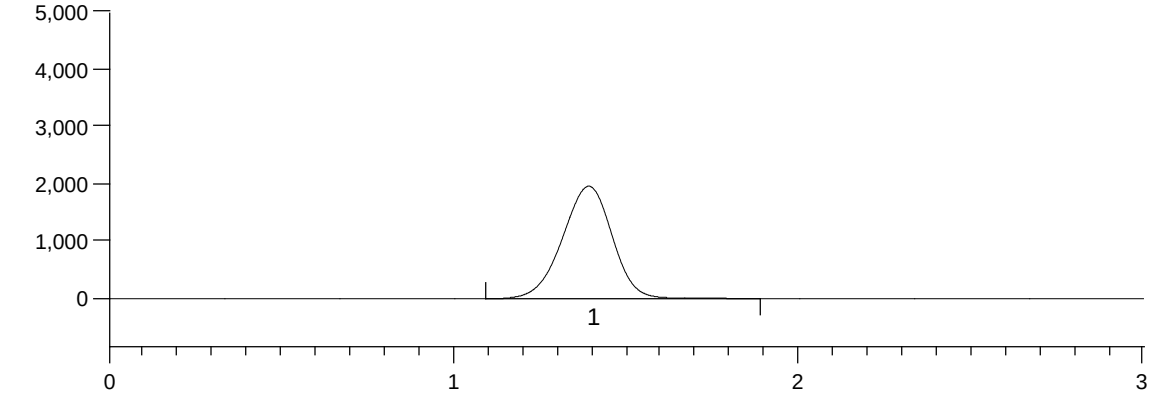
Peak Report

Batch Number: B090222
Method Number: 1631E

Project Number(s): 0900160
Instrument ID: BR-10

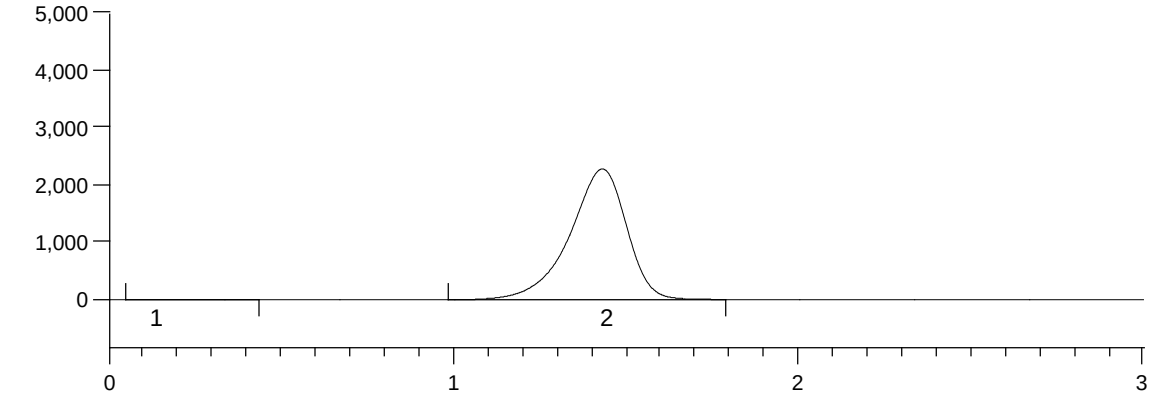
Date Analyzed: 2/24/09
Analyst Name: AC/BK



Date: 2/24/09
Time: 10:38 AM

Peak	rt	Area
1	1.39	199,912

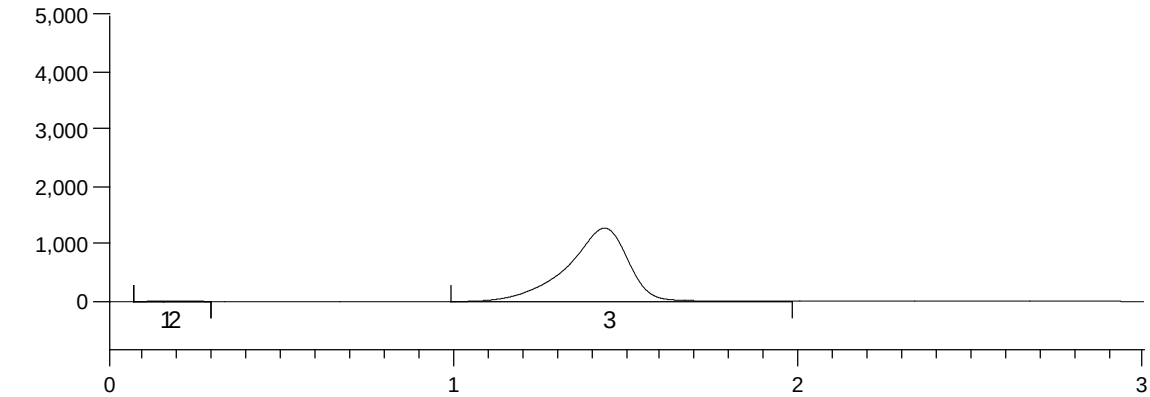
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
16		S	0908020-02		1	199,912	8.11	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 10:43 AM

Peak	rt	Area
1	0.12	683
2	1.43	263,903

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
17		S	0908020-03		2	263,903	13.8	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 10:48 AM

Peak	rt	Area
1	0.15	234
2	0.18	565
3	1.43	157,147

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
18		S	0908020-04		3	157,147	4.33	0.00		< HS	accept
Notes											

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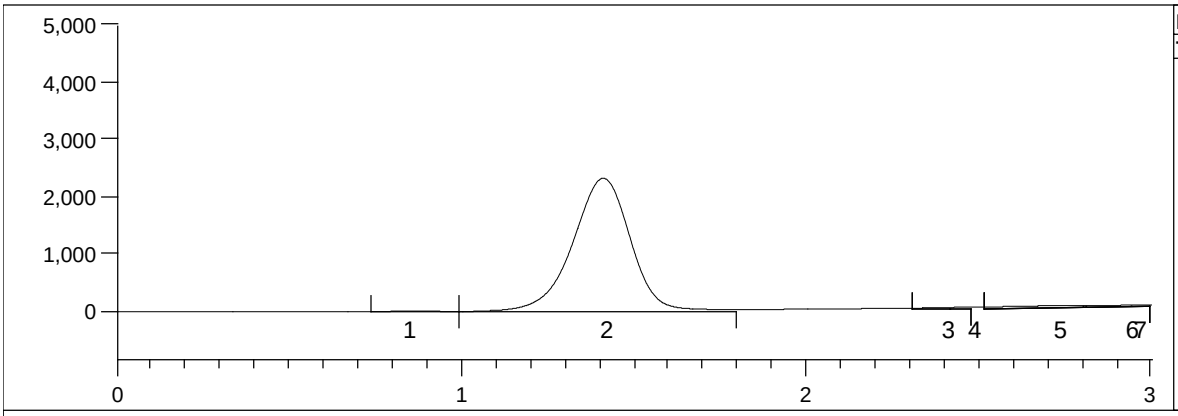
Peak Report

Batch Number: B090222
Method Number: 1631E

Project Number(s): 0900160
Instrument ID: BR-10

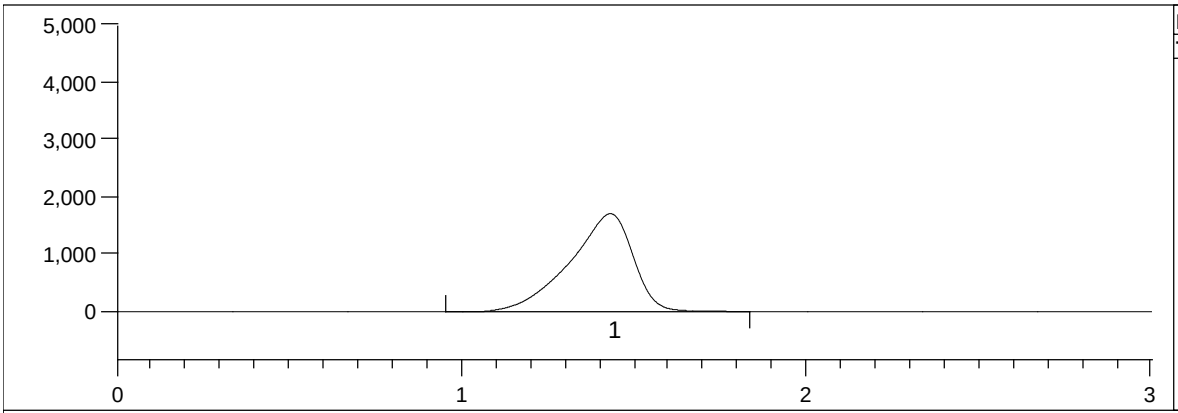
Date Analyzed: 2/24/09
Analyst Name: AC/BK



Date: 2/24/09
Time: 10:53 AM

Peak	rt	Area
1	0.84	1,293
2	1.40	265,765
3	2.40	132
4	2.47	47
5	2.72	1,206
6	2.93	389
7	2.95	84

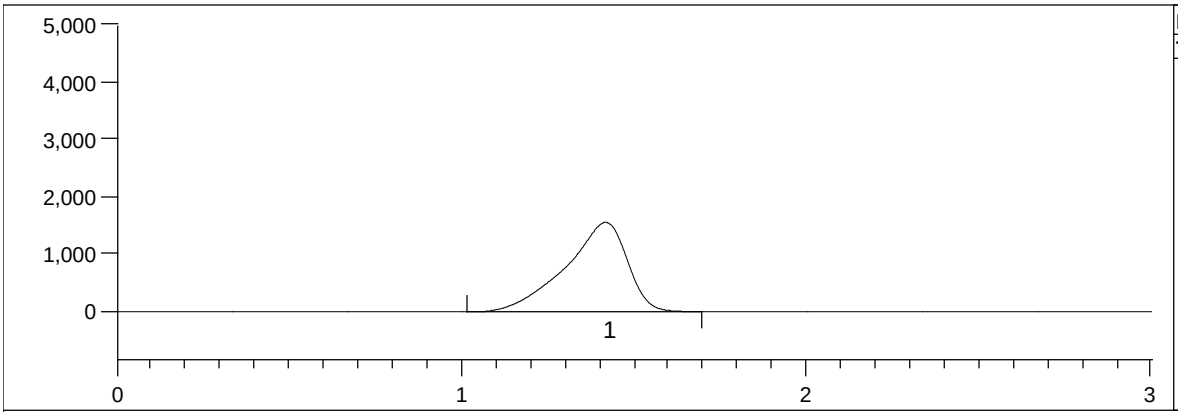
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
19		S	0908016-17		2	265,765	13.9	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 10:59 AM

Peak	rt	Area
1	1.42	222,362

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
20		S	0908020-01		1	222,362	10.1	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 11:03 AM

Peak	rt	Area
1	1.41	195,933

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
21		S	0908016-19		1	195,933	7.76	0.00		< HS	accept
Notes											

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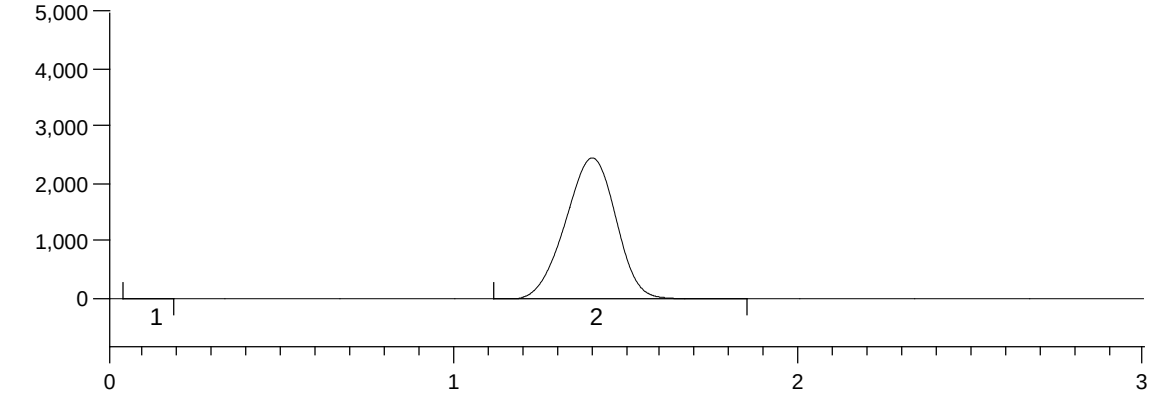
Peak Report

Batch Number: B090222
Method Number: 1631E

Project Number(s): 0900160
Instrument ID: BR-10

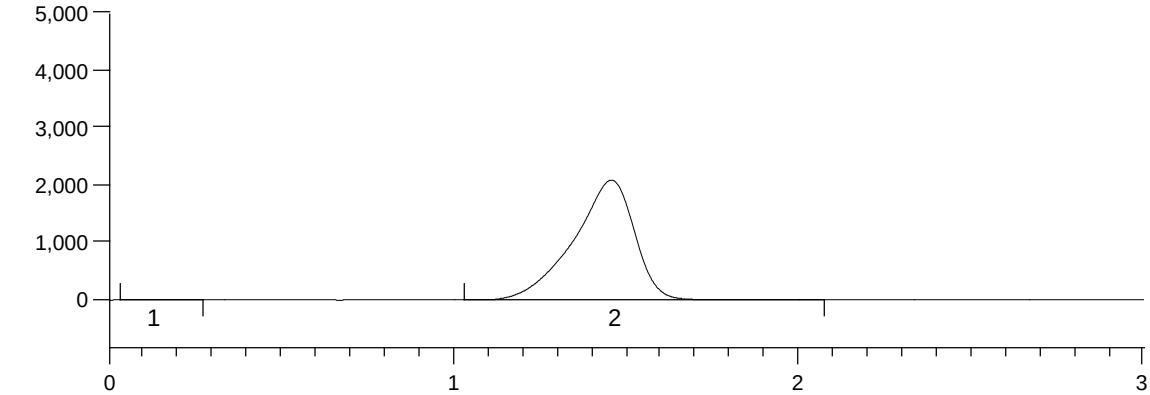
Date Analyzed: 2/24/09
Analyst Name: AC/BK



Date: 2/24/09
Time: 11:10 AM

Peak	rt	Area
1	0.12	327
2	1.40	254,557

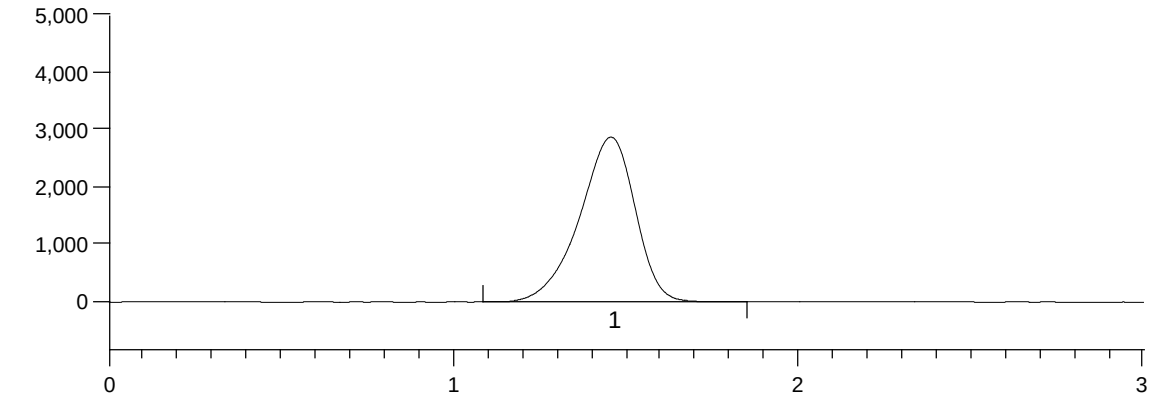
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
22		S	0908016-21		2	254,557	12.9	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 11:15 AM

Peak	rt	Area
1	0.11	561
2	1.45	260,866

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
23		S	0908016-22		2	260,866	13.5	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 11:20 AM

Peak	rt	Area
1	1.45	328,166

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
24		S	0908020-02RE1		1	328,166	19.4	0.00		< HS	accept
Notes											

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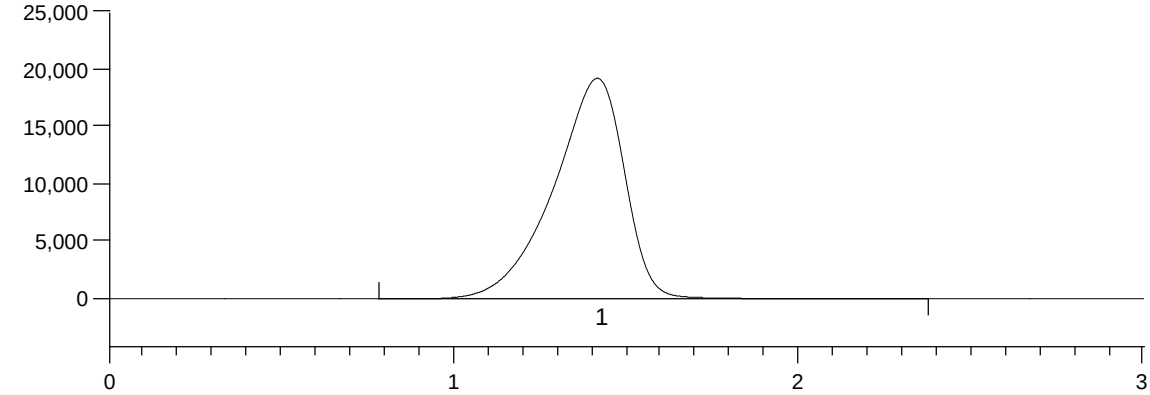
Peak Report

Batch Number: B090222
Method Number: 1631E

Project Number(s): 0900160
Instrument ID: BR-10

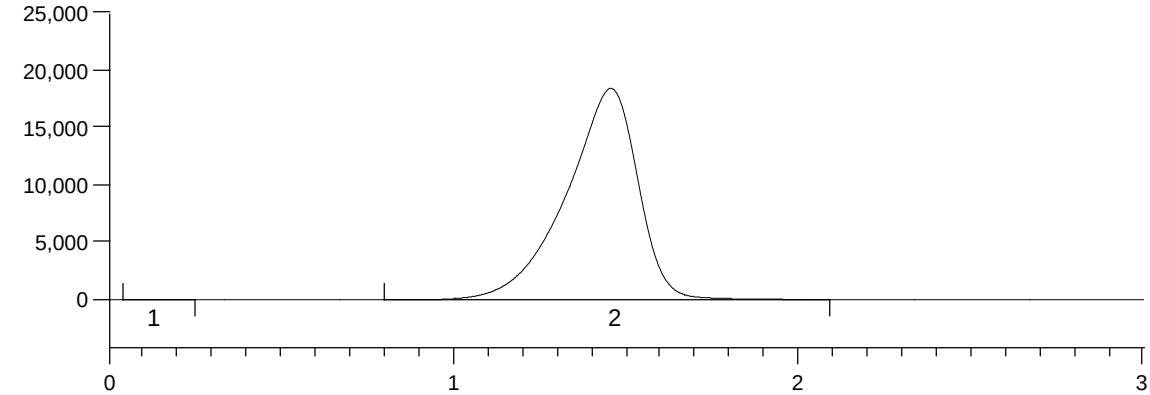
Date Analyzed: 2/24/09
Analyst Name: AC/BK



Date: 2/24/09
Time: 11:26 AM

Peak	rt	Area
1	1.41	2,777,958

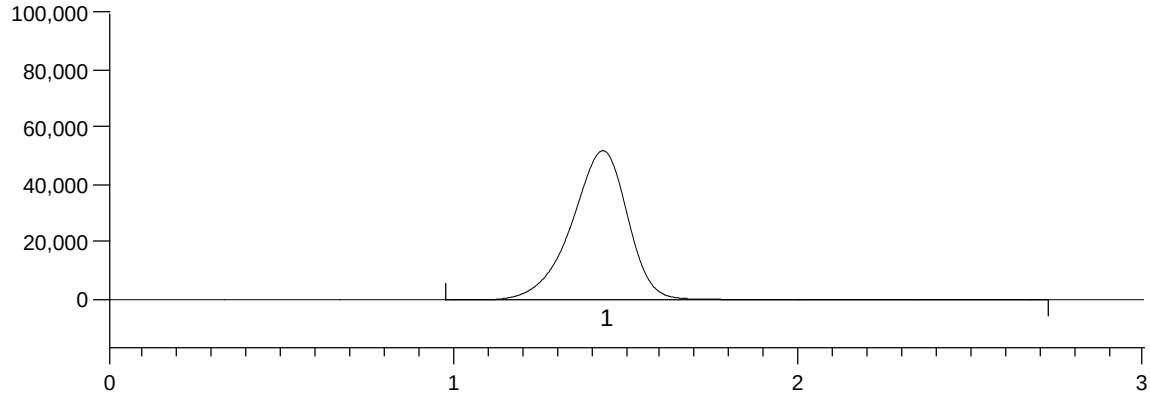
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
25		S	B090222-MS1		1	2,777,958	236	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 11:31 AM

Peak	rt	Area
1	0.12	573
2	1.45	2,686,430

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
26		S	B090222-MSD1		2	2,686,430	228	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 11:35 AM

Peak	rt	Area
1	1.43	5,980,570

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
27		CCV	SEQ-CCV1		1	5,980,570	519		104	77-123	accept
Notes											

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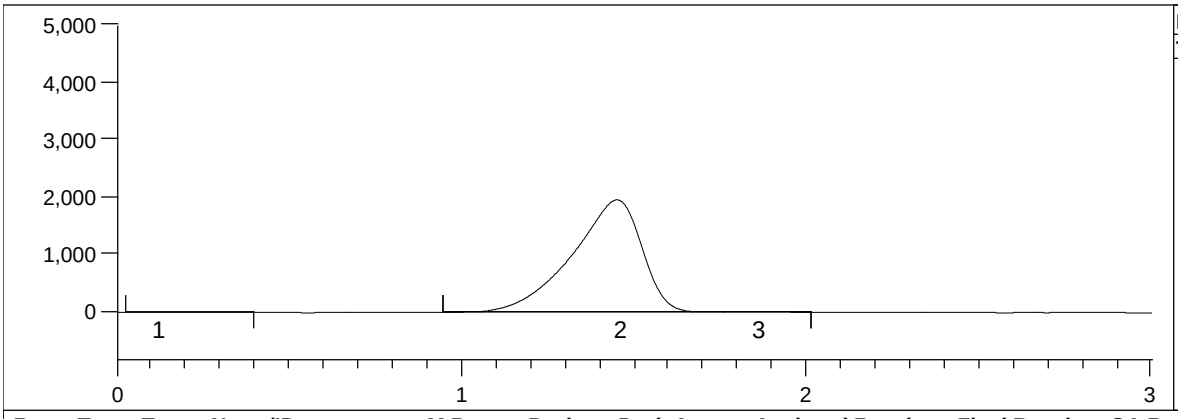
Peak Report

Batch Number: B090222
Method Number: 1631E

Project Number(s): 0900160
Instrument ID: BR-10

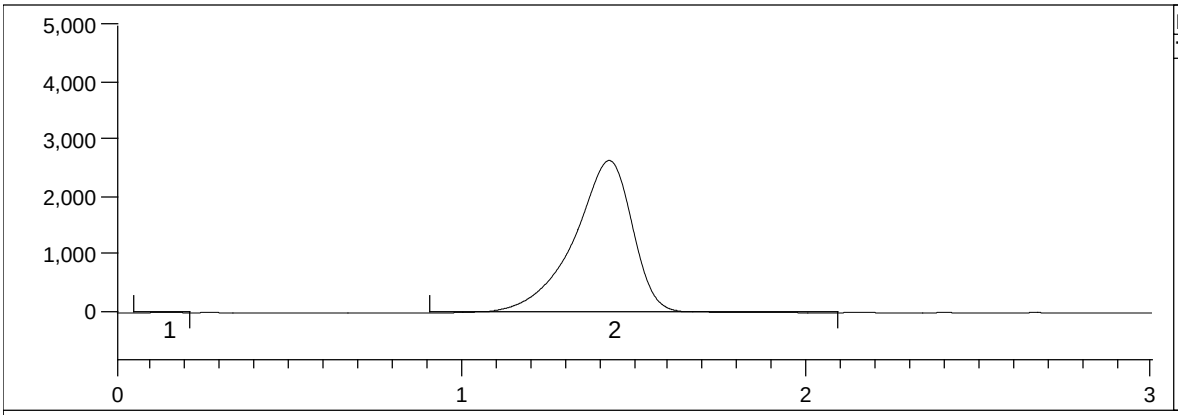
Date Analyzed: 2/24/09
Analyst Name: AC/BK



Date: 2/24/09
Time: 11:40 AM

Peak	rt	Area
1	0.10	737
2	1.44	282,888
3	1.84	1,862

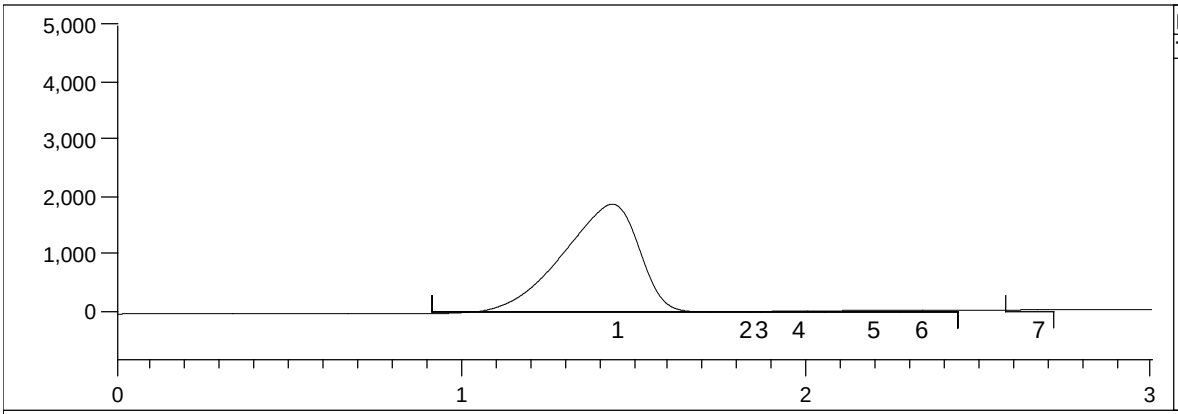
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
28		S	B090197-BLK1		2	282,888	15.4	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 11:47 AM

Peak	rt	Area
1	0.14	487
2	1.42	323,611

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
29		S	B090197-BLK2		2	323,611	19.0	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 12:08 PM

Peak	rt	Area
1	1.43	297,975
2	1.81	505
3	1.85	165
4	1.96	1,157
5	2.18	1,485
6	2.31	507
7	2.65	275

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
30		S	B090197-BLK3		1	297,975	16.8	0.00		< HS	accept
Notes											

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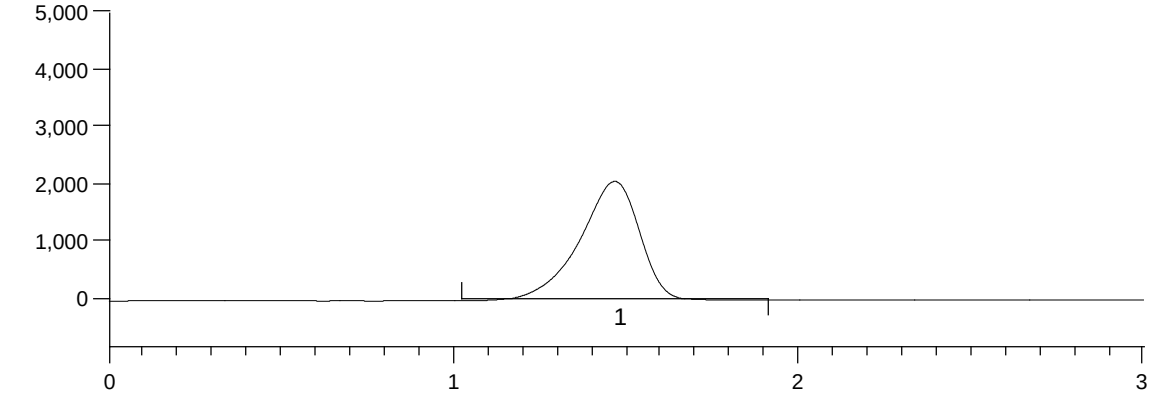
Peak Report

Batch Number: B090222
Method Number: 1631E

Project Number(s): 0900160
Instrument ID: BR-10

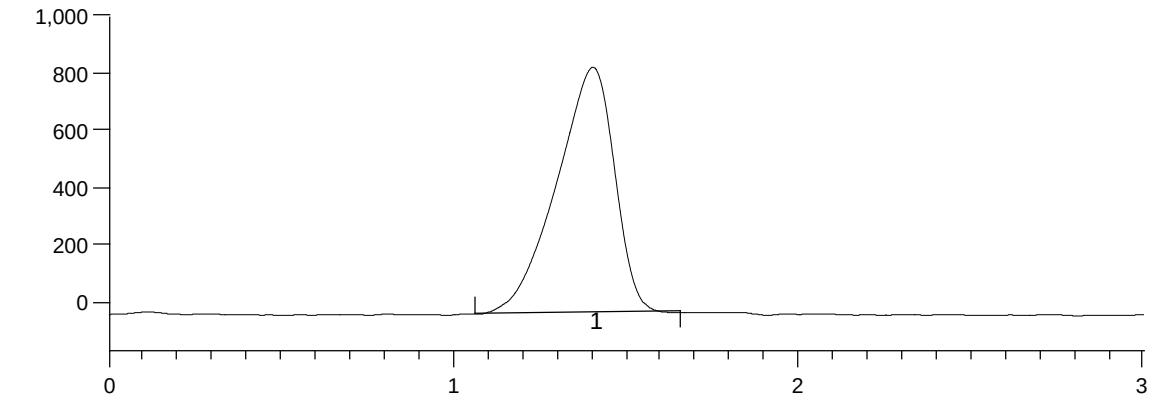
Date Analyzed: 2/24/09
Analyst Name: AC/BK



Date: 2/24/09
Time: 12:13 PM

Peak	rt	Area
1	1.46	258,401

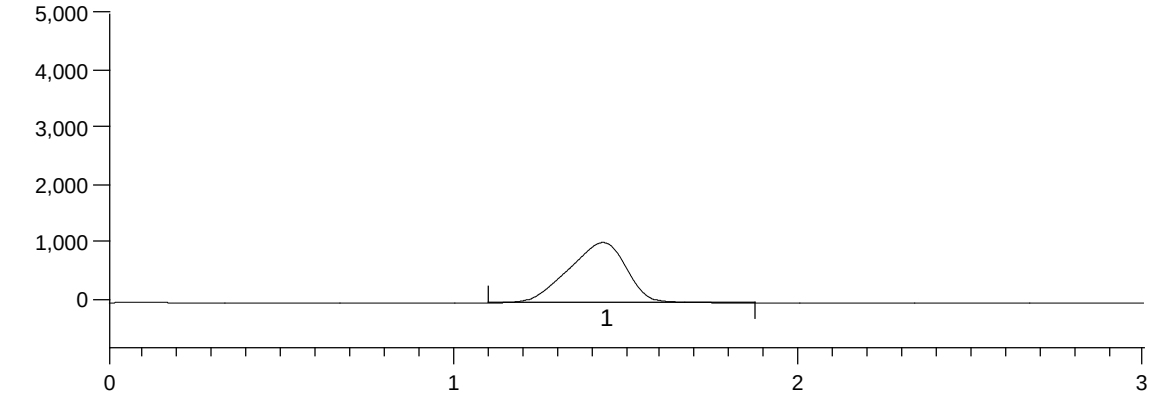
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
31		S	B090197-BLK4		1	258,401	13.3	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 12:17 PM

Peak	rt	Area
1	1.40	101,920

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
32		S	0906030-03		1	101,920	-0.546	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 12:35 PM

Peak	rt	Area
1	1.43	126,789

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
33		S	0907034-02		1	126,789	1.65	0.00		< HS	accept
Notes											

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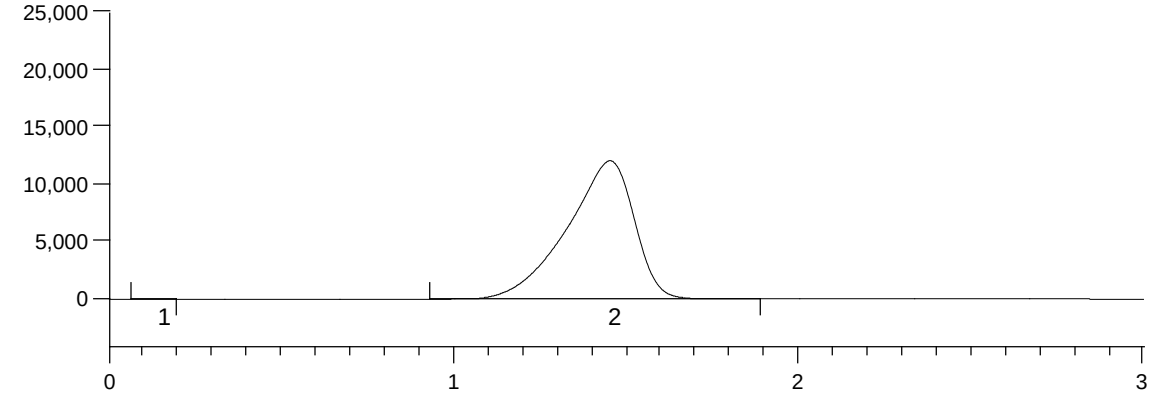
Peak Report

Batch Number: B090222
Method Number: 1631E

Project Number(s): 0900160
Instrument ID: BR-10

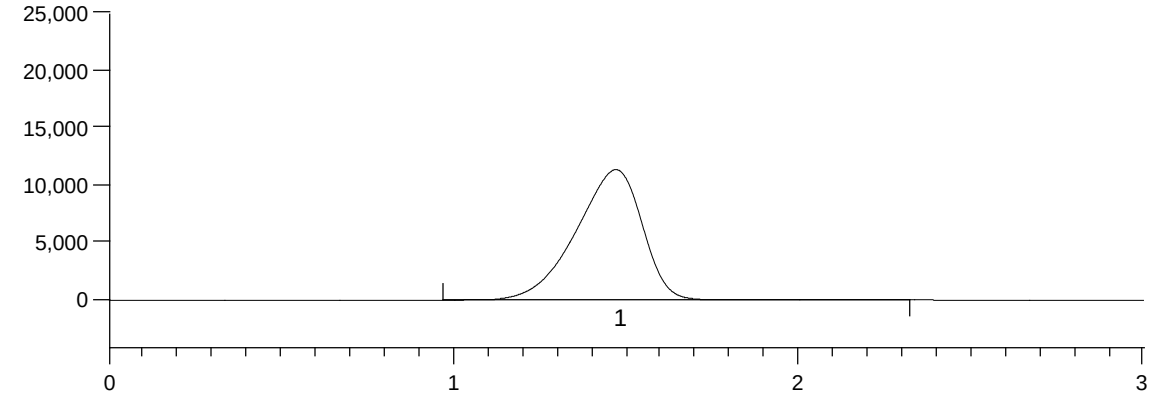
Date Analyzed: 2/24/09
Analyst Name: AC/BK



Date: 2/24/09
Time: 12:41 PM

Peak	rt	Area
1	0.14	225
2	1.45	1,660,136

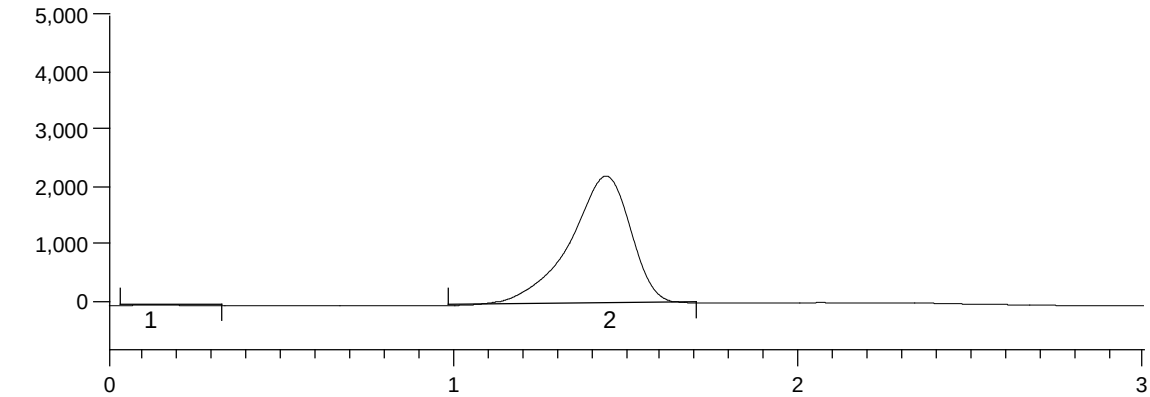
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
34		S	0908009-01		2	1,660,136	137	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 12:45 PM

Peak	rt	Area
1	1.46	1,554,482

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
35		S	0908009-02		1	1,554,482	128	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 12:49 PM

Peak	rt	Area
1	0.10	624
2	1.44	280,264

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
36		S	0907016-01		2	280,264	15.2	0.00		< HS	accept
Notes											

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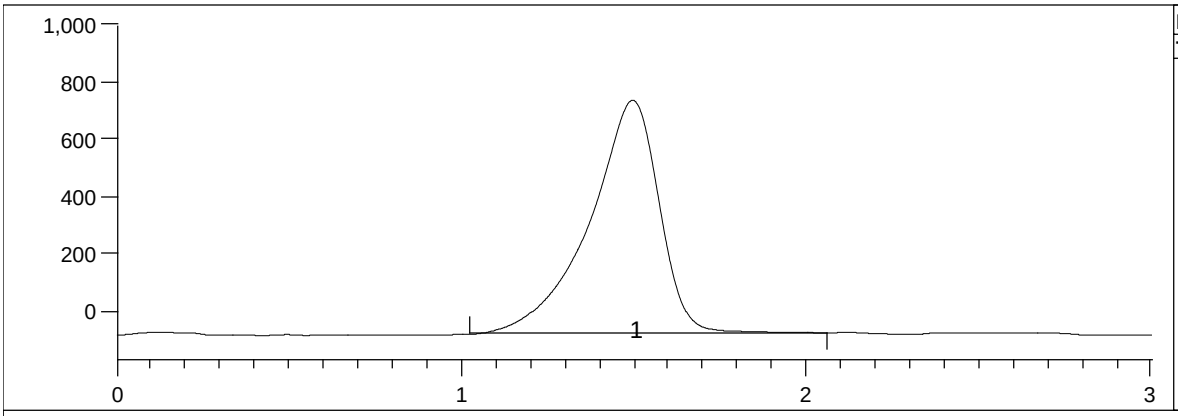
Peak Report

Batch Number: B090222
Method Number: 1631E

Project Number(s): 0900160
Instrument ID: BR-10

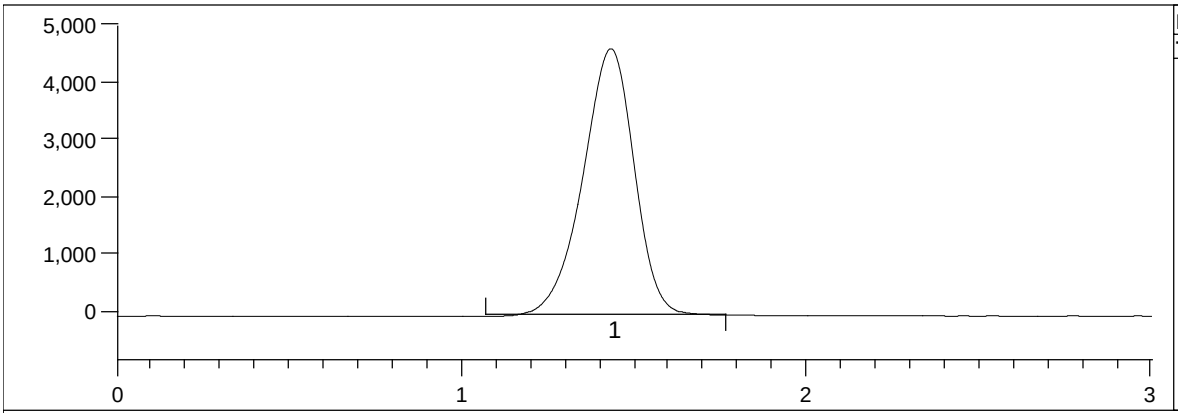
Date Analyzed: 2/24/09
Analyst Name: AC/BK



Date: 2/24/09
Time: 12:59 PM

Peak	rt	Area
1	1.49	116,093

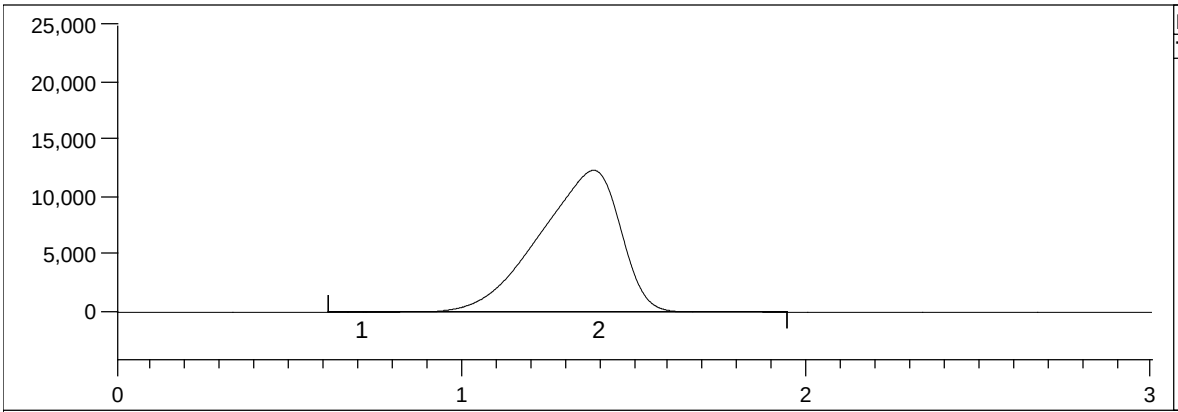
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
37		S	0907016-02		1	116,093	0.706	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 1:03 PM

Peak	rt	Area
1	1.43	490,204

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
38		S	0907016-03		1	490,204	33.7	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 1:08 PM

Peak	rt	Area
1	0.70	322
2	1.38	2,067,585

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
39		S	0907016-04		2	2,067,585	173	0.00		< HS	accept
Notes											

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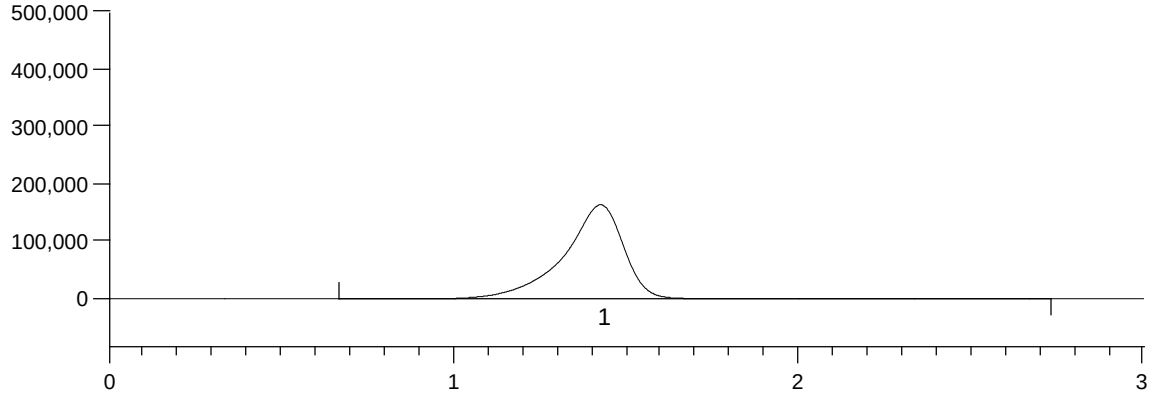
Peak Report

Batch Number: B090222
Method Number: 1631E

Project Number(s): 0900160
Instrument ID: BR-10

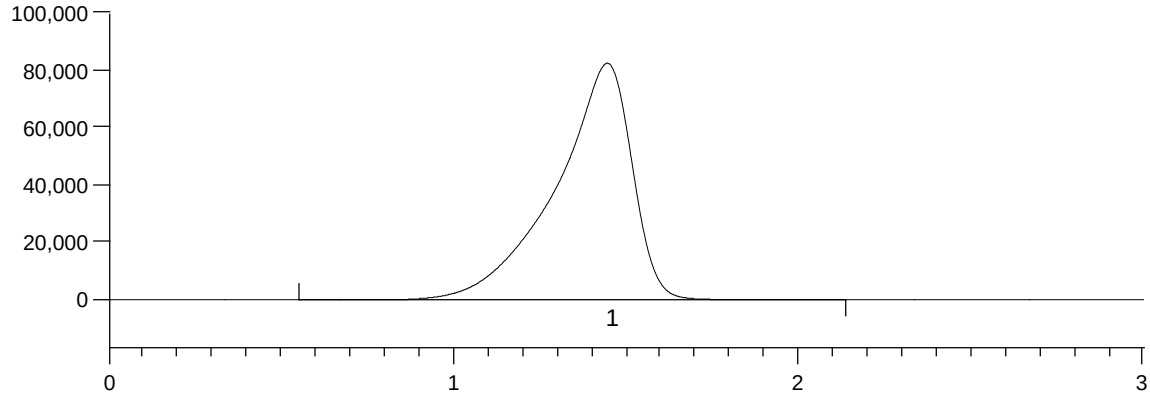
Date Analyzed: 2/24/09
Analyst Name: AC/BK



Date: 2/24/09
Time: 1:12 PM

Peak	rt	Area
1	1.42	20,033,559

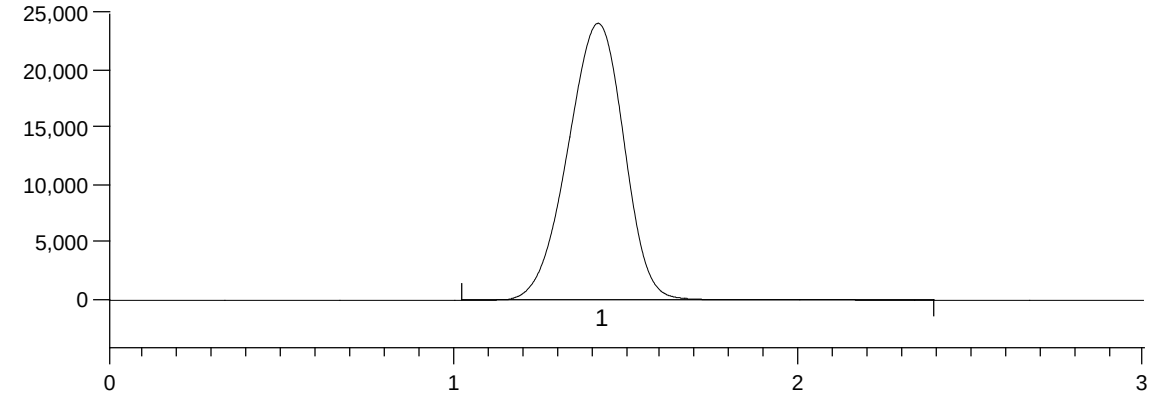
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
40		S	0907029-04		1	20,033,559	1,760	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 1:19 PM

Peak	rt	Area
1	1.44	12,771,954

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
41		S	0907029-05		1	12,771,954	1,120	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 1:22 PM

Peak	rt	Area
1	1.41	2,794,702

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
42		S	B090197-MS1		1	2,794,702	237	0.00		< HS	accept
Notes											

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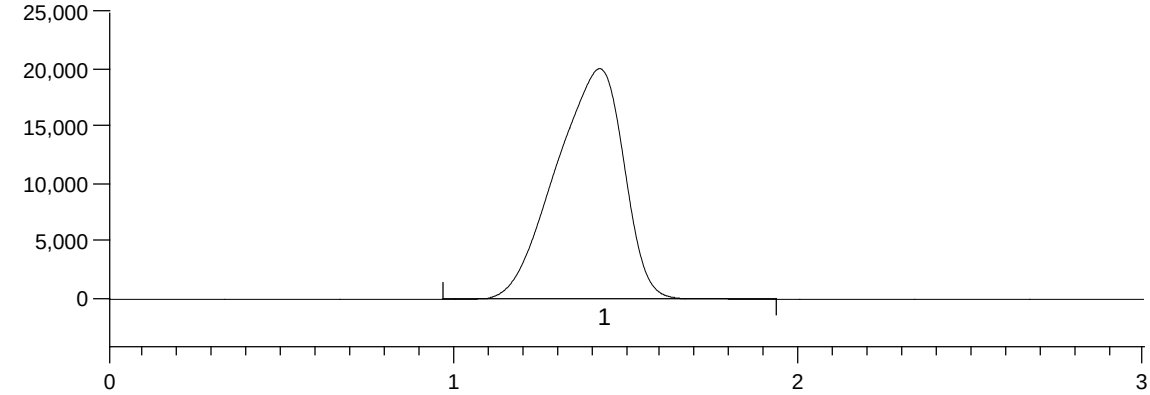
Peak Report

Batch Number: B090222
Method Number: 1631E

Project Number(s): 0900160
Instrument ID: BR-10

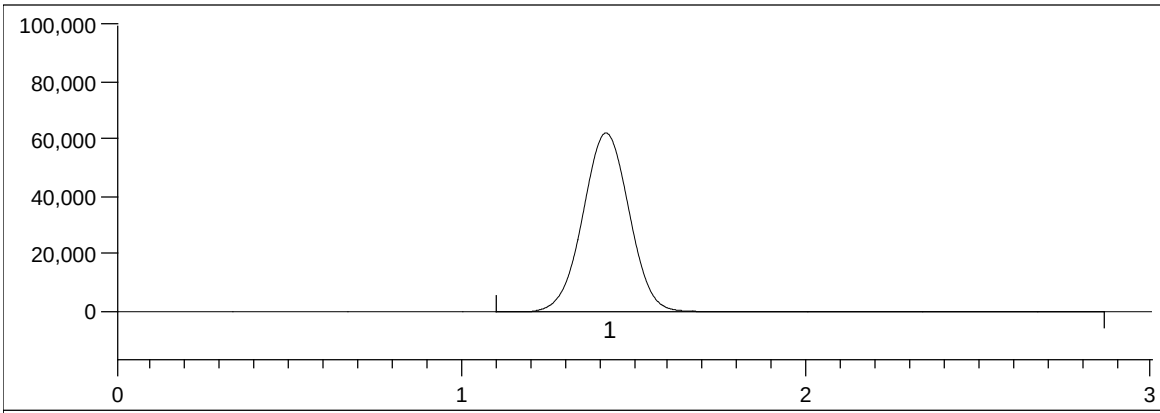
Date Analyzed: 2/24/09
Analyst Name: AC/BK



Date: 2/24/09
Time: 1:28 PM

Peak	rt	Area
1	1.42	2,795,515

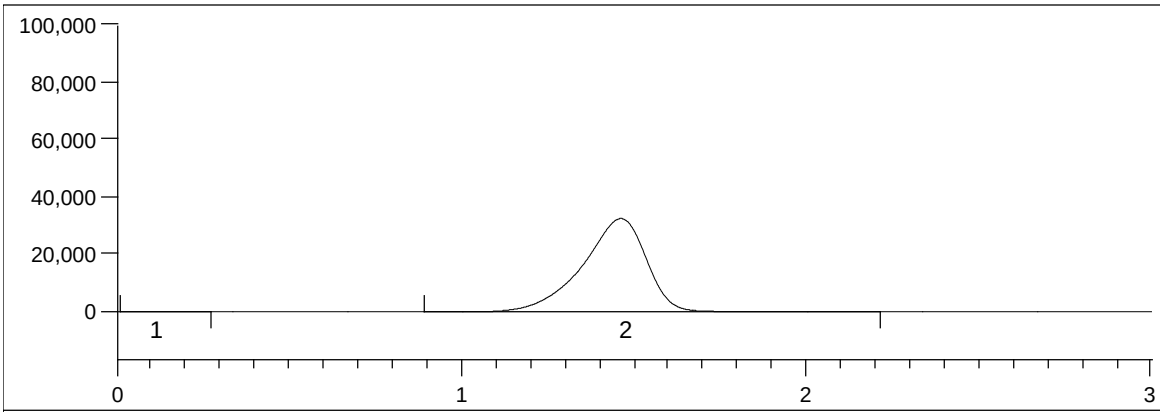
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
43		S	B090197-MSD1		1	2,795,515	237	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 1:32 PM

Peak	rt	Area
1	1.41	5,954,412

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
44		CCV	SEQ-CCV2		1	5,954,412	516		103	77-123	accept
Notes											



Date: 2/24/09
Time: 1:37 PM

Peak	rt	Area
1	0.09	764
2	1.46	4,216,040

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
45		S	0907021-01		2	4,216,040	363	0.00		< HS	accept
Notes											

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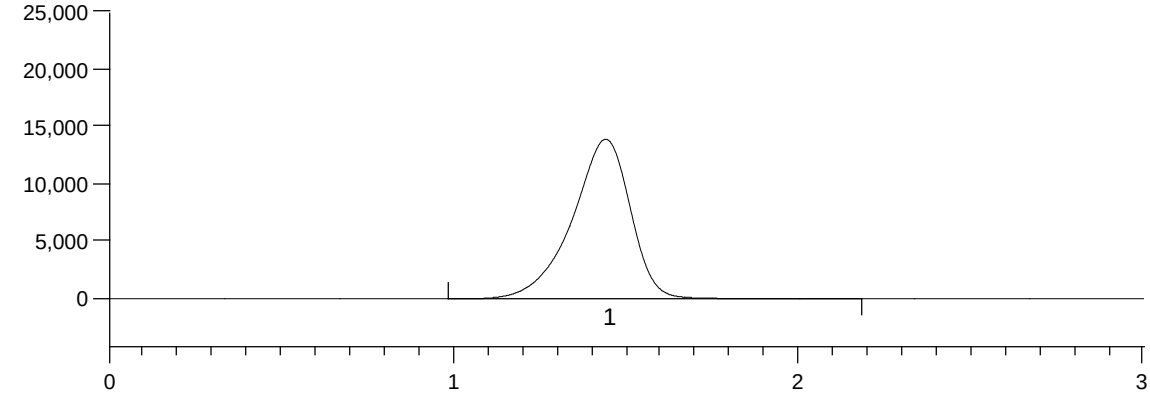
Peak Report

Batch Number: B090222
Method Number: 1631E

Project Number(s): 0900160
Instrument ID: BR-10

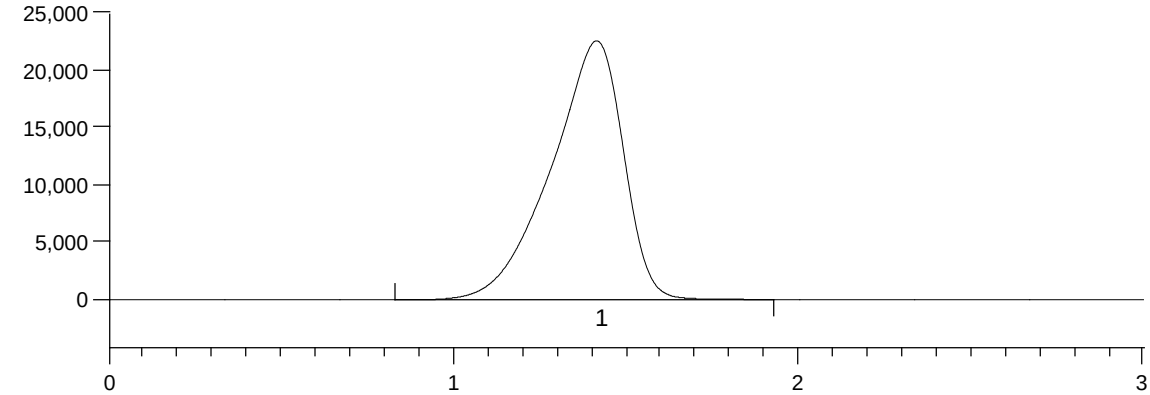
Date Analyzed: 2/24/09
Analyst Name: AC/BK



Date: 2/24/09
Time: 1:41 PM

Peak	rt	Area
1	1.44	1,649,928

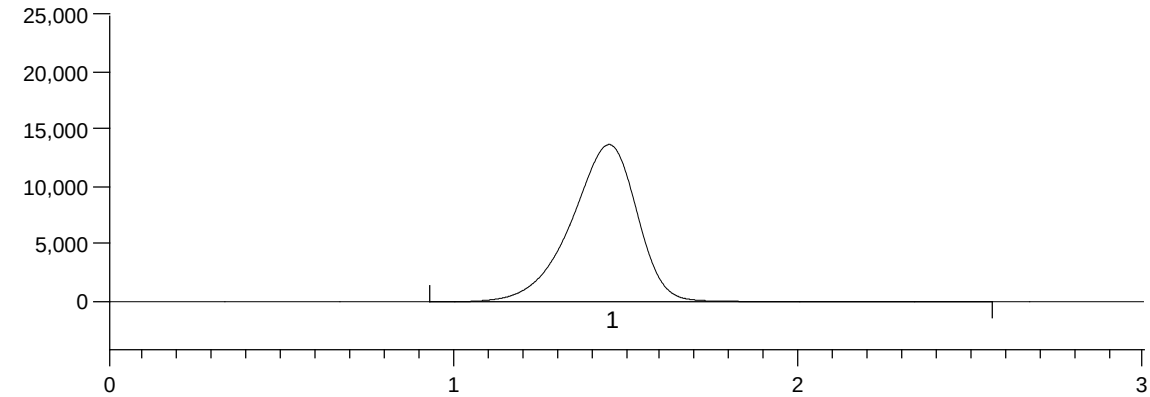
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
46		S	0907021-02		1	1,649,928	136	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 1:44 PM

Peak	rt	Area
1	1.41	3,297,805

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
47		S	0907021-03		1	3,297,805	282	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 1:48 PM

Peak	rt	Area
1	1.44	1,847,366

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
48		S	0907021-04		1	1,847,366	154	0.00		< HS	accept
Notes											

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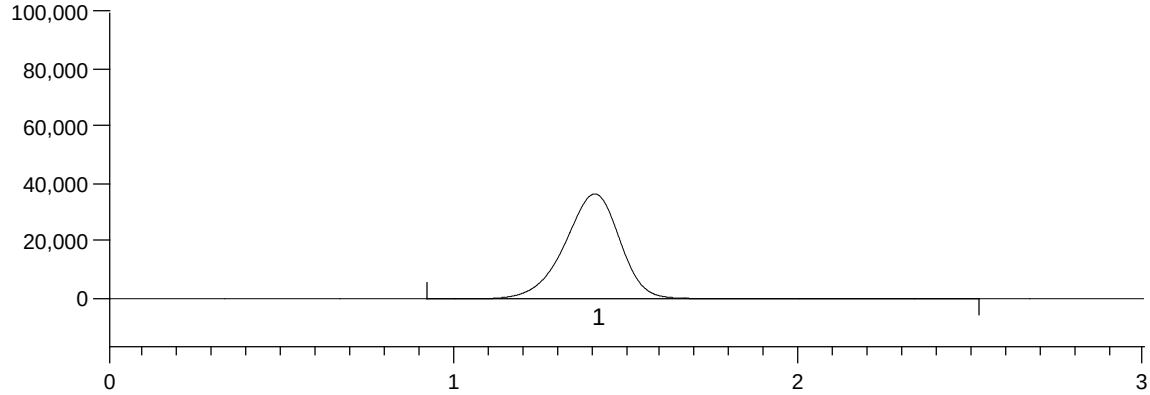
Peak Report

Batch Number: B090222
Method Number: 1631E

Project Number(s): 0900160
Instrument ID: BR-10

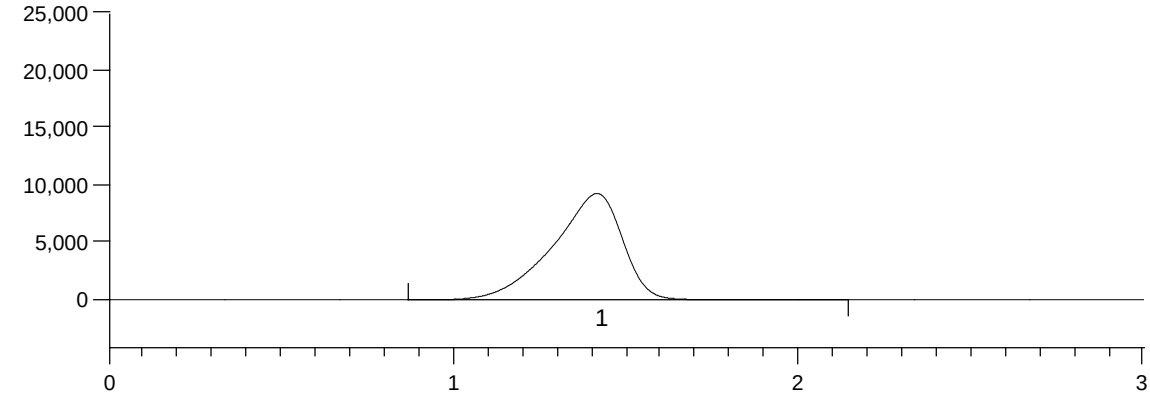
Date Analyzed: 2/24/09
Analyst Name: AC/BK



Date: 2/24/09
Time: 1:56 PM

Peak	rt	Area
1	1.40	4,147,069

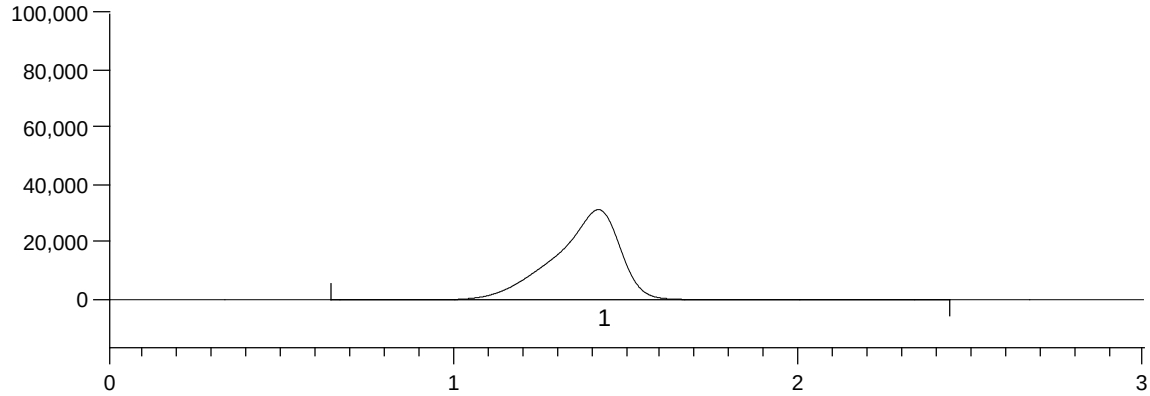
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
49		S	0907021-05		1	4,147,069	357	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 1:59 PM

Peak	rt	Area
1	1.41	1,318,149

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
50		S	0907021-06		1	1,318,149	107	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 2:03 PM

Peak	rt	Area
1	1.42	4,149,073

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
51		S	0907021-07		1	4,149,073	357	0.00		< HS	accept
Notes											

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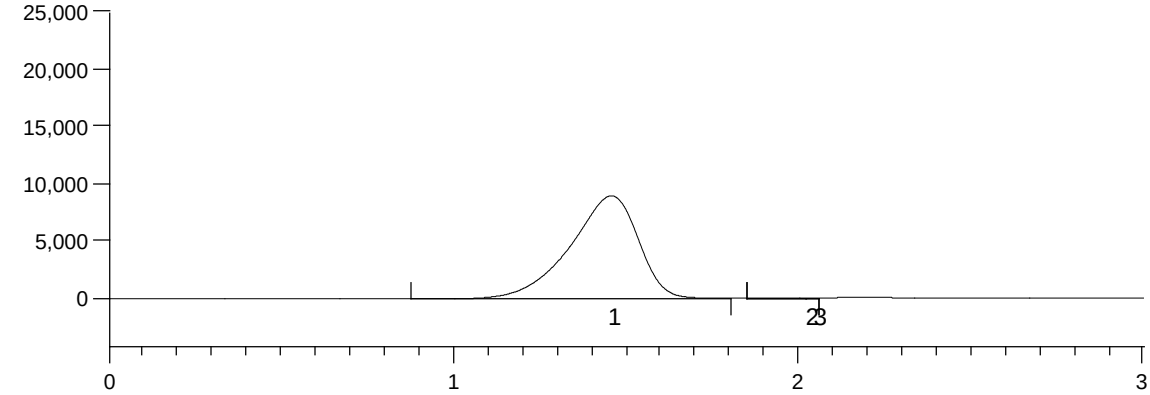
Peak Report

Batch Number: B090222
Method Number: 1631E

Project Number(s): 0900160
Instrument ID: BR-10

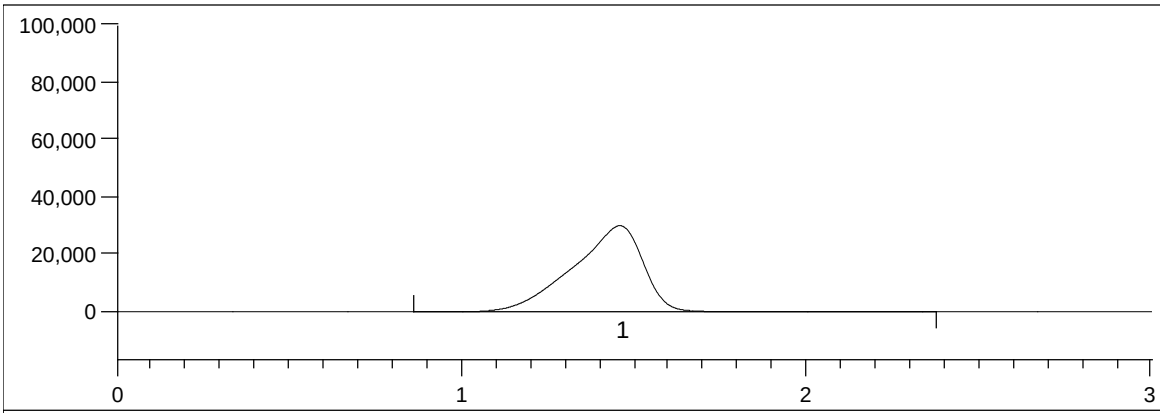
Date Analyzed: 2/24/09
Analyst Name: AC/BK



Date: 2/24/09
Time: 2:07 PM

Peak	rt	Area
1	1.45	1,239,323
2	2.02	676
3	2.04	79

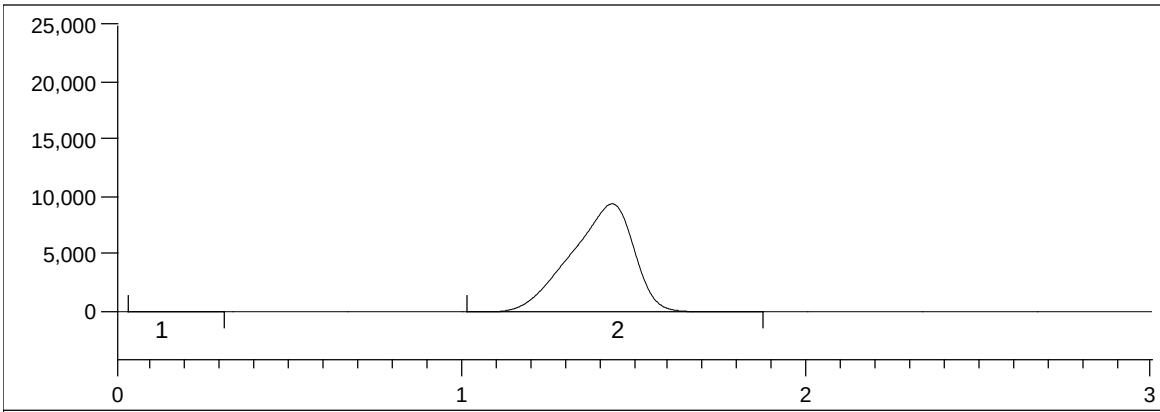
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
52		S	0907021-08		1	1,239,323	99.9	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 2:15 PM

Peak	rt	Area
1	1.45	4,287,121

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
53		S	0907021-09		1	4,287,121	369	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 2:19 PM

Peak	rt	Area
1	0.12	565
2	1.43	1,206,345

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
54		S	0907021-10		2	1,206,345	97.0	0.00		< HS	accept
Notes											

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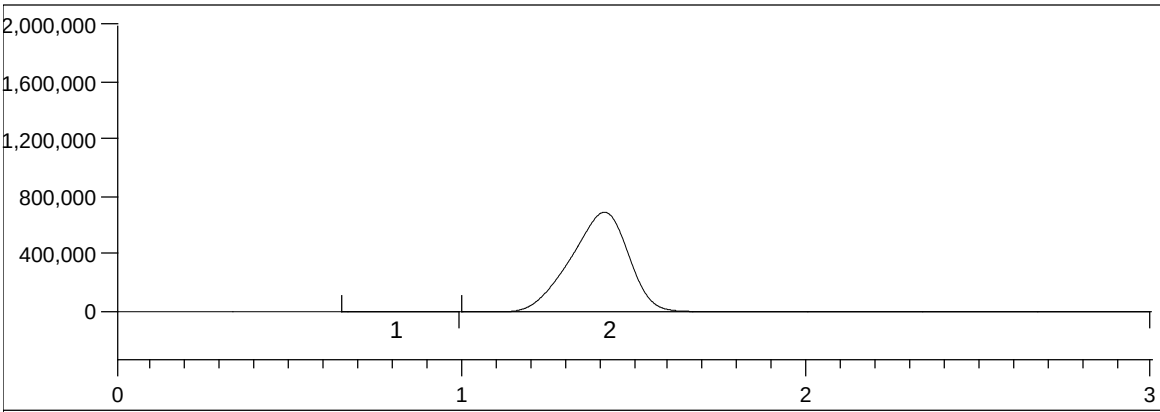
Peak Report

Batch Number: B090222
Method Number: 1631E

Project Number(s): 0900160
Instrument ID: BR-10

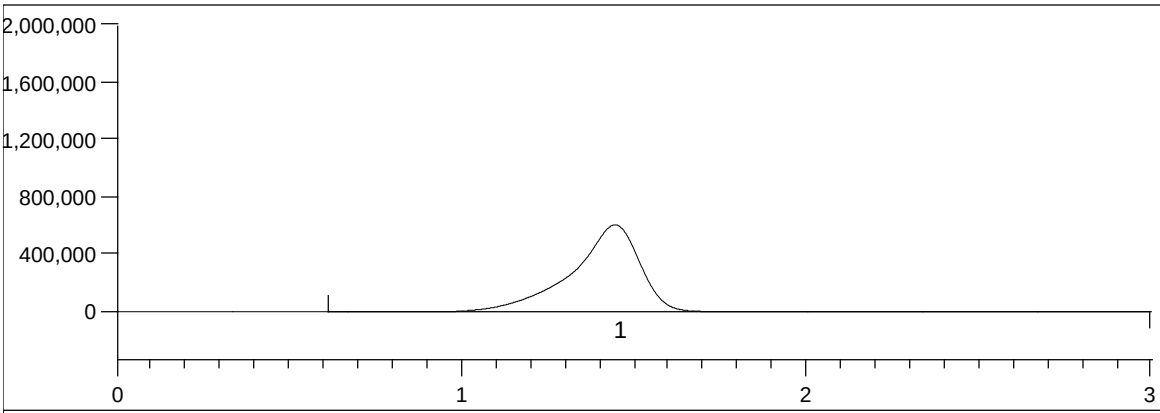
Date Analyzed: 2/24/09
Analyst Name: AC/BK



Date: 2/24/09
Time: 2:23 PM

Peak	rt	Area
1	0.79	2,736
2	1.41	82,425,252

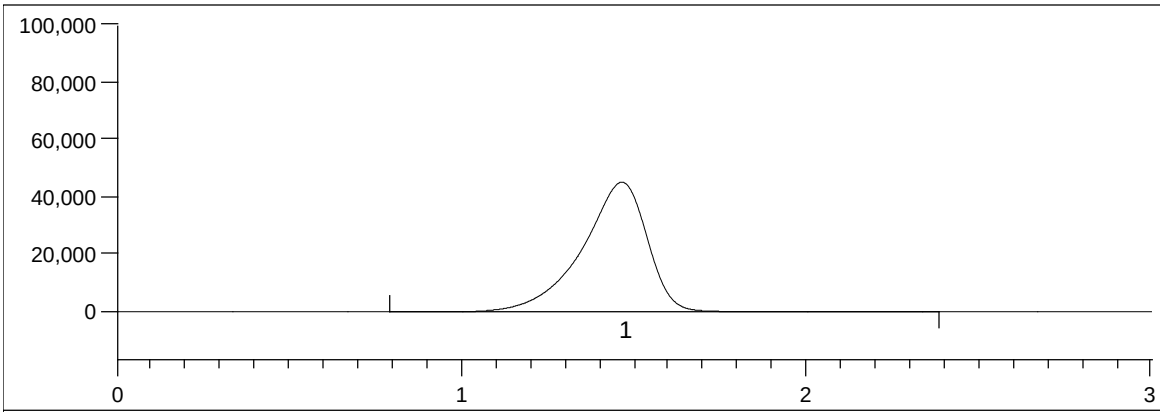
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
55		S	B090197-MS2		2	82,425,252	7,270	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 2:27 PM

Peak	rt	Area
1	1.44	83,615,345

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
56		S	B090197-MSD2		1	83,615,345	7,370	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 2:34 PM

Peak	rt	Area
1	1.46	5,980,560

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
57		CCV	SEQ-CCV3		1	5,980,560	519		104	77-123	accept
Notes											

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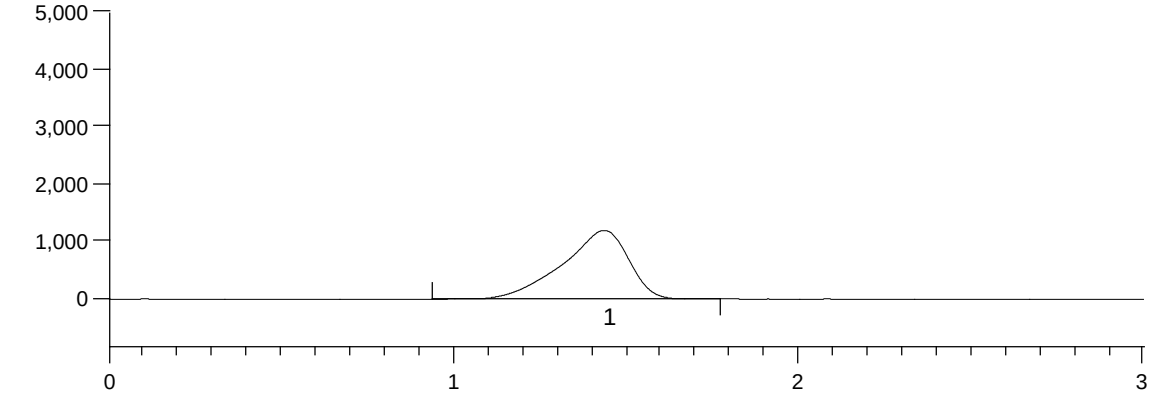
Peak Report

Batch Number: B090222
Method Number: 1631E

Project Number(s): 0900160
Instrument ID: BR-10

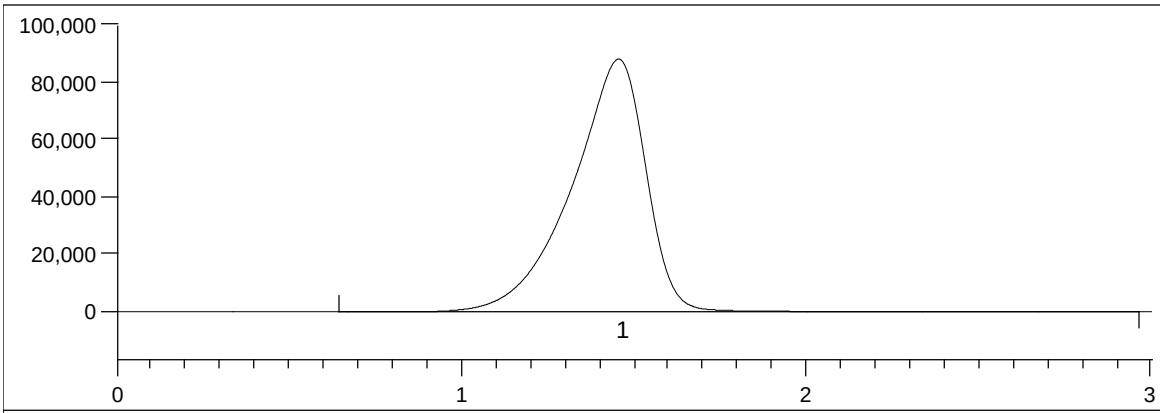
Date Analyzed: 2/24/09
Analyst Name: AC/BK



Date: 2/24/09
Time: 2:39 PM

Peak	rt	Area
1	1.43	164,726

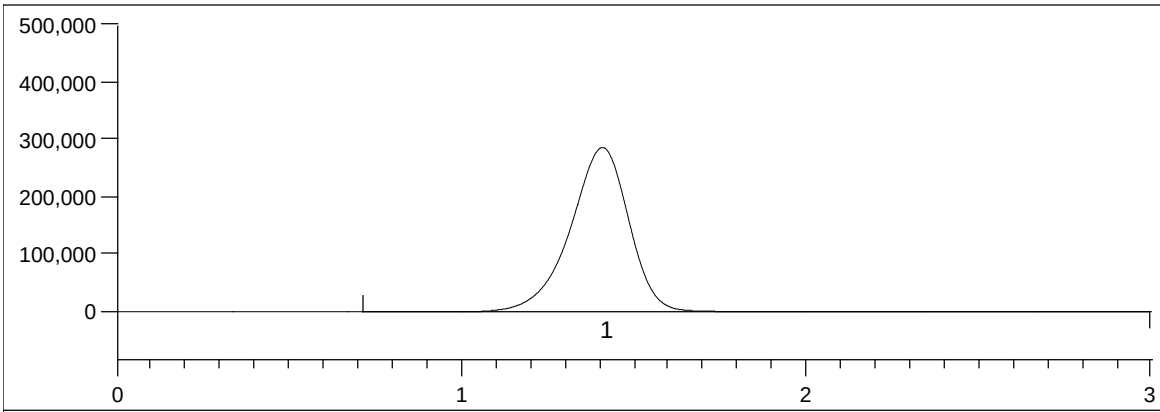
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
58		S	0907021-11		1	164,726	5.00	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 2:43 PM

Peak	rt	Area
1	1.45	13,281,250

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
59		S	0906030-01		1	13,281,250	1,160	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 2:48 PM

Peak	rt	Area
1	1.40	34,274,654

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
60		S	0906030-02		1	34,274,654	3,020	0.00		< HS	accept
Notes											

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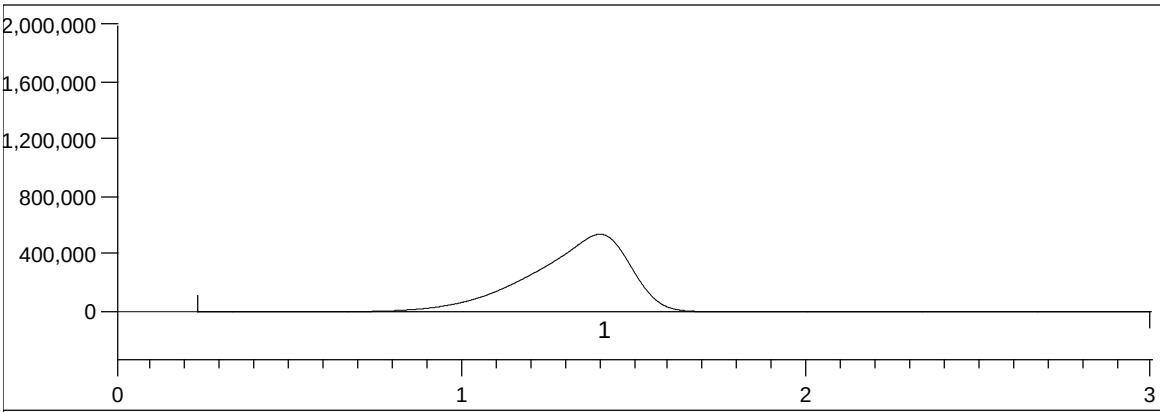
Peak Report

Batch Number: B090222
Method Number: 1631E

Project Number(s): 0900160
Instrument ID: BR-10

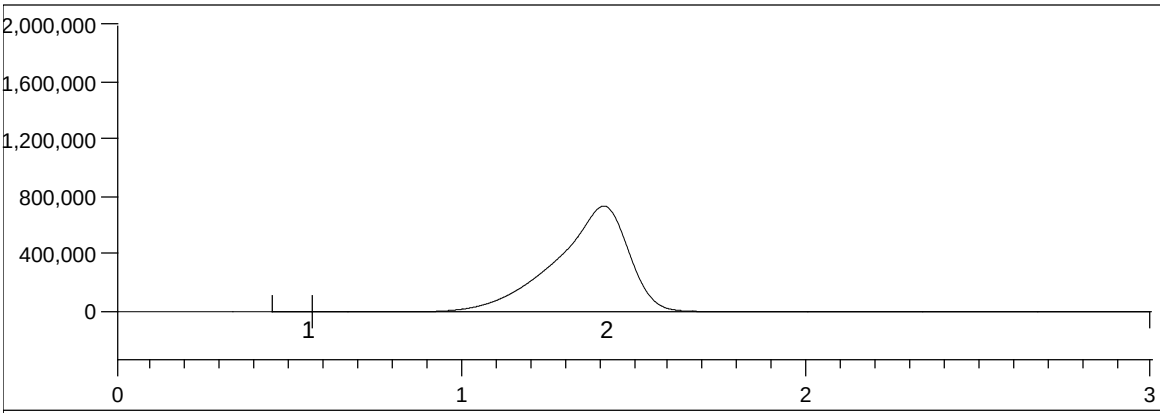
Date Analyzed: 2/24/09
Analyst Name: AC/BK



Date: 2/24/09
Time: 2:53 PM

Peak	rt	Area
1	1.40	106,872,068

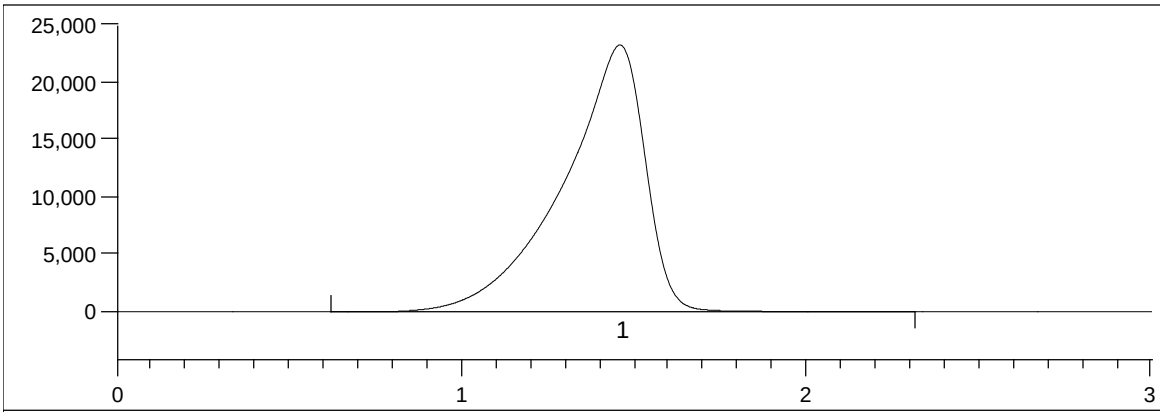
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
61		S	0907034-01		1	106,872,068	9,430	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 3:00 PM

Peak	rt	Area
1	0.54	85
2	1.41	109,743,469

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
62		S	0907034-03		2	109,743,469	9,680	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 3:22 PM

Peak	rt	Area
1	1.45	3,866,395

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
63		S	0908017-01		1	3,866,395	332	0.00		< HS	accept
Notes											

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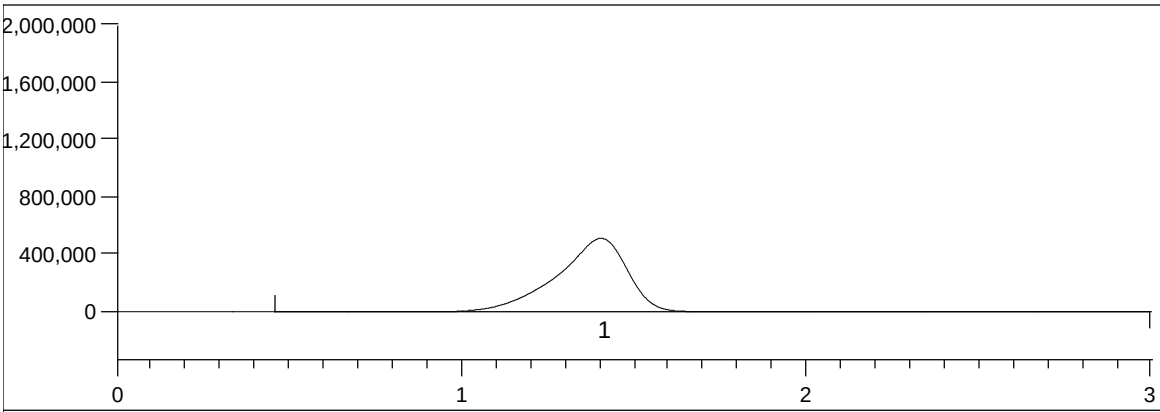
Peak Report

Batch Number: B090222
Method Number: 1631E

Project Number(s): 0900160
Instrument ID: BR-10

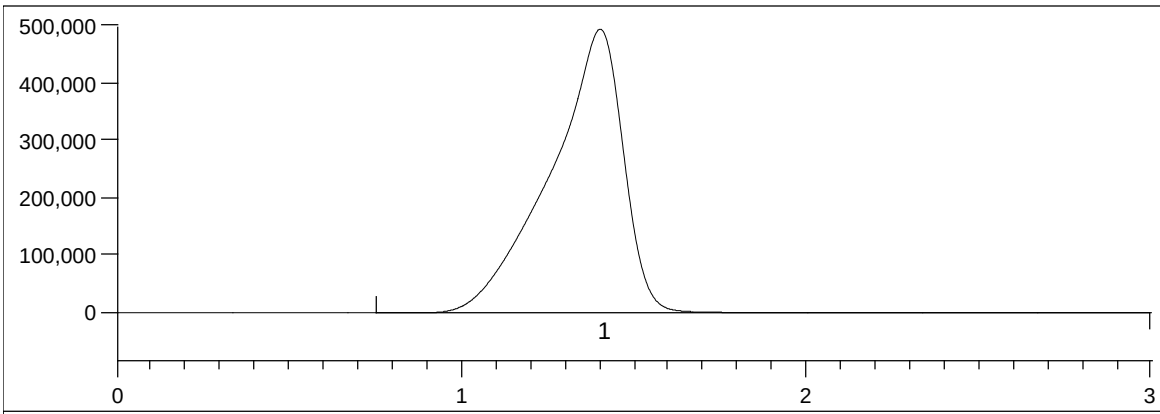
Date Analyzed: 2/24/09
Analyst Name: AC/BK



Date: 2/24/09
Time: 3:34 PM

Peak	rt	Area
1	1.40	73,648,786

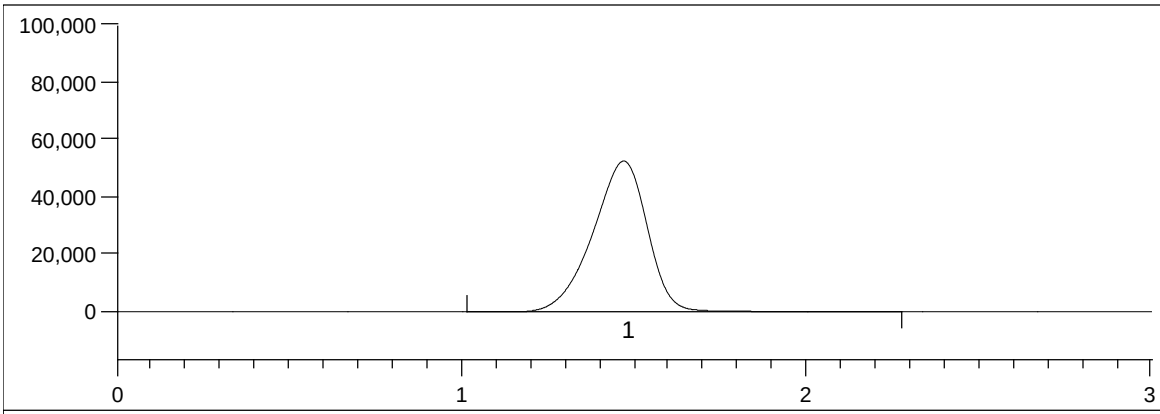
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
64		S	B090197-MS3		1	73,648,786	6,490	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 3:41 PM

Peak	rt	Area
1	1.40	73,073,389

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
65		S	B090197-MSD3		1	73,073,389	6,440	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 3:45 PM

Peak	rt	Area
1	1.46	5,819,544

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
66		CCV	SEQ-CCV4		1	5,819,544	504		101	77-123	accept
Notes											

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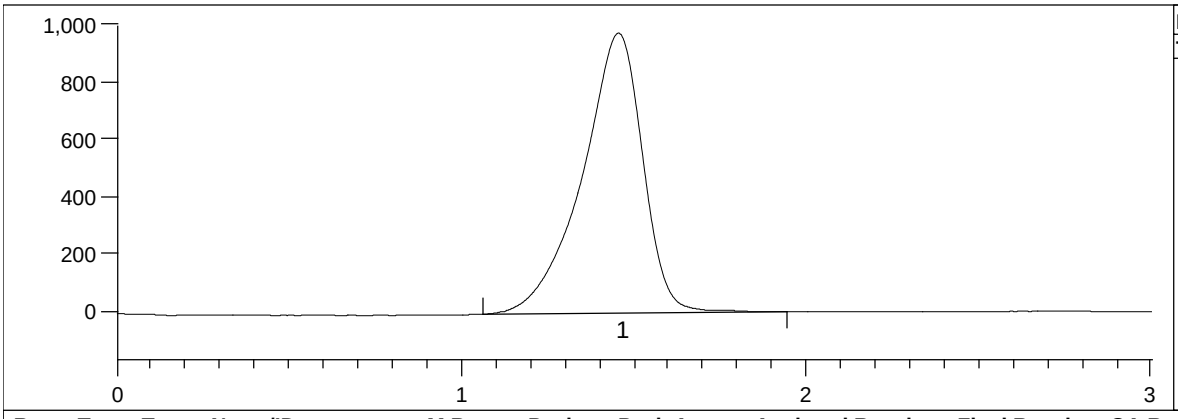
Peak Report

Batch Number: B090222
Method Number: 1631E

Project Number(s): 0900160
Instrument ID: BR-10

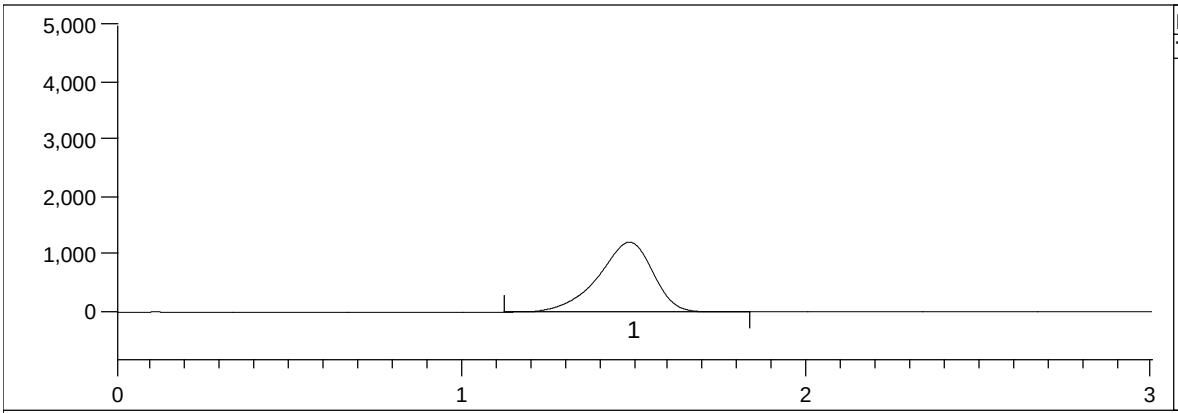
Date Analyzed: 2/24/09
Analyst Name: AC/BK



Date: 2/24/09
Time: 3:50 PM

Peak	rt	Area
1	1.45	120,865

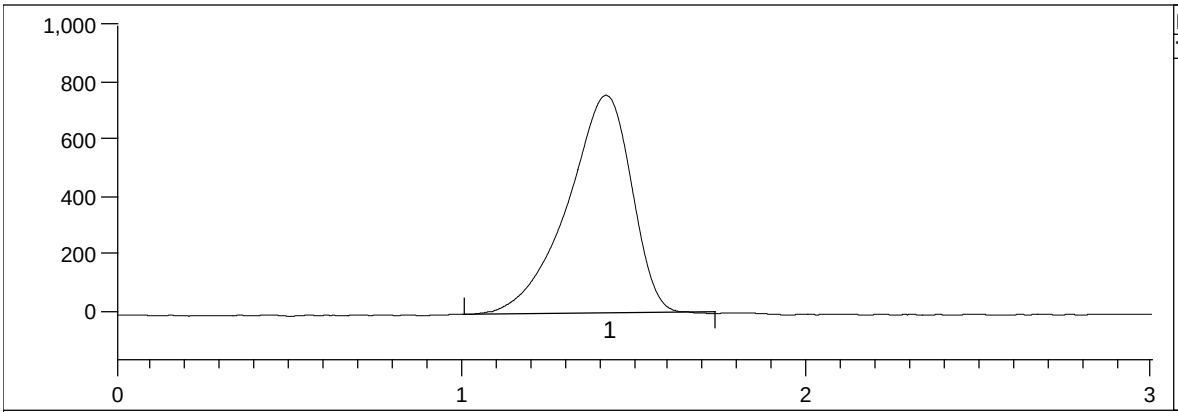
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
67		S	B090215-BLK1		1	120,865	1.13	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 3:55 PM

Peak	rt	Area
1	1.48	138,731

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
68		S	B090215-BLK2		1	138,731	2.71	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 4:27 PM

Peak	rt	Area
1	1.41	100,615

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
69		S	B090215-BLK3		1	100,615	-0.661	0.00		< HS	accept
Notes											

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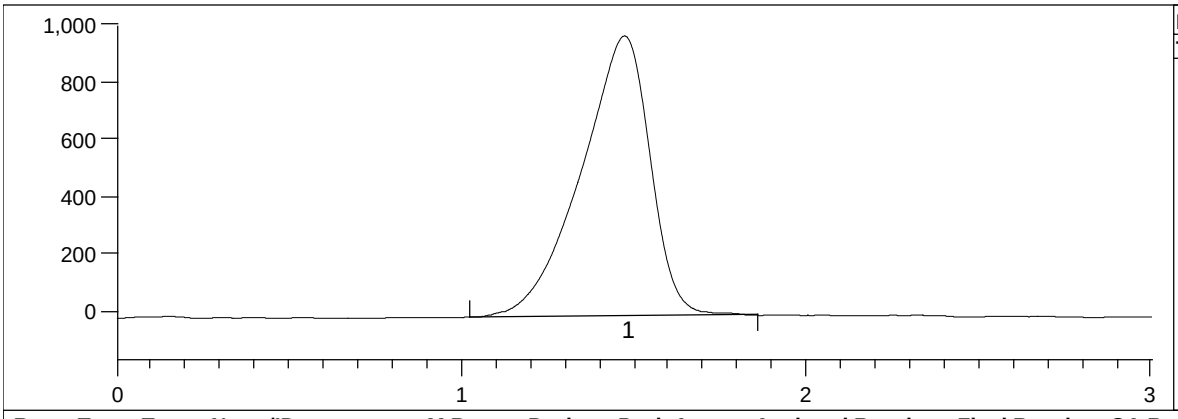
Peak Report

Batch Number: B090222
Method Number: 1631E

Project Number(s): 0900160
Instrument ID: BR-10

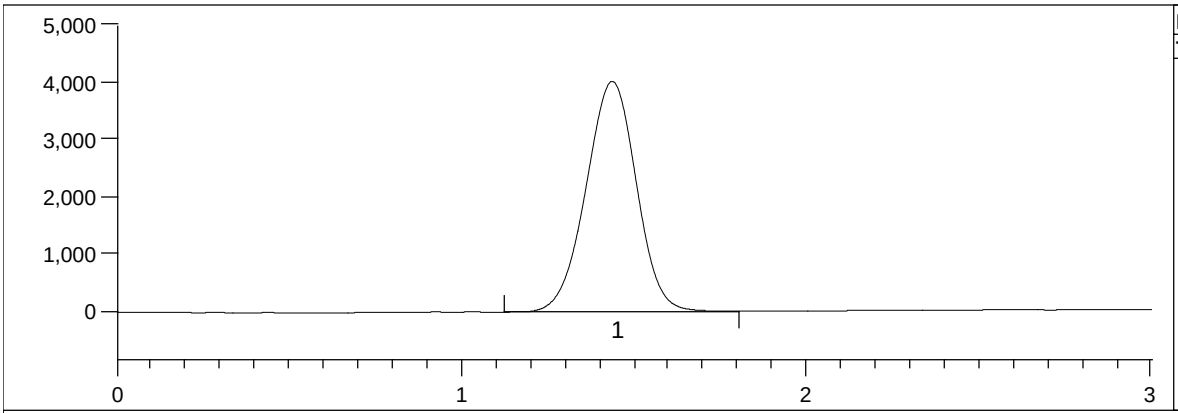
Date Analyzed: 2/24/09
Analyst Name: AC/BK



Date: 2/24/09
Time: 4:35 PM

Peak	rt	Area
1	1.47	138,391

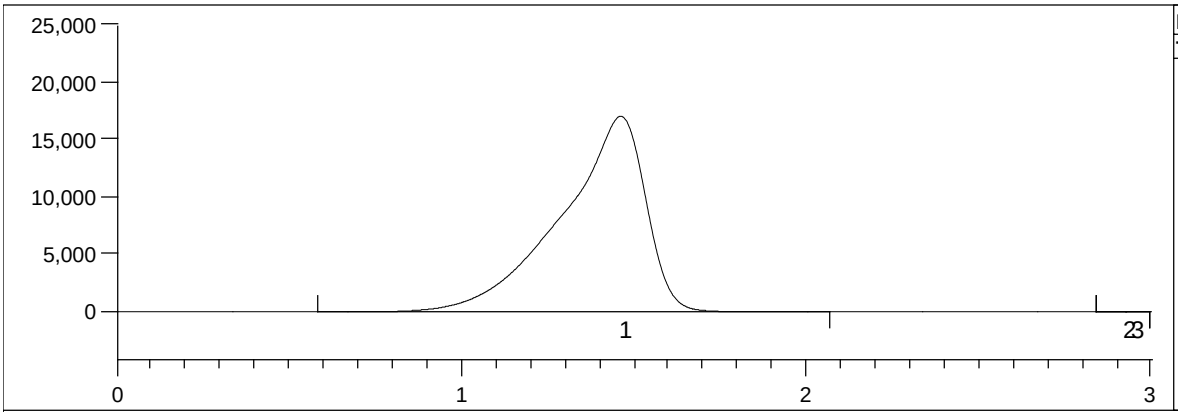
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
70		S	B090215-BLK4		1	138,391	2.68	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 4:40 PM

Peak	rt	Area
1	1.43	410,902

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
71		S	0906036-06RE2		1	410,902	26.7	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 4:44 PM

Peak	rt	Area
1	1.46	2,908,471
2	2.92	122
3	2.94	110

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
72		S	B090215-MS1		1	2,908,471	247	0.00		< HS	accept
Notes											

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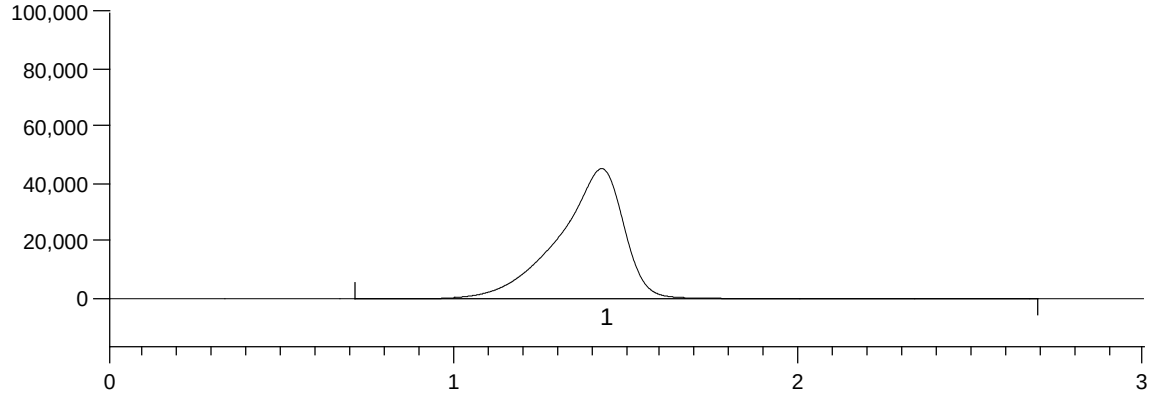
Peak Report

Batch Number: B090222
Method Number: 1631E

Project Number(s): 0900160
Instrument ID: BR-10

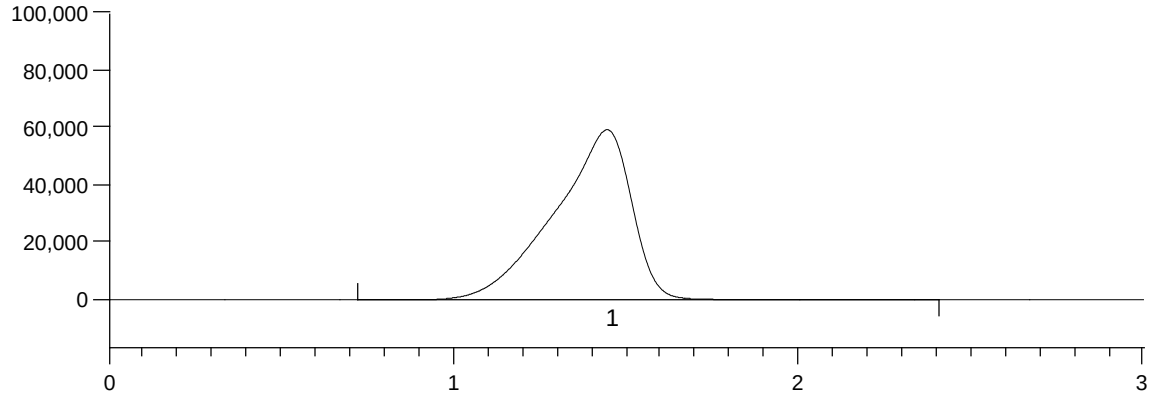
Date Analyzed: 2/24/09
Analyst Name: AC/BK



Date: 2/24/09
Time: 4:48 PM

Peak	rt	Area
1	1.42	6,028,588

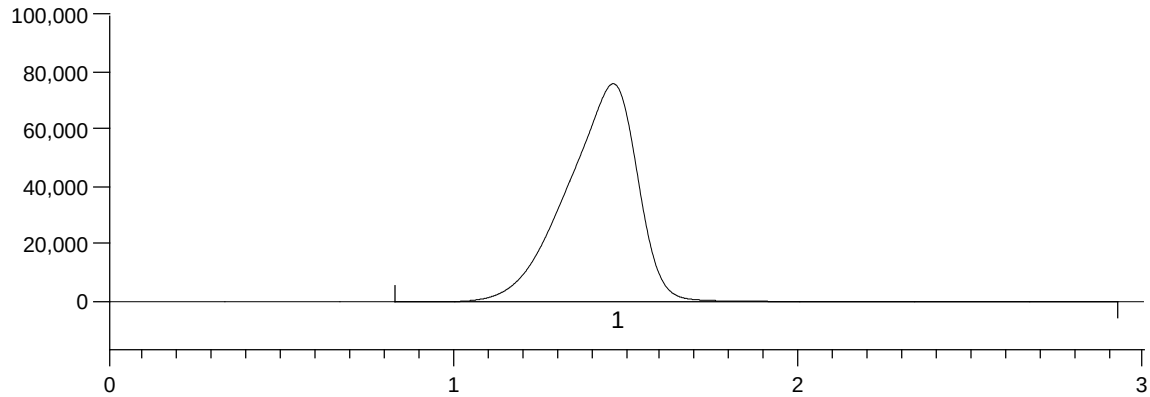
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
73		CCV	SEQ-CCV5		1	6,028,588	523		105	77-123	accept
Notes											



Date: 2/24/09
Time: 4:52 PM

Peak	rt	Area
1	1.44	9,272,702

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
74		S	0906006-06RE1		1	9,272,702	809	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 4:56 PM

Peak	rt	Area
1	1.46	10,893,512

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
75		S	B090199-DUP4		1	10,893,512	952	0.00		< HS	accept
Notes											

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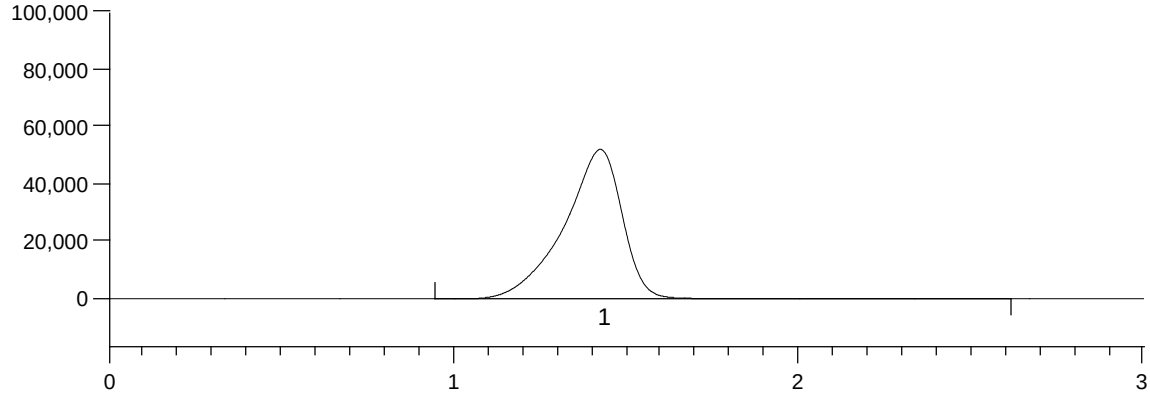
Peak Report

Batch Number: B090222
Method Number: 1631E

Project Number(s): 0900160
Instrument ID: BR-10

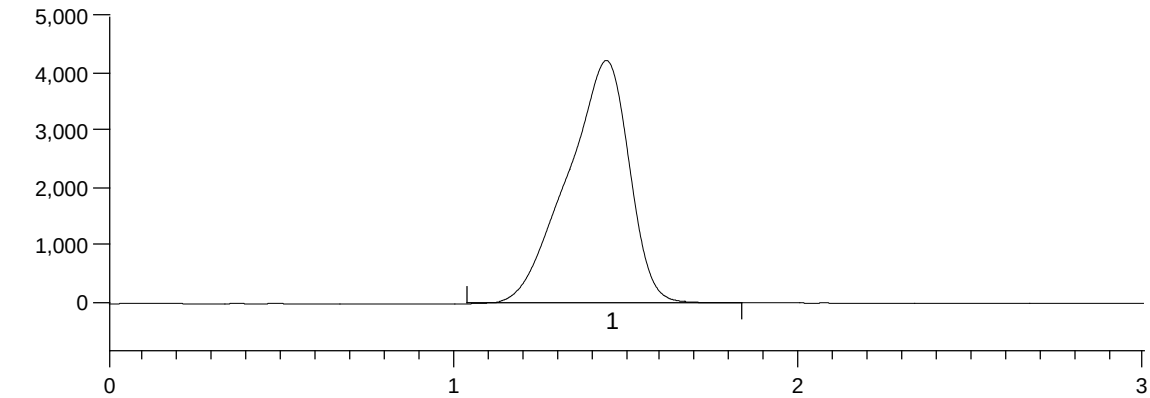
Date Analyzed: 2/24/09
Analyst Name: AC/BK



Date: 2/24/09
Time: 5:02 PM

Peak	rt	Area
1	1.42	6,151,501

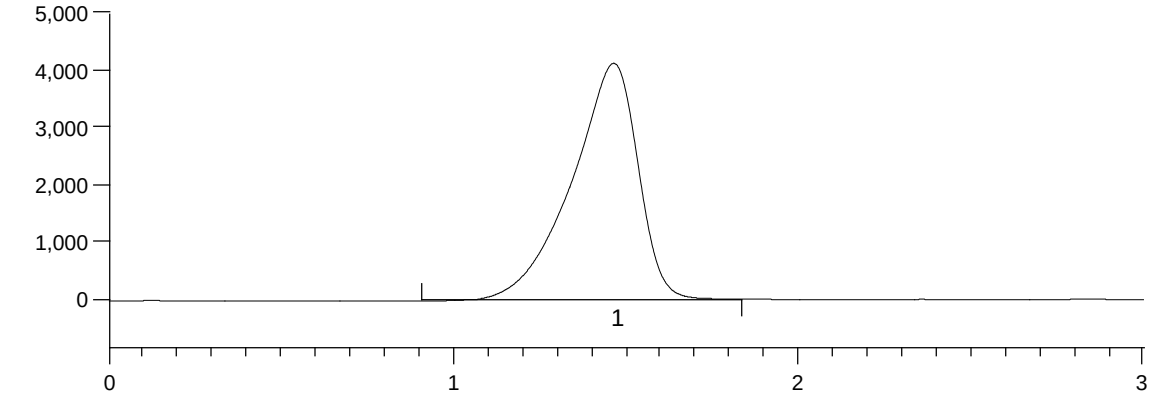
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
76		CCV	SEQ-CCV6		1	6,151,501	534		107	77-123	accept
Notes											



Date: 2/24/09
Time: 5:12 PM

Peak	rt	Area
1	1.44	533,015

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
77		S	HgII MMHg TORT2		1	533,015	37.5	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 5:17 PM

Peak	rt	Area
1	1.46	556,975

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
78		S	HgII MMHg TORT2		1	556,975	39.6	0.00		< HS	accept
Notes											

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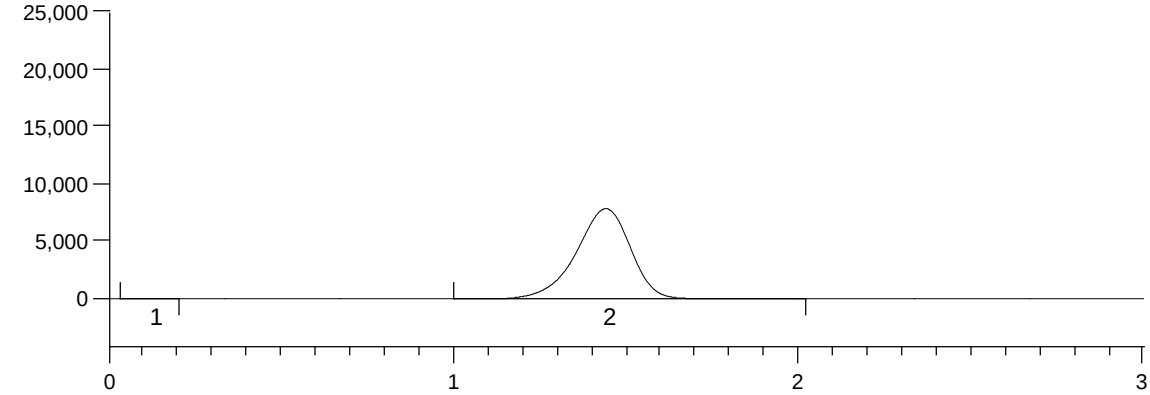
Peak Report

Batch Number: B090222
Method Number: 1631E

Project Number(s): 0900160
Instrument ID: BR-10

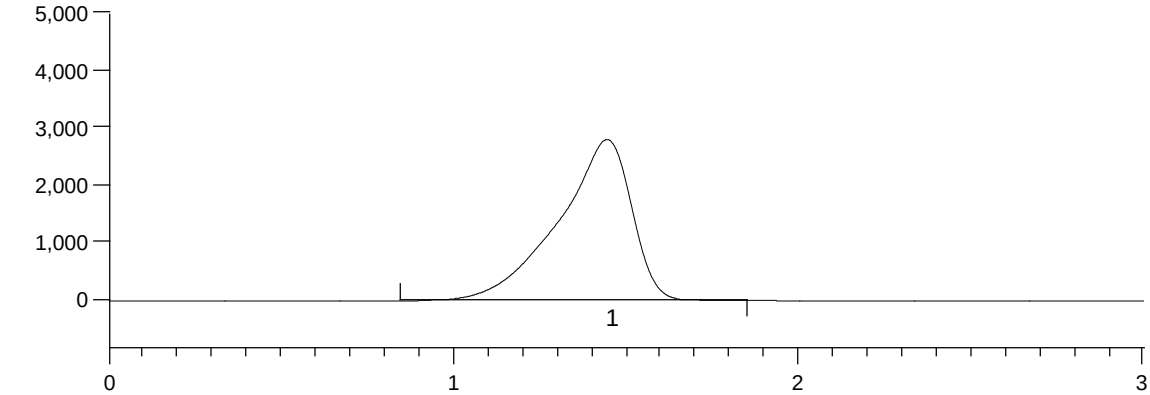
Date Analyzed: 2/24/09
Analyst Name: AC/BK



Date: 2/24/09
Time: 5:23 PM

Peak	rt	Area
1	0.12	387
2	1.44	882,477

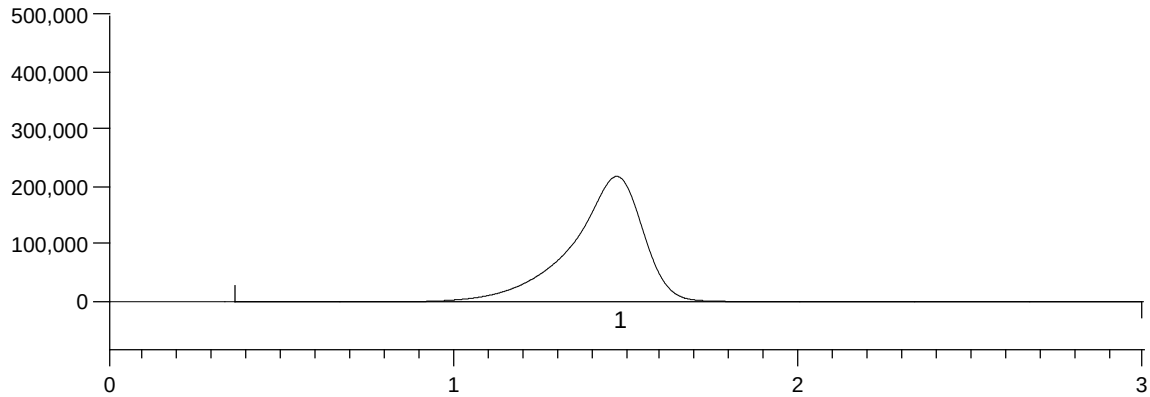
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
79		S	HgII MMHg TORT2		2	882,477	68.4	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 5:27 PM

Peak	rt	Area
1	1.44	423,205

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
80		S	HgII MMHg TORT2		1	423,205	27.8	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 5:31 PM

Peak	rt	Area
1	1.47	31,896,954

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
81		S	HgII MMHg DOLT4		1	31,896,954	2,810	0.00		< HS	accept
Notes											

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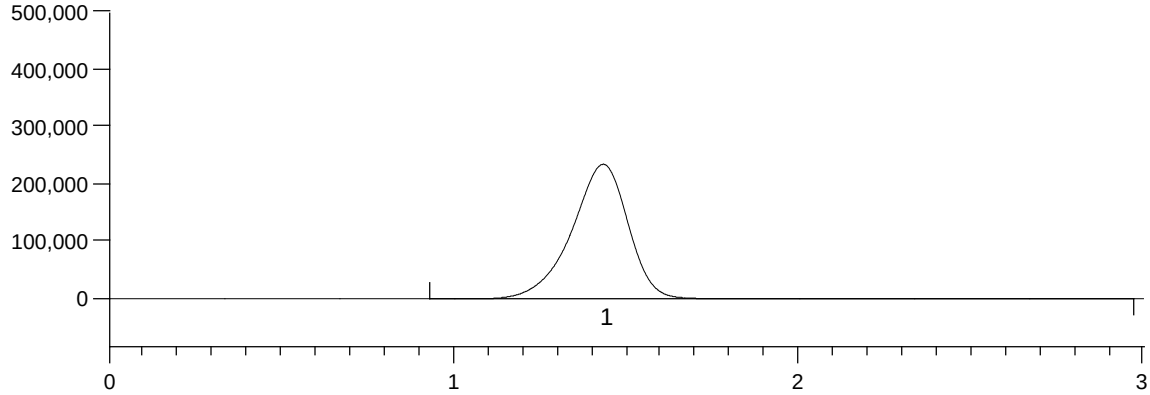
Peak Report

Batch Number: B090222
Method Number: 1631E

Project Number(s): 0900160
Instrument ID: BR-10

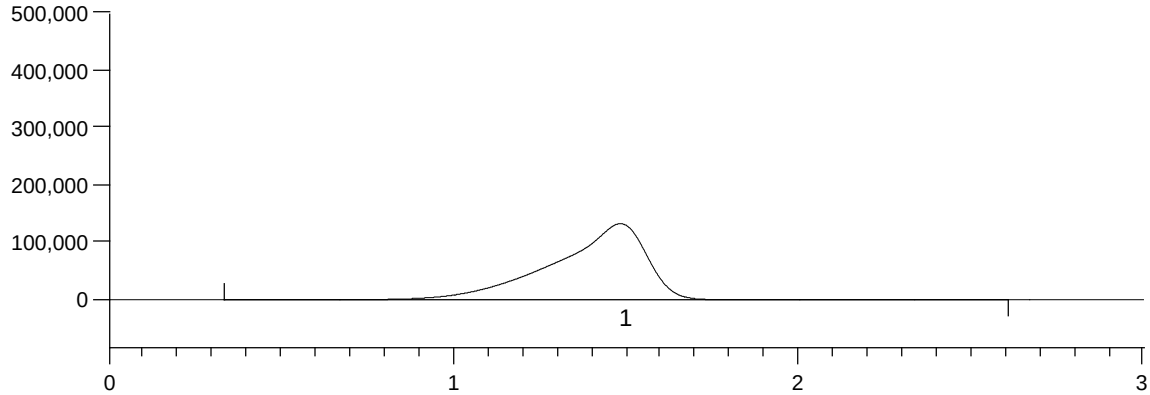
Date Analyzed: 2/24/09
Analyst Name: AC/BK



Date: 2/24/09
Time: 5:36 PM

Peak	rt	Area
1	1.43	27,028,921

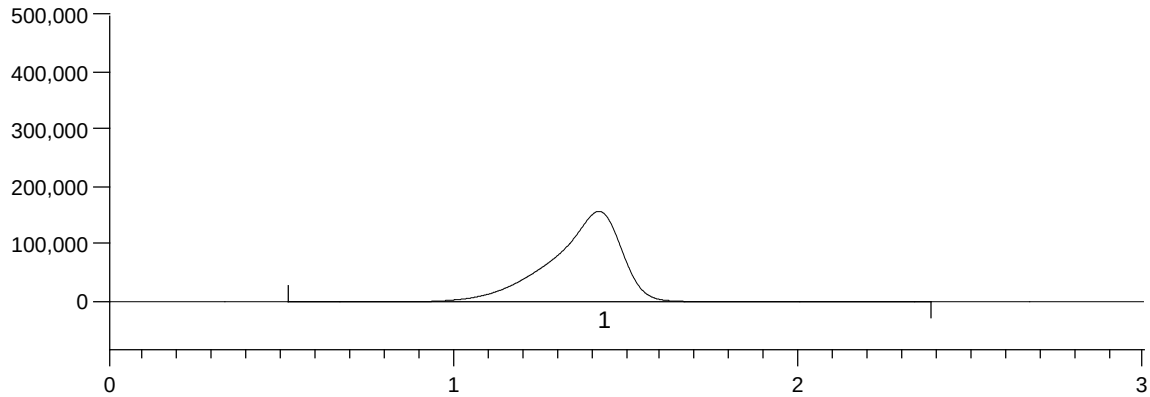
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
82		S	HgII MMHg DOLT4		1	27,028,921	2,380	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 5:43 PM

Peak	rt	Area
1	1.48	24,670,168

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
83		S	HgII MMHg DOLT4		1	24,670,168	2,170	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 5:47 PM

Peak	rt	Area
1	1.42	22,078,781

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
84		S	HgII MMHg DOLT4		1	22,078,781	1,940	0.00		< HS	accept
Notes											

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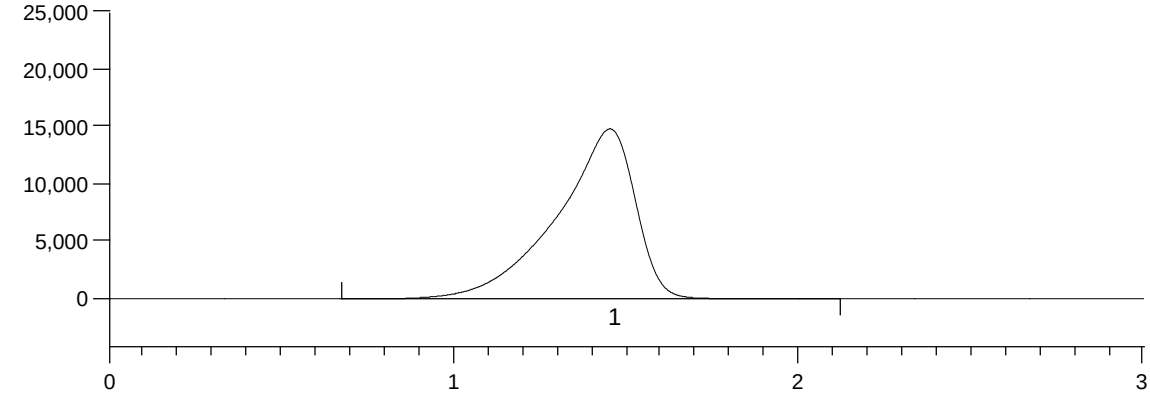
Peak Report

Batch Number: B090222
Method Number: 1631E

Project Number(s): 0900160
Instrument ID: BR-10

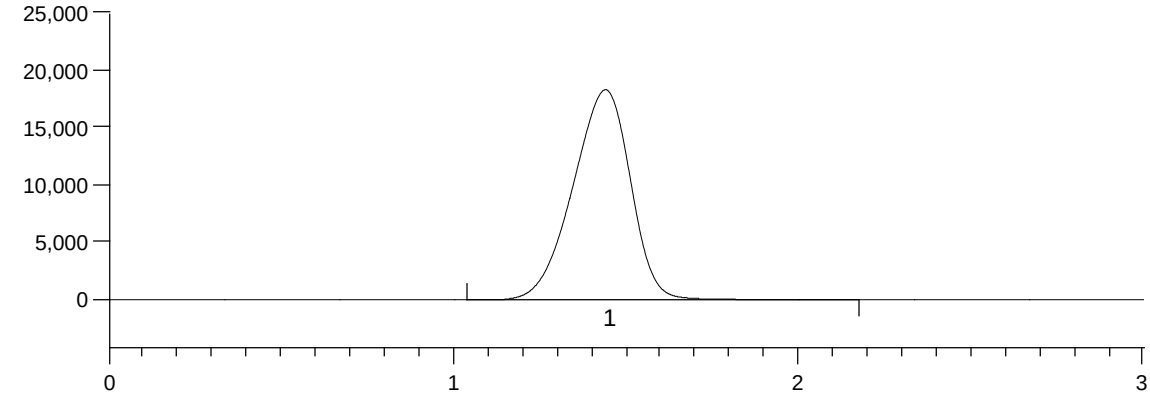
Date Analyzed: 2/24/09
Analyst Name: AC/BK



Date: 2/24/09
Time: 5:52 PM

Peak	rt	Area
1	1.45	2,365,428

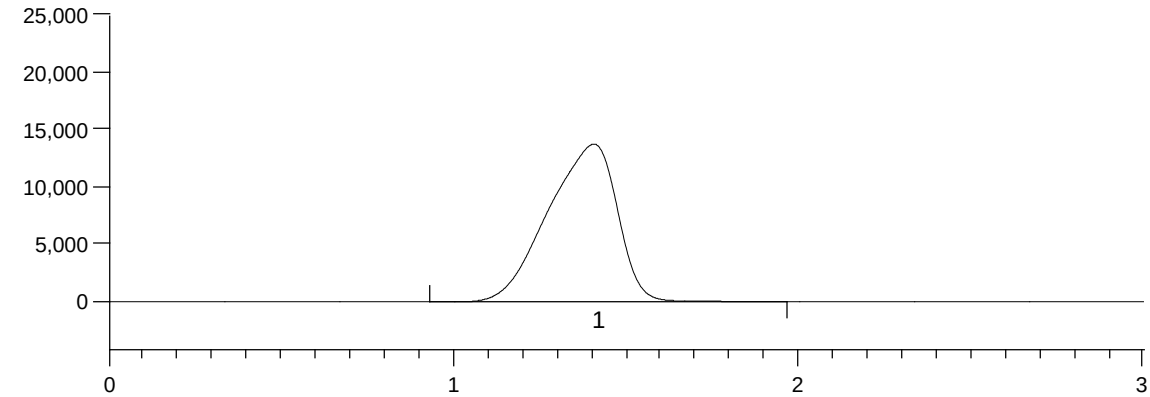
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
85		S	HgII MMHg DORM3		1	2,365,428	199	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 5:56 PM

Peak	rt	Area
1	1.44	2,148,582

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
86		S	HgII MMHg DORM3		1	2,148,582	180.	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 6:03 PM

Peak	rt	Area
1	1.40	1,936,403

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
87		S	HgII MMHg DORM3		1	1,936,403	161	0.00		< HS	accept
Notes											

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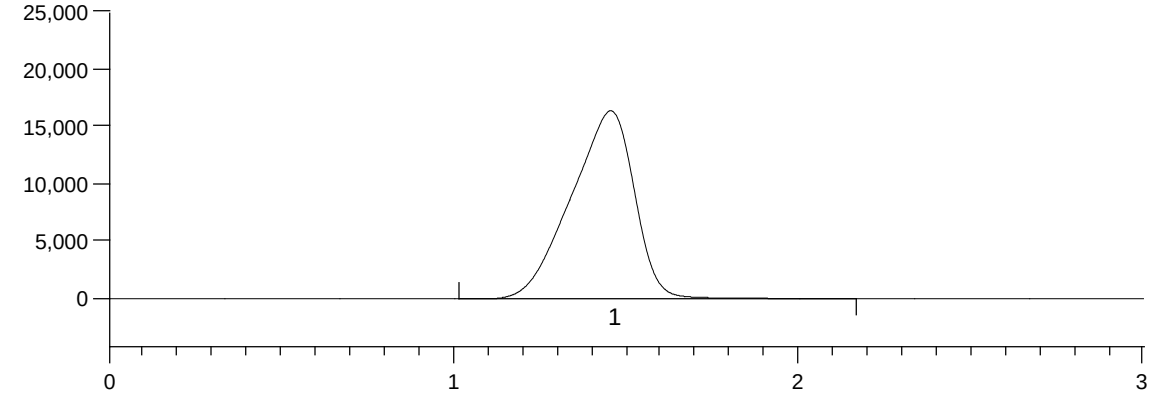
Peak Report

Batch Number: B090222
Method Number: 1631E

Project Number(s): 0900160
Instrument ID: BR-10

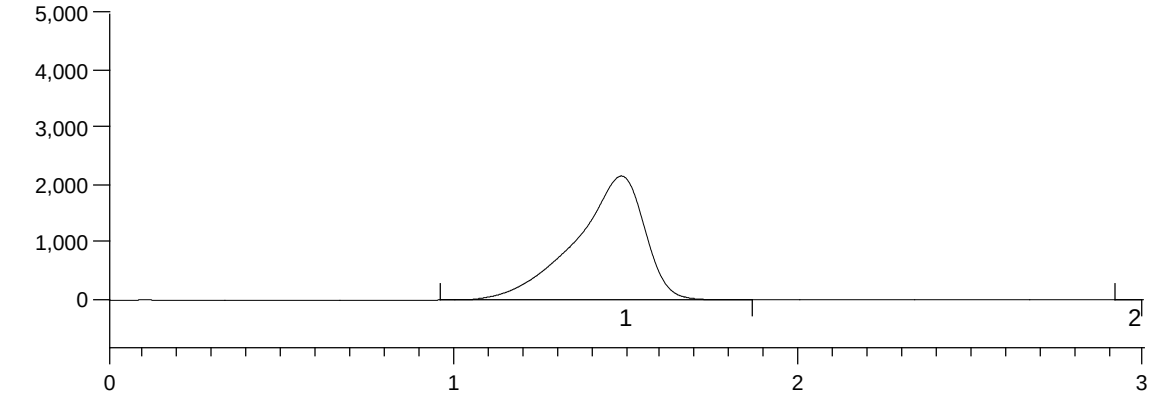
Date Analyzed: 2/24/09
Analyst Name: AC/BK



Date: 2/24/09
Time: 6:11 PM

Peak	rt	Area
1	1.45	2,108,875

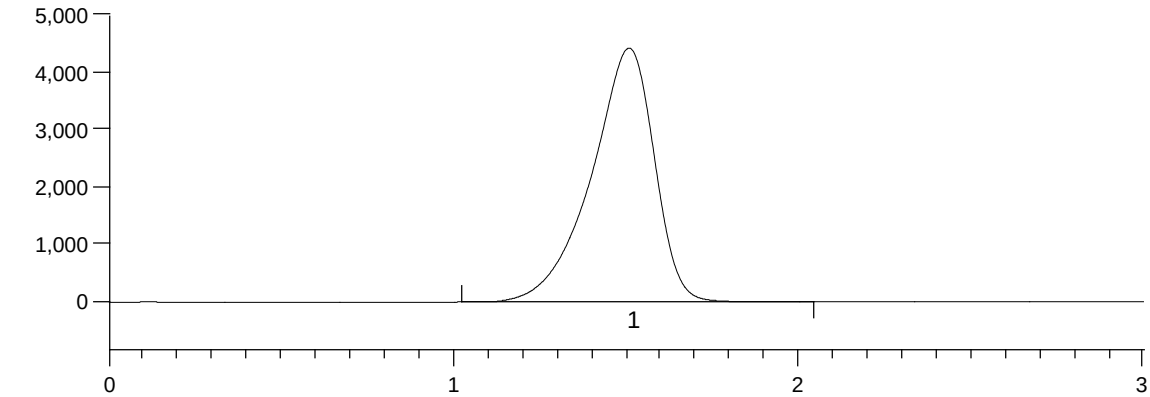
Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
88		S	HgII MMHg DORM3		1	2,108,875	177	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 6:16 PM

Peak	rt	Area
1	1.48	305,184
2	2.96	17

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
89		S	HgII MMHg BS15		1	305,184	17.4	0.00		< HS	accept
Notes											



Date: 2/24/09
Time: 6:20 PM

Peak	rt	Area
1	1.50	568,645

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
90		S	HgII MMHg BS16		1	568,645	40.7	0.00		< HS	accept
Notes											

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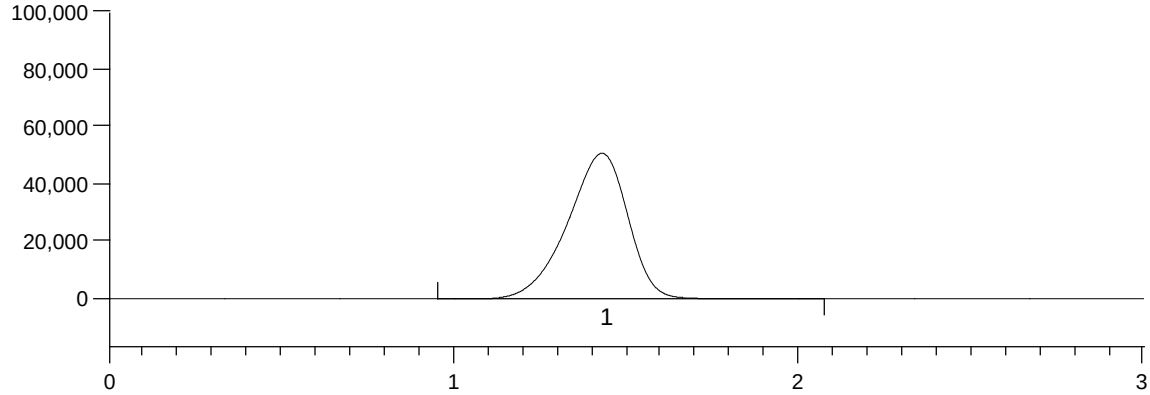
Peak Report

Batch Number: B090222
Method Number: 1631E

Project Number(s): 0900160
Instrument ID: BR-10

Date Analyzed: 2/24/09
Analyst Name: AC/BK



Date: 2/24/09
Time: 6:24 PM

Peak	rt	Area
1	1.42	6,220,848

Run	Trap	Type	Name/ID	M B	Peak	Peak Area	Analyzed Result	Final Result	QA Results	Criteria	Notes
91		CCV	SEQ-CCV7		1	6,220,848	540.		108	77-123	accept
Notes											

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Table of Contents

Chain of Custody and Supporting Documentation 1

Data Review Qualifier Definitions 5

Metals Analysis 7
Case Narrative 8
Sample Data Summary 13
Quality Control Summary 16

General Chemistry Analysis 19
Case Narrative 20
Sample Data Summary 28
Quality Control Summary 31

Chain of Custody
and
Supporting
Documentation

UCDAVIS

University of California at Davis
Environmental Health and Safety - TB 30
One Shields Avenue
Davis, CA 95616

Field Chain-of-Custody Form

Lab Name and Address:	Project Name:	Date:	Page: of	P.O.#
Joanne Harley 843-769-7387 General Engineering Labs, Inc. 2040 Savage Road Charleston, SC 29407	LEHR Stormwater Sampling	1-9-08	1 of 1	UCD9-809575

Sample ID	Collection	Matrix Code*	Sample Type**	Field Preserved (Y or N)	Number of Containers	Hardness	Iron		TOC		TDS	TSS		Oil & Grease								Comments
~~STMW0139~~	Date: Time:	~~SW~~	~~G~~	~~Y~~	~~5~~	✓	✓		✓		✓	✓		✓								
~~STMW0140~~	Date: Time:	~~SW~~	~~G~~	~~Y~~	~~5~~	✓	✓		✓		✓	✓		✓								
STMW0142	Date: 1-8-08 Time: 1620	SW	G	Y	4	X	X		X					X								
	Date: Time:																					
	Date: Time:																					
	Date: Time:																					
	Date: Time:																					
	Date: Time:																					

Relinquished by: (Signature)	Date: 1-9-08 Time: 1500	Cooler Numbers
Jim Aborn		612
Received by: (Signature) Fed Ex	Date: Time:	
Relinquished by: (Signature)	Date: Time:	

Comments: Please contact Jim Aborn (530-752-8589) with any problems.

Received for Laboratory By: (*Signature*) Patricia Nard — Date: 1-10-08 — Time: 09:00

Method of Shipment: — Airbill No.

Cooler Survey (pass / fail) _____ If FAIL do not open; contact the Program Development Department and the Radiation Safety Officer IMMEDIATELY.

Surveyed by: (*Signature*) — Date: — Time:

Cooler Condition Upon Receipt at Laboratory:

Seals Intact: YES X NO____

Internal Cooler Temp: 2 °C; Samples in good condition: (Y/N) Y; Samples surveyed (pass/fail) Y

*Sample Matrix Codes				**Sample Type Codes
SW - Surface Water	AR - Air	SD - Sediment		G - Grab
GW - Ground Water	SL - Soil	WW - Waste Water	BI - Biota	C - Composite
DW - Drinking Water	SG - Sludge	FI - Filter	O - Other	O - Other

EHSCOC.FRM

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: UC DAVIS	**SDG/ARCOC/Work Order:**
Received By: Patricia Dent	**Date Received:** January 10, 2008

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
COC/Samples marked as radioactive?		X	Maximum Counts Observed*: 50 C.P.M.
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (4 +/- 2 C)?	X			Preservation Method: blue ice dry ice none other (describe) ice bags 2c
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?	X			Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?	X			Sample ID's affected:
11	Number of containers received match number indicated on COC?	X			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	X			

Comments: 6748 2942 4795 > 2c

PM (or PMA) review: Initials HH Date 1/14/08

List of current GEL Certifications as of 29 January 2008

State	Certification
Alaska	UST-062
Arizona	AZ0668
Arkansas	88-0651
CLIA	42D0904046
California	01151CA
Colorado	GenEngLabs
Connecticut	PH-0169
Dept. of Navy	NFESC 413
EPA	WG-15J
Florida/NELAP	E87156
Georgia	E87156 (FL/NELAP)
Hawaii	N/A
Idaho	N/A
Illinois	200029
Indiana	C-SC-01
Kansas	E-10332
Kentucky	90129
Louisiana	03046
Maryland	270
Massachusetts	M-SC012
Michigan	9903
Nevada	SC12
New Jersey	SC002
New Mexico	FL NELAP E87156
New York	11501
North Carolina	233
North Carolina Drinking W	45709
North Dakota	R-158
Oklahoma	9904
Pennsylvania	68-00485
South Carolina	10120001/10585001/10120002
Tennessee	02934
Texas NELAP	T104704235-07-TX
U.S. Dept. of Agriculture	S-52597
US Army Corps of Engineer	N/A
Utah	8037697376 GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Data Review Qualifier Definitions

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

Metals Analysis

Case Narrative

Metals Fractional Narrative
UC Davis (DMOP)
SDG 200582

Sample Analysis

Sample ID	Client ID
200582001	STMW0142
1201494364	Method Blank (MB) **ICP**
1201494365	Laboratory Control Sample (LCS)
1201494368	200582001(STMW0142L) Serial Dilution (SD)
1201494369	200582001(STMW0142D) Sample Duplicate (DUP)
1201494366	200582001(STMW0142S) Matrix Spike (MS)
1201494367	200582001(STMW0142SD) Matrix Spike Duplicate (MSD)

The sample in this SDG was analyzed on an "as received" basis.

Method/Analysis Information

Analytical Batch: 717258
Prep Batch : 717257
Standard Operating Procedures: GL-MA-E-013 REV# 17 and GL-MA-E-006 REV# 9
Analytical Method: SW846 3005/6010B
Prep Method : SW846 3005A

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 4300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits, with the exception of iron, which recovered outside of the advisory limits of 70-130%.

ICSA/ICSAB Statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Sample Statement
The following sample was selected as the quality control (QC) sample for this SDG: 200582001 (STMW0142).

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. All applicable elements met the acceptance criteria.

Matrix Spike Duplicate (MSD) Recovery Statement
The percent recovery (%R) obtained from the MSD analyses are evaluated when the sample concentration is less than four time (4X) the spike concentration added. All applicable elements met the acceptance criteria.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of RL is used to evaluate the DUP results. All applicable analytes met these requirements.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL for CVAA, 50X the IDL for ICP, and 100X the IDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG did not require dilutions.

Preparation Information
The sample in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Nonconformance Documentation
Nonconformance reports (NCRs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer:_____ **Date:** 1-23-08

Sample Data Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

DMOP001 UC Davis

Client SDG: 200582 GEL Work Order: 200582

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

J Value is estimated

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

ND The analyte concentration is not detected above the detection limit.

The above sample is reported on an "as received" basis.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Joanne Harley.

1-23-08

Reviewed by

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : UC Davis
Address : EH & S
One Shields Avenue
Davis, California 95616
Contact: Ms. Christine Judal
Project: **LEHR GW Monitoring-Cert.of Analysis Package**

Report Date: January 18, 2008

Client Sample ID:	STMW0142	Project:	DMOP00104
Sample ID:	200582001	Client ID:	DMOP001
Matrix:	Water		
Collect Date:	08-JAN-08 16:20		
Receive Date:	10-JAN-08		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP											
3005/6010 Iron Federal"As Received"											
Iron		15400	25.0	100	ug/L	1	HSC	01/14/08	1205	717258	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-TRACE SW846 3005A	BXA1	01/11/08	1841	717257

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 3005/6010B	

Quality Control Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: January 18, 2008

UC Davis
EH & S
One Shields Avenue
Davis, California
Contact: **Ms. Christine Judal**

Workorder: **200582**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Metals Analysis-ICP										
Batch 717258										
QC1201494369 200582001 DUP										
Iron		15400		15100	ug/L	2		(0%-20%)	HSC	01/14/08 12:12
QC1201494365 LCS										
Iron	5000			5060	ug/L		101	(80%-120%)		01/14/08 11:58
QC1201494364 MB										
Iron			U	-58.1	ug/L					01/14/08 11:50
QC1201494366 200582001 MS										
Iron	5000	15400		21000	ug/L		112	(75%-125%)		01/14/08 12:19
QC1201494367 200582001 MSD										
Iron	5000	15400		21000	ug/L	0	110	(0%-20%)		01/14/08 12:26
QC1201494368 200582001 SDILT										
Iron		15400		3120	ug/L	1.08				01/14/08 12:34

Notes:
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- H Analytical holding time was exceeded
- J Value is estimated
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
- ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
- d 5-day BOD--The 2:1 depletion requirement was not met for this sample
- h Preparation or preservation holding time was exceeded

QC Summary

Workorder: **200582**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
UC Davis (DMOP)
SDG 200582

Method/Analysis Information

Product: **Carbon, Total Organic**

Analytical Batch: 718485 **Method:** SM 5310 D

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9060:

Sample ID	Client ID
200582001	STMW0142
1201497225	Method Blank (MB)
1201497227	200582001(STMW0142) Sample Duplicate (DUP)
1201497229	200582001(STMW0142) Post Spike (PS)
1201497230	Laboratory Control Sample (LCS)

The sample in this SDG was analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-093 REV# 8.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Carbon analysis was performed on a O-I Analytical Model 1010 Total Organic Carbon Analyzer.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
The following sample was selected for QC analysis: 200582001 (STMW0142).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recovery for this sample set was within the required acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The following samples in this sample group were diluted due to matrix interference. 1201497227 (STMW0142), 1201497229 (STMW0142) and 200582001 (STMW0142).

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
An NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product: **Oil & Grease**

Analytical Batch: 720069 **Method:** SW846 9070

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9070:

Sample ID	Client ID
200582001	STMW0142
1201500657	Method Blank (MB)
1201500658	200582001(STMW0142) Matrix Spike (MS)
1201500659	Laboratory Control Sample (LCS)

The sample in this SDG was analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-017 REV# 8.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Oil & Grease analysis was performed on a Sartorius Balance.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recovery met the acceptance limits.

Laboratory Control Sample Duplicate (LCSD) Recovery

LCSD N/A

LCS/LCSD Relative Percent Difference (RPD) Statement

LCSD N/A

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The spike recovery was outside of the required acceptance limits due to matrix interference for the following samples: 1201500658 (STMW0142).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 516191 1201500658 (STMW0142).

Additional Comments
Less sample used due to limited sample volume for this test. 1201500658 (STMW0142) and 200582001 (STMW0142).

Method/Analysis Information

Product: **Total Hardness**

Analytical Batch: 716897 **Method:** EPA 130.2

Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA 130.2:

Sample ID	Client ID
200582001	STMW0142
1201493557	Method Blank (MB)
1201493558	Laboratory Control Sample (LCS)
1201494103	200499006(NFP 778/GS10) Sample Duplicate (DUP)
1201494104	200499006(NFP 778/GS10) Matrix Spike (MS)

The sample in this SDG was analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-100 REV# 3.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Titration analysis was performed on a manually operated buret.

Initial Standardization

The titrant was properly standardized

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation

The following sample was selected for QC analysis: 200499006 (NFP 778/GS10).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

The MS/PS recovery for this sample set was within the required acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
An NCR was not required for this SDG.

Additional Comments
Lower amount used due to high concentration 1201494103 (NFP 778/GS10) and 1201494104 (NFP 778/GS10). Lower amount used due to matrix interference 200582001 (STMW0142).

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Tom Lewis, Jr. **Date:** 24 JAN 08

Sample Data Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

DMOP001 UC Davis

Client SDG: 200582 GEL Work Order: 200582

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

J Value is estimated

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

ND The analyte concentration is not detected above the detection limit.

The above sample is reported on an "as received" basis.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Joanne Harley.

Reviewed by

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : UC Davis
Address : EH & S
One Shields Avenue
Davis, California 95616
Contact: Ms. Christine Judal
Project: **LEHR GW Monitoring-Cert.of Analysis Package**

Report Date: January 23, 2008

Client Sample ID:	STMW0142	Project:	DMOP00104
Sample ID:	200582001	Client ID:	DMOP001
Matrix:	Water		
Collect Date:	08-JAN-08 16:20		
Receive Date:	10-JAN-08		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Carbon Analysis										
SM 5310 D Total Organic Carbon"As Received"										
Total Organic Carbon Average		7.20	0.660	2.00	mg/L	2	TSM 01/17/08	1313	718485	1
Oil & Grease Analysis Federal										
SW9070 OIL & GREASE Federal"As Received"										
Oil & Grease		7.12	1.34	6.13	mg/L		JXT1 01/22/08	0741	720069	2
Titration Analysis Federal										
EPA 130.2 Total Hardness Federal"As Received"										
Hardness as CaCO3		19.3	3.33	10.0	mg/L		TXT1 01/10/08	1710	716897	3

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SM 5310 D	
2	SW846 9070	
3	EPA 130.2	

Quality Control Summary

QC Summary

Report Date: January 23, 2008

UC Davis
EH & S
One Shields Avenue
Davis, California
Contact: **Ms. Christine Judal**

Workorder: **200582**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Carbon Analysis										
Batch 718485										
QC1201497227 200582001 DUP										
Total Organic Carbon Average		7.20		6.73	mg/L	7 ^		(+/-2.00)	TSM	01/17/08 13:31
QC1201497230 LCS										
Total Organic Carbon Average	10.0			10.2	mg/L		102	(85%-115%)		01/17/08 13:05
QC1201497225 MB										
Total Organic Carbon Average			U	0.038	mg/L					01/17/08 12:55
QC1201497229 200582001 PS										
Total Organic Carbon Average	10.0	3.60		12.9	mg/L		93	(80%-120%)		01/17/08 13:51
Oil & Grease Analysis										
Batch 720069										
QC1201500659 LCS										
Oil & Grease	214			200	mg/L		93	(79%-111%)	JXT1	01/22/08 07:41
QC1201500657 MB										
Oil & Grease			U	0.00	mg/L					01/22/08 07:41
QC1201500658 200582001 MS										
Oil & Grease	559	7.12		317	mg/L		55*	(73%-116%)		01/22/08 09:03
Titration Analysis										
Batch 716897										
QC1201494103 200499006 DUP										
Hardness as CaCO3		530		530	mg/L	0		(0%-10%)	TXT1	01/10/08 17:02
QC1201493558 LCS										
Hardness as CaCO3	250			246	mg/L		98	(90%-110%)		01/10/08 16:48
QC1201493557 MB										
Hardness as CaCO3			U	0.00	mg/L					01/10/08 16:45
QC1201494104 200499006 MS										
Hardness as CaCO3	200	530		726	mg/L		98	(90%-110%)		01/10/08 17:06

Notes:
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- H Analytical holding time was exceeded
- J Value is estimated

QC Summary

Workorder: 200582

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

N/A	RPD or %Recovery limits do not apply.
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
h	Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Miscellaneous

NCR Report No.: 516191
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
23-JAN-08	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
BALANCE	SW846 9070	Liquid	DMOP
Batch ID:	**Sample Numbers:**		
720069	1201500658		

Potentially affected work order(s)(SDG): 200582

Application Issues:

Failed Recovery for MS/PS

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS: QC 1201500658MS	1.MS was outside acceptance limits due to matrix interference.

Originator's Name:
John Thomas 23-JAN-08

Data Validator/Group Leader:
Elzbieta Szulc 23-JAN-08

Quality Review:

Director:

UCDAVIS

University of California at Davis
Environmental Health and Safety - TB 30
One Shields Avenue
Davis, CA 95616

Field Chain-of-Custody Form

201395

Lab Name and Address:	Project Name:	Date:	Page: of	P.O.#
Joanne Harley 843-769-7387 General Engineering Labs, Inc. 2040 Savage Road Charleston, SC 29407	LEHR Stormwater Sampling	1-22-08	1 of 1	UCD9-809575

Sample ID	Collection	Matrix Code*	Sample Type**	Field Preserved (Y or N)	Number of Containers	Hardness	Iron		TOC		TDS	TSS	Nitrate as N		Oil & Grease							Comments
STMW0142	Date: 1-22-08 Time: 0945	SW	G	Y	1						✓	✓	✓									
	Date: Time:																					
	Date: Time:																					
	Date: Time:																					
	Date: Time:																					
	Date: Time:																					
	Date: Time:																					
	Date: Time:																					

Relinquished by: (Signature) Jim Aborn — Date: 1-22-08 Time: 1500

Received by: (Signature) Fed Ex — Date: Time:

Relinquished by: (Signature) M. Smith — Date: 1-23-08 Time: 915

Cooler Numbers: 007

Comments: Please contact Jim Aborn (530-752-8589) with any problems.

Received for Laboratory By: (Signature) Mella Smith — Date: 1-23-08 Time: 915

Method of Shipment: Airbill No.

Cooler Survey (pass / fail) P — If FAIL do not open; contact the Program Development Department and the Radiation Safety Officer IMMEDIATELY.

Surveyed by: (Signature) — Date: Time:

Cooler Condition Upon Receipt at Laboratory:

Seals Intact: YES ✓ NO ____

Internal Cooler Temp: 2 °C; Samples in good condition: (Y/N) Y; Samples surveyed (pass/fail) ____

*Sample Matrix Codes

SW - Surface Water	AR - Air	SD - Sediment	
GW - Ground Water	SL - Soil	WW - Waste Water	BI - Biota
DW - Drinking Water	SG - Sludge	FI - Filter	O - Other

**Sample Type Codes

G - Grab
C - Composite
O - Other

EHSCOC.FRM

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: UC Davis	**SDG/ARCOC/Work Order:**
Received By: Mellie Smith	**Date Received:** 1-23-08

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
COC/Samples marked as radioactive?		✓	Maximum Counts Observed*: 60 CPM
Classified Radioactive II by RSO?		✓	
COC/Samples marked containing PCBs?		✓	
Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		✓	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (4 +/- 2 C)?	✓			Preservation Method: ice bags blue ice dry ice none other (describe) 2c
3	Chain of custody documents included with shipment?	✓			
4	Sample containers intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?				Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		✓		Sample ID's and containers affected:
7	Are Encore containers present?			✓	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	✓			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Sample ID's affected:
11	Number of containers received match number indicated on COC?	✓			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	✓			

Comments: Fed Ex
6748 2942 5026 - 2c

PM (or PMA) review: Initials [illegible] Date 1/23/08

List of current GEL Certifications as of 12 February 2008

State	Certification
Alaska	UST-062
Arizona	AZ0668
Arkansas	88-0651
CLIA	42D0904046
California	01151CA
Colorado	GenEngLabs
Connecticut	PH-0169
Dept. of Navy	NFESC 413
EPA	WG-15J
Florida/NELAP	E87156
Georgia	E87156 (FL/NELAP)
Hawaii	N/A
Idaho	N/A
Illinois	200029
Indiana	C-SC-01
Kansas	E-10332
Kentucky	90129
Louisiana	03046
Maryland	270
Massachusetts	M-SC012
Michigan	9903
Nevada	SC12
New Jersey	SC002
New Mexico	FL NELAP E87156
New York	11501
North Carolina	233
North Carolina Drinking W	45709
North Dakota	R-158
Oklahoma	9904
Pennsylvania	68-00485
South Carolina	10120001/10585001/10120002
Tennessee	02934
Texas NELAP	T104704235-07-TX
U.S. Dept. of Agriculture	S-52597
US Army Corps of Engineer	N/A
Utah	8037697376 GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Data Review Qualifier Definitions

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
UC Davis (DMOP)
SDG 201395

Method/Analysis Information

Product: **Ion Chromatography**

Analytical Batch: 720619 **Method:** EPA 300.0

Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA 300.0:

Sample ID	Client ID
201395001	STMW0142
1201501673	Method Blank (MB)
1201501674	Laboratory Control Sample (LCS)
1201501675	201395001(STMW0142) Sample Duplicate (DUP)
1201501676	201395001(STMW0142) Post Spike (PS)

The sample in this SDG was analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-086 REV# 14.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Ion Chromatography analysis was performed on a Dionex DX300 Ion Chromatograph equipped with a Dionex AS9-HC general purpose anion column.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
The following sample was selected for QC analysis: 201395001 (STMW0142).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recovery for this sample set was within the required acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
An NCR was not required for this SDG.

Manual Integrations
Manual integrations were not required for the samples in this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product: **Solids, Total Dissolved**

Analytical Batch: 721381 **Method:** EPA 160.1

Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA 160.1:

Sample ID	Client ID
201395001	STMW0142
1201503319	Method Blank (MB)
1201503320	201391007(MW-1C) Sample Duplicate (DUP)
1201503321	Laboratory Control Sample (LCS)

The sample in this SDG was analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-001 REV# 8.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Solids analysis was performed on a Sartorius Balance BAL216. Solids lab

Initial Calibration

All initial calibration requirements have been met for this SDG.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation

The following sample was selected for QC analysis: 201391007 (MW-1C).

Duplicate Relative Percent Difference (RPD) Statement

The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Sample Aliquot
A sufficient amount of sample was provided by the client for analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
An NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product: **Solids, Total Suspended**

Analytical Batch: 720622 **Method:** EPA 160.2

Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA 160.2:

Sample ID	Client ID
201395001	STMW0142
1201501682	Method Blank (MB)
1201501683	201339002(SD09021) Sample Duplicate (DUP)
1201501685	Laboratory Control Sample (LCS)

The sample in this SDG was analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-012 REV# 8.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Solids analysis was performed on a Sartorius Balance BAL216. Solids lab

Initial Calibration

All initial calibration requirements have been met for this SDG.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation

The following sample was selected for QC analysis: 201339002 (SD09021).

Duplicate Relative Percent Difference (RPD) Statement

The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Sample Aliquot
Insufficient amount of 1201501683 (SD09021) was provided; therefore, reduced aliquot was used.

Miscellaneous Information

Nonconformance (NCR) Documentation
An NCR was not required for this SDG.

Additional Comments
Due to sample matrix, a smaller aliquot was used for analysis. 201395001 (STMW0142).

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Tom Lewis, Jr. **Date:** 08Feb08

Sample Data Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

DMOP001 UC Davis

Client SDG: 201395 GEL Work Order: 201395

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

ND The analyte concentration is not detected above the detection limit.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Joanne Harley.

Reviewed by

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : UC Davis
Address : EH & S
One Shields Avenue
Davis, California 95616
Contact: Ms. Christine Judal
Project: **LEHR GW Monitoring-Cert.of Analysis Package**

Report Date: January 31, 2008

Client Sample ID:	STMW0142	Project:	DMOP00104
Sample ID:	201395001	Client ID:	DMOP001
Matrix:	Storm Water		
Collect Date:	22-JAN-08 09:45		
Receive Date:	23-JAN-08		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Ion Chromatography Federal										
EPA 300.0 Nitrate in Liquid										
Nitrate-N		0.738	0.033	0.100	mg/L	1	VXP1 01/23/08	1818	720619	1
Solids Analysis Federal										
EPA 160.1 Solids, Dissolved-F										
Total Dissolved Solids		55.0	2.38	20.0	mg/L		NXM 1 01/25/08	1301	721381	2
EPA 160.2 Total Suspended Liq										
Total Suspended Solids		99.3	3.93	17.2	mg/L		NXM 1 01/23/08	1339	720622	3

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 160.1	
3	EPA 160.2	

Quality Control Summary

QC Summary

Report Date: January 31, 2008

UC Davis
EH & S
One Shields Avenue
Davis, California
Contact: **Ms. Christine Judal**

Workorder: **201395**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Ion Chromatography										
Batch 720619										
QC1201501675 201395001 DUP										
Nitrate-N		0.738		0.724	mg/L	2		(0%-20%)	VXP1	01/23/08 18:38
QC1201501674 LCS										
Nitrate-N	5.00			4.75	mg/L		95	(90%-110%)		01/23/08 17:58
QC1201501673 MB										
Nitrate-N			U	0.00	mg/L					01/23/08 17:37
QC1201501676 201395001 PS										
Nitrate-N	5.00	0.738		5.28	mg/L		91	(90%-110%)		01/23/08 18:59
Solids Analysis										
Batch 720622										
QC1201501683 201339002 DUP										
Total Suspended Solids		8.75		8.50	mg/L	3 ^		(+/-6.25)	NXM1	01/23/08 13:39
QC1201501685 LCS										
Total Suspended Solids	500			498	mg/L		100	(95%-105%)		01/23/08 13:39
QC1201501682 MB										
Total Suspended Solids			U	-0.20	mg/L					01/23/08 13:39
Batch 721381										
QC1201503320 201391007 DUP										
Total Dissolved Solids		104		99.0	mg/L	5		(0%-10%)	NXM1	01/25/08 13:01
QC1201503321 LCS										
Total Dissolved Solids	300			298	mg/L		99	(95%-105%)		01/25/08 13:01
QC1201503319 MB										
Total Dissolved Solids			U	-3.0	mg/L					01/25/08 13:01

Notes:
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

QC Summary

Workorder: 201395

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
h	Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 31-JAN-2008 09:56

GEL Laboratories LLC

Contract: DMOP00104

SDG #: 201395

Ion Chromatography

Method: EPA 300.0 Concentration Units:mg/L

Instrument: Dionex DX300 Ion Chromatograph equipped with a Dionex AS9-HC general purpose anion column

Parmname: Nitrate-N

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**23-JAN-2008 11:31:07**	**AZAWNC01.D02**	**4.833**	**5**	**97**	**(90%-110%)**	**Yes**
CCV	23-JAN-2008 16:57:09	AZAWNC01.D18	4.712	5	94	(90%-110%)	Yes
CCV	23-JAN-2008 19:19:37	AZAWNC01.D25	7.139	7.5	95	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**23-JAN-2008 11:51:30**	**AZAWNC01.D03**	**0**	**0.1**	**Yes**
CCB	23-JAN-2008 17:17:30	AZAWNC01.D19	0	0.1	Yes
CCB	23-JAN-2008 19:39:58	AZAWNC01.D26	0	0.1	Yes

Ion Chromatography

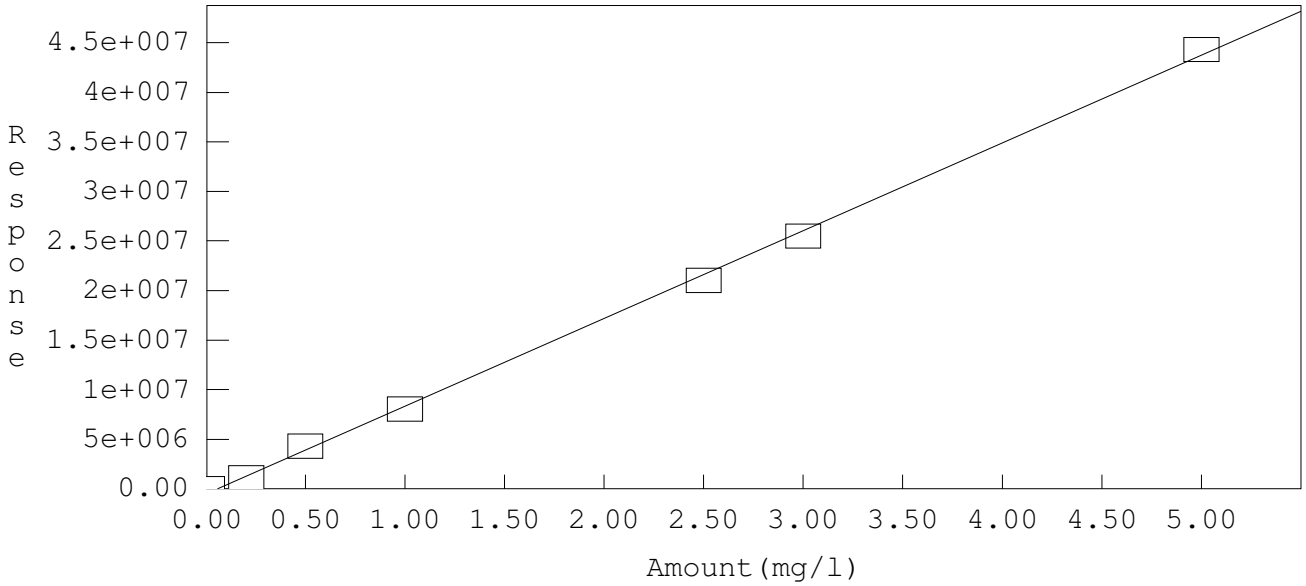
METHOD: 300/9056
SOP NUMBER: GL-GC-E-086

SAMPLENAME	BATCH	DILUTION	USER	RUNTIME	FILENAME
BLK:			VXP1	01/22/2008 09:38:06	AZAVNC01.R01
AUTOCAL7:			VXP1	01/22/2008 09:58:41	AZAVNC01.R02
AUTOCAL6:			VXP1	01/22/2008 10:19:04	AZAVNC01.R03
AUTOCAL5:			VXP1	01/22/2008 10:39:28	AZAVNC01.R04
AUTOCAL4:			VXP1	01/22/2008 10:59:48	AZAVNC01.R05
AUTOCAL3:			VXP1	01/22/2008 11:20:08	AZAVNC01.R06
AUTOCAL2:			VXP1	01/22/2008 11:40:29	AZAVNC01.R07
AUTOCAL1:			VXP1	01/22/2008 12:00:49	AZAVNC01.R08
WIC080122-02ICV:1		1	VXP1	01/22/2008 12:21:09	AZAVNC01.R09
ICB:			VXP1	01/22/2008 12:41:31	AZAVNC01.R10
1201496724:2	718216	1	VXP1	01/22/2008 13:01:53	AZAVNC01.R11
1201496725:2	718216	1	VXP1	01/22/2008 13:22:13	AZAVNC01.R12
200929001:2	718216	250	VXP1	01/22/2008 13:42:33	AZAVNC01.R13
1201496726:2	718216	250	VXP1	01/22/2008 14:02:57	AZAVNC01.R14
1201496727:2	718216	250	VXP1	01/22/2008 15:27:56	AZAVNC01.R15
WIC080122-02CVH:1		1	VXP1	01/22/2008 15:48:16	AZAVNC01.R16
CCB:			VXP1	01/22/2008 16:08:37	AZAVNC01.R17
1201499721:1	719597	1	VXP1	01/22/2008 16:28:57	AZAVNC01.R18
1201499724:1	719597	1	VXP1	01/22/2008 16:49:17	AZAVNC01.R19
201141001:1	719597	1	VXP1	01/22/2008 17:09:37	AZAVNC01.R20
1201499722:1	719597	1	VXP1	01/22/2008 17:29:58	AZAVNC01.R21
1201499723:1	719597	1	VXP1	01/22/2008 17:50:18	AZAVNC01.R22
201141002:1	719597	1	VXP1	01/22/2008 18:10:38	AZAVNC01.R23
WIC080122-02CCV:1		1	VXP1	01/22/2008 18:30:59	AZAVNC01.R24
CCB:			VXP1	01/22/2008 18:51:20	AZAVNC01.R25
1201499392:1	719433	1	VXP1	01/22/2008 19:11:41	AZAVNC01.R26
1201499393:1	719433	1	VXP1	01/22/2008 19:32:01	AZAVNC01.R27
200956002:1	719433	1	VXP1	01/22/2008 19:52:21	AZAVNC01.R28
200956003:1	719433	1	VXP1	01/22/2008 20:12:42	AZAVNC01.R29
200956006:1	719433	1	VXP1	01/22/2008 20:33:02	AZAVNC01.R30
200957001:1	719433	1	VXP1	01/22/2008 20:53:23	AZAVNC01.R31
1201499396:1	719433	1	VXP1	01/22/2008 21:13:43	AZAVNC01.R32
1201499397:1	719433	1	VXP1	01/22/2008 21:34:03	AZAVNC01.R33
200957007:1	719433	1	VXP1	01/22/2008 21:54:24	AZAVNC01.R34
200959001:1	719433	1	VXP1	01/22/2008 22:14:44	AZAVNC01.R35
WIC080122-02CVH:1		1	VXP1	01/22/2008 22:35:05	AZAVNC01.R36
CCB:			VXP1	01/22/2008 22:55:25	AZAVNC01.R37
200961002:1	719433	1	VXP1	01/22/2008 23:15:45	AZAVNC01.R38
200961004:1	719433	1	VXP1	01/22/2008 23:36:06	AZAVNC01.R39
201053002:1	719433	1	VXP1	01/22/2008 23:56:26	AZAVNC01.R40
1201499394:1	719433	1	VXP1	01/23/2008 00:16:46	AZAVNC01.R41
1201499395:1	719433	1	VXP1	01/23/2008 00:37:07	AZAVNC01.R42
201053005:1	719433	1	VXP1	01/23/2008 00:57:33	AZAVNC01.R43
WIC080122-02CCV:1		1	VXP1	01/23/2008 01:17:55	AZAVNC01.R44
CCB:			VXP1	01/23/2008 01:38:17	AZAVNC01.R45
1201499681:2	719575	1	VXP1	01/23/2008 01:58:40	AZAVNC01.R46
1201499682:2	719575	1	VXP1	01/23/2008 02:19:02	AZAVNC01.R47
201257001:2	719575	1	VXP1	01/23/2008 02:39:25	AZAVNC01.R48
1201499683:2	719575	1	VXP1	01/23/2008 02:59:47	AZAVNC01.R49
1201499684:2	719575	1	VXP1	01/23/2008 03:20:10	AZAVNC01.R50
201259002:2	719575	2	VXP1	01/23/2008 03:40:32	AZAVNC01.R51
201259003:2	719575	5	VXP1	01/23/2008 04:00:55	AZAVNC01.R52
201260001:2	719575	1	VXP1	01/23/2008 04:21:17	AZAVNC01.R53
WIC080122-02CVH:1		1	VXP1	01/23/2008 04:41:40	AZAVNC01.R54
CCB:			VXP1	01/23/2008 05:02:00	AZAVNC01.R55

```
201257001:3          719575   20    VXP1  01/23/2008 05:22:21 AZAVNC01.R56
1201499683:3         719575   20    VXP1  01/23/2008 05:42:43 AZAVNC01.R57
1201499684:3         719575   20    VXP1  01/23/2008 06:03:06 AZAVNC01.R58
201259002:3          719575   1     VXP1  01/23/2008 06:23:27 AZAVNC01.R59
WIC080122-02CCV:1             1     VXP1  01/23/2008 06:43:47 AZAVNC01.R60
CCB:                                VXP1  01/23/2008 07:04:10 AZAVNC01.R61
```

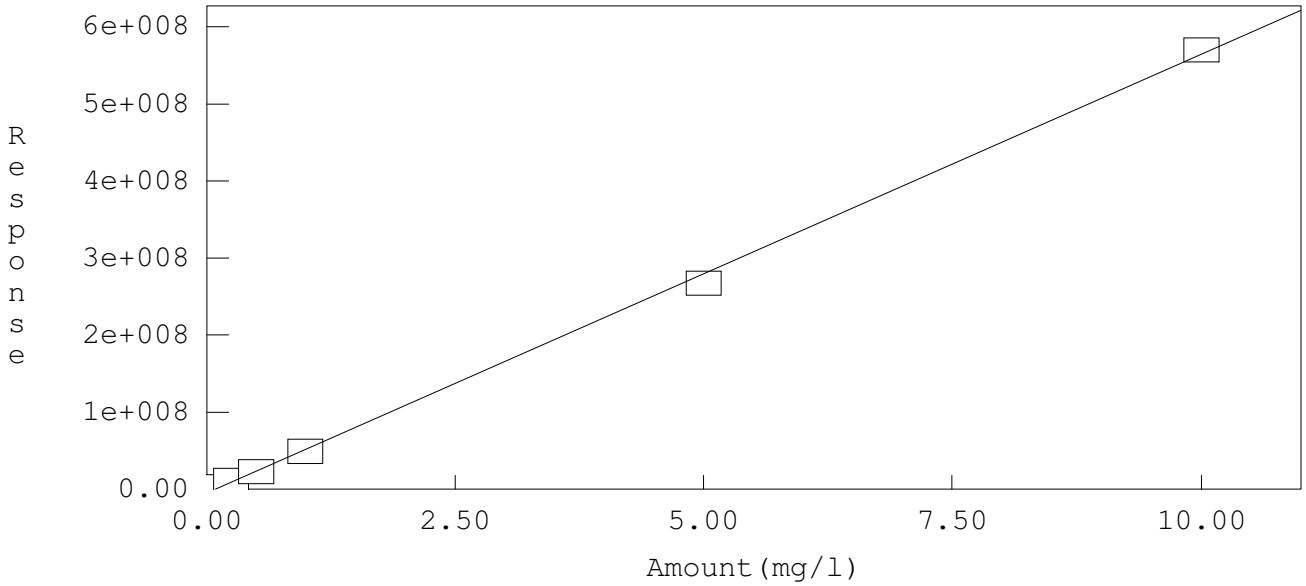
Method: C:\DX\METHOD\JAN22.MET

Component: Bromide
Fit Type: Linear
r^2 = 0.999075
Amt = Resp * 1.131e-007 + 0.05683
Resp = Amt * 8.842e+006 + -5.025e+005
Standardization: External
Calibration: Area



Method: C:\DX\METHOD\JAN22.MET

Component: Nitrate-N
Fit Type: Linear
r^2 = 0.999198
Amt = Resp * 1.758e-008 + 0.08807
Resp = Amt * 5.69e+007 + -5.011e+006
Standardization: External
Calibration: Area

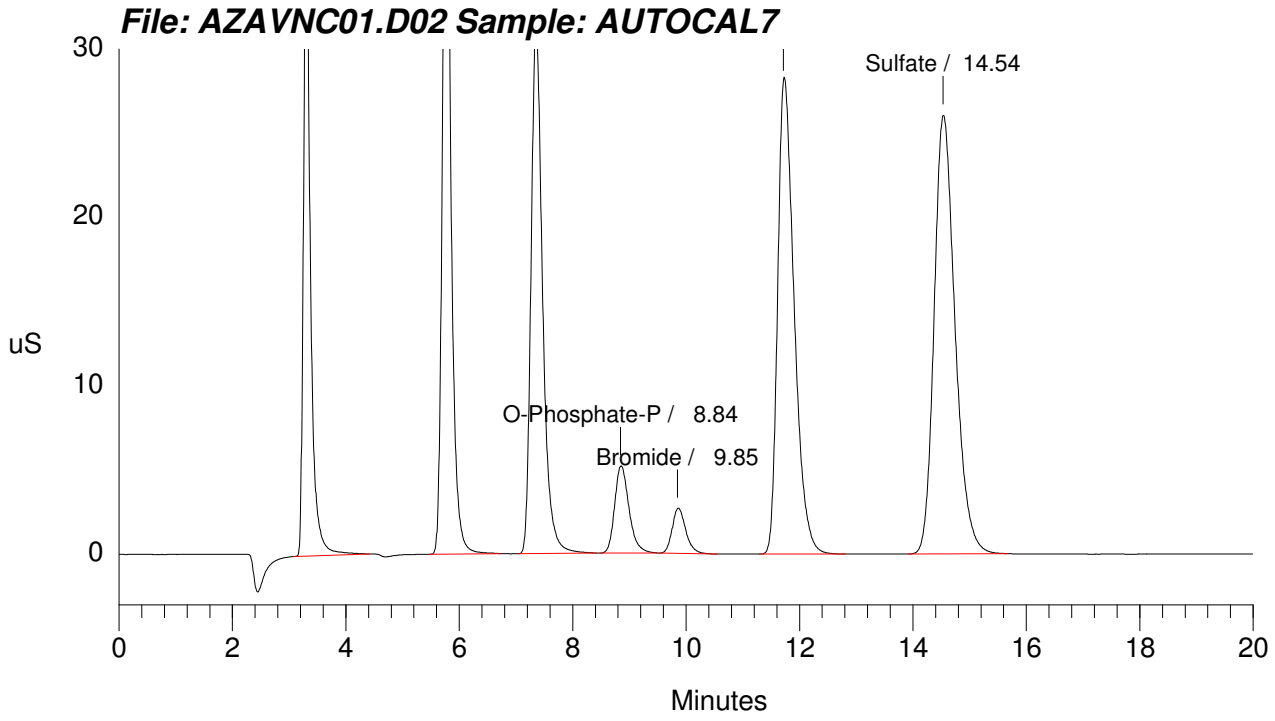


```
==============================================================================
| Sample Name: AUTOCAL7                        Date: 01/22/2008 09:58:41      |
| Data File  : C:\TMP\HORIZON\AZAVNC01.D02                                    |
| Method     : C:\DX\METHOD\JAN22.MET                                         |
| ACI Address: 1  System: 1  Inject#: 2                   Detector:CDM-2      |
| Analyst    : VXP1           Column: AS9HC#013772;GLGCE-086;300;9056        |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.29	Fluoride	10.000	35294645	321426744	1	0.00
2	5.76	Chloride	20.000	44171114	476321042	1	0.00
3	7.35	Nitrite-N	10.000	30819787	442104304	1	0.00
4	8.84	O-Phosphate-P	5.000	5156541	90617952	1	0.00
5	9.85	Bromide	5.000	2645285	44301610	1	0.00
6	11.71	Nitrate-N	10.000	28045519	569803400	1	0.00
7	14.54	Sulfate	40.000	26033740	666558734	1	0.00
		Totals	100.000	172166630	2611133786		

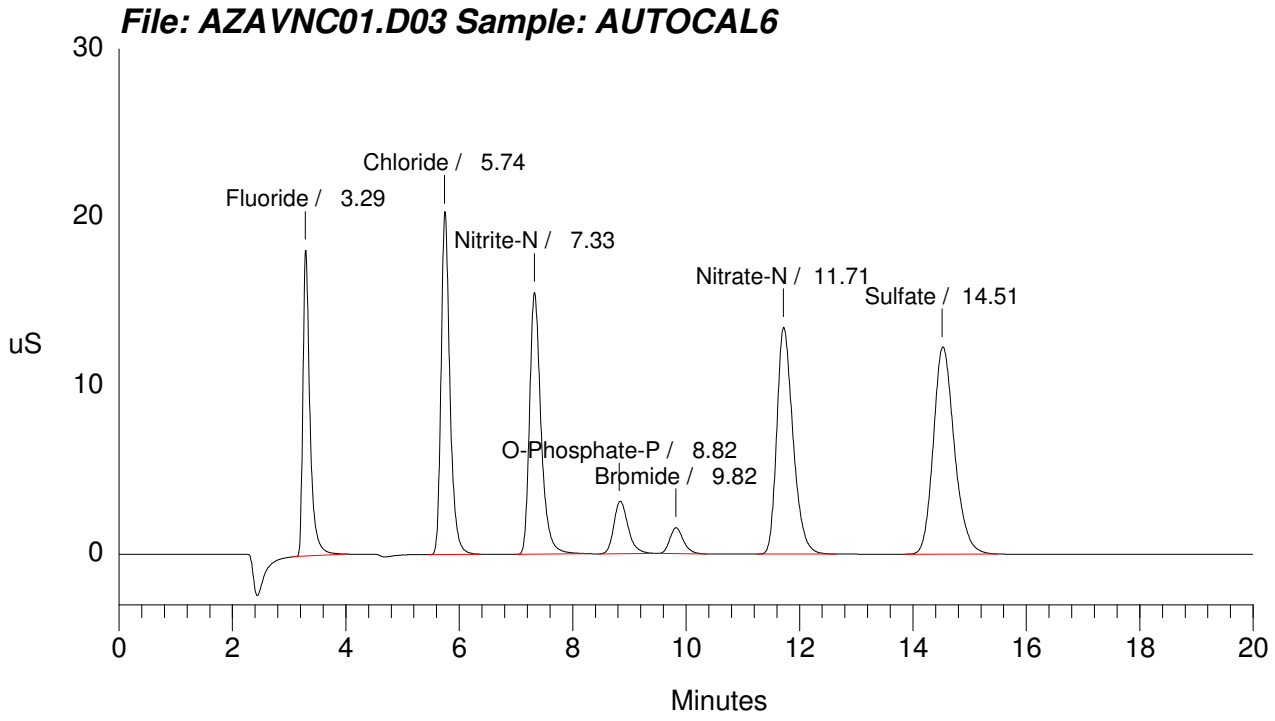


```
==============================================================================
| Sample Name: AUTOCAL6                        Date: 01/22/2008 10:19:04      |
| Data File  : C:\TMP\HORIZON\AZAVNC01.D03                                    |
| Method     : C:\DX\METHOD\JAN22.MET                                         |
| ACI Address: 1  System: 1  Inject#: 3                   Detector:CDM-2      |
| Analyst    : VXP1           Column: AS9HC#013772;GLGCE-086;300;9056        |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.29	Fluoride	5.000	18158658	156763264	1	0.00
2	5.74	Chloride	10.000	20196988	219768060	1	0.00
3	7.33	Nitrite-N	5.000	15538183	218274590	1	0.00
4	8.82	O-Phosphate-P	3.000	3073541	54393946	1	0.00
5	9.82	Bromide	3.000	1541023	25510112	1	0.00
6	11.71	Nitrate-N	5.000	13448908	267478322	1	0.00
7	14.51	Sulfate	20.000	12250326	316877496	1	0.00
		Totals	51.000	84207628	1259065790		

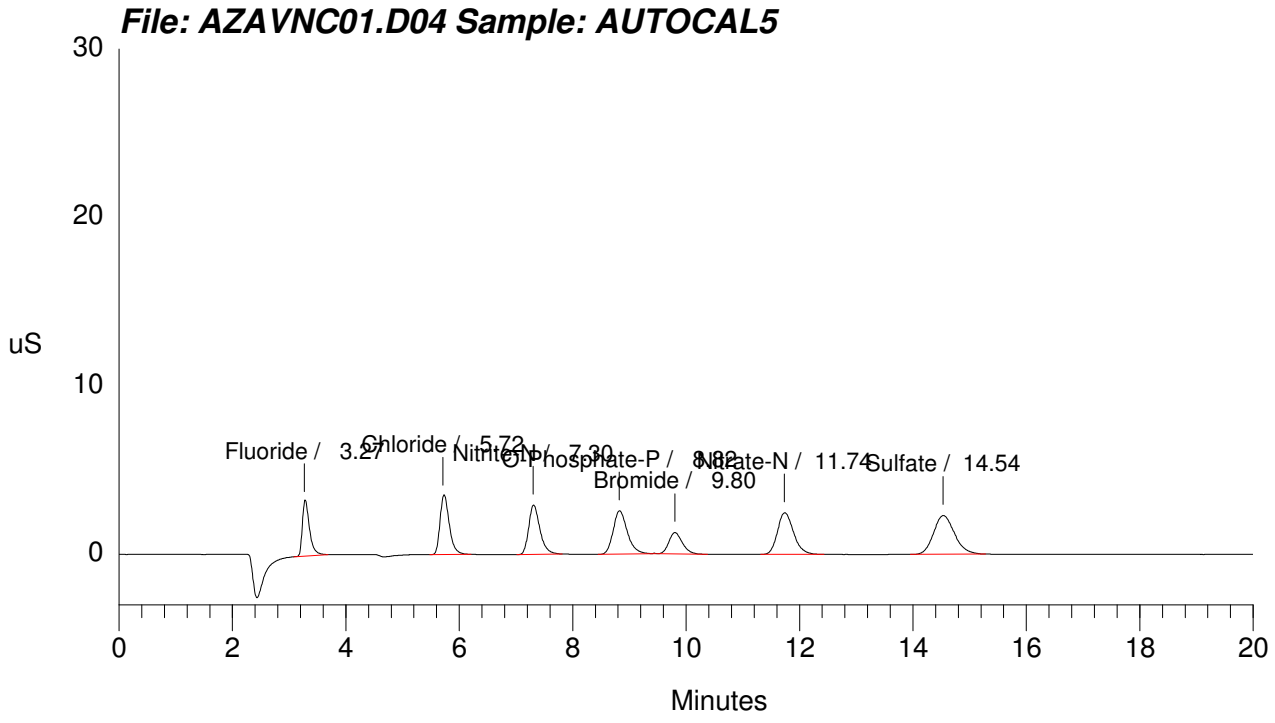


```
==============================================================================
| Sample Name: AUTOCAL5                        Date: 01/22/2008 10:39:28      |
| Data File  : C:\TMP\HORIZON\AZAVNC01.D04                                    |
| Method     : C:\DX\METHOD\JAN22.MET                                         |
| ACI Address: 1  System: 1  Inject#: 4                   Detector:CDM-2      |
| Analyst    : VXP1           Column: AS9HC#013772;GLGCE-086;300;9056        |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	1.000	3173389	29391167	1	0.00
2	5.72	Chloride	2.000	3470393	40422614	1	0.00
3	7.30	Nitrite-N	1.000	2925972	40564980	1	0.00
4	8.82	O-Phosphate-P	2.500	2566586	44797828	1	0.00
5	9.80	Bromide	2.500	1267297	21013930	1	0.00
6	11.74	Nitrate-N	1.000	2468178	48969388	1	0.00
7	14.54	Sulfate	4.000	2301530	59268446	1	0.00
		Totals	14.000	18173345	284428353		

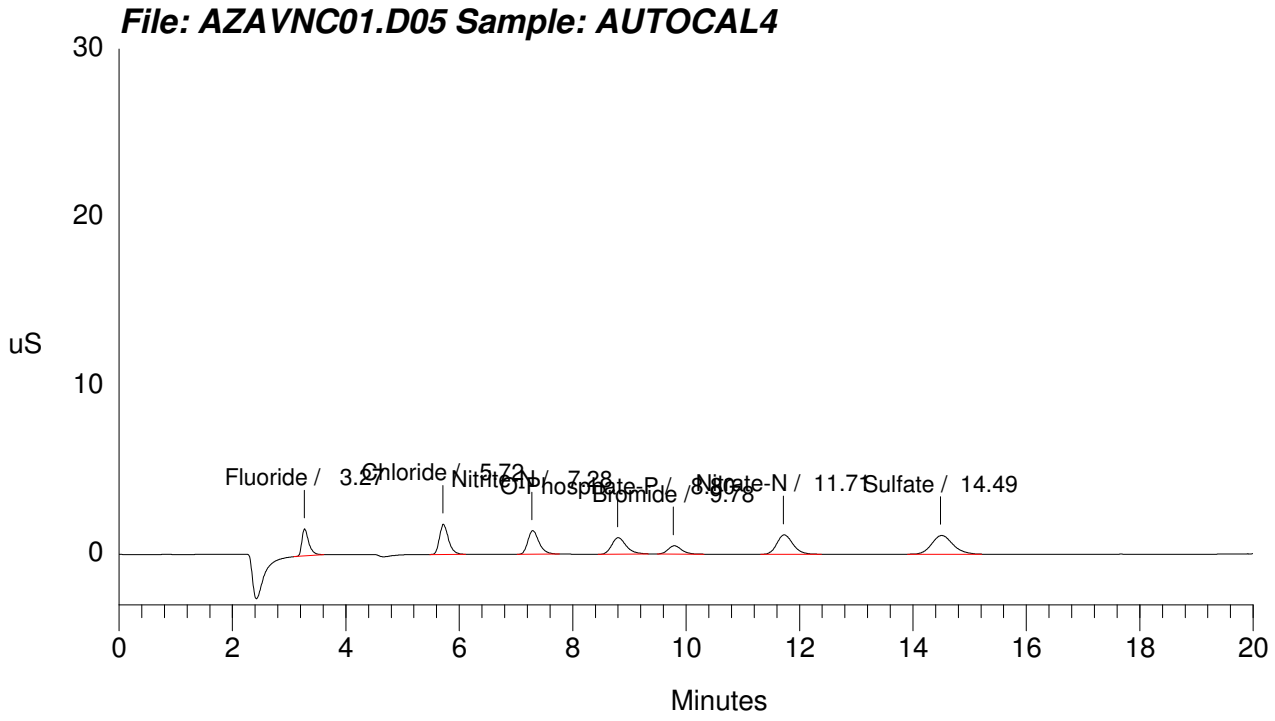


```
==============================================================================
| Sample Name: AUTOCAL4                        Date: 01/22/2008 10:59:48      |
| Data File  : C:\TMP\HORIZON\AZAVNC01.D05                                    |
| Method     : C:\DX\METHOD\JAN22.MET                                         |
| ACI Address: 1  System: 1  Inject#: 5                   Detector:CDM-2      |
| Analyst    : VXP1           Column: AS9HC#013772;GLGCE-086;300;9056        |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	0.500	1611725	13962839	1	0.00
2	5.72	Chloride	1.000	1795190	19773484	1	0.00
3	7.28	Nitrite-N	0.500	1376502	19265644	1	0.00
4	8.80	O-Phosphate-P	1.000	973372	17221768	1	0.00
5	9.78	Bromide	1.000	482264	8052336	1	0.00
6	11.71	Nitrate-N	0.500	1147036	22875354	1	0.00
7	14.49	Sulfate	2.000	1107025	28994500	1	0.00
		Totals	6.500	8493114	130145925		

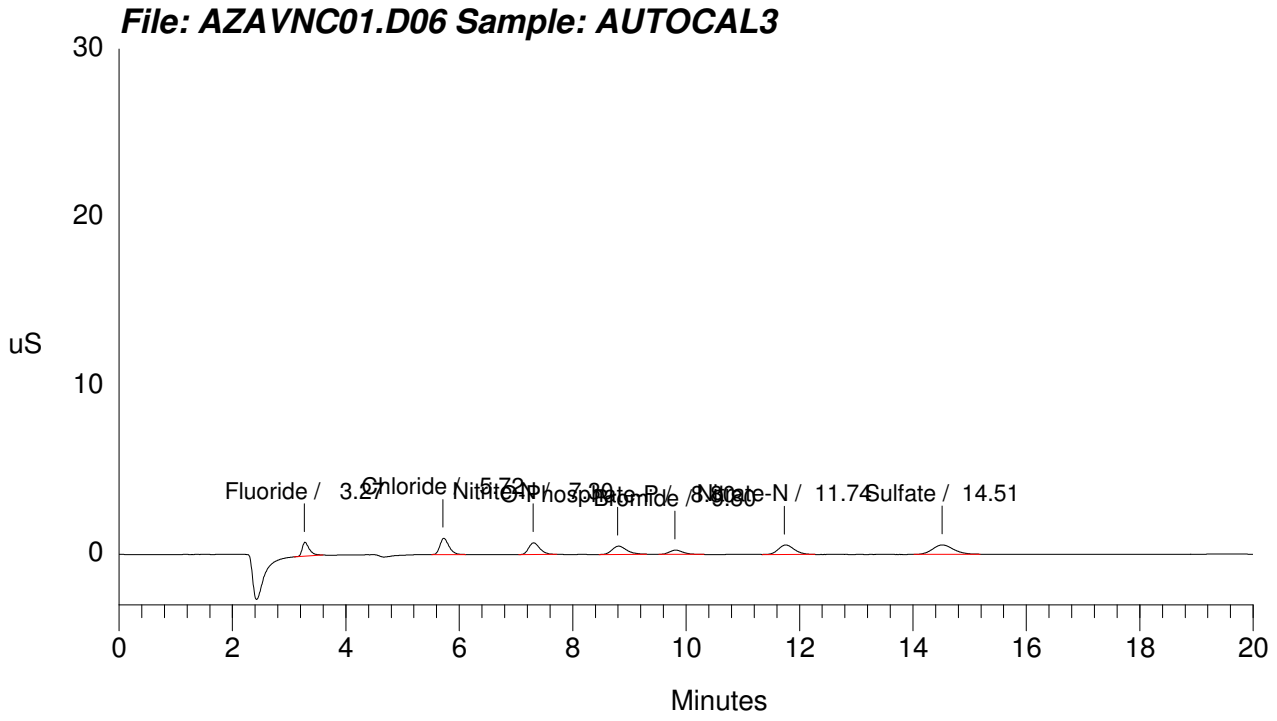


```
==============================================================================
| Sample Name: AUTOCAL3                        Date: 01/22/2008 11:20:08      |
| Data File  : C:\TMP\HORIZON\AZAVNC01.D06                                    |
| Method     : C:\DX\METHOD\JAN22.MET                                         |
| ACI Address: 1  System: 1  Inject#: 6                   Detector:CDM-2      |
| Analyst    : VXP1           Column: AS9HC#013772;GLGCE-086;300;9056        |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	0.250	813994	7483541	1	0.00
2	5.72	Chloride	0.500	963021	10853990	1	0.00
3	7.30	Nitrite-N	0.250	701230	9663754	1	0.00
4	8.80	O-Phosphate-P	0.500	489343	8842010	1	0.00
5	9.80	Bromide	0.500	251069	4316836	1	0.00
6	11.74	Nitrate-N	0.250	560638	11307764	1	0.00
7	14.51	Sulfate	1.000	559715	14536718	1	0.00
		Totals	3.250	4339010	67004613		

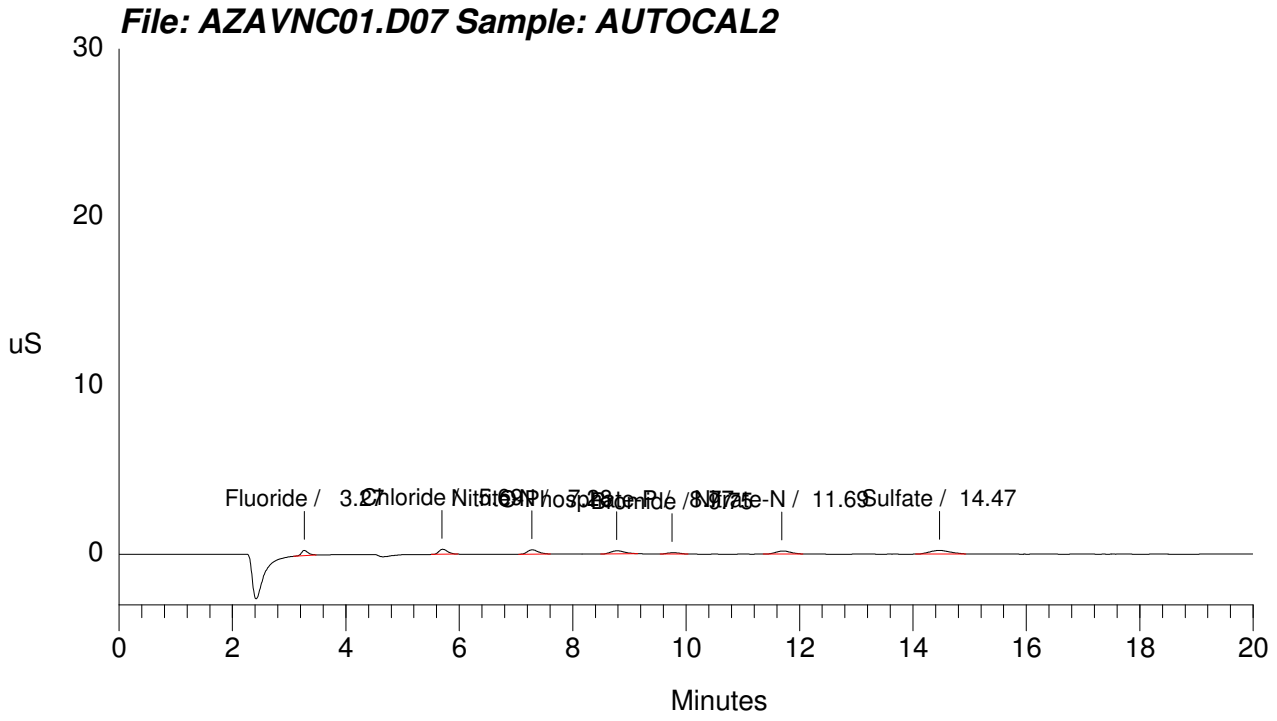


```
==============================================================================
| Sample Name: AUTOCAL2                        Date: 01/22/2008 11:40:29      |
| Data File  : C:\TMP\HORIZON\AZAVNC01.D07                                    |
| Method     : C:\DX\METHOD\JAN22.MET                                         |
| ACI Address: 1  System: 1  Inject#: 7                   Detector:CDM-2      |
| Analyst    : VXP1           Column: AS9HC#013772;GLGCE-086;300;9056        |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	0.100	319388	2653610	1	0.00
2	5.69	Chloride	0.200	297921	3306994	1	0.00
3	7.28	Nitrite-N	0.100	259605	3439336	1	0.00
4	8.77	O-Phosphate-P	0.200	186124	3169156	1	0.00
5	9.75	Bromide	0.200	78913	1164946	1	0.00
6	11.69	Nitrate-N	0.100	174631	3199100	1	0.00
7	14.47	Sulfate	0.400	210477	5233318	1	0.00
		Totals	1.300	1527060	22166460		

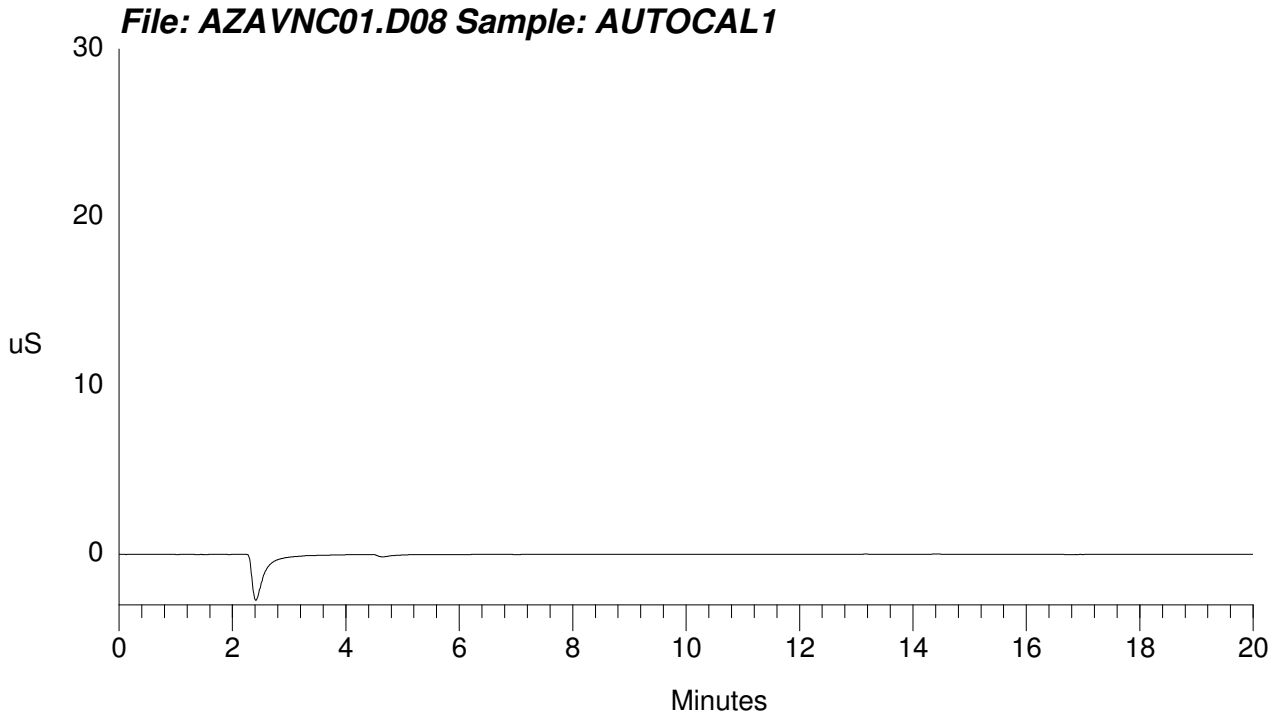


```
==============================================================================
| Sample Name: AUTOCAL1                        Date: 01/22/2008 12:00:49     |
| Data File  : C:\TMP\HORIZON\AZAVNC01.D08                                   |
| Method     : C:\DX\METHOD\JAN22.MET                                        |
| ACI Address: 1  System: 1  Inject#: 8                   Detector:CDM-2    |
| Analyst    : VXP1           Column: AS9HC#013772;GLGCE-086;300;9056       |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
0	0.00	Fluoride	0.000	0	0	0	0.00
0	0.00	Chloride	0.000	0	0	0	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
0	0.00	O-Phosphate-P	0.000	0	0	0	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
0	0.00	Nitrate-N	0.000	0	0	0	0.00
0	0.00	Sulfate	0.000	0	0	0	0.00
		Totals	0.000	0	0		

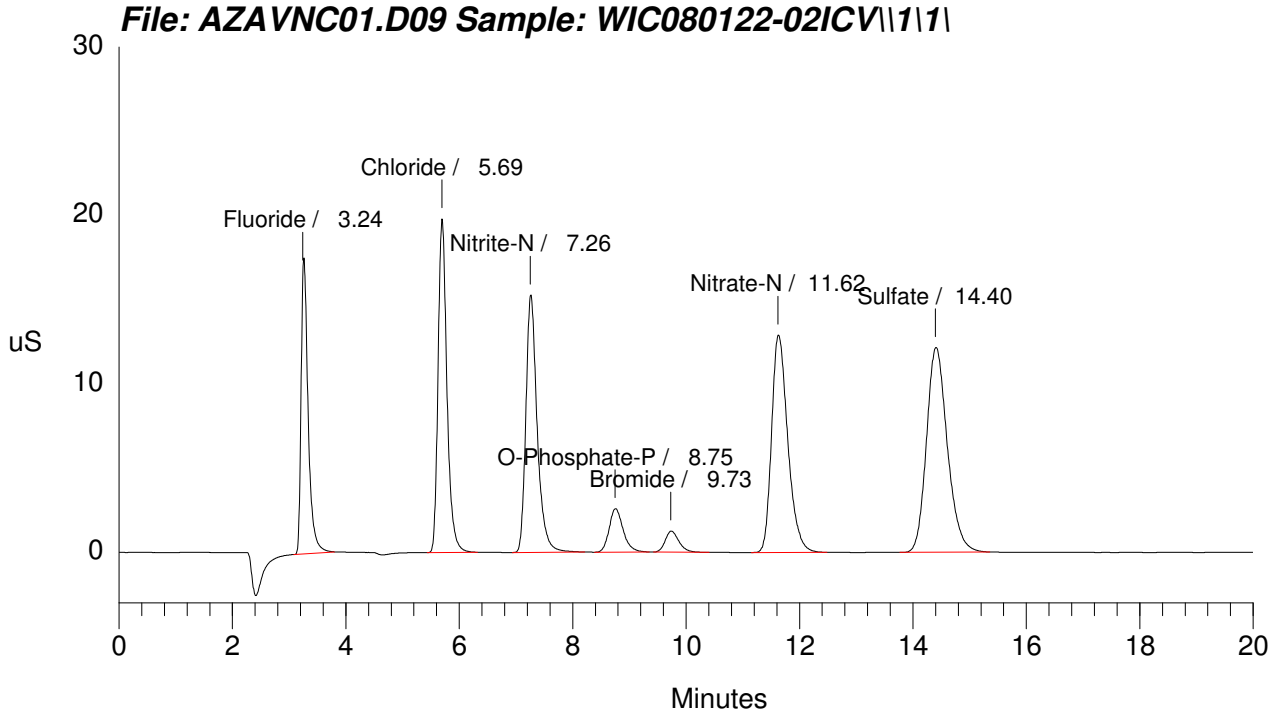


```
==============================================================================
| Sample Name: WIC080122-02ICV\\1\1\          Date: 01/22/2008 12:21:09      |
| Data File  : C:\TMP\HORIZON\AZAVNC01.D09                                   |
| Method     : C:\DX\METHOD\JAN22.MET                                        |
| ACI Address: 1  System: 1  Inject#: 9                   Detector:CDM-2     |
| Analyst    : VXP1           Column: AS9HC#013772;GLGCE-086;300;9056        |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	4.739	16783870	150909640	1	0.00
2	5.69	Chloride	9.251	19818452	215239334	1	0.00
3	7.26	Nitrite-N	4.822	15271734	211783246	1	0.00
4	8.75	O-Phosphate-P	2.457	2577604	44280474	1	0.00
5	9.73	Bromide	2.433	1249979	21012722	1	0.00
6	11.62	Nitrate-N	4.593	12895577	256323072	1	0.00
7	14.40	Sulfate	18.974	12141812	311305268	1	0.00
		Totals	47.269	80739028	1210853756		

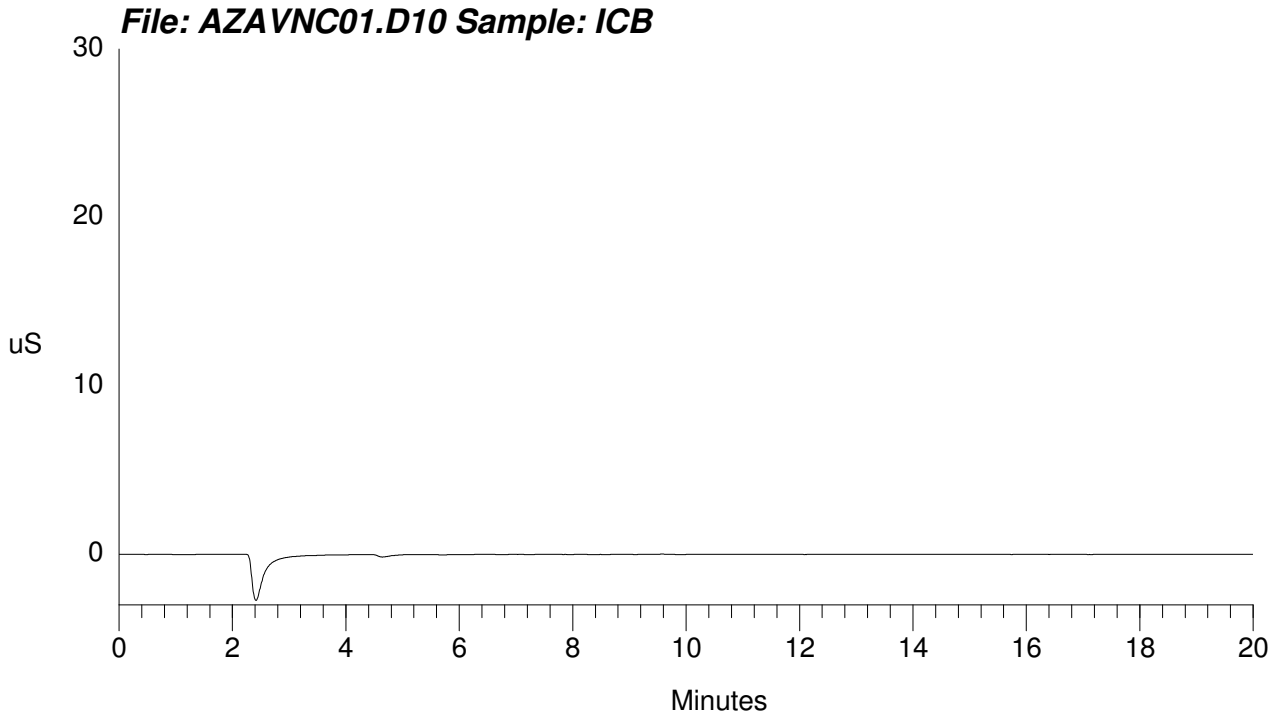


```
==============================================================================
| Sample Name: ICB                            Date: 01/22/2008 12:41:31      |
| Data File  : C:\TMP\HORIZON\AZAVNC01.D10                                   |
| Method     : C:\DX\METHOD\JAN22.MET                                        |
| ACI Address: 1  System: 1  Inject#: 10                  Detector:CDM-2     |
| Analyst    : VXP1           Column: AS9HC#013772;GLGCE-086;300;9056        |
==============================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                        Code
------------------------------------------------------------------------------
   0   0.00 Fluoride                 0.000          0          0    0   0.00
   0   0.00 Chloride                 0.000          0          0    0   0.00
   0   0.00 Nitrite-N                0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P            0.000          0          0    0   0.00
   0   0.00 Bromide                  0.000          0          0    0   0.00
   0   0.00 Nitrate-N                0.000          0          0    0   0.00
   0   0.00 Sulfate                  0.000          0          0    0   0.00
                              ------------------------------------
                       Totals        0.000          0          0
```



METHOD: 300/9056
SOP NUMBER: GL-GC-E-086

SAMPLENAME	BATCH	DILUTION	USER	RUNTIME	FILENAME
BLK:			VXP1	01/23/2008 11:10:43	AZAWNC01.R01
WIC080123-02ICV:1		1	VXP1	01/23/2008 11:31:07	AZAWNC01.R02
ICB:			VXP1	01/23/2008 11:51:30	AZAWNC01.R03
200956006:2	719433	5	VXP1	01/23/2008 12:11:55	AZAWNC01.R04
200957001:2	719433	5	VXP1	01/23/2008 12:32:18	AZAWNC01.R05
1201499396:2	719433	5	VXP1	01/23/2008 12:52:40	AZAWNC01.R06
1201499397:2	719433	5	VXP1	01/23/2008 13:13:02	AZAWNC01.R07
200957007:2	719433	5	VXP1	01/23/2008 13:33:25	AZAWNC01.R08
200959001:2	719433	2	VXP1	01/23/2008 13:53:47	AZAWNC01.R09
200961002:2	719433	10	VXP1	01/23/2008 14:14:08	AZAWNC01.R10
200961004:2	719433	10	VXP1	01/23/2008 14:34:29	AZAWNC01.R11
WIC080123-02CVH:1		1	VXP1	01/23/2008 14:54:52	AZAWNC01.R12
CCB:			VXP1	01/23/2008 15:15:15	AZAWNC01.R13
201053002:2	719433	10	VXP1	01/23/2008 15:35:40	AZAWNC01.R14
1201499394:2	719433	10	VXP1	01/23/2008 15:56:05	AZAWNC01.R15
1201499395:2	719433	10	VXP1	01/23/2008 16:16:26	AZAWNC01.R16
201053005:2	719433	2	VXP1	01/23/2008 16:36:48	AZAWNC01.R17
WIC080123-02CCV:1		1	VXP1	01/23/2008 16:57:09	AZAWNC01.R18
CCB:			VXP1	01/23/2008 17:17:30	AZAWNC01.R19
1201501673:1	720619	1	VXP1	01/23/2008 17:37:52	AZAWNC01.R20
1201501674:1	720619	1	VXP1	01/23/2008 17:58:15	AZAWNC01.R21
201395001:1	720619	1	VXP1	01/23/2008 18:18:35	AZAWNC01.R22
1201501675:1	720619	1	VXP1	01/23/2008 18:38:56	AZAWNC01.R23
1201501676:1	720619	1	VXP1	01/23/2008 18:59:17	AZAWNC01.R24
WIC080123-02CVH:1		1	VXP1	01/23/2008 19:19:37	AZAWNC01.R25
CCB:			VXP1	01/23/2008 19:39:58	AZAWNC01.R26
1201501669:1	720618	1	VXP1	01/23/2008 20:00:18	AZAWNC01.R27
1201501670:1	720618	1	VXP1	01/23/2008 20:20:42	AZAWNC01.R28
201391002:1	720618	1	VXP1	01/23/2008 20:41:05	AZAWNC01.R29
1201501671:1	720618	1	VXP1	01/23/2008 21:01:25	AZAWNC01.R30
1201501672:1	720618	1	VXP1	01/23/2008 21:21:46	AZAWNC01.R31
201391003:1	720618	1	VXP1	01/23/2008 21:42:06	AZAWNC01.R32
201391004:1	720618	1	VXP1	01/23/2008 22:02:27	AZAWNC01.R33
201391005:1	720618	1	VXP1	01/23/2008 22:22:47	AZAWNC01.R34
201391006:1	720618	1	VXP1	01/23/2008 22:43:08	AZAWNC01.R35
201391007:1	720618	1	VXP1	01/23/2008 23:03:29	AZAWNC01.R36
WIC080123-02CCV:1		1	VXP1	01/23/2008 23:23:49	AZAWNC01.R37
CCB:			VXP1	01/23/2008 23:44:10	AZAWNC01.R38
1201501665:1	720617	1	VXP1	01/24/2008 00:04:31	AZAWNC01.R39
1201501666:1	720617	1	VXP1	01/24/2008 00:24:51	AZAWNC01.R40
201344008:1	720617	1	VXP1	01/24/2008 00:45:14	AZAWNC01.R41
1201501667:1	720617	1	VXP1	01/24/2008 01:05:36	AZAWNC01.R42
1201501668:1	720617	1	VXP1	01/24/2008 01:25:57	AZAWNC01.R43
WIC080123-02CVH:1		1	VXP1	01/24/2008 01:46:20	AZAWNC01.R44
CCB:			VXP1	01/24/2008 02:06:42	AZAWNC01.R45
1201500138:1	719805	1	VXP1	01/24/2008 02:27:03	AZAWNC01.R46
1201500145:1	719805	1	VXP1	01/24/2008 02:47:24	AZAWNC01.R47
201135001:1	719805	1	VXP1	01/24/2008 03:07:46	AZAWNC01.R48
1201500139:1	719805	1	VXP1	01/24/2008 03:28:07	AZAWNC01.R49
1201500141:1	719805	1	VXP1	01/24/2008 03:48:28	AZAWNC01.R50
1201500143:1	719805	1	VXP1	01/24/2008 04:08:52	AZAWNC01.R51
201135002:1	719805	1	VXP1	01/24/2008 04:29:15	AZAWNC01.R52
201135003:1	719805	1	VXP1	01/24/2008 04:49:37	AZAWNC01.R53
201135004:1	719805	1	VXP1	01/24/2008 05:10:00	AZAWNC01.R54
201135005:1	719805	1	VXP1	01/24/2008 05:30:23	AZAWNC01.R55

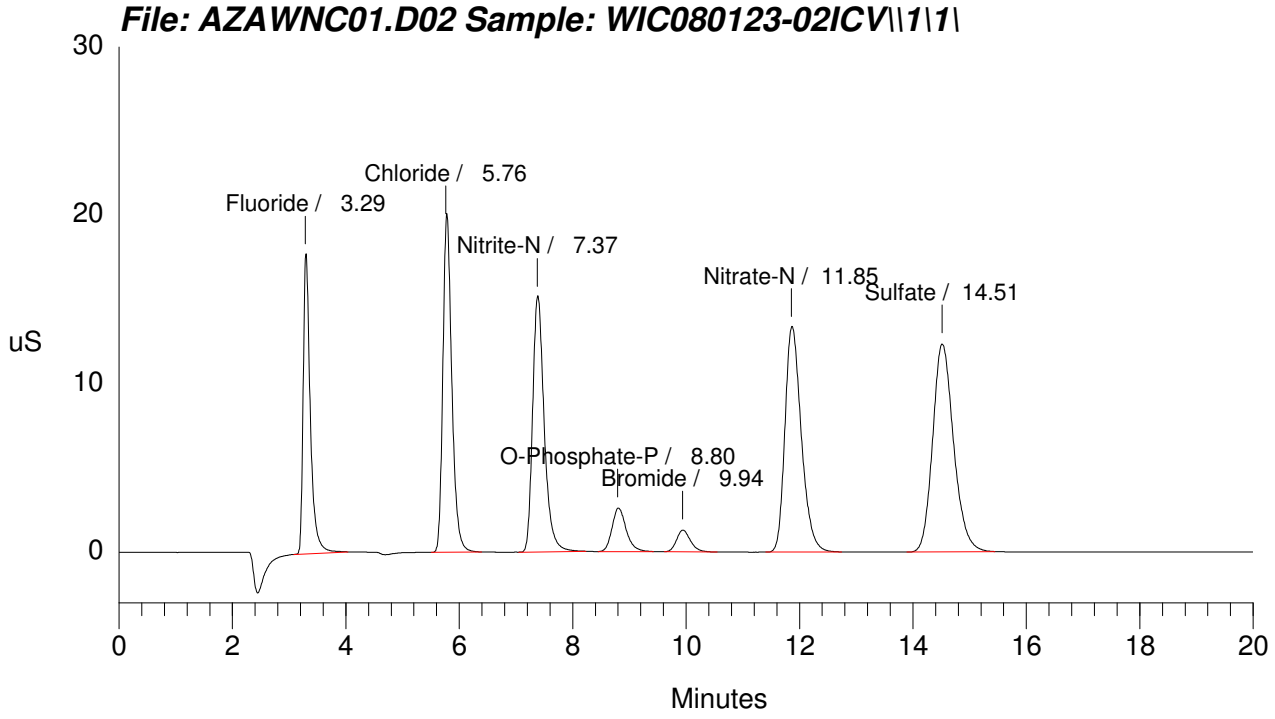
WIC080123-02CCV:1		1	VXP1	01/24/2008	05:50:44	AZAWNC01.R56
CCB:			VXP1	01/24/2008	06:11:07	AZAWNC01.R57
201135006:1	719805	1	VXP1	01/24/2008	06:31:28	AZAWNC01.R58
201135007:1	719805	1	VXP1	01/24/2008	06:51:49	AZAWNC01.R59
201135008:1	719805	1	VXP1	01/24/2008	07:12:09	AZAWNC01.R60
201135009:1	719805	1	VXP1	01/24/2008	07:32:30	AZAWNC01.R61
201135010:1	719805	1	VXP1	01/24/2008	07:52:51	AZAWNC01.R62
201135011:1	719805	1	VXP1	01/24/2008	08:13:11	AZAWNC01.R63
201140001:1	719805	1	VXP1	01/24/2008	08:33:32	AZAWNC01.R64
201140002:1	719805	1	VXP1	01/24/2008	08:53:53	AZAWNC01.R65
201140003:1	719805	1	VXP1	01/24/2008	09:14:13	AZAWNC01.R66
201240001:1	719805	1	VXP1	01/24/2008	09:34:34	AZAWNC01.R67
WIC080123-02CVH:1		1	VXP1	01/24/2008	09:54:54	AZAWNC01.R68
CCB:			VXP1	01/24/2008	10:15:13	AZAWNC01.R69
201240002:1	719805	1	VXP1	01/24/2008	10:35:33	AZAWNC01.R70
201243001:1	719805	1	VXP1	01/24/2008	10:55:54	AZAWNC01.R71
201243002:1	719805	1	VXP1	01/24/2008	11:16:15	AZAWNC01.R72
1201500140:1	719805	1	VXP1	01/24/2008	11:36:36	AZAWNC01.R73
1201500142:1	719805	1	VXP1	01/24/2008	11:56:59	AZAWNC01.R74
1201500144:1	719805	1	VXP1	01/24/2008	12:17:21	AZAWNC01.R75
201248001:1	719805	1	VXP1	01/24/2008	12:37:43	AZAWNC01.R76
WIC080123-02CCV:1		1	VXP1	01/24/2008	12:58:05	AZAWNC01.R77
CCB:			VXP1	01/24/2008	13:18:28	AZAWNC01.R78

```
==============================================================================
| Sample Name: WIC080123-02ICV\\1\1\          Date: 01/23/2008 11:31:07     |
| Data File  : C:\TMP\HORIZON\AZAWNC01.D02                                  |
| Method     : C:\DX\METHOD\JAN11.MET                                       |
| ACI Address: 1  System: 1  Inject#: 2                   Detector:CDM-2    |
| Analyst    : VXP1           Column: AS9HC#013772;GLGCE-086;300;9056       |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.29	Fluoride	4.860	17739917	155792802	1	0.00
2	5.76	Chloride	9.297	19440048	219961972	1	0.00
3	7.37	Nitrite-N	4.829	15099508	216177982	1	0.00
4	8.80	O-Phosphate-P	2.447	2580583	44752648	1	0.00
5	9.94	Bromide	2.506	1290657	21864052	1	0.00
6	11.85	Nitrate-N	4.833	13325877	268695068	1	0.00
7	14.51	Sulfate	18.846	12336469	316798324	1	0.00
		Totals	47.618	81813058	1244042848		

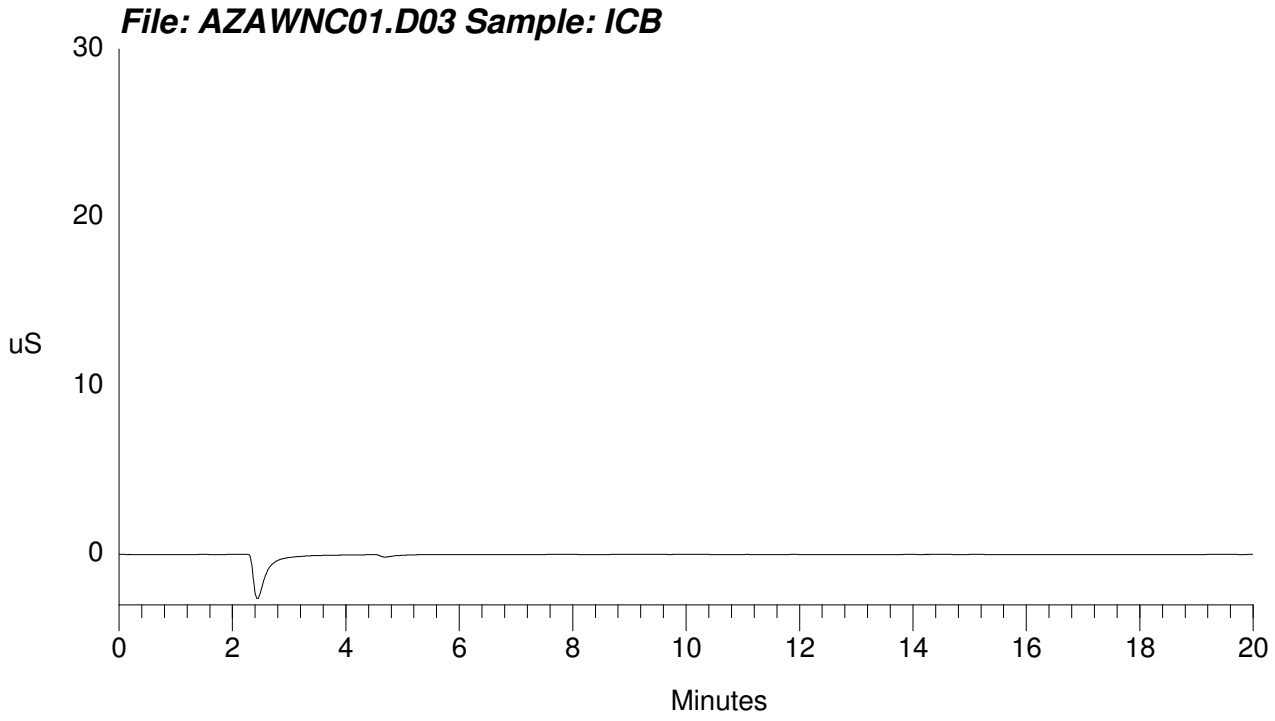


```
==============================================================================
| Sample Name: ICB                            Date: 01/23/2008 11:51:30      |
| Data File  : C:\TMP\HORIZON\AZAWNC01.D03                                   |
| Method     : C:\DX\METHOD\JAN11.MET                                        |
| ACI Address: 1  System: 1  Inject#: 3                   Detector:CDM-2     |
| Analyst    : VXP1           Column: AS9HC#013772;GLGCE-086;300;9056        |
==============================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                       mg/l                        Code
------------------------------------------------------------------------------
   0   0.00 Fluoride                  0.000          0          0    0   0.00
   0   0.00 Chloride                  0.000          0          0    0   0.00
   0   0.00 Nitrite-N                 0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P             0.000          0          0    0   0.00
   0   0.00 Bromide                   0.000          0          0    0   0.00
   0   0.00 Nitrate-N                 0.000          0          0    0   0.00
   0   0.00 Sulfate                   0.000          0          0    0   0.00
                              ------------------------------------
                        Totals        0.000          0          0
```



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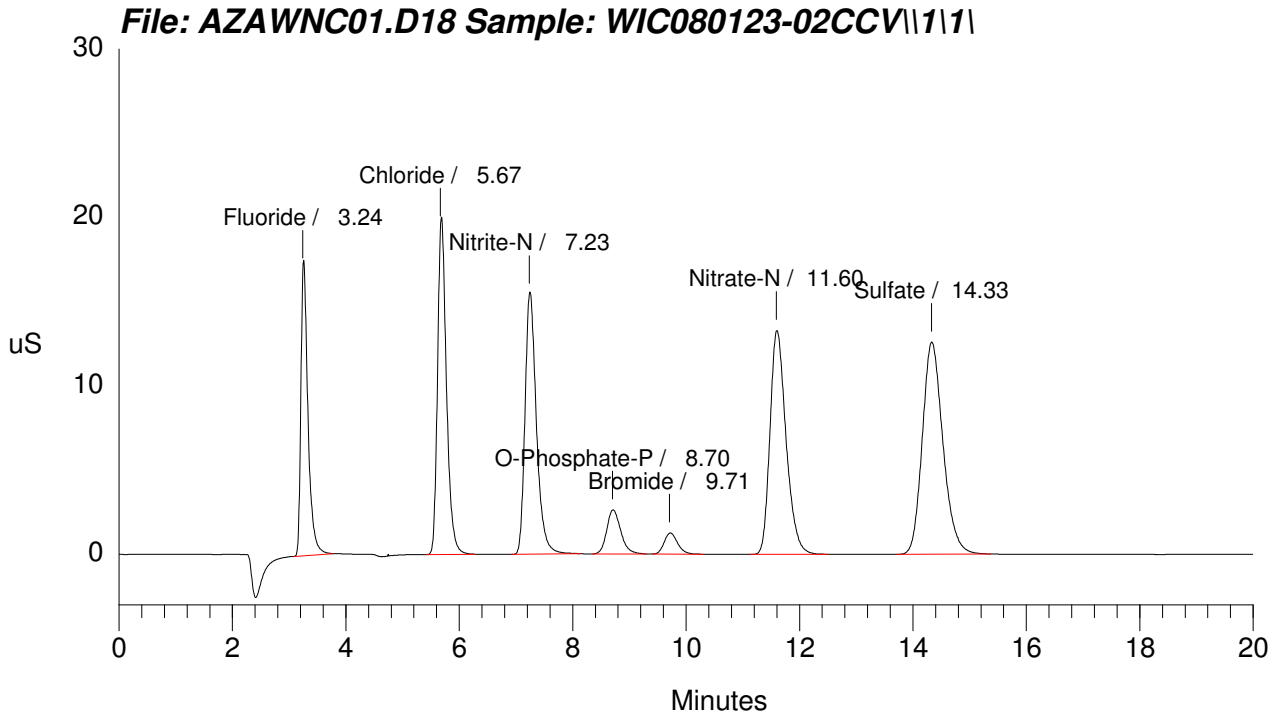
==============================================================================
| Sample Name: WIC080123-02CCV\\1\1\          Date: 01/23/2008 16:57:09      |
| Data File  : C:\TMP\HORIZON\AZAWNC01.D18                                   |
| Method     : C:\DX\METHOD\JAN11.MET                                        |
| ACI Address: 1  System: 1  Inject#: 18                  Detector:CDM-2     |
| Analyst    : VXP1           Column: AS9HC#013772;GLGCE-086;300;9056        |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	4.722	17012093	151349229	1	0.00
2	5.67	Chloride	9.227	19434125	218290234	1	0.00
3	7.23	Nitrite-N	4.853	15422170	217256240	1	0.00
4	8.70	O-Phosphate-P	2.442	2607998	44660096	1	0.00
5	9.71	Bromide	2.369	1240109	20661890	1	0.00
6	11.60	Nitrate-N	4.712	13287305	261861028	1	0.00
7	14.33	Sulfate	18.966	12576606	318838412	1	0.00
		Totals	47.292	81580406	1232917129		

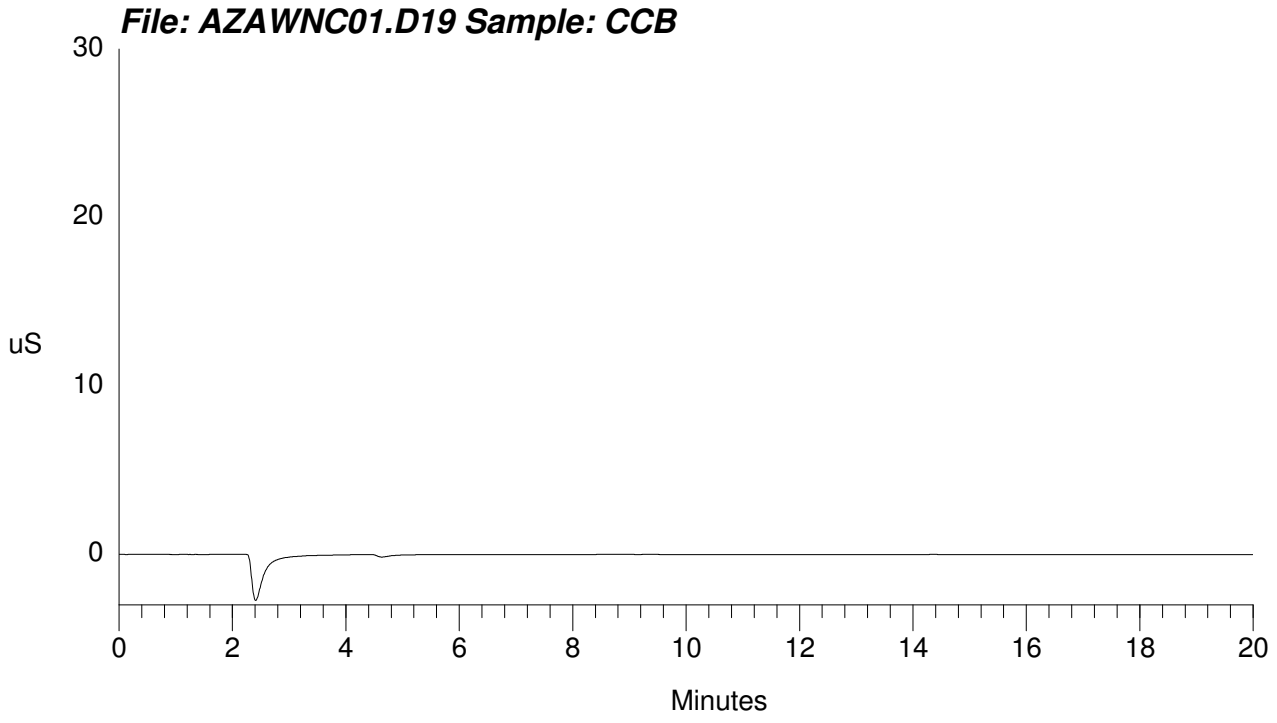


```
==============================================================================
| Sample Name: CCB                            Date: 01/23/2008 17:17:30      |
| Data File  : C:\TMP\HORIZON\AZAWNC01.D19                                   |
| Method     : C:\DX\METHOD\JAN11.MET                                        |
| ACI Address: 1  System: 1  Inject#: 19                  Detector:CDM-2     |
| Analyst    : VXP1           Column: AS9HC#013772;GLGCE-086;300;9056        |
==============================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                        Code
------------------------------------------------------------------------------
   0   0.00 Fluoride                 0.000          0          0    0   0.00
   0   0.00 Chloride                 0.000          0          0    0   0.00
   0   0.00 Nitrite-N                0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P            0.000          0          0    0   0.00
   0   0.00 Bromide                  0.000          0          0    0   0.00
   0   0.00 Nitrate-N                0.000          0          0    0   0.00
   0   0.00 Sulfate                  0.000          0          0    0   0.00
                          ------------------------------------
                      Totals         0.000          0          0
```



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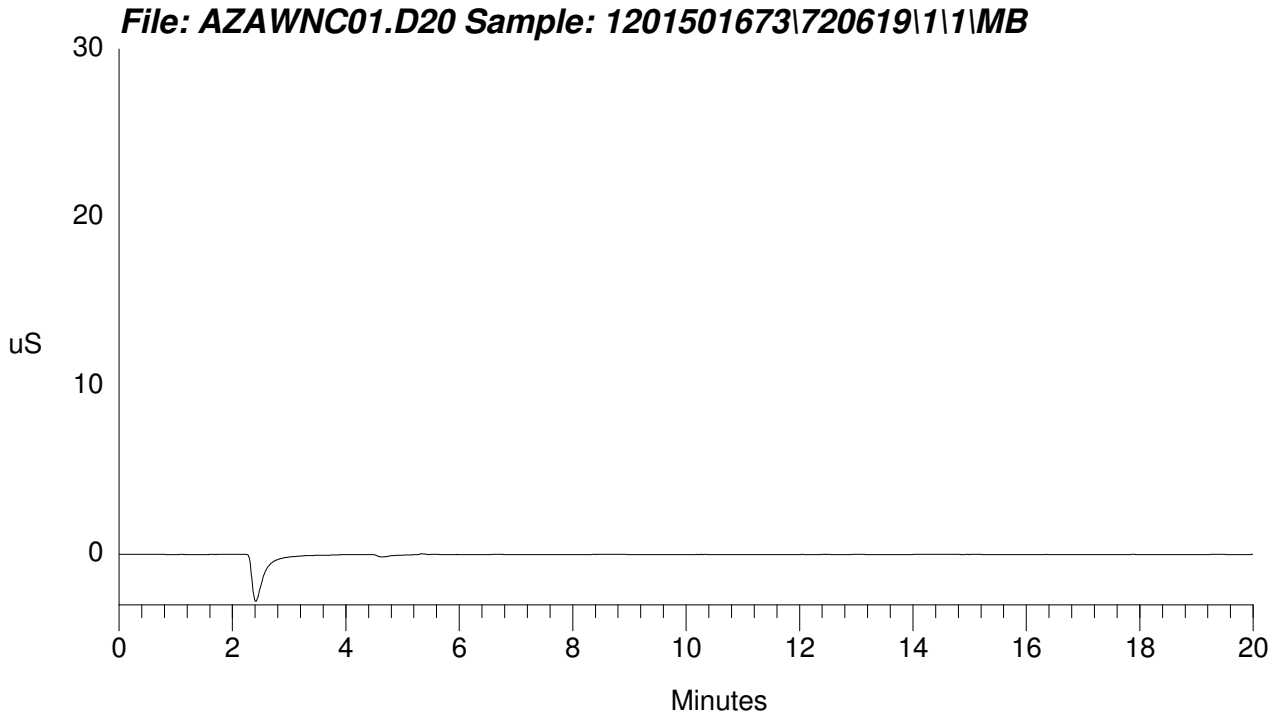
==============================================================================
| Sample Name: 1201501673\720619\1\1\MB       Date: 01/23/2008 17:37:52     |
| Data File  : C:\TMP\HORIZON\AZAWNC01.D20                                  |
| Method     : C:\DX\METHOD\JAN11.MET                                       |
| ACI Address: 1  System: 1  Inject#: 20                 Detector:CDM-2     |
| Analyst    : VXP1           Column: AS9HC#013772;GLGCE-086;300;9056       |
==============================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                        Code
------------------------------------------------------------------------------
   0   0.00 Fluoride                 0.000          0          0    0   0.00
   0   0.00 Chloride                 0.000          0          0    0   0.00
   0   0.00 Nitrite-N                0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P            0.000          0          0    0   0.00
   0   0.00 Bromide                  0.000          0          0    0   0.00
   0   0.00 Nitrate-N                0.000          0          0    0   0.00
   0   0.00 Sulfate                  0.000          0          0    0   0.00
                              ------------------------------------
                       Totals        0.000          0          0
```

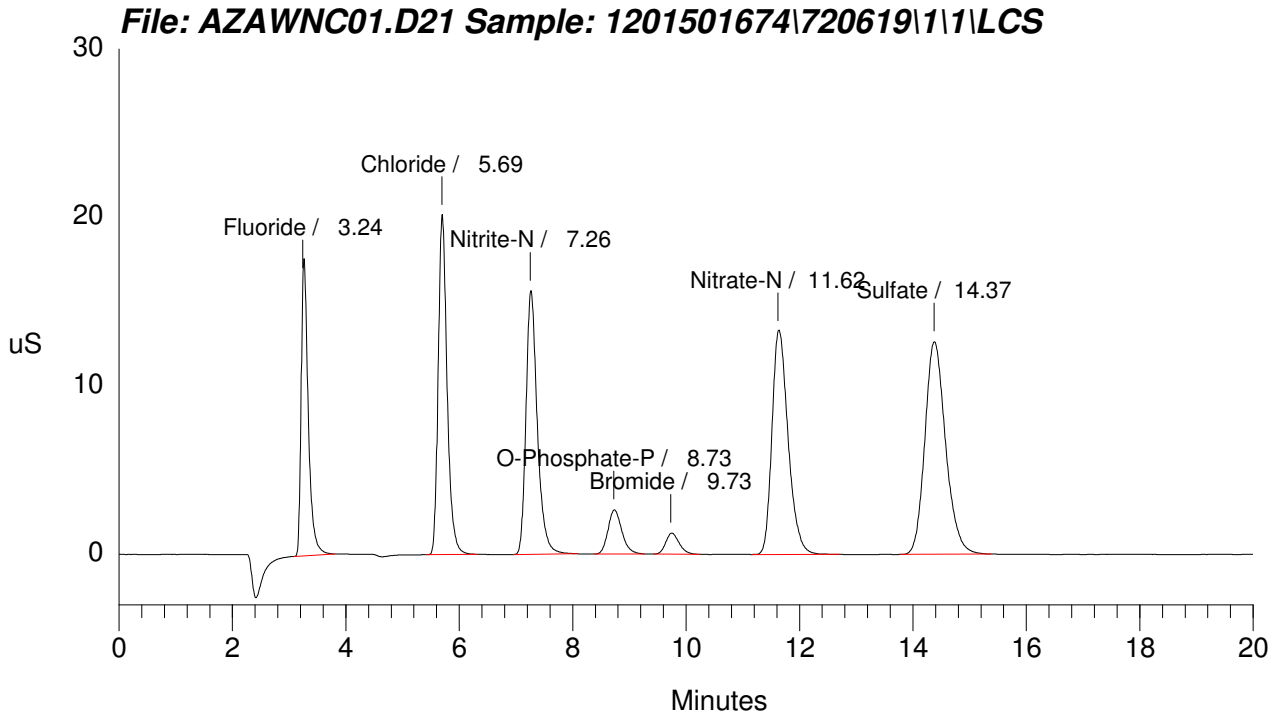


```
==============================================================================
| Sample Name: 1201501674\720619\1\1\LCS      Date: 01/23/2008 17:58:15      |
| Data File  : C:\TMP\HORIZON\AZAWNC01.D21                                   |
| Method     : C:\DX\METHOD\JAN11.MET                                        |
| ACI Address: 1  System: 1  Inject#: 21                  Detector:CDM-2     |
| Analyst    : VXP1           Column: AS9HC#013772;GLGCE-086;300;9056        |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	4.773	16442364	152972929	1	0.00
2	5.69	Chloride	9.292	20127281	219855560	1	0.00
3	7.26	Nitrite-N	4.834	15604501	216423614	1	0.00
4	8.73	O-Phosphate-P	2.429	2612347	44425416	1	0.00
5	9.73	Bromide	2.364	1229064	20616694	1	0.00
6	11.62	Nitrate-N	4.752	13217819	264118304	1	0.00
7	14.37	Sulfate	19.098	12605722	321066176	1	0.00
		Totals	47.543	81839097	1239478693		



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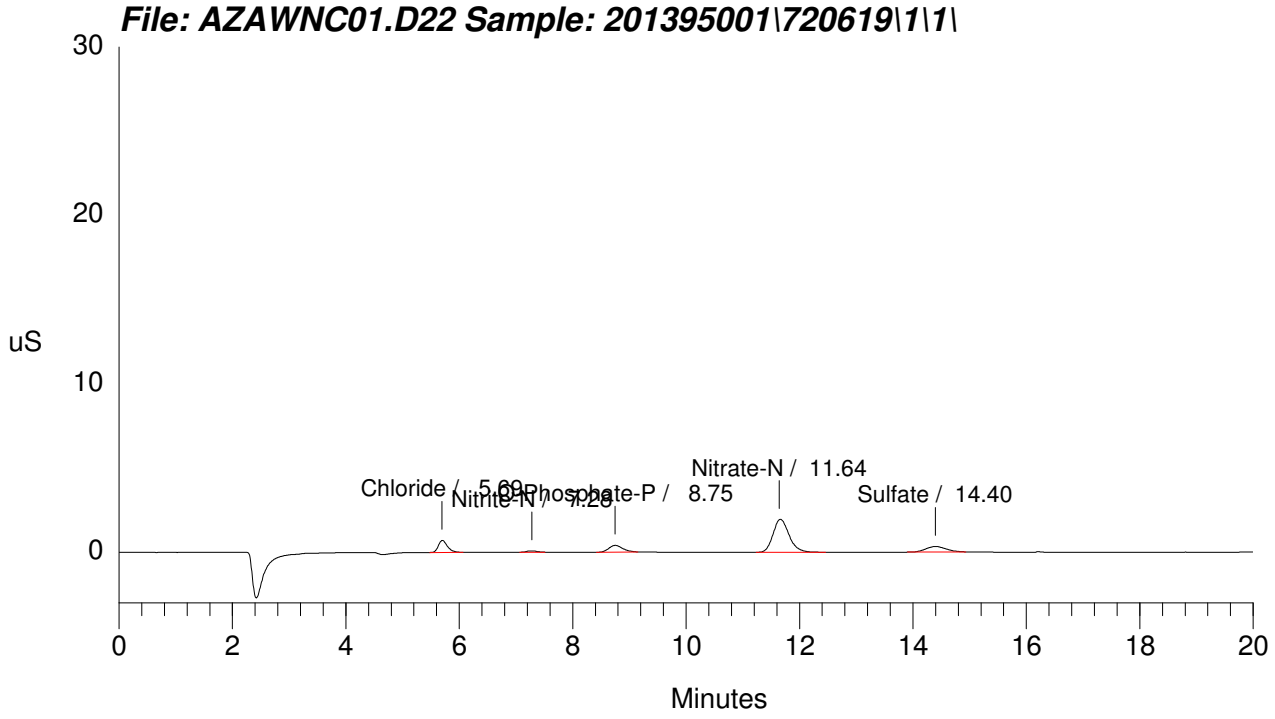
==============================================================================
| Sample Name: 201395001\720619\1\1\          Date: 01/23/2008 18:18:35     |
| Data File  : C:\TMP\HORIZON\AZAWNC01.D22                                  |
| Method     : C:\DX\METHOD\JAN11.MET                                       |
| ACI Address: 1  System: 1  Inject#: 22                  Detector:CDM-2    |
| Analyst    : VXP1           Column: AS9HC#013772;GLGCE-086;300;9056       |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
0	0.00	Fluoride	0.000	0	0	0	0.00
1	5.69	Chloride	0.466	716128	8059152	1	0.00
2	7.28	Nitrite-N	0.043	80749	1009988	1	0.00
3	8.75	O-Phosphate-P	0.402	403720	6825802	1	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
4	11.64	Nitrate-N	0.738	1942087	38739982	1	0.00
5	14.40	Sulfate	0.670	326913	8172062	1	0.00
		Totals	2.318	3469598	62806986		

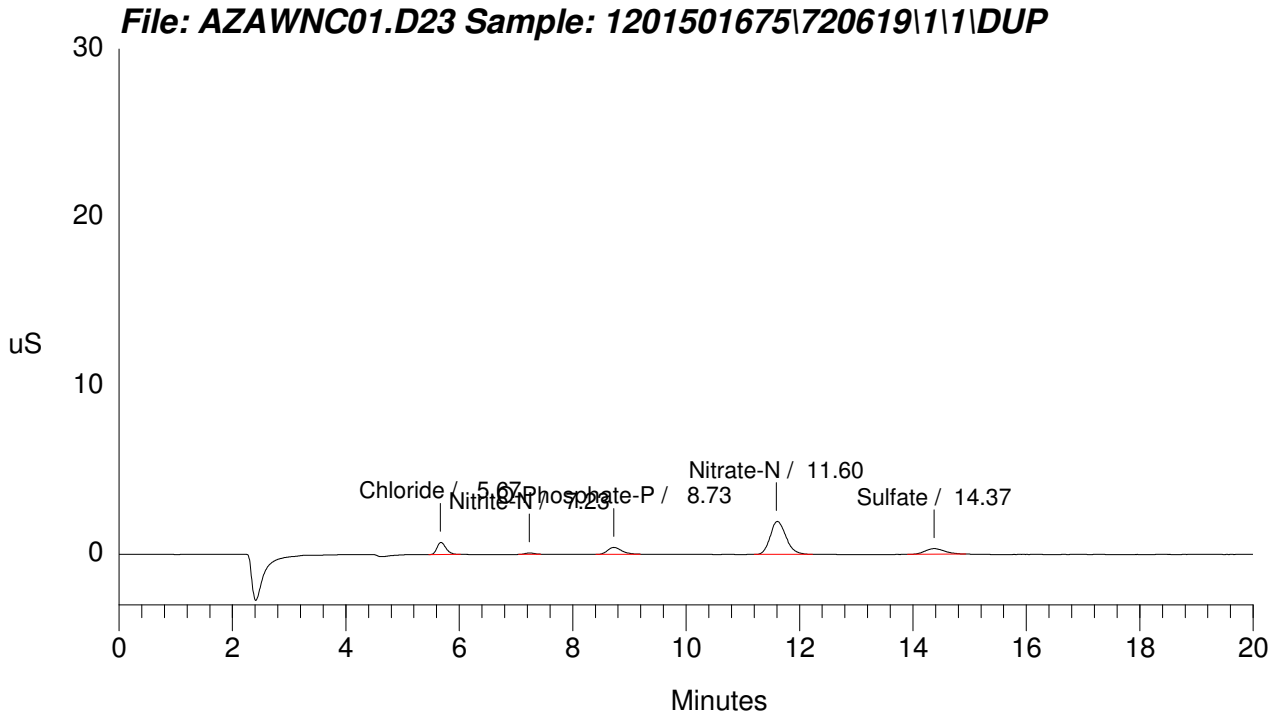


```
==============================================================================
| Sample Name: 1201501675\720619\1\1\DUP      Date: 01/23/2008 18:38:56     |
| Data File  : C:\TMP\HORIZON\AZAWNC01.D23                                  |
| Method     : C:\DX\METHOD\JAN11.MET                                       |
| ACI Address: 1  System: 1  Inject#: 23                  Detector:CDM-2    |
| Analyst    : VXP1           Column: AS9HC#013772;GLGCE-086;300;9056       |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
0	0.00	Fluoride	0.000	0	0	0	0.00
1	5.67	Chloride	0.465	720123	8051298	1	0.00
2	7.23	Nitrite-N	0.042	83653	974148	1	0.00
3	8.73	O-Phosphate-P	0.427	416233	7293320	1	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
4	11.60	Nitrate-N	0.724	1953637	37969122	1	0.00
5	14.37	Sulfate	0.675	333865	8251426	1	0.00
		Totals	2.333	3507510	62539314		



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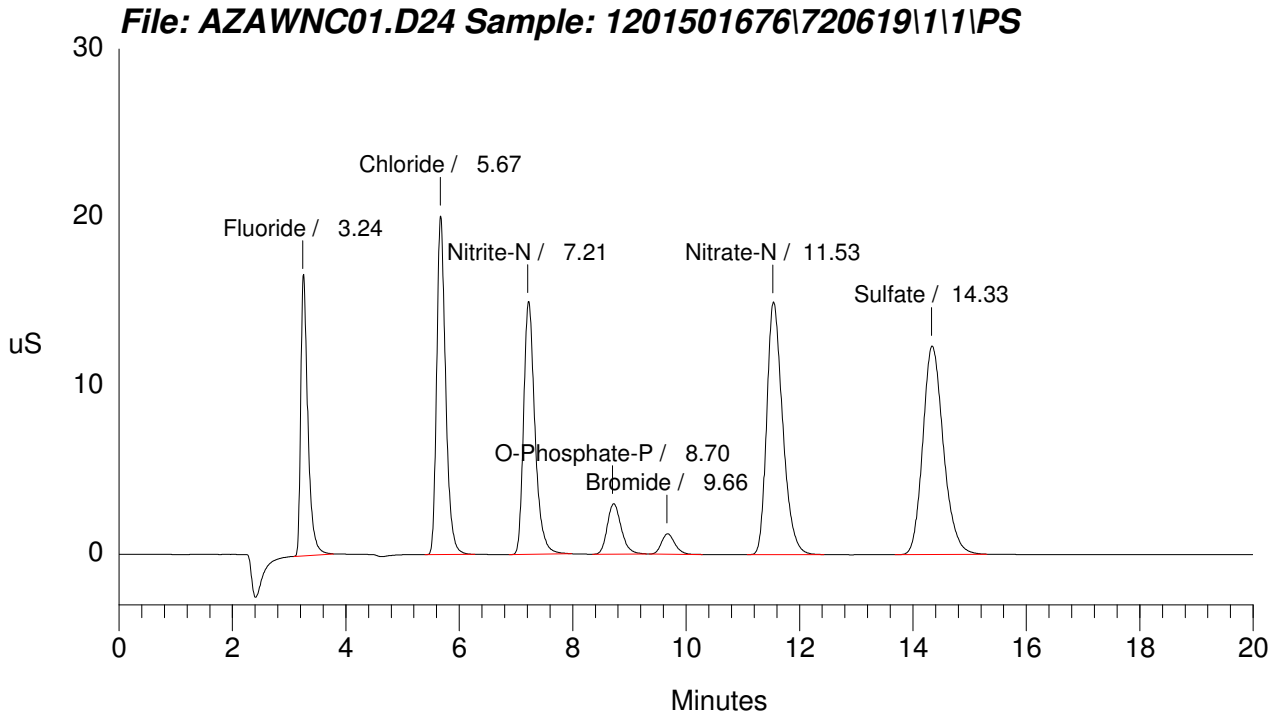
==============================================================================
| Sample Name: 1201501676\720619\1\1\PS       Date: 01/23/2008 18:59:17     |
| Data File  : C:\TMP\HORIZON\AZAWNC01.D24                                  |
| Method     : C:\DX\METHOD\JAN11.MET                                       |
| ACI Address: 1  System: 1  Inject#: 24                  Detector:CDM-2    |
| Analyst    : VXP1           Column: AS9HC#013772;GLGCE-086;300;9056       |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	4.533	16394448	145262123	1	0.00
2	5.67	Chloride	9.284	20084007	219639868	1	0.00
3	7.21	Nitrite-N	4.656	14890365	208377124	1	0.00
4	8.70	O-Phosphate-P	2.799	2942033	51278692	1	0.00
5	9.66	Bromide	2.282	1199854	19889666	1	0.00
6	11.53	Nitrate-N	5.276	14887613	293537180	1	0.00
7	14.33	Sulfate	18.638	12361578	313257432	1	0.00
		Totals	47.466	82759899	1251242085		

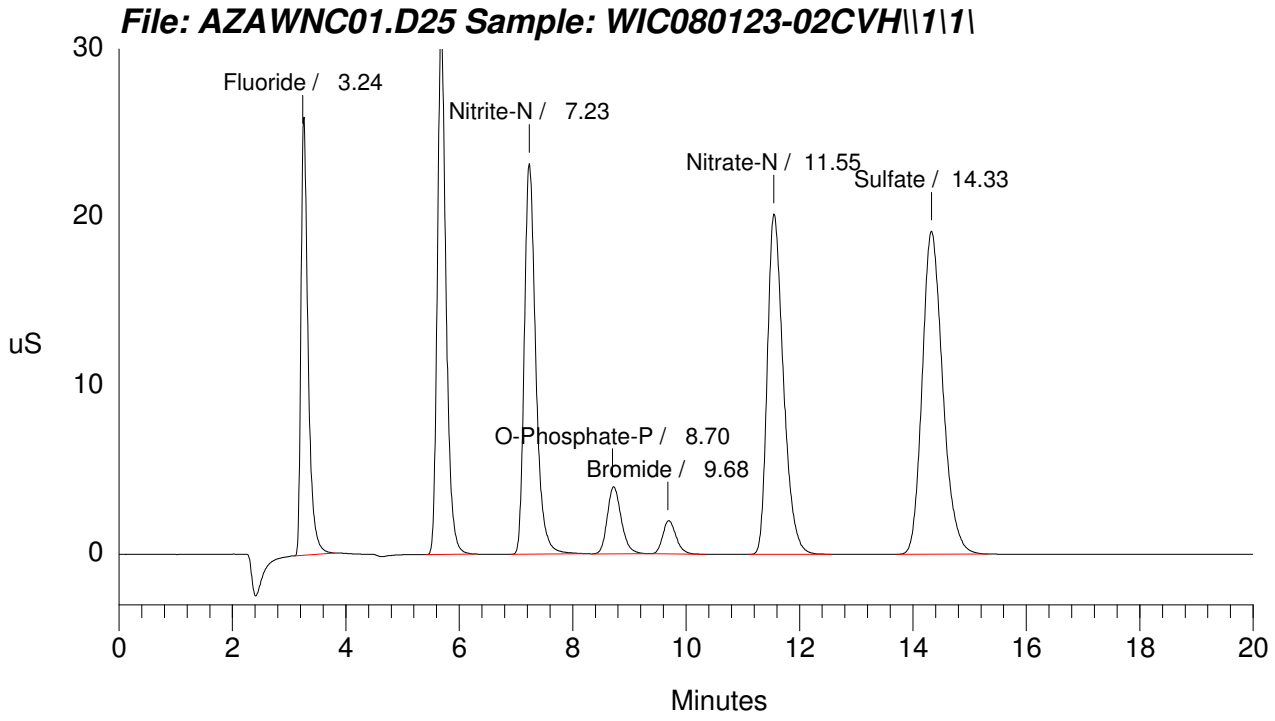


```
==============================================================================
| Sample Name: WIC080123-02CVH\\1\1\          Date: 01/23/2008 19:19:37     |
| Data File  : C:\TMP\HORIZON\AZAWNC01.D25                                  |
| Method     : C:\DX\METHOD\JAN11.MET                                       |
| ACI Address: 1  System: 1  Inject#: 25                  Detector:CDM-2    |
| Analyst    : VXP1           Column: AS9HC#013772;GLGCE-086;300;9056       |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	7.037	24986155	225860570	1	0.00
2	5.67	Chloride	14.082	30675663	334786934	1	0.00
3	7.23	Nitrite-N	7.265	23199932	325681806	1	0.00
4	8.70	O-Phosphate-P	3.702	3923864	68017164	1	0.00
5	9.68	Bromide	3.699	1965677	32387192	1	0.00
6	11.55	Nitrate-N	7.139	20205282	398138978	1	0.00
7	14.33	Sulfate	28.593	19177408	482291308	1	0.00
		Totals	71.516	124133982	1867163952		

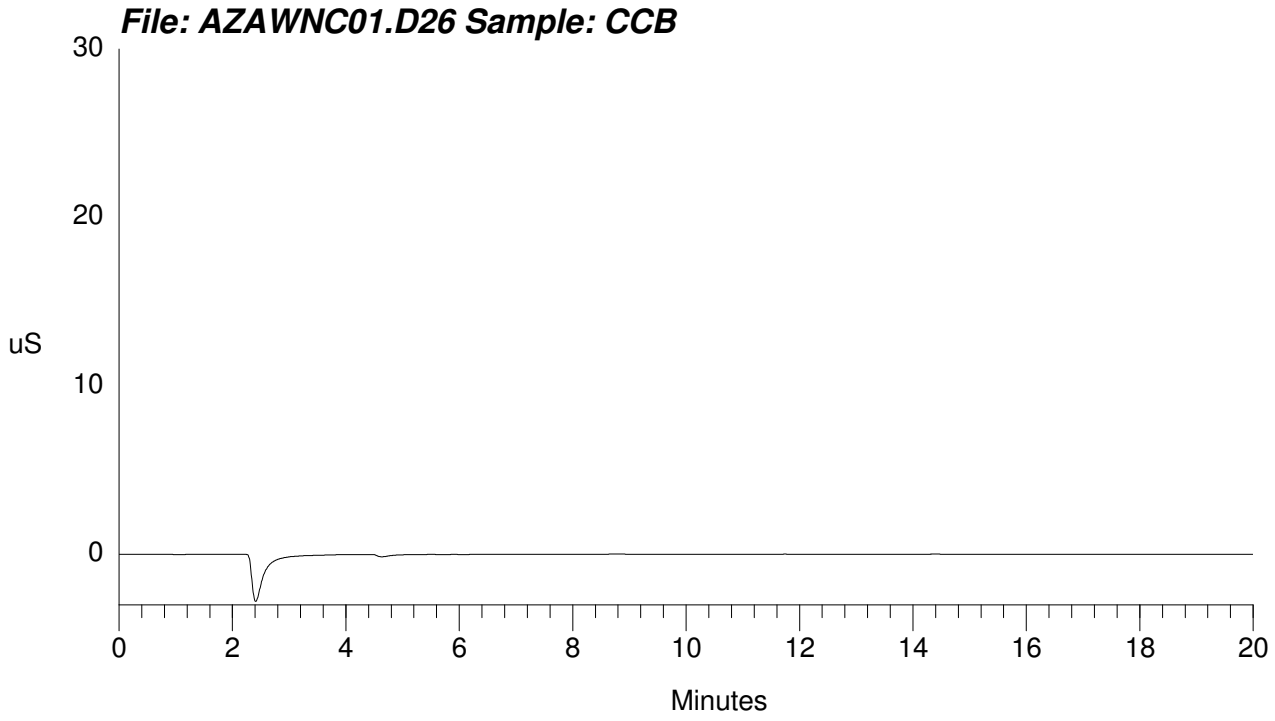


```
==============================================================================
| Sample Name: CCB                            Date: 01/23/2008 19:39:58      |
| Data File  : C:\TMP\HORIZON\AZAWNC01.D26                                   |
| Method     : C:\DX\METHOD\JAN11.MET                                        |
| ACI Address: 1  System: 1  Inject#: 26                 Detector:CDM-2      |
| Analyst    : VXP1           Column: AS9HC#013772;GLGCE-086;300;9056        |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
0	0.00	Fluoride	0.000	0	0	0	0.00
0	0.00	Chloride	0.000	0	0	0	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
0	0.00	O-Phosphate-P	0.000	0	0	0	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
0	0.00	Nitrate-N	0.000	0	0	0	0.00
0	0.00	Sulfate	0.000	0	0	0	0.00
		Totals	0.000	0	0		



Solids, Total Dissolved

Batch: 721381.0
Analyst: NXM1

TDS/TS/VS LogBook

Procedure Code BALDSEP_LF
Procedure Description EPA 160.1 Solids, Dissolved
Lab Sop GL-GC-E-001

Sample Type	Sample Id	Lot Id	Nc(mg/L)	Recovery(%)
LCS	1201503321	WTD730145-01	300	99.333

Sample Type	Sample Id	Rpd(%)
DUP	1201503320	4.9261083743842

Sample Id	Sample Type	Original Hsn	Instrument	Run Date	Crucible ID	Aliquot (L)	Crucible Wt(g)	Final Wt Event 1	Final Wt Event 2	Final Wt Event 3	Final Wt Event 4	Result	Units
1201503319	MB		BAL216	25-JAN-2008 13:01	NIT	0.1	53.7659	53.7658	53.7656			-3	mg/L
1201503321	LCS		BAL216	25-JAN-2008 13:01	J1	0.1	50.1767	50.2063	50.2065			298	mg/L
201391007	SAMPLE		BAL216	25-JAN-2008 13:01	FO	0.1	55.271	55.2818	55.2814			104	mg/L
1201503320	DUP	201391007	BAL216	25-JAN-2008 13:01	YAN	0.1	62.1978	62.2079	62.2077			99	mg/L
201395001	SAMPLE		BAL216	25-JAN-2008 13:01	S3	0.1	54.5548	54.5604	54.5603			55	mg/L
201500002	SAMPLE		BAL216	25-JAN-2008 13:01	ARA	0.1	53.1468	53.1705	53.1701			233	mg/L
201500003	SAMPLE		BAL216	25-JAN-2008 13:01	NTHE	0.1	61.1084	61.1237	61.1235			151	mg/L
201500004	SAMPLE		BAL216	25-JAN-2008 13:01	BRO	0.1	65.3878	65.3941	65.3939			61	mg/L
201500005	SAMPLE		BAL216	25-JAN-2008 13:01	RED	0.1	63.8701	63.8916	63.8916			215	mg/L
201500006	SAMPLE		BAL216	25-JAN-2008 13:01	UH	0.1	56.8108	56.8228	56.8227			119	mg/L
201500007	SAMPLE		BAL216	25-JAN-2008 13:01	POO	0.1	55.1267	55.1485	55.148			213	mg/L
201531015	SAMPLE		BAL216	25-JAN-2008 13:01	YX	0.1	60.4401	60.458	60.4579			178	mg/L

Comments: **All Weights are in Grams**

A) Result = (Final - Crucible)/Aliquot * 1000
B) Prep Factor = 0.5 / Aliquot

Date: 25-JAN-08 13:01:46
Date: 28-JAN-08 11:45:00
Temperature: 180 C
Temperature: 180 C

Note: Aliquot is used for the determination of the effective MDL and PQL in LIMS

Solids, Total Suspended

TSS/VSS LogBook

Batch: 720622.0
Analyst: NXM1
Procedure Code TSS2540DLF
Procedure Description SM 2540D Total Suspended Solids
Lab Sop GL-GC-E-012

Sample Type	Sample Id	Lot Id	Nc(mg/L)	Recovery(%)
LCS	1201501685	WTS736010	500	99.6

Sample Type	Sample Id	Rpd(%)
DUP	1201501683	2.8985507246377
DUP	1201501684	1.0638297872340

Sample Id	Run Date	Instrument	Filter ID	Aliquot (L)	Initial Filter Wt Event 1	Initial Filter Wt Event 2	Final Filter Wt Event 1	Final Filter Wt Event 2	Final Filter Wt Event 3	Final Filter Wt Event 4	Result (mg/L)
1201501682-MB	23-JAN-2008 13:39	BAL216	1	0.5	0.1201	0.1201	0.1202	0.12			-0.2
1201501685-LCS	23-JAN-2008 13:39	BAL216	2	0.1	0.119	0.1189	0.1685	0.1687			498
201339002	23-JAN-2008 13:39	BAL216	3	0.4	0.117	0.1171	0.1207	0.1206			8.75
1201501683-DUP (201339002)	23-JAN-2008 13:39	BAL216	4	0.4	0.12	0.1201	0.1235	0.1235			8.5
201365001	23-JAN-2008 13:39	BAL216	5	0.036	0.121	0.1211	0.1398	0.14			525
1201501684-DUP (201365001)	23-JAN-2008 13:39	BAL216	6	0.036	0.1167	0.1167	0.1351	0.1354			519.4444
201384005	23-JAN-2008 13:39	BAL216	7	0.5	0.1174	0.1175	0.1362	0.1362			37.4
201384006	23-JAN-2008 13:39	BAL216	8	0.4	0.116	0.1157	0.1307	0.1305			37
201384007	23-JAN-2008 13:39	BAL216	9	0.12	0.118	0.118	0.1244	0.1242			51.66667
201384008	23-JAN-2008 13:39	BAL216	10	0.88	0.1182	0.1182	0.118	0.1182			0
201388001	23-JAN-2008 13:39	BAL216	11	0.63	0.1188	0.119	0.1313	0.1315			19.84127
201388002	23-JAN-2008 13:39	BAL216	12	0.985	0.1182	0.1182	0.131	0.1311			13.09645
201394001	23-JAN-2008 13:39	BAL216	13	0.09	0.1194	0.1192	0.1384	0.1382			211.1111
201395001	23-JAN-2008 13:39	BAL216	14	0.145	0.1203	0.1204	0.1349	0.1348			99.31034
201408001	23-JAN-2008 13:39	BAL216	15	0.016	0.1182	0.1182	0.1279	0.128			612.5

Comments: **A) TSS** Result = (Final Filter Wt - Initial Filter Wt) * 1000 / Aliquot

In Oven Date/Time: 23-JAN-08 13:39:49
Out Oven Date/Time: 24-JAN-08 09:15:32
In Oven Temperature: 103 C
Out Oven Temperature: 103 C

Note: Aliquot is used for the determination of the effective MDL and PQL in LIMS
All Weights are in Grams

UCDAVIS

University of California at Davis
Environmental Health and Safety - TB 30
One Shields Avenue
Davis, CA 95616

Field Chain-of-Custody Form

Page 2 of 233

Lab Name and Address:	Project Name:	Date:	Page: of	P.O.#
Joanne Harley 843-769-7387 General Engineering Labs, Inc. 2040 Savage Road Charleston, SC 29407	LEHR Stormwater Sampling	2-25-08	1 of 1	UCD9-809575

203493

Sample ID	Collection	Matrix Code*	Sample Type**	Field Preserved (Y or N)	Number of Containers	Hardness	Iron		TOC		TDS	TSS	Nitrate as N		Oil & Grease							Comments
STMW0144	Date: 2-24-08 Time: 1030	SW	G	Y	5	✓	✓		✓		✓	✓	✓		✓							
	Date: Time:																					
	Date: Time:																					
	Date: Time:																					
	Date: Time:																					
	Date: Time:																					
	Date: Time:																					
	Date: Time:																					

Relinquished by: (Signature)	Date:	Cooler Numbers
Jim Aborn	2-25-08 Time: 1200	
Received by: (Signature) Fed Ex	Date: Time:	
Relinquished by: (Signature)	Date: Time:	

Comments: Please contact Jim Aborn (530-752-8589) with any problems.

Received for Laboratory By: (Signature) [signature] Date: 2/26/08 Time: 1000

Method of Shipment: Airbill No.

Cooler Survey (pass / fail) _____ If FAIL do not open; contact the Program Development Department and the Radiation Safety Officer IMMEDIATELY.

Surveyed by: (Signature) Date: Time:

Cooler Condition Upon Receipt at Laboratory: Good

Seals Intact: YES K NO ____

Internal Cooler Temp: 3 °C; Samples in good condition: (Y/N) Y ; Samples surveyed (pass/fail) P

*Sample Matrix Codes

SW - Surface Water	AR - Air	SD - Sediment	
GW - Ground Water	SL - Soil	WW - Waste Water	BI - Biota
DW - Drinking Water	SG - Sludge	FI - Filter	O - Other

**Sample Type Codes

G - Grab
C - Composite
O - Other

EHSCOC.FRM

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: UCD	SDG/ARCOC/Work Order:
Received By: Erin Trimble	Date Received: 2/26/08

Suspected Hazard Information	Yes	No	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
Marked as radioactive?		X	Maximum Counts Observed*: 30 CPM
Classified Radioactive II by RSO?		X	
Marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Identified as Foreign Soil?		X	

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (4 +/- 2 C)?	X			Preservation Method: ice bags blue ice dry ice none other (describe) 3°C
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?	X			Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?	X			Sample ID's affected:
11	Number of containers received match number indicated on COC?	X			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	X			

Comments:
6748 2942 6467 3°C

PM (or PMA) review: Initials GT Date 2/27/08

List of current GEL Certifications as of 14 March 2008

State	Certification
Alaska	UST-062
Arizona	AZ0668
Arkansas	88-0651
CLIA	42D0904046
California	01151CA
Colorado	GenEngLabs
Connecticut	PH-0169
Dept. of Navy	NFESC 413
EPA	WG-15J
Florida/NELAP	E87156
Georgia	E87156 (FL/NELAP)
Hawaii	N/A
Idaho	N/A
Illinois	200029
Indiana	C-SC-01
Kansas	E-10332
Kentucky	90129
Louisiana	03046
Maryland	270
Massachusetts	M-SC012
Michigan	9903
Nevada	SC12
New Jersey	SC002
New Mexico	FL NELAP E87156
New York	11501
North Carolina	233
North Carolina Drinking W	45709
North Dakota	R-158
Oklahoma	9904
Pennsylvania	68-00485
South Carolina	10120001/10585001/10120002
Tennessee	02934
Texas NELAP	T104704235-07-TX
U.S. Dept. of Agriculture	S-52597
US Army Corps of Engineer	N/A
Utah	8037697376 GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Data Review Qualifier Definitions

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

Metals Analysis

Case Narrative

Metals Fractional Narrative
UC Davis (DMOP)
SDG 203493

Sample Analysis

Sample ID	Client ID
203493001	STMW0144
1201524624	Method Blank (MB) **ICP**
1201524625	Laboratory Control Sample (LCS)
1201524636	203581001(20080225M00049L) Serial Dilution (SD)
1201524629	203581001(20080225M00049D) Sample Duplicate (DUP)
1201524626	203581001(20080225M00049S) Matrix Spike (MS)
1201529766	203581001(20080225M00049SD) Matrix Spike Duplicate (MSD)

The sample in this SDG was analyzed on an "as received" basis.

Method/Analysis Information

Analytical Batch: 730799
Prep Batch : 730795
Standard Operating Procedures: GL-MA-E-013 REV# 17 and GL-MA-E-006 REV# 9
Analytical Method: SW846 3005/6010B
Prep Method : SW846 3005A

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic

pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits.

ICSA/ICSAB Statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Sample Statement
The following sample was selected as the quality control (QC) sample for this SDG: 203581001 (20080225M00049).

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. All applicable elements met the acceptance criteria.

Matrix Spike Duplicate (MSD) Recovery Statement
The percent recovery (%R) obtained from the MSD analyses are evaluated when the sample concentration is less than four time (4X) the spike concentration added. All applicable elements met the acceptance criteria.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL for CVAA, 50X the IDL for ICP, and 100X the IDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG did not require dilutions.

Preparation Information
The sample in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Nonconformance Documentation
Nonconformance reports (NCRs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case

narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Nikki-Lee A. Elmore **Date:** 3.17.08

Sample Data Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

DMOP001 UC Davis

Client SDG: 203493 GEL Work Order: 203493

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

J Value is estimated

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Joanne Harley.

Nik-Cole A. Elmore 3.17.08

Reviewed by

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : UC Davis
Address : EH & S
One Shields Avenue
Davis, California 95616
Contact: Ms. Christine Judal
Project: **LEHR GW Monitoring-Cert.of Analysis Package**

Report Date: March 11, 2008

Client Sample ID:	STMW0144	Project:	DMOP00104
Sample ID:	203493001	Client ID:	DMOP001
Matrix:	Storm Water		
Collect Date:	24-FEB-08 10:30		
Receive Date:	26-FEB-08		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP											
3005/6010 Iron Federal											
Iron		8920	25.0	100	ug/L	1	HSC	03/06/08	1314	730799	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-TRACE SW846 3005A	BXA1	03/04/08	2202	730795

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 3005/6010B	

Quality Control Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: March 11, 2008

UC Davis
EH & S
One Shields Avenue
Davis, California
Contact: **Ms. Christine Judal**

Workorder: **203493**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Metals Analysis-ICP											
Batch 730799											
QC1201524629 203581001 DUP											
Iron		U	5.85	U	5.95	ug/L	N/A ^		(+/-100)	HSC	03/06/08 13:39
QC1201524625 LCS											
Iron	5000				4990	ug/L		100	(80%-120%)		03/06/08 13:08
QC1201524624 MB											
Iron				U	2.38	ug/L					03/06/08 13:01
QC1201524626 203581001 MS											
Iron	5000	U	5.85		5040	ug/L		101	(75%-125%)		03/06/08 13:46
QC1201529766 203581001 MSD											
Iron	5000	U	5.85		5060	ug/L	0	101	(0%-20%)		03/06/08 13:51
QC1201524636 203581001 SDILT											
Iron		U	5.85	U	2.50	ug/L	N/A				03/06/08 13:57

Notes:
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- H Analytical holding time was exceeded
- J Value is estimated
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
- ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
- d 5-day BOD--The 2:1 depletion requirement was not met for this sample
- h Preparation or preservation holding time was exceeded

QC Summary

Workorder: **203493**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

METALS
−2a−
Initial and Continuing Calibration Verification

SDG No: 203493

Contract: DMOP00104 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Iron	5130	ug/L	5000	ug/L	102.6	90.0 − 110.0	P	06−MAR−08 07:10	030608A−1
CCV01										
	Iron	5050	ug/L	5000	ug/L	101	90.0 − 110.0	P	06−MAR−08 08:05	030608A−1
CCV02										
	Iron	5060	ug/L	5000	ug/L	101.2	90.0 − 110.0	P	06−MAR−08 08:43	030608A−1
CCV03										
	Iron	5070	ug/L	5000	ug/L	101.4	90.0 − 110.0	P	06−MAR−08 10:10	030608A−1
CCV04										
	Iron	5050	ug/L	5000	ug/L	101.1	90.0 − 110.0	P	06−MAR−08 11:16	030608A−1
CCV05										
	Iron	5020	ug/L	5000	ug/L	100.5	90.0 − 110.0	P	06−MAR−08 11:56	030608A−1
CCV06										
	Iron	5010	ug/L	5000	ug/L	100.2	90.0 − 110.0	P	06−MAR−08 12:37	030608A−1
CCV07										
	Iron	4910	ug/L	5000	ug/L	98.3	90.0 − 110.0	P	06−MAR−08 13:27	030608A−1
CCV08										
	Iron	5050	ug/L	5000	ug/L	101	90.0 − 110.0	P	06−MAR−08 14:32	030608A−1

METALS
−2b−
CRDL Standard for AA & ICP

SDG No: 203493

Contract: DMOP00104 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
PQL01										
	Iron	106	ug/L	100	ug/L	105.75	70.0 − 130.0	P	06−MAR−08 07:23	030608A−1

Metals
−3a−
Initial and Continuing Calibration Blank Summary

SDG No.: 203493

Contract: DMOP00104

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Iron	25.0	+/−100	U	25.0	100	LIQ	P	06−MAR−08 07:16	030608A−1
CCB01										
	Iron	25.0	+/−100	U	25.0	100	LIQ	P	06−MAR−08 08:11	030608A−1
CCB02										
	Iron	25.0	+/−100	U	25.0	100	LIQ	P	06−MAR−08 08:49	030608A−1
CCB03										
	Iron	25.0	+/−100	U	25.0	100	LIQ	P	06−MAR−08 10:15	030608A−1
CCB04										
	Iron	25.0	+/−100	U	25.0	100	LIQ	P	06−MAR−08 11:21	030608A−1
CCB05										
	Iron	25.0	+/−100	U	25.0	100	LIQ	P	06−MAR−08 12:01	030608A−1
CCB06										
	Iron	25.0	+/−100	U	25.0	100	LIQ	P	06−MAR−08 12:42	030608A−1
CCB07										
	Iron	25.0	+/−100	U	25.0	100	LIQ	P	06−MAR−08 13:32	030608A−1
CCB08										
	Iron	25.0	+/−100	U	25.0	100	LIQ	P	06−MAR−08 14:37	030608A−1

METALS
−4−
Interference Check Sample

SDG No: 203493

Contract: DMOP00104 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Iron	185000	ug/L	200000	ug/L	92.7	80.0 − 120.0	06−MAR−08 07:29	030608A−1
ICSAB01									
	Iron	183000	ug/L	200000	ug/L	91.7	80.0 − 120.0	06−MAR−08 07:35	030608A−1

METALS
−13−
SAMPLE PREPARATION SUMMARY

SDG No: 203493 **Method Type:** P

Contract: DMOP00104 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	730795						
1201524624	MB for batch 730795	MB	WATER	04−MAR−08	50mL	50mL	
1201524625	LCS for batch 730795	LCS	WATER	04−MAR−08	50mL	50mL	
1201524626	20080225M00049S	MS	WATER	04−MAR−08	50mL	50mL	
1201529766	20080225M00049SD	MSD	WATER	04−MAR−08	50mL	50mL	
1201524629	20080225M00049D	DUP	WATER	04−MAR−08	50mL	50mL	
203493001	STMW0144	SAMPLE	STORM WATER	04−MAR−08	50mL	50mL	

Metals
−14−
Analysis Run Log

Contract: DMOP00104
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 06−MAR−08
End Date: 06−MAR−08
Client Sdg: 203493
Method P
Data File: 030608A−1

Samp No.	D/F	Run Time	Fe
S0.0	1	06:42	X
S0.1	1	06:49	X
S0.5	1	06:55	X
SCAL	1	07:00	X
S10	1	07:06	X
ICV01	1	07:10	X
ICB01	1	07:16	X
PQL01	1	07:23	X
ICSA01	1	07:29	X
ICSAB01	1	07:35	X
LR01	1	07:40	X
LR02	1	07:46	X
ZZZZZZ	1	07:53	
ZZZZZZ	1	07:58	
CCV01	1	08:05	X
CCB01	1	08:11	X
ZZZZZZ	5	08:29	
ZZZZZZ	10	08:36	
CCV02	1	08:43	X
CCB02	1	08:49	X
ZZZZZZ	1	09:04	
ZZZZZZ	1	09:10	
ZZZZZZ	1	09:16	
ZZZZZZ	1	09:23	
ZZZZZZ	1	09:30	
ZZZZZZ	5	09:35	
ZZZZZZ	1	09:42	
ZZZZZZ	1	09:49	
ZZZZZZ	1	09:56	
ZZZZZZ	1	10:04	
CCV03	1	10:10	X
CCB03	1	10:15	X
ZZZZZZ	1	10:22	
ZZZZZZ	2	10:28	
ZZZZZZ	1	10:34	
ZZZZZZ	1	10:40	
ZZZZZZ	1	10:47	
ZZZZZZ	1	10:52	
ZZZZZZ	5	10:58	
ZZZZZZ	1	11:04	

Metals
−14−
Analysis Run Log

Samp No.	D/F	Run Time	Fe
ZZZZZZ	1	11:10	
CCV04	1	11:16	X
CCB04	1	11:21	X
ZZZZZZ	1	11:31	
ZZZZZZ	1	11:38	
ZZZZZZ	1	11:43	
ZZZZZZ	1	11:49	
CCV05	1	11:56	X
CCB05	1	12:01	X
ZZZZZZ	1	12:08	
ZZZZZZ	1	12:15	
ZZZZZZ	1	12:20	
ZZZZZZ	1	12:26	
ZZZZZZ	5	12:31	
CCV06	1	12:37	X
CCB06	1	12:42	X
1201524624	1	13:01	X
1201524625	1	13:08	X
203493001	1	13:14	X
ZZZZZZ	1	13:20	
CCV07	1	13:27	X
CCB07	1	13:32	X
1201524629	1	13:39	X
1201524626	1	13:46	X
1201529766	1	13:51	X
1201524636	5	13:57	X
ZZZZZZ	1	14:04	
ZZZZZZ	1	14:11	
ZZZZZZ	1	14:18	
ZZZZZZ	1	14:25	
CCV08	1	14:32	X
CCB08	1	14:37	X

Standards

METALS
−10−
Instrument Detection Limits

SDG NO. 203493

Contract: DMOP00104 **Lab Code: GEL** **MDL Effective Date:** 23−JUL−07

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
LIQUID	Iron	259.94	25.0	100

METALS
−11−
Interelement Correction Factors

Lab Code: GEL **GEL Job No:** **203493**
Contract: **DMOP00104**
Instrument: **OPTIMA3** **Effective Dates:** **20−DEC−07**
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	**396.153**	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	**206.836**	0.01975	0.00000	0.00000	0.00000	0.00000
Arsenic	**188.979**	0.00000	0.00000	1.94003	0.00000	0.00000
Barium	**233.527**	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	**313.107**	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	**249.677**	0.00976	0.00000	0.00000	0.00000	0.00000
Cadmium	**225.502**	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	**267.716**	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	**228.616**	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	**324.752**	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	**238.204**	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	**220.353**	−0.19421	0.00000	0.00000	0.00000	0.00000
Magnesium	**279.077**	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	**257.61**	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	**202.031**	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	**231.604**	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	**214.914**	−0.26818	0.00000	0.00000	0.00000	0.00000
Selenium	**196.026**	−0.10341	0.00000	0.00000	0.00000	0.00000
Silica	**196.026**	0.00000	0.00000	0.00000	0.00000	0.00000
	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	**251.611**	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	**328.068**	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	**421.552**	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	**181.975**	0.12612	0.00000	0.00000	0.00000	0.00000
Thallium	**190.801**	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	**189.927**	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	**334.94**	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	**409.014**	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	**292.402**	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	**213.857**	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
−11−
Interelement Correction Factors

Lab Code: GEL **GEL Job No:** **203493**
Contract: **DMOP00104**
Instrument: **OPTIMA3** **Effective Dates:** **20−DEC−07**
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	**396.153**	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	**206.836**	0.00000	0.00000	12.9225	0.00000	0.00000
Arsenic	**188.979**	5.57252	0.00000	0.00000	0.00000	0.00000
Barium	**233.527**	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	**313.107**	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	**249.677**	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	**225.502**	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	**267.716**	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	**228.616**	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	**324.752**	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	**238.204**	0.00000	0.00000	0.00000	−30.3993	0.00000
Lead	**220.353**	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	**279.077**	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	**257.61**	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	**202.031**	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	**231.604**	0.00000	0.00000	0.00000	0.82020	0.00000
Phosphorous	**214.914**	0.00000	0.00000	0.00000	0.00000	137.85
Selenium	**196.026**	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	**196.026**	0.00000	0.00000	0.00000	0.00000	0.00000
	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	**251.611**	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	**328.068**	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	**421.552**	0.00000	0.00000	0.00261	0.00000	0.00000
Sulfur	**181.975**	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	**190.801**	0.00000	0.00000	0.00000	3.81173	0.00000
Tin	**189.927**	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	**334.94**	0.00000	0.00000	0.34958	0.00000	0.00000
Uranium	**409.014**	0.00000	0.00000	2.82176	0.00000	0.00000
Vanadium	**292.402**	0.00000	0.00000	0.27339	0.00000	0.00000
Zinc	**213.857**	0.00000	0.00000	0.00000	0.00000	1.18435

METALS
−11−
Interelement Correction Factors

Lab Code: GEL **GEL Job No:** **203493**
Contract: **DMOP00104**
Instrument: **OPTIMA3** **Effective Dates:** **20−DEC−07**
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	**396.153**	0.00000	0.00000	0.00000	0.00000	39.0615
Antimony	**206.836**	0.00000	0.00000	0.00000	0.00000	−2.85089
Arsenic	**188.979**	−0.09839	0.00000	0.00000	0.00000	0.00000
Barium	**233.527**	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	**313.107**	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	**249.677**	0.01914	0.00000	0.00223	0.00000	0.00000
Cadmium	**225.502**	0.07029	0.00000	0.00000	0.00000	0.00000
Chromium	**267.716**	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	**228.616**	0.00000	0.00000	0.00000	0.00000	−2.60682
Copper	**324.752**	−0.05749	0.00000	0.00000	0.00000	0.00000
Iron	**238.204**	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	**220.353**	0.06126	0.00000	0.00000	0.00000	−2.46626
Magnesium	**279.077**	0.51508	0.00000	0.00000	0.00000	−26.2800
Manganese	**257.61**	−0.10974	0.00000	0.01828	0.00000	0.00000
Molybdenum	**202.031**	−0.05912	0.00000	0.00000	0.00000	0.00000
Nickel	**231.604**	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	**214.914**	0.81481	0.00000	0.00000	0.00000	0.00000
Selenium	**196.026**	−3.12224	0.00000	0.00000	0.00000	0.00000
Silica	**196.026**	0.00000	0.00000	0.00000	0.00000	35.0785
	251.611	0.00000	0.00000	0.00000	0.00000	
Silicon	**251.611**	0.00000	0.00000	0.00000	0.00000	15.7929
Silver	**328.068**	−0.30582	0.00000	0.00000	0.00000	0.00000
Strontium	**421.552**	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	**181.975**	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	**190.801**	0.00000	0.00000	0.00000	−5.44506	0.00000
Tin	**189.927**	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	**334.94**	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	**409.014**	0.10935	0.00000	0.00000	0.00000	−2.88534
Vanadium	**292.402**	0.13992	0.00000	−0.01205	0.00000	−10.1669
Zinc	**213.857**	0.12635	0.00000	0.03383	0.00000	0.00000

METALS
−11−
Interelement Correction Factors

Lab Code: GEL **GEL Job No:** **203493**
Contract: **DMOP00104**
Instrument: **OPTIMA3** **Effective Dates:** **20−DEC−07**
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Nickel	Phosphorous	Selenium	Silica	Silicon
Aluminum	**396.153**	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	**206.836**	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	**188.979**	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	**233.527**	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	**313.107**	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	**249.677**	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	**225.502**	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	**267.716**	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	**228.616**	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	**324.752**	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	**238.204**	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	**220.353**	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	**279.077**	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	**257.61**	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	**202.031**	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	**231.604**	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	**214.914**	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	**196.026**	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	**196.026**	0.00000	0.00000	0.00000	0.00000	0.00000
	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	**251.611**	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	**328.068**	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	**421.552**	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	**181.975**	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	**190.801**	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	**189.927**	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	**334.94**	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	**409.014**	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	**292.402**	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	**213.857**	6.58595	0.00000	0.00000	0.00000	0.00000

METALS
−11−
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 203493
Contract: DMOP00104
Instrument: OPTIMA3
Effective Dates: 20−DEC−07
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Silver	Strontium	Sulfur	Thallium	Tin
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	−1.39075
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	225.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
−11−
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 203493
Contract: DMOP00104
Instrument: OPTIMA3
Effective Dates: 20−DEC−07
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	−3.82471	−0.76850	−1.01783	0.00000
Arsenic	188.979	−5.29173	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	−2.19400	0.00000
Beryllium	313.107	−2.52703	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000
Cadmium	225.502	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	−1.71798	0.00000
Cobalt	228.616	2.07408	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.81083	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.59071	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	−0.92805	0.00000	0.00000
Silica	196.026	0.00000	0.00000	0.00000	0.00000
	251.611	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.77254	−3.08130	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	−4.91504	0.00000	1.71501	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.44774	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	1.01224	−1.92082	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000

METALS
−12−
Linear Ranges

SDG NO. 203493

Contract: DMOP00104 **Lab Code: GEL**

Instrument ID OPTIMA3

Analyte	Integration Time	LDR	Units	Effective Date
Iron		400000	ug/L	01−FEB−08

Raw Data

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Reprocessing Begun
Logged In Analyst: Optima3 **Technique: ICP Continuous**

Results Data Set (original): 030608
Results Library (original): C:\pe\Optima3\Results\Results.mdb
Results Data Set (reprocessed): 030608A
Results Library (reprocessed): C:\pe\Optima3\Results\Results.mdb

==========

Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 3/6/2008 08:18:55**
IEC File: 120607 iec.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 3/6/2008 06:42:59**
Analyst: **Data Type: Reprocessed on 3/6/2008 08:21:08**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1005741.0	1005741.0	100.60	%	06:46:08
1	Sc Radial	105812.8	105812.8	101	%	06:44:51
1	Y 371.029	852769.3	852769.3	100.60	%	06:46:08
1	Y RADIAL	91837.4	91837.4	100.6	%	06:44:51
1	Ag 328.068†	1085.4	1078.9	[0.00]	ug/L	06:46:08

1	Al 396.153Radial†	535.0	530.8	[0.00]	ug/L	06:44:51
1	As 188.979†	-61.1	-60.7	[0.00]	ug/L	06:46:28
1	B 249.677†	-743.6	-739.1	[0.00]	ug/L	06:46:28
1	Ba 233.527†	42.5	42.2	[0.00]	ug/L	06:46:28
1	Be 313.107†	-3771.2	-3748.6	[0.00]	ug/L	06:46:08
1	Ca 317.933Radial†	682.2	676.9	[0.00]	ug/L	06:45:11
1	Cd 226.502†	-232.8	-231.4	[0.00]	ug/L	06:46:28
1	Co 228.616†	-214.6	-213.3	[0.00]	ug/L	06:46:28
1	Cr 267.716†	-54.0	-53.6	[0.00]	ug/L	06:46:28
1	Cu 324.752†	8604.5	8553.1	[0.00]	ug/L	06:46:08
1	Fe 238.204 Radial†	62.8	62.3	[0.00]	ug/L	06:45:11
1	K 766.490 Radial†	3376.9	3350.7	[0.00]	ug/L	06:44:51
1	Mg 279.077 IEC†	90.4	89.7	[0.00]	ug/L	06:45:11
1	Mn 257.610†	1046.3	1040.0	[0.00]	ug/L	06:46:28
1	Mo 202.031†	28.6	28.4	[0.00]	ug/L	06:46:28
1	Na 589.592 Radial†	-1212.0	-1202.6	[0.00]	ug/L	06:44:51
1	Ni 231.604†	287.5	285.8	[0.00]	ug/L	06:46:28
1	P 214.914†	835.2	830.2	[0.00]	ug/L	06:46:28
1	Pb 220.353†	-96.6	-96.1	[0.00]	ug/L	06:46:28
1	S 181.975 Axial†	161.9	160.9	[0.00]	ug/L	06:46:28
1	Sb 206.836†	130.3	129.6	[0.00]	ug/L	06:46:28
1	Se 196.026†	-63.3	-63.0	[0.00]	ug/L	06:46:28
1	Si 251.611†	935.7	930.2	[0.00]	ug/L	06:46:28
1	Sn 189.927†	-5.6	-5.6	[0.00]	ug/L	06:46:28
1	Sr 421.552†	-1952.5	-1937.3	[0.00]	ug/L	06:44:51
1	Ti 334.940†	-1455.9	-1447.2	[0.00]	ug/L	06:46:28
1	Tl 190.801†	-128.1	-127.4	[0.00]	ug/L	06:46:28
1	U 409.014†	5372.0	5339.9	[0.00]	ug/L	06:46:08
1	V 292.402†	-2480.0	-2465.2	[0.00]	ug/L	06:46:28
1	Zn 213.857†	2060.4	2048.0	[0.00]	ug/L	06:46:28
1	SiO2†	975.5	969.7	[0.00]	ug/L	06:47:25
2	Sc 361.383	996768.9	996768.9	99.704	%	06:46:34
2	Sc Radial	104713.9	104713.9	99.7	%	06:45:17
2	Y 371.029	845233.7	845233.7	99.714	%	06:46:34
2	Y RADIAL	90954.8	90954.8	99.68	%	06:45:17
2	Ag 328.068†	1118.3	1121.6	[0.00]	ug/L	06:46:34
2	Al 396.153Radial†	555.9	557.3	[0.00]	ug/L	06:45:17
2	As 188.979†	-63.8	-64.0	[0.00]	ug/L	06:46:54
2	B 249.677†	-797.1	-799.5	[0.00]	ug/L	06:46:54
2	Ba 233.527†	27.2	27.3	[0.00]	ug/L	06:46:54
2	Be 313.107†	-3710.2	-3721.2	[0.00]	ug/L	06:46:34
2	Ca 317.933Radial†	735.4	737.4	[0.00]	ug/L	06:45:37
2	Cd 226.502†	-221.3	-222.0	[0.00]	ug/L	06:46:54
2	Co 228.616†	-198.0	-198.6	[0.00]	ug/L	06:46:54
2	Cr 267.716†	-55.9	-56.1	[0.00]	ug/L	06:46:54
2	Cu 324.752†	8565.9	8591.4	[0.00]	ug/L	06:46:34
2	Fe 238.204 Radial†	54.6	54.8	[0.00]	ug/L	06:45:37
2	K 766.490 Radial†	3494.2	3503.5	[0.00]	ug/L	06:45:17
2	Mg 279.077 IEC†	74.7	74.9	[0.00]	ug/L	06:45:37
2	Mn 257.610†	1057.2	1060.3	[0.00]	ug/L	06:46:54
2	Mo 202.031†	17.5	17.6	[0.00]	ug/L	06:46:54
2	Na 589.592 Radial†	-1382.2	-1385.9	[0.00]	ug/L	06:45:17
2	Ni 231.604†	293.8	294.7	[0.00]	ug/L	06:46:54
2	P 214.914†	767.6	769.9	[0.00]	ug/L	06:46:54
2	Pb 220.353†	-109.3	-109.6	[0.00]	ug/L	06:46:54
2	S 181.975 Axial†	167.1	167.6	[0.00]	ug/L	06:46:54
2	Sb 206.836†	136.7	137.1	[0.00]	ug/L	06:46:54
2	Se 196.026†	-51.9	-52.0	[0.00]	ug/L	06:46:54
2	Si 251.611†	931.3	934.1	[0.00]	ug/L	06:46:54
2	Sn 189.927†	-13.0	-13.0	[0.00]	ug/L	06:46:54
2	Sr 421.552†	-1990.3	-1995.6	[0.00]	ug/L	06:45:17
2	Ti 334.940†	-1403.4	-1407.6	[0.00]	ug/L	06:46:54
2	Tl 190.801†	-147.6	-148.0	[0.00]	ug/L	06:46:54
2	U 409.014†	5393.2	5409.3	[0.00]	ug/L	06:46:34
2	V 292.402†	-2533.4	-2540.9	[0.00]	ug/L	06:46:54
2	Zn 213.857†	2011.5	2017.5	[0.00]	ug/L	06:46:54
2	SiO2†	974.5	977.4	[0.00]	ug/L	06:47:30
3	Sc 361.383	996677.6	996677.6	99.695	%	06:46:59
3	Sc Radial	104447.8	104447.8	99.5	%	06:45:42
3	Y 371.029	844963.2	844963.2	99.682	%	06:46:59
3	Y RADIAL	90947.5	90947.5	99.67	%	06:45:42

3	Ag 328.068†	1175.0	1178.6	[0.00]	ug/L	06:46:59
3	Al 396.153Radial†	595.5	598.6	[0.00]	ug/L	06:45:42
3	As 188.979†	-60.7	-60.8	[0.00]	ug/L	06:47:20
3	B 249.677†	-799.1	-801.5	[0.00]	ug/L	06:47:20
3	Ba 233.527†	14.7	14.7	[0.00]	ug/L	06:47:20
3	Be 313.107†	-3692.0	-3703.4	[0.00]	ug/L	06:46:59
3	Ca 317.933Radial†	723.7	727.5	[0.00]	ug/L	06:46:02
3	Cd 226.502†	-214.8	-215.4	[0.00]	ug/L	06:47:20
3	Co 228.616†	-188.2	-188.8	[0.00]	ug/L	06:47:20
3	Cr 267.716†	-53.6	-53.7	[0.00]	ug/L	06:47:20
3	Cu 324.752†	8551.1	8577.3	[0.00]	ug/L	06:46:59
3	Fe 238.204 Radial†	39.1	39.3	[0.00]	ug/L	06:46:02
3	K 766.490 Radial†	3340.6	3358.0	[0.00]	ug/L	06:45:42
3	Mg 279.077 IEC†	70.3	70.6	[0.00]	ug/L	06:46:02
3	Mn 257.610†	1056.5	1059.8	[0.00]	ug/L	06:47:20
3	Mo 202.031†	43.3	43.4	[0.00]	ug/L	06:47:20
3	Na 589.592 Radial†	-1437.4	-1444.9	[0.00]	ug/L	06:45:42
3	Ni 231.604†	270.1	270.9	[0.00]	ug/L	06:47:20
3	P 214.914†	794.3	796.7	[0.00]	ug/L	06:47:20
3	Pb 220.353†	-122.5	-122.9	[0.00]	ug/L	06:47:20
3	S 181.975 Axial†	160.3	160.8	[0.00]	ug/L	06:47:20
3	Sb 206.836†	128.8	129.2	[0.00]	ug/L	06:47:20
3	Se 196.026†	-66.0	-66.2	[0.00]	ug/L	06:47:20
3	Si 251.611†	936.2	939.0	[0.00]	ug/L	06:47:20
3	Sn 189.927†	-12.1	-12.2	[0.00]	ug/L	06:47:20
3	Sr 421.552†	-1980.9	-1991.2	[0.00]	ug/L	06:45:42
3	Ti 334.940†	-1486.3	-1490.9	[0.00]	ug/L	06:47:20
3	Tl 190.801†	-138.8	-139.2	[0.00]	ug/L	06:47:20
3	U 409.014†	5381.3	5397.8	[0.00]	ug/L	06:46:59
3	V 292.402†	-2492.2	-2499.8	[0.00]	ug/L	06:47:20
3	Zn 213.857†	2028.5	2034.7	[0.00]	ug/L	06:47:20
3	SiO2†	986.2	989.2	[0.00]	ug/L	06:47:35

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	999729.1	5206.58	0.52%	100.00	%
Sc Radial	104991.5	723.62	0.69%	100	%
Y 371.029	847655.4	4430.84	0.52%	100.00	%
Y RADIAL	91246.6	511.71	0.56%	100.0	%
Ag 328.068†	1126.4	49.99	4.44%	[0.00]	ug/L
Al 396.153Radial†	562.3	34.17	6.08%	[0.00]	ug/L
As 188.979†	-61.9	1.85	2.99%	[0.00]	ug/L
B 249.677†	-780.0	35.45	4.54%	[0.00]	ug/L
Ba 233.527†	28.1	13.77	49.04%	[0.00]	ug/L
Be 313.107†	-3724.4	22.79	0.61%	[0.00]	ug/L
Ca 317.933Radial†	713.9	32.46	4.55%	[0.00]	ug/L
Cd 226.502†	-222.9	8.05	3.61%	[0.00]	ug/L
Co 228.616†	-200.2	12.34	6.17%	[0.00]	ug/L
Cr 267.716†	-54.5	1.38	2.54%	[0.00]	ug/L
Cu 324.752†	8573.9	19.38	0.23%	[0.00]	ug/L
Fe 238.204 Radial†	52.1	11.70	22.44%	[0.00]	ug/L
K 766.490 Radial†	3404.1	86.19	2.53%	[0.00]	ug/L
Mg 279.077 IEC†	78.4	10.02	12.78%	[0.00]	ug/L
Mn 257.610†	1053.4	11.58	1.10%	[0.00]	ug/L
Mo 202.031†	29.8	12.97	43.54%	[0.00]	ug/L
Na 589.592 Radial†	-1344.5	126.34	9.40%	[0.00]	ug/L
Ni 231.604†	283.8	12.03	4.24%	[0.00]	ug/L
P 214.914†	799.0	30.23	3.78%	[0.00]	ug/L
Pb 220.353†	-109.5	13.42	12.25%	[0.00]	ug/L
S 181.975 Axial†	163.1	3.91	2.39%	[0.00]	ug/L
Sb 206.836†	132.0	4.48	3.40%	[0.00]	ug/L
Se 196.026†	-60.4	7.42	12.28%	[0.00]	ug/L
Si 251.611†	934.4	4.44	0.48%	[0.00]	ug/L
Sn 189.927†	-10.3	4.08	39.79%	[0.00]	ug/L
Sr 421.552†	-1974.7	32.43	1.64%	[0.00]	ug/L
Ti 334.940†	-1448.5	41.67	2.88%	[0.00]	ug/L
Tl 190.801†	-138.2	10.36	7.50%	[0.00]	ug/L
U 409.014†	5382.3	37.18	0.69%	[0.00]	ug/L
V 292.402†	-2502.0	37.91	1.52%	[0.00]	ug/L

Zn 213.857†	2033.4	15.33	0.75%	[0.00] ug/L
SiO2†	978.8	9.85	1.01%	[0.00] ug/L

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Sequence No.: 2 **Autosampler Location: 2**
Sample ID: S0.1 **Date Collected: 3/6/2008 06:49:44**
Analyst: **Data Type: Reprocessed on 3/6/2008 08:21:09**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	978655.3	978655.3	97.892	%	06:51:54
1	Sc Radial	105706.0	105706.0	101	%	06:51:37
1	Y 371.029	826599.9	826599.9	97.516	%	06:51:54
1	Y RADIAL	92131.5	92131.5	101.0	%	06:51:37
1	Ag 328.068†	26539.8	25984.9	[100]	ug/L	06:51:54
1	As 188.979†	812.3	891.7	[100]	ug/L	06:52:14
1	B 249.677†	6331.4	7247.8	[100]	ug/L	06:52:14
1	Ba 233.527†	34546.1	35262.0	[100]	ug/L	06:51:54
1	Be 313.107†	344464.2	355606.1	[100]	ug/L	06:51:54
1	Cd 226.502†	19082.6	19716.5	[100]	ug/L	06:52:14
1	Co 228.616†	11753.7	12207.0	[100]	ug/L	06:52:14
1	Cr 267.716†	13097.8	13434.3	[100]	ug/L	06:52:14
1	Cu 324.752†	48740.6	41216.3	[100]	ug/L	06:51:54
1	K 766.490 Radial†	7907.2	4449.7	[1000]	ug/L	06:51:37
1	Mn 257.610†	180514.5	183348.3	[100]	ug/L	06:51:54
1	Mo 202.031†	4445.6	4511.6	[100]	ug/L	06:52:14
1	Ni 231.604†	9861.4	9790.0	[100]	ug/L	06:52:14
1	P 214.914†	4019.8	3307.4	[500]	ug/L	06:52:14
1	Pb 220.353†	2217.9	2375.2	[100]	ug/L	06:52:14
1	S 181.975 Axial†	736.3	589.1	[200]	ug/L	06:52:14
1	Sb 206.836†	1199.9	1093.7	[100]	ug/L	06:52:14
1	Se 196.026†	572.5	645.2	[100]	ug/L	06:52:14
1	Si 251.611†	29860.5	29569.1	[500]	ug/L	06:51:54
1	Sn 189.927†	2027.1	2081.0	[100]	ug/L	06:52:14
1	Sr 421.552†	113043.3	114254.0	[100]	ug/L	06:51:37
1	Ti 334.940†	74661.8	77718.1	[100]	ug/L	06:51:54
1	Tl 190.801†	1198.8	1362.8	[100]	ug/L	06:52:14
1	U 409.014†	7902.3	2690.1	[100]	ug/L	06:51:54
1	V 292.402†	15200.4	18029.7	[100]	ug/L	06:51:54
1	Zn 213.857†	32626.6	31295.7	[100]	ug/L	06:51:54
1	SiO2†	29835.7	29499.4	[1069.5]	ug/L	06:53:11
2	Sc 361.383	981141.1	981141.1	98.141	%	06:52:20
2	Sc Radial	104837.2	104837.2	99.9	%	06:51:42
2	Y 371.029	829368.5	829368.5	97.843	%	06:52:20
2	Y RADIAL	91174.7	91174.7	99.92	%	06:51:42
2	Ag 328.068†	26640.3	26018.6	[100]	ug/L	06:52:20
2	As 188.979†	810.1	887.3	[100]	ug/L	06:52:40
2	B 249.677†	6328.0	7228.0	[100]	ug/L	06:52:40
2	Ba 233.527†	34590.0	35217.3	[100]	ug/L	06:52:20
2	Be 313.107†	344520.8	354772.3	[100]	ug/L	06:52:20
2	Cd 226.502†	19169.5	19755.6	[100]	ug/L	06:52:40
2	Co 228.616†	11827.3	12251.6	[100]	ug/L	06:52:40
2	Cr 267.716†	13216.0	13520.8	[100]	ug/L	06:52:40
2	Cu 324.752†	48809.2	41160.0	[100]	ug/L	06:52:20
2	K 766.490 Radial†	7963.4	4571.1	[1000]	ug/L	06:51:42
2	Mn 257.610†	180384.3	182748.4	[100]	ug/L	06:52:20
2	Mo 202.031†	4478.4	4533.5	[100]	ug/L	06:52:40
2	Ni 231.604†	9913.7	9817.7	[100]	ug/L	06:52:40
2	P 214.914†	4039.3	3316.9	[500]	ug/L	06:52:40
2	Pb 220.353†	2231.6	2383.4	[100]	ug/L	06:52:40
2	S 181.975 Axial†	734.9	585.8	[200]	ug/L	06:52:40
2	Sb 206.836†	1198.9	1089.7	[100]	ug/L	06:52:40
2	Se 196.026†	566.8	637.9	[100]	ug/L	06:52:40
2	Si 251.611†	29718.9	29347.6	[500]	ug/L	06:52:20
2	Sn 189.927†	2035.9	2084.8	[100]	ug/L	06:52:40
2	Sr 421.552†	113327.5	115468.9	[100]	ug/L	06:51:42
2	Ti 334.940†	74803.7	77669.4	[100]	ug/L	06:52:20
2	Tl 190.801†	1203.5	1364.5	[100]	ug/L	06:52:40

2	U 409.014†	8066.7	2837.2	[100]	ug/L	06:52:20
2	V 292.402†	15167.0	17956.4	[100]	ug/L	06:52:20
2	Zn 213.857†	32658.0	31243.3	[100]	ug/L	06:52:20
2	SiO2†	29729.0	29313.4	[1069.5]	ug/L	06:53:16
3	Sc 361.383	987935.1	987935.1	98.820	%	06:52:46
3	Sc Radial	105320.7	105320.7	100	%	06:51:47
3	Y 371.029	833659.8	833659.8	98.349	%	06:52:46
3	Y RADIAL	91695.4	91695.4	100.5	%	06:51:47
3	Ag 328.068†	26646.2	25837.9	[100]	ug/L	06:52:46
3	As 188.979†	820.6	892.2	[100]	ug/L	06:53:06
3	B 249.677†	6336.6	7192.3	[100]	ug/L	06:53:06
3	Ba 233.527†	34719.4	35105.8	[100]	ug/L	06:52:46
3	Be 313.107†	346677.0	354540.0	[100]	ug/L	06:52:46
3	Cd 226.502†	19196.6	19648.7	[100]	ug/L	06:53:06
3	Co 228.616†	11859.0	12200.8	[100]	ug/L	06:53:06
3	Cr 267.716†	13185.6	13397.5	[100]	ug/L	06:53:06
3	Cu 324.752†	49427.5	41443.7	[100]	ug/L	06:52:46
3	K 766.490 Radial†	8125.6	4696.1	[1000]	ug/L	06:51:47
3	Mn 257.610†	181834.6	182952.0	[100]	ug/L	06:52:46
3	Mo 202.031†	4484.8	4508.6	[100]	ug/L	06:53:06
3	Ni 231.604†	9875.5	9709.6	[100]	ug/L	06:53:06
3	P 214.914†	4037.4	3286.6	[500]	ug/L	06:53:06
3	Pb 220.353†	2211.1	2347.0	[100]	ug/L	06:53:06
3	S 181.975 Axial†	740.1	585.8	[200]	ug/L	06:53:06
3	Sb 206.836†	1190.1	1072.4	[100]	ug/L	06:53:06
3	Se 196.026†	572.7	639.9	[100]	ug/L	06:53:06
3	Si 251.611†	30067.9	29492.4	[500]	ug/L	06:52:46
3	Sn 189.927†	2054.7	2089.5	[100]	ug/L	06:53:06
3	Sr 421.552†	114254.1	115871.7	[100]	ug/L	06:51:47
3	Ti 334.940†	75470.0	77819.5	[100]	ug/L	06:52:46
3	Tl 190.801†	1189.4	1341.8	[100]	ug/L	06:53:06
3	U 409.014†	8186.5	2901.9	[100]	ug/L	06:52:46
3	V 292.402†	15327.8	18012.8	[100]	ug/L	06:52:46
3	Zn 213.857†	32853.0	31211.8	[100]	ug/L	06:52:46
3	SiO2†	29571.9	28946.2	[1069.5]	ug/L	06:53:21

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	982577.2	4803.70	0.49%	98.284	%
Sc Radial	105288.0	435.29	0.41%	100	%
Y 371.029	829876.1	3557.21	0.43%	97.903	%
Y RADIAL	91667.2	479.05	0.52%	100.5	%
Ag 328.068†	25947.1	96.08	0.37%	[100]	ug/L
As 188.979†	890.4	2.71	0.30%	[100]	ug/L
B 249.677†	7222.7	28.13	0.39%	[100]	ug/L
Ba 233.527†	35195.0	80.40	0.23%	[100]	ug/L
Be 313.107†	354972.8	560.59	0.16%	[100]	ug/L
Cd 226.502†	19706.9	54.09	0.27%	[100]	ug/L
Co 228.616†	12219.8	27.72	0.23%	[100]	ug/L
Cr 267.716†	13450.9	63.31	0.47%	[100]	ug/L
Cu 324.752†	41273.3	150.17	0.36%	[100]	ug/L
K 766.490 Radial†	4572.3	123.24	2.70%	[1000]	ug/L
Mn 257.610†	183016.2	305.05	0.17%	[100]	ug/L
Mo 202.031†	4517.9	13.60	0.30%	[100]	ug/L
Ni 231.604†	9772.4	56.15	0.57%	[100]	ug/L
P 214.914†	3303.6	15.50	0.47%	[500]	ug/L
Pb 220.353†	2368.5	19.09	0.81%	[100]	ug/L
S 181.975 Axial†	586.9	1.90	0.32%	[200]	ug/L
Sb 206.836†	1085.3	11.33	1.04%	[100]	ug/L
Se 196.026†	641.0	3.78	0.59%	[100]	ug/L
Si 251.611†	29469.7	112.49	0.38%	[500]	ug/L
Sn 189.927†	2085.1	4.27	0.20%	[100]	ug/L
Sr 421.552†	115198.2	842.13	0.73%	[100]	ug/L
Ti 334.940†	77735.7	76.57	0.10%	[100]	ug/L
Tl 190.801†	1356.4	12.67	0.93%	[100]	ug/L
U 409.014†	2809.7	108.51	3.86%	[100]	ug/L
V 292.402†	17999.6	38.40	0.21%	[100]	ug/L
Zn 213.857†	31250.3	42.37	0.14%	[100]	ug/L
SiO2†	29253.0	281.51	0.96%	[1069.5]	ug/L

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Sequence No.: 3 **Autosampler Location: 3**
Sample ID: S0.5 **Date Collected: 3/6/2008 06:55:31**
Analyst: **Data Type: Reprocessed on 3/6/2008 08:21:19**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	982261.6	982261.6	98.253	%	06:57:58
1	Sc Radial	102338.1	102338.1	97.5	%	06:57:29
1	Y 371.029	823799.3	823799.3	97.186	%	06:57:58
1	Y RADIAL	88379.6	88379.6	96.86	%	06:57:29
1	Ag 328.068†	128291.9	129446.9	[500]	ug/L	06:57:58
1	Al 396.153Radial†	44708.5	45305.4	[5000]	ug/L	06:57:29
1	As 188.979†	4431.3	4572.0	[500]	ug/L	06:58:03
1	B 249.677†	36348.7	37775.1	[500]	ug/L	06:57:58
1	Ba 233.527†	170193.1	173191.6	[500]	ug/L	06:57:58
1	Be 313.107†	1738766.4	1773411.3	[500]	ug/L	06:57:58
1	Ca 317.933Radial†	125100.9	127630.6	[5000]	ug/L	06:57:29
1	Cd 226.502†	97774.6	99736.2	[500]	ug/L	06:57:58
1	Co 228.616†	58550.8	59792.3	[500]	ug/L	06:58:03
1	Cr 267.716†	66707.2	67947.9	[500]	ug/L	06:57:58
1	Cu 324.752†	211458.2	206644.6	[500]	ug/L	06:57:58
1	K 766.490 Radial†	28030.8	25353.5	[5000]	ug/L	06:57:29
1	Mg 279.077 IEC†	10998.7	11205.5	[5000]	ug/L	06:57:29
1	Mn 257.610†	882808.9	897454.6	[500]	ug/L	06:57:58
1	Mo 202.031†	22165.4	22529.8	[500]	ug/L	06:58:03
1	Ni 231.604†	47474.1	48034.6	[500]	ug/L	06:58:03
1	P 214.914†	17077.6	16582.3	[2500]	ug/L	06:58:03
1	Pb 220.353†	11269.9	11579.8	[500]	ug/L	06:58:03
1	S 181.975 Axial†	3129.6	3022.2	[1000]	ug/L	06:58:03
1	Sb 206.836†	5537.7	5504.2	[500]	ug/L	06:58:03
1	Se 196.026†	3015.1	3129.2	[500]	ug/L	06:58:03
1	Si 251.611†	145297.9	146947.4	[2500]	ug/L	06:57:58
1	Sn 189.927†	10226.7	10418.8	[500]	ug/L	06:58:03
1	Sr 421.552†	569621.3	586365.2	[500]	ug/L	06:57:24
1	Ti 334.940†	383295.2	391559.9	[500]	ug/L	06:57:58
1	Tl 190.801†	6445.7	6698.5	[500]	ug/L	06:58:03
1	U 409.014†	17203.9	12127.5	[500]	ug/L	06:57:58
1	V 292.402†	86822.2	90868.2	[500]	ug/L	06:57:58
1	Zn 213.857†	154261.7	154971.5	[500]	ug/L	06:57:58
1	SiO2†	146496.1	148122.5	[5347.5]	ug/L	06:58:33
2	Sc 361.383	975361.7	975361.7	97.563	%	06:58:10
2	Sc Radial	103116.4	103116.4	98.2	%	06:57:39
2	Y 371.029	817611.6	817611.6	96.456	%	06:58:10
2	Y RADIAL	89085.0	89085.0	97.63	%	06:57:39
2	Ag 328.068†	127540.0	129599.9	[500]	ug/L	06:58:10
2	Al 396.153Radial†	45133.8	45392.3	[5000]	ug/L	06:57:39
2	As 188.979†	4445.4	4618.3	[500]	ug/L	06:58:15
2	B 249.677†	36082.5	37763.9	[500]	ug/L	06:58:10
2	Ba 233.527†	169141.4	173338.9	[500]	ug/L	06:58:10
2	Be 313.107†	1726032.5	1772878.3	[500]	ug/L	06:58:10
2	Ca 317.933Radial†	126197.0	127778.0	[5000]	ug/L	06:57:39
2	Cd 226.502†	97051.4	99699.0	[500]	ug/L	06:58:10
2	Co 228.616†	59283.0	60964.3	[500]	ug/L	06:58:15
2	Cr 267.716†	66130.9	67837.5	[500]	ug/L	06:58:10
2	Cu 324.752†	209486.1	206145.8	[500]	ug/L	06:58:10
2	K 766.490 Radial†	28228.8	25338.1	[5000]	ug/L	06:57:39
2	Mg 279.077 IEC†	11148.8	11273.2	[5000]	ug/L	06:57:39
2	Mn 257.610†	877526.4	898396.3	[500]	ug/L	06:58:10
2	Mo 202.031†	22360.4	22889.2	[500]	ug/L	06:58:15
2	Ni 231.604†	48000.0	48915.4	[500]	ug/L	06:58:15
2	P 214.914†	17240.4	16872.1	[2500]	ug/L	06:58:15
2	Pb 220.353†	11455.7	11851.4	[500]	ug/L	06:58:15
2	S 181.975 Axial†	3169.7	3085.8	[1000]	ug/L	06:58:15
2	Sb 206.836†	5568.6	5575.8	[500]	ug/L	06:58:15

2	Se 196.026†	3062.5	3199.4	[500]	ug/L	06:58:15
2	Si 251.611†	144163.0	146830.2	[2500]	ug/L	06:58:10
2	Sn 189.927†	10367.9	10637.2	[500]	ug/L	06:58:15
2	Sr 421.552†	566866.8	579149.8	[500]	ug/L	06:57:34
2	Ti 334.940†	380263.8	391212.4	[500]	ug/L	06:58:10
2	Tl 190.801†	6447.6	6746.9	[500]	ug/L	06:58:15
2	U 409.014†	16964.5	12006.1	[500]	ug/L	06:58:10
2	V 292.402†	86059.1	90711.1	[500]	ug/L	06:58:10
2	Zn 213.857†	153219.5	155013.9	[500]	ug/L	06:58:10
2	SiO2†	144725.0	147361.8	[5347.5]	ug/L	06:58:38
3	Sc 361.383	980832.2	980832.2	98.110	%	06:58:23
3	Sc Radial	102592.0	102592.0	97.7	%	06:57:49
3	Y 371.029	821773.1	821773.1	96.947	%	06:58:23
3	Y RADIAL	88648.3	88648.3	97.15	%	06:57:49
3	Ag 328.068†	128494.4	129843.6	[500]	ug/L	06:58:23
3	Al 396.153Radial†	44830.0	45316.3	[5000]	ug/L	06:57:49
3	As 188.979†	4361.2	4507.1	[500]	ug/L	06:58:28
3	B 249.677†	36529.0	38012.8	[500]	ug/L	06:58:23
3	Ba 233.527†	170423.0	173678.3	[500]	ug/L	06:58:23
3	Be 313.107†	1738135.5	1775347.2	[500]	ug/L	06:58:23
3	Ca 317.933Radial†	125820.6	128049.4	[5000]	ug/L	06:57:49
3	Cd 226.502†	97692.8	99797.9	[500]	ug/L	06:58:23
3	Co 228.616†	58638.9	59968.9	[500]	ug/L	06:58:28
3	Cr 267.716†	66742.5	68082.9	[500]	ug/L	06:58:23
3	Cu 324.752†	211299.7	206796.7	[500]	ug/L	06:58:23
3	K 766.490 Radial†	28053.5	25305.6	[5000]	ug/L	06:57:49
3	Mg 279.077 IEC†	11091.4	11272.4	[5000]	ug/L	06:57:49
3	Mn 257.610†	884141.1	900121.8	[500]	ug/L	06:58:23
3	Mo 202.031†	22181.3	22578.8	[500]	ug/L	06:58:28
3	Ni 231.604†	47549.8	48182.1	[500]	ug/L	06:58:28
3	P 214.914†	17092.4	16622.7	[2500]	ug/L	06:58:28
3	Pb 220.353†	11326.5	11654.2	[500]	ug/L	06:58:28
3	S 181.975 Axial†	3137.2	3034.5	[1000]	ug/L	06:58:28
3	Sb 206.836†	5551.1	5526.1	[500]	ug/L	06:58:28
3	Se 196.026†	3079.9	3199.6	[500]	ug/L	06:58:28
3	Si 251.611†	145716.8	147589.8	[2500]	ug/L	06:58:23
3	Sn 189.927†	10284.3	10492.7	[500]	ug/L	06:58:28
3	Sr 421.552†	566895.7	582129.3	[500]	ug/L	06:57:44
3	Ti 334.940†	382890.4	391715.7	[500]	ug/L	06:58:23
3	Tl 190.801†	6410.2	6671.9	[500]	ug/L	06:58:28
3	U 409.014†	17208.2	12157.4	[500]	ug/L	06:58:23
3	V 292.402†	86792.2	90966.3	[500]	ug/L	06:58:23
3	Zn 213.857†	154533.5	155477.4	[500]	ug/L	06:58:23
3	SiO2†	144044.5	145840.9	[5347.5]	ug/L	06:58:44

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	979485.2	3641.82	0.37%	97.975	%
Sc Radial	102682.2	396.90	0.39%	97.8	%
Y 371.029	821061.3	3154.68	0.38%	96.863	%
Y RADIAL	88704.3	356.02	0.40%	97.21	%
Ag 328.068†	129630.1	200.06	0.15%	[500]	ug/L
Al 396.153Radial†	45338.0	47.32	0.10%	[5000]	ug/L
As 188.979†	4565.8	55.86	1.22%	[500]	ug/L
B 249.677†	37850.6	140.57	0.37%	[500]	ug/L
Ba 233.527†	173402.9	249.59	0.14%	[500]	ug/L
Be 313.107†	1773878.9	1299.20	0.07%	[500]	ug/L
Ca 317.933Radial†	127819.3	212.42	0.17%	[5000]	ug/L
Cd 226.502†	99744.4	49.97	0.05%	[500]	ug/L
Co 228.616†	60241.8	631.88	1.05%	[500]	ug/L
Cr 267.716†	67956.1	122.90	0.18%	[500]	ug/L
Cu 324.752†	206529.0	340.50	0.16%	[500]	ug/L
K 766.490 Radial†	25332.4	24.48	0.10%	[5000]	ug/L
Mg 279.077 IEC†	11250.4	38.87	0.35%	[5000]	ug/L
Mn 257.610†	898657.6	1352.68	0.15%	[500]	ug/L
Mo 202.031†	22665.9	194.92	0.86%	[500]	ug/L
Ni 231.604†	48377.4	471.76	0.98%	[500]	ug/L
P 214.914†	16692.4	156.98	0.94%	[2500]	ug/L
Pb 220.353†	11695.2	140.36	1.20%	[500]	ug/L

S 181.975 Axial†	3047.5	33.74	1.11%	[1000]	ug/L
Sb 206.836†	5535.4	36.68	0.66%	[500]	ug/L
Se 196.026†	3176.1	40.61	1.28%	[500]	ug/L
Si 251.611†	147122.5	408.98	0.28%	[2500]	ug/L
Sn 189.927†	10516.2	111.06	1.06%	[500]	ug/L
Sr 421.552†	582548.1	3625.87	0.62%	[500]	ug/L
Ti 334.940†	391496.0	257.66	0.07%	[500]	ug/L
Tl 190.801†	6705.8	38.00	0.57%	[500]	ug/L
U 409.014†	12097.0	80.16	0.66%	[500]	ug/L
V 292.402†	90848.5	128.74	0.14%	[500]	ug/L
Zn 213.857†	155154.3	280.61	0.18%	[500]	ug/L
SiO2†	147108.4	1161.69	0.79%	[5347.5]	ug/L

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Sequence No.: 4 **Autosampler Location: 4**
Sample ID: SCAL **Date Collected: 3/6/2008 07:00:53**
Analyst: **Data Type: Reprocessed on 3/6/2008 08:21:20**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	969045.9	969045.9	96.931	%	07:03:23
1	Sc Radial	104790.6	104790.6	99.8	%	07:02:52
1	Y 371.029	812019.4	812019.4	95.796	%	07:03:23
1	Y RADIAL	90411.9	90411.9	99.09	%	07:02:52
1	Ag 328.068†	248367.9	255105.7	[1000]	ug/L	07:03:23
1	Al 396.153Radial†	88224.8	87831.8	[10000]	ug/L	07:02:52
1	As 188.979†	8764.2	9103.6	[1000]	ug/L	07:03:28
1	B 249.677†	71932.1	74989.8	[1000]	ug/L	07:03:23
1	Ba 233.527†	330977.9	341429.7	[1000]	ug/L	07:03:23
1	Be 313.107†	3385569.4	3496492.2	[1000]	ug/L	07:03:23
1	Ca 317.933Radial†	252536.5	252306.9	[10000]	ug/L	07:02:52
1	Cd 226.502†	190031.6	196271.6	[1000]	ug/L	07:03:23
1	Co 228.616†	116813.3	120712.2	[1000]	ug/L	07:03:28
1	Cr 267.716†	130355.2	134537.2	[1000]	ug/L	07:03:28
1	Cu 324.752†	403380.1	407578.6	[1000]	ug/L	07:03:23
1	Fe 238.204 Radial†	93839.9	93967.7	[10000]	ug/L	07:02:52
1	K 766.490 Radial†	52975.0	49672.5	[10000]	ug/L	07:02:52
1	Mg 279.077 IEC†	22097.5	22061.4	[10000]	ug/L	07:02:52
1	Mn 257.610†	1715928.9	1769207.5	[1000]	ug/L	07:03:23
1	Mo 202.031†	43874.0	45233.4	[1000]	ug/L	07:03:28
1	Na 589.592 Radial†	163941.4	165600.3	[10000]	ug/L	07:02:47
1	Ni 231.604†	94105.4	96801.3	[1000]	ug/L	07:03:28
1	P 214.914†	33227.7	33480.9	[5000]	ug/L	07:03:28
1	Pb 220.353†	22648.2	23474.9	[1000]	ug/L	07:03:28
1	S 181.975 Axial†	6080.2	6109.6	[2000]	ug/L	07:03:28
1	Sb 206.836†	10893.8	11106.8	[1000]	ug/L	07:03:28
1	Se 196.026†	6193.9	6450.4	[1000]	ug/L	07:03:28
1	Si 251.611†	282374.5	290381.0	[5000]	ug/L	07:03:23
1	Sn 189.927†	20298.9	20951.8	[1000]	ug/L	07:03:28
1	Sr 421.552†	1146932.9	1151106.9	[1000]	ug/L	07:02:47
1	Ti 334.940†	744973.7	770010.6	[1000]	ug/L	07:03:23
1	Tl 190.801†	12893.4	13439.8	[1000]	ug/L	07:03:28
1	U 409.014†	28925.3	24458.9	[1000]	ug/L	07:03:23
1	V 292.402†	172064.6	180014.7	[1000]	ug/L	07:03:23
1	Zn 213.857†	298020.2	305423.1	[1000]	ug/L	07:03:23
1	SiO2†	287046.4	295156.5	[10695]	ug/L	07:04:02
2	Sc 361.383	970863.9	970863.9	97.113	%	07:03:38
2	Sc Radial	103267.0	103267.0	98.4	%	07:03:02
2	Y 371.029	812434.2	812434.2	95.845	%	07:03:38
2	Y RADIAL	89157.4	89157.4	97.71	%	07:03:02
2	Ag 328.068†	250039.1	256346.7	[1000]	ug/L	07:03:38
2	Al 396.153Radial†	87001.1	87891.7	[10000]	ug/L	07:03:02
2	As 188.979†	8748.0	9070.0	[1000]	ug/L	07:03:43
2	B 249.677†	72708.0	75649.7	[1000]	ug/L	07:03:38
2	Ba 233.527†	333586.8	343476.7	[1000]	ug/L	07:03:38
2	Be 313.107†	3408187.2	3513242.0	[1000]	ug/L	07:03:38
2	Ca 317.933Radial†	248540.3	251976.9	[10000]	ug/L	07:03:02
2	Cd 226.502†	191132.0	197037.6	[1000]	ug/L	07:03:38
2	Co 228.616†	116664.7	120333.5	[1000]	ug/L	07:03:43
2	Cr 267.716†	130350.0	134279.9	[1000]	ug/L	07:03:43
2	Cu 324.752†	407069.3	410598.2	[1000]	ug/L	07:03:38
2	Fe 238.204 Radial†	92322.5	93812.1	[10000]	ug/L	07:03:02
2	K 766.490 Radial†	52310.9	49780.4	[10000]	ug/L	07:03:02
2	Mg 279.077 IEC†	21819.8	22105.8	[10000]	ug/L	07:03:02
2	Mn 257.610†	1729389.5	1779753.5	[1000]	ug/L	07:03:38
2	Mo 202.031†	43904.4	45180.0	[1000]	ug/L	07:03:43
2	Na 589.592 Radial†	164355.1	168444.2	[10000]	ug/L	07:02:57
2	Ni 231.604†	94150.5	96665.9	[1000]	ug/L	07:03:43

2	P 214.914†	33247.6	33437.2	[5000]	ug/L	07:03:43
2	Pb 220.353†	22668.8	23452.3	[1000]	ug/L	07:03:43
2	S 181.975 Axial†	6115.0	6133.8	[2000]	ug/L	07:03:43
2	Sb 206.836†	10936.9	11130.1	[1000]	ug/L	07:03:43
2	Se 196.026†	6212.8	6457.9	[1000]	ug/L	07:03:43
2	Si 251.611†	284628.3	292156.3	[5000]	ug/L	07:03:38
2	Sn 189.927†	20385.4	21001.8	[1000]	ug/L	07:03:43
2	Sr 421.552†	1149171.5	1170337.0	[1000]	ug/L	07:02:57
2	Ti 334.940†	750754.6	774524.2	[1000]	ug/L	07:03:38
2	Tl 190.801†	12865.4	13386.1	[1000]	ug/L	07:03:43
2	U 409.014†	28865.6	24341.5	[1000]	ug/L	07:03:38
2	V 292.402†	173259.1	180912.4	[1000]	ug/L	07:03:38
2	Zn 213.857†	300164.2	307055.1	[1000]	ug/L	07:03:38
2	SiO2†	286542.7	294083.3	[10695]	ug/L	07:04:08
3	Sc 361.383	979532.6	979532.6	97.980	%	07:03:52
3	Sc Radial	105294.6	105294.6	100	%	07:03:13
3	Y 371.029	820313.6	820313.6	96.774	%	07:03:52
3	Y RADIAL	90946.2	90946.2	99.67	%	07:03:13
3	Ag 328.068†	253367.5	257465.2	[1000]	ug/L	07:03:52
3	Al 396.153Radial†	88433.2	87616.4	[10000]	ug/L	07:03:13
3	As 188.979†	9060.9	9309.6	[1000]	ug/L	07:03:57
3	B 249.677†	73837.7	76140.2	[1000]	ug/L	07:03:52
3	Ba 233.527†	337279.4	344205.6	[1000]	ug/L	07:03:52
3	Be 313.107†	3453150.3	3528073.8	[1000]	ug/L	07:03:52
3	Ca 317.933Radial†	252665.9	251224.6	[10000]	ug/L	07:03:13
3	Cd 226.502†	193364.5	197574.3	[1000]	ug/L	07:03:52
3	Co 228.616†	120911.9	123605.1	[1000]	ug/L	07:03:57
3	Cr 267.716†	135764.1	138617.8	[1000]	ug/L	07:03:57
3	Cu 324.752†	413243.2	413189.7	[1000]	ug/L	07:03:52
3	Fe 238.204 Radial†	93906.6	93584.2	[10000]	ug/L	07:03:13
3	K 766.490 Radial†	52932.3	49375.9	[10000]	ug/L	07:03:13
3	Mg 279.077 IEC†	22139.8	21997.7	[10000]	ug/L	07:03:13
3	Mn 257.610†	1749605.2	1784626.2	[1000]	ug/L	07:03:52
3	Mo 202.031†	45579.0	46488.9	[1000]	ug/L	07:03:57
3	Na 589.592 Radial†	163648.8	164522.2	[10000]	ug/L	07:03:08
3	Ni 231.604†	97524.7	99251.7	[1000]	ug/L	07:03:57
3	P 214.914†	34346.8	34256.1	[5000]	ug/L	07:03:57
3	Pb 220.353†	23415.7	24008.0	[1000]	ug/L	07:03:57
3	S 181.975 Axial†	6243.9	6209.6	[2000]	ug/L	07:03:57
3	Sb 206.836†	11280.9	11381.5	[1000]	ug/L	07:03:57
3	Se 196.026†	6410.8	6603.4	[1000]	ug/L	07:03:57
3	Si 251.611†	288576.0	293591.6	[5000]	ug/L	07:03:52
3	Sn 189.927†	21061.4	21506.0	[1000]	ug/L	07:03:57
3	Sr 421.552†	1143444.0	1142127.3	[1000]	ug/L	07:03:08
3	Ti 334.940†	760843.1	777979.1	[1000]	ug/L	07:03:52
3	Tl 190.801†	13306.2	13718.7	[1000]	ug/L	07:03:57
3	U 409.014†	29322.8	24545.1	[1000]	ug/L	07:03:52
3	V 292.402†	175354.4	181471.9	[1000]	ug/L	07:03:52
3	Zn 213.857†	303746.7	307976.1	[1000]	ug/L	07:03:52
3	SiO2†	287787.1	292742.0	[10695]	ug/L	07:04:13

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	973147.5	5603.87	0.58%	97.341	%
Sc Radial	104450.7	1055.67	1.01%	99.5	%
Y 371.029	814922.4	4673.50	0.57%	96.138	%
Y RADIAL	90171.8	918.27	1.02%	98.82	%
Ag 328.068†	256305.9	1180.28	0.46%	[1000]	ug/L
Al 396.153Radial†	87779.9	144.80	0.16%	[10000]	ug/L
As 188.979†	9161.0	129.74	1.42%	[1000]	ug/L
B 249.677†	75593.2	577.29	0.76%	[1000]	ug/L
Ba 233.527†	343037.3	1439.14	0.42%	[1000]	ug/L
Be 313.107†	3512602.6	15800.49	0.45%	[1000]	ug/L
Ca 317.933Radial†	251836.1	554.67	0.22%	[10000]	ug/L
Cd 226.502†	196961.2	654.72	0.33%	[1000]	ug/L
Co 228.616†	121550.3	1789.59	1.47%	[1000]	ug/L
Cr 267.716†	135811.6	2433.61	1.79%	[1000]	ug/L
Cu 324.752†	410455.5	2808.31	0.68%	[1000]	ug/L
Fe 238.204 Radial†	93788.0	192.88	0.21%	[10000]	ug/L

K 766.490 Radial†	49609.6	209.47	0.42%	[10000]	ug/L
Mg 279.077 IEC†	22055.0	54.32	0.25%	[10000]	ug/L
Mn 257.610†	1777862.4	7881.36	0.44%	[1000]	ug/L
Mo 202.031†	45634.1	740.81	1.62%	[1000]	ug/L
Na 589.592 Radial†	166188.9	2026.20	1.22%	[10000]	ug/L
Ni 231.604†	97573.0	1455.43	1.49%	[1000]	ug/L
P 214.914†	33724.7	460.69	1.37%	[5000]	ug/L
Pb 220.353†	23645.1	314.51	1.33%	[1000]	ug/L
S 181.975 Axial†	6151.0	52.16	0.85%	[2000]	ug/L
Sb 206.836†	11206.1	152.37	1.36%	[1000]	ug/L
Se 196.026†	6503.9	86.25	1.33%	[1000]	ug/L
Si 251.611†	292043.0	1608.29	0.55%	[5000]	ug/L
Sn 189.927†	21153.2	306.52	1.45%	[1000]	ug/L
Sr 421.552†	1154523.7	14411.92	1.25%	[1000]	ug/L
Ti 334.940†	774171.3	3995.97	0.52%	[1000]	ug/L
Tl 190.801†	13514.9	178.58	1.32%	[1000]	ug/L
U 409.014†	24448.5	102.17	0.42%	[1000]	ug/L
V 292.402†	180799.7	735.11	0.41%	[1000]	ug/L
Zn 213.857†	306818.1	1292.92	0.42%	[1000]	ug/L
SiO2†	293993.9	1209.69	0.41%	[10695]	ug/L

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Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S10 **Date Collected: 3/6/2008 07:06:23**
Analyst: **Data Type: Reprocessed on 3/6/2008 08:21:21**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	959950.2	959950.2	96.021	%	07:08:35
1	Sc Radial	101171.7	101171.7	96.4	%	07:08:17
1	Y 371.029	802854.5	802854.5	94.715	%	07:08:35
1	Y RADIAL	87327.9	87327.9	95.71	%	07:08:17
1	Al 396.153Radial†	420908.0	436237.6	[50000]	ug/L	07:08:17
1	Ca 317.933Radial†	1210526.6	1255517.3	[50000]	ug/L	07:08:17
1	Fe 238.204 Radial†	179770.3	186505.6	[20000]	ug/L	07:08:17
1	Mg 279.077 IEC†	104119.9	107972.6	[50000]	ug/L	07:08:17
1	Na 589.592 Radial†	326175.3	339834.8	[20000]	ug/L	07:08:17
2	Sc 361.383	959249.4	959249.4	95.951	%	07:08:41
2	Sc Radial	102689.2	102689.2	97.8	%	07:08:22
2	Y 371.029	800370.6	800370.6	94.422	%	07:08:41
2	Y RADIAL	88481.5	88481.5	96.97	%	07:08:22
2	Al 396.153Radial†	426364.6	435361.4	[50000]	ug/L	07:08:22
2	Ca 317.933Radial†	1228026.8	1254845.2	[50000]	ug/L	07:08:22
2	Fe 238.204 Radial†	182486.9	186526.1	[20000]	ug/L	07:08:22
2	Mg 279.077 IEC†	105563.2	107851.5	[50000]	ug/L	07:08:22
2	Na 589.592 Radial†	330529.1	339284.0	[20000]	ug/L	07:08:22
3	Sc 361.383	950043.0	950043.0	95.030	%	07:08:48
3	Sc Radial	101419.1	101419.1	96.6	%	07:08:27
3	Y 371.029	793740.1	793740.1	93.639	%	07:08:48
3	Y RADIAL	87624.0	87624.0	96.03	%	07:08:27
3	Al 396.153Radial†	422241.3	436552.0	[50000]	ug/L	07:08:27
3	Ca 317.933Radial†	1213576.6	1255609.7	[50000]	ug/L	07:08:27
3	Fe 238.204 Radial†	180293.6	186592.1	[20000]	ug/L	07:08:27
3	Mg 279.077 IEC†	104145.0	107734.9	[50000]	ug/L	07:08:27
3	Na 589.592 Radial†	326721.1	339574.0	[20000]	ug/L	07:08:27

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	956414.2	5528.74	0.58%	95.667	%
Sc Radial	101760.0	814.17	0.80%	96.9	%
Y 371.029	798988.4	4711.79	0.59%	94.259	%
Y RADIAL	87811.1	599.10	0.68%	96.24	%
Al 396.153Radial†	436050.3	616.99	0.14%	[50000]	ug/L
Ca 317.933Radial†	1255324.1	417.25	0.03%	[50000]	ug/L
Fe 238.204 Radial†	186541.2	45.19	0.02%	[20000]	ug/L
Mg 279.077 IEC†	107853.0	118.86	0.11%	[50000]	ug/L
Na 589.592 Radial†	339564.2	275.53	0.08%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	256.9	0.00000	0.999989	
Al 396.153Radial	3	Lin Thru 0	0.0	8.726	0.00000	0.999992	
As 188.979	3	Lin Thru 0	0.0	9.153	0.00000	0.999996	
B 249.677	3	Lin Thru 0	0.0	75.59	0.00000	0.999992	
Ba 233.527	3	Lin Thru 0	0.0	343.9	0.00000	0.999988	
Be 313.107	3	Lin Thru 0	0.0	3520	0.00000	0.999992	
Ca 317.933Radial	3	Lin Thru 0	0.0	25.11	0.00000	0.999998	
Cd 226.502	3	Lin Thru 0	0.0	197.5	0.00000	0.999987	
Co 228.616	3	Lin Thru 0	0.0	121.3	0.00000	0.999994	
Cr 267.716	3	Lin Thru 0	0.0	135.8	0.00000	1.000000	
Cu 324.752	3	Lin Thru 0	0.0	411.0	0.00000	0.999997	
Fe 238.204 Radia	2	Lin Thru 0	0.0	9.337	0.00000	0.999998	

K 766.490 Radial	3	Lin Thru 0	0.0	4.979	0.00000	0.999938
Mg 279.077 IEC	3	Lin Thru 0	0.0	2.160	0.00000	0.999982
Mn 257.610	3	Lin Thru 0	0.0	1782	0.00000	0.999988
Mo 202.031	3	Lin Thru 0	0.0	45.57	0.00000	0.999996
Na 589.592 Radia	2	Lin Thru 0	0.0	16.91	0.00000	0.999964
Ni 231.604	3	Lin Thru 0	0.0	97.41	0.00000	0.999994
P 214.914	3	Lin Thru 0	0.0	6.730	0.00000	0.999991
Pb 220.353	3	Lin Thru 0	0.0	23.59	0.00000	0.999991
S 181.975 Axial	3	Lin Thru 0	0.0	3.069	0.00000	0.999986
Sb 206.836	3	Lin Thru 0	0.0	11.18	0.00000	0.999985
Se 196.026	3	Lin Thru 0	0.0	6.473	0.00000	0.999956
Si 251.611	3	Lin Thru 0	0.0	58.50	0.00000	0.999995
Sn 189.927	3	Lin Thru 0	0.0	21.13	0.00000	0.999997
Sr 421.552	3	Lin Thru 0	0.0	1157	0.00000	0.999993
Ti 334.940	3	Lin Thru 0	0.0	775.9	0.00000	0.999990
Tl 190.801	3	Lin Thru 0	0.0	13.49	0.00000	0.999995
U 409.014	3	Lin Thru 0	0.0	24.43	0.00000	0.999901
V 292.402	3	Lin Thru 0	0.0	181.0	0.00000	0.999998
Zn 213.857	3	Lin Thru 0	0.0	307.6	0.00000	0.999989
SiO2	3	Lin Thru 0	0.0	27.49	0.00000	1.000000

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Sequence No.: 6 **Autosampler Location: 9**
Sample ID: ICV **Date Collected: 3/6/2008 07:10:58**
Analyst: **Data Type: Reprocessed on 3/6/2008 08:21:21**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	984265.8	984265.8	98.453	%			07:13:26
1	Sc Radial	102971.2	102971.2	98.1	%			07:12:56
1	Y 371.029	826721.1	826721.1	97.530	%			07:13:26
1	Y RADIAL	89005.6	89005.6	97.54	%			07:12:56
1	Ag 328.068†	64967.0	64861.3	255.19	ug/L	255.19	ppb	07:13:26
1	Al 396.153Radial†	44558.1	44870.1	5122.0	ug/L	5122.0	ppb	07:12:56
1	As 188.979†	4261.5	4390.3	479.10	ug/L	479.10	ppb	07:13:31
1	B 249.677†	36174.4	37522.8	496.24	ug/L	496.24	ppb	07:13:26
1	Ba 233.527†	170436.0	173085.6	504.47	ug/L	504.47	ppb	07:13:26
1	Be 313.107†	860563.6	877807.9	250.66	ug/L	250.66	ppb	07:13:26
1	Ca 317.933Radial†	126189.3	127951.3	5094.9	ug/L	5094.9	ppb	07:12:56
1	Cd 226.502†	96503.7	98242.8	497.16	ug/L	497.16	ppb	07:13:26
1	Co 228.616†	58088.5	59201.3	488.10	ug/L	488.10	ppb	07:13:31
1	Cr 267.716†	66124.2	67217.5	495.76	ug/L	495.76	ppb	07:13:26
1	Cu 324.752†	209578.5	204297.1	496.98	ug/L	496.98	ppb	07:13:26
1	Fe 238.204 Radial†	46865.2	47732.6	5126.8	ug/L	5126.8	ppb	07:12:56
1	K 766.490 Radial†	15837.3	12743.9	2559.6	ug/L	2559.6	ppb	07:12:56
1	Mg 279.077 IEC†	11200.8	11342.1	5261.6	ug/L	5261.6	ppb	07:12:56
1	Mn 257.610†	890861.8	903804.4	507.61	ug/L	507.61	ppb	07:13:26
1	Mo 202.031†	21831.0	22144.2	486.23	ug/L	486.23	ppb	07:13:31
1	Na 589.592 Radial†	40159.2	42291.6	2501.5	ug/L	2501.5	ppb	07:12:51
1	Ni 231.604†	47214.3	47672.3	488.99	ug/L	488.99	ppb	07:13:31
1	P 214.914†	16869.4	16335.5	2355.8	ug/L	2355.8	ppb	07:13:31
1	Pb 220.353†	11258.5	11544.9	490.89	ug/L	490.89	ppb	07:13:31
1	S 181.975 Axial†	7703.7	7661.7	2496.0	ug/L	2496.0	ppb	07:13:31
1	Sb 206.836†	5557.2	5512.6	491.62	ug/L	491.62	ppb	07:13:31
1	Se 196.026†	15768.5	16076.6	2498.8	ug/L	2498.8	ppb	07:13:31
1	Si 251.611†	286432.8	289998.5	4949.5	ug/L	4949.5	ppb	07:13:26
1	Sn 189.927†	10317.6	10489.9	496.68	ug/L	496.68	ppb	07:13:31
1	Sr 421.552†	576097.8	589375.6	509.42	ug/L	509.42	ppb	07:12:51
1	Ti 334.940†	382654.1	390114.3	502.93	ug/L	502.93	ppb	07:13:26
1	Tl 190.801†	6411.2	6650.1	495.30	ug/L	495.30	ppb	07:13:31
1	U 409.014†	17100.9	11987.3	490.19	ug/L	490.19	ppb	07:13:26
1	V 292.402†	87104.1	90974.6	507.29	ug/L	507.29	ppb	07:13:26
1	Zn 213.857†	152944.6	153314.1	493.86	ug/L	493.86	ppb	07:13:26
1	SiO2†	289500.8	293070.2	10643	ug/L	10643	ppb	07:14:01
2	Sc 361.383	985797.4	985797.4	98.606	%			07:13:38
2	Sc Radial	103120.6	103120.6	98.2	%			07:13:07
2	Y 371.029	827620.7	827620.7	97.636	%			07:13:38
2	Y RADIAL	89025.5	89025.5	97.57	%			07:13:07
2	Ag 328.068†	65076.8	64870.1	255.23	ug/L	255.23	ppb	07:13:38
2	Al 396.153Radial†	44620.4	44867.7	5121.6	ug/L	5121.6	ppb	07:13:07
2	As 188.979†	4276.0	4398.3	479.95	ug/L	479.95	ppb	07:13:43
2	B 249.677†	36492.8	37788.6	499.76	ug/L	499.76	ppb	07:13:38
2	Ba 233.527†	170804.8	173190.7	504.77	ug/L	504.77	ppb	07:13:38
2	Be 313.107†	863356.4	879282.2	251.08	ug/L	251.08	ppb	07:13:38
2	Ca 317.933Radial†	126214.1	127790.1	5088.4	ug/L	5088.4	ppb	07:13:07
2	Cd 226.502†	96664.1	98253.1	497.22	ug/L	497.22	ppb	07:13:38
2	Co 228.616†	58609.0	59637.5	491.71	ug/L	491.71	ppb	07:13:43
2	Cr 267.716†	66198.7	67188.8	495.55	ug/L	495.55	ppb	07:13:38
2	Cu 324.752†	210211.0	204607.9	497.74	ug/L	497.74	ppb	07:13:38
2	Fe 238.204 Radial†	46941.0	47740.5	5127.8	ug/L	5127.8	ppb	07:13:07
2	K 766.490 Radial†	16074.9	12962.5	2603.5	ug/L	2603.5	ppb	07:13:07
2	Mg 279.077 IEC†	11172.8	11297.1	5240.9	ug/L	5240.9	ppb	07:13:07
2	Mn 257.610†	893041.0	904608.5	508.06	ug/L	508.06	ppb	07:13:38
2	Mo 202.031†	21997.3	22278.4	489.18	ug/L	489.18	ppb	07:13:43
2	Na 589.592 Radial†	40818.5	42903.5	2537.7	ug/L	2537.7	ppb	07:13:02
2	Ni 231.604†	47714.3	48104.9	493.43	ug/L	493.43	ppb	07:13:43

2	P 214.914†	16985.0	16426.1	2369.2	ug/L	2369.2	ppb	07:13:43
2	Pb 220.353†	11302.4	11571.7	492.03	ug/L	492.03	ppb	07:13:43
2	S 181.975 Axial†	7758.9	7705.4	2510.2	ug/L	2510.2	ppb	07:13:43
2	Sb 206.836†	5576.0	5522.9	492.56	ug/L	492.56	ppb	07:13:43
2	Se 196.026†	15912.1	16197.3	2517.4	ug/L	2517.4	ppb	07:13:43
2	Si 251.611†	287067.5	290190.0	4952.8	ug/L	4952.8	ppb	07:13:38
2	Sn 189.927†	10404.9	10562.2	500.10	ug/L	500.10	ppb	07:13:43
2	Sr 421.552†	582097.6	594633.4	513.97	ug/L	513.97	ppb	07:13:02
2	Ti 334.940†	383480.7	390348.8	503.23	ug/L	503.23	ppb	07:13:38
2	Tl 190.801†	6493.0	6723.0	500.69	ug/L	500.69	ppb	07:13:43
2	U 409.014†	17181.9	12042.4	492.45	ug/L	492.45	ppb	07:13:38
2	V 292.402†	87199.6	90934.0	507.10	ug/L	507.10	ppb	07:13:38
2	Zn 213.857†	153399.7	153534.2	494.54	ug/L	494.54	ppb	07:13:38
2	SiO2†	282552.1	285566.4	10370	ug/L	10370	ppb	07:14:06
3	Sc 361.383	982604.4	982604.4	98.287	%			07:13:50
3	Sc Radial	102778.3	102778.3	97.9	%			07:13:17
3	Y 371.029	826162.2	826162.2	97.464	%			07:13:50
3	Y RADIAL	88874.4	88874.4	97.40	%			07:13:17
3	Ag 328.068†	64945.9	64951.4	255.55	ug/L	255.55	ppb	07:13:50
3	Al 396.153Radial†	44598.4	44996.5	5136.6	ug/L	5136.6	ppb	07:13:17
3	As 188.979†	4170.4	4305.0	469.79	ug/L	469.79	ppb	07:13:55
3	B 249.677†	36087.0	37495.9	495.89	ug/L	495.89	ppb	07:13:50
3	Ba 233.527†	170004.9	172939.7	504.05	ug/L	504.05	ppb	07:13:50
3	Be 313.107†	860586.6	879309.2	251.08	ug/L	251.08	ppb	07:13:50
3	Ca 317.933Radial†	125689.9	127682.5	5084.2	ug/L	5084.2	ppb	07:13:17
3	Cd 226.502†	96503.7	98408.5	498.00	ug/L	498.00	ppb	07:13:50
3	Co 228.616†	57638.7	58843.5	485.15	ug/L	485.15	ppb	07:13:55
3	Cr 267.716†	66011.3	67216.2	495.75	ug/L	495.75	ppb	07:13:50
3	Cu 324.752†	209032.2	204101.2	496.51	ug/L	496.51	ppb	07:13:50
3	Fe 238.204 Radial†	46808.3	47764.1	5130.1	ug/L	5130.1	ppb	07:13:17
3	K 766.490 Radial†	15989.9	12930.1	2597.0	ug/L	2597.0	ppb	07:13:17
3	Mg 279.077 IEC†	11118.3	11279.3	5232.5	ug/L	5232.5	ppb	07:13:17
3	Mn 257.610†	888836.5	903273.7	507.31	ug/L	507.31	ppb	07:13:50
3	Mo 202.031†	21712.2	22060.8	484.40	ug/L	484.40	ppb	07:13:55
3	Na 589.592 Radial†	40287.8	42499.8	2513.8	ug/L	2513.8	ppb	07:13:12
3	Ni 231.604†	47032.0	47567.9	487.92	ug/L	487.92	ppb	07:13:55
3	P 214.914†	16745.5	16238.4	2341.5	ug/L	2341.5	ppb	07:13:55
3	Pb 220.353†	11126.2	11429.6	486.00	ug/L	486.00	ppb	07:13:55
3	S 181.975 Axial†	7631.8	7601.8	2476.5	ug/L	2476.5	ppb	07:13:55
3	Sb 206.836†	5536.9	5501.4	490.61	ug/L	490.61	ppb	07:13:55
3	Se 196.026†	15697.6	16031.6	2491.8	ug/L	2491.8	ppb	07:13:55
3	Si 251.611†	285828.4	289875.4	4947.5	ug/L	4947.5	ppb	07:13:50
3	Sn 189.927†	10235.4	10424.1	493.56	ug/L	493.56	ppb	07:13:55
3	Sr 421.552†	576739.6	591133.5	510.94	ug/L	510.94	ppb	07:13:12
3	Ti 334.940†	381865.1	389968.7	502.74	ug/L	502.74	ppb	07:13:50
3	Tl 190.801†	6395.5	6645.2	494.95	ug/L	494.95	ppb	07:13:55
3	U 409.014†	17050.0	11964.8	489.26	ug/L	489.26	ppb	07:13:50
3	V 292.402†	87002.6	91020.9	507.52	ug/L	507.52	ppb	07:13:50
3	Zn 213.857†	152926.3	153558.0	494.66	ug/L	494.66	ppb	07:13:50
3	SiO2†	286135.3	290143.3	10537	ug/L	10537	ppb	07:14:11

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	984222.5	98.449	%	0.1597				0.16%
Sc Radial	102956.7	98.1	%	0.16				0.17%
Y 371.029	826834.7	97.544	%	0.0868				0.09%
Y RADIAL	88968.5	97.50	%	0.090				0.09%
Ag 328.068†	64894.2	255.32	ug/L	0.195	255.32	ppb	0.195	0.08%
QC value within limits for Ag 328.068 Recovery = 102.13%								
Al 396.153Radial†	44911.4	5126.8	ug/L	8.52	5126.8	ppb	8.52	0.17%
QC value within limits for Al 396.153Radial Recovery = 102.54%								
As 188.979†	4364.5	476.28	ug/L	5.640	476.28	ppb	5.640	1.18%
QC value within limits for As 188.979 Recovery = 95.26%								
B 249.677†	37602.4	497.29	ug/L	2.140	497.29	ppb	2.140	0.43%
QC value within limits for B 249.677 Recovery = 99.46%								
Ba 233.527†	173072.0	504.43	ug/L	0.366	504.43	ppb	0.366	0.07%
QC value within limits for Ba 233.527 Recovery = 100.89%								
Be 313.107†	878799.8	250.94	ug/L	0.244	250.94	ppb	0.244	0.10%
QC value within limits for Be 313.107 Recovery = 100.38%								

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Ca 317.933Radial†     127808.0      5089.2 ug/L          5.39      5089.2 ppb           5.39   0.11%
   QC value within limits for Ca 317.933Radial  Recovery = 101.78%
Cd 226.502†            98301.5      497.46 ug/L         0.470      497.46 ppb          0.470   0.09%
   QC value within limits for Cd 226.502  Recovery = 99.49%
Co 228.616†            59227.4      488.32 ug/L         3.283      488.32 ppb          3.283   0.67%
   QC value within limits for Co 228.616  Recovery = 97.66%
Cr 267.716†            67207.5      495.69 ug/L         0.120      495.69 ppb          0.120   0.02%
   QC value within limits for Cr 267.716  Recovery = 99.14%
Cu 324.752†           204335.4      497.07 ug/L         0.620      497.07 ppb          0.620   0.12%
   QC value within limits for Cu 324.752  Recovery = 99.41%
Fe 238.204 Radial†     47745.8      5128.2 ug/L          1.69      5128.2 ppb           1.69   0.03%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.56%
K 766.490 Radial†      12878.9      2586.7 ug/L         23.69      2586.7 ppb          23.69   0.92%
   QC value within limits for K 766.490 Radial  Recovery = 103.47%
Mg 279.077 IEC†        11306.2      5245.0 ug/L         15.00      5245.0 ppb          15.00   0.29%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.90%
Mn 257.610†           903895.5      507.66 ug/L         0.377      507.66 ppb          0.377   0.07%
   QC value within limits for Mn 257.610  Recovery = 101.53%
Mo 202.031†            22161.1      486.61 ug/L         2.409      486.61 ppb          2.409   0.50%
   QC value within limits for Mo 202.031  Recovery = 97.32%
Na 589.592 Radial†     42565.0      2517.7 ug/L         18.40      2517.7 ppb          18.40   0.73%
   QC value within limits for Na 589.592 Radial  Recovery = 100.71%
Ni 231.604†            47781.7      490.11 ug/L         2.920      490.11 ppb          2.920   0.60%
   QC value within limits for Ni 231.604  Recovery = 98.02%
P 214.914†             16333.3      2355.5 ug/L         13.86      2355.5 ppb          13.86   0.59%
   QC value within limits for P 214.914  Recovery = 94.22%
Pb 220.353†            11515.4      489.64 ug/L         3.202      489.64 ppb          3.202   0.65%
   QC value within limits for Pb 220.353  Recovery = 97.93%
S 181.975 Axial†        7656.3      2494.2 ug/L         16.96      2494.2 ppb          16.96   0.68%
   QC value within limits for S 181.975 Axial  Recovery = 99.77%
Sb 206.836†             5512.3      491.60 ug/L         0.973      491.60 ppb          0.973   0.20%
   QC value within limits for Sb 206.836  Recovery = 98.32%
Se 196.026†            16101.8      2502.7 ug/L         13.24      2502.7 ppb          13.24   0.53%
   QC value within limits for Se 196.026  Recovery = 100.11%
Si 251.611†           290021.3      4949.9 ug/L          2.67      4949.9 ppb           2.67   0.05%
   QC value within limits for Si 251.611  Recovery = 99.00%
Sn 189.927†            10492.1      496.78 ug/L         3.272      496.78 ppb          3.272   0.66%
   QC value within limits for Sn 189.927  Recovery = 99.36%
Sr 421.552†           591714.2      511.44 ug/L         2.314      511.44 ppb          2.314   0.45%
   QC value within limits for Sr 421.552  Recovery = 102.29%
Ti 334.940†           390144.0      502.97 ug/L         0.247      502.97 ppb          0.247   0.05%
   QC value within limits for Ti 334.940  Recovery = 100.59%
Tl 190.801†             6672.8      496.98 ug/L         3.219      496.98 ppb          3.219   0.65%
   QC value within limits for Tl 190.801  Recovery = 99.40%
U 409.014†             11998.2      490.63 ug/L         1.643      490.63 ppb          1.643   0.33%
   QC value within limits for U 409.014  Recovery = 98.13%
V 292.402†             90976.5      507.30 ug/L         0.213      507.30 ppb          0.213   0.04%
   QC value within limits for V 292.402  Recovery = 101.46%
Zn 213.857†           153468.8      494.35 ug/L         0.433      494.35 ppb          0.433   0.09%
   QC value within limits for Zn 213.857  Recovery = 98.87%
SiO2†                 289593.3       10517 ug/L         137.6       10517 ppb          137.6   1.31%
   QC value within limits for SiO2  Recovery = 98.33%
All analyte(s) passed QC.
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Sequence No.: 7 **Autosampler Location: 10**
Sample ID: ICB **Date Collected: 3/6/2008 07:16:22**
Analyst: **Data Type: Reprocessed on 3/6/2008 08:21:24**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	974971.7	974971.7	97.524	%			07:19:32
1	Sc Radial	102101.0	102101.0	97.2	%			07:18:15
1	Y 371.029	825396.0	825396.0	97.374	%			07:19:32
1	Y RADIAL	88775.5	88775.5	97.29	%			07:18:15
1	Ag 328.068†	1199.3	103.3	0.3907	ug/L	0.3907	ppb	07:19:32
1	Al 396.153Radial†	536.0	-11.0	-1.2722	ug/L	-1.2722	ppb	07:18:15
1	As 188.979†	-47.6	13.1	1.4089	ug/L	1.4089	ppb	07:19:52
1	B 249.677†	-467.3	300.8	3.9797	ug/L	3.9797	ppb	07:19:52
1	Ba 233.527†	85.9	60.0	0.1741	ug/L	0.1741	ppb	07:19:52
1	Be 313.107†	-3588.4	44.9	0.0128	ug/L	0.0128	ppb	07:19:32
1	Ca 317.933Radial†	1808.4	1145.7	45.620	ug/L	45.620	ppb	07:18:35
1	Cd 226.502†	-217.8	-0.4	-0.0022	ug/L	-0.0022	ppb	07:19:52
1	Co 228.616†	-214.2	-19.4	-0.1601	ug/L	-0.1601	ppb	07:19:52
1	Cr 267.716†	-54.1	-1.0	-0.0076	ug/L	-0.0076	ppb	07:19:52
1	Cu 324.752†	8574.5	218.3	0.5187	ug/L	0.5187	ppb	07:19:32
1	Fe 238.204 Radial†	79.3	29.4	3.1417	ug/L	3.1417	ppb	07:18:35
1	K 766.490 Radial†	3415.5	108.2	21.727	ug/L	21.727	ppb	07:18:15
1	Mg 279.077 IEC†	96.9	21.2	9.8336	ug/L	9.8336	ppb	07:18:35
1	Mn 257.610†	1209.8	187.2	0.1052	ug/L	0.1052	ppb	07:19:52
1	Mo 202.031†	29.0	-0.1	-0.0018	ug/L	-0.0018	ppb	07:19:52
1	Na 589.592 Radial†	-1742.8	-447.7	-26.482	ug/L	-26.482	ppb	07:18:15
1	Ni 231.604†	281.8	5.2	0.0532	ug/L	0.0532	ppb	07:19:52
1	P 214.914†	825.1	47.1	6.9208	ug/L	6.9208	ppb	07:19:52
1	Pb 220.353†	-98.2	8.8	0.3649	ug/L	0.3649	ppb	07:19:52
1	S 181.975 Axial†	170.9	12.1	3.9592	ug/L	3.9592	ppb	07:19:52
1	Sb 206.836†	145.9	17.6	1.5908	ug/L	1.5908	ppb	07:19:52
1	Se 196.026†	-51.0	8.1	1.2590	ug/L	1.2590	ppb	07:19:52
1	Si 251.611†	1175.6	271.0	4.6328	ug/L	4.6328	ppb	07:19:52
1	Sn 189.927†	15.5	26.1	1.2374	ug/L	1.2374	ppb	07:19:52
1	Sr 421.552†	-1950.5	-31.0	-0.0282	ug/L	-0.0282	ppb	07:18:15
1	Ti 334.940†	-1412.2	0.4	-0.0014	ug/L	-0.0014	ppb	07:19:52
1	Tl 190.801†	-120.5	14.6	1.0846	ug/L	1.0846	ppb	07:19:52
1	U 409.014†	5621.1	381.5	15.620	ug/L	15.620	ppb	07:19:32
1	V 292.402†	-2461.4	-21.9	-0.0915	ug/L	-0.0915	ppb	07:19:52
1	Zn 213.857†	2264.6	288.7	0.9370	ug/L	0.9370	ppb	07:19:52
1	SiO2†	1232.0	284.5	10.349	ug/L	10.349	ppb	07:20:48
2	Sc 361.383	981532.6	981532.6	98.180	%			07:19:57
2	Sc Radial	103598.0	103598.0	98.7	%			07:18:40
2	Y 371.029	831699.5	831699.5	98.118	%			07:19:57
2	Y RADIAL	90185.8	90185.8	98.84	%			07:18:40
2	Ag 328.068†	1015.0	-92.6	-0.3664	ug/L	-0.3664	ppb	07:19:57
2	Al 396.153Radial†	677.0	123.9	14.165	ug/L	14.165	ppb	07:18:40
2	As 188.979†	-60.3	0.4	0.0209	ug/L	0.0209	ppb	07:20:17
2	B 249.677†	-443.5	328.3	4.3425	ug/L	4.3425	ppb	07:20:17
2	Ba 233.527†	37.9	10.5	0.0304	ug/L	0.0304	ppb	07:20:17
2	Be 313.107†	-3595.2	62.6	0.0180	ug/L	0.0180	ppb	07:19:57
2	Ca 317.933Radial†	2076.8	1390.8	55.379	ug/L	55.379	ppb	07:19:00
2	Cd 226.502†	-217.0	1.9	0.0092	ug/L	0.0092	ppb	07:20:17
2	Co 228.616†	-201.7	-5.2	-0.0415	ug/L	-0.0415	ppb	07:20:17
2	Cr 267.716†	-76.8	-23.8	-0.1751	ug/L	-0.1751	ppb	07:20:17
2	Cu 324.752†	8565.8	150.7	0.3593	ug/L	0.3593	ppb	07:19:57
2	Fe 238.204 Radial†	95.3	44.4	4.7544	ug/L	4.7544	ppb	07:19:00
2	K 766.490 Radial†	3414.9	56.8	11.401	ug/L	11.401	ppb	07:18:40
2	Mg 279.077 IEC†	107.5	30.5	14.151	ug/L	14.151	ppb	07:19:00
2	Mn 257.610†	1202.2	171.1	0.0963	ug/L	0.0963	ppb	07:20:17
2	Mo 202.031†	52.3	23.5	0.5154	ug/L	0.5154	ppb	07:20:17
2	Na 589.592 Radial†	-1612.4	-289.7	-17.134	ug/L	-17.134	ppb	07:18:40
2	Ni 231.604†	302.4	24.2	0.2485	ug/L	0.2485	ppb	07:20:17

2	P 214.914†	819.3	35.5	5.2300	ug/L	5.2300	ppb	07:20:17
2	Pb 220.353†	-129.6	-22.4	-0.9527	ug/L	-0.9527	ppb	07:20:17
2	S 181.975 Axial†	154.7	-5.5	-1.7920	ug/L	-1.7920	ppb	07:20:17
2	Sb 206.836†	171.4	42.6	3.8211	ug/L	3.8211	ppb	07:20:17
2	Se 196.026†	-56.6	2.8	0.4498	ug/L	0.4498	ppb	07:20:17
2	Si 251.611†	1153.3	240.2	4.0985	ug/L	4.0985	ppb	07:20:17
2	Sn 189.927†	6.3	16.7	0.7918	ug/L	0.7918	ppb	07:20:17
2	Sr 421.552†	-2022.1	-74.6	-0.0662	ug/L	-0.0662	ppb	07:18:40
2	Ti 334.940†	-1367.9	55.3	0.0733	ug/L	0.0733	ppb	07:20:17
2	Tl 190.801†	-119.8	16.2	1.1992	ug/L	1.1992	ppb	07:20:17
2	U 409.014†	5506.7	226.4	9.2712	ug/L	9.2712	ppb	07:19:57
2	V 292.402†	-2474.7	-18.6	-0.0801	ug/L	-0.0801	ppb	07:20:17
2	Zn 213.857†	2226.6	234.5	0.7592	ug/L	0.7592	ppb	07:20:17
2	SiO2†	1141.4	183.8	6.6664	ug/L	6.6664	ppb	07:20:53
3	Sc 361.383	994999.9	994999.9	99.527	%			07:20:23
3	Sc Radial	103703.4	103703.4	98.8	%			07:19:05
3	Y 371.029	843380.4	843380.4	99.496	%			07:20:23
3	Y RADIAL	90212.7	90212.7	98.87	%			07:19:05
3	Ag 328.068†	1136.6	15.6	0.0580	ug/L	0.0580	ppb	07:20:23
3	Al 396.153Radial†	594.9	40.1	4.5862	ug/L	4.5862	ppb	07:19:05
3	As 188.979†	-61.7	-0.1	-0.0382	ug/L	-0.0382	ppb	07:20:43
3	B 249.677†	-455.3	322.6	4.2680	ug/L	4.2680	ppb	07:20:43
3	Ba 233.527†	57.3	29.5	0.0855	ug/L	0.0855	ppb	07:20:43
3	Be 313.107†	-3769.6	-63.1	-0.0180	ug/L	-0.0180	ppb	07:20:23
3	Ca 317.933Radial†	1653.4	960.0	38.225	ug/L	38.225	ppb	07:19:25
3	Cd 226.502†	-236.7	-14.9	-0.0756	ug/L	-0.0756	ppb	07:20:43
3	Co 228.616†	-204.7	-5.5	-0.0451	ug/L	-0.0451	ppb	07:20:43
3	Cr 267.716†	-94.1	-40.0	-0.2948	ug/L	-0.2948	ppb	07:20:43
3	Cu 324.752†	8699.6	167.0	0.4032	ug/L	0.4032	ppb	07:20:23
3	Fe 238.204 Radial†	60.1	8.7	0.9277	ug/L	0.9277	ppb	07:19:25
3	K 766.490 Radial†	3533.5	173.3	34.814	ug/L	34.814	ppb	07:19:05
3	Mg 279.077 IEC†	74.9	-2.6	-1.1971	ug/L	-1.1971	ppb	07:19:25
3	Mn 257.610†	1213.8	166.1	0.0934	ug/L	0.0934	ppb	07:20:43
3	Mo 202.031†	26.9	-2.8	-0.0611	ug/L	-0.0611	ppb	07:20:43
3	Na 589.592 Radial†	-1679.3	-355.7	-21.040	ug/L	-21.040	ppb	07:19:05
3	Ni 231.604†	269.7	-12.8	-0.1318	ug/L	-0.1318	ppb	07:20:43
3	P 214.914†	847.7	52.8	7.7883	ug/L	7.7883	ppb	07:20:43
3	Pb 220.353†	-103.7	5.3	0.2241	ug/L	0.2241	ppb	07:20:43
3	S 181.975 Axial†	156.2	-6.2	-2.0178	ug/L	-2.0178	ppb	07:20:43
3	Sb 206.836†	156.9	25.7	2.3082	ug/L	2.3082	ppb	07:20:43
3	Se 196.026†	-59.0	1.1	0.1780	ug/L	0.1780	ppb	07:20:43
3	Si 251.611†	1194.2	265.5	4.5395	ug/L	4.5395	ppb	07:20:43
3	Sn 189.927†	-6.8	3.5	0.1651	ug/L	0.1651	ppb	07:20:43
3	Sr 421.552†	-2054.8	-105.6	-0.0924	ug/L	-0.0924	ppb	07:19:05
3	Ti 334.940†	-1451.6	-9.9	-0.0102	ug/L	-0.0102	ppb	07:20:43
3	Tl 190.801†	-113.6	24.0	1.7809	ug/L	1.7809	ppb	07:20:43
3	U 409.014†	5451.1	94.7	3.8782	ug/L	3.8782	ppb	07:20:23
3	V 292.402†	-2499.8	-9.7	-0.0466	ug/L	-0.0466	ppb	07:20:43
3	Zn 213.857†	2273.3	250.6	0.8153	ug/L	0.8153	ppb	07:20:43
3	SiO2†	1236.8	263.9	9.5996	ug/L	9.5996	ppb	07:20:58

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	983834.7	98.410	%	1.0213				1.04%
Sc Radial	103134.1	98.2	%	0.85				0.87%
Y 371.029	833492.0	98.329	%	1.0765				1.09%
Y RADIAL	89724.7	98.33	%	0.901				0.92%
Ag 328.068†	8.8	0.0275	ug/L	0.37947	0.0275	ppb	0.37947	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	51.0	5.8263	ug/L	7.79288	5.8263	ppb	7.79288	133.75%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	4.5	0.4639	ug/L	0.81898	0.4639	ppb	0.81898	176.55%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	317.2	4.1967	ug/L	0.19160	4.1967	ppb	0.19160	4.57%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	33.3	0.0967	ug/L	0.07249	0.0967	ppb	0.07249	74.97%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	14.8	0.0042	ug/L	0.01941	0.0042	ppb	0.01941	456.68%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†       1165.5      46.408 ug/L        8.6038      46.408 ppb         8.6038  18.54%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               -4.5     -0.0229 ug/L       0.04604     -0.0229 ppb        0.04604 201.24%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -10.0     -0.0822 ug/L       0.06749     -0.0822 ppb        0.06749  82.07%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -21.6     -0.1592 ug/L       0.14430     -0.1592 ppb        0.14430  90.66%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              178.7      0.4271 ug/L       0.08230      0.4271 ppb        0.08230  19.27%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        27.5      2.9413 ug/L       1.92120      2.9413 ppb        1.92120  65.32%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        112.8      22.647 ug/L       11.7339      22.647 ppb        11.7339  51.81%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           16.4      7.5959 ug/L       7.91513      7.5959 ppb        7.91513 104.20%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              174.8      0.0983 ug/L       0.00616      0.0983 ppb        0.00616   6.27%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                6.9      0.1508 ug/L       0.31712      0.1508 ppb        0.31712 210.26%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -364.4     -21.552 ug/L        4.6954     -21.552 ppb         4.6954  21.79%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                5.5      0.0566 ug/L       0.19018      0.0566 ppb        0.19018 335.81%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                45.1      6.6464 ug/L       1.30104      6.6464 ppb        1.30104  19.58%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -2.8     -0.1212 ug/L       0.72349     -0.1212 ppb        0.72349 596.75%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           0.2      0.0498 ug/L       3.38749      0.0498 ppb        3.38749 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               28.6      2.5734 ug/L       1.13853      2.5734 ppb        1.13853  44.24%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                4.0      0.6289 ug/L       0.56236      0.6289 ppb        0.56236  89.41%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              258.9      4.4236 ug/L       0.28540      4.4236 ppb        0.28540   6.45%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               15.4      0.7314 ug/L       0.53865      0.7314 ppb        0.53865  73.64%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -70.4     -0.0623 ug/L       0.03229     -0.0623 ppb        0.03229  51.85%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               15.3      0.0206 ug/L       0.04588      0.0206 ppb        0.04588 222.87%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               18.3      1.3549 ug/L       0.37337      1.3549 ppb        0.37337  27.56%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               234.2      9.5897 ug/L       5.87720      9.5897 ppb        5.87720  61.29%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -16.7     -0.0727 ug/L       0.02336     -0.0727 ppb        0.02336  32.12%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              257.9      0.8372 ug/L       0.09090      0.8372 ppb        0.09090  10.86%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    244.0      8.8717 ug/L       1.94624      8.8717 ppb        1.94624  21.94%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 8 **Autosampler Location: 11**
Sample ID: PQL **Date Collected: 3/6/2008 07:23:09**
Analyst: **Data Type: Reprocessed on 3/6/2008 08:21:26**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	982276.7	982276.7	98.254	%			07:26:19
1	Sc Radial	101476.3	101476.3	96.7	%			07:25:02
1	Y 371.029	834712.2	834712.2	98.473	%			07:26:19
1	Y RADIAL	88319.8	88319.8	96.79	%			07:25:02
1	Ag 328.068†	2373.8	1289.6	5.0181	ug/L	5.0181	ppb	07:26:19
1	Al 396.153Radial†	2443.9	1966.3	224.92	ug/L	224.92	ppb	07:25:02
1	As 188.979†	85.0	148.4	15.941	ug/L	15.941	ppb	07:26:39
1	B 249.677†	3040.4	3874.4	51.252	ug/L	51.252	ppb	07:26:39
1	Ba 233.527†	1855.7	1860.6	5.4212	ug/L	5.4212	ppb	07:26:39
1	Be 313.107†	13439.7	17402.9	4.9568	ug/L	4.9568	ppb	07:26:19
1	Ca 317.933Radial†	3199.2	2596.1	103.37	ug/L	103.37	ppb	07:25:22
1	Cd 226.502†	758.6	995.0	5.0315	ug/L	5.0315	ppb	07:26:39
1	Co 228.616†	421.2	628.9	5.1988	ug/L	5.1988	ppb	07:26:39
1	Cr 267.716†	640.4	706.2	5.2078	ug/L	5.2078	ppb	07:26:39
1	Cu 324.752†	12755.3	4408.0	10.681	ug/L	10.681	ppb	07:26:19
1	Fe 238.204 Radial†	1009.6	992.4	106.44	ug/L	106.44	ppb	07:25:22
1	K 766.490 Radial†	4075.6	812.7	163.24	ug/L	163.24	ppb	07:25:02
1	Mg 279.077 IEC†	766.0	714.2	330.87	ug/L	330.87	ppb	07:25:22
1	Mn 257.610†	18687.1	17965.7	10.087	ug/L	10.087	ppb	07:26:39
1	Mo 202.031†	482.2	461.0	10.123	ug/L	10.123	ppb	07:26:39
1	Na 589.592 Radial†	715.5	2084.8	123.31	ug/L	123.31	ppb	07:25:02
1	Ni 231.604†	762.9	492.6	5.0531	ug/L	5.0531	ppb	07:26:39
1	P 214.914†	1768.7	1001.2	147.25	ug/L	147.25	ppb	07:26:39
1	Pb 220.353†	142.0	254.1	10.795	ug/L	10.795	ppb	07:26:39
1	S 181.975 Axial†	454.8	299.8	97.649	ug/L	97.649	ppb	07:26:39
1	Sb 206.836†	264.3	137.1	12.311	ug/L	12.311	ppb	07:26:39
1	Se 196.026†	43.9	105.1	16.575	ug/L	16.575	ppb	07:26:39
1	Si 251.611†	6958.6	6147.8	104.93	ug/L	104.93	ppb	07:26:39
1	Sn 189.927†	257.7	272.6	12.906	ug/L	12.906	ppb	07:26:39
1	Sr 421.552†	4062.4	6177.8	5.3382	ug/L	5.3382	ppb	07:25:02
1	Ti 334.940†	2373.6	3864.3	4.9618	ug/L	4.9618	ppb	07:26:39
1	Tl 190.801†	164.1	305.2	22.666	ug/L	22.666	ppb	07:26:39
1	U 409.014†	6783.3	1521.5	62.290	ug/L	62.290	ppb	07:26:19
1	V 292.402†	-1632.8	840.2	4.8479	ug/L	4.8479	ppb	07:26:39
1	Zn 213.857†	4998.6	3053.9	9.8591	ug/L	9.8591	ppb	07:26:39
1	SiO2†	7062.0	6208.7	225.48	ug/L	225.48	ppb	07:27:36
2	Sc 361.383	988208.7	988208.7	98.848	%			07:26:44
2	Sc Radial	102935.2	102935.2	98.0	%			07:25:27
2	Y 371.029	837615.5	837615.5	98.816	%			07:26:44
2	Y RADIAL	89533.3	89533.3	98.12	%			07:25:27
2	Ag 328.068†	2461.5	1363.8	5.3092	ug/L	5.3092	ppb	07:26:44
2	Al 396.153Radial†	2320.1	1804.2	206.33	ug/L	206.33	ppb	07:25:27
2	As 188.979†	80.8	143.6	15.419	ug/L	15.419	ppb	07:27:05
2	B 249.677†	3082.6	3898.6	51.571	ug/L	51.571	ppb	07:27:05
2	Ba 233.527†	1806.9	1799.9	5.2452	ug/L	5.2452	ppb	07:27:05
2	Be 313.107†	13572.5	17455.1	4.9714	ug/L	4.9714	ppb	07:26:44
2	Ca 317.933Radial†	3170.5	2519.9	100.34	ug/L	100.34	ppb	07:25:47
2	Cd 226.502†	777.8	1009.8	5.1062	ug/L	5.1062	ppb	07:27:05
2	Co 228.616†	409.1	614.1	5.0780	ug/L	5.0780	ppb	07:27:05
2	Cr 267.716†	609.5	671.1	4.9495	ug/L	4.9495	ppb	07:27:05
2	Cu 324.752†	12647.4	4220.9	10.227	ug/L	10.227	ppb	07:26:44
2	Fe 238.204 Radial†	1022.3	990.6	106.24	ug/L	106.24	ppb	07:25:47
2	K 766.490 Radial†	4029.6	706.0	141.81	ug/L	141.81	ppb	07:25:27
2	Mg 279.077 IEC†	770.0	707.0	327.55	ug/L	327.55	ppb	07:25:47
2	Mn 257.610†	18632.5	17796.3	9.9916	ug/L	9.9916	ppb	07:27:05
2	Mo 202.031†	499.3	475.3	10.436	ug/L	10.436	ppb	07:27:05
2	Na 589.592 Radial†	675.8	2033.8	120.30	ug/L	120.30	ppb	07:25:27
2	Ni 231.604†	780.8	506.1	5.1914	ug/L	5.1914	ppb	07:27:05

2	P 214.914†	1778.2	1000.0	147.13 ug/L	147.13 ppb	07:27:05
2	Pb 220.353†	136.0	247.2	10.499 ug/L	10.499 ppb	07:27:05
2	S 181.975 Axial†	446.5	288.6	94.022 ug/L	94.022 ppb	07:27:05
2	Sb 206.836†	269.6	140.8	12.650 ug/L	12.650 ppb	07:27:05
2	Se 196.026†	65.1	126.3	19.844 ug/L	19.844 ppb	07:27:05
2	Si 251.611†	6930.2	6076.6	103.71 ug/L	103.71 ppb	07:27:05
2	Sn 189.927†	257.4	270.7	12.817 ug/L	12.817 ppb	07:27:05
2	Sr 421.552†	3799.2	5849.8	5.0548 ug/L	5.0548 ppb	07:25:27
2	Ti 334.940†	2340.7	3816.6	4.9009 ug/L	4.9009 ppb	07:27:05
2	Tl 190.801†	118.7	258.3	19.191 ug/L	19.191 ppb	07:27:05
2	U 409.014†	6777.8	1474.5	60.367 ug/L	60.367 ppb	07:26:44
2	V 292.402†	-1595.2	888.2	5.1127 ug/L	5.1127 ppb	07:27:05
2	Zn 213.857†	5023.4	3048.6	9.8414 ug/L	9.8414 ppb	07:27:05
2	SiO2†	7037.7	6141.0	223.01 ug/L	223.01 ppb	07:27:41
3	Sc 361.383	984538.8	984538.8	98.481 %		07:27:10
3	Sc Radial	102665.0	102665.0	97.8 %		07:25:52
3	Y 371.029	834377.0	834377.0	98.434 %		07:27:10
3	Y RADIAL	89453.7	89453.7	98.04 %		07:25:52
3	Ag 328.068†	2501.5	1413.7	5.5066 ug/L	5.5066 ppb	07:27:10
3	Al 396.153Radial†	2304.9	1794.9	205.26 ug/L	205.26 ppb	07:25:52
3	As 188.979†	63.5	126.3	13.526 ug/L	13.526 ppb	07:27:30
3	B 249.677†	3078.3	3905.9	51.668 ug/L	51.668 ppb	07:27:30
3	Ba 233.527†	1776.1	1775.4	5.1740 ug/L	5.1740 ppb	07:27:30
3	Be 313.107†	13353.8	17284.2	4.9229 ug/L	4.9229 ppb	07:27:10
3	Ca 317.933Radial†	3204.7	2563.4	102.07 ug/L	102.07 ppb	07:26:12
3	Cd 226.502†	756.9	991.6	5.0142 ug/L	5.0142 ppb	07:27:30
3	Co 228.616†	393.3	599.6	4.9585 ug/L	4.9585 ppb	07:27:30
3	Cr 267.716†	614.7	678.6	5.0049 ug/L	5.0049 ppb	07:27:30
3	Cu 324.752†	12626.2	4247.1	10.295 ug/L	10.295 ppb	07:27:10
3	Fe 238.204 Radial†	1004.4	975.0	104.57 ug/L	104.57 ppb	07:26:12
3	K 766.490 Radial†	4123.0	812.3	163.16 ug/L	163.16 ppb	07:25:52
3	Mg 279.077 IEC†	758.8	697.6	323.19 ug/L	323.19 ppb	07:26:12
3	Mn 257.610†	18584.1	17817.5	10.003 ug/L	10.003 ppb	07:27:30
3	Mo 202.031†	498.2	476.1	10.454 ug/L	10.454 ppb	07:27:30
3	Na 589.592 Radial†	684.2	2044.2	120.91 ug/L	120.91 ppb	07:25:52
3	Ni 231.604†	752.6	480.4	4.9279 ug/L	4.9279 ppb	07:27:30
3	P 214.914†	1780.7	1009.3	148.50 ug/L	148.50 ppb	07:27:30
3	Pb 220.353†	135.9	247.6	10.520 ug/L	10.520 ppb	07:27:30
3	S 181.975 Axial†	448.1	291.9	95.084 ug/L	95.084 ppb	07:27:30
3	Sb 206.836†	262.3	134.4	12.068 ug/L	12.068 ppb	07:27:30
3	Se 196.026†	55.0	116.2	18.287 ug/L	18.287 ppb	07:27:30
3	Si 251.611†	6932.7	6105.3	104.20 ug/L	104.20 ppb	07:27:30
3	Sn 189.927†	259.9	274.2	12.983 ug/L	12.983 ppb	07:27:30
3	Sr 421.552†	3796.9	5857.6	5.0614 ug/L	5.0614 ppb	07:25:52
3	Ti 334.940†	2339.9	3824.6	4.9136 ug/L	4.9136 ppb	07:27:30
3	Tl 190.801†	142.1	282.5	20.988 ug/L	20.988 ppb	07:27:30
3	U 409.014†	6634.8	1354.9	55.471 ug/L	55.471 ppb	07:27:10
3	V 292.402†	-1592.7	884.7	5.0844 ug/L	5.0844 ppb	07:27:30
3	Zn 213.857†	4994.9	3038.5	9.8108 ug/L	9.8108 ppb	07:27:30
3	SiO2†	6990.6	6119.7	222.23 ug/L	222.23 ppb	07:27:46

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	985008.0	98.527	%	0.2995				0.30%
Sc Radial	102358.9	97.5	%	0.74				0.76%
Y 371.029	835568.3	98.574	%	0.2101				0.21%
Y RADIAL	89102.3	97.65	%	0.744				0.76%
Ag 328.068†	1355.7	5.2779	ug/L	0.24573	5.2779	ppb	0.24573	4.66%
QC value within limits for Ag 328.068 Recovery = 105.56%								
Al 396.153Radial†	1855.1	212.17	ug/L	11.052	212.17	ppb	11.052	5.21%
QC value within limits for Al 396.153Radial Recovery = 106.08%								
As 188.979†	139.4	14.962	ug/L	1.2708	14.962	ppb	1.2708	8.49%
QC value within limits for As 188.979 Recovery = 99.75%								
B 249.677†	3892.9	51.497	ug/L	0.2180	51.497	ppb	0.2180	0.42%
QC value within limits for B 249.677 Recovery = 102.99%								
Ba 233.527†	1812.0	5.2801	ug/L	0.12729	5.2801	ppb	0.12729	2.41%
QC value within limits for Ba 233.527 Recovery = 105.60%								
Be 313.107†	17380.7	4.9504	ug/L	0.02489	4.9504	ppb	0.02489	0.50%
QC value within limits for Be 313.107 Recovery = 99.01%								

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Ca 317.933Radial†       2559.8      101.93 ug/L         1.523      101.93 ppb          1.523   1.49%
   QC value within limits for Ca 317.933Radial  Recovery = 101.93%
Cd 226.502†              998.8      5.0507 ug/L       0.04892      5.0507 ppb        0.04892   0.97%
   QC value within limits for Cd 226.502  Recovery = 101.01%
Co 228.616†              614.2      5.0784 ug/L       0.12018      5.0784 ppb        0.12018   2.37%
   QC value within limits for Co 228.616  Recovery = 101.57%
Cr 267.716†              685.3      5.0540 ug/L       0.13597      5.0540 ppb        0.13597   2.69%
   QC value within limits for Cr 267.716  Recovery = 101.08%
Cu 324.752†             4292.0      10.401 ug/L        0.2447      10.401 ppb         0.2447   2.35%
   QC value within limits for Cu 324.752  Recovery = 104.01%
Fe 238.204 Radial†       986.0      105.75 ug/L         1.029      105.75 ppb          1.029   0.97%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.75%
K 766.490 Radial†        777.0      156.07 ug/L        12.350      156.07 ppb         12.350   7.91%
   QC value within limits for K 766.490 Radial  Recovery = 104.05%
Mg 279.077 IEC†          706.2      327.20 ug/L         3.852      327.20 ppb          3.852   1.18%
   QC value within limits for Mg 279.077 IEC  Recovery = 109.07%
Mn 257.610†            17859.8      10.027 ug/L        0.0518      10.027 ppb         0.0518   0.52%
   QC value within limits for Mn 257.610  Recovery = 100.27%
Mo 202.031†              470.8      10.338 ug/L        0.1864      10.338 ppb         0.1864   1.80%
   QC value within limits for Mo 202.031  Recovery = 103.38%
Na 589.592 Radial†      2054.2      121.51 ug/L         1.595      121.51 ppb          1.595   1.31%
   QC value within limits for Na 589.592 Radial  Recovery = 81.00%
Ni 231.604†              493.1      5.0575 ug/L       0.13176      5.0575 ppb        0.13176   2.61%
   QC value within limits for Ni 231.604  Recovery = 101.15%
P 214.914†              1003.5      147.63 ug/L         0.758      147.63 ppb          0.758   0.51%
   QC value within limits for P 214.914  Recovery = 98.42%
Pb 220.353†              249.6      10.605 ug/L        0.1651      10.605 ppb         0.1651   1.56%
   QC value within limits for Pb 220.353  Recovery = 106.05%
S 181.975 Axial†         293.4      95.585 ug/L        1.8646      95.585 ppb         1.8646   1.95%
   QC value within limits for S 181.975 Axial  Recovery = 95.58%
Sb 206.836†              137.4      12.343 ug/L        0.2921      12.343 ppb         0.2921   2.37%
   QC value within limits for Sb 206.836  Recovery = 123.43%
Se 196.026†              115.9      18.236 ug/L        1.6350      18.236 ppb         1.6350   8.97%
   QC value within limits for Se 196.026  Recovery = 121.57%
Si 251.611†             6109.9      104.28 ug/L         0.615      104.28 ppb          0.615   0.59%
   QC value within limits for Si 251.611  Recovery = 104.28%
Sn 189.927†              272.5      12.902 ug/L        0.0830      12.902 ppb         0.0830   0.64%
   QC value within limits for Sn 189.927  Recovery = 129.02%
Sr 421.552†             5961.8      5.1515 ug/L       0.16177      5.1515 ppb        0.16177   3.14%
   QC value within limits for Sr 421.552  Recovery = 103.03%
Ti 334.940†             3835.1      4.9254 ug/L       0.03212      4.9254 ppb        0.03212   0.65%
   QC value within limits for Ti 334.940  Recovery = 98.51%
Tl 190.801†              282.0      20.948 ug/L        1.7380      20.948 ppb         1.7380   8.30%
   QC value within limits for Tl 190.801  Recovery = 104.74%
U 409.014†              1450.3      59.376 ug/L        3.5156      59.376 ppb         3.5156   5.92%
   QC value within limits for U 409.014  Recovery = 118.75%
V 292.402†               871.0      5.0150 ug/L       0.14541      5.0150 ppb        0.14541   2.90%
   QC value within limits for V 292.402  Recovery = 100.30%
Zn 213.857†             3047.0      9.8371 ug/L       0.02444      9.8371 ppb        0.02444   0.25%
   QC value within limits for Zn 213.857  Recovery = 98.37%
SiO2†                   6156.5      223.57 ug/L         1.697      223.57 ppb          1.697   0.76%
   QC value within limits for SiO2  Recovery = 104.96%
All analyte(s) passed QC.
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Sequence No.: 9 **Autosampler Location: 13**
Sample ID: ICSA **Date Collected: 3/6/2008 07:29:56**
Analyst: **Data Type: Reprocessed on 3/6/2008 08:21:27**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	862394.1	862394.1	86.263	%			07:32:41
1	Sc Radial	96319.3	96319.3	91.7	%			07:32:01
1	Y 371.029	716119.5	716119.5	84.482	%			07:32:41
1	Y RADIAL	82994.5	82994.5	90.96	%			07:32:01
1	Ag 328.068†	-10087.6	-12820.5	7.1628	ug/L	7.1628	ppb	07:32:46
1	Al 396.153Radial†	3987486.1	4345941.9	497940	ug/L	497940	ppb	07:31:51
1	As 188.979†	-212.1	-184.1	-1.9638	ug/L	-1.9638	ppb	07:32:46
1	B 249.677†	-1060.8	-449.7	-16.501	ug/L	-16.501	ppb	07:32:41
1	Ba 233.527†	1099.1	1246.0	3.6555	ug/L	3.6555	ppb	07:32:46
1	Be 313.107†	-4199.7	-1144.1	-0.4563	ug/L	-0.4563	ppb	07:32:46
1	Ca 317.933Radial†	10964460.8	11950945.3	475870	ug/L	475870	ppb	07:31:51
1	Cd 226.502†	2077.8	2631.6	0.2069	ug/L	0.2069	ppb	07:32:46
1	Co 228.616†	166.7	393.5	3.3178	ug/L	3.3178	ppb	07:32:46
1	Cr 267.716†	-720.7	-781.0	-5.7254	ug/L	-5.7254	ppb	07:32:46
1	Cu 324.752†	2995.7	-5101.2	-1.7478	ug/L	-1.7478	ppb	07:32:46
1	Fe 238.204 Radial†	1598916.0	1742824.2	186650	ug/L	186650	ppb	07:31:56
1	K 766.490 Radial†	2936.9	-202.7	-40.720	ug/L	-40.720	ppb	07:32:01
1	Mg 279.077 IEC†	937180.0	1021481.7	472860	ug/L	472860	ppb	07:32:01
1	Mn 257.610†	-21369.4	-25825.8	-2.6553	ug/L	-2.6553	ppb	07:32:41
1	Mo 202.031†	-465.1	-569.0	-1.4519	ug/L	-1.4519	ppb	07:32:46
1	Na 589.592 Radial†	-1136.1	106.1	6.2752	ug/L	6.2752	ppb	07:32:01
1	Ni 231.604†	373.4	149.1	1.5282	ug/L	1.5282	ppb	07:32:46
1	P 214.914†	809.0	138.9	3.8272	ug/L	3.8272	ppb	07:32:46
1	Pb 220.353†	-2153.6	-2387.0	-15.958	ug/L	-15.958	ppb	07:32:46
1	S 181.975 Axial†	103.9	-42.6	-76.695	ug/L	-76.695	ppb	07:32:46
1	Sb 206.836†	182.3	79.4	-2.8419	ug/L	-2.8419	ppb	07:32:46
1	Se 196.026†	-3281.4	-3743.6	-6.1412	ug/L	-6.1412	ppb	07:32:46
1	Si 251.611†	2199.0	1614.8	27.800	ug/L	27.800	ppb	07:32:46
1	Sn 189.927†	-395.7	-448.5	-6.6273	ug/L	-6.6273	ppb	07:32:46
1	Sr 421.552†	15230.7	18576.7	1.7479	ug/L	1.7479	ppb	07:32:01
1	Ti 334.940†	-36012.9	-40299.4	0.6222	ug/L	0.6222	ppb	07:32:46
1	Tl 190.801†	-170.5	-59.4	-4.7730	ug/L	-4.7730	ppb	07:32:46
1	U 409.014†	6352.8	1982.1	60.717	ug/L	60.717	ppb	07:32:41
1	V 292.402†	104.6	2623.2	-5.8399	ug/L	-5.8399	ppb	07:32:46
1	Zn 213.857†	13548.9	13673.1	4.8774	ug/L	4.8774	ppb	07:32:46
1	SiO2†	2144.0	1506.7	55.243	ug/L	55.243	ppb	07:33:13
2	Sc 361.383	864051.7	864051.7	86.429	%			07:32:52
2	Sc Radial	96796.3	96796.3	92.2	%			07:32:18
2	Y 371.029	718734.2	718734.2	84.791	%			07:32:52
2	Y RADIAL	83520.9	83520.9	91.53	%			07:32:18
2	Ag 328.068†	-10189.4	-12915.7	6.1418	ug/L	6.1418	ppb	07:32:57
2	Al 396.153Radial†	3971347.1	4307017.1	493480	ug/L	493480	ppb	07:32:07
2	As 188.979†	-171.5	-136.6	3.0165	ug/L	3.0165	ppb	07:32:57
2	B 249.677†	-1073.9	-462.5	-16.582	ug/L	-16.582	ppb	07:32:52
2	Ba 233.527†	1104.2	1249.6	3.6658	ug/L	3.6658	ppb	07:32:57
2	Be 313.107†	-4259.9	-1204.4	-0.4742	ug/L	-0.4742	ppb	07:32:57
2	Ca 317.933Radial†	10929716.8	11854362.1	472030	ug/L	472030	ppb	07:32:07
2	Cd 226.502†	1972.2	2504.9	-0.2862	ug/L	-0.2862	ppb	07:32:57
2	Co 228.616†	179.0	407.4	3.4308	ug/L	3.4308	ppb	07:32:57
2	Cr 267.716†	-779.0	-846.8	-6.2098	ug/L	-6.2098	ppb	07:32:57
2	Cu 324.752†	3025.9	-5072.9	-1.8034	ug/L	-1.8034	ppb	07:32:57
2	Fe 238.204 Radial†	1588604.8	1723051.1	184530	ug/L	184530	ppb	07:32:13
2	K 766.490 Radial†	2932.9	-222.9	-44.766	ug/L	-44.766	ppb	07:32:18
2	Mg 279.077 IEC†	945578.9	1025557.5	474750	ug/L	474750	ppb	07:32:18
2	Mn 257.610†	-21343.3	-25748.1	-2.8786	ug/L	-2.8786	ppb	07:32:52
2	Mo 202.031†	-499.9	-608.2	-2.4381	ug/L	-2.4381	ppb	07:32:57
2	Na 589.592 Radial†	-1157.8	88.7	5.2441	ug/L	5.2441	ppb	07:32:18
2	Ni 231.604†	307.5	72.0	0.7359	ug/L	0.7359	ppb	07:32:57

2	P 214.914†	879.2	218.3	16.136	ug/L	16.136	ppb	07:32:57
2	Pb 220.353†	-2073.0	-2289.0	-12.546	ug/L	-12.546	ppb	07:32:57
2	S 181.975 Axial†	106.3	-40.1	-75.319	ug/L	-75.319	ppb	07:32:57
2	Sb 206.836†	155.1	47.5	-5.6049	ug/L	-5.6049	ppb	07:32:57
2	Se 196.026†	-3228.0	-3674.4	-1.8584	ug/L	-1.8584	ppb	07:32:57
2	Si 251.611†	2234.5	1651.0	28.433	ug/L	28.433	ppb	07:32:57
2	Sn 189.927†	-421.5	-477.4	-8.1152	ug/L	-8.1152	ppb	07:32:57
2	Sr 421.552†	15347.1	18621.1	1.9021	ug/L	1.9021	ppb	07:32:18
2	Ti 334.940†	-36288.2	-40537.7	-0.1113	ug/L	-0.1113	ppb	07:32:57
2	Tl 190.801†	-167.0	-55.0	-4.4485	ug/L	-4.4485	ppb	07:32:57
2	U 409.014†	6434.0	2062.0	64.217	ug/L	64.217	ppb	07:32:52
2	V 292.402†	104.3	2622.6	-5.5262	ug/L	-5.5262	ppb	07:32:57
2	Zn 213.857†	13567.7	13664.8	5.0592	ug/L	5.0592	ppb	07:32:57
2	SiO2†	2170.3	1532.3	56.205	ug/L	56.205	ppb	07:33:18
3	Sc 361.383	863828.3	863828.3	86.406	%			07:33:02
3	Sc Radial	97026.4	97026.4	92.4	%			07:32:34
3	Y 371.029	717365.7	717365.7	84.629	%			07:33:02
3	Y RADIAL	83646.3	83646.3	91.67	%			07:32:34
3	Ag 328.068†	-10065.0	-12774.8	6.8477	ug/L	6.8477	ppb	07:33:07
3	Al 396.153Radial†	4010420.0	4339079.9	497160	ug/L	497160	ppb	07:32:24
3	As 188.979†	-192.9	-161.3	0.3640	ug/L	0.3640	ppb	07:33:07
3	B 249.677†	-995.5	-372.1	-15.437	ug/L	-15.437	ppb	07:33:02
3	Ba 233.527†	1060.1	1198.8	3.5161	ug/L	3.5161	ppb	07:33:07
3	Be 313.107†	-4212.2	-1150.5	-0.4560	ug/L	-0.4560	ppb	07:33:07
3	Ca 317.933Radial†	11016513.2	11920163.5	474650	ug/L	474650	ppb	07:32:24
3	Cd 226.502†	1947.1	2476.4	-0.4689	ug/L	-0.4689	ppb	07:33:07
3	Co 228.616†	124.4	344.2	2.9105	ug/L	2.9105	ppb	07:33:07
3	Cr 267.716†	-775.7	-843.3	-6.1853	ug/L	-6.1853	ppb	07:33:07
3	Cu 324.752†	2936.8	-5175.1	-2.0277	ug/L	-2.0277	ppb	07:33:07
3	Fe 238.204 Radial†	1597080.6	1728135.5	185080	ug/L	185080	ppb	07:32:29
3	K 766.490 Radial†	2949.5	-212.5	-42.672	ug/L	-42.672	ppb	07:32:34
3	Mg 279.077 IEC†	946083.7	1023670.9	473870	ug/L	473870	ppb	07:32:34
3	Mn 257.610†	-21115.6	-25490.9	-2.6586	ug/L	-2.6586	ppb	07:33:02
3	Mo 202.031†	-459.8	-561.9	-1.3897	ug/L	-1.3897	ppb	07:33:07
3	Na 589.592 Radial†	-1253.7	-12.2	-0.7215	ug/L	-0.7215	ppb	07:32:34
3	Ni 231.604†	318.3	84.6	0.8665	ug/L	0.8665	ppb	07:33:07
3	P 214.914†	892.2	233.7	18.999	ug/L	18.999	ppb	07:33:07
3	Pb 220.353†	-1985.5	-2188.4	-7.6022	ug/L	-7.6022	ppb	07:33:07
3	S 181.975 Axial†	160.2	22.3	-55.453	ug/L	-55.453	ppb	07:33:07
3	Sb 206.836†	226.0	129.5	1.6732	ug/L	1.6732	ppb	07:33:07
3	Se 196.026†	-3159.6	-3596.2	12.061	ug/L	12.061	ppb	07:33:07
3	Si 251.611†	2150.2	1554.0	26.760	ug/L	26.760	ppb	07:33:07
3	Sn 189.927†	-441.7	-500.9	-9.1440	ug/L	-9.1440	ppb	07:33:07
3	Sr 421.552†	15267.6	18495.6	1.7147	ug/L	1.7147	ppb	07:32:34
3	Ti 334.940†	-35517.1	-39656.2	1.3105	ug/L	1.3105	ppb	07:33:07
3	Tl 190.801†	-78.3	47.6	3.1670	ug/L	3.1670	ppb	07:33:07
3	U 409.014†	6612.9	2270.9	72.712	ug/L	72.712	ppb	07:33:02
3	V 292.402†	-28.7	2468.8	-6.4374	ug/L	-6.4374	ppb	07:33:07
3	Zn 213.857†	13140.1	13173.9	3.4232	ug/L	3.4232	ppb	07:33:07
3	SiO2†	2242.1	1616.1	59.216	ug/L	59.216	ppb	07:33:23

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	863424.7	86.366	%	0.0900				0.10%
Sc Radial	96714.0	92.1	%	0.34				0.37%
Y 371.029	717406.5	84.634	%	0.1543				0.18%
Y RADIAL	83387.2	91.39	%	0.379				0.41%
Ag 328.068†	-12837.0	6.7174	ug/L	0.52283	6.7174	ppb	0.52283	7.78%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	4330679.6	496190	ug/L	2380.7	496190	ppb	2380.7	0.48%
QC value within limits for Al 396.153Radial Recovery = 99.24%								
As 188.979†	-160.7	0.4722	ug/L	2.49191	0.4722	ppb	2.49191	527.70%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-428.1	-16.173	ug/L	0.6389	-16.173	ppb	0.6389	3.95%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1231.5	3.6125	ug/L	0.08359	3.6125	ppb	0.08359	2.31%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1166.3	-0.4622	ug/L	0.01042	-0.4622	ppb	0.01042	2.25%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†   11908490.3      474180 ug/L        1964.6      474180 ppb         1964.6   0.41%
   QC value within limits for Ca 317.933Radial  Recovery = 94.84%
Cd 226.502†             2537.6     -0.1827 ug/L       0.34958     -0.1827 ppb        0.34958 191.32%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              381.7      3.2197 ug/L       0.27369      3.2197 ppb        0.27369   8.50%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -823.7     -6.0402 ug/L       0.27287     -6.0402 ppb        0.27287   4.52%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -5116.4     -1.8596 ug/L       0.14817     -1.8596 ppb        0.14817   7.97%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†   1731337.0      185420 ug/L        1099.7      185420 ppb         1099.7   0.59%
   QC value within limits for Fe 238.204 Radial  Recovery = 92.71%
K 766.490 Radial†       -212.7     -42.719 ug/L        2.0237     -42.719 ppb         2.0237   4.74%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†      1023570.0      473820 ug/L         945.0      473820 ppb          945.0   0.20%
   QC value within limits for Mg 279.077 IEC  Recovery = 94.76%
Mn 257.610†           -25688.3     -2.7308 ug/L       0.12801     -2.7308 ppb        0.12801   4.69%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -579.7     -1.7599 ug/L       0.58815     -1.7599 ppb        0.58815  33.42%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        60.9      3.5993 ug/L       3.77726      3.5993 ppb        3.77726 104.94%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              101.9      1.0435 ug/L       0.42481      1.0435 ppb        0.42481  40.71%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               196.9      12.987 ug/L        8.0611      12.987 ppb         8.0611  62.07%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -2288.1     -12.036 ug/L        4.2014     -12.036 ppb         4.2014  34.91%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -20.2     -69.156 ug/L       11.8870     -69.156 ppb        11.8870  17.19%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               85.5     -2.2579 ug/L       3.67403     -2.2579 ppb        3.67403 162.72%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†            -3671.4      1.3536 ug/L       9.51650      1.3536 ppb        9.51650 703.03%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             1606.6      27.664 ug/L        0.8448      27.664 ppb         0.8448   3.05%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†             -475.6     -7.9621 ug/L       1.26531     -7.9621 ppb        1.26531  15.89%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†            18564.5      1.7882 ug/L       0.09996      1.7882 ppb        0.09996   5.59%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†           -40164.4      0.6071 ug/L       0.71103      0.6071 ppb        0.71103 117.12%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -22.3     -2.0182 ug/L       4.49344     -2.0182 ppb        4.49344 222.65%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              2105.0      65.882 ug/L        6.1687      65.882 ppb         6.1687   9.36%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              2571.6     -5.9345 ug/L       0.46290     -5.9345 ppb        0.46290   7.80%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            13503.9      4.4533 ug/L       0.89666      4.4533 ppb        0.89666  20.13%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   1551.7      56.888 ug/L        2.0732      56.888 ppb         2.0732   3.64%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 10 **Autosampler Location: 14**
Sample ID: ICSAB **Date Collected: 3/6/2008 07:35:33**
Analyst: **Data Type: Reprocessed on 3/6/2008 08:21:28**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	862741.9	862741.9	86.298	%			07:38:02
1	Sc Radial	97640.2	97640.2	93.0	%			07:37:32
1	Y 371.029	717969.0	717969.0	84.701	%			07:38:02
1	Y RADIAL	84211.1	84211.1	92.29	%			07:37:32
1	Ag 328.068†	49118.5	55791.2	274.34	ug/L	274.34	ppb	07:38:07
1	Al 396.153Radial†	4065478.6	4371007.3	500800	ug/L	500800	ppb	07:37:27
1	As 188.979†	3792.6	4456.7	503.49	ug/L	503.49	ppb	07:38:07
1	B 249.677†	33748.8	39887.6	517.18	ug/L	517.18	ppb	07:38:02
1	Ba 233.527†	148726.2	172313.0	502.26	ug/L	502.26	ppb	07:38:02
1	Be 313.107†	747103.2	869453.6	248.17	ug/L	248.17	ppb	07:38:02
1	Ca 317.933Radial†	11155021.1	11994171.6	477590	ug/L	477590	ppb	07:37:27
1	Cd 226.502†	82517.2	95842.4	472.49	ug/L	472.49	ppb	07:38:07
1	Co 228.616†	49010.6	56992.8	469.97	ug/L	469.97	ppb	07:38:07
1	Cr 267.716†	56653.7	65703.7	484.64	ug/L	484.64	ppb	07:38:07
1	Cu 324.752†	198638.7	221604.9	549.25	ug/L	549.25	ppb	07:38:02
1	Fe 238.204 Radial†	1591222.5	1710973.9	183250	ug/L	183250	ppb	07:37:32
1	K 766.490 Radial†	27915.4	26613.0	5345.3	ug/L	5345.3	ppb	07:37:32
1	Mg 279.077 IEC†	952875.6	1024539.4	474290	ug/L	474290	ppb	07:37:32
1	Mn 257.610†	723737.8	837600.4	481.43	ug/L	481.43	ppb	07:38:02
1	Mo 202.031†	18796.7	21751.4	488.15	ug/L	488.15	ppb	07:38:07
1	Na 589.592 Radial†	82027.9	89548.3	5296.7	ug/L	5296.7	ppb	07:37:32
1	Ni 231.604†	38589.5	44433.0	455.75	ug/L	455.75	ppb	07:38:07
1	P 214.914†	15493.2	17154.3	2459.5	ug/L	2459.5	ppb	07:38:07
1	Pb 220.353†	7307.7	8577.5	450.41	ug/L	450.41	ppb	07:38:07
1	S 181.975 Axial†	7142.5	8113.6	2580.7	ug/L	2580.7	ppb	07:38:07
1	Sb 206.836†	5079.9	5754.5	503.47	ug/L	503.47	ppb	07:38:07
1	Se 196.026†	10784.5	12557.3	2502.7	ug/L	2502.7	ppb	07:38:07
1	Si 251.611†	262831.6	303629.9	5182.7	ug/L	5182.7	ppb	07:38:02
1	Sn 189.927†	8220.2	9535.7	466.01	ug/L	466.01	ppb	07:38:07
1	Sr 421.552†	560763.0	604957.7	508.68	ug/L	508.68	ppb	07:37:32
1	Ti 334.940†	306650.5	356789.4	512.16	ug/L	512.16	ppb	07:38:02
1	Tl 190.801†	5148.4	6104.0	454.46	ug/L	454.46	ppb	07:38:07
1	U 409.014†	17232.2	14586.1	577.11	ug/L	577.11	ppb	07:38:02
1	V 292.402†	78996.6	94041.8	505.13	ug/L	505.13	ppb	07:38:07
1	Zn 213.857†	147368.6	168734.5	505.79	ug/L	505.79	ppb	07:38:02
1	SiO2†	261898.2	302503.9	10987	ug/L	10987	ppb	07:38:34
2	Sc 361.383	863710.7	863710.7	86.394	%			07:38:13
2	Sc Radial	98580.8	98580.8	93.9	%			07:37:43
2	Y 371.029	718942.2	718942.2	84.815	%			07:38:13
2	Y RADIAL	85120.3	85120.3	93.29	%			07:37:43
2	Ag 328.068†	49114.8	55723.1	274.02	ug/L	274.02	ppb	07:38:18
2	Al 396.153Radial†	4063971.9	4327690.6	495830	ug/L	495830	ppb	07:37:38
2	As 188.979†	3832.7	4498.1	508.02	ug/L	508.02	ppb	07:38:18
2	B 249.677†	33700.7	39788.0	515.92	ug/L	515.92	ppb	07:38:13
2	Ba 233.527†	148929.9	172355.5	502.38	ug/L	502.38	ppb	07:38:13
2	Be 313.107†	747844.6	869340.7	248.14	ug/L	248.14	ppb	07:38:13
2	Ca 317.933Radial†	11165050.0	11890401.6	473460	ug/L	473460	ppb	07:37:38
2	Cd 226.502†	82328.9	95517.1	470.85	ug/L	470.85	ppb	07:38:18
2	Co 228.616†	48940.4	56847.8	468.78	ug/L	468.78	ppb	07:38:18
2	Cr 267.716†	56536.0	65493.8	483.10	ug/L	483.10	ppb	07:38:18
2	Cu 324.752†	199095.6	221875.6	549.90	ug/L	549.90	ppb	07:38:13
2	Fe 238.204 Radial†	1605160.7	1709492.5	183090	ug/L	183090	ppb	07:37:43
2	K 766.490 Radial†	28181.5	26610.1	5344.7	ug/L	5344.7	ppb	07:37:43
2	Mg 279.077 IEC†	962683.5	1025208.6	474600	ug/L	474600	ppb	07:37:43
2	Mn 257.610†	724557.0	837607.9	481.41	ug/L	481.41	ppb	07:38:13
2	Mo 202.031†	18824.4	21759.1	488.31	ug/L	488.31	ppb	07:38:18
2	Na 589.592 Radial†	82800.3	89529.3	5295.6	ug/L	5295.6	ppb	07:37:43
2	Ni 231.604†	38487.6	44264.9	454.03	ug/L	454.03	ppb	07:38:18

2	P 214.914†	15434.5	17066.2	2445.1	ug/L	2445.1	ppb	07:38:18
2	Pb 220.353†	7360.2	8628.8	451.63	ug/L	451.63	ppb	07:38:18
2	S 181.975 Axial†	7139.7	8101.0	2577.2	ug/L	2577.2	ppb	07:38:18
2	Sb 206.836†	5099.3	5770.4	505.00	ug/L	505.00	ppb	07:38:18
2	Se 196.026†	10779.8	12537.9	2498.9	ug/L	2498.9	ppb	07:38:18
2	Si 251.611†	263085.2	303581.9	5181.9	ug/L	5181.9	ppb	07:38:13
2	Sn 189.927†	8184.5	9483.7	463.42	ug/L	463.42	ppb	07:38:18
2	Sr 421.552†	565205.7	603935.8	507.92	ug/L	507.92	ppb	07:37:43
2	Ti 334.940†	307266.6	357103.9	512.11	ug/L	512.11	ppb	07:38:13
2	Tl 190.801†	5148.7	6097.8	454.01	ug/L	454.01	ppb	07:38:18
2	U 409.014†	17127.2	14442.1	571.24	ug/L	571.24	ppb	07:38:13
2	V 292.402†	78787.8	93697.5	503.24	ug/L	503.24	ppb	07:38:18
2	Zn 213.857†	147518.9	168717.0	505.75	ug/L	505.75	ppb	07:38:13
2	SiO2†	258954.9	298756.7	10850	ug/L	10850	ppb	07:38:39
3	Sc 361.383	864932.9	864932.9	86.517	%			07:38:23
3	Sc Radial	96411.4	96411.4	91.8	%			07:37:55
3	Y 371.029	718856.0	718856.0	84.805	%			07:38:23
3	Y RADIAL	83168.1	83168.1	91.15	%			07:37:55
3	Ag 328.068†	49070.4	55591.4	273.70	ug/L	273.70	ppb	07:38:29
3	Al 396.153Radial†	4075506.4	4437643.9	508430	ug/L	508430	ppb	07:37:49
3	As 188.979†	3827.1	4485.4	506.71	ug/L	506.71	ppb	07:38:29
3	B 249.677†	33544.4	39552.2	512.63	ug/L	512.63	ppb	07:38:23
3	Ba 233.527†	148951.4	172136.7	501.74	ug/L	501.74	ppb	07:38:23
3	Be 313.107†	747621.7	867859.8	247.72	ug/L	247.72	ppb	07:38:23
3	Ca 317.933Radial†	11184597.7	12179257.2	484960	ug/L	484960	ppb	07:37:49
3	Cd 226.502†	81718.2	94676.6	466.55	ug/L	466.55	ppb	07:38:29
3	Co 228.616†	48656.2	56439.3	465.40	ug/L	465.40	ppb	07:38:29
3	Cr 267.716†	56319.7	65151.4	480.57	ug/L	480.57	ppb	07:38:29
3	Cu 324.752†	199130.2	221589.9	549.25	ug/L	549.25	ppb	07:38:23
3	Fe 238.204 Radial†	1575542.5	1715705.8	183760	ug/L	183760	ppb	07:37:55
3	K 766.490 Radial†	27627.4	26682.1	5359.1	ug/L	5359.1	ppb	07:37:55
3	Mg 279.077 IEC†	943908.1	1027832.8	475810	ug/L	475810	ppb	07:37:55
3	Mn 257.610†	724573.0	836441.3	480.81	ug/L	480.81	ppb	07:38:23
3	Mo 202.031†	18693.6	21577.1	484.35	ug/L	484.35	ppb	07:38:29
3	Na 589.592 Radial†	81095.9	89657.5	5303.2	ug/L	5303.2	ppb	07:37:55
3	Ni 231.604†	38401.6	44102.5	452.36	ug/L	452.36	ppb	07:38:29
3	P 214.914†	15185.6	16753.2	2401.5	ug/L	2401.5	ppb	07:38:29
3	Pb 220.353†	7284.8	8529.6	449.83	ug/L	449.83	ppb	07:38:29
3	S 181.975 Axial†	7047.6	7982.9	2537.2	ug/L	2537.2	ppb	07:38:29
3	Sb 206.836†	5038.0	5691.2	497.68	ug/L	497.68	ppb	07:38:29
3	Se 196.026†	10612.7	12327.1	2469.2	ug/L	2469.2	ppb	07:38:29
3	Si 251.611†	263283.1	303380.3	5178.5	ug/L	5178.5	ppb	07:38:23
3	Sn 189.927†	8190.9	9477.7	463.49	ug/L	463.49	ppb	07:38:29
3	Sr 421.552†	554663.0	606000.0	509.36	ug/L	509.36	ppb	07:37:55
3	Ti 334.940†	307302.4	356642.8	512.79	ug/L	512.79	ppb	07:38:23
3	Tl 190.801†	5132.8	6070.9	452.03	ug/L	452.03	ppb	07:38:29
3	U 409.014†	17123.4	14409.6	569.83	ug/L	569.83	ppb	07:38:23
3	V 292.402†	78441.9	93168.8	500.20	ug/L	500.20	ppb	07:38:29
3	Zn 213.857†	147510.8	168466.3	504.82	ug/L	504.82	ppb	07:38:23
3	SiO2†	260762.8	300422.8	10911	ug/L	10911	ppb	07:38:45

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	863795.2	86.403	%	0.1098				0.13%
Sc Radial	97544.1	92.9	%	1.04				1.12%
Y 371.029	718589.1	84.774	%	0.0636				0.07%
Y RADIAL	84166.5	92.24	%	1.071				1.16%
Ag 328.068†	55701.9	274.02	ug/L	0.316	274.02	ppb	0.316	0.12%
QC value within limits for Ag 328.068 Recovery = 109.61%								
Al 396.153Radial†	4378780.6	501690	ug/L	6346.2	501690	ppb	6346.2	1.26%
QC value within limits for Al 396.153Radial Recovery = 100.34%								
As 188.979†	4480.1	506.07	ug/L	2.328	506.07	ppb	2.328	0.46%
QC value within limits for As 188.979 Recovery = 101.21%								
B 249.677†	39742.6	515.24	ug/L	2.345	515.24	ppb	2.345	0.46%
QC value within limits for B 249.677 Recovery = 103.05%								
Ba 233.527†	172268.4	502.13	ug/L	0.342	502.13	ppb	0.342	0.07%
QC value within limits for Ba 233.527 Recovery = 100.43%								
Be 313.107†	868884.7	248.01	ug/L	0.253	248.01	ppb	0.253	0.10%
QC value within limits for Be 313.107 Recovery = 99.21%								

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Ca 317.933Radial†   12021276.8      478670 ug/L        5826.4      478670 ppb         5826.4   1.22%
   QC value within limits for Ca 317.933Radial  Recovery = 95.73%
Cd 226.502†            95345.4      469.96 ug/L         3.068      469.96 ppb          3.068   0.65%
   QC value within limits for Cd 226.502  Recovery = 93.99%
Co 228.616†            56760.0      468.05 ug/L         2.370      468.05 ppb          2.370   0.51%
   QC value within limits for Co 228.616  Recovery = 93.61%
Cr 267.716†            65449.7      482.77 ug/L         2.057      482.77 ppb          2.057   0.43%
   QC value within limits for Cr 267.716  Recovery = 96.55%
Cu 324.752†           221690.1      549.47 ug/L         0.378      549.47 ppb          0.378   0.07%
   QC value within limits for Cu 324.752  Recovery = 109.89%
Fe 238.204 Radial†   1712057.4      183370 ug/L         347.5      183370 ppb          347.5   0.19%
   QC value within limits for Fe 238.204 Radial  Recovery = 91.68%
K 766.490 Radial†      26635.1      5349.7 ug/L          8.18      5349.7 ppb           8.18   0.15%
   QC value within limits for K 766.490 Radial  Recovery = 106.99%
Mg 279.077 IEC†      1025860.3      474900 ug/L         805.7      474900 ppb          805.7   0.17%
   QC value within limits for Mg 279.077 IEC  Recovery = 94.98%
Mn 257.610†           837216.5      481.22 ug/L         0.354      481.22 ppb          0.354   0.07%
   QC value within limits for Mn 257.610  Recovery = 96.24%
Mo 202.031†            21695.9      486.93 ug/L         2.239      486.93 ppb          2.239   0.46%
   QC value within limits for Mo 202.031  Recovery = 97.39%
Na 589.592 Radial†     89578.3      5298.5 ug/L          4.09      5298.5 ppb           4.09   0.08%
   QC value within limits for Na 589.592 Radial  Recovery = 105.97%
Ni 231.604†            44266.8      454.05 ug/L         1.695      454.05 ppb          1.695   0.37%
   QC value within limits for Ni 231.604  Recovery = 90.81%
P 214.914†             16991.3      2435.4 ug/L         30.18      2435.4 ppb          30.18   1.24%
   QC value within limits for P 214.914  Recovery = 97.42%
Pb 220.353†             8578.6      450.63 ug/L         0.921      450.63 ppb          0.921   0.20%
   QC value within limits for Pb 220.353  Recovery = 90.13%
S 181.975 Axial†        8065.8      2565.0 ug/L         24.20      2565.0 ppb          24.20   0.94%
   QC value within limits for S 181.975 Axial  Recovery = 102.60%
Sb 206.836†             5738.7      502.05 ug/L         3.861      502.05 ppb          3.861   0.77%
   QC value within limits for Sb 206.836  Recovery = 100.41%
Se 196.026†            12474.1      2490.2 ug/L         18.36      2490.2 ppb          18.36   0.74%
   QC value within limits for Se 196.026  Recovery = 99.61%
Si 251.611†           303530.7      5181.0 ug/L          2.23      5181.0 ppb           2.23   0.04%
   QC value within limits for Si 251.611  Recovery = 103.62%
Sn 189.927†             9499.0      464.31 ug/L         1.475      464.31 ppb          1.475   0.32%
   QC value within limits for Sn 189.927  Recovery = 92.86%
Sr 421.552†           604964.5      508.65 ug/L         0.720      508.65 ppb          0.720   0.14%
   QC value within limits for Sr 421.552  Recovery = 101.73%
Ti 334.940†           356845.4      512.35 ug/L         0.379      512.35 ppb          0.379   0.07%
   QC value within limits for Ti 334.940  Recovery = 102.47%
Tl 190.801†             6090.9      453.50 ug/L         1.294      453.50 ppb          1.294   0.29%
   QC value within limits for Tl 190.801  Recovery = 90.70%
U 409.014†             14479.3      572.72 ug/L         3.860      572.72 ppb          3.860   0.67%
   QC value within limits for U 409.014  Recovery = 114.54%
V 292.402†             93636.0      502.86 ug/L         2.487      502.86 ppb          2.487   0.49%
   QC value within limits for V 292.402  Recovery = 100.57%
Zn 213.857†           168639.3      505.45 ug/L         0.547      505.45 ppb          0.547   0.11%
   QC value within limits for Zn 213.857  Recovery = 101.09%
SiO2†                 300561.1       10916 ug/L          68.3       10916 ppb           68.3   0.63%
   QC value within limits for SiO2  Recovery = 102.07%
All analyte(s) passed QC.
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Sequence No.: 11 **Autosampler Location: 15**
Sample ID: LR1 **Date Collected: 3/6/2008 07:40:54**
Analyst: **Data Type: Reprocessed on 3/6/2008 08:21:29**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	854247.4	854247.4	85.448	%			07:43:44
1	Sc Radial	96671.8	96671.8	92.1	%			07:42:59
1	Y 371.029	708464.3	708464.3	83.579	%			07:43:44
1	Y RADIAL	83384.7	83384.7	91.38	%			07:42:59
1	Ag 328.068†	-20899.0	-25584.5	-0.6419	ug/L	-0.6419	ppb	07:43:44
1	Al 396.153Radial†	4033210.1	4379751.0	501820	ug/L	501820	ppb	07:42:54
1	As 188.979†	-337.2	-332.7	-0.8982	ug/L	-0.8982	ppb	07:43:49
1	B 249.677†	-1558.0	-1043.3	-27.724	ug/L	-27.724	ppb	07:43:44
1	Ba 233.527†	1991.6	2302.7	6.7167	ug/L	6.7167	ppb	07:43:49
1	Be 313.107†	-10449.7	-8504.9	-2.5324	ug/L	-2.5324	ppb	07:43:49
1	Ca 317.933Radial†	10964610.0	11907524.3	474140	ug/L	474140	ppb	07:42:49
1	Cd 226.502†	3600.2	4436.2	-2.9471	ug/L	-2.9471	ppb	07:43:49
1	Co 228.616†	657.3	969.4	8.0196	ug/L	8.0196	ppb	07:43:49
1	Cr 267.716†	-96.7	-58.6	-0.4161	ug/L	-0.4161	ppb	07:43:49
1	Cu 324.752†	1234.0	-7129.8	-8.7928	ug/L	-8.7928	ppb	07:43:44
1	Fe 238.204 Radial†	3108280.0	3375730.4	361530	ug/L	361530	ppb	07:42:54
1	K 766.490 Radial†	2828.5	-332.1	-66.706	ug/L	-66.706	ppb	07:42:59
1	Mg 279.077 IEC†	930901.7	1010937.9	467890	ug/L	467890	ppb	07:42:59
1	Mn 257.610†	-50736.8	-60430.8	-2.7929	ug/L	-2.7929	ppb	07:43:44
1	Mo 202.031†	-939.8	-1129.6	-3.4149	ug/L	-3.4149	ppb	07:43:44
1	Na 589.592 Radial†	7729591.4	8396154.3	496630	ug/L	496630	ppb	07:42:49
1	Ni 231.604†	606.5	426.0	4.3666	ug/L	4.3666	ppb	07:43:49
1	P 214.914†	1758.2	1258.7	29.430	ug/L	29.430	ppb	07:43:49
1	Pb 220.353†	-1520.6	-1670.0	-4.4206	ug/L	-4.4206	ppb	07:43:49
1	S 181.975 Axial†	174.8	41.5	-49.791	ug/L	-49.791	ppb	07:43:49
1	Sb 206.836†	72.7	-46.9	-2.7890	ug/L	-2.7890	ppb	07:43:49
1	Se 196.026†	-6036.4	-7004.1	-4.4277	ug/L	-4.4277	ppb	07:43:49
1	Si 251.611†	1669.6	1019.5	17.819	ug/L	17.819	ppb	07:43:49
1	Sn 189.927†	-480.4	-551.9	-11.574	ug/L	-11.574	ppb	07:43:49
1	Sr 421.552†	15955.2	19303.1	2.4280	ug/L	2.4280	ppb	07:42:59
1	Ti 334.940†	-31701.5	-35651.9	-0.2975	ug/L	-0.2975	ppb	07:43:49
1	Tl 190.801†	-246.2	-149.9	-11.564	ug/L	-11.564	ppb	07:43:49
1	U 409.014†	319381.0	368390.5	15042	ug/L	15042	ppb	07:43:44
1	V 292.402†	-731.0	1646.5	-7.0849	ug/L	-7.0849	ppb	07:43:49
1	Zn 213.857†	19674.0	20991.1	6.7271	ug/L	6.7271	ppb	07:43:49
1	SiO2†	1713.8	1026.8	38.220	ug/L	38.220	ppb	07:44:16
2	Sc 361.383	854071.3	854071.3	85.430	%			07:43:55
2	Sc Radial	95713.4	95713.4	91.2	%			07:43:18
2	Y 371.029	709614.6	709614.6	83.715	%			07:43:55
2	Y RADIAL	82653.3	82653.3	90.58	%			07:43:18
2	Ag 328.068†	-20779.2	-25449.4	0.1707	ug/L	0.1707	ppb	07:43:55
2	Al 396.153Radial†	4017236.1	4406090.9	504830	ug/L	504830	ppb	07:43:13
2	As 188.979†	-338.9	-334.8	-1.0310	ug/L	-1.0310	ppb	07:44:00
2	B 249.677†	-1388.5	-845.2	-25.174	ug/L	-25.174	ppb	07:43:55
2	Ba 233.527†	1896.9	2192.4	6.3975	ug/L	6.3975	ppb	07:44:00
2	Be 313.107†	-10613.4	-8699.1	-2.5875	ug/L	-2.5875	ppb	07:44:00
2	Ca 317.933Radial†	11066741.9	12138799.9	483350	ug/L	483350	ppb	07:43:07
2	Cd 226.502†	3562.5	4393.0	-3.2430	ug/L	-3.2430	ppb	07:44:00
2	Co 228.616†	744.4	1071.6	8.8605	ug/L	8.8605	ppb	07:44:00
2	Cr 267.716†	-99.0	-61.4	-0.4351	ug/L	-0.4351	ppb	07:44:00
2	Cu 324.752†	1573.2	-6732.4	-7.8163	ug/L	-7.8163	ppb	07:43:55
2	Fe 238.204 Radial†	3086780.7	3385950.5	362620	ug/L	362620	ppb	07:43:13
2	K 766.490 Radial†	2918.8	-202.3	-40.633	ug/L	-40.633	ppb	07:43:18
2	Mg 279.077 IEC†	920453.2	1009600.4	467270	ug/L	467270	ppb	07:43:18
2	Mn 257.610†	-50107.5	-59706.5	-2.2550	ug/L	-2.2550	ppb	07:43:55
2	Mo 202.031†	-957.4	-1150.4	-3.8077	ug/L	-3.8077	ppb	07:43:55
2	Na 589.592 Radial†	7790785.1	8547341.5	505570	ug/L	505570	ppb	07:43:07
2	Ni 231.604†	504.2	306.4	3.1381	ug/L	3.1381	ppb	07:44:00

2	P 214.914†	1797.9	1305.6	36.187	ug/L	36.187	ppb	07:44:00
2	Pb 220.353†	-1663.0	-1837.0	-11.022	ug/L	-11.022	ppb	07:44:00
2	S 181.975 Axial†	178.9	46.4	-48.572	ug/L	-48.572	ppb	07:44:00
2	Sb 206.836†	46.9	-77.0	-5.4919	ug/L	-5.4919	ppb	07:44:00
2	Se 196.026†	-6003.8	-6967.3	4.6321	ug/L	4.6321	ppb	07:44:00
2	Si 251.611†	1670.8	1021.3	17.857	ug/L	17.857	ppb	07:44:00
2	Sn 189.927†	-485.9	-558.5	-11.605	ug/L	-11.605	ppb	07:44:00
2	Sr 421.552†	15791.3	19296.8	2.1455	ug/L	2.1455	ppb	07:43:18
2	Ti 334.940†	-31692.8	-35649.3	0.6942	ug/L	0.6942	ppb	07:44:00
2	Tl 190.801†	-245.8	-149.5	-11.540	ug/L	-11.540	ppb	07:44:00
2	U 409.014†	320682.6	369991.2	15107	ug/L	15107	ppb	07:43:55
2	V 292.402†	-614.0	1783.2	-6.3689	ug/L	-6.3689	ppb	07:44:00
2	Zn 213.857†	19531.9	20829.5	6.0914	ug/L	6.0914	ppb	07:44:00
2	SiO2†	1696.5	1007.1	37.517	ug/L	37.517	ppb	07:44:21
3	Sc 361.383	855401.6	855401.6	85.563	%			07:44:06
3	Sc Radial	96449.3	96449.3	91.9	%			07:43:36
3	Y 371.029	711349.5	711349.5	83.920	%			07:44:06
3	Y RADIAL	83152.6	83152.6	91.13	%			07:43:36
3	Ag 328.068†	-20881.8	-25531.5	-1.6093	ug/L	-1.6093	ppb	07:44:06
3	Al 396.153Radial†	4009479.3	4364023.9	500010	ug/L	500010	ppb	07:43:31
3	As 188.979†	-295.4	-283.4	4.1214	ug/L	4.1214	ppb	07:44:11
3	B 249.677†	-1359.0	-808.2	-24.532	ug/L	-24.532	ppb	07:44:06
3	Ba 233.527†	2017.9	2330.3	6.7990	ug/L	6.7990	ppb	07:44:11
3	Be 313.107†	-10512.9	-8562.2	-2.5475	ug/L	-2.5475	ppb	07:44:11
3	Ca 317.933Radial†	11010394.5	11984836.2	477220	ug/L	477220	ppb	07:43:25
3	Cd 226.502†	3576.2	4402.5	-2.8626	ug/L	-2.8626	ppb	07:44:11
3	Co 228.616†	722.9	1045.1	8.6402	ug/L	8.6402	ppb	07:44:11
3	Cr 267.716†	-16.0	35.8	0.2806	ug/L	0.2806	ppb	07:44:11
3	Cu 324.752†	1630.8	-6668.0	-7.9483	ug/L	-7.9483	ppb	07:44:06
3	Fe 238.204 Radial†	3070001.3	3341849.4	357900	ug/L	357900	ppb	07:43:31
3	K 766.490 Radial†	2841.5	-310.9	-62.436	ug/L	-62.436	ppb	07:43:36
3	Mg 279.077 IEC†	926477.4	1008454.2	466740	ug/L	466740	ppb	07:43:36
3	Mn 257.610†	-49457.9	-58856.1	-2.2864	ug/L	-2.2864	ppb	07:44:06
3	Mo 202.031†	-974.3	-1168.5	-4.4837	ug/L	-4.4837	ppb	07:44:06
3	Na 589.592 Radial†	7744192.9	8431415.9	498710	ug/L	498710	ppb	07:43:25
3	Ni 231.604†	544.9	353.1	3.6173	ug/L	3.6173	ppb	07:44:11
3	P 214.914†	1776.9	1277.7	34.581	ug/L	34.581	ppb	07:44:11
3	Pb 220.353†	-1646.1	-1814.2	-10.716	ug/L	-10.716	ppb	07:44:11
3	S 181.975 Axial†	160.7	24.7	-55.017	ug/L	-55.017	ppb	07:44:11
3	Sb 206.836†	135.2	26.1	3.8362	ug/L	3.8362	ppb	07:44:11
3	Se 196.026†	-5906.9	-6843.1	9.9249	ug/L	9.9249	ppb	07:44:11
3	Si 251.611†	1612.4	950.0	16.644	ug/L	16.644	ppb	07:44:11
3	Sn 189.927†	-512.2	-588.4	-13.205	ug/L	-13.205	ppb	07:44:11
3	Sr 421.552†	15980.7	19370.8	2.3939	ug/L	2.3939	ppb	07:43:36
3	Ti 334.940†	-31453.3	-35311.7	0.4420	ug/L	0.4420	ppb	07:44:11
3	Tl 190.801†	-264.2	-170.6	-13.094	ug/L	-13.094	ppb	07:44:11
3	U 409.014†	321631.1	370515.9	15129	ug/L	15129	ppb	07:44:06
3	V 292.402†	-591.5	1810.7	-5.5260	ug/L	-5.5260	ppb	07:44:11
3	Zn 213.857†	19509.1	20767.3	6.5004	ug/L	6.5004	ppb	07:44:11
3	SiO2†	1620.0	914.6	34.166	ug/L	34.166	ppb	07:44:26

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	854573.5	85.480	%	0.0723				0.08%
Sc Radial	96278.2	91.7	%	0.48				0.52%
Y 371.029	709809.4	83.738	%	0.1713				0.20%
Y RADIAL	83063.5	91.03	%	0.410				0.45%
Ag 328.068†	-25521.8	-0.6935	ug/L	0.89114	-0.6935	ppb	0.89114	128.50%
Al 396.153Radial†	4383288.6	502220	ug/L	2435.2	502220	ppb	2435.2	0.48%
QC value within limits for Al 396.153Radial Recovery = 100.44%								
As 188.979†	-317.0	0.7307	ug/L	2.93715	0.7307	ppb	2.93715	401.95%
B 249.677†	-898.9	-25.810	ug/L	1.6884	-25.810	ppb	1.6884	6.54%
Ba 233.527†	2275.1	6.6377	ug/L	0.21208	6.6377	ppb	0.21208	3.20%
Be 313.107†	-8588.8	-2.5558	ug/L	0.02850	-2.5558	ppb	0.02850	1.12%
Ca 317.933Radial†	12010386.8	478240	ug/L	4688.1	478240	ppb	4688.1	0.98%
QC value within limits for Ca 317.933Radial Recovery = 95.65%								
Cd 226.502†	4410.6	-3.0176	ug/L	0.19971	-3.0176	ppb	0.19971	6.62%
Co 228.616†	1028.7	8.5068	ug/L	0.43600	8.5068	ppb	0.43600	5.13%
Cr 267.716†	-28.1	-0.1902	ug/L	0.40780	-0.1902	ppb	0.40780	214.41%

Cu 324.752†	-6843.4	-8.1858	ug/L	0.52981	-8.1858	ppb	0.52981	6.47%
Fe 238.204 Radial†	3367843.4	360680	ug/L	2472.2	360680	ppb	2472.2	0.69%
QC value within limits for Fe 238.204 Radial Recovery = 90.17%								
K 766.490 Radial†	-281.8	-56.591	ug/L	13.9844	-56.591	ppb	13.9844	24.71%
Mg 279.077 IEC†	1009664.1	467300	ug/L	574.7	467300	ppb	574.7	0.12%
QC value within limits for Mg 279.077 IEC Recovery = 93.46%								
Mn 257.610†	-59664.5	-2.4448	ug/L	0.30189	-2.4448	ppb	0.30189	12.35%
Mo 202.031†	-1149.5	-3.9021	ug/L	0.54063	-3.9021	ppb	0.54063	13.85%
Na 589.592 Radial†	8458303.9	500300	ug/L	4678.6	500300	ppb	4678.6	0.94%
QC value within limits for Na 589.592 Radial Recovery = 100.06%								
Ni 231.604†	361.8	3.7073	ug/L	0.61917	3.7073	ppb	0.61917	16.70%
P 214.914†	1280.7	33.399	ug/L	3.5300	33.399	ppb	3.5300	10.57%
Pb 220.353†	-1773.8	-8.7194	ug/L	3.72602	-8.7194	ppb	3.72602	42.73%
S 181.975 Axial†	37.5	-51.126	ug/L	3.4236	-51.126	ppb	3.4236	6.70%
Sb 206.836†	-32.6	-1.4816	ug/L	4.79954	-1.4816	ppb	4.79954	323.94%
Se 196.026†	-6938.2	3.3764	ug/L	7.25825	3.3764	ppb	7.25825	214.97%
Si 251.611†	996.9	17.440	ug/L	0.6894	17.440	ppb	0.6894	3.95%
Sn 189.927†	-566.3	-12.128	ug/L	0.9330	-12.128	ppb	0.9330	7.69%
Sr 421.552†	19323.6	2.3225	ug/L	0.15420	2.3225	ppb	0.15420	6.64%
Ti 334.940†	-35537.6	0.2796	ug/L	0.51542	0.2796	ppb	0.51542	184.36%
Tl 190.801†	-156.7	-12.066	ug/L	0.8903	-12.066	ppb	0.8903	7.38%
U 409.014†	369632.6	15093	ug/L	45.5	15093	ppb	45.5	0.30%
QC value within limits for U 409.014 Recovery = 100.62%								
V 292.402†	1746.8	-6.3266	ug/L	0.78032	-6.3266	ppb	0.78032	12.33%
Zn 213.857†	20862.7	6.4396	ug/L	0.32219	6.4396	ppb	0.32219	5.00%
SiO2†	982.8	36.634	ug/L	2.1662	36.634	ppb	2.1662	5.91%

All analyte(s) passed QC.

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Sequence No.: 12 **Autosampler Location: 16**
Sample ID: LR2 **Date Collected: 3/6/2008 07:46:36**
Analyst: **Data Type: Reprocessed on 3/6/2008 08:21:30**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	953153.9	953153.9	95.341	%			07:49:37
1	Sc Radial	101237.0	101237.0	96.4	%			07:48:36
1	Y 371.029	779405.2	779405.2	91.948	%			07:49:43
1	Y RADIAL	87461.1	87461.1	95.85	%			07:48:36
1	Ag 328.068†	-7115.4	-8589.5	-2.2946	ug/L	-2.2946	ppb	07:49:43
1	Al 396.153Radial†	4491.7	4096.1	94.190	ug/L	94.190	ppb	07:48:41
1	As 188.979†	86889.1	91196.7	9967.6	ug/L	9967.6	ppb	07:49:43
1	B 249.677†	370108.3	388973.4	5146.0	ug/L	5146.0	ppb	07:49:43
1	Ba 233.527†	4676890.7	4905395.9	14288	ug/L	14288	ppb	07:49:37
1	Be 313.107†	9779933.0	10261547.6	2939.9	ug/L	2939.9	ppb	07:49:29
1	Ca 317.933Radial†	1214.2	545.3	21.712	ug/L	21.712	ppb	07:48:41
1	Cd 226.502†	1850005.8	1940628.1	9827.8	ug/L	9827.8	ppb	07:49:37
1	Co 228.616†	1140094.8	1196005.0	9861.2	ug/L	9861.2	ppb	07:49:37
1	Cr 267.716†	3136962.5	3290302.6	24243	ug/L	24243	ppb	07:49:37
1	Cu 324.752†	7951904.6	8331895.5	20273	ug/L	20273	ppb	07:49:29
1	Fe 238.204 Radial†	-2710.3	-2863.0	-6.9879	ug/L	-6.9879	ppb	07:48:41
1	K 766.490 Radial†	1408419.9	1457249.2	292690	ug/L	292690	ppb	07:48:36
1	Mg 279.077 IEC†	-585.6	-685.8	-64.937	ug/L	-64.937	ppb	07:48:41
1	Mn 257.610†	16284929.6	17079628.9	9583.8	ug/L	9583.8	ppb	07:49:29
1	Mo 202.031†	417344.1	437707.6	9605.0	ug/L	9605.0	ppb	07:49:43
1	Na 589.592 Radial†	-418.2	910.7	53.868	ug/L	53.868	ppb	07:48:36
1	Ni 231.604†	903089.7	946934.8	9712.9	ug/L	9712.9	ppb	07:49:37
1	P 214.914†	114752.0	119560.3	14970	ug/L	14970	ppb	07:49:43
1	Pb 220.353†	542915.4	569554.1	24163	ug/L	24163	ppb	07:49:43
1	S 181.975 Axial†	152814.8	160118.9	52176	ug/L	52176	ppb	07:49:43
1	Sb 206.836†	110237.2	115491.9	10109	ug/L	10109	ppb	07:49:43
1	Se 196.026†	61727.0	64803.7	10010	ug/L	10010	ppb	07:49:43
1	Si 251.611†	2728362.5	2860747.8	48750	ug/L	48750	ppb	07:49:37
1	Sn 189.927†	201221.0	211063.8	9990.3	ug/L	9990.3	ppb	07:49:43
1	Sr 421.552†	10920888.4	11327880.1	9794.0	ug/L	9794.0	ppb	07:48:31
1	Ti 334.940†	7201033.1	7554355.6	9727.2	ug/L	9727.2	ppb	07:49:37
1	Tl 190.801†	122701.2	128835.1	9592.1	ug/L	9592.1	ppb	07:49:43
1	U 409.014†	6791.9	1741.5	30.684	ug/L	30.684	ppb	07:49:43
1	V 292.402†	1749572.4	1837566.1	10235	ug/L	10235	ppb	07:49:37
1	Zn 213.857†	4166577.2	4368140.9	14115	ug/L	14115	ppb	07:49:37
1	SiO2†	2752257.8	2885766.4	104630	ug/L	104630	ppb	07:50:39
2	Sc 361.383	952762.4	952762.4	95.302	%			07:50:02
2	Sc Radial	103077.1	103077.1	98.2	%			07:48:54
2	Y 371.029	771091.5	771091.5	90.968	%			07:50:07
2	Y RADIAL	88858.9	88858.9	97.38	%			07:48:54
2	Ag 328.068†	-7121.1	-8598.6	-2.2562	ug/L	-2.2562	ppb	07:50:07
2	Al 396.153Radial†	4579.9	4102.7	98.040	ug/L	98.040	ppb	07:48:59
2	As 188.979†	85920.1	90217.4	9861.1	ug/L	9861.1	ppb	07:50:07
2	B 249.677†	366006.1	384828.5	5091.1	ug/L	5091.1	ppb	07:50:07
2	Ba 233.527†	4689662.5	4920812.7	14333	ug/L	14333	ppb	07:50:02
2	Be 313.107†	9890990.9	10382294.5	2974.2	ug/L	2974.2	ppb	07:49:54
2	Ca 317.933Radial†	1345.3	656.4	26.136	ug/L	26.136	ppb	07:48:59
2	Cd 226.502†	1859335.9	1951215.4	9881.4	ug/L	9881.4	ppb	07:50:02
2	Co 228.616†	1143892.9	1200481.6	9897.8	ug/L	9897.8	ppb	07:50:02
2	Cr 267.716†	3146278.2	3301429.3	24325	ug/L	24325	ppb	07:50:02
2	Cu 324.752†	8022190.6	8409073.0	20460	ug/L	20460	ppb	07:49:54
2	Fe 238.204 Radial†	-2647.3	-2748.6	6.3806	ug/L	6.3806	ppb	07:48:59
2	K 766.490 Radial†	1432217.6	1455413.6	292320	ug/L	292320	ppb	07:48:54
2	Mg 279.077 IEC†	-566.4	-655.3	-52.938	ug/L	-52.938	ppb	07:48:59
2	Mn 257.610†	16441062.7	17250476.3	9679.6	ug/L	9679.6	ppb	07:49:54
2	Mo 202.031†	413736.3	434101.8	9525.9	ug/L	9525.9	ppb	07:50:07
2	Na 589.592 Radial†	-402.4	934.6	55.282	ug/L	55.282	ppb	07:48:54
2	Ni 231.604†	906002.8	950380.7	9748.2	ug/L	9748.2	ppb	07:50:02

2	P 214.914†	114045.5	118868.5	14841	ug/L	14841	ppb	07:50:07
2	Pb 220.353†	538072.0	564705.9	23957	ug/L	23957	ppb	07:50:07
2	S 181.975 Axial†	150980.2	158259.7	51570	ug/L	51570	ppb	07:50:07
2	Sb 206.836†	108845.8	114079.4	9981.6	ug/L	9981.6	ppb	07:50:07
2	Se 196.026†	61119.0	64192.3	9916.1	ug/L	9916.1	ppb	07:50:07
2	Si 251.611†	2736013.3	2869951.5	48908	ug/L	48908	ppb	07:50:02
2	Sn 189.927†	199673.0	209526.2	9917.5	ug/L	9917.5	ppb	07:50:07
2	Sr 421.552†	11229205.9	11439737.2	9890.8	ug/L	9890.8	ppb	07:48:49
2	Ti 334.940†	7204608.4	7561210.2	9736.0	ug/L	9736.0	ppb	07:50:02
2	Tl 190.801†	121482.5	127609.2	9501.6	ug/L	9501.6	ppb	07:50:07
2	U 409.014†	6923.2	1882.2	35.983	ug/L	35.983	ppb	07:50:07
2	V 292.402†	1753015.2	1841932.6	10259	ug/L	10259	ppb	07:50:02
2	Zn 213.857†	4179505.0	4383501.5	14164	ug/L	14164	ppb	07:50:02
2	SiO2†	2768832.1	2904343.7	105310	ug/L	105310	ppb	07:50:46
3	Sc 361.383	952365.5	952365.5	95.262	%			07:50:26
3	Sc Radial	102521.3	102521.3	97.6	%			07:49:12
3	Y 371.029	772762.0	772762.0	91.165	%			07:50:31
3	Y RADIAL	88334.4	88334.4	96.81	%			07:49:12
3	Ag 328.068†	-7220.5	-8705.9	-2.6535	ug/L	-2.6535	ppb	07:50:31
3	Al 396.153Radial†	4455.0	4000.1	85.771	ug/L	85.771	ppb	07:49:17
3	As 188.979†	85878.2	90211.0	9860.3	ug/L	9860.3	ppb	07:50:31
3	B 249.677†	367181.6	386222.5	5109.6	ug/L	5109.6	ppb	07:50:31
3	Ba 233.527†	4692919.1	4926282.0	14349	ug/L	14349	ppb	07:50:26
3	Be 313.107†	9847608.8	10341080.3	2962.6	ug/L	2962.6	ppb	07:50:18
3	Ca 317.933Radial†	1279.5	596.4	23.750	ug/L	23.750	ppb	07:49:17
3	Cd 226.502†	1859663.6	1952372.4	9887.3	ug/L	9887.3	ppb	07:50:26
3	Co 228.616†	1145448.8	1202615.1	9915.4	ug/L	9915.4	ppb	07:50:26
3	Cr 267.716†	3148852.6	3305507.7	24355	ug/L	24355	ppb	07:50:26
3	Cu 324.752†	7967637.7	8355315.1	20330	ug/L	20330	ppb	07:50:18
3	Fe 238.204 Radial†	-2628.3	-2743.8	7.4361	ug/L	7.4361	ppb	07:49:17
3	K 766.490 Radial†	1427317.4	1458303.5	292900	ug/L	292900	ppb	07:49:12
3	Mg 279.077 IEC†	-507.3	-597.9	-26.007	ug/L	-26.007	ppb	07:49:17
3	Mn 257.610†	16379832.4	17193390.5	9647.6	ug/L	9647.6	ppb	07:50:18
3	Mo 202.031†	414134.5	434700.7	9539.1	ug/L	9539.1	ppb	07:50:31
3	Na 589.592 Radial†	-573.4	757.3	44.792	ug/L	44.792	ppb	07:49:12
3	Ni 231.604†	907610.2	952464.2	9769.6	ug/L	9769.6	ppb	07:50:26
3	P 214.914†	114607.1	119507.8	14954	ug/L	14954	ppb	07:50:31
3	Pb 220.353†	537875.7	564735.2	23958	ug/L	23958	ppb	07:50:31
3	S 181.975 Axial†	150979.0	158324.5	51591	ug/L	51591	ppb	07:50:31
3	Sb 206.836†	108845.1	114126.2	9985.5	ug/L	9985.5	ppb	07:50:31
3	Se 196.026†	61143.0	64244.2	9924.1	ug/L	9924.1	ppb	07:50:31
3	Si 251.611†	2739019.6	2874303.7	48983	ug/L	48983	ppb	07:50:26
3	Sn 189.927†	199484.1	209415.2	9912.3	ug/L	9912.3	ppb	07:50:31
3	Sr 421.552†	11023231.9	11290803.3	9762.0	ug/L	9762.0	ppb	07:49:06
3	Ti 334.940†	7209730.5	7569737.7	9746.9	ug/L	9746.9	ppb	07:50:26
3	Tl 190.801†	121571.4	127755.6	9512.3	ug/L	9512.3	ppb	07:50:31
3	U 409.014†	6804.4	1760.5	30.954	ug/L	30.954	ppb	07:50:31
3	V 292.402†	1753218.5	1842912.6	10264	ug/L	10264	ppb	07:50:26
3	Zn 213.857†	4183332.2	4389346.7	14183	ug/L	14183	ppb	07:50:26
3	SiO2†	2750841.3	2886669.0	104670	ug/L	104670	ppb	07:50:53

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	952760.6	95.302	%	0.0394				0.04%
Sc Radial	102278.5	97.4	%	0.90				0.92%
Y 371.029	774419.6	91.360	%	0.5188				0.57%
Y RADIAL	88218.2	96.68	%	0.774				0.80%
Ag 328.068†	-8631.3	-2.4014	ug/L	0.21911	-2.4014	ppb	0.21911	9.12%
Al 396.153Radial†	4066.3	92.667	ug/L	6.2748	92.667	ppb	6.2748	6.77%
As 188.979†	90541.7	9896.3	ug/L	61.70	9896.3	ppb	61.70	0.62%
QC value within limits for As 188.979 Recovery = 98.96%								
B 249.677†	386674.8	5115.6	ug/L	27.90	5115.6	ppb	27.90	0.55%
QC value within limits for B 249.677 Recovery = 102.31%								
Ba 233.527†	4917496.9	14323	ug/L	31.5	14323	ppb	31.5	0.22%
QC value within limits for Ba 233.527 Recovery = 95.49%								
Be 313.107†	10328307.5	2958.9	ug/L	17.45	2958.9	ppb	17.45	0.59%
QC value within limits for Be 313.107 Recovery = 98.63%								
Ca 317.933Radial†	599.4	23.866	ug/L	2.2142	23.866	ppb	2.2142	9.28%
Cd 226.502†	1948071.9	9865.5	ug/L	32.78	9865.5	ppb	32.78	0.33%

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   QC value within limits for Cd 226.502  Recovery = 98.65%
Co 228.616†          1199700.6      9891.5 ug/L         27.68      9891.5 ppb          27.68   0.28%
   QC value within limits for Co 228.616  Recovery = 98.91%
Cr 267.716†          3299079.9       24307 ug/L          58.0       24307 ppb           58.0   0.24%
   QC value within limits for Cr 267.716  Recovery = 97.23%
Cu 324.752†          8365427.8       20354 ug/L          96.3       20354 ppb           96.3   0.47%
   QC value within limits for Cu 324.752  Recovery = 101.77%
Fe 238.204 Radial†     -2785.1      2.2763 ug/L       8.04032      2.2763 ppb        8.04032 353.22%
K 766.490 Radial†    1456988.7      292640 ug/L         293.7      292640 ppb          293.7   0.10%
   QC value within limits for K 766.490 Radial  Recovery = 97.55%
Mg 279.077 IEC†         -646.3     -47.961 ug/L       19.9362     -47.961 ppb        19.9362  41.57%
Mn 257.610†         17174498.6      9637.0 ug/L         48.81      9637.0 ppb          48.81   0.51%
   QC value within limits for Mn 257.610  Recovery = 96.37%
Mo 202.031†           435503.4      9556.7 ug/L         42.40      9556.7 ppb          42.40   0.44%
   QC value within limits for Mo 202.031  Recovery = 95.57%
Na 589.592 Radial†       867.5      51.314 ug/L        5.6922      51.314 ppb         5.6922  11.09%
Ni 231.604†           949926.6      9743.5 ug/L         28.64      9743.5 ppb          28.64   0.29%
   QC value within limits for Ni 231.604  Recovery = 97.44%
P 214.914†            119312.2       14922 ug/L          70.2       14922 ppb           70.2   0.47%
   QC value within limits for P 214.914  Recovery = 99.48%
Pb 220.353†           566331.8       24026 ug/L         118.4       24026 ppb          118.4   0.49%
   QC value within limits for Pb 220.353  Recovery = 96.10%
S 181.975 Axial†      158901.1       51779 ug/L         343.8       51779 ppb          343.8   0.66%
   QC value within limits for S 181.975 Axial  Recovery = 103.56%
Sb 206.836†           114565.8       10025 ug/L          72.6       10025 ppb           72.6   0.72%
   QC value within limits for Sb 206.836  Recovery = 100.25%
Se 196.026†            64413.4      9950.2 ug/L         52.35      9950.2 ppb          52.35   0.53%
   QC value within limits for Se 196.026  Recovery = 99.50%
Si 251.611†          2868334.3       48880 ug/L         118.9       48880 ppb          118.9   0.24%
   QC value within limits for Si 251.611  Recovery = 97.76%
Sn 189.927†           210001.8      9940.0 ug/L         43.61      9940.0 ppb          43.61   0.44%
   QC value within limits for Sn 189.927  Recovery = 99.40%
Sr 421.552†         11352806.9      9815.6 ug/L         67.03      9815.6 ppb          67.03   0.68%
   QC value within limits for Sr 421.552  Recovery = 98.16%
Ti 334.940†          7561767.8      9736.7 ug/L          9.91      9736.7 ppb           9.91   0.10%
   QC value within limits for Ti 334.940  Recovery = 97.37%
Tl 190.801†           128066.7      9535.3 ug/L         49.44      9535.3 ppb          49.44   0.52%
   QC value within limits for Tl 190.801  Recovery = 95.35%
U 409.014†              1794.7      32.541 ug/L        2.9845      32.541 ppb         2.9845   9.17%
V 292.402†           1840803.8       10253 ug/L          15.3       10253 ppb           15.3   0.15%
   QC value within limits for V 292.402  Recovery = 102.53%
Zn 213.857†          4380329.7       14154 ug/L          35.4       14154 ppb           35.4   0.25%
   QC value within limits for Zn 213.857  Recovery = 94.36%
SiO2†                2892259.7      104870 ug/L         382.0      104870 ppb          382.0   0.36%
   QC value within limits for SiO2  Recovery = 98.01%
All analyte(s) passed QC.
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Sequence No.: 15 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 3/6/2008 08:05:39**
Analyst: **Data Type: Reprocessed on 3/6/2008 08:21:33**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	985897.5	985897.5	98.616	%			08:08:06
1	Sc Radial	104821.6	104821.6	99.8	%			08:07:36
1	Y 371.029	825958.1	825958.1	97.440	%			08:08:06
1	Y RADIAL	90364.5	90364.5	99.03	%			08:07:36
1	Ag 328.068†	128989.6	129672.9	507.43	ug/L	507.43	ppb	08:08:06
1	Al 396.153Radial†	45928.9	45441.1	5186.8	ug/L	5186.8	ppb	08:07:36
1	As 188.979†	4592.0	4718.3	514.76	ug/L	514.76	ppb	08:08:11
1	B 249.677†	38304.0	39621.4	524.01	ug/L	524.01	ppb	08:08:06
1	Ba 233.527†	171552.9	173931.6	506.93	ug/L	506.93	ppb	08:08:06
1	Be 313.107†	1751129.5	1779421.3	506.81	ug/L	506.81	ppb	08:08:06
1	Ca 317.933Radial†	127838.8	127332.2	5070.2	ug/L	5070.2	ppb	08:07:36
1	Cd 226.502†	98329.2	99931.7	505.72	ug/L	505.72	ppb	08:08:06
1	Co 228.616†	59589.7	60625.9	499.88	ug/L	499.88	ppb	08:08:11
1	Cr 267.716†	67085.9	68081.6	502.12	ug/L	502.12	ppb	08:08:06
1	Cu 324.752†	212303.5	206708.1	502.84	ug/L	502.84	ppb	08:08:06
1	Fe 238.204 Radial†	46839.6	46863.4	5034.1	ug/L	5034.1	ppb	08:07:36
1	K 766.490 Radial†	28473.3	25115.4	5044.5	ug/L	5044.5	ppb	08:07:36
1	Mg 279.077 IEC†	11209.4	11149.1	5172.8	ug/L	5172.8	ppb	08:07:36
1	Mn 257.610†	890270.9	901707.6	506.43	ug/L	506.43	ppb	08:08:06
1	Mo 202.031†	22622.7	22910.3	503.04	ug/L	503.04	ppb	08:08:11
1	Na 589.592 Radial†	166073.5	167687.2	9918.6	ug/L	9918.6	ppb	08:07:31
1	Ni 231.604†	48302.5	48696.4	499.49	ug/L	499.49	ppb	08:08:11
1	P 214.914†	17330.8	16775.0	2420.4	ug/L	2420.4	ppb	08:08:11
1	Pb 220.353†	11530.6	11801.9	501.85	ug/L	501.85	ppb	08:08:11
1	S 181.975 Axial†	3181.9	3063.5	997.61	ug/L	997.61	ppb	08:08:11
1	Sb 206.836†	5752.6	5701.3	508.50	ug/L	508.50	ppb	08:08:11
1	Se 196.026†	3152.0	3256.6	518.00	ug/L	518.00	ppb	08:08:11
1	Si 251.611†	146669.0	147792.3	2518.4	ug/L	2518.4	ppb	08:08:06
1	Sn 189.927†	10491.1	10648.6	504.19	ug/L	504.19	ppb	08:08:11
1	Sr 421.552†	582620.4	585539.5	506.10	ug/L	506.10	ppb	08:07:31
1	Ti 334.940†	385934.2	392797.2	506.38	ug/L	506.38	ppb	08:08:06
1	Tl 190.801†	6546.3	6776.4	504.62	ug/L	504.62	ppb	08:08:11
1	U 409.014†	17120.0	11977.9	489.84	ug/L	489.84	ppb	08:08:06
1	V 292.402†	87348.7	91076.2	508.03	ug/L	508.03	ppb	08:08:06
1	Zn 213.857†	155500.0	155648.2	501.38	ug/L	501.38	ppb	08:08:06
1	SiO2†	148479.8	149584.1	5423.4	ug/L	5423.4	ppb	08:08:41
2	Sc 361.383	988150.0	988150.0	98.842	%			08:08:18
2	Sc Radial	106198.3	106198.3	101	%			08:07:47
2	Y 371.029	828320.5	828320.5	97.719	%			08:08:18
2	Y RADIAL	91606.7	91606.7	100.4	%			08:07:47
2	Ag 328.068†	129824.9	130219.8	509.57	ug/L	509.57	ppb	08:08:18
2	Al 396.153Radial†	46483.3	45392.9	5181.3	ug/L	5181.3	ppb	08:07:47
2	As 188.979†	4568.6	4684.0	511.00	ug/L	511.00	ppb	08:08:23
2	B 249.677†	38689.3	39922.7	527.99	ug/L	527.99	ppb	08:08:18
2	Ba 233.527†	172601.2	174595.7	508.87	ug/L	508.87	ppb	08:08:18
2	Be 313.107†	1763070.1	1787454.1	509.10	ug/L	509.10	ppb	08:08:18
2	Ca 317.933Radial†	129700.9	127513.2	5077.4	ug/L	5077.4	ppb	08:07:47
2	Cd 226.502†	99127.9	100512.4	508.66	ug/L	508.66	ppb	08:08:18
2	Co 228.616†	59605.3	60504.0	498.87	ug/L	498.87	ppb	08:08:23
2	Cr 267.716†	67531.5	68377.3	504.30	ug/L	504.30	ppb	08:08:18
2	Cu 324.752†	214154.3	208089.9	506.20	ug/L	506.20	ppb	08:08:18
2	Fe 238.204 Radial†	47672.1	47078.2	5057.0	ug/L	5057.0	ppb	08:07:47
2	K 766.490 Radial†	28915.8	25183.2	5058.1	ug/L	5058.1	ppb	08:07:47
2	Mg 279.077 IEC†	11409.4	11201.4	5196.9	ug/L	5196.9	ppb	08:07:47
2	Mn 257.610†	895996.3	905442.2	508.52	ug/L	508.52	ppb	08:08:18
2	Mo 202.031†	22652.4	22888.0	502.55	ug/L	502.55	ppb	08:08:23
2	Na 589.592 Radial†	167072.4	166518.4	9849.5	ug/L	9849.5	ppb	08:07:42
2	Ni 231.604†	48322.4	48604.9	498.55	ug/L	498.55	ppb	08:08:23

2	P 214.914†	17348.0	16752.3	2416.6 ug/L	2416.6 ppb	08:08:23
2	Pb 220.353†	11568.0	11813.1	502.31 ug/L	502.31 ppb	08:08:23
2	S 181.975 Axial†	3213.1	3087.7	1005.5 ug/L	1005.5 ppb	08:08:23
2	Sb 206.836†	5718.8	5653.8	504.23 ug/L	504.23 ppb	08:08:23
2	Se 196.026†	3141.4	3238.6	515.29 ug/L	515.29 ppb	08:08:23
2	Si 251.611†	147687.9	148484.1	2530.2 ug/L	2530.2 ppb	08:08:18
2	Sn 189.927†	10480.5	10613.5	502.53 ug/L	502.53 ppb	08:08:23
2	Sr 421.552†	585326.4	580649.8	501.88 ug/L	501.88 ppb	08:07:42
2	Ti 334.940†	388465.4	394466.0	508.53 ug/L	508.53 ppb	08:08:18
2	Tl 190.801†	6494.1	6708.4	499.61 ug/L	499.61 ppb	08:08:23
2	U 409.014†	17259.1	12079.0	493.97 ug/L	493.97 ppb	08:08:18
2	V 292.402†	87876.1	91407.8	509.86 ug/L	509.86 ppb	08:08:18
2	Zn 213.857†	156588.1	156389.6	503.79 ug/L	503.79 ppb	08:08:18
2	SiO2†	148501.3	149262.7	5411.7 ug/L	5411.7 ppb	08:08:46
3	Sc 361.383	984253.0	984253.0	98.452 %		08:08:30
3	Sc Radial	105442.1	105442.1	100 %		08:07:57
3	Y 371.029	824974.8	824974.8	97.324 %		08:08:30
3	Y RADIAL	90942.8	90942.8	99.67 %		08:07:57
3	Ag 328.068†	129015.3	129917.5	508.39 ug/L	508.39 ppb	08:08:30
3	Al 396.153Radial†	46208.7	45448.9	5187.8 ug/L	5187.8 ppb	08:07:57
3	As 188.979†	4520.8	4653.8	507.72 ug/L	507.72 ppb	08:08:35
3	B 249.677†	38313.4	39695.8	524.99 ug/L	524.99 ppb	08:08:30
3	Ba 233.527†	171625.2	174295.7	507.99 ug/L	507.99 ppb	08:08:30
3	Be 313.107†	1753386.4	1784680.6	508.31 ug/L	508.31 ppb	08:08:30
3	Ca 317.933Radial†	128856.1	127591.5	5080.5 ug/L	5080.5 ppb	08:07:57
3	Cd 226.502†	98638.0	100411.9	508.15 ug/L	508.15 ppb	08:08:30
3	Co 228.616†	59217.6	60349.0	497.59 ug/L	497.59 ppb	08:08:35
3	Cr 267.716†	67337.5	68450.8	504.84 ug/L	504.84 ppb	08:08:30
3	Cu 324.752†	212610.2	207379.3	504.47 ug/L	504.47 ppb	08:08:30
3	Fe 238.204 Radial†	47335.2	47080.7	5057.3 ug/L	5057.3 ppb	08:07:57
3	K 766.490 Radial†	28546.5	25020.4	5025.4 ug/L	5025.4 ppb	08:07:57
3	Mg 279.077 IEC†	11333.4	11206.6	5199.3 ug/L	5199.3 ppb	08:07:57
3	Mn 257.610†	890467.0	903415.1	507.39 ug/L	507.39 ppb	08:08:30
3	Mo 202.031†	22477.2	22800.8	500.64 ug/L	500.64 ppb	08:08:35
3	Na 589.592 Radial†	169479.3	170099.5	10061 ug/L	10061 ppb	08:07:52
3	Ni 231.604†	47974.5	48445.0	496.91 ug/L	496.91 ppb	08:08:35
3	P 214.914†	17216.2	16688.0	2407.2 ug/L	2407.2 ppb	08:08:35
3	Pb 220.353†	11500.5	11790.9	501.36 ug/L	501.36 ppb	08:08:35
3	S 181.975 Axial†	3183.0	3070.0	999.73 ug/L	999.73 ppb	08:08:35
3	Sb 206.836†	5675.7	5633.0	502.34 ug/L	502.34 ppb	08:08:35
3	Se 196.026†	3112.1	3221.4	512.64 ug/L	512.64 ppb	08:08:35
3	Si 251.611†	146824.3	148198.6	2525.4 ug/L	2525.4 ppb	08:08:30
3	Sn 189.927†	10374.7	10548.1	499.43 ug/L	499.43 ppb	08:08:35
3	Sr 421.552†	595356.5	594786.7	514.10 ug/L	514.10 ppb	08:07:52
3	Ti 334.940†	385708.6	393221.9	506.93 ug/L	506.93 ppb	08:08:30
3	Tl 190.801†	6491.2	6731.4	501.31 ug/L	501.31 ppb	08:08:35
3	U 409.014†	17302.9	12192.6	498.62 ug/L	498.62 ppb	08:08:30
3	V 292.402†	87542.9	91421.4	509.92 ug/L	509.92 ppb	08:08:30
3	Zn 213.857†	155676.5	156090.9	502.83 ug/L	502.83 ppb	08:08:30
3	SiO2†	149349.0	150718.5	5464.7 ug/L	5464.7 ppb	08:08:52

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	986100.2	98.637	%	0.1957				0.20%
Sc Radial	105487.3	100	%	0.7				0.65%
Y 371.029	826417.8	97.495	%	0.2029				0.21%
Y RADIAL	90971.3	99.70	%	0.681				0.68%
Ag 328.068†	129936.7	508.47	ug/L	1.071	508.47	ppb	1.071	0.21%
QC value within limits for Ag 328.068 Recovery = 101.69%								
Al 396.153Radial†	45427.6	5185.3	ug/L	3.50	5185.3	ppb	3.50	0.07%
QC value within limits for Al 396.153Radial Recovery = 103.71%								
As 188.979†	4685.4	511.16	ug/L	3.525	511.16	ppb	3.525	0.69%
QC value within limits for As 188.979 Recovery = 102.23%								
B 249.677†	39746.7	525.66	ug/L	2.076	525.66	ppb	2.076	0.39%
QC value within limits for B 249.677 Recovery = 105.13%								
Ba 233.527†	174274.3	507.93	ug/L	0.969	507.93	ppb	0.969	0.19%
QC value within limits for Ba 233.527 Recovery = 101.59%								
Be 313.107†	1783852.0	508.08	ug/L	1.162	508.08	ppb	1.162	0.23%
QC value within limits for Be 313.107 Recovery = 101.62%								

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Ca 317.933Radial†     127478.9      5076.1 ug/L          5.30      5076.1 ppb           5.30   0.10%
   QC value within limits for Ca 317.933Radial  Recovery = 101.52%
Cd 226.502†           100285.3      507.51 ug/L         1.571      507.51 ppb          1.571   0.31%
   QC value within limits for Cd 226.502  Recovery = 101.50%
Co 228.616†            60492.9      498.78 ug/L         1.147      498.78 ppb          1.147   0.23%
   QC value within limits for Co 228.616  Recovery = 99.76%
Cr 267.716†            68303.2      503.76 ug/L         1.441      503.76 ppb          1.441   0.29%
   QC value within limits for Cr 267.716  Recovery = 100.75%
Cu 324.752†           207392.4      504.51 ug/L         1.680      504.51 ppb          1.680   0.33%
   QC value within limits for Cu 324.752  Recovery = 100.90%
Fe 238.204 Radial†     47007.4      5049.5 ug/L         13.33      5049.5 ppb          13.33   0.26%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.99%
K 766.490 Radial†      25106.3      5042.6 ug/L         16.42      5042.6 ppb          16.42   0.33%
   QC value within limits for K 766.490 Radial  Recovery = 100.85%
Mg 279.077 IEC†        11185.7      5189.7 ug/L         14.67      5189.7 ppb          14.67   0.28%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.79%
Mn 257.610†           903521.6      507.45 ug/L         1.050      507.45 ppb          1.050   0.21%
   QC value within limits for Mn 257.610  Recovery = 101.49%
Mo 202.031†            22866.3      502.08 ug/L         1.269      502.08 ppb          1.269   0.25%
   QC value within limits for Mo 202.031  Recovery = 100.42%
Na 589.592 Radial†    168101.7      9943.1 ug/L        108.02      9943.1 ppb         108.02   1.09%
   QC value within limits for Na 589.592 Radial  Recovery = 99.43%
Ni 231.604†            48582.1      498.32 ug/L         1.305      498.32 ppb          1.305   0.26%
   QC value within limits for Ni 231.604  Recovery = 99.66%
P 214.914†             16738.4      2414.7 ug/L          6.77      2414.7 ppb           6.77   0.28%
   QC value within limits for P 214.914  Recovery = 96.59%
Pb 220.353†            11802.0      501.84 ug/L         0.475      501.84 ppb          0.475   0.09%
   QC value within limits for Pb 220.353  Recovery = 100.37%
S 181.975 Axial†        3073.7      1000.9 ug/L          4.08      1000.9 ppb           4.08   0.41%
   QC value within limits for S 181.975 Axial  Recovery = 100.09%
Sb 206.836†             5662.7      505.02 ug/L         3.152      505.02 ppb          3.152   0.62%
   QC value within limits for Sb 206.836  Recovery = 101.00%
Se 196.026†             3238.9      515.31 ug/L         2.680      515.31 ppb          2.680   0.52%
   QC value within limits for Se 196.026  Recovery = 103.06%
Si 251.611†           148158.3      2524.7 ug/L          5.95      2524.7 ppb           5.95   0.24%
   QC value within limits for Si 251.611  Recovery = 100.99%
Sn 189.927†            10603.4      502.05 ug/L         2.414      502.05 ppb          2.414   0.48%
   QC value within limits for Sn 189.927  Recovery = 100.41%
Sr 421.552†           586992.0      507.36 ug/L         6.207      507.36 ppb          6.207   1.22%
   QC value within limits for Sr 421.552  Recovery = 101.47%
Ti 334.940†           393495.1      507.28 ug/L         1.117      507.28 ppb          1.117   0.22%
   QC value within limits for Ti 334.940  Recovery = 101.46%
Tl 190.801†             6738.7      501.85 ug/L         2.551      501.85 ppb          2.551   0.51%
   QC value within limits for Tl 190.801  Recovery = 100.37%
U 409.014†             12083.2      494.14 ug/L         4.390      494.14 ppb          4.390   0.89%
   QC value within limits for U 409.014  Recovery = 98.83%
V 292.402†             91301.8      509.27 ug/L         1.076      509.27 ppb          1.076   0.21%
   QC value within limits for V 292.402  Recovery = 101.85%
Zn 213.857†           156042.9      502.67 ug/L         1.213      502.67 ppb          1.213   0.24%
   QC value within limits for Zn 213.857  Recovery = 100.53%
SiO2†                 149855.1      5433.3 ug/L         27.86      5433.3 ppb          27.86   0.51%
   QC value within limits for SiO2  Recovery = 101.60%
All analyte(s) passed QC.
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Sequence No.: 16 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 3/6/2008 08:11:01**
Analyst: **Data Type: Reprocessed on 3/6/2008 08:21:35**
Logged In Analyst (Original) : Optima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	992545.4	992545.4	99.281	%			08:14:11
1	Sc Radial	107089.3	107089.3	102	%			08:12:54
1	Y 371.029	839090.1	839090.1	98.990	%			08:14:11
1	Y RADIAL	93040.9	93040.9	102.0	%			08:12:54
1	Ag 328.068†	1141.3	23.2	0.0912	ug/L	0.0912	ppb	08:14:11
1	Al 396.153Radial†	553.0	-20.1	-2.2991	ug/L	-2.2991	ppb	08:12:54
1	As 188.979†	1.7	63.6	6.8447	ug/L	6.8447	ppb	08:14:31
1	B 249.677†	641.0	1425.7	18.861	ug/L	18.861	ppb	08:14:31
1	Ba 233.527†	25.6	-2.3	-0.0066	ug/L	-0.0066	ppb	08:14:31
1	Be 313.107†	-3822.5	-125.7	-0.0355	ug/L	-0.0355	ppb	08:14:11
1	Ca 317.933Radial†	703.4	-24.3	-0.9656	ug/L	-0.9656	ppb	08:13:14
1	Cd 226.502†	-174.5	47.1	0.2388	ug/L	0.2388	ppb	08:14:31
1	Co 228.616†	-203.2	-4.5	-0.0371	ug/L	-0.0371	ppb	08:14:31
1	Cr 267.716†	-64.5	-10.5	-0.0773	ug/L	-0.0773	ppb	08:14:31
1	Cu 324.752†	8581.7	69.8	0.1709	ug/L	0.1709	ppb	08:14:11
1	Fe 238.204 Radial†	53.8	0.6	0.0641	ug/L	0.0641	ppb	08:13:14
1	K 766.490 Radial†	3503.9	31.2	6.2641	ug/L	6.2641	ppb	08:12:54
1	Mg 279.077 IEC†	55.2	-24.3	-11.230	ug/L	-11.230	ppb	08:13:14
1	Mn 257.610†	1046.7	0.9	0.0007	ug/L	0.0007	ppb	08:14:31
1	Mo 202.031†	30.3	0.7	0.0155	ug/L	0.0155	ppb	08:14:31
1	Na 589.592 Radial†	-2162.2	-775.4	-45.865	ug/L	-45.865	ppb	08:12:54
1	Ni 231.604†	287.8	6.1	0.0625	ug/L	0.0625	ppb	08:14:31
1	P 214.914†	804.7	11.6	1.6982	ug/L	1.6982	ppb	08:14:31
1	Pb 220.353†	-94.9	13.9	0.5911	ug/L	0.5911	ppb	08:14:31
1	S 181.975 Axial†	152.1	-9.9	-3.2187	ug/L	-3.2187	ppb	08:14:31
1	Sb 206.836†	248.3	118.1	10.571	ug/L	10.571	ppb	08:14:31
1	Se 196.026†	-50.9	9.1	1.4084	ug/L	1.4084	ppb	08:14:31
1	Si 251.611†	1237.8	312.4	5.3391	ug/L	5.3391	ppb	08:14:31
1	Sn 189.927†	-4.0	6.2	0.2947	ug/L	0.2947	ppb	08:14:31
1	Sr 421.552†	-2050.3	-35.5	-0.0306	ug/L	-0.0306	ppb	08:12:54
1	Ti 334.940†	-1382.4	56.1	0.0728	ug/L	0.0728	ppb	08:14:31
1	Tl 190.801†	-123.3	14.0	1.0405	ug/L	1.0405	ppb	08:14:31
1	U 409.014†	5316.0	-27.8	-1.1383	ug/L	-1.1383	ppb	08:14:11
1	V 292.402†	-2480.7	3.4	0.0163	ug/L	0.0163	ppb	08:14:31
1	Zn 213.857†	2070.4	51.9	0.1686	ug/L	0.1686	ppb	08:14:31
1	SiO2†	1277.0	307.5	11.184	ug/L	11.184	ppb	08:15:27
2	Sc 361.383	1002406.0	1002406.0	100.27	%			08:14:36
2	Sc Radial	106430.9	106430.9	101	%			08:13:19
2	Y 371.029	848162.9	848162.9	100.06	%			08:14:36
2	Y RADIAL	92316.4	92316.4	101.2	%			08:13:19
2	Ag 328.068†	1156.2	26.8	0.1039	ug/L	0.1039	ppb	08:14:36
2	Al 396.153Radial†	505.2	-63.9	-7.3494	ug/L	-7.3494	ppb	08:13:19
2	As 188.979†	10.7	72.5	7.8161	ug/L	7.8161	ppb	08:14:56
2	B 249.677†	696.1	1474.3	19.504	ug/L	19.504	ppb	08:14:56
2	Ba 233.527†	16.8	-11.3	-0.0326	ug/L	-0.0326	ppb	08:14:56
2	Be 313.107†	-3788.0	-53.5	-0.0152	ug/L	-0.0152	ppb	08:14:36
2	Ca 317.933Radial†	695.5	-27.8	-1.1068	ug/L	-1.1068	ppb	08:13:39
2	Cd 226.502†	-192.4	31.1	0.1574	ug/L	0.1574	ppb	08:14:56
2	Co 228.616†	-211.9	-11.2	-0.0903	ug/L	-0.0903	ppb	08:14:56
2	Cr 267.716†	-60.5	-5.9	-0.0429	ug/L	-0.0429	ppb	08:14:56
2	Cu 324.752†	8599.7	2.8	0.0062	ug/L	0.0062	ppb	08:14:36
2	Fe 238.204 Radial†	55.4	2.5	0.2633	ug/L	0.2633	ppb	08:13:39
2	K 766.490 Radial†	3394.9	-55.0	-11.055	ug/L	-11.055	ppb	08:13:19
2	Mg 279.077 IEC†	86.0	6.5	3.0124	ug/L	3.0124	ppb	08:13:39
2	Mn 257.610†	1070.0	13.8	0.0077	ug/L	0.0077	ppb	08:14:56
2	Mo 202.031†	57.7	27.8	0.6094	ug/L	0.6094	ppb	08:14:56
2	Na 589.592 Radial†	-2214.0	-839.6	-49.662	ug/L	-49.662	ppb	08:13:19
2	Ni 231.604†	265.5	-19.0	-0.1945	ug/L	-0.1945	ppb	08:14:56

2	P 214.914†	835.4	34.2	5.0789	ug/L	5.0789	ppb	08:14:56
2	Pb 220.353†	-126.8	-16.9	-0.7173	ug/L	-0.7173	ppb	08:14:56
2	S 181.975 Axial†	154.0	-9.5	-3.0939	ug/L	-3.0939	ppb	08:14:56
2	Sb 206.836†	230.2	97.6	8.7345	ug/L	8.7345	ppb	08:14:56
2	Se 196.026†	-59.2	1.4	0.2107	ug/L	0.2107	ppb	08:14:56
2	Si 251.611†	1237.1	299.4	5.1083	ug/L	5.1083	ppb	08:14:56
2	Sn 189.927†	4.5	14.7	0.6977	ug/L	0.6977	ppb	08:14:56
2	Sr 421.552†	-2126.9	-123.4	-0.1067	ug/L	-0.1067	ppb	08:13:19
2	Ti 334.940†	-1451.5	0.9	0.0006	ug/L	0.0006	ppb	08:14:56
2	Tl 190.801†	-112.0	26.5	1.9633	ug/L	1.9633	ppb	08:14:56
2	U 409.014†	5418.3	21.5	0.8809	ug/L	0.8809	ppb	08:14:36
2	V 292.402†	-2487.3	21.4	0.1261	ug/L	0.1261	ppb	08:14:56
2	Zn 213.857†	2059.2	20.3	0.0672	ug/L	0.0672	ppb	08:14:56
2	SiO2†	1274.1	291.9	10.598	ug/L	10.598	ppb	08:15:32
3	Sc 361.383	1003325.4	1003325.4	100.36	%			08:15:02
3	Sc Radial	105321.6	105321.6	100	%			08:13:44
3	Y 371.029	849224.4	849224.4	100.19	%			08:15:02
3	Y RADIAL	91405.2	91405.2	100.2	%			08:13:44
3	Ag 328.068†	1130.3	-0.2	-0.0081	ug/L	-0.0081	ppb	08:15:02
3	Al 396.153Radial†	509.5	-54.3	-6.2394	ug/L	-6.2394	ppb	08:13:44
3	As 188.979†	18.0	79.8	8.6111	ug/L	8.6111	ppb	08:15:22
3	B 249.677†	639.0	1416.7	18.743	ug/L	18.743	ppb	08:15:22
3	Ba 233.527†	27.6	-0.6	-0.0012	ug/L	-0.0012	ppb	08:15:22
3	Be 313.107†	-3700.3	37.3	0.0108	ug/L	0.0108	ppb	08:15:02
3	Ca 317.933Radial†	667.0	-49.0	-1.9510	ug/L	-1.9510	ppb	08:14:04
3	Cd 226.502†	-185.9	37.7	0.1910	ug/L	0.1910	ppb	08:15:22
3	Co 228.616†	-237.3	-36.2	-0.2976	ug/L	-0.2976	ppb	08:15:22
3	Cr 267.716†	-62.2	-7.5	-0.0548	ug/L	-0.0548	ppb	08:15:22
3	Cu 324.752†	8614.5	9.7	0.0152	ug/L	0.0152	ppb	08:15:02
3	Fe 238.204 Radial†	58.9	6.5	0.6898	ug/L	0.6898	ppb	08:14:04
3	K 766.490 Radial†	3498.5	83.4	16.761	ug/L	16.761	ppb	08:13:44
3	Mg 279.077 IEC†	82.3	3.6	1.6976	ug/L	1.6976	ppb	08:14:04
3	Mn 257.610†	1082.7	25.5	0.0143	ug/L	0.0143	ppb	08:15:22
3	Mo 202.031†	49.6	19.6	0.4304	ug/L	0.4304	ppb	08:15:22
3	Na 589.592 Radial†	-2135.8	-784.7	-46.412	ug/L	-46.412	ppb	08:13:44
3	Ni 231.604†	264.7	-20.1	-0.2057	ug/L	-0.2057	ppb	08:15:22
3	P 214.914†	813.3	11.4	1.6897	ug/L	1.6897	ppb	08:15:22
3	Pb 220.353†	-125.5	-15.5	-0.6648	ug/L	-0.6648	ppb	08:15:22
3	S 181.975 Axial†	153.0	-10.6	-3.4601	ug/L	-3.4601	ppb	08:15:22
3	Sb 206.836†	227.0	94.2	8.4427	ug/L	8.4427	ppb	08:15:22
3	Se 196.026†	-53.8	6.8	1.0537	ug/L	1.0537	ppb	08:15:22
3	Si 251.611†	1321.0	381.8	6.5204	ug/L	6.5204	ppb	08:15:22
3	Sn 189.927†	-3.4	6.9	0.3277	ug/L	0.3277	ppb	08:15:22
3	Sr 421.552†	-2128.0	-146.6	-0.1267	ug/L	-0.1267	ppb	08:13:44
3	Ti 334.940†	-1391.0	62.5	0.0756	ug/L	0.0756	ppb	08:15:22
3	Tl 190.801†	-111.9	26.7	1.9802	ug/L	1.9802	ppb	08:15:22
3	U 409.014†	5660.2	257.6	10.546	ug/L	10.546	ppb	08:15:02
3	V 292.402†	-2478.5	32.4	0.2036	ug/L	0.2036	ppb	08:15:22
3	Zn 213.857†	2044.4	3.6	0.0129	ug/L	0.0129	ppb	08:15:22
3	SiO2†	1255.8	272.5	9.8976	ug/L	9.8976	ppb	08:15:37

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	999425.6	99.970	%	0.5978				0.60%
Sc Radial	106280.6	101	%	0.9				0.84%
Y 371.029	845492.5	99.745	%	0.6571				0.66%
Y RADIAL	92254.2	101.1	%	0.90				0.89%
Ag 328.068†	16.6	0.0623	ug/L	0.06133	0.0623	ppb	0.06133	98.38%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-46.1	-5.2960	ug/L	2.65401	-5.2960	ppb	2.65401	50.11%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	72.0	7.7573	ug/L	0.88470	7.7573	ppb	0.88470	11.40%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1438.9	19.036	ug/L	0.4096	19.036	ppb	0.4096	2.15%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-4.7	-0.0135	ug/L	0.01676	-0.0135	ppb	0.01676	124.58%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-47.3	-0.0133	ug/L	0.02323	-0.0133	ppb	0.02323	174.52%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Ca 317.933Radial†        -33.7     -1.3411 ug/L       0.53284     -1.3411 ppb        0.53284  39.73%
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†               38.7      0.1957 ug/L       0.04090      0.1957 ppb        0.04090  20.90%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -17.3     -0.1417 ug/L       0.13766     -0.1417 ppb        0.13766  97.17%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -7.9     -0.0583 ug/L       0.01747     -0.0583 ppb        0.01747  29.95%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               27.5      0.0641 ug/L       0.09260      0.0641 ppb        0.09260 144.53%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         3.2      0.3391 ug/L       0.31965      0.3391 ppb        0.31965  94.28%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         19.9      3.9900 ug/L      14.04648      3.9900 ppb       14.04648 352.04%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -4.7     -2.1734 ug/L       7.87083     -2.1734 ppb        7.87083 362.15%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               13.4      0.0076 ug/L       0.00680      0.0076 ppb        0.00680  89.48%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               16.0      0.3518 ug/L       0.30468      0.3518 ppb        0.30468  86.61%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -799.9     -47.313 ug/L        2.0527     -47.313 ppb         2.0527   4.34%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -11.0     -0.1126 ug/L       0.15173     -0.1126 ppb        0.15173 134.79%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                19.1      2.8223 ug/L       1.95432      2.8223 ppb        1.95432  69.25%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -6.2     -0.2637 ug/L       0.74070     -0.2637 ppb        0.74070 280.91%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -10.0     -3.2576 ug/L       0.18615     -3.2576 ppb        0.18615   5.71%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              103.3      9.2494 ug/L       1.15376      9.2494 ppb        1.15376  12.47%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                5.8      0.8909 ug/L       0.61525      0.8909 ppb        0.61525  69.06%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              331.2      5.6560 ug/L       0.75747      5.6560 ppb        0.75747  13.39%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                9.3      0.4400 ug/L       0.22379      0.4400 ppb        0.22379  50.86%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             -101.8     -0.0880 ug/L       0.05068     -0.0880 ppb        0.05068  57.60%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               39.8      0.0497 ug/L       0.04249      0.0497 ppb        0.04249  85.53%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               22.4      1.6613 ug/L       0.53769      1.6613 ppb        0.53769  32.37%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                83.7      3.4296 ug/L       6.24530      3.4296 ppb        6.24530 182.10%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                19.1      0.1153 ug/L       0.09409      0.1153 ppb        0.09409  81.59%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               25.3      0.0829 ug/L       0.07901      0.0829 ppb        0.07901  95.29%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    290.6      10.560 ug/L        0.6439      10.560 ppb         0.6439   6.10%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 3 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 3/6/2008 08:43:43**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	103379.7	103379.7	98.5	%			08:45:40
1	Y RADIAL	89381.4	89381.4	97.96	%			08:45:40
1	Al 396.153Radial†	45610.0	45758.9	5223.6	ug/L	5223.6	ppb	08:45:40
1	Ca 317.933Radial†	126495.3	127753.6	5087.0	ug/L	5087.0	ppb	08:45:40
1	Fe 238.204 Radial†	46414.9	47086.4	5057.7	ug/L	5057.7	ppb	08:45:40
1	K 766.490 Radial†	28371.4	25409.7	5103.6	ug/L	5103.6	ppb	08:45:40
1	Mg 279.077 IEC†	11025.4	11118.9	5158.5	ug/L	5158.5	ppb	08:45:40
1	Na 589.592 Radial†	166557.0	170498.3	10085	ug/L	10085	ppb	08:45:35
1	Sr 421.552†	580976.7	592009.7	511.70	ug/L	511.70	ppb	08:45:35
1	Sc 361.383	980755.9	980755.9	98.102	%			08:46:09
1	Y 371.029	821565.7	821565.7	96.922	%			08:46:09
1	Ag 328.068†	128529.4	129889.5	508.28	ug/L	508.28	ppb	08:46:09
1	As 188.979†	4377.8	4524.3	493.67	ug/L	493.67	ppb	08:46:14
1	B 249.677†	37075.2	38572.5	510.13	ug/L	510.13	ppb	08:46:09
1	Ba 233.527†	170742.6	174017.6	507.18	ug/L	507.18	ppb	08:46:09
1	Be 313.107†	1739415.0	1776789.3	506.07	ug/L	506.07	ppb	08:46:09
1	Cd 226.502†	97828.8	99944.3	505.79	ug/L	505.79	ppb	08:46:09
1	Co 228.616†	58362.4	59691.7	492.16	ug/L	492.16	ppb	08:46:14
1	Cr 267.716†	66807.6	68154.5	502.66	ug/L	502.66	ppb	08:46:09
1	Cu 324.752†	211731.1	207253.2	504.17	ug/L	504.17	ppb	08:46:09
1	Mn 257.610†	886498.8	902595.3	506.93	ug/L	506.93	ppb	08:46:09
1	Mo 202.031†	22099.6	22497.3	493.98	ug/L	493.98	ppb	08:46:14
1	Ni 231.604†	47406.3	48039.6	492.76	ug/L	492.76	ppb	08:46:14
1	P 214.914†	16938.5	16467.3	2374.5	ug/L	2374.5	ppb	08:46:14
1	Pb 220.353†	11388.1	11717.9	498.27	ug/L	498.27	ppb	08:46:14
1	S 181.975 Axial†	3100.8	2997.7	976.16	ug/L	976.16	ppb	08:46:14
1	Sb 206.836†	5499.5	5474.0	488.11	ug/L	488.11	ppb	08:46:14
1	Se 196.026†	3007.9	3126.5	497.98	ug/L	497.98	ppb	08:46:14
1	Si 251.611†	145796.4	147682.5	2516.7	ug/L	2516.7	ppb	08:46:09
1	Sn 189.927†	10202.4	10410.0	492.90	ug/L	492.90	ppb	08:46:14
1	Ti 334.940†	384357.1	393241.2	506.96	ug/L	506.96	ppb	08:46:09
1	Tl 190.801†	6362.2	6623.5	493.33	ug/L	493.33	ppb	08:46:14
1	U 409.014†	17089.8	12038.1	492.28	ug/L	492.28	ppb	08:46:09
1	V 292.402†	86805.5	90986.8	507.44	ug/L	507.44	ppb	08:46:09
1	Zn 213.857†	154813.7	155775.3	501.84	ug/L	501.84	ppb	08:46:09
1	SiO2†	146825.3	148686.9	5391.1	ug/L	5391.1	ppb	08:46:45
2	Sc Radial	103747.1	103747.1	98.8	%			08:45:50
2	Y RADIAL	89801.0	89801.0	98.42	%			08:45:50
2	Al 396.153Radial†	45802.5	45789.6	5226.6	ug/L	5226.6	ppb	08:45:50
2	Ca 317.933Radial†	127005.2	127814.6	5089.4	ug/L	5089.4	ppb	08:45:50
2	Fe 238.204 Radial†	46626.2	47133.3	5063.0	ug/L	5063.0	ppb	08:45:50
2	K 766.490 Radial†	28444.9	25382.0	5098.0	ug/L	5098.0	ppb	08:45:50
2	Mg 279.077 IEC†	11121.2	11176.1	5185.3	ug/L	5185.3	ppb	08:45:50
2	Na 589.592 Radial†	168094.1	171454.7	10141	ug/L	10141	ppb	08:45:45
2	Sr 421.552†	585932.1	594934.7	514.23	ug/L	514.23	ppb	08:45:45
2	Sc 361.383	977157.8	977157.8	97.742	%			08:46:22
2	Y 371.029	819156.9	819156.9	96.638	%			08:46:22
2	Ag 328.068†	127943.0	129771.9	507.83	ug/L	507.83	ppb	08:46:22
2	As 188.979†	4475.4	4640.6	506.34	ug/L	506.34	ppb	08:46:27
2	B 249.677†	37029.1	38664.4	511.34	ug/L	511.34	ppb	08:46:22
2	Ba 233.527†	169961.1	173859.0	506.72	ug/L	506.72	ppb	08:46:22
2	Be 313.107†	1731747.3	1775473.3	505.69	ug/L	505.69	ppb	08:46:22
2	Cd 226.502†	97198.0	99666.1	504.38	ug/L	504.38	ppb	08:46:22
2	Co 228.616†	59314.3	60884.6	502.02	ug/L	502.02	ppb	08:46:27
2	Cr 267.716†	66502.2	68092.9	502.21	ug/L	502.21	ppb	08:46:22
2	Cu 324.752†	210648.9	206940.8	503.41	ug/L	503.41	ppb	08:46:22
2	Mn 257.610†	882206.3	901531.0	506.33	ug/L	506.33	ppb	08:46:22
2	Mo 202.031†	22542.5	23033.4	505.74	ug/L	505.74	ppb	08:46:27
2	Ni 231.604†	48041.9	48867.8	501.25	ug/L	501.25	ppb	08:46:27

2	P 214.914†	17253.4	16853.0	2431.9	ug/L	2431.9 ppb	08:46:27
2	Pb 220.353†	11465.1	11839.5	503.45	ug/L	503.45 ppb	08:46:27
2	S 181.975 Axial†	3138.0	3047.4	992.38	ug/L	992.38 ppb	08:46:27
2	Sb 206.836†	5662.7	5661.5	504.94	ug/L	504.94 ppb	08:46:27
2	Se 196.026†	3091.6	3223.4	512.97	ug/L	512.97 ppb	08:46:27
2	Si 251.611†	144906.2	147318.9	2510.3	ug/L	2510.3 ppb	08:46:22
2	Sn 189.927†	10386.9	10637.1	503.64	ug/L	503.64 ppb	08:46:27
2	Ti 334.940†	382669.4	392957.2	506.59	ug/L	506.59 ppb	08:46:22
2	Tl 190.801†	6497.2	6785.5	505.29	ug/L	505.29 ppb	08:46:27
2	U 409.014†	17054.2	12065.8	493.45	ug/L	493.45 ppb	08:46:22
2	V 292.402†	86632.0	91135.1	508.38	ug/L	508.38 ppb	08:46:22
2	Zn 213.857†	153760.3	155278.6	500.17	ug/L	500.17 ppb	08:46:22
2	SiO2†	145444.3	147825.1	5359.3	ug/L	5359.3 ppb	08:46:50
3	Sc Radial	102647.7	102647.7	97.8	%		08:46:01
3	Y RADIAL	88766.1	88766.1	97.28	%		08:46:01
3	Al 396.153Radial†	45317.3	45789.8	5227.0	ug/L	5227.0 ppb	08:46:01
3	Ca 317.933Radial†	125449.5	127600.1	5080.9	ug/L	5080.9 ppb	08:46:01
3	Fe 238.204 Radial†	46056.7	47056.3	5054.6	ug/L	5054.6 ppb	08:46:01
3	K 766.490 Radial†	28037.6	25273.7	5076.3	ug/L	5076.3 ppb	08:46:01
3	Mg 279.077 IEC†	10996.0	11168.7	5181.7	ug/L	5181.7 ppb	08:46:01
3	Na 589.592 Radial†	166699.7	171850.6	10165	ug/L	10165 ppb	08:45:56
3	Sr 421.552†	582060.0	597325.4	516.29	ug/L	516.29 ppb	08:45:56
3	Sc 361.383	978874.5	978874.5	97.914	%		08:46:34
3	Y 371.029	821575.6	821575.6	96.923	%		08:46:34
3	Ag 328.068†	128334.8	129942.6	508.48	ug/L	508.48 ppb	08:46:34
3	As 188.979†	4393.0	4548.5	496.29	ug/L	496.29 ppb	08:46:39
3	B 249.677†	37032.9	38601.9	510.52	ug/L	510.52 ppb	08:46:34
3	Ba 233.527†	170046.0	173640.7	506.08	ug/L	506.08 ppb	08:46:34
3	Be 313.107†	1735007.2	1775695.5	505.76	ug/L	505.76 ppb	08:46:34
3	Cd 226.502†	97352.3	99649.3	504.29	ug/L	504.29 ppb	08:46:34
3	Co 228.616†	58509.1	59955.9	494.35	ug/L	494.35 ppb	08:46:39
3	Cr 267.716†	66531.0	68002.9	501.54	ug/L	501.54 ppb	08:46:34
3	Cu 324.752†	211149.1	207073.7	503.73	ug/L	503.73 ppb	08:46:34
3	Mn 257.610†	882720.6	900473.4	505.74	ug/L	505.74 ppb	08:46:34
3	Mo 202.031†	22253.7	22698.0	498.38	ug/L	498.38 ppb	08:46:39
3	Ni 231.604†	47504.8	48233.1	494.74	ug/L	494.74 ppb	08:46:39
3	P 214.914†	16967.2	16529.7	2383.8	ug/L	2383.8 ppb	08:46:39
3	Pb 220.353†	11361.5	11713.1	498.07	ug/L	498.07 ppb	08:46:39
3	S 181.975 Axial†	3135.0	3038.7	989.53	ug/L	989.53 ppb	08:46:39
3	Sb 206.836†	5508.4	5493.7	489.91	ug/L	489.91 ppb	08:46:39
3	Se 196.026†	3021.0	3145.7	500.94	ug/L	500.94 ppb	08:46:39
3	Si 251.611†	145345.6	147507.7	2513.6	ug/L	2513.6 ppb	08:46:34
3	Sn 189.927†	10215.4	10443.3	494.47	ug/L	494.47 ppb	08:46:39
3	Ti 334.940†	383047.2	392656.5	506.20	ug/L	506.20 ppb	08:46:34
3	Tl 190.801†	6406.0	6680.7	497.55	ug/L	497.55 ppb	08:46:39
3	U 409.014†	17200.3	12184.4	498.28	ug/L	498.28 ppb	08:46:34
3	V 292.402†	86591.0	90937.8	507.23	ug/L	507.23 ppb	08:46:34
3	Zn 213.857†	154040.4	155288.8	500.24	ug/L	500.24 ppb	08:46:34
3	SiO2†	146000.3	148132.1	5370.7	ug/L	5370.7 ppb	08:46:55

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	978929.4	97.919	%	0.1800				0.18%
Sc Radial	103258.1	98.3	%	0.53				0.54%
Y 371.029	820766.1	96.828	%	0.1644				0.17%
Y RADIAL	89316.2	97.88	%	0.570				0.58%
Ag 328.068†	129868.0	508.20	ug/L	0.335	508.20	ppb	0.335	0.07%
QC value within limits for Ag 328.068 Recovery = 101.64%								
Al 396.153Radial†	45779.4	5225.7	ug/L	1.86	5225.7	ppb	1.86	0.04%
QC value within limits for Al 396.153Radial Recovery = 104.51%								
As 188.979†	4571.1	498.77	ug/L	6.690	498.77	ppb	6.690	1.34%
QC value within limits for As 188.979 Recovery = 99.75%								
B 249.677†	38612.9	510.66	ug/L	0.621	510.66	ppb	0.621	0.12%
QC value within limits for B 249.677 Recovery = 102.13%								
Ba 233.527†	173839.1	506.66	ug/L	0.551	506.66	ppb	0.551	0.11%
QC value within limits for Ba 233.527 Recovery = 101.33%								
Be 313.107†	1775986.0	505.84	ug/L	0.201	505.84	ppb	0.201	0.04%
QC value within limits for Be 313.107 Recovery = 101.17%								
Ca 317.933Radial†	127722.8	5085.8	ug/L	4.40	5085.8	ppb	4.40	0.09%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.72%
Cd 226.502†            99753.2      504.82 ug/L         0.839      504.82 ppb          0.839   0.17%
   QC value within limits for Cd 226.502  Recovery = 100.96%
Co 228.616†            60177.4      496.18 ug/L         5.179      496.18 ppb          5.179   1.04%
   QC value within limits for Co 228.616  Recovery = 99.24%
Cr 267.716†            68083.4      502.14 ug/L         0.562      502.14 ppb          0.562   0.11%
   QC value within limits for Cr 267.716  Recovery = 100.43%
Cu 324.752†           207089.2      503.77 ug/L         0.382      503.77 ppb          0.382   0.08%
   QC value within limits for Cu 324.752  Recovery = 100.75%
Fe 238.204 Radial†     47092.0      5058.4 ug/L          4.29      5058.4 ppb           4.29   0.08%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.17%
K 766.490 Radial†      25355.1      5092.6 ug/L         14.43      5092.6 ppb          14.43   0.28%
   QC value within limits for K 766.490 Radial  Recovery = 101.85%
Mg 279.077 IEC†        11154.6      5175.2 ug/L         14.55      5175.2 ppb          14.55   0.28%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.50%
Mn 257.610†           901533.2      506.33 ug/L         0.596      506.33 ppb          0.596   0.12%
   QC value within limits for Mn 257.610  Recovery = 101.27%
Mo 202.031†            22742.9      499.37 ug/L         5.944      499.37 ppb          5.944   1.19%
   QC value within limits for Mo 202.031  Recovery = 99.87%
Na 589.592 Radial†    171267.9       10130 ug/L          41.1       10130 ppb           41.1   0.41%
   QC value within limits for Na 589.592 Radial  Recovery = 101.30%
Ni 231.604†            48380.2      496.25 ug/L         4.443      496.25 ppb          4.443   0.90%
   QC value within limits for Ni 231.604  Recovery = 99.25%
P 214.914†             16616.7      2396.8 ug/L         30.80      2396.8 ppb          30.80   1.29%
   QC value within limits for P 214.914  Recovery = 95.87%
Pb 220.353†            11756.8      499.93 ug/L         3.050      499.93 ppb          3.050   0.61%
   QC value within limits for Pb 220.353  Recovery = 99.99%
S 181.975 Axial†        3028.0      986.02 ug/L         8.656      986.02 ppb          8.656   0.88%
   QC value within limits for S 181.975 Axial  Recovery = 98.60%
Sb 206.836†             5543.1      494.32 ug/L         9.244      494.32 ppb          9.244   1.87%
   QC value within limits for Sb 206.836  Recovery = 98.86%
Se 196.026†             3165.2      503.96 ug/L         7.937      503.96 ppb          7.937   1.57%
   QC value within limits for Se 196.026  Recovery = 100.79%
Si 251.611†           147503.1      2513.5 ug/L          3.20      2513.5 ppb           3.20   0.13%
   QC value within limits for Si 251.611  Recovery = 100.54%
Sn 189.927†            10496.8      497.00 ug/L         5.805      497.00 ppb          5.805   1.17%
   QC value within limits for Sn 189.927  Recovery = 99.40%
Sr 421.552†           594756.6      514.07 ug/L         2.302      514.07 ppb          2.302   0.45%
   QC value within limits for Sr 421.552  Recovery = 102.81%
Ti 334.940†           392951.6      506.58 ug/L         0.378      506.58 ppb          0.378   0.07%
   QC value within limits for Ti 334.940  Recovery = 101.32%
Tl 190.801†             6696.5      498.72 ug/L         6.067      498.72 ppb          6.067   1.22%
   QC value within limits for Tl 190.801  Recovery = 99.74%
U 409.014†             12096.1      494.67 ug/L         3.185      494.67 ppb          3.185   0.64%
   QC value within limits for U 409.014  Recovery = 98.93%
V 292.402†             91019.9      507.68 ug/L         0.614      507.68 ppb          0.614   0.12%
   QC value within limits for V 292.402  Recovery = 101.54%
Zn 213.857†           155447.6      500.75 ug/L         0.944      500.75 ppb          0.944   0.19%
   QC value within limits for Zn 213.857  Recovery = 100.15%
SiO2†                 148214.7      5373.7 ug/L         16.09      5373.7 ppb          16.09   0.30%
   QC value within limits for SiO2  Recovery = 100.49%
All analyte(s) passed QC.
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Sequence No.: 4 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 3/6/2008 08:49:05**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	104654.7	104654.7	99.7	%			08:50:58
1	Y RADIAL	90979.6	90979.6	99.71	%			08:50:58
1	Al 396.153Radial†	566.8	6.4	0.7149	ug/L	0.7149	ppb	08:50:58
1	Ca 317.933Radial†	798.9	87.6	3.4878	ug/L	3.4878	ppb	08:51:18
1	Fe 238.204 Radial†	52.5	0.6	0.0558	ug/L	0.0558	ppb	08:51:18
1	K 766.490 Radial†	3368.0	-25.2	-5.0671	ug/L	-5.0671	ppb	08:50:58
1	Mg 279.077 IEC†	68.9	-9.3	-4.3138	ug/L	-4.3138	ppb	08:51:18
1	Na 589.592 Radial†	-2100.8	-763.1	-45.135	ug/L	-45.135	ppb	08:50:58
1	Sr 421.552†	-2077.3	-109.3	-0.0946	ug/L	-0.0946	ppb	08:50:58
1	Sc 361.383	990452.3	990452.3	99.072	%			08:52:15
1	Y 371.029	839138.8	839138.8	98.995	%			08:52:15
1	Ag 328.068†	1089.5	-26.7	-0.1141	ug/L	-0.1141	ppb	08:52:15
1	As 188.979†	-23.5	38.2	4.1232	ug/L	4.1232	ppb	08:52:35
1	B 249.677†	-176.7	601.6	7.9594	ug/L	7.9594	ppb	08:52:35
1	Ba 233.527†	59.6	32.0	0.0935	ug/L	0.0935	ppb	08:52:35
1	Be 313.107†	-3759.0	-69.8	-0.0199	ug/L	-0.0199	ppb	08:52:15
1	Cd 226.502†	-226.7	-5.9	-0.0298	ug/L	-0.0298	ppb	08:52:35
1	Co 228.616†	-215.9	-17.7	-0.1452	ug/L	-0.1452	ppb	08:52:35
1	Cr 267.716†	-106.9	-53.4	-0.3932	ug/L	-0.3932	ppb	08:52:35
1	Cu 324.752†	8539.5	45.5	0.0996	ug/L	0.0996	ppb	08:52:15
1	Mn 257.610†	1062.8	19.4	0.0110	ug/L	0.0110	ppb	08:52:35
1	Mo 202.031†	44.2	14.9	0.3259	ug/L	0.3259	ppb	08:52:35
1	Ni 231.604†	277.0	-4.2	-0.0426	ug/L	-0.0426	ppb	08:52:35
1	P 214.914†	794.4	2.8	0.4078	ug/L	0.4078	ppb	08:52:35
1	Pb 220.353†	-111.9	-3.4	-0.1531	ug/L	-0.1531	ppb	08:52:35
1	S 181.975 Axial†	149.4	-12.2	-3.9891	ug/L	-3.9891	ppb	08:52:35
1	Sb 206.836†	202.6	72.5	6.5059	ug/L	6.5059	ppb	08:52:35
1	Se 196.026†	-35.7	24.4	3.7722	ug/L	3.7722	ppb	08:52:35
1	Si 251.611†	1108.5	184.5	3.1479	ug/L	3.1479	ppb	08:52:35
1	Sn 189.927†	20.0	30.5	1.4417	ug/L	1.4417	ppb	08:52:35
1	Ti 334.940†	-1444.9	-9.9	-0.0184	ug/L	-0.0184	ppb	08:52:35
1	Tl 190.801†	-145.4	-8.5	-0.6316	ug/L	-0.6316	ppb	08:52:35
1	U 409.014†	5665.8	336.5	13.779	ug/L	13.779	ppb	08:52:15
1	V 292.402†	-2449.6	29.5	0.1926	ug/L	0.1926	ppb	08:52:35
1	Zn 213.857†	2021.6	7.2	0.0236	ug/L	0.0236	ppb	08:52:35
1	SiO2†	1104.5	136.0	4.9362	ug/L	4.9362	ppb	08:53:31
2	Sc Radial	105453.2	105453.2	100	%			08:51:23
2	Y RADIAL	91788.1	91788.1	100.6	%			08:51:23
2	Al 396.153Radial†	572.8	8.0	0.9082	ug/L	0.9082	ppb	08:51:23
2	Ca 317.933Radial†	804.9	87.5	3.4838	ug/L	3.4838	ppb	08:51:43
2	Fe 238.204 Radial†	65.1	12.6	1.3483	ug/L	1.3483	ppb	08:51:43
2	K 766.490 Radial†	3423.2	4.1	0.8272	ug/L	0.8272	ppb	08:51:23
2	Mg 279.077 IEC†	65.5	-13.2	-6.1034	ug/L	-6.1034	ppb	08:51:43
2	Na 589.592 Radial†	-1995.2	-642.0	-37.974	ug/L	-37.974	ppb	08:51:23
2	Sr 421.552†	-2072.0	-88.3	-0.0764	ug/L	-0.0764	ppb	08:51:23
2	Sc 361.383	992363.0	992363.0	99.263	%			08:52:40
2	Y 371.029	841408.7	841408.7	99.263	%			08:52:40
2	Ag 328.068†	1093.3	-25.0	-0.1023	ug/L	-0.1023	ppb	08:52:40
2	As 188.979†	-34.8	26.8	2.8811	ug/L	2.8811	ppb	08:53:00
2	B 249.677†	-153.8	625.1	8.2703	ug/L	8.2703	ppb	08:53:00
2	Ba 233.527†	60.1	32.5	0.0941	ug/L	0.0941	ppb	08:53:00
2	Be 313.107†	-3703.8	-6.9	-0.0017	ug/L	-0.0017	ppb	08:52:40
2	Cd 226.502†	-211.0	10.4	0.0524	ug/L	0.0524	ppb	08:53:00
2	Co 228.616†	-220.2	-21.7	-0.1782	ug/L	-0.1782	ppb	08:53:00
2	Cr 267.716†	-99.4	-45.7	-0.3368	ug/L	-0.3368	ppb	08:53:00
2	Cu 324.752†	8688.3	178.8	0.4301	ug/L	0.4301	ppb	08:52:40
2	Mn 257.610†	1061.4	15.9	0.0092	ug/L	0.0092	ppb	08:53:00
2	Mo 202.031†	38.4	8.9	0.1958	ug/L	0.1958	ppb	08:53:00
2	Ni 231.604†	281.5	-0.2	-0.0019	ug/L	-0.0019	ppb	08:53:00

2	P 214.914†	810.3	17.4	2.5239	ug/L	2.5239	ppb	08:53:00
2	Pb 220.353†	-131.3	-22.7	-0.9647	ug/L	-0.9647	ppb	08:53:00
2	S 181.975 Axial†	145.6	-16.4	-5.3463	ug/L	-5.3463	ppb	08:53:00
2	Sb 206.836†	187.6	57.0	5.1127	ug/L	5.1127	ppb	08:53:00
2	Se 196.026†	-50.7	9.4	1.4529	ug/L	1.4529	ppb	08:53:00
2	Si 251.611†	1118.7	192.6	3.2884	ug/L	3.2884	ppb	08:53:00
2	Sn 189.927†	0.8	11.1	0.5239	ug/L	0.5239	ppb	08:53:00
2	Ti 334.940†	-1360.1	78.3	0.0986	ug/L	0.0986	ppb	08:53:00
2	Tl 190.801†	-88.4	49.2	3.6453	ug/L	3.6453	ppb	08:53:00
2	U 409.014†	5497.2	155.7	6.3744	ug/L	6.3744	ppb	08:52:40
2	V 292.402†	-2515.3	-32.0	-0.1627	ug/L	-0.1627	ppb	08:53:00
2	Zn 213.857†	2026.3	7.9	0.0252	ug/L	0.0252	ppb	08:53:00
2	SiO2†	1127.3	156.9	5.7014	ug/L	5.7014	ppb	08:53:36
3	Sc Radial	107005.1	107005.1	102	%			08:51:48
3	Y RADIAL	92930.3	92930.3	101.8	%			08:51:48
3	Al 396.153Radial†	544.4	-28.1	-3.2344	ug/L	-3.2344	ppb	08:51:48
3	Ca 317.933Radial†	783.4	54.8	2.1813	ug/L	2.1813	ppb	08:52:08
3	Fe 238.204 Radial†	48.4	-4.6	-0.5047	ug/L	-0.5047	ppb	08:52:08
3	K 766.490 Radial†	3489.8	20.1	4.0360	ug/L	4.0360	ppb	08:51:48
3	Mg 279.077 IEC†	71.8	-8.0	-3.6739	ug/L	-3.6739	ppb	08:52:08
3	Na 589.592 Radial†	-1886.0	-506.1	-29.933	ug/L	-29.933	ppb	08:51:48
3	Sr 421.552†	-2096.5	-82.4	-0.0713	ug/L	-0.0713	ppb	08:51:48
3	Sc 361.383	985596.6	985596.6	98.586	%			08:53:06
3	Y 371.029	835257.5	835257.5	98.537	%			08:53:06
3	Ag 328.068†	1207.8	98.8	0.3771	ug/L	0.3771	ppb	08:53:06
3	As 188.979†	-29.1	32.3	3.4862	ug/L	3.4862	ppb	08:53:26
3	B 249.677†	-211.4	565.6	7.4832	ug/L	7.4832	ppb	08:53:26
3	Ba 233.527†	44.0	16.6	0.0477	ug/L	0.0477	ppb	08:53:26
3	Be 313.107†	-3629.0	43.3	0.0123	ug/L	0.0123	ppb	08:53:06
3	Cd 226.502†	-196.5	23.6	0.1194	ug/L	0.1194	ppb	08:53:26
3	Co 228.616†	-227.4	-30.4	-0.2495	ug/L	-0.2495	ppb	08:53:26
3	Cr 267.716†	-63.1	-9.6	-0.0708	ug/L	-0.0708	ppb	08:53:26
3	Cu 324.752†	8615.5	165.1	0.3950	ug/L	0.3950	ppb	08:53:06
3	Mn 257.610†	1091.5	53.8	0.0302	ug/L	0.0302	ppb	08:53:26
3	Mo 202.031†	47.7	18.6	0.4084	ug/L	0.4084	ppb	08:53:26
3	Ni 231.604†	300.7	21.3	0.2184	ug/L	0.2184	ppb	08:53:26
3	P 214.914†	813.6	26.3	3.8525	ug/L	3.8525	ppb	08:53:26
3	Pb 220.353†	-143.0	-35.5	-1.5079	ug/L	-1.5079	ppb	08:53:26
3	S 181.975 Axial†	151.2	-9.7	-3.1658	ug/L	-3.1658	ppb	08:53:26
3	Sb 206.836†	189.7	60.4	5.4153	ug/L	5.4153	ppb	08:53:26
3	Se 196.026†	-58.7	0.9	0.1364	ug/L	0.1364	ppb	08:53:26
3	Si 251.611†	1139.4	221.3	3.7766	ug/L	3.7766	ppb	08:53:26
3	Sn 189.927†	3.8	14.1	0.6665	ug/L	0.6665	ppb	08:53:26
3	Ti 334.940†	-1428.5	-0.4	-0.0040	ug/L	-0.0040	ppb	08:53:26
3	Tl 190.801†	-143.0	-6.9	-0.5062	ug/L	-0.5062	ppb	08:53:26
3	U 409.014†	5506.9	203.6	8.3346	ug/L	8.3346	ppb	08:53:06
3	V 292.402†	-2510.9	-44.9	-0.2281	ug/L	-0.2281	ppb	08:53:26
3	Zn 213.857†	2035.4	31.2	0.0998	ug/L	0.0998	ppb	08:53:26
3	SiO2†	1109.1	146.2	5.3043	ug/L	5.3043	ppb	08:53:41

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	989470.7	98.974	%	0.3489				0.35%
Sc Radial	105704.3	101	%	1.1				1.13%
Y 371.029	838601.7	98.932	%	0.3670				0.37%
Y RADIAL	91899.4	100.7	%	1.07				1.07%
Ag 328.068†	15.7	0.0536	ug/L	0.28024	0.0536	ppb	0.28024	523.32%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-4.6	-0.5371	ug/L	2.33792	-0.5371	ppb	2.33792	435.31%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	32.4	3.4968	ug/L	0.62109	3.4968	ppb	0.62109	17.76%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	597.5	7.9043	ug/L	0.39642	7.9043	ppb	0.39642	5.02%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	27.0	0.0784	ug/L	0.02662	0.0784	ppb	0.02662	33.94%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-11.1	-0.0031	ug/L	0.01613	-0.0031	ppb	0.01613	521.92%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	76.6	3.0510	ug/L	0.75321	3.0510	ppb	0.75321	24.69%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                9.4      0.0473 ug/L       0.07477      0.0473 ppb        0.07477 157.93%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -23.3     -0.1910 ug/L       0.05331     -0.1910 ppb        0.05331  27.91%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -36.2     -0.2669 ug/L       0.17213     -0.2669 ppb        0.17213  64.49%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              129.8      0.3082 ug/L       0.18154      0.3082 ppb        0.18154  58.90%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         2.9      0.2998 ug/L       0.95028      0.2998 ppb        0.95028 316.95%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -0.3     -0.0680 ug/L       4.61710     -0.0680 ppb        4.61710 >999.9%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -10.2     -4.6970 ug/L       1.25928     -4.6970 ppb        1.25928  26.81%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               29.7      0.0168 ug/L       0.01165      0.0168 ppb        0.01165  69.49%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               14.1      0.3100 ug/L       0.10715      0.3100 ppb        0.10715  34.56%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -637.0     -37.681 ug/L        7.6054     -37.681 ppb         7.6054  20.18%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                5.6      0.0580 ug/L       0.14040      0.0580 ppb        0.14040 242.24%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                15.5      2.2614 ug/L       1.73732      2.2614 ppb        1.73732  76.83%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -20.5     -0.8752 ug/L       0.68181     -0.8752 ppb        0.68181  77.90%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -12.8     -4.1671 ug/L       1.10113     -4.1671 ppb        1.10113  26.42%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               63.3      5.6780 ug/L       0.73278      5.6780 ppb        0.73278  12.91%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               11.5      1.7872 ug/L       1.84080      1.7872 ppb        1.84080 103.00%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              199.4      3.4043 ug/L       0.32994      3.4043 ppb        0.32994   9.69%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               18.5      0.8774 ug/L       0.49390      0.8774 ppb        0.49390  56.29%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -93.3     -0.0808 ug/L       0.01225     -0.0808 ppb        0.01225  15.17%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               22.7      0.0254 ug/L       0.06379      0.0254 ppb        0.06379 250.94%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               11.3      0.8358 ug/L       2.43387      0.8358 ppb        2.43387 291.19%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               231.9      9.4959 ug/L       3.83631      9.4959 ppb        3.83631  40.40%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -15.8     -0.0661 ug/L       0.22636     -0.0661 ppb        0.22636 342.70%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               15.4      0.0495 ug/L       0.04353      0.0495 ppb        0.04353  87.90%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    146.4      5.3140 ug/L       0.38270      5.3140 ppb        0.38270   7.20%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 2 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 3/6/2008 10:10:01**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	103649.2	103649.2	98.7	%			10:11:58
1	Y RADIAL	89525.8	89525.8	98.11	%			10:11:58
1	Al 396.153Radial†	46296.1	46333.4	5288.6	ug/L	5288.6	ppb	10:11:58
1	Ca 317.933Radial†	127246.9	128180.8	5104.0	ug/L	5104.0	ppb	10:11:58
1	Fe 238.204 Radial†	46660.9	47213.0	5071.7	ug/L	5071.7	ppb	10:11:58
1	K 766.490 Radial†	28738.9	25707.1	5163.3	ug/L	5163.3	ppb	10:11:58
1	Mg 279.077 IEC†	11128.3	11194.0	5193.8	ug/L	5193.8	ppb	10:11:58
1	Na 589.592 Radial†	169465.9	173005.0	10233	ug/L	10233	ppb	10:11:53
1	Sr 421.552†	593064.1	602718.9	520.96	ug/L	520.96	ppb	10:11:53
1	Sc 361.383	972521.3	972521.3	97.278	%			10:12:27
1	Y 371.029	816616.8	816616.8	96.338	%			10:12:27
1	Ag 328.068†	128307.7	130770.9	511.73	ug/L	511.73	ppb	10:12:27
1	As 188.979†	4452.0	4638.4	506.10	ug/L	506.10	ppb	10:12:32
1	B 249.677†	36991.8	38806.8	513.23	ug/L	513.23	ppb	10:12:27
1	Ba 233.527†	170696.8	175444.2	511.34	ug/L	511.34	ppb	10:12:27
1	Be 313.107†	1742303.5	1794771.6	511.19	ug/L	511.19	ppb	10:12:27
1	Cd 226.502†	97705.8	100662.3	509.42	ug/L	509.42	ppb	10:12:27
1	Co 228.616†	59584.5	61451.6	506.70	ug/L	506.70	ppb	10:12:32
1	Cr 267.716†	66868.7	68794.0	507.38	ug/L	507.38	ppb	10:12:27
1	Cu 324.752†	211084.2	208415.7	506.99	ug/L	506.99	ppb	10:12:27
1	Mn 257.610†	885337.3	909052.6	510.55	ug/L	510.55	ppb	10:12:27
1	Mo 202.031†	22810.9	23419.3	514.21	ug/L	514.21	ppb	10:12:32
1	Ni 231.604†	48526.0	49599.8	508.76	ug/L	508.76	ppb	10:12:32
1	P 214.914†	17386.8	17074.2	2464.3	ug/L	2464.3	ppb	10:12:32
1	Pb 220.353†	11635.9	12071.0	513.29	ug/L	513.29	ppb	10:12:32
1	S 181.975 Axial†	3196.1	3122.4	1016.8	ug/L	1016.8	ppb	10:12:32
1	Sb 206.836†	5611.7	5636.8	502.73	ug/L	502.73	ppb	10:12:32
1	Se 196.026†	3135.7	3283.8	522.33	ug/L	522.33	ppb	10:12:32
1	Si 251.611†	145834.7	148980.2	2538.5	ug/L	2538.5	ppb	10:12:27
1	Sn 189.927†	10455.0	10757.7	509.35	ug/L	509.35	ppb	10:12:32
1	Ti 334.940†	384967.8	397186.4	512.04	ug/L	512.04	ppb	10:12:27
1	Tl 190.801†	6589.7	6912.2	514.70	ug/L	514.70	ppb	10:12:32
1	U 409.014†	17134.5	12231.5	500.24	ug/L	500.24	ppb	10:12:27
1	V 292.402†	87327.0	92272.1	514.76	ug/L	514.76	ppb	10:12:27
1	Zn 213.857†	154246.5	156528.4	504.17	ug/L	504.17	ppb	10:12:27
1	SiO2†	146974.6	150107.7	5442.0	ug/L	5442.0	ppb	10:13:03
2	Sc Radial	103722.3	103722.3	98.8	%			10:12:08
2	Y RADIAL	89655.4	89655.4	98.26	%			10:12:08
2	Al 396.153Radial†	46289.7	46293.9	5284.8	ug/L	5284.8	ppb	10:12:08
2	Ca 317.933Radial†	126786.7	127624.2	5081.8	ug/L	5081.8	ppb	10:12:08
2	Fe 238.204 Radial†	46472.3	46988.9	5047.3	ug/L	5047.3	ppb	10:12:08
2	K 766.490 Radial†	28543.9	25489.1	5119.5	ug/L	5119.5	ppb	10:12:08
2	Mg 279.077 IEC†	11081.3	11138.5	5167.7	ug/L	5167.7	ppb	10:12:08
2	Na 589.592 Radial†	165419.4	168788.0	9983.7	ug/L	9983.7	ppb	10:12:03
2	Sr 421.552†	579995.8	589067.8	509.16	ug/L	509.16	ppb	10:12:03
2	Sc 361.383	981692.1	981692.1	98.196	%			10:12:40
2	Y 371.029	822543.2	822543.2	97.037	%			10:12:40
2	Ag 328.068†	129641.4	130897.0	512.21	ug/L	512.21	ppb	10:12:40
2	As 188.979†	4358.9	4500.8	491.09	ug/L	491.09	ppb	10:12:45
2	B 249.677†	37463.7	38932.0	514.89	ug/L	514.89	ppb	10:12:40
2	Ba 233.527†	172471.7	175612.5	511.83	ug/L	511.83	ppb	10:12:40
2	Be 313.107†	1760088.9	1796152.1	511.58	ug/L	511.58	ppb	10:12:40
2	Cd 226.502†	98729.8	100766.7	509.95	ug/L	509.95	ppb	10:12:40
2	Co 228.616†	58605.6	59882.6	493.73	ug/L	493.73	ppb	10:12:45
2	Cr 267.716†	67506.5	68801.4	507.43	ug/L	507.43	ppb	10:12:40
2	Cu 324.752†	212955.0	208293.8	506.70	ug/L	506.70	ppb	10:12:40
2	Mn 257.610†	894750.2	910136.4	511.16	ug/L	511.16	ppb	10:12:40
2	Mo 202.031†	22284.5	22664.1	497.64	ug/L	497.64	ppb	10:12:45
2	Ni 231.604†	47561.8	48151.9	493.91	ug/L	493.91	ppb	10:12:45

2	P 214.914†	17049.0	16563.3	2388.4	ug/L	2388.4	ppb	10:12:45
2	Pb 220.353†	11386.7	11705.5	497.76	ug/L	497.76	ppb	10:12:45
2	S 181.975 Axial†	3129.6	3024.0	984.73	ug/L	984.73	ppb	10:12:45
2	Sb 206.836†	5542.1	5512.0	491.50	ug/L	491.50	ppb	10:12:45
2	Se 196.026†	3024.6	3140.6	500.13	ug/L	500.13	ppb	10:12:45
2	Si 251.611†	147341.2	149113.9	2541.1	ug/L	2541.1	ppb	10:12:40
2	Sn 189.927†	10305.7	10505.4	497.41	ug/L	497.41	ppb	10:12:45
2	Ti 334.940†	389004.6	397600.5	512.57	ug/L	512.57	ppb	10:12:40
2	Tl 190.801†	6454.2	6711.0	499.85	ug/L	499.85	ppb	10:12:45
2	U 409.014†	17196.3	12130.0	496.04	ug/L	496.04	ppb	10:12:40
2	V 292.402†	87899.8	92016.8	513.17	ug/L	513.17	ppb	10:12:40
2	Zn 213.857†	155921.4	156752.8	505.01	ug/L	505.01	ppb	10:12:40
2	SiO2†	147672.4	149406.8	5417.1	ug/L	5417.1	ppb	10:13:08
3	Sc Radial	104388.3	104388.3	99.4	%			10:12:19
3	Y RADIAL	90158.9	90158.9	98.81	%			10:12:19
3	Al 396.153Radial†	46844.0	46552.4	5314.2	ug/L	5314.2	ppb	10:12:19
3	Ca 317.933Radial†	128716.0	128745.9	5126.5	ug/L	5126.5	ppb	10:12:19
3	Fe 238.204 Radial†	47226.9	47447.7	5096.5	ug/L	5096.5	ppb	10:12:19
3	K 766.490 Radial†	28880.9	25643.7	5150.6	ug/L	5150.6	ppb	10:12:19
3	Mg 279.077 IEC†	11205.7	11192.0	5192.5	ug/L	5192.5	ppb	10:12:19
3	Na 589.592 Radial†	167917.6	170232.4	10069	ug/L	10069	ppb	10:12:14
3	Sr 421.552†	588554.4	593930.1	513.36	ug/L	513.36	ppb	10:12:14
3	Sc 361.383	984018.2	984018.2	98.428	%			10:12:52
3	Y 371.029	825861.3	825861.3	97.429	%			10:12:52
3	Ag 328.068†	130191.6	131143.8	513.19	ug/L	513.19	ppb	10:12:52
3	As 188.979†	4370.4	4502.1	491.21	ug/L	491.21	ppb	10:12:57
3	B 249.677†	37731.3	39113.7	517.29	ug/L	517.29	ppb	10:12:52
3	Ba 233.527†	172670.8	175399.6	511.22	ug/L	511.22	ppb	10:12:52
3	Be 313.107†	1763782.8	1795667.9	511.45	ug/L	511.45	ppb	10:12:52
3	Cd 226.502†	98769.3	100569.2	508.95	ug/L	508.95	ppb	10:12:52
3	Co 228.616†	59067.8	60211.1	496.45	ug/L	496.45	ppb	10:12:57
3	Cr 267.716†	67786.6	68923.4	508.33	ug/L	508.33	ppb	10:12:52
3	Cu 324.752†	214111.8	208956.4	508.31	ug/L	508.31	ppb	10:12:52
3	Mn 257.610†	896597.0	909858.8	511.01	ug/L	511.01	ppb	10:12:52
3	Mo 202.031†	22529.8	22859.8	501.94	ug/L	501.94	ppb	10:12:57
3	Ni 231.604†	47826.2	48306.0	495.49	ug/L	495.49	ppb	10:12:57
3	P 214.914†	17049.3	16522.6	2382.1	ug/L	2382.1	ppb	10:12:57
3	Pb 220.353†	11468.7	11761.4	500.14	ug/L	500.14	ppb	10:12:57
3	S 181.975 Axial†	3128.5	3015.4	981.92	ug/L	981.92	ppb	10:12:57
3	Sb 206.836†	5547.7	5504.3	490.82	ug/L	490.82	ppb	10:12:57
3	Se 196.026†	3061.0	3170.2	504.85	ug/L	504.85	ppb	10:12:57
3	Si 251.611†	147845.9	149272.0	2543.7	ug/L	2543.7	ppb	10:12:52
3	Sn 189.927†	10364.6	10540.4	499.07	ug/L	499.07	ppb	10:12:57
3	Ti 334.940†	390120.3	397797.5	512.82	ug/L	512.82	ppb	10:12:52
3	Tl 190.801†	6393.9	6634.1	494.14	ug/L	494.14	ppb	10:12:57
3	U 409.014†	17434.5	12330.5	504.25	ug/L	504.25	ppb	10:12:52
3	V 292.402†	88369.7	92282.6	514.69	ug/L	514.69	ppb	10:12:52
3	Zn 213.857†	156324.1	156786.5	505.10	ug/L	505.10	ppb	10:12:52
3	SiO2†	145602.0	146947.9	5327.5	ug/L	5327.5	ppb	10:13:13

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	979410.6	97.968	%	0.6080				0.62%
Sc Radial	103919.9	99.0	%	0.39				0.39%
Y 371.029	821673.8	96.935	%	0.5525				0.57%
Y RADIAL	89780.0	98.39	%	0.367				0.37%
Ag 328.068†	130937.2	512.38	ug/L	0.742	512.38	ppb	0.742	0.14%
QC value within limits for Ag 328.068 Recovery = 102.48%								
Al 396.153Radial†	46393.3	5295.9	ug/L	16.00	5295.9	ppb	16.00	0.30%
QC value within limits for Al 396.153Radial Recovery = 105.92%								
As 188.979†	4547.1	496.14	ug/L	8.629	496.14	ppb	8.629	1.74%
QC value within limits for As 188.979 Recovery = 99.23%								
B 249.677†	38950.8	515.13	ug/L	2.041	515.13	ppb	2.041	0.40%
QC value within limits for B 249.677 Recovery = 103.03%								
Ba 233.527†	175485.4	511.46	ug/L	0.325	511.46	ppb	0.325	0.06%
QC value within limits for Ba 233.527 Recovery = 102.29%								
Be 313.107†	1795530.5	511.41	ug/L	0.200	511.41	ppb	0.200	0.04%
QC value within limits for Be 313.107 Recovery = 102.28%								
Ca 317.933Radial†	128183.7	5104.1	ug/L	22.33	5104.1	ppb	22.33	0.44%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.08%
Cd 226.502†           100666.0      509.44 ug/L         0.502      509.44 ppb          0.502   0.10%
   QC value within limits for Cd 226.502  Recovery = 101.89%
Co 228.616†            60515.1      498.96 ug/L         6.843      498.96 ppb          6.843   1.37%
   QC value within limits for Co 228.616  Recovery = 99.79%
Cr 267.716†            68839.6      507.71 ug/L         0.536      507.71 ppb          0.536   0.11%
   QC value within limits for Cr 267.716  Recovery = 101.54%
Cu 324.752†           208555.3      507.33 ug/L         0.856      507.33 ppb          0.856   0.17%
   QC value within limits for Cu 324.752  Recovery = 101.47%
Fe 238.204 Radial†     47216.5      5071.9 ug/L         24.61      5071.9 ppb          24.61   0.49%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.44%
K 766.490 Radial†      25613.3      5144.5 ug/L         22.52      5144.5 ppb          22.52   0.44%
   QC value within limits for K 766.490 Radial  Recovery = 102.89%
Mg 279.077 IEC†        11174.8      5184.7 ug/L         14.72      5184.7 ppb          14.72   0.28%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.69%
Mn 257.610†           909682.6      510.91 ug/L         0.315      510.91 ppb          0.315   0.06%
   QC value within limits for Mn 257.610  Recovery = 102.18%
Mo 202.031†            22981.1      504.60 ug/L         8.601      504.60 ppb          8.601   1.70%
   QC value within limits for Mo 202.031  Recovery = 100.92%
Na 589.592 Radial†    170675.1       10095 ug/L         126.8       10095 ppb          126.8   1.26%
   QC value within limits for Na 589.592 Radial  Recovery = 100.95%
Ni 231.604†            48685.9      499.39 ug/L         8.158      499.39 ppb          8.158   1.63%
   QC value within limits for Ni 231.604  Recovery = 99.88%
P 214.914†             16720.0      2411.6 ug/L         45.72      2411.6 ppb          45.72   1.90%
   QC value within limits for P 214.914  Recovery = 96.47%
Pb 220.353†            11845.9      503.73 ug/L         8.364      503.73 ppb          8.364   1.66%
   QC value within limits for Pb 220.353  Recovery = 100.75%
S 181.975 Axial†        3053.9      994.48 ug/L        19.380      994.48 ppb         19.380   1.95%
   QC value within limits for S 181.975 Axial  Recovery = 99.45%
Sb 206.836†             5551.0      495.01 ug/L         6.689      495.01 ppb          6.689   1.35%
   QC value within limits for Sb 206.836  Recovery = 99.00%
Se 196.026†             3198.2      509.11 ug/L        11.692      509.11 ppb         11.692   2.30%
   QC value within limits for Se 196.026  Recovery = 101.82%
Si 251.611†           149122.0      2541.1 ug/L          2.59      2541.1 ppb           2.59   0.10%
   QC value within limits for Si 251.611  Recovery = 101.64%
Sn 189.927†            10601.2      501.94 ug/L         6.472      501.94 ppb          6.472   1.29%
   QC value within limits for Sn 189.927  Recovery = 100.39%
Sr 421.552†           595239.0      514.49 ug/L         5.982      514.49 ppb          5.982   1.16%
   QC value within limits for Sr 421.552  Recovery = 102.90%
Ti 334.940†           397528.2      512.48 ug/L         0.402      512.48 ppb          0.402   0.08%
   QC value within limits for Ti 334.940  Recovery = 102.50%
Tl 190.801†             6752.5      502.90 ug/L        10.615      502.90 ppb         10.615   2.11%
   QC value within limits for Tl 190.801  Recovery = 100.58%
U 409.014†             12230.7      500.18 ug/L         4.109      500.18 ppb          4.109   0.82%
   QC value within limits for U 409.014  Recovery = 100.04%
V 292.402†             92190.5      514.21 ug/L         0.897      514.21 ppb          0.897   0.17%
   QC value within limits for V 292.402  Recovery = 102.84%
Zn 213.857†           156689.2      504.76 ug/L         0.508      504.76 ppb          0.508   0.10%
   QC value within limits for Zn 213.857  Recovery = 100.95%
SiO2†                 148820.8      5395.6 ug/L         60.22      5395.6 ppb          60.22   1.12%
   QC value within limits for SiO2  Recovery = 100.90%
All analyte(s) passed QC.
```

Sequence No.: 3 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 3/6/2008 10:15:23**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	102618.8	102618.8	97.7	%			10:17:16
1	Y RADIAL	89234.2	89234.2	97.79	%			10:17:16
1	Al 396.153Radial†	587.9	39.3	4.4838	ug/L	4.4838	ppb	10:17:16
1	Ca 317.933Radial†	817.9	122.9	4.8939	ug/L	4.8939	ppb	10:17:36
1	Fe 238.204 Radial†	64.4	13.8	1.4747	ug/L	1.4747	ppb	10:17:36
1	K 766.490 Radial†	3544.5	222.4	44.669	ug/L	44.669	ppb	10:17:16
1	Mg 279.077 IEC†	59.5	-17.5	-8.0925	ug/L	-8.0925	ppb	10:17:36
1	Na 589.592 Radial†	-2110.5	-814.9	-48.199	ug/L	-48.199	ppb	10:17:16
1	Sr 421.552†	-1996.5	-68.0	-0.0589	ug/L	-0.0589	ppb	10:17:16
1	Sc 361.383	968803.9	968803.9	96.907	%			10:18:33
1	Y 371.029	822324.5	822324.5	97.012	%			10:18:33
1	Ag 328.068†	1112.4	21.5	0.0738	ug/L	0.0738	ppb	10:18:33
1	As 188.979†	-65.5	-5.7	-0.6584	ug/L	-0.6584	ppb	10:18:53
1	B 249.677†	-278.3	492.9	6.5204	ug/L	6.5204	ppb	10:18:53
1	Ba 233.527†	49.7	23.2	0.0659	ug/L	0.0659	ppb	10:18:53
1	Be 313.107†	-3631.0	-22.5	-0.0063	ug/L	-0.0063	ppb	10:18:33
1	Cd 226.502†	-191.8	25.0	0.1265	ug/L	0.1265	ppb	10:18:53
1	Co 228.616†	-198.6	-4.8	-0.0385	ug/L	-0.0385	ppb	10:18:53
1	Cr 267.716†	-54.9	-2.1	-0.0169	ug/L	-0.0169	ppb	10:18:53
1	Cu 324.752†	8615.5	316.6	0.7617	ug/L	0.7617	ppb	10:18:33
1	Mn 257.610†	1162.7	146.5	0.0825	ug/L	0.0825	ppb	10:18:53
1	Mo 202.031†	43.8	15.4	0.3389	ug/L	0.3389	ppb	10:18:53
1	Ni 231.604†	259.0	-16.5	-0.1698	ug/L	-0.1698	ppb	10:18:53
1	P 214.914†	808.6	35.5	5.1665	ug/L	5.1665	ppb	10:18:53
1	Pb 220.353†	-117.0	-11.2	-0.4803	ug/L	-0.4803	ppb	10:18:53
1	S 181.975 Axial†	146.4	-12.0	-3.9059	ug/L	-3.9059	ppb	10:18:53
1	Sb 206.836†	137.9	10.4	0.9368	ug/L	0.9368	ppb	10:18:53
1	Se 196.026†	-48.3	10.6	1.6412	ug/L	1.6412	ppb	10:18:53
1	Si 251.611†	1164.3	267.1	4.5597	ug/L	4.5597	ppb	10:18:53
1	Sn 189.927†	-4.7	5.5	0.2584	ug/L	0.2584	ppb	10:18:53
1	Ti 334.940†	-1379.7	24.8	0.0277	ug/L	0.0277	ppb	10:18:53
1	Tl 190.801†	-104.7	30.1	2.2336	ug/L	2.2336	ppb	10:18:53
1	U 409.014†	5467.3	259.5	10.623	ug/L	10.623	ppb	10:18:33
1	V 292.402†	-2546.1	-125.3	-0.6691	ug/L	-0.6691	ppb	10:18:53
1	Zn 213.857†	2109.9	143.9	0.4681	ug/L	0.4681	ppb	10:18:53
1	SiO2†	1112.5	169.3	6.1448	ug/L	6.1448	ppb	10:19:50
2	Sc Radial	102680.6	102680.6	97.8	%			10:17:41
2	Y RADIAL	89353.8	89353.8	97.93	%			10:17:41
2	Al 396.153Radial†	514.2	-36.5	-4.2031	ug/L	-4.2031	ppb	10:17:41
2	Ca 317.933Radial†	806.2	110.4	4.3967	ug/L	4.3967	ppb	10:18:01
2	Fe 238.204 Radial†	54.0	3.1	0.3318	ug/L	0.3318	ppb	10:18:01
2	K 766.490 Radial†	3479.4	153.7	30.865	ug/L	30.865	ppb	10:17:41
2	Mg 279.077 IEC†	85.4	9.0	4.1636	ug/L	4.1636	ppb	10:18:01
2	Na 589.592 Radial†	-2403.4	-1113.0	-65.832	ug/L	-65.832	ppb	10:17:41
2	Sr 421.552†	-2075.1	-147.1	-0.1273	ug/L	-0.1273	ppb	10:17:41
2	Sc 361.383	975954.9	975954.9	97.622	%			10:18:59
2	Y 371.029	828515.6	828515.6	97.742	%			10:18:59
2	Ag 328.068†	1181.5	83.9	0.3195	ug/L	0.3195	ppb	10:18:59
2	As 188.979†	-63.2	-2.8	-0.3403	ug/L	-0.3403	ppb	10:19:19
2	B 249.677†	-371.9	399.1	5.2800	ug/L	5.2800	ppb	10:19:19
2	Ba 233.527†	60.8	34.2	0.0993	ug/L	0.0993	ppb	10:19:19
2	Be 313.107†	-3601.3	35.4	0.0101	ug/L	0.0101	ppb	10:18:59
2	Cd 226.502†	-203.3	14.7	0.0742	ug/L	0.0742	ppb	10:19:19
2	Co 228.616†	-195.1	0.3	0.0042	ug/L	0.0042	ppb	10:19:19
2	Cr 267.716†	-64.7	-11.8	-0.0870	ug/L	-0.0870	ppb	10:19:19
2	Cu 324.752†	8621.0	257.1	0.6182	ug/L	0.6182	ppb	10:18:59
2	Mn 257.610†	1183.3	158.7	0.0890	ug/L	0.0890	ppb	10:19:19
2	Mo 202.031†	52.5	24.0	0.5272	ug/L	0.5272	ppb	10:19:19
2	Ni 231.604†	276.6	-0.5	-0.0047	ug/L	-0.0047	ppb	10:19:19

2	P 214.914†	830.2	51.4	7.5552	ug/L	7.5552	ppb	10:19:19
2	Pb 220.353†	-129.0	-22.6	-0.9614	ug/L	-0.9614	ppb	10:19:19
2	S 181.975 Axial†	151.6	-7.7	-2.5235	ug/L	-2.5235	ppb	10:19:19
2	Sb 206.836†	143.1	14.6	1.3197	ug/L	1.3197	ppb	10:19:19
2	Se 196.026†	-48.9	10.3	1.5881	ug/L	1.5881	ppb	10:19:19
2	Si 251.611†	1138.9	232.2	3.9613	ug/L	3.9613	ppb	10:19:19
2	Sn 189.927†	14.3	24.9	1.1775	ug/L	1.1775	ppb	10:19:19
2	Ti 334.940†	-1391.3	23.3	0.0265	ug/L	0.0265	ppb	10:19:19
2	Tl 190.801†	-92.4	43.5	3.2268	ug/L	3.2268	ppb	10:19:19
2	U 409.014†	5470.2	221.2	9.0564	ug/L	9.0564	ppb	10:18:59
2	V 292.402†	-2454.7	-12.5	-0.0464	ug/L	-0.0464	ppb	10:19:19
2	Zn 213.857†	2080.9	98.1	0.3182	ug/L	0.3182	ppb	10:19:19
2	SiO2†	1149.5	198.7	7.2082	ug/L	7.2082	ppb	10:19:55
3	Sc Radial	102879.5	102879.5	98.0	%			10:18:06
3	Y RADIAL	89522.3	89522.3	98.11	%			10:18:06
3	Al 396.153Radial†	535.8	-15.4	-1.7941	ug/L	-1.7941	ppb	10:18:06
3	Ca 317.933Radial†	837.4	140.6	5.6004	ug/L	5.6004	ppb	10:18:26
3	Fe 238.204 Radial†	53.3	2.2	0.2414	ug/L	0.2414	ppb	10:18:26
3	K 766.490 Radial†	3360.9	25.8	5.1862	ug/L	5.1862	ppb	10:18:06
3	Mg 279.077 IEC†	76.3	-0.6	-0.2567	ug/L	-0.2567	ppb	10:18:26
3	Na 589.592 Radial†	-2272.5	-974.7	-57.654	ug/L	-57.654	ppb	10:18:06
3	Sr 421.552†	-2110.6	-179.2	-0.1551	ug/L	-0.1551	ppb	10:18:06
3	Sc 361.383	978980.7	978980.7	97.925	%			10:19:24
3	Y 371.029	829563.7	829563.7	97.866	%			10:19:24
3	Ag 328.068†	1143.1	40.9	0.1503	ug/L	0.1503	ppb	10:19:24
3	As 188.979†	-65.6	-5.1	-0.5913	ug/L	-0.5913	ppb	10:19:44
3	B 249.677†	-353.9	418.6	5.5381	ug/L	5.5381	ppb	10:19:44
3	Ba 233.527†	52.9	25.9	0.0747	ug/L	0.0747	ppb	10:19:44
3	Be 313.107†	-3713.7	-68.0	-0.0191	ug/L	-0.0191	ppb	10:19:24
3	Cd 226.502†	-206.5	12.1	0.0612	ug/L	0.0612	ppb	10:19:44
3	Co 228.616†	-193.3	2.8	0.0247	ug/L	0.0247	ppb	10:19:44
3	Cr 267.716†	-72.9	-20.0	-0.1475	ug/L	-0.1475	ppb	10:19:44
3	Cu 324.752†	8643.2	252.5	0.6059	ug/L	0.6059	ppb	10:19:24
3	Mn 257.610†	1129.2	99.8	0.0560	ug/L	0.0560	ppb	10:19:44
3	Mo 202.031†	55.3	26.7	0.5856	ug/L	0.5856	ppb	10:19:44
3	Ni 231.604†	293.5	16.0	0.1638	ug/L	0.1638	ppb	10:19:44
3	P 214.914†	805.4	23.5	3.4025	ug/L	3.4025	ppb	10:19:44
3	Pb 220.353†	-143.7	-37.2	-1.5818	ug/L	-1.5818	ppb	10:19:44
3	S 181.975 Axial†	145.4	-14.6	-4.7488	ug/L	-4.7488	ppb	10:19:44
3	Sb 206.836†	127.9	-1.4	-0.1105	ug/L	-0.1105	ppb	10:19:44
3	Se 196.026†	-50.7	8.6	1.3356	ug/L	1.3356	ppb	10:19:44
3	Si 251.611†	1159.6	249.8	4.2603	ug/L	4.2603	ppb	10:19:44
3	Sn 189.927†	8.1	18.6	0.8789	ug/L	0.8789	ppb	10:19:44
3	Ti 334.940†	-1366.7	52.9	0.0642	ug/L	0.0642	ppb	10:19:44
3	Tl 190.801†	-117.7	18.1	1.3392	ug/L	1.3392	ppb	10:19:44
3	U 409.014†	5520.5	255.1	10.447	ug/L	10.447	ppb	10:19:24
3	V 292.402†	-2504.0	-55.1	-0.2783	ug/L	-0.2783	ppb	10:19:44
3	Zn 213.857†	2069.1	79.5	0.2568	ug/L	0.2568	ppb	10:19:44
3	SiO2†	1182.0	228.2	8.2814	ug/L	8.2814	ppb	10:20:00

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	974579.8	97.484	%	0.5227				0.54%
Sc Radial	102726.3	97.8	%	0.13				0.13%
Y 371.029	826801.3	97.540	%	0.4615				0.47%
Y RADIAL	89370.1	97.94	%	0.159				0.16%
Ag 328.068†	48.8	0.1812	ug/L	0.12570	0.1812	ppb	0.12570	69.36%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-4.2	-0.5045	ug/L	4.48477	-0.5045	ppb	4.48477	889.03%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-4.6	-0.5300	ug/L	0.16767	-0.5300	ppb	0.16767	31.64%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	436.9	5.7795	ug/L	0.65447	5.7795	ppb	0.65447	11.32%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	27.8	0.0800	ug/L	0.01734	0.0800	ppb	0.01734	21.68%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-18.4	-0.0051	ug/L	0.01468	-0.0051	ppb	0.01468	286.93%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	124.7	4.9637	ug/L	0.60489	4.9637	ppb	0.60489	12.19%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                17.2      0.0873 ug/L       0.03460      0.0873 ppb        0.03460  39.64%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -0.5     -0.0032 ug/L       0.03228     -0.0032 ppb        0.03228 >999.9%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -11.3     -0.0838 ug/L       0.06534     -0.0838 ppb        0.06534  77.96%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               275.4      0.6619 ug/L       0.08664      0.6619 ppb        0.08664  13.09%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          6.4      0.6826 ug/L       0.68743      0.6826 ppb        0.68743 100.70%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         134.0      26.907 ug/L       20.0368      26.907 ppb        20.0368  74.47%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -3.0     -1.3952 ug/L       6.20687     -1.3952 ppb        6.20687 444.87%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               135.0      0.0758 ug/L       0.01748      0.0758 ppb        0.01748  23.05%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                22.0      0.4839 ug/L       0.12891      0.4839 ppb        0.12891  26.64%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -967.5     -57.228 ug/L        8.8243     -57.228 ppb         8.8243  15.42%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -0.3     -0.0036 ug/L       0.16681     -0.0036 ppb        0.16681 >999.9%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 36.8      5.3747 ug/L       2.08419      5.3747 ppb        2.08419  38.78%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -23.7     -1.0078 ug/L       0.55222     -1.0078 ppb        0.55222  54.79%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -11.4     -3.7261 ug/L       1.12350     -3.7261 ppb        1.12350  30.15%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 7.9      0.7153 ug/L       0.74035      0.7153 ppb        0.74035 103.50%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 9.8      1.5216 ug/L       0.16329      1.5216 ppb        0.16329  10.73%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               249.7      4.2604 ug/L       0.29923      4.2604 ppb        0.29923   7.02%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                16.3      0.7716 ug/L       0.46885      0.7716 ppb        0.46885  60.76%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -131.4     -0.1138 ug/L       0.04952     -0.1138 ppb        0.04952  43.52%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                33.7      0.0395 ug/L       0.02140      0.0395 ppb        0.02140  54.21%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                30.6      2.2665 ug/L       0.94426      2.2665 ppb        0.94426  41.66%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                245.3      10.042 ug/L        0.8584      10.042 ppb         0.8584   8.55%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -64.3     -0.3313 ug/L       0.31471     -0.3313 ppb        0.31471  95.00%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               107.2      0.3477 ug/L       0.10869      0.3477 ppb        0.10869  31.26%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     198.7      7.2114 ug/L       1.06831      7.2114 ppb        1.06831  14.81%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 13 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 3/6/2008 11:16:31**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	99823.8	99823.8	95.1	%			11:18:28
1	Y RADIAL	86422.2	86422.2	94.71	%			11:18:28
1	Al 396.153Radial†	45033.9	46803.0	5342.9	ug/L	5342.9	ppb	11:18:28
1	Ca 317.933Radial†	122844.3	128489.8	5116.3	ug/L	5116.3	ppb	11:18:28
1	Fe 238.204 Radial†	44739.8	47003.8	5049.0	ug/L	5049.0	ppb	11:18:28
1	K 766.490 Radial†	27925.0	25966.6	5215.4	ug/L	5215.4	ppb	11:18:28
1	Mg 279.077 IEC†	10683.1	11157.7	5176.7	ug/L	5176.7	ppb	11:18:28
1	Na 589.592 Radial†	166393.8	176352.1	10431	ug/L	10431	ppb	11:18:23
1	Sr 421.552†	584336.4	616561.2	532.92	ug/L	532.92	ppb	11:18:23
1	Sc 361.383	972284.9	972284.9	97.255	%			11:18:57
1	Y 371.029	817126.7	817126.7	96.398	%			11:18:57
1	Ag 328.068†	128666.6	131172.1	513.29	ug/L	513.29	ppb	11:18:57
1	As 188.979†	4355.8	4540.6	495.49	ug/L	495.49	ppb	11:19:02
1	B 249.677†	36279.5	38083.5	503.66	ug/L	503.66	ppb	11:18:57
1	Ba 233.527†	170767.9	175560.0	511.68	ug/L	511.68	ppb	11:18:57
1	Be 313.107†	1744518.8	1797484.9	511.96	ug/L	511.96	ppb	11:18:57
1	Cd 226.502†	97836.8	100821.3	510.23	ug/L	510.23	ppb	11:18:57
1	Co 228.616†	58460.1	60310.5	497.27	ug/L	497.27	ppb	11:19:02
1	Cr 267.716†	67038.6	68985.4	508.79	ug/L	508.79	ppb	11:18:57
1	Cu 324.752†	211062.6	208446.2	507.07	ug/L	507.07	ppb	11:18:57
1	Mn 257.610†	884745.8	908665.8	510.33	ug/L	510.33	ppb	11:18:57
1	Mo 202.031†	22257.0	22855.4	501.84	ug/L	501.84	ppb	11:19:02
1	Ni 231.604†	47641.8	48702.8	499.56	ug/L	499.56	ppb	11:19:02
1	P 214.914†	16859.2	16536.2	2384.4	ug/L	2384.4	ppb	11:19:02
1	Pb 220.353†	11341.6	11771.2	500.57	ug/L	500.57	ppb	11:19:02
1	S 181.975 Axial†	3039.9	2962.7	964.73	ug/L	964.73	ppb	11:19:02
1	Sb 206.836†	5516.2	5539.9	493.98	ug/L	493.98	ppb	11:19:02
1	Se 196.026†	3058.4	3205.1	510.11	ug/L	510.11	ppb	11:19:02
1	Si 251.611†	145560.1	148734.3	2534.5	ug/L	2534.5	ppb	11:18:57
1	Sn 189.927†	10208.7	10507.1	497.49	ug/L	497.49	ppb	11:19:02
1	Ti 334.940†	383774.1	396055.2	510.58	ug/L	510.58	ppb	11:18:57
1	Tl 190.801†	6416.2	6735.5	501.63	ug/L	501.63	ppb	11:19:02
1	U 409.014†	17024.3	12122.5	495.74	ug/L	495.74	ppb	11:18:57
1	V 292.402†	87205.2	92168.7	514.05	ug/L	514.05	ppb	11:18:57
1	Zn 213.857†	154264.9	156585.9	504.43	ug/L	504.43	ppb	11:18:57
1	SiO2†	143583.1	146657.2	5317.0	ug/L	5317.0	ppb	11:19:32
2	Sc Radial	100320.0	100320.0	95.6	%			11:18:38
2	Y RADIAL	86927.8	86927.8	95.27	%			11:18:38
2	Al 396.153Radial†	45190.2	46732.3	5334.5	ug/L	5334.5	ppb	11:18:38
2	Ca 317.933Radial†	123431.5	128465.3	5115.3	ug/L	5115.3	ppb	11:18:38
2	Fe 238.204 Radial†	45005.9	47049.5	5054.1	ug/L	5054.1	ppb	11:18:38
2	K 766.490 Radial†	28009.9	25910.1	5204.1	ug/L	5204.1	ppb	11:18:38
2	Mg 279.077 IEC†	10740.2	11162.0	5178.9	ug/L	5178.9	ppb	11:18:38
2	Na 589.592 Radial†	167124.6	176251.5	10425	ug/L	10425	ppb	11:18:33
2	Sr 421.552†	585350.6	614583.1	531.21	ug/L	531.21	ppb	11:18:33
2	Sc 361.383	965011.9	965011.9	96.527	%			11:19:09
2	Y 371.029	810576.1	810576.1	95.626	%			11:19:09
2	Ag 328.068†	127833.3	131305.8	513.80	ug/L	513.80	ppb	11:19:09
2	As 188.979†	4376.8	4596.1	501.55	ug/L	501.55	ppb	11:19:14
2	B 249.677†	36024.5	38100.5	503.88	ug/L	503.88	ppb	11:19:09
2	Ba 233.527†	169943.2	176029.0	513.04	ug/L	513.04	ppb	11:19:09
2	Be 313.107†	1732091.2	1798129.3	512.15	ug/L	512.15	ppb	11:19:09
2	Cd 226.502†	97257.5	100979.3	511.03	ug/L	511.03	ppb	11:19:09
2	Co 228.616†	58813.3	61129.4	504.04	ug/L	504.04	ppb	11:19:14
2	Cr 267.716†	66533.0	68981.1	508.76	ug/L	508.76	ppb	11:19:09
2	Cu 324.752†	209824.4	208799.1	507.92	ug/L	507.92	ppb	11:19:09
2	Mn 257.610†	880401.7	911021.6	511.65	ug/L	511.65	ppb	11:19:09
2	Mo 202.031†	22443.1	23220.7	509.85	ug/L	509.85	ppb	11:19:14
2	Ni 231.604†	47735.0	49168.5	504.34	ug/L	504.34	ppb	11:19:14

2	P 214.914†	17064.7	16879.7	2435.3	ug/L	2435.3	ppb	11:19:14
2	Pb 220.353†	11456.3	11978.0	509.34	ug/L	509.34	ppb	11:19:14
2	S 181.975 Axial†	3106.0	3054.6	994.71	ug/L	994.71	ppb	11:19:14
2	Sb 206.836†	5537.0	5604.2	499.78	ug/L	499.78	ppb	11:19:14
2	Se 196.026†	3050.5	3220.7	512.53	ug/L	512.53	ppb	11:19:14
2	Si 251.611†	144749.9	149023.0	2539.3	ug/L	2539.3	ppb	11:19:09
2	Sn 189.927†	10276.9	10656.8	504.58	ug/L	504.58	ppb	11:19:14
2	Ti 334.940†	382357.3	397561.5	512.52	ug/L	512.52	ppb	11:19:09
2	Tl 190.801†	6475.0	6846.1	509.82	ug/L	509.82	ppb	11:19:14
2	U 409.014†	17116.1	12349.5	505.06	ug/L	505.06	ppb	11:19:09
2	V 292.402†	86564.0	92180.2	514.22	ug/L	514.22	ppb	11:19:09
2	Zn 213.857†	153282.6	156763.6	504.97	ug/L	504.97	ppb	11:19:09
2	SiO2†	147331.0	151652.6	5498.4	ug/L	5498.4	ppb	11:19:37
3	Sc Radial	99721.7	99721.7	95.0	%			11:18:48
3	Y RADIAL	86302.1	86302.1	94.58	%			11:18:48
3	Al 396.153Radial†	44918.6	46730.1	5334.6	ug/L	5334.6	ppb	11:18:48
3	Ca 317.933Radial†	122611.6	128377.1	5111.8	ug/L	5111.8	ppb	11:18:48
3	Fe 238.204 Radial†	44756.7	47069.7	5056.1	ug/L	5056.1	ppb	11:18:48
3	K 766.490 Radial†	27746.3	25808.5	5183.7	ug/L	5183.7	ppb	11:18:48
3	Mg 279.077 IEC†	10676.8	11162.6	5179.0	ug/L	5179.0	ppb	11:18:48
3	Na 589.592 Radial†	164388.8	174420.4	10317	ug/L	10317	ppb	11:18:43
3	Sr 421.552†	575957.4	608368.5	525.84	ug/L	525.84	ppb	11:18:43
3	Sc 361.383	977026.8	977026.8	97.729	%			11:19:22
3	Y 371.029	820078.3	820078.3	96.747	%			11:19:22
3	Ag 328.068†	128918.0	130787.2	511.79	ug/L	511.79	ppb	11:19:22
3	As 188.979†	4346.1	4509.0	492.03	ug/L	492.03	ppb	11:19:27
3	B 249.677†	36409.8	38035.9	503.03	ug/L	503.03	ppb	11:19:22
3	Ba 233.527†	171547.8	175505.8	511.52	ug/L	511.52	ppb	11:19:22
3	Be 313.107†	1748968.5	1793332.1	510.78	ug/L	510.78	ppb	11:19:22
3	Cd 226.502†	98132.9	100636.1	509.29	ug/L	509.29	ppb	11:19:22
3	Co 228.616†	58742.5	60307.6	497.25	ug/L	497.25	ppb	11:19:27
3	Cr 267.716†	67205.8	68821.9	507.58	ug/L	507.58	ppb	11:19:22
3	Cu 324.752†	211925.2	208275.6	506.65	ug/L	506.65	ppb	11:19:22
3	Mn 257.610†	888144.4	907728.0	509.81	ug/L	509.81	ppb	11:19:22
3	Mo 202.031†	22369.5	22859.4	501.93	ug/L	501.93	ppb	11:19:27
3	Ni 231.604†	47669.7	48493.6	497.41	ug/L	497.41	ppb	11:19:27
3	P 214.914†	17019.3	16615.9	2396.3	ug/L	2396.3	ppb	11:19:27
3	Pb 220.353†	11408.4	11783.1	501.07	ug/L	501.07	ppb	11:19:27
3	S 181.975 Axial†	3084.5	2993.1	974.65	ug/L	974.65	ppb	11:19:27
3	Sb 206.836†	5518.3	5514.6	491.73	ug/L	491.73	ppb	11:19:27
3	Se 196.026†	3048.0	3179.2	506.13	ug/L	506.13	ppb	11:19:27
3	Si 251.611†	145960.8	148418.0	2529.1	ug/L	2529.1	ppb	11:19:22
3	Sn 189.927†	10288.7	10538.1	498.96	ug/L	498.96	ppb	11:19:27
3	Ti 334.940†	385406.9	395810.8	510.27	ug/L	510.27	ppb	11:19:22
3	Tl 190.801†	6404.7	6691.7	498.39	ug/L	498.39	ppb	11:19:27
3	U 409.014†	17126.8	12142.5	496.56	ug/L	496.56	ppb	11:19:22
3	V 292.402†	87365.1	91897.2	512.56	ug/L	512.56	ppb	11:19:22
3	Zn 213.857†	154627.2	156186.7	503.14	ug/L	503.14	ppb	11:19:22
3	SiO2†	144937.6	147326.6	5341.3	ug/L	5341.3	ppb	11:19:42

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	971441.2	97.170	%	0.6053				0.62%
Sc Radial	99955.2	95.2	%	0.30				0.32%
Y 371.029	815927.0	96.257	%	0.5737				0.60%
Y RADIAL	86550.7	94.85	%	0.364				0.38%
Ag 328.068†	131088.4	512.96	ug/L	1.048	512.96	ppb	1.048	0.20%
QC value within limits for Ag 328.068 Recovery = 102.59%								
Al 396.153Radial†	46755.1	5337.3	ug/L	4.84	5337.3	ppb	4.84	0.09%
QC value within limits for Al 396.153Radial Recovery = 106.75%								
As 188.979†	4548.6	496.35	ug/L	4.817	496.35	ppb	4.817	0.97%
QC value within limits for As 188.979 Recovery = 99.27%								
B 249.677†	38073.3	503.52	ug/L	0.443	503.52	ppb	0.443	0.09%
QC value within limits for B 249.677 Recovery = 100.70%								
Ba 233.527†	175698.3	512.08	ug/L	0.838	512.08	ppb	0.838	0.16%
QC value within limits for Ba 233.527 Recovery = 102.42%								
Be 313.107†	1796315.5	511.63	ug/L	0.742	511.63	ppb	0.742	0.15%
QC value within limits for Be 313.107 Recovery = 102.33%								
Ca 317.933Radial†	128444.1	5114.5	ug/L	2.36	5114.5	ppb	2.36	0.05%

```
   QC value within limits for Ca 317.933Radial  Recovery = 102.29%
Cd 226.502†           100812.2      510.18 ug/L         0.870      510.18 ppb          0.870   0.17%
   QC value within limits for Cd 226.502  Recovery = 102.04%
Co 228.616†            60582.5      499.52 ug/L         3.912      499.52 ppb          3.912   0.78%
   QC value within limits for Co 228.616  Recovery = 99.90%
Cr 267.716†            68929.5      508.38 ug/L         0.687      508.38 ppb          0.687   0.14%
   QC value within limits for Cr 267.716  Recovery = 101.68%
Cu 324.752†           208507.0      507.21 ug/L         0.646      507.21 ppb          0.646   0.13%
   QC value within limits for Cu 324.752  Recovery = 101.44%
Fe 238.204 Radial†     47041.0      5053.1 ug/L          3.65      5053.1 ppb           3.65   0.07%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.06%
K 766.490 Radial†      25895.1      5201.1 ug/L         16.09      5201.1 ppb          16.09   0.31%
   QC value within limits for K 766.490 Radial  Recovery = 104.02%
Mg 279.077 IEC†        11160.8      5178.2 ug/L          1.28      5178.2 ppb           1.28   0.02%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.56%
Mn 257.610†           909138.5      510.60 ug/L         0.952      510.60 ppb          0.952   0.19%
   QC value within limits for Mn 257.610  Recovery = 102.12%
Mo 202.031†            22978.5      504.54 ug/L         4.603      504.54 ppb          4.603   0.91%
   QC value within limits for Mo 202.031  Recovery = 100.91%
Na 589.592 Radial†    175674.7       10391 ug/L          64.3       10391 ppb           64.3   0.62%
   QC value within limits for Na 589.592 Radial  Recovery = 103.91%
Ni 231.604†            48788.3      500.44 ug/L         3.544      500.44 ppb          3.544   0.71%
   QC value within limits for Ni 231.604  Recovery = 100.09%
P 214.914†             16677.2      2405.3 ug/L         26.64      2405.3 ppb          26.64   1.11%
   QC value within limits for P 214.914  Recovery = 96.21%
Pb 220.353†            11844.1      503.66 ug/L         4.928      503.66 ppb          4.928   0.98%
   QC value within limits for Pb 220.353  Recovery = 100.73%
S 181.975 Axial†        3003.5      978.03 ug/L        15.271      978.03 ppb         15.271   1.56%
   QC value within limits for S 181.975 Axial  Recovery = 97.80%
Sb 206.836†             5552.9      495.17 ug/L         4.153      495.17 ppb          4.153   0.84%
   QC value within limits for Sb 206.836  Recovery = 99.03%
Se 196.026†             3201.7      509.59 ug/L         3.231      509.59 ppb          3.231   0.63%
   QC value within limits for Se 196.026  Recovery = 101.92%
Si 251.611†           148725.1      2534.3 ug/L          5.11      2534.3 ppb           5.11   0.20%
   QC value within limits for Si 251.611  Recovery = 101.37%
Sn 189.927†            10567.3      500.34 ug/L         3.742      500.34 ppb          3.742   0.75%
   QC value within limits for Sn 189.927  Recovery = 100.07%
Sr 421.552†           613170.9      529.99 ug/L         3.696      529.99 ppb          3.696   0.70%
   QC value within limits for Sr 421.552  Recovery = 106.00%
Ti 334.940†           396475.8      511.12 ug/L         1.220      511.12 ppb          1.220   0.24%
   QC value within limits for Ti 334.940  Recovery = 102.22%
Tl 190.801†             6757.8      503.28 ug/L         5.894      503.28 ppb          5.894   1.17%
   QC value within limits for Tl 190.801  Recovery = 100.66%
U 409.014†             12204.8      499.12 ug/L         5.158      499.12 ppb          5.158   1.03%
   QC value within limits for U 409.014  Recovery = 99.82%
V 292.402†             92082.0      513.61 ug/L         0.915      513.61 ppb          0.915   0.18%
   QC value within limits for V 292.402  Recovery = 102.72%
Zn 213.857†           156512.1      504.18 ug/L         0.939      504.18 ppb          0.939   0.19%
   QC value within limits for Zn 213.857  Recovery = 100.84%
SiO2†                 148545.5      5385.5 ug/L         98.47      5385.5 ppb          98.47   1.83%
   QC value within limits for SiO2  Recovery = 100.71%
All analyte(s) passed QC.
```

Sequence No.: 14 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 3/6/2008 11:21:53**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	100831.3	100831.3	96.0	%			11:23:46
1	Y RADIAL	87822.1	87822.1	96.25	%			11:23:46
1	Al 396.153Radial†	621.0	84.3	9.6531	ug/L	9.6531	ppb	11:23:46
1	Ca 317.933Radial†	786.9	105.4	4.1977	ug/L	4.1977	ppb	11:24:06
1	Fe 238.204 Radial†	60.8	11.2	1.1981	ug/L	1.1981	ppb	11:24:06
1	K 766.490 Radial†	3407.5	144.0	28.925	ug/L	28.925	ppb	11:23:46
1	Mg 279.077 IEC†	84.8	9.9	4.5865	ug/L	4.5865	ppb	11:24:06
1	Na 589.592 Radial†	-2183.3	-928.9	-54.944	ug/L	-54.944	ppb	11:23:46
1	Sr 421.552†	-2158.1	-272.4	-0.2356	ug/L	-0.2356	ppb	11:23:46
1	Sc 361.383	979833.2	979833.2	98.010	%			11:25:03
1	Y 371.029	833069.1	833069.1	98.279	%			11:25:03
1	Ag 328.068†	1182.1	79.7	0.3035	ug/L	0.3035	ppb	11:25:03
1	As 188.979†	-71.3	-10.9	-1.2027	ug/L	-1.2027	ppb	11:25:23
1	B 249.677†	-608.7	159.0	2.1036	ug/L	2.1036	ppb	11:25:23
1	Ba 233.527†	45.2	18.0	0.0519	ug/L	0.0519	ppb	11:25:23
1	Be 313.107†	-3734.0	-85.4	-0.0243	ug/L	-0.0243	ppb	11:25:03
1	Cd 226.502†	-236.8	-18.7	-0.0946	ug/L	-0.0946	ppb	11:25:23
1	Co 228.616†	-199.7	-3.5	-0.0283	ug/L	-0.0283	ppb	11:25:23
1	Cr 267.716†	-57.1	-3.8	-0.0281	ug/L	-0.0281	ppb	11:25:23
1	Cu 324.752†	8590.9	191.5	0.4592	ug/L	0.4592	ppb	11:25:03
1	Mn 257.610†	1108.0	77.1	0.0433	ug/L	0.0433	ppb	11:25:23
1	Mo 202.031†	42.6	13.7	0.3001	ug/L	0.3001	ppb	11:25:23
1	Ni 231.604†	299.1	21.4	0.2200	ug/L	0.2200	ppb	11:25:23
1	P 214.914†	785.4	2.4	0.3005	ug/L	0.3005	ppb	11:25:23
1	Pb 220.353†	-140.5	-33.8	-1.4357	ug/L	-1.4357	ppb	11:25:23
1	S 181.975 Axial†	153.2	-6.7	-2.1971	ug/L	-2.1971	ppb	11:25:23
1	Sb 206.836†	132.2	3.0	0.2722	ug/L	0.2722	ppb	11:25:23
1	Se 196.026†	-42.7	16.9	2.6135	ug/L	2.6135	ppb	11:25:23
1	Si 251.611†	1238.0	328.8	5.6152	ug/L	5.6152	ppb	11:25:23
1	Sn 189.927†	-8.5	1.6	0.0759	ug/L	0.0759	ppb	11:25:23
1	Ti 334.940†	-1436.9	-17.5	-0.0258	ug/L	-0.0258	ppb	11:25:23
1	Tl 190.801†	-105.8	30.2	2.2418	ug/L	2.2418	ppb	11:25:23
1	U 409.014†	5472.5	201.3	8.2412	ug/L	8.2412	ppb	11:25:03
1	V 292.402†	-2494.9	-43.6	-0.2219	ug/L	-0.2219	ppb	11:25:23
1	Zn 213.857†	2078.3	87.1	0.2808	ug/L	0.2808	ppb	11:25:23
1	SiO2†	1129.4	173.5	6.3010	ug/L	6.3010	ppb	11:26:19
2	Sc Radial	100605.6	100605.6	95.8	%			11:24:11
2	Y RADIAL	87696.8	87696.8	96.11	%			11:24:11
2	Al 396.153Radial†	598.3	62.1	7.0966	ug/L	7.0966	ppb	11:24:11
2	Ca 317.933Radial†	810.2	131.6	5.2385	ug/L	5.2385	ppb	11:24:31
2	Fe 238.204 Radial†	59.5	9.9	1.0647	ug/L	1.0647	ppb	11:24:31
2	K 766.490 Radial†	3402.6	146.9	29.505	ug/L	29.505	ppb	11:24:11
2	Mg 279.077 IEC†	83.9	9.2	4.2751	ug/L	4.2751	ppb	11:24:31
2	Na 589.592 Radial†	-2181.2	-931.8	-55.116	ug/L	-55.116	ppb	11:24:11
2	Sr 421.552†	-2161.0	-280.5	-0.2427	ug/L	-0.2427	ppb	11:24:11
2	Sc 361.383	970526.5	970526.5	97.079	%			11:25:28
2	Y 371.029	825201.9	825201.9	97.351	%			11:25:28
2	Ag 328.068†	1167.7	76.4	0.2881	ug/L	0.2881	ppb	11:25:28
2	As 188.979†	-59.5	0.6	0.0532	ug/L	0.0532	ppb	11:25:48
2	B 249.677†	-662.2	97.9	1.2946	ug/L	1.2946	ppb	11:25:48
2	Ba 233.527†	33.9	6.9	0.0191	ug/L	0.0191	ppb	11:25:48
2	Be 313.107†	-3699.5	-86.4	-0.0245	ug/L	-0.0245	ppb	11:25:28
2	Cd 226.502†	-261.1	-46.1	-0.2333	ug/L	-0.2333	ppb	11:25:48
2	Co 228.616†	-183.1	11.6	0.0972	ug/L	0.0972	ppb	11:25:48
2	Cr 267.716†	-22.6	31.2	0.2294	ug/L	0.2294	ppb	11:25:48
2	Cu 324.752†	8470.3	151.2	0.3593	ug/L	0.3593	ppb	11:25:28
2	Mn 257.610†	1120.6	101.0	0.0567	ug/L	0.0567	ppb	11:25:48
2	Mo 202.031†	55.2	27.1	0.5938	ug/L	0.5938	ppb	11:25:48
2	Ni 231.604†	304.4	29.8	0.3055	ug/L	0.3055	ppb	11:25:48

2	P 214.914†	770.9	-4.8	-0.7684	ug/L	-0.7684	ppb	11:25:48
2	Pb 220.353†	-109.7	-3.5	-0.1509	ug/L	-0.1509	ppb	11:25:48
2	S 181.975 Axial†	143.5	-15.3	-4.9795	ug/L	-4.9795	ppb	11:25:48
2	Sb 206.836†	141.8	14.1	1.2650	ug/L	1.2650	ppb	11:25:48
2	Se 196.026†	-56.7	2.0	0.3187	ug/L	0.3187	ppb	11:25:48
2	Si 251.611†	1207.8	309.7	5.2848	ug/L	5.2848	ppb	11:25:48
2	Sn 189.927†	-4.5	5.7	0.2686	ug/L	0.2686	ppb	11:25:48
2	Ti 334.940†	-1404.0	2.3	-0.0014	ug/L	-0.0014	ppb	11:25:48
2	Tl 190.801†	-122.5	12.0	0.8926	ug/L	0.8926	ppb	11:25:48
2	U 409.014†	5481.0	263.6	10.791	ug/L	10.791	ppb	11:25:28
2	V 292.402†	-2501.6	-74.9	-0.3871	ug/L	-0.3871	ppb	11:25:48
2	Zn 213.857†	2094.6	124.2	0.4010	ug/L	0.4010	ppb	11:25:48
2	SiO2†	1180.7	237.4	8.6158	ug/L	8.6158	ppb	11:26:24
3	Sc Radial	97034.7	97034.7	92.4	%			11:24:36
3	Y RADIAL	84750.7	84750.7	92.88	%			11:24:36
3	Al 396.153Radial†	561.5	45.2	5.1699	ug/L	5.1699	ppb	11:24:36
3	Ca 317.933Radial†	836.8	191.5	7.6259	ug/L	7.6259	ppb	11:24:56
3	Fe 238.204 Radial†	53.8	6.1	0.6496	ug/L	0.6496	ppb	11:24:56
3	K 766.490 Radial†	3356.5	227.7	45.736	ug/L	45.736	ppb	11:24:36
3	Mg 279.077 IEC†	69.5	-3.2	-1.4697	ug/L	-1.4697	ppb	11:24:56
3	Na 589.592 Radial†	-2252.6	-1092.9	-64.643	ug/L	-64.643	ppb	11:24:36
3	Sr 421.552†	-2055.0	-248.8	-0.2153	ug/L	-0.2153	ppb	11:24:36
3	Sc 361.383	961007.9	961007.9	96.127	%			11:25:54
3	Y 371.029	818503.3	818503.3	96.561	%			11:25:54
3	Ag 328.068†	1126.6	45.6	0.1627	ug/L	0.1627	ppb	11:25:54
3	As 188.979†	-57.6	1.9	0.2037	ug/L	0.2037	ppb	11:26:14
3	B 249.677†	-664.5	88.8	1.1746	ug/L	1.1746	ppb	11:26:14
3	Ba 233.527†	42.0	15.7	0.0444	ug/L	0.0444	ppb	11:26:14
3	Be 313.107†	-3571.9	8.6	0.0022	ug/L	0.0022	ppb	11:25:54
3	Cd 226.502†	-222.4	-8.4	-0.0428	ug/L	-0.0428	ppb	11:26:14
3	Co 228.616†	-189.2	3.4	0.0288	ug/L	0.0288	ppb	11:26:14
3	Cr 267.716†	-36.1	16.9	0.1237	ug/L	0.1237	ppb	11:26:14
3	Cu 324.752†	8431.5	197.3	0.4660	ug/L	0.4660	ppb	11:25:54
3	Mn 257.610†	1137.8	130.3	0.0732	ug/L	0.0732	ppb	11:26:14
3	Mo 202.031†	43.7	15.7	0.3437	ug/L	0.3437	ppb	11:26:14
3	Ni 231.604†	313.9	42.7	0.4385	ug/L	0.4385	ppb	11:26:14
3	P 214.914†	757.9	-10.6	-1.6334	ug/L	-1.6334	ppb	11:26:14
3	Pb 220.353†	-104.2	1.1	0.0377	ug/L	0.0377	ppb	11:26:14
3	S 181.975 Axial†	146.2	-11.0	-3.5991	ug/L	-3.5991	ppb	11:26:14
3	Sb 206.836†	130.2	3.5	0.3228	ug/L	0.3228	ppb	11:26:14
3	Se 196.026†	-71.2	-13.7	-2.1064	ug/L	-2.1064	ppb	11:26:14
3	Si 251.611†	1236.0	351.4	6.0018	ug/L	6.0018	ppb	11:26:14
3	Sn 189.927†	8.8	19.4	0.9194	ug/L	0.9194	ppb	11:26:14
3	Ti 334.940†	-1462.9	-73.3	-0.1014	ug/L	-0.1014	ppb	11:26:14
3	Tl 190.801†	-108.4	25.4	1.8861	ug/L	1.8861	ppb	11:26:14
3	U 409.014†	5581.9	424.5	17.379	ug/L	17.379	ppb	11:25:54
3	V 292.402†	-2498.6	-97.3	-0.5006	ug/L	-0.5006	ppb	11:26:14
3	Zn 213.857†	2098.7	149.8	0.4837	ug/L	0.4837	ppb	11:26:14
3	SiO2†	1274.0	346.6	12.593	ug/L	12.593	ppb	11:26:29

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	970455.9	97.072	%	0.9415				0.97%
Sc Radial	99490.5	94.8	%	2.03				2.14%
Y 371.029	825591.4	97.397	%	0.8601				0.88%
Y RADIAL	86756.5	95.08	%	1.905				2.00%
Ag 328.068†	67.2	0.2514	ug/L	0.07725	0.2514	ppb	0.07725	30.72%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	63.9	7.3065	ug/L	2.24897	7.3065	ppb	2.24897	30.78%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.8	-0.3152	ug/L	0.77220	-0.3152	ppb	0.77220	244.96%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	115.2	1.5242	ug/L	0.50530	1.5242	ppb	0.50530	33.15%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	13.5	0.0384	ug/L	0.01721	0.0384	ppb	0.01721	44.76%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-54.4	-0.0156	ug/L	0.01538	-0.0156	ppb	0.01538	98.91%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	142.8	5.6874	ug/L	1.75763	5.6874	ppb	1.75763	30.90%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              -24.4     -0.1236 ug/L       0.09851     -0.1236 ppb        0.09851  79.70%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                3.8      0.0326 ug/L       0.06283      0.0326 ppb        0.06283 192.97%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               14.8      0.1083 ug/L       0.12943      0.1083 ppb        0.12943 119.51%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              180.0      0.4281 ug/L       0.05976      0.4281 ppb        0.05976  13.96%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         9.1      0.9708 ug/L       0.28607      0.9708 ppb        0.28607  29.47%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        172.9      34.722 ug/L        9.5429      34.722 ppb         9.5429  27.48%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            5.3      2.4639 ug/L       3.41022      2.4639 ppb        3.41022 138.41%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              102.8      0.0577 ug/L       0.01497      0.0577 ppb        0.01497  25.93%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               18.8      0.4125 ug/L       0.15849      0.4125 ppb        0.15849  38.42%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -984.5     -58.234 ug/L        5.5507     -58.234 ppb         5.5507   9.53%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               31.3      0.3214 ug/L       0.11013      0.3214 ppb        0.11013  34.27%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -4.3     -0.7004 ug/L       0.96871     -0.7004 ppb        0.96871 138.30%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -12.1     -0.5163 ug/L       0.80180     -0.5163 ppb        0.80180 155.29%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -11.0     -3.5919 ug/L       1.39123     -3.5919 ppb        1.39123  38.73%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                6.8      0.6200 ug/L       0.55915      0.6200 ppb        0.55915  90.19%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                1.7      0.2752 ug/L       2.36026      0.2752 ppb        2.36026 857.53%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              330.0      5.6339 ug/L       0.35889      5.6339 ppb        0.35889   6.37%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                8.9      0.4213 ug/L       0.44200      0.4213 ppb        0.44200 104.91%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             -267.2     -0.2312 ug/L       0.01419     -0.2312 ppb        0.01419   6.14%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -29.5     -0.0429 ug/L       0.05218     -0.0429 ppb        0.05218 121.76%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               22.6      1.6735 ug/L       0.69926      1.6735 ppb        0.69926  41.78%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               296.5      12.137 ug/L        4.7155      12.137 ppb         4.7155  38.85%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -71.9     -0.3699 ug/L       0.14013     -0.3699 ppb        0.14013  37.88%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              120.4      0.3885 ug/L       0.10202      0.3885 ppb        0.10202  26.26%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    252.5      9.1701 ug/L       3.18268      9.1701 ppb        3.18268  34.71%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 5 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 3/6/2008 11:56:26**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	101108.7	101108.7	96.3	%			11:58:23
1	Y RADIAL	87455.1	87455.1	95.84	%			11:58:23
1	Al 396.153Radial†	45256.8	46432.5	5300.6	ug/L	5300.6	ppb	11:58:23
1	Ca 317.933Radial†	123703.8	127740.4	5086.5	ug/L	5086.5	ppb	11:58:23
1	Fe 238.204 Radial†	45139.2	46820.5	5029.3	ug/L	5029.3	ppb	11:58:23
1	K 766.490 Radial†	28233.7	25913.9	5204.8	ug/L	5204.8	ppb	11:58:23
1	Mg 279.077 IEC†	10698.7	11031.2	5118.0	ug/L	5118.0	ppb	11:58:23
1	Na 589.592 Radial†	166330.8	174062.8	10296	ug/L	10296	ppb	11:58:18
1	Sr 421.552†	581037.9	605325.9	523.21	ug/L	523.21	ppb	11:58:18
1	Sc 361.383	970514.0	970514.0	97.078	%			11:58:53
1	Y 371.029	815087.5	815087.5	96.158	%			11:58:53
1	Ag 328.068†	127536.1	130248.9	509.67	ug/L	509.67	ppb	11:58:53
1	As 188.979†	4308.5	4500.1	491.07	ug/L	491.07	ppb	11:58:58
1	B 249.677†	35899.5	37760.2	499.38	ug/L	499.38	ppb	11:58:53
1	Ba 233.527†	169326.3	174395.4	508.29	ug/L	508.29	ppb	11:58:53
1	Be 313.107†	1724559.3	1780197.6	507.04	ug/L	507.04	ppb	11:58:53
1	Cd 226.502†	96785.8	99922.2	505.68	ug/L	505.68	ppb	11:58:53
1	Co 228.616†	57779.3	59718.8	492.39	ug/L	492.39	ppb	11:58:58
1	Cr 267.716†	66451.7	68506.5	505.26	ug/L	505.26	ppb	11:58:53
1	Cu 324.752†	209505.2	207237.9	504.12	ug/L	504.12	ppb	11:58:53
1	Mn 257.610†	876680.9	902018.0	506.60	ug/L	506.60	ppb	11:58:53
1	Mo 202.031†	22081.5	22716.4	498.79	ug/L	498.79	ppb	11:58:58
1	Ni 231.604†	47030.7	48162.7	494.02	ug/L	494.02	ppb	11:58:58
1	P 214.914†	16741.7	16446.7	2371.5	ug/L	2371.5	ppb	11:58:58
1	Pb 220.353†	11312.9	11763.0	500.19	ug/L	500.19	ppb	11:58:58
1	S 181.975 Axial†	3064.8	2993.9	974.93	ug/L	974.93	ppb	11:58:58
1	Sb 206.836†	5506.1	5539.8	494.00	ug/L	494.00	ppb	11:58:58
1	Se 196.026†	2999.0	3149.7	501.49	ug/L	501.49	ppb	11:58:58
1	Si 251.611†	144004.3	147404.9	2511.9	ug/L	2511.9	ppb	11:58:53
1	Sn 189.927†	10115.7	10430.4	493.86	ug/L	493.86	ppb	11:58:58
1	Ti 334.940†	380689.7	393598.1	507.41	ug/L	507.41	ppb	11:58:53
1	Tl 190.801†	6405.2	6736.2	501.68	ug/L	501.68	ppb	11:58:58
1	U 409.014†	17320.5	12459.6	509.54	ug/L	509.54	ppb	11:58:53
1	V 292.402†	86493.5	91599.2	510.91	ug/L	510.91	ppb	11:58:53
1	Zn 213.857†	152708.7	155272.3	500.20	ug/L	500.20	ppb	11:58:53
1	SiO2†	146410.6	149839.2	5432.8	ug/L	5432.8	ppb	11:59:28
2	Sc Radial	102293.6	102293.6	97.4	%			11:58:34
2	Y RADIAL	88577.0	88577.0	97.07	%			11:58:34
2	Al 396.153Radial†	45617.0	46257.9	5280.3	ug/L	5280.3	ppb	11:58:34
2	Ca 317.933Radial†	124884.0	127463.8	5075.5	ug/L	5075.5	ppb	11:58:34
2	Fe 238.204 Radial†	45541.5	46690.4	5015.6	ug/L	5015.6	ppb	11:58:34
2	K 766.490 Radial†	28593.8	25943.9	5210.9	ug/L	5210.9	ppb	11:58:34
2	Mg 279.077 IEC†	10811.8	11018.5	5112.4	ug/L	5112.4	ppb	11:58:34
2	Na 589.592 Radial†	164458.3	170140.2	10064	ug/L	10064	ppb	11:58:29
2	Sr 421.552†	575351.0	592500.0	512.12	ug/L	512.12	ppb	11:58:29
2	Sc 361.383	968754.7	968754.7	96.902	%			11:59:05
2	Y 371.029	815076.2	815076.2	96.157	%			11:59:05
2	Ag 328.068†	127562.7	130514.9	510.70	ug/L	510.70	ppb	11:59:05
2	As 188.979†	4365.4	4566.8	498.36	ug/L	498.36	ppb	11:59:10
2	B 249.677†	35619.0	37537.9	496.44	ug/L	496.44	ppb	11:59:05
2	Ba 233.527†	168498.1	173857.5	506.72	ug/L	506.72	ppb	11:59:05
2	Be 313.107†	1716660.2	1775272.2	505.64	ug/L	505.64	ppb	11:59:05
2	Cd 226.502†	96115.1	99411.1	503.09	ug/L	503.09	ppb	11:59:05
2	Co 228.616†	58650.8	60726.3	500.71	ug/L	500.71	ppb	11:59:10
2	Cr 267.716†	66057.5	68224.1	503.18	ug/L	503.18	ppb	11:59:05
2	Cu 324.752†	208912.1	207017.9	503.59	ug/L	503.59	ppb	11:59:05
2	Mn 257.610†	871996.9	898824.3	504.81	ug/L	504.81	ppb	11:59:05
2	Mo 202.031†	22352.3	23037.1	505.82	ug/L	505.82	ppb	11:59:10
2	Ni 231.604†	47751.8	48994.8	502.56	ug/L	502.56	ppb	11:59:10

2	P 214.914†	16946.9	16689.8	2407.7	ug/L	2407.7	ppb	11:59:10
2	Pb 220.353†	11484.3	11961.0	508.61	ug/L	508.61	ppb	11:59:10
2	S 181.975 Axial†	3131.2	3068.2	999.15	ug/L	999.15	ppb	11:59:10
2	Sb 206.836†	5501.1	5545.0	494.52	ug/L	494.52	ppb	11:59:10
2	Se 196.026†	3052.0	3210.0	510.76	ug/L	510.76	ppb	11:59:10
2	Si 251.611†	143279.2	146926.0	2503.6	ug/L	2503.6	ppb	11:59:05
2	Sn 189.927†	10287.0	10626.1	503.12	ug/L	503.12	ppb	11:59:10
2	Ti 334.940†	379935.7	393532.1	507.33	ug/L	507.33	ppb	11:59:05
2	Tl 190.801†	6439.9	6784.0	505.18	ug/L	505.18	ppb	11:59:10
2	U 409.014†	17054.0	12217.0	499.64	ug/L	499.64	ppb	11:59:05
2	V 292.402†	86150.9	91407.4	509.90	ug/L	509.90	ppb	11:59:05
2	Zn 213.857†	151827.1	154648.1	498.12	ug/L	498.12	ppb	11:59:05
2	SiO2†	143534.9	147145.5	5334.6	ug/L	5334.6	ppb	11:59:33
3	Sc Radial	100859.7	100859.7	96.1	%			11:58:44
3	Y RADIAL	87381.3	87381.3	95.76	%			11:58:44
3	Al 396.153Radial†	45086.2	46370.9	5293.4	ug/L	5293.4	ppb	11:58:44
3	Ca 317.933Radial†	123502.1	127847.6	5090.7	ug/L	5090.7	ppb	11:58:44
3	Fe 238.204 Radial†	44982.8	46773.4	5024.3	ug/L	5024.3	ppb	11:58:44
3	K 766.490 Radial†	28184.8	25935.3	5209.1	ug/L	5209.1	ppb	11:58:44
3	Mg 279.077 IEC†	10736.4	11097.8	5149.0	ug/L	5149.0	ppb	11:58:44
3	Na 589.592 Radial†	163724.4	171775.9	10160	ug/L	10160	ppb	11:58:39
3	Sr 421.552†	572763.0	598201.2	517.05	ug/L	517.05	ppb	11:58:39
3	Sc 361.383	972106.4	972106.4	97.237	%			11:59:17
3	Y 371.029	818439.6	818439.6	96.553	%			11:59:17
3	Ag 328.068†	127766.3	130270.4	509.76	ug/L	509.76	ppb	11:59:17
3	As 188.979†	4305.6	4489.8	489.95	ug/L	489.95	ppb	11:59:23
3	B 249.677†	35788.3	37585.3	497.07	ug/L	497.07	ppb	11:59:17
3	Ba 233.527†	169153.2	173931.6	506.94	ug/L	506.94	ppb	11:59:17
3	Be 313.107†	1724784.2	1777518.9	506.28	ug/L	506.28	ppb	11:59:17
3	Cd 226.502†	96585.9	99553.3	503.81	ug/L	503.81	ppb	11:59:17
3	Co 228.616†	58349.8	60208.0	496.44	ug/L	496.44	ppb	11:59:23
3	Cr 267.716†	66395.6	68336.7	504.01	ug/L	504.01	ppb	11:59:17
3	Cu 324.752†	209619.8	207002.3	503.55	ug/L	503.55	ppb	11:59:17
3	Mn 257.610†	875593.3	899420.2	505.14	ug/L	505.14	ppb	11:59:17
3	Mo 202.031†	22297.3	22901.1	502.84	ug/L	502.84	ppb	11:59:23
3	Ni 231.604†	47453.7	48518.4	497.67	ug/L	497.67	ppb	11:59:23
3	P 214.914†	16884.1	16565.0	2389.1	ug/L	2389.1	ppb	11:59:23
3	Pb 220.353†	11391.8	11825.0	502.84	ug/L	502.84	ppb	11:59:23
3	S 181.975 Axial†	3096.3	3021.2	983.82	ug/L	983.82	ppb	11:59:23
3	Sb 206.836†	5484.8	5508.7	491.24	ug/L	491.24	ppb	11:59:23
3	Se 196.026†	3041.7	3188.5	507.47	ug/L	507.47	ppb	11:59:23
3	Si 251.611†	143892.9	147047.3	2505.7	ug/L	2505.7	ppb	11:59:17
3	Sn 189.927†	10289.0	10591.6	501.49	ug/L	501.49	ppb	11:59:23
3	Ti 334.940†	380945.1	393218.3	506.92	ug/L	506.92	ppb	11:59:17
3	Tl 190.801†	6455.7	6777.3	504.70	ug/L	504.70	ppb	11:59:23
3	U 409.014†	17045.0	12147.0	496.76	ug/L	496.76	ppb	11:59:17
3	V 292.402†	86487.2	91446.8	510.09	ug/L	510.09	ppb	11:59:17
3	Zn 213.857†	152477.0	154776.2	498.56	ug/L	498.56	ppb	11:59:17
3	SiO2†	143504.7	146603.7	5315.0	ug/L	5315.0	ppb	11:59:38

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	970458.4	97.072	%	0.1677				0.17%
Sc Radial	101420.7	96.6	%	0.73				0.76%
Y 371.029	816201.1	96.289	%	0.2287				0.24%
Y RADIAL	87804.4	96.23	%	0.734				0.76%
Ag 328.068†	130344.8	510.04	ug/L	0.574	510.04	ppb	0.574	0.11%
QC value within limits for Ag 328.068 Recovery = 102.01%								
Al 396.153Radial†	46353.8	5291.4	ug/L	10.28	5291.4	ppb	10.28	0.19%
QC value within limits for Al 396.153Radial Recovery = 105.83%								
As 188.979†	4518.9	493.13	ug/L	4.567	493.13	ppb	4.567	0.93%
QC value within limits for As 188.979 Recovery = 98.63%								
B 249.677†	37627.8	497.63	ug/L	1.549	497.63	ppb	1.549	0.31%
QC value within limits for B 249.677 Recovery = 99.53%								
Ba 233.527†	174061.5	507.31	ug/L	0.849	507.31	ppb	0.849	0.17%
QC value within limits for Ba 233.527 Recovery = 101.46%								
Be 313.107†	1777662.9	506.32	ug/L	0.701	506.32	ppb	0.701	0.14%
QC value within limits for Be 313.107 Recovery = 101.26%								
Ca 317.933Radial†	127683.9	5084.2	ug/L	7.89	5084.2	ppb	7.89	0.16%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.68%
Cd 226.502†            99628.9      504.19 ug/L         1.335      504.19 ppb          1.335   0.26%
   QC value within limits for Cd 226.502  Recovery = 100.84%
Co 228.616†            60217.7      496.51 ug/L         4.161      496.51 ppb          4.161   0.84%
   QC value within limits for Co 228.616  Recovery = 99.30%
Cr 267.716†            68355.8      504.15 ug/L         1.048      504.15 ppb          1.048   0.21%
   QC value within limits for Cr 267.716  Recovery = 100.83%
Cu 324.752†           207086.0      503.75 ug/L         0.316      503.75 ppb          0.316   0.06%
   QC value within limits for Cu 324.752  Recovery = 100.75%
Fe 238.204 Radial†     46761.5      5023.1 ug/L          6.93      5023.1 ppb           6.93   0.14%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.46%
K 766.490 Radial†      25931.0      5208.3 ug/L          3.10      5208.3 ppb           3.10   0.06%
   QC value within limits for K 766.490 Radial  Recovery = 104.17%
Mg 279.077 IEC†        11049.2      5126.5 ug/L         19.72      5126.5 ppb          19.72   0.38%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.53%
Mn 257.610†           900087.5      505.52 ug/L         0.954      505.52 ppb          0.954   0.19%
   QC value within limits for Mn 257.610  Recovery = 101.10%
Mo 202.031†            22884.9      502.48 ug/L         3.532      502.48 ppb          3.532   0.70%
   QC value within limits for Mo 202.031  Recovery = 100.50%
Na 589.592 Radial†    171993.0       10173 ug/L         116.5       10173 ppb          116.5   1.15%
   QC value within limits for Na 589.592 Radial  Recovery = 101.73%
Ni 231.604†            48558.6      498.08 ug/L         4.283      498.08 ppb          4.283   0.86%
   QC value within limits for Ni 231.604  Recovery = 99.62%
P 214.914†             16567.2      2389.4 ug/L         18.10      2389.4 ppb          18.10   0.76%
   QC value within limits for P 214.914  Recovery = 95.58%
Pb 220.353†            11849.7      503.88 ug/L         4.303      503.88 ppb          4.303   0.85%
   QC value within limits for Pb 220.353  Recovery = 100.78%
S 181.975 Axial†        3027.8      985.97 ug/L        12.249      985.97 ppb         12.249   1.24%
   QC value within limits for S 181.975 Axial  Recovery = 98.60%
Sb 206.836†             5531.2      493.25 ug/L         1.763      493.25 ppb          1.763   0.36%
   QC value within limits for Sb 206.836  Recovery = 98.65%
Se 196.026†             3182.7      506.57 ug/L         4.702      506.57 ppb          4.702   0.93%
   QC value within limits for Se 196.026  Recovery = 101.31%
Si 251.611†           147126.0      2507.0 ug/L          4.31      2507.0 ppb           4.31   0.17%
   QC value within limits for Si 251.611  Recovery = 100.28%
Sn 189.927†            10549.4      499.49 ug/L         4.944      499.49 ppb          4.944   0.99%
   QC value within limits for Sn 189.927  Recovery = 99.90%
Sr 421.552†           598675.7      517.46 ug/L         5.556      517.46 ppb          5.556   1.07%
   QC value within limits for Sr 421.552  Recovery = 103.49%
Ti 334.940†           393449.5      507.22 ug/L         0.259      507.22 ppb          0.259   0.05%
   QC value within limits for Ti 334.940  Recovery = 101.44%
Tl 190.801†             6765.8      503.85 ug/L         1.899      503.85 ppb          1.899   0.38%
   QC value within limits for Tl 190.801  Recovery = 100.77%
U 409.014†             12274.5      501.98 ug/L         6.706      501.98 ppb          6.706   1.34%
   QC value within limits for U 409.014  Recovery = 100.40%
V 292.402†             91484.5      510.30 ug/L         0.535      510.30 ppb          0.535   0.10%
   QC value within limits for V 292.402  Recovery = 102.06%
Zn 213.857†           154898.9      498.96 ug/L         1.097      498.96 ppb          1.097   0.22%
   QC value within limits for Zn 213.857  Recovery = 99.79%
SiO2†                 147862.8      5360.8 ug/L         63.14      5360.8 ppb          63.14   1.18%
   QC value within limits for SiO2  Recovery = 100.25%
All analyte(s) passed QC.
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Sequence No.: 6 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 3/6/2008 12:01:48**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	99453.8	99453.8	94.7	%			12:03:41
1	Y RADIAL	86813.4	86813.4	95.14	%			12:03:41
1	Al 396.153Radial†	569.8	39.3	4.4836	ug/L	4.4836	ppb	12:03:41
1	Ca 317.933Radial†	847.3	180.5	7.1884	ug/L	7.1884	ppb	12:04:01
1	Fe 238.204 Radial†	56.5	7.5	0.8042	ug/L	0.8042	ppb	12:04:01
1	K 766.490 Radial†	3398.8	184.0	36.950	ug/L	36.950	ppb	12:03:41
1	Mg 279.077 IEC†	88.1	14.6	6.7709	ug/L	6.7709	ppb	12:04:01
1	Na 589.592 Radial†	-2074.4	-845.4	-50.005	ug/L	-50.005	ppb	12:03:41
1	Sr 421.552†	-1940.5	-73.9	-0.0641	ug/L	-0.0641	ppb	12:03:41
1	Sc 361.383	976011.8	976011.8	97.628	%			12:04:58
1	Y 371.029	827784.0	827784.0	97.656	%			12:04:58
1	Ag 328.068†	1103.8	4.2	0.0045	ug/L	0.0045	ppb	12:04:58
1	As 188.979†	-76.5	-16.5	-1.8078	ug/L	-1.8078	ppb	12:05:18
1	B 249.677†	-775.1	-13.9	-0.1834	ug/L	-0.1834	ppb	12:04:58
1	Ba 233.527†	27.1	-0.3	-0.0015	ug/L	-0.0015	ppb	12:05:18
1	Be 313.107†	-3564.6	73.2	0.0204	ug/L	0.0204	ppb	12:04:58
1	Cd 226.502†	-222.2	-4.7	-0.0239	ug/L	-0.0239	ppb	12:05:18
1	Co 228.616†	-179.5	16.4	0.1368	ug/L	0.1368	ppb	12:05:18
1	Cr 267.716†	-25.7	28.1	0.2066	ug/L	0.2066	ppb	12:05:18
1	Cu 324.752†	8614.3	249.7	0.5958	ug/L	0.5958	ppb	12:04:58
1	Mn 257.610†	1149.8	124.4	0.0697	ug/L	0.0697	ppb	12:04:58
1	Mo 202.031†	53.0	24.5	0.5374	ug/L	0.5374	ppb	12:05:18
1	Ni 231.604†	281.9	5.0	0.0509	ug/L	0.0509	ppb	12:05:18
1	P 214.914†	766.0	-14.3	-2.2136	ug/L	-2.2136	ppb	12:05:18
1	Pb 220.353†	-140.1	-34.0	-1.4470	ug/L	-1.4470	ppb	12:05:18
1	S 181.975 Axial†	150.4	-9.1	-2.9545	ug/L	-2.9545	ppb	12:05:18
1	Sb 206.836†	146.9	18.5	1.6638	ug/L	1.6638	ppb	12:05:18
1	Se 196.026†	-57.5	1.5	0.2431	ug/L	0.2431	ppb	12:05:18
1	Si 251.611†	1066.7	158.2	2.6961	ug/L	2.6961	ppb	12:05:18
1	Sn 189.927†	-15.4	-5.5	-0.2588	ug/L	-0.2588	ppb	12:05:18
1	Ti 334.940†	-1534.9	-123.7	-0.1651	ug/L	-0.1651	ppb	12:04:58
1	Tl 190.801†	-122.5	12.7	0.9394	ug/L	0.9394	ppb	12:05:18
1	U 409.014†	5599.6	353.3	14.465	ug/L	14.465	ppb	12:04:58
1	V 292.402†	-2494.7	-53.4	-0.2615	ug/L	-0.2615	ppb	12:04:58
1	Zn 213.857†	2055.1	71.6	0.2314	ug/L	0.2314	ppb	12:05:18
1	SiO2†	1091.9	139.7	5.0618	ug/L	5.0618	ppb	12:06:15
2	Sc Radial	100590.8	100590.8	95.8	%			12:04:06
2	Y RADIAL	87633.4	87633.4	96.04	%			12:04:06
2	Al 396.153Radial†	521.1	-18.4	-2.1201	ug/L	-2.1201	ppb	12:04:06
2	Ca 317.933Radial†	846.1	169.2	6.7375	ug/L	6.7375	ppb	12:04:26
2	Fe 238.204 Radial†	49.3	-0.7	-0.0772	ug/L	-0.0772	ppb	12:04:26
2	K 766.490 Radial†	3389.6	133.9	26.884	ug/L	26.884	ppb	12:04:06
2	Mg 279.077 IEC†	85.1	10.5	4.8518	ug/L	4.8518	ppb	12:04:26
2	Na 589.592 Radial†	-2126.9	-875.5	-51.787	ug/L	-51.787	ppb	12:04:06
2	Sr 421.552†	-2110.2	-227.8	-0.1972	ug/L	-0.1972	ppb	12:04:06
2	Sc 361.383	971531.0	971531.0	97.179	%			12:05:24
2	Y 371.029	825260.6	825260.6	97.358	%			12:05:24
2	Ag 328.068†	1117.8	23.8	0.0811	ug/L	0.0811	ppb	12:05:24
2	As 188.979†	-56.7	3.5	0.3813	ug/L	0.3813	ppb	12:05:44
2	B 249.677†	-691.7	68.3	0.9033	ug/L	0.9033	ppb	12:05:24
2	Ba 233.527†	26.7	-0.6	-0.0025	ug/L	-0.0025	ppb	12:05:44
2	Be 313.107†	-3667.0	-49.0	-0.0143	ug/L	-0.0143	ppb	12:05:24
2	Cd 226.502†	-233.7	-17.6	-0.0891	ug/L	-0.0891	ppb	12:05:44
2	Co 228.616†	-193.3	1.4	0.0123	ug/L	0.0123	ppb	12:05:44
2	Cr 267.716†	-79.4	-27.2	-0.2007	ug/L	-0.2007	ppb	12:05:44
2	Cu 324.752†	8465.8	137.6	0.3237	ug/L	0.3237	ppb	12:05:24
2	Mn 257.610†	1110.5	89.4	0.0500	ug/L	0.0500	ppb	12:05:24
2	Mo 202.031†	43.6	15.0	0.3299	ug/L	0.3299	ppb	12:05:44
2	Ni 231.604†	284.5	9.0	0.0919	ug/L	0.0919	ppb	12:05:44

2	P 214.914†	765.8	-10.9	-1.6629	ug/L	-1.6629	ppb	12:05:44
2	Pb 220.353†	-138.4	-32.9	-1.4007	ug/L	-1.4007	ppb	12:05:44
2	S 181.975 Axial†	141.1	-17.9	-5.8316	ug/L	-5.8316	ppb	12:05:44
2	Sb 206.836†	135.3	7.3	0.6664	ug/L	0.6664	ppb	12:05:44
2	Se 196.026†	-77.4	-19.3	-2.9709	ug/L	-2.9709	ppb	12:05:44
2	Si 251.611†	1070.6	167.3	2.8545	ug/L	2.8545	ppb	12:05:44
2	Sn 189.927†	12.5	23.1	1.0959	ug/L	1.0959	ppb	12:05:44
2	Ti 334.940†	-1524.9	-120.6	-0.1607	ug/L	-0.1607	ppb	12:05:24
2	Tl 190.801†	-102.8	32.4	2.4037	ug/L	2.4037	ppb	12:05:44
2	U 409.014†	5552.8	331.7	13.580	ug/L	13.580	ppb	12:05:24
2	V 292.402†	-2501.3	-71.9	-0.3676	ug/L	-0.3676	ppb	12:05:24
2	Zn 213.857†	2031.1	56.6	0.1829	ug/L	0.1829	ppb	12:05:44
2	SiO2†	1132.3	186.4	6.7689	ug/L	6.7689	ppb	12:06:20
3	Sc Radial	101507.7	101507.7	96.7	%			12:04:31
3	Y RADIAL	88346.7	88346.7	96.82	%			12:04:31
3	Al 396.153Radial†	539.7	-4.0	-0.4752	ug/L	-0.4752	ppb	12:04:31
3	Ca 317.933Radial†	824.9	139.3	5.5464	ug/L	5.5464	ppb	12:04:51
3	Fe 238.204 Radial†	63.5	13.5	1.4452	ug/L	1.4452	ppb	12:04:51
3	K 766.490 Radial†	3498.3	214.3	43.045	ug/L	43.045	ppb	12:04:31
3	Mg 279.077 IEC†	80.1	4.4	2.0644	ug/L	2.0644	ppb	12:04:51
3	Na 589.592 Radial†	-2007.9	-732.4	-43.320	ug/L	-43.320	ppb	12:04:31
3	Sr 421.552†	-2136.2	-234.8	-0.2032	ug/L	-0.2032	ppb	12:04:31
3	Sc 361.383	977029.7	977029.7	97.729	%			12:05:50
3	Y 371.029	828835.9	828835.9	97.780	%			12:05:50
3	Ag 328.068†	1113.7	13.2	0.0488	ug/L	0.0488	ppb	12:05:50
3	As 188.979†	-77.4	-17.4	-1.9021	ug/L	-1.9021	ppb	12:06:10
3	B 249.677†	-715.4	48.0	0.6348	ug/L	0.6348	ppb	12:05:50
3	Ba 233.527†	45.8	18.8	0.0547	ug/L	0.0547	ppb	12:06:10
3	Be 313.107†	-3679.6	-40.7	-0.0120	ug/L	-0.0120	ppb	12:05:50
3	Cd 226.502†	-211.0	7.0	0.0354	ug/L	0.0354	ppb	12:06:10
3	Co 228.616†	-208.3	-13.0	-0.1056	ug/L	-0.1056	ppb	12:06:10
3	Cr 267.716†	-53.1	0.2	0.0014	ug/L	0.0014	ppb	12:06:10
3	Cu 324.752†	8513.5	137.4	0.3313	ug/L	0.3313	ppb	12:05:50
3	Mn 257.610†	1105.8	78.1	0.0439	ug/L	0.0439	ppb	12:05:50
3	Mo 202.031†	42.9	14.0	0.3083	ug/L	0.3083	ppb	12:06:10
3	Ni 231.604†	273.7	-3.8	-0.0386	ug/L	-0.0386	ppb	12:06:10
3	P 214.914†	769.9	-11.2	-1.7139	ug/L	-1.7139	ppb	12:06:10
3	Pb 220.353†	-131.2	-24.7	-1.0469	ug/L	-1.0469	ppb	12:06:10
3	S 181.975 Axial†	149.3	-10.4	-3.3780	ug/L	-3.3780	ppb	12:06:10
3	Sb 206.836†	130.9	1.9	0.1759	ug/L	0.1759	ppb	12:06:10
3	Se 196.026†	-55.9	3.2	0.5021	ug/L	0.5021	ppb	12:06:10
3	Si 251.611†	1065.4	155.8	2.6576	ug/L	2.6576	ppb	12:06:10
3	Sn 189.927†	-10.1	-0.1	-0.0023	ug/L	-0.0023	ppb	12:06:10
3	Ti 334.940†	-1554.9	-142.5	-0.1847	ug/L	-0.1847	ppb	12:05:50
3	Tl 190.801†	-119.9	15.5	1.1472	ug/L	1.1472	ppb	12:06:10
3	U 409.014†	5351.6	93.7	3.8348	ug/L	3.8348	ppb	12:05:50
3	V 292.402†	-2446.9	-1.7	0.0010	ug/L	0.0010	ppb	12:05:50
3	Zn 213.857†	2034.0	47.9	0.1553	ug/L	0.1553	ppb	12:06:10
3	SiO2†	1103.8	150.7	5.4710	ug/L	5.4710	ppb	12:06:25

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	974857.5	97.512	%	0.2926				0.30%
Sc Radial	100517.4	95.7	%	0.98				1.02%
Y 371.029	827293.5	97.598	%	0.2168				0.22%
Y RADIAL	87597.8	96.00	%	0.841				0.88%
Ag 328.068†	13.7	0.0448	ug/L	0.03847	0.0448	ppb	0.03847	85.89%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	5.6	0.6294	ug/L	3.43766	0.6294	ppb	3.43766	546.14%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-10.1	-1.1095	ug/L	1.29194	-1.1095	ppb	1.29194	116.44%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	34.1	0.4516	ug/L	0.56604	0.4516	ppb	0.56604	125.35%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	6.0	0.0169	ug/L	0.03273	0.0169	ppb	0.03273	193.53%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-5.5	-0.0020	ug/L	0.01942	-0.0020	ppb	0.01942	974.40%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	163.0	6.4908	ug/L	0.84836	6.4908	ppb	0.84836	13.07%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                -5.1     -0.0259 ug/L       0.06226     -0.0259 ppb        0.06226 240.85%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 1.6      0.0145 ug/L       0.12119      0.0145 ppb        0.12119 836.11%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 0.4      0.0024 ug/L       0.20365      0.0024 ppb        0.20365 >999.9%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               174.9      0.4169 ug/L       0.15492      0.4169 ppb        0.15492  37.16%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          6.8      0.7240 ug/L       0.76435      0.7240 ppb        0.76435 105.57%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         177.4      35.626 ug/L        8.1612      35.626 ppb         8.1612  22.91%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             9.8      4.5623 ug/L       2.36657      4.5623 ppb        2.36657  51.87%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                97.3      0.0546 ug/L       0.01349      0.0546 ppb        0.01349  24.71%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                17.9      0.3919 ug/L       0.12649      0.3919 ppb        0.12649  32.28%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -817.8     -48.371 ug/L        4.4639     -48.371 ppb         4.4639   9.23%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 3.4      0.0348 ug/L       0.06673      0.0348 ppb        0.06673 191.97%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -12.1     -1.8634 ug/L       0.30431     -1.8634 ppb        0.30431  16.33%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -30.5     -1.2982 ug/L       0.21888     -1.2982 ppb        0.21888  16.86%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -12.4     -4.0547 ug/L       1.55333     -4.0547 ppb        1.55333  38.31%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 9.2      0.8354 ug/L       0.75824      0.8354 ppb        0.75824  90.77%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -4.8     -0.7419 ug/L       1.93471     -0.7419 ppb        1.93471 260.79%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               160.4      2.7361 ug/L       0.10435      2.7361 ppb        0.10435   3.81%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 5.9      0.2782 ug/L       0.71961      0.2782 ppb        0.71961 258.62%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -178.8     -0.1548 ug/L       0.07863     -0.1548 ppb        0.07863  50.79%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -128.9     -0.1702 ug/L       0.01277     -0.1702 ppb        0.01277   7.50%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                20.2      1.4968 ug/L       0.79223      1.4968 ppb        0.79223  52.93%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                259.6      10.627 ug/L        5.8985      10.627 ppb         5.8985  55.51%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -42.3     -0.2094 ug/L       0.18976     -0.2094 ppb        0.18976  90.64%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                58.7      0.1898 ug/L       0.03853      0.1898 ppb        0.03853  20.30%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     158.9      5.7672 ug/L       0.89129      5.7672 ppb        0.89129  15.45%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 6 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 3/6/2008 12:37:20**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	101733.0	101733.0	96.9	%			12:39:17
1	Y RADIAL	88062.8	88062.8	96.51	%			12:39:17
1	Al 396.153Radial†	44888.3	45763.8	5223.8	ug/L	5223.8	ppb	12:39:17
1	Ca 317.933Radial†	122917.3	126140.5	5022.8	ug/L	5022.8	ppb	12:39:17
1	Fe 238.204 Radial†	44701.2	46080.8	4950.2	ug/L	4950.2	ppb	12:39:17
1	K 766.490 Radial†	28152.6	25650.3	5151.9	ug/L	5151.9	ppb	12:39:17
1	Mg 279.077 IEC†	10633.2	10895.3	5055.3	ug/L	5055.3	ppb	12:39:17
1	Na 589.592 Radial†	161738.3	168263.3	9952.7	ug/L	9952.7	ppb	12:39:12
1	Sr 421.552†	565211.2	585289.9	505.89	ug/L	505.89	ppb	12:39:12
1	Sc 361.383	965172.8	965172.8	96.543	%			12:39:46
1	Y 371.029	811526.1	811526.1	95.738	%			12:39:46
1	Ag 328.068†	127929.7	131383.6	514.08	ug/L	514.08	ppb	12:39:46
1	As 188.979†	4285.2	4500.5	491.10	ug/L	491.10	ppb	12:39:51
1	B 249.677†	35880.0	37944.7	501.83	ug/L	501.83	ppb	12:39:46
1	Ba 233.527†	169267.4	175299.7	510.92	ug/L	510.92	ppb	12:39:46
1	Be 313.107†	1724264.6	1789723.3	509.75	ug/L	509.75	ppb	12:39:46
1	Cd 226.502†	96538.6	100217.9	507.18	ug/L	507.18	ppb	12:39:46
1	Co 228.616†	58046.2	60324.7	497.39	ug/L	497.39	ppb	12:39:51
1	Cr 267.716†	66409.2	68841.3	507.73	ug/L	507.73	ppb	12:39:46
1	Cu 324.752†	209562.1	208491.2	507.17	ug/L	507.17	ppb	12:39:46
1	Mn 257.610†	876005.5	906316.0	509.01	ug/L	509.01	ppb	12:39:46
1	Mo 202.031†	22121.9	22884.2	502.46	ug/L	502.46	ppb	12:39:51
1	Ni 231.604†	47275.7	48684.5	499.37	ug/L	499.37	ppb	12:39:51
1	P 214.914†	16827.7	16631.3	2398.5	ug/L	2398.5	ppb	12:39:51
1	Pb 220.353†	11257.9	11770.5	500.52	ug/L	500.52	ppb	12:39:51
1	S 181.975 Axial†	3072.1	3019.0	983.11	ug/L	983.11	ppb	12:39:51
1	Sb 206.836†	5450.0	5513.2	491.61	ug/L	491.61	ppb	12:39:51
1	Se 196.026†	3027.3	3196.1	508.43	ug/L	508.43	ppb	12:39:51
1	Si 251.611†	144028.0	148250.3	2526.3	ug/L	2526.3	ppb	12:39:46
1	Sn 189.927†	10182.0	10556.8	499.84	ug/L	499.84	ppb	12:39:51
1	Ti 334.940†	381155.9	396251.0	510.82	ug/L	510.82	ppb	12:39:46
1	Tl 190.801†	6385.9	6752.7	502.91	ug/L	502.91	ppb	12:39:51
1	U 409.014†	16984.9	12210.7	499.37	ug/L	499.37	ppb	12:39:46
1	V 292.402†	86503.1	92102.2	513.71	ug/L	513.71	ppb	12:39:46
1	Zn 213.857†	152681.4	156114.5	502.91	ug/L	502.91	ppb	12:39:46
1	SiO2†	143433.0	147589.6	5350.8	ug/L	5350.8	ppb	12:40:21
2	Sc Radial	99942.6	99942.6	95.2	%			12:39:27
2	Y RADIAL	86242.1	86242.1	94.52	%			12:39:27
2	Al 396.153Radial†	44809.7	46511.1	5309.2	ug/L	5309.2	ppb	12:39:27
2	Ca 317.933Radial†	122544.2	128021.0	5097.6	ug/L	5097.6	ppb	12:39:27
2	Fe 238.204 Radial†	44647.3	46850.7	5032.8	ug/L	5032.8	ppb	12:39:27
2	K 766.490 Radial†	28074.8	26089.0	5240.0	ug/L	5240.0	ppb	12:39:27
2	Mg 279.077 IEC†	10576.7	11032.6	5118.9	ug/L	5118.9	ppb	12:39:27
2	Na 589.592 Radial†	161917.2	171441.4	10141	ug/L	10141	ppb	12:39:22
2	Sr 421.552†	565449.8	595989.9	515.14	ug/L	515.14	ppb	12:39:22
2	Sc 361.383	954320.6	954320.6	95.458	%			12:39:58
2	Y 371.029	802844.8	802844.8	94.714	%			12:39:58
2	Ag 328.068†	126387.1	131274.4	513.67	ug/L	513.67	ppb	12:39:58
2	As 188.979†	4328.4	4596.2	501.56	ug/L	501.56	ppb	12:40:04
2	B 249.677†	35496.0	37965.0	502.09	ug/L	502.09	ppb	12:39:58
2	Ba 233.527†	167229.5	175158.6	510.51	ug/L	510.51	ppb	12:39:58
2	Be 313.107†	1700602.0	1785244.6	508.48	ug/L	508.48	ppb	12:39:58
2	Cd 226.502†	95311.5	100069.6	506.42	ug/L	506.42	ppb	12:39:58
2	Co 228.616†	57871.2	60825.1	501.53	ug/L	501.53	ppb	12:40:04
2	Cr 267.716†	65545.7	68719.0	506.82	ug/L	506.82	ppb	12:39:58
2	Cu 324.752†	206697.7	207958.9	505.87	ug/L	505.87	ppb	12:39:58
2	Mn 257.610†	864653.2	904741.9	508.13	ug/L	508.13	ppb	12:39:58
2	Mo 202.031†	22107.3	23129.4	507.85	ug/L	507.85	ppb	12:40:04
2	Ni 231.604†	47181.5	49142.7	504.07	ug/L	504.07	ppb	12:40:04

2	P 214.914†	16779.2	16778.6	2420.6	ug/L	2420.6	ppb	12:40:04
2	Pb 220.353†	11163.8	11804.6	501.98	ug/L	501.98	ppb	12:40:04
2	S 181.975 Axial†	3074.7	3057.9	995.76	ug/L	995.76	ppb	12:40:04
2	Sb 206.836†	5521.7	5652.5	504.11	ug/L	504.11	ppb	12:40:04
2	Se 196.026†	3007.8	3211.3	511.02	ug/L	511.02	ppb	12:40:04
2	Si 251.611†	141903.1	147720.7	2517.1	ug/L	2517.1	ppb	12:39:58
2	Sn 189.927†	10146.2	10639.2	503.74	ug/L	503.74	ppb	12:40:04
2	Ti 334.940†	376253.4	395604.9	510.00	ug/L	510.00	ppb	12:39:58
2	Tl 190.801†	6357.3	6798.0	506.23	ug/L	506.23	ppb	12:40:04
2	U 409.014†	16913.4	12335.9	504.50	ug/L	504.50	ppb	12:39:58
2	V 292.402†	85439.0	92006.4	513.24	ug/L	513.24	ppb	12:39:58
2	Zn 213.857†	150658.2	155793.5	501.82	ug/L	501.82	ppb	12:39:58
2	SiO2†	142759.9	148574.0	5386.5	ug/L	5386.5	ppb	12:40:26
3	Sc Radial	101283.7	101283.7	96.5	%			12:39:37
3	Y RADIAL	87515.8	87515.8	95.91	%			12:39:37
3	Al 396.153Radial†	45442.5	46543.9	5313.1	ug/L	5313.1	ppb	12:39:37
3	Ca 317.933Radial†	124226.7	128060.5	5099.2	ug/L	5099.2	ppb	12:39:37
3	Fe 238.204 Radial†	45370.1	46978.8	5046.4	ug/L	5046.4	ppb	12:39:37
3	K 766.490 Radial†	28466.9	26105.0	5243.2	ug/L	5243.2	ppb	12:39:37
3	Mg 279.077 IEC†	10741.9	11056.7	5130.0	ug/L	5130.0	ppb	12:39:37
3	Na 589.592 Radial†	162637.8	169936.1	10052	ug/L	10052	ppb	12:39:32
3	Sr 421.552†	569226.7	592039.8	511.72	ug/L	511.72	ppb	12:39:32
3	Sc 361.383	967563.5	967563.5	96.783	%			12:40:11
3	Y 371.029	812815.4	812815.4	95.890	%			12:40:11
3	Ag 328.068†	128197.2	131332.6	513.90	ug/L	513.90	ppb	12:40:11
3	As 188.979†	4323.0	4528.6	494.17	ug/L	494.17	ppb	12:40:16
3	B 249.677†	36044.5	38022.8	502.86	ug/L	502.86	ppb	12:40:11
3	Ba 233.527†	170001.0	175624.5	511.87	ug/L	511.87	ppb	12:40:11
3	Be 313.107†	1731165.0	1792440.3	510.53	ug/L	510.53	ppb	12:40:11
3	Cd 226.502†	97074.4	100524.4	508.72	ug/L	508.72	ppb	12:40:11
3	Co 228.616†	58434.9	60577.8	499.48	ug/L	499.48	ppb	12:40:16
3	Cr 267.716†	66847.5	69124.3	509.81	ug/L	509.81	ppb	12:40:11
3	Cu 324.752†	209805.5	208206.4	506.48	ug/L	506.48	ppb	12:40:11
3	Mn 257.610†	880094.8	908299.3	510.13	ug/L	510.13	ppb	12:40:11
3	Mo 202.031†	22269.7	22980.3	504.58	ug/L	504.58	ppb	12:40:16
3	Ni 231.604†	47557.9	48855.1	501.12	ug/L	501.12	ppb	12:40:16
3	P 214.914†	16949.7	16714.2	2410.9	ug/L	2410.9	ppb	12:40:16
3	Pb 220.353†	11432.3	11921.9	506.95	ug/L	506.95	ppb	12:40:16
3	S 181.975 Axial†	3107.5	3047.7	992.46	ug/L	992.46	ppb	12:40:16
3	Sb 206.836†	5540.0	5592.2	498.67	ug/L	498.67	ppb	12:40:16
3	Se 196.026†	3052.8	3214.7	511.58	ug/L	511.58	ppb	12:40:16
3	Si 251.611†	144544.9	148415.7	2529.0	ug/L	2529.0	ppb	12:40:11
3	Sn 189.927†	10206.0	10555.5	499.78	ug/L	499.78	ppb	12:40:16
3	Ti 334.940†	382233.0	396388.4	511.00	ug/L	511.00	ppb	12:40:11
3	Tl 190.801†	6395.9	6746.7	502.46	ug/L	502.46	ppb	12:40:16
3	U 409.014†	17206.1	12395.8	506.93	ug/L	506.93	ppb	12:40:11
3	V 292.402†	86794.3	92181.7	514.17	ug/L	514.17	ppb	12:40:11
3	Zn 213.857†	153296.2	156359.0	503.68	ug/L	503.68	ppb	12:40:11
3	SiO2†	144531.9	148358.0	5378.7	ug/L	5378.7	ppb	12:40:32

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	962352.3	96.261	%	0.7060				0.73%
Sc Radial	100986.4	96.2	%	0.89				0.92%
Y 371.029	809062.1	95.447	%	0.6397				0.67%
Y RADIAL	87273.6	95.65	%	1.024				1.07%
Ag 328.068†	131330.2	513.88	ug/L	0.203	513.88	ppb	0.203	0.04%
QC value within limits for Ag 328.068 Recovery = 102.78%								
Al 396.153Radial†	46272.9	5282.1	ug/L	50.47	5282.1	ppb	50.47	0.96%
QC value within limits for Al 396.153Radial Recovery = 105.64%								
As 188.979†	4541.8	495.61	ug/L	5.373	495.61	ppb	5.373	1.08%
QC value within limits for As 188.979 Recovery = 99.12%								
B 249.677†	37977.5	502.26	ug/L	0.535	502.26	ppb	0.535	0.11%
QC value within limits for B 249.677 Recovery = 100.45%								
Ba 233.527†	175360.9	511.10	ug/L	0.696	511.10	ppb	0.696	0.14%
QC value within limits for Ba 233.527 Recovery = 102.22%								
Be 313.107†	1789136.1	509.59	ug/L	1.034	509.59	ppb	1.034	0.20%
QC value within limits for Be 313.107 Recovery = 101.92%								
Ca 317.933Radial†	127407.3	5073.2	ug/L	43.69	5073.2	ppb	43.69	0.86%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.46%
Cd 226.502†           100270.7      507.44 ug/L         1.174      507.44 ppb          1.174   0.23%
   QC value within limits for Cd 226.502  Recovery = 101.49%
Co 228.616†            60575.8      499.47 ug/L         2.070      499.47 ppb          2.070   0.41%
   QC value within limits for Co 228.616  Recovery = 99.89%
Cr 267.716†            68894.9      508.12 ug/L         1.532      508.12 ppb          1.532   0.30%
   QC value within limits for Cr 267.716  Recovery = 101.62%
Cu 324.752†           208218.8      506.51 ug/L         0.648      506.51 ppb          0.648   0.13%
   QC value within limits for Cu 324.752  Recovery = 101.30%
Fe 238.204 Radial†     46636.8      5009.8 ug/L         52.07      5009.8 ppb          52.07   1.04%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.20%
K 766.490 Radial†      25948.1      5211.7 ug/L         51.83      5211.7 ppb          51.83   0.99%
   QC value within limits for K 766.490 Radial  Recovery = 104.23%
Mg 279.077 IEC†        10994.9      5101.4 ug/L         40.32      5101.4 ppb          40.32   0.79%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.03%
Mn 257.610†           906452.4      509.09 ug/L         1.001      509.09 ppb          1.001   0.20%
   QC value within limits for Mn 257.610  Recovery = 101.82%
Mo 202.031†            22997.9      504.96 ug/L         2.714      504.96 ppb          2.714   0.54%
   QC value within limits for Mo 202.031  Recovery = 100.99%
Na 589.592 Radial†    169880.3       10048 ug/L          94.0       10048 ppb           94.0   0.94%
   QC value within limits for Na 589.592 Radial  Recovery = 100.48%
Ni 231.604†            48894.1      501.52 ug/L         2.376      501.52 ppb          2.376   0.47%
   QC value within limits for Ni 231.604  Recovery = 100.30%
P 214.914†             16708.0      2410.0 ug/L         11.04      2410.0 ppb          11.04   0.46%
   QC value within limits for P 214.914  Recovery = 96.40%
Pb 220.353†            11832.3      503.15 ug/L         3.369      503.15 ppb          3.369   0.67%
   QC value within limits for Pb 220.353  Recovery = 100.63%
S 181.975 Axial†        3041.5      990.44 ug/L         6.564      990.44 ppb          6.564   0.66%
   QC value within limits for S 181.975 Axial  Recovery = 99.04%
Sb 206.836†             5586.0      498.13 ug/L         6.264      498.13 ppb          6.264   1.26%
   QC value within limits for Sb 206.836  Recovery = 99.63%
Se 196.026†             3207.4      510.34 ug/L         1.683      510.34 ppb          1.683   0.33%
   QC value within limits for Se 196.026  Recovery = 102.07%
Si 251.611†           148128.9      2524.1 ug/L          6.24      2524.1 ppb           6.24   0.25%
   QC value within limits for Si 251.611  Recovery = 100.97%
Sn 189.927†            10583.9      501.12 ug/L         2.271      501.12 ppb          2.271   0.45%
   QC value within limits for Sn 189.927  Recovery = 100.22%
Sr 421.552†           591106.5      510.92 ug/L         4.677      510.92 ppb          4.677   0.92%
   QC value within limits for Sr 421.552  Recovery = 102.18%
Ti 334.940†           396081.5      510.61 ug/L         0.537      510.61 ppb          0.537   0.11%
   QC value within limits for Ti 334.940  Recovery = 102.12%
Tl 190.801†             6765.8      503.87 ug/L         2.063      503.87 ppb          2.063   0.41%
   QC value within limits for Tl 190.801  Recovery = 100.77%
U 409.014†             12314.1      503.60 ug/L         3.863      503.60 ppb          3.863   0.77%
   QC value within limits for U 409.014  Recovery = 100.72%
V 292.402†             92096.8      513.71 ug/L         0.468      513.71 ppb          0.468   0.09%
   QC value within limits for V 292.402  Recovery = 102.74%
Zn 213.857†           156089.0      502.81 ug/L         0.932      502.81 ppb          0.932   0.19%
   QC value within limits for Zn 213.857  Recovery = 100.56%
SiO2†                 148173.8      5372.0 ug/L         18.73      5372.0 ppb          18.73   0.35%
   QC value within limits for SiO2  Recovery = 100.46%
All analyte(s) passed QC.
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Sequence No.: 7 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 3/6/2008 12:42:41**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	98810.8	98810.8	94.1	%			12:44:34
1	Y RADIAL	86054.3	86054.3	94.31	%			12:44:34
1	Al 396.153Radial†	544.2	16.0	1.8063	ug/L	1.8063	ppb	12:44:34
1	Ca 317.933Radial†	857.7	197.4	7.8612	ug/L	7.8612	ppb	12:44:54
1	Fe 238.204 Radial†	53.9	5.2	0.5474	ug/L	0.5474	ppb	12:44:54
1	K 766.490 Radial†	3439.5	250.6	50.326	ug/L	50.326	ppb	12:44:34
1	Mg 279.077 IEC†	78.8	5.4	2.4993	ug/L	2.4993	ppb	12:44:54
1	Na 589.592 Radial†	-2184.0	-976.1	-57.736	ug/L	-57.736	ppb	12:44:34
1	Sr 421.552†	-2091.8	-248.0	-0.2146	ug/L	-0.2146	ppb	12:44:34
1	Sc 361.383	953857.2	953857.2	95.412	%			12:45:51
1	Y 371.029	810000.1	810000.1	95.558	%			12:45:51
1	Ag 328.068†	1096.8	23.1	0.0678	ug/L	0.0678	ppb	12:45:51
1	As 188.979†	-73.3	-14.9	-1.6385	ug/L	-1.6385	ppb	12:46:11
1	B 249.677†	-664.6	83.5	1.1048	ug/L	1.1048	ppb	12:45:51
1	Ba 233.527†	65.8	40.8	0.1169	ug/L	0.1169	ppb	12:46:11
1	Be 313.107†	-3568.9	-16.2	-0.0049	ug/L	-0.0049	ppb	12:45:51
1	Cd 226.502†	-217.9	-5.5	-0.0277	ug/L	-0.0277	ppb	12:46:11
1	Co 228.616†	-207.8	-17.6	-0.1431	ug/L	-0.1431	ppb	12:46:11
1	Cr 267.716†	-65.3	-13.9	-0.1038	ug/L	-0.1038	ppb	12:46:11
1	Cu 324.752†	8455.4	288.2	0.6805	ug/L	0.6805	ppb	12:45:51
1	Mn 257.610†	1110.3	110.3	0.0619	ug/L	0.0619	ppb	12:45:51
1	Mo 202.031†	51.4	24.1	0.5278	ug/L	0.5278	ppb	12:46:11
1	Ni 231.604†	268.0	-2.9	-0.0298	ug/L	-0.0298	ppb	12:46:11
1	P 214.914†	756.1	-6.5	-1.0615	ug/L	-1.0615	ppb	12:46:11
1	Pb 220.353†	-126.2	-22.7	-0.9757	ug/L	-0.9757	ppb	12:46:11
1	S 181.975 Axial†	155.4	-0.2	-0.0575	ug/L	-0.0575	ppb	12:46:11
1	Sb 206.836†	128.4	2.6	0.2580	ug/L	0.2580	ppb	12:46:11
1	Se 196.026†	-64.5	-7.2	-1.1026	ug/L	-1.1026	ppb	12:46:11
1	Si 251.611†	1120.8	240.3	4.0988	ug/L	4.0988	ppb	12:46:11
1	Sn 189.927†	11.4	22.3	1.0540	ug/L	1.0540	ppb	12:46:11
1	Ti 334.940†	-1482.2	-105.0	-0.1458	ug/L	-0.1458	ppb	12:45:51
1	Tl 190.801†	-119.9	12.5	0.9313	ug/L	0.9313	ppb	12:46:11
1	U 409.014†	5729.6	622.9	25.501	ug/L	25.501	ppb	12:45:51
1	V 292.402†	-2536.3	-156.2	-0.8089	ug/L	-0.8089	ppb	12:45:51
1	Zn 213.857†	2038.5	103.1	0.3344	ug/L	0.3344	ppb	12:46:11
1	SiO2†	1139.4	215.4	7.8168	ug/L	7.8168	ppb	12:47:08
2	Sc Radial	99379.1	99379.1	94.7	%			12:44:59
2	Y RADIAL	86519.2	86519.2	94.82	%			12:44:59
2	Al 396.153Radial†	516.2	-16.9	-1.9486	ug/L	-1.9486	ppb	12:44:59
2	Ca 317.933Radial†	868.2	203.3	8.0951	ug/L	8.0951	ppb	12:45:19
2	Fe 238.204 Radial†	51.2	1.9	0.2029	ug/L	0.2029	ppb	12:45:19
2	K 766.490 Radial†	3477.3	269.6	54.148	ug/L	54.148	ppb	12:44:59
2	Mg 279.077 IEC†	75.0	0.8	0.3774	ug/L	0.3774	ppb	12:45:19
2	Na 589.592 Radial†	-2218.1	-998.9	-59.084	ug/L	-59.084	ppb	12:44:59
2	Sr 421.552†	-2085.2	-228.2	-0.1976	ug/L	-0.1976	ppb	12:44:59
2	Sc 361.383	967657.9	967657.9	96.792	%			12:46:17
2	Y 371.029	821187.1	821187.1	96.877	%			12:46:17
2	Ag 328.068†	1141.4	52.9	0.1907	ug/L	0.1907	ppb	12:46:17
2	As 188.979†	-66.6	-6.9	-0.7668	ug/L	-0.7668	ppb	12:46:37
2	B 249.677†	-620.1	139.4	1.8444	ug/L	1.8444	ppb	12:46:17
2	Ba 233.527†	49.4	22.9	0.0660	ug/L	0.0660	ppb	12:46:37
2	Be 313.107†	-3533.6	73.7	0.0203	ug/L	0.0203	ppb	12:46:17
2	Cd 226.502†	-193.3	23.3	0.1179	ug/L	0.1179	ppb	12:46:37
2	Co 228.616†	-201.2	-7.7	-0.0624	ug/L	-0.0624	ppb	12:46:37
2	Cr 267.716†	-53.4	-0.7	-0.0056	ug/L	-0.0056	ppb	12:46:37
2	Cu 324.752†	8545.2	254.5	0.6045	ug/L	0.6045	ppb	12:46:17
2	Mn 257.610†	1153.6	138.5	0.0777	ug/L	0.0777	ppb	12:46:17
2	Mo 202.031†	35.4	6.8	0.1493	ug/L	0.1493	ppb	12:46:37
2	Ni 231.604†	251.7	-23.7	-0.2434	ug/L	-0.2434	ppb	12:46:37

2	P 214.914†	767.6	-6.0	-0.9724	ug/L	-0.9724	ppb	12:46:37
2	Pb 220.353†	-60.0	47.5	2.0040	ug/L	2.0040	ppb	12:46:37
2	S 181.975 Axial†	147.6	-10.6	-3.4482	ug/L	-3.4482	ppb	12:46:37
2	Sb 206.836†	155.2	28.3	2.5497	ug/L	2.5497	ppb	12:46:37
2	Se 196.026†	-74.5	-16.6	-2.5553	ug/L	-2.5553	ppb	12:46:37
2	Si 251.611†	1101.5	203.6	3.4777	ug/L	3.4777	ppb	12:46:37
2	Sn 189.927†	-11.0	-1.1	-0.0524	ug/L	-0.0524	ppb	12:46:37
2	Ti 334.940†	-1596.7	-201.1	-0.2664	ug/L	-0.2664	ppb	12:46:17
2	Tl 190.801†	-123.0	11.1	0.8254	ug/L	0.8254	ppb	12:46:37
2	U 409.014†	5640.6	445.2	18.226	ug/L	18.226	ppb	12:46:17
2	V 292.402†	-2480.9	-61.1	-0.3011	ug/L	-0.3011	ppb	12:46:17
2	Zn 213.857†	2016.2	49.6	0.1620	ug/L	0.1620	ppb	12:46:37
2	SiO2†	1191.5	252.2	9.1697	ug/L	9.1697	ppb	12:47:13
3	Sc Radial	99998.7	99998.7	95.2	%			12:45:24
3	Y RADIAL	87051.2	87051.2	95.40	%			12:45:24
3	Al 396.153Radial†	560.5	26.2	2.9901	ug/L	2.9901	ppb	12:45:24
3	Ca 317.933Radial†	858.4	187.3	7.4582	ug/L	7.4582	ppb	12:45:44
3	Fe 238.204 Radial†	51.8	2.2	0.2357	ug/L	0.2357	ppb	12:45:44
3	K 766.490 Radial†	3529.5	301.7	60.596	ug/L	60.596	ppb	12:45:24
3	Mg 279.077 IEC†	65.8	-9.4	-4.3295	ug/L	-4.3295	ppb	12:45:44
3	Na 589.592 Radial†	-2197.6	-962.9	-56.954	ug/L	-56.954	ppb	12:45:24
3	Sr 421.552†	-2029.4	-156.0	-0.1351	ug/L	-0.1351	ppb	12:45:24
3	Sc 361.383	966609.8	966609.8	96.687	%			12:46:43
3	Y 371.029	822006.3	822006.3	96.974	%			12:46:43
3	Ag 328.068†	1106.5	18.0	0.0611	ug/L	0.0611	ppb	12:46:43
3	As 188.979†	-66.0	-6.4	-0.7014	ug/L	-0.7014	ppb	12:47:03
3	B 249.677†	-687.3	69.2	0.9155	ug/L	0.9155	ppb	12:46:43
3	Ba 233.527†	47.6	21.1	0.0596	ug/L	0.0596	ppb	12:47:03
3	Be 313.107†	-3634.5	-34.7	-0.0101	ug/L	-0.0101	ppb	12:46:43
3	Cd 226.502†	-218.8	-3.4	-0.0172	ug/L	-0.0172	ppb	12:47:03
3	Co 228.616†	-205.6	-12.4	-0.1009	ug/L	-0.1009	ppb	12:47:03
3	Cr 267.716†	-58.4	-5.9	-0.0451	ug/L	-0.0451	ppb	12:47:03
3	Cu 324.752†	8492.7	209.8	0.5037	ug/L	0.5037	ppb	12:46:43
3	Mn 257.610†	1137.4	123.0	0.0691	ug/L	0.0691	ppb	12:46:43
3	Mo 202.031†	46.8	18.6	0.4086	ug/L	0.4086	ppb	12:47:03
3	Ni 231.604†	289.4	15.5	0.1591	ug/L	0.1591	ppb	12:47:03
3	P 214.914†	790.6	18.7	2.7081	ug/L	2.7081	ppb	12:47:03
3	Pb 220.353†	-121.2	-15.8	-0.6734	ug/L	-0.6734	ppb	12:47:03
3	S 181.975 Axial†	153.0	-4.8	-1.5749	ug/L	-1.5749	ppb	12:47:03
3	Sb 206.836†	136.4	9.1	0.8223	ug/L	0.8223	ppb	12:47:03
3	Se 196.026†	-80.8	-23.2	-3.5794	ug/L	-3.5794	ppb	12:47:03
3	Si 251.611†	1083.2	185.9	3.1717	ug/L	3.1717	ppb	12:47:03
3	Sn 189.927†	6.6	17.1	0.8081	ug/L	0.8081	ppb	12:47:03
3	Ti 334.940†	-1478.4	-80.5	-0.1066	ug/L	-0.1066	ppb	12:46:43
3	Tl 190.801†	-138.0	-4.5	-0.3346	ug/L	-0.3346	ppb	12:47:03
3	U 409.014†	5398.1	200.7	8.2194	ug/L	8.2194	ppb	12:46:43
3	V 292.402†	-2572.2	-158.3	-0.8548	ug/L	-0.8548	ppb	12:46:43
3	Zn 213.857†	2047.4	84.1	0.2719	ug/L	0.2719	ppb	12:47:03
3	SiO2†	1120.3	179.9	6.5291	ug/L	6.5291	ppb	12:47:18

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	962708.3	96.297	%	0.7685				0.80%
Sc Radial	99396.2	94.7	%	0.57				0.60%
Y 371.029	817731.2	96.470	%	0.7913				0.82%
Y RADIAL	86541.6	94.84	%	0.547				0.58%
Ag 328.068†	31.3	0.1065	ug/L	0.07295	0.1065	ppb	0.07295	68.50%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	8.4	0.9493	ug/L	2.57852	0.9493	ppb	2.57852	271.63%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-9.4	-1.0356	ug/L	0.52317	-1.0356	ppb	0.52317	50.52%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	97.4	1.2882	ug/L	0.49087	1.2882	ppb	0.49087	38.10%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	28.3	0.0808	ug/L	0.03140	0.0808	ppb	0.03140	38.86%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	7.6	0.0017	ug/L	0.01626	0.0017	ppb	0.01626	932.77%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	196.0	7.8048	ug/L	0.32220	7.8048	ppb	0.32220	4.13%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                4.8      0.0244 ug/L       0.08118      0.0244 ppb        0.08118 333.21%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -12.6     -0.1021 ug/L       0.04035     -0.1021 ppb        0.04035  39.50%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -6.8     -0.0515 ug/L       0.04944     -0.0515 ppb        0.04944  95.96%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              250.8      0.5963 ug/L       0.08866      0.5963 ppb        0.08866  14.87%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         3.1      0.3287 ug/L       0.19017      0.3287 ppb        0.19017  57.86%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        274.0      55.023 ug/L        5.1906      55.023 ppb         5.1906   9.43%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -1.1     -0.4843 ug/L       3.49499     -0.4843 ppb        3.49499 721.68%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              123.9      0.0696 ug/L       0.00791      0.0696 ppb        0.00791  11.37%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               16.5      0.3619 ug/L       0.19353      0.3619 ppb        0.19353  53.48%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -979.3     -57.925 ug/L        1.0775     -57.925 ppb         1.0775   1.86%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -3.7     -0.0381 ug/L       0.20137     -0.0381 ppb        0.20137 529.09%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 2.1      0.2247 ug/L       2.15113      0.2247 ppb        2.15113 957.31%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                3.0      0.1183 ug/L       1.64001      0.1183 ppb        1.64001 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -5.2     -1.6935 ug/L       1.69848     -1.6935 ppb        1.69848 100.29%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               13.4      1.2100 ug/L       1.19402      1.2100 ppb        1.19402  98.68%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -15.7     -2.4124 ug/L       1.24455     -2.4124 ppb        1.24455  51.59%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              209.9      3.5827 ug/L       0.47240      3.5827 ppb        0.47240  13.19%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               12.7      0.6032 ug/L       0.58093      0.6032 ppb        0.58093  96.30%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             -210.7     -0.1824 ug/L       0.04187     -0.1824 ppb        0.04187  22.95%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             -128.9     -0.1729 ug/L       0.08329     -0.1729 ppb        0.08329  48.17%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                6.4      0.4741 ug/L       0.70230      0.4741 ppb        0.70230 148.15%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               422.9      17.316 ug/L        8.6768      17.316 ppb         8.6768  50.11%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -125.2     -0.6549 ug/L       0.30728     -0.6549 ppb        0.30728  46.92%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               78.9      0.2561 ug/L       0.08728      0.2561 ppb        0.08728  34.08%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    215.8      7.8385 ug/L       1.32043      7.8385 ppb        1.32043  16.85%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 3/6/2008 13:01:54 **Plasma On Time: 3/3/2008 06:20:28**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\030608.sif
Batch ID:
Results Data Set: 030608A
Results Library: C:\pe\Optima3\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location: 38**
Sample ID: 1201524624|730799|1 **Date Collected: 3/6/2008 13:01:56**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: 1201524624|730799|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	100984.7	100984.7	96.2	%			13:03:48
1	Y RADIAL	87662.4	87662.4	96.07	%			13:03:48
1	Al 396.153Radial†	563.7	23.8	2.7141	ug/L	2.7141	ppb	13:03:48
1	Ca 317.933Radial†	925.6	248.4	9.8902	ug/L	9.8902	ppb	13:04:08
1	Fe 238.204 Radial†	62.9	13.2	1.4144	ug/L	1.4144	ppb	13:04:08
1	K 766.490 Radial†	3313.6	41.1	8.2464	ug/L	8.2464	ppb	13:03:48
1	Mg 279.077 IEC†	93.5	18.8	8.7321	ug/L	8.7321	ppb	13:04:08
1	Na 589.592 Radial†	-2023.1	-758.9	-44.891	ug/L	-44.891	ppb	13:03:48
1	Sr 421.552†	-2012.2	-117.3	-0.1017	ug/L	-0.1017	ppb	13:03:48
1	Sc 361.383	947740.8	947740.8	94.800	%			13:05:06
1	Y 371.029	803907.6	803907.6	94.839	%			13:05:06
1	Ag 328.068†	1091.3	24.8	0.0838	ug/L	0.0838	ppb	13:05:06
1	As 188.979†	-70.6	-12.6	-1.3766	ug/L	-1.3766	ppb	13:05:26
1	B 249.677†	-803.5	-67.6	-0.8941	ug/L	-0.8941	ppb	13:05:06
1	Ba 233.527†	38.5	12.5	0.0348	ug/L	0.0348	ppb	13:05:26
1	Be 313.107†	-3584.5	-56.7	-0.0166	ug/L	-0.0166	ppb	13:05:06
1	Cd 226.502†	-201.9	10.0	0.0506	ug/L	0.0506	ppb	13:05:26
1	Co 228.616†	-204.1	-15.1	-0.1234	ug/L	-0.1234	ppb	13:05:26
1	Cr 267.716†	-20.7	32.7	0.2395	ug/L	0.2395	ppb	13:05:26
1	Cu 324.752†	8404.9	292.0	0.6992	ug/L	0.6992	ppb	13:05:06
1	Mn 257.610†	1100.1	107.1	0.0601	ug/L	0.0601	ppb	13:05:06
1	Mo 202.031†	37.4	9.6	0.2110	ug/L	0.2110	ppb	13:05:26
1	Ni 231.604†	232.1	-39.0	-0.4000	ug/L	-0.4000	ppb	13:05:26
1	P 214.914†	803.7	48.8	7.1514	ug/L	7.1514	ppb	13:05:26
1	Pb 220.353†	-131.4	-29.1	-1.2392	ug/L	-1.2392	ppb	13:05:26
1	S 181.975 Axial†	150.9	-3.9	-1.2699	ug/L	-1.2699	ppb	13:05:26
1	Sb 206.836†	133.2	8.5	0.7725	ug/L	0.7725	ppb	13:05:26
1	Se 196.026†	-67.8	-11.1	-1.7063	ug/L	-1.7063	ppb	13:05:26
1	Si 251.611†	1592.4	745.3	12.737	ug/L	12.737	ppb	13:05:26
1	Sn 189.927†	14.2	25.3	1.1955	ug/L	1.1955	ppb	13:05:26
1	Ti 334.940†	-1514.4	-148.9	-0.1972	ug/L	-0.1972	ppb	13:05:06
1	Tl 190.801†	-116.8	15.0	1.1122	ug/L	1.1122	ppb	13:05:26
1	U 409.014†	5427.9	343.3	14.055	ug/L	14.055	ppb	13:05:06
1	V 292.402†	-2493.9	-128.7	-0.6823	ug/L	-0.6823	ppb	13:05:06
1	Zn 213.857†	2270.5	361.6	1.1771	ug/L	1.1771	ppb	13:05:26
1	SiO2†	1484.9	587.6	21.365	ug/L	21.365	ppb	13:06:22
2	Sc Radial	91813.2	91813.2	87.4	%			13:04:13
2	Y RADIAL	79609.7	79609.7	87.25	%			13:04:13
2	Al 396.153Radial†	511.3	22.4	2.5516	ug/L	2.5516	ppb	13:04:13
2	Ca 317.933Radial†	858.9	268.2	10.681	ug/L	10.681	ppb	13:04:33
2	Fe 238.204 Radial†	69.5	27.4	2.9231	ug/L	2.9231	ppb	13:04:33
2	K 766.490 Radial†	3452.1	543.6	109.18	ug/L	109.18	ppb	13:04:13
2	Mg 279.077 IEC†	85.1	18.9	8.7451	ug/L	8.7451	ppb	13:04:33
2	Na 589.592 Radial†	-2100.6	-1057.6	-62.556	ug/L	-62.556	ppb	13:04:13
2	Sr 421.552†	-1912.9	-212.8	-0.1843	ug/L	-0.1843	ppb	13:04:13
2	Sc 361.383	973042.3	973042.3	97.331	%			13:05:31
2	Y 371.029	824365.1	824365.1	97.252	%			13:05:31

2	Ag 328.068†	1030.7	-67.4	-0.2725	ug/L	-0.2725	ppb	13:05:31
2	As 188.979†	-68.5	-8.6	-0.9235	ug/L	-0.9235	ppb	13:05:51
2	B 249.677†	-911.8	-156.8	-2.0746	ug/L	-2.0746	ppb	13:05:31
2	Ba 233.527†	48.3	21.5	0.0609	ug/L	0.0609	ppb	13:05:51
2	Be 313.107†	-3677.4	-53.9	-0.0151	ug/L	-0.0151	ppb	13:05:31
2	Cd 226.502†	-224.8	-8.1	-0.0410	ug/L	-0.0410	ppb	13:05:51
2	Co 228.616†	-226.4	-32.4	-0.2656	ug/L	-0.2656	ppb	13:05:51
2	Cr 267.716†	-20.7	33.2	0.2430	ug/L	0.2430	ppb	13:05:51
2	Cu 324.752†	8486.0	144.9	0.3436	ug/L	0.3436	ppb	13:05:31
2	Mn 257.610†	1159.4	137.8	0.0775	ug/L	0.0775	ppb	13:05:31
2	Mo 202.031†	49.7	21.2	0.4657	ug/L	0.4657	ppb	13:05:51
2	Ni 231.604†	283.8	7.8	0.0807	ug/L	0.0807	ppb	13:05:51
2	P 214.914†	809.9	33.2	4.8765	ug/L	4.8765	ppb	13:05:51
2	Pb 220.353†	-128.9	-22.9	-0.9743	ug/L	-0.9743	ppb	13:05:51
2	S 181.975 Axial†	158.0	-0.7	-0.2404	ug/L	-0.2404	ppb	13:05:51
2	Sb 206.836†	156.7	29.0	2.6064	ug/L	2.6064	ppb	13:05:51
2	Se 196.026†	-47.1	12.0	1.8690	ug/L	1.8690	ppb	13:05:51
2	Si 251.611†	1379.1	482.5	8.2400	ug/L	8.2400	ppb	13:05:51
2	Sn 189.927†	29.8	40.8	1.9331	ug/L	1.9331	ppb	13:05:51
2	Ti 334.940†	-1352.7	58.8	0.0718	ug/L	0.0718	ppb	13:05:31
2	Tl 190.801†	-137.3	-2.9	-0.2083	ug/L	-0.2083	ppb	13:05:51
2	U 409.014†	5505.2	273.9	11.214	ug/L	11.214	ppb	13:05:31
2	V 292.402†	-2575.3	-143.9	-0.7693	ug/L	-0.7693	ppb	13:05:31
2	Zn 213.857†	2277.8	306.8	0.9960	ug/L	0.9960	ppb	13:05:51
2	SiO2†	1477.7	539.5	19.606	ug/L	19.606	ppb	13:06:27
3	Sc Radial	100228.7	100228.7	95.5	%			13:04:38
3	Y RADIAL	87041.9	87041.9	95.39	%			13:04:38
3	Al 396.153Radial†	519.5	-18.1	-2.0973	ug/L	-2.0973	ppb	13:04:38
3	Ca 317.933Radial†	923.8	253.8	10.105	ug/L	10.105	ppb	13:04:59
3	Fe 238.204 Radial†	74.8	26.2	2.8092	ug/L	2.8092	ppb	13:04:59
3	K 766.490 Radial†	3271.1	22.4	4.5070	ug/L	4.5070	ppb	13:04:38
3	Mg 279.077 IEC†	56.8	-18.9	-8.7368	ug/L	-8.7368	ppb	13:04:59
3	Na 589.592 Radial†	-2105.9	-861.6	-50.961	ug/L	-50.961	ppb	13:04:38
3	Sr 421.552†	-1928.9	-45.8	-0.0399	ug/L	-0.0399	ppb	13:04:38
3	Sc 361.383	971820.2	971820.2	97.208	%			13:05:57
3	Y 371.029	822885.6	822885.6	97.078	%			13:05:57
3	Ag 328.068†	1159.4	66.4	0.2510	ug/L	0.2510	ppb	13:05:57
3	As 188.979†	-78.8	-19.2	-2.0914	ug/L	-2.0914	ppb	13:06:17
3	B 249.677†	-874.4	-119.4	-1.5802	ug/L	-1.5802	ppb	13:05:57
3	Ba 233.527†	32.7	5.5	0.0158	ug/L	0.0158	ppb	13:06:17
3	Be 313.107†	-3580.2	41.4	0.0118	ug/L	0.0118	ppb	13:05:57
3	Cd 226.502†	-222.1	-5.6	-0.0284	ug/L	-0.0284	ppb	13:06:17
3	Co 228.616†	-200.0	-5.5	-0.0437	ug/L	-0.0437	ppb	13:06:17
3	Cr 267.716†	-35.8	17.7	0.1300	ug/L	0.1300	ppb	13:06:17
3	Cu 324.752†	8468.7	138.0	0.3276	ug/L	0.3276	ppb	13:05:57
3	Mn 257.610†	1139.3	118.6	0.0670	ug/L	0.0670	ppb	13:05:57
3	Mo 202.031†	55.9	27.7	0.6090	ug/L	0.6090	ppb	13:06:17
3	Ni 231.604†	234.3	-42.7	-0.4387	ug/L	-0.4387	ppb	13:06:17
3	P 214.914†	809.0	33.3	4.8913	ug/L	4.8913	ppb	13:06:17
3	Pb 220.353†	-107.4	-1.0	-0.0471	ug/L	-0.0471	ppb	13:06:17
3	S 181.975 Axial†	156.0	-2.6	-0.8386	ug/L	-0.8386	ppb	13:06:17
3	Sb 206.836†	148.5	20.8	1.8732	ug/L	1.8732	ppb	13:06:17
3	Se 196.026†	-67.6	-9.2	-1.4092	ug/L	-1.4092	ppb	13:06:17
3	Si 251.611†	1430.2	536.8	9.1670	ug/L	9.1670	ppb	13:06:17
3	Sn 189.927†	32.8	44.0	2.0841	ug/L	2.0841	ppb	13:06:17
3	Ti 334.940†	-1404.7	3.5	0.0010	ug/L	0.0010	ppb	13:05:57
3	Tl 190.801†	-115.6	19.3	1.4284	ug/L	1.4284	ppb	13:06:17
3	U 409.014†	5471.7	246.5	10.094	ug/L	10.094	ppb	13:05:57
3	V 292.402†	-2454.6	-23.1	-0.1025	ug/L	-0.1025	ppb	13:05:57
3	Zn 213.857†	2280.7	312.8	1.0195	ug/L	1.0195	ppb	13:06:17
3	SiO2†	1513.7	578.4	21.016	ug/L	21.016	ppb	13:06:33

Mean Data: 1201524624|730799|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	964201.1	96.446	%	1.4272				1.48%
Sc Radial	97675.5	93.0	%	4.85				5.21%
Y 371.029	817052.8	96.390	%	1.3458				1.40%
Y RADIAL	84771.4	92.90	%	4.911				5.29%
Ag 328.068†	7.9	0.0208	ug/L	0.26736	0.0208	ppb	0.26736	>999.9%

Al 396.153Radial†	9.4	1.0561	ug/L	2.73212	1.0561	ppb	2.73212 258.69%
As 188.979†	-13.5	-1.4638	ug/L	0.58882	-1.4638	ppb	0.58882 40.22%
B 249.677†	-114.6	-1.5163	ug/L	0.59281	-1.5163	ppb	0.59281 39.10%
Ba 233.527†	13.2	0.0372	ug/L	0.02262	0.0372	ppb	0.02262 60.83%
Be 313.107†	-23.1	-0.0066	ug/L	0.01596	-0.0066	ppb	0.01596 240.07%
Ca 317.933Radial†	256.8	10.225	ug/L	0.4092	10.225	ppb	0.4092 4.00%
Cd 226.502†	-1.2	-0.0063	ug/L	0.04964	-0.0063	ppb	0.04964 788.39%
Co 228.616†	-17.6	-0.1443	ug/L	0.11242	-0.1443	ppb	0.11242 77.93%
Cr 267.716†	27.9	0.2042	ug/L	0.06423	0.2042	ppb	0.06423 31.46%
Cu 324.752†	191.6	0.4568	ug/L	0.21007	0.4568	ppb	0.21007 45.99%
Fe 238.204 Radial†	22.3	2.3822	ug/L	0.84009	2.3822	ppb	0.84009 35.27%
K 766.490 Radial†	202.4	40.645	ug/L	59.3830	40.645	ppb	59.3830 146.10%
Mg 279.077 IEC†	6.3	2.9135	ug/L	10.08940	2.9135	ppb	10.08940 346.30%
Mn 257.610†	121.2	0.0682	ug/L	0.00878	0.0682	ppb	0.00878 12.88%
Mo 202.031†	19.5	0.4286	ug/L	0.20155	0.4286	ppb	0.20155 47.03%
Na 589.592 Radial†	-892.7	-52.803	ug/L	8.9756	-52.803	ppb	8.9756 17.00%
Ni 231.604†	-24.6	-0.2526	ug/L	0.28936	-0.2526	ppb	0.28936 114.54%
P 214.914†	38.4	5.6397	ug/L	1.30913	5.6397	ppb	1.30913 23.21%
Pb 220.353†	-17.6	-0.7535	ug/L	0.62595	-0.7535	ppb	0.62595 83.07%
S 181.975 Axial†	-2.4	-0.7830	ug/L	0.51697	-0.7830	ppb	0.51697 66.03%
Sb 206.836†	19.5	1.7507	ug/L	0.92309	1.7507	ppb	0.92309 52.73%
Se 196.026†	-2.8	-0.4155	ug/L	1.98402	-0.4155	ppb	1.98402 477.48%
Si 251.611†	588.2	10.048	ug/L	2.3747	10.048	ppb	2.3747 23.63%
Sn 189.927†	36.7	1.7376	ug/L	0.47545	1.7376	ppb	0.47545 27.36%
Sr 421.552†	-125.3	-0.1086	ug/L	0.07245	-0.1086	ppb	0.07245 66.68%
Ti 334.940†	-28.9	-0.0414	ug/L	0.13944	-0.0414	ppb	0.13944 336.64%
Tl 190.801†	10.5	0.7774	ug/L	0.86818	0.7774	ppb	0.86818 111.67%
U 409.014†	287.9	11.787	ug/L	2.0418	11.787	ppb	2.0418 17.32%
V 292.402†	-98.6	-0.5180	ug/L	0.36247	-0.5180	ppb	0.36247 69.97%
Zn 213.857†	327.1	1.0642	ug/L	0.09851	1.0642	ppb	0.09851 9.26%
SiO2†	568.5	20.663	ug/L	0.9311	20.663	ppb	0.9311 4.51%

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Sequence No.: 2 **Autosampler Location: 39**
Sample ID: 1201524625|730799|1 **Date Collected: 3/6/2008 13:08:43**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: 1201524625|730799|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	100587.1	100587.1	95.8	%			13:10:41
1	Y RADIAL	87022.1	87022.1	95.37	%			13:10:41
1	Al 396.153Radial†	44659.6	46052.8	5257.7	ug/L	5257.7	ppb	13:10:41
1	Ca 317.933Radial†	123278.8	127963.0	5095.3	ug/L	5095.3	ppb	13:10:41
1	Fe 238.204 Radial†	44722.7	46628.9	5008.5	ug/L	5008.5	ppb	13:10:41
1	K 766.490 Radial†	28331.3	26167.8	5255.8	ug/L	5255.8	ppb	13:10:41
1	Mg 279.077 IEC†	10593.4	10978.9	5093.4	ug/L	5093.4	ppb	13:10:41
1	Na 589.592 Radial†	81886.5	86816.5	5135.1	ug/L	5135.1	ppb	13:10:36
1	Sr 421.552†	579128.5	606461.8	524.19	ug/L	524.19	ppb	13:10:36
1	Sc 361.383	975860.0	975860.0	97.612	%			13:11:10
1	Y 371.029	819937.7	819937.7	96.730	%			13:11:10
1	Ag 328.068†	126670.3	128642.3	503.42	ug/L	503.42	ppb	13:11:10
1	As 188.979†	4194.4	4358.8	475.73	ug/L	475.73	ppb	13:11:15
1	B 249.677†	35345.4	36990.0	489.19	ug/L	489.19	ppb	13:11:10
1	Ba 233.527†	170101.3	174233.9	507.82	ug/L	507.82	ppb	13:11:10
1	Be 313.107†	1700930.2	1746258.6	497.40	ug/L	497.40	ppb	13:11:10
1	Cd 226.502†	95197.0	97748.4	494.67	ug/L	494.67	ppb	13:11:10
1	Co 228.616†	57367.2	58970.6	486.19	ug/L	486.19	ppb	13:11:15
1	Cr 267.716†	65960.2	67628.0	498.79	ug/L	498.79	ppb	13:11:10
1	Cu 324.752†	210025.4	206588.6	502.55	ug/L	502.55	ppb	13:11:10
1	Mn 257.610†	880191.1	900666.9	505.84	ug/L	505.84	ppb	13:11:10
1	Mo 202.031†	21529.5	22026.3	483.64	ug/L	483.64	ppb	13:11:15
1	Ni 231.604†	46507.8	47361.6	485.80	ug/L	485.80	ppb	13:11:15
1	P 214.914†	4368.2	3676.0	474.24	ug/L	474.24	ppb	13:11:15
1	Pb 220.353†	11071.3	11451.6	486.96	ug/L	486.96	ppb	13:11:15
1	S 181.975 Axial†	14814.7	15014.0	4891.8	ug/L	4891.8	ppb	13:11:15
1	Sb 206.836†	5453.3	5454.8	486.42	ug/L	486.42	ppb	13:11:15
1	Se 196.026†	2932.3	3064.5	488.26	ug/L	488.26	ppb	13:11:15
1	Si 251.611†	281049.0	286988.9	4898.1	ug/L	4898.1	ppb	13:11:10
1	Sn 189.927†	10065.0	10321.5	488.71	ug/L	488.71	ppb	13:11:15
1	Ti 334.940†	383650.4	394482.9	508.56	ug/L	508.56	ppb	13:11:10
1	Tl 190.801†	6207.5	6497.5	484.01	ug/L	484.01	ppb	13:11:15
1	U 409.014†	17100.6	12136.5	496.29	ug/L	496.29	ppb	13:11:10
1	V 292.402†	87229.3	91864.9	512.20	ug/L	512.20	ppb	13:11:10
1	Zn 213.857†	149982.0	151617.0	488.37	ug/L	488.37	ppb	13:11:10
1	SiO2†	282890.6	288831.2	10489	ug/L	10489	ppb	13:11:46
2	Sc Radial	102247.9	102247.9	97.4	%			13:10:51
2	Y RADIAL	88247.0	88247.0	96.71	%			13:10:51
2	Al 396.153Radial†	45173.0	45822.9	5231.0	ug/L	5231.0	ppb	13:10:51
2	Ca 317.933Radial†	124338.3	126960.7	5055.4	ug/L	5055.4	ppb	13:10:51
2	Fe 238.204 Radial†	45242.5	46404.3	4984.8	ug/L	4984.8	ppb	13:10:51
2	K 766.490 Radial†	28613.5	25977.2	5217.6	ug/L	5217.6	ppb	13:10:51
2	Mg 279.077 IEC†	10690.3	10898.7	5056.5	ug/L	5056.5	ppb	13:10:51
2	Na 589.592 Radial†	81112.0	84632.9	5006.0	ug/L	5006.0	ppb	13:10:46
2	Sr 421.552†	574872.0	592272.2	511.93	ug/L	511.93	ppb	13:10:46
2	Sc 361.383	975986.1	975986.1	97.625	%			13:11:23
2	Y 371.029	821052.1	821052.1	96.862	%			13:11:23
2	Ag 328.068†	126860.2	128819.9	504.11	ug/L	504.11	ppb	13:11:23
2	As 188.979†	4279.0	4444.9	485.11	ug/L	485.11	ppb	13:11:28
2	B 249.677†	35449.6	37092.0	490.54	ug/L	490.54	ppb	13:11:23
2	Ba 233.527†	170310.3	174425.4	508.38	ug/L	508.38	ppb	13:11:23
2	Be 313.107†	1703346.8	1748508.8	498.04	ug/L	498.04	ppb	13:11:23
2	Cd 226.502†	95456.0	98001.1	495.95	ug/L	495.95	ppb	13:11:23
2	Co 228.616†	58416.6	60037.9	495.00	ug/L	495.00	ppb	13:11:28
2	Cr 267.716†	66139.5	67802.9	500.08	ug/L	500.08	ppb	13:11:23
2	Cu 324.752†	210031.2	206566.7	502.49	ug/L	502.49	ppb	13:11:23
2	Mn 257.610†	880991.4	901370.1	506.23	ug/L	506.23	ppb	13:11:23
2	Mo 202.031†	21850.0	22351.7	490.78	ug/L	490.78	ppb	13:11:28
2	Ni 231.604†	47329.5	48197.2	494.37	ug/L	494.37	ppb	13:11:28

2	P 214.914†	4365.0	3672.2	473.70	ug/L	473.70 ppb	13:11:28
2	Pb 220.353†	11212.4	11594.7	493.04	ug/L	493.04 ppb	13:11:28
2	S 181.975 Axial†	15097.4	15301.6	4985.5	ug/L	4985.5 ppb	13:11:28
2	Sb 206.836†	5578.6	5582.3	497.86	ug/L	497.86 ppb	13:11:28
2	Se 196.026†	2966.7	3099.3	493.57	ug/L	493.57 ppb	13:11:28
2	Si 251.611†	281414.2	287325.8	4903.8	ug/L	4903.8 ppb	13:11:23
2	Sn 189.927†	10282.5	10542.9	499.18	ug/L	499.18 ppb	13:11:28
2	Ti 334.940†	384144.0	394937.7	509.13	ug/L	509.13 ppb	13:11:23
2	Tl 190.801†	6336.4	6628.7	493.70	ug/L	493.70 ppb	13:11:28
2	U 409.014†	17221.2	12257.8	501.28	ug/L	501.28 ppb	13:11:23
2	V 292.402†	87428.6	92057.5	513.35	ug/L	513.35 ppb	13:11:23
2	Zn 213.857†	150312.8	151936.0	489.36	ug/L	489.36 ppb	13:11:23
2	SiO2†	285320.6	291282.8	10578	ug/L	10578 ppb	13:11:51
3	Sc Radial	102818.1	102818.1	97.9	%		13:11:02
3	Y RADIAL	89055.9	89055.9	97.60	%		13:11:02
3	Al 396.153Radial†	45308.4	45703.9	5217.3	ug/L	5217.3 ppb	13:11:02
3	Ca 317.933Radial†	125405.9	127342.9	5070.6	ug/L	5070.6 ppb	13:11:02
3	Fe 238.204 Radial†	45509.8	46419.6	4986.5	ug/L	4986.5 ppb	13:11:02
3	K 766.490 Radial†	28784.7	25989.1	5219.9	ug/L	5219.9 ppb	13:11:02
3	Mg 279.077 IEC†	10804.5	10954.5	5082.4	ug/L	5082.4 ppb	13:11:02
3	Na 589.592 Radial†	82456.6	85544.0	5059.9	ug/L	5059.9 ppb	13:10:57
3	Sr 421.552†	583410.8	597717.7	516.63	ug/L	516.63 ppb	13:10:57
3	Sc 361.383	972635.8	972635.8	97.290	%		13:11:35
3	Y 371.029	816467.7	816467.7	96.321	%		13:11:35
3	Ag 328.068†	126227.7	128617.5	503.31	ug/L	503.31 ppb	13:11:35
3	As 188.979†	4317.8	4500.0	491.14	ug/L	491.14 ppb	13:11:40
3	B 249.677†	35081.1	36838.4	487.19	ug/L	487.19 ppb	13:11:35
3	Ba 233.527†	170042.3	174750.8	509.32	ug/L	509.32 ppb	13:11:35
3	Be 313.107†	1696667.5	1747653.5	497.80	ug/L	497.80 ppb	13:11:35
3	Cd 226.502†	95113.8	97986.1	495.87	ug/L	495.87 ppb	13:11:35
3	Co 228.616†	58512.7	60342.9	497.52	ug/L	497.52 ppb	13:11:40
3	Cr 267.716†	65995.8	67888.7	500.71	ug/L	500.71 ppb	13:11:35
3	Cu 324.752†	208805.9	206048.4	501.22	ug/L	501.22 ppb	13:11:35
3	Mn 257.610†	879561.9	903009.2	507.15	ug/L	507.15 ppb	13:11:35
3	Mo 202.031†	21922.2	22503.1	494.10	ug/L	494.10 ppb	13:11:40
3	Ni 231.604†	47343.6	48378.6	496.23	ug/L	496.23 ppb	13:11:40
3	P 214.914†	4438.2	3762.9	487.34	ug/L	487.34 ppb	13:11:40
3	Pb 220.353†	11182.6	11603.7	493.42	ug/L	493.42 ppb	13:11:40
3	S 181.975 Axial†	15127.3	15385.6	5012.9	ug/L	5012.9 ppb	13:11:40
3	Sb 206.836†	5566.0	5589.1	498.47	ug/L	498.47 ppb	13:11:40
3	Se 196.026†	2962.8	3105.7	494.57	ug/L	494.57 ppb	13:11:40
3	Si 251.611†	280395.1	287271.3	4902.8	ug/L	4902.8 ppb	13:11:35
3	Sn 189.927†	10272.1	10568.5	500.40	ug/L	500.40 ppb	13:11:40
3	Ti 334.940†	382629.7	394736.6	508.88	ug/L	508.88 ppb	13:11:35
3	Tl 190.801†	6366.2	6681.7	497.63	ug/L	497.63 ppb	13:11:40
3	U 409.014†	17263.1	12361.7	505.54	ug/L	505.54 ppb	13:11:35
3	V 292.402†	86886.5	91808.8	512.02	ug/L	512.02 ppb	13:11:35
3	Zn 213.857†	150011.7	152156.9	490.07	ug/L	490.07 ppb	13:11:35
3	SiO2†	277258.8	284003.2	10313	ug/L	10313 ppb	13:11:56

Mean Data: 1201524625|730799|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	974827.3	97.509	%	0.1899				0.19%
Sc Radial	101884.4	97.0	%	1.10				1.14%
Y 371.029	819152.5	96.637	%	0.2821				0.29%
Y RADIAL	88108.3	96.56	%	1.122				1.16%
Ag 328.068†	128693.2	503.61	ug/L	0.430	503.61	ppb	0.430	0.09%
Al 396.153Radial†	45859.9	5235.3	ug/L	20.53	5235.3	ppb	20.53	0.39%
As 188.979†	4434.6	483.99	ug/L	7.765	483.99	ppb	7.765	1.60%
B 249.677†	36973.4	488.98	ug/L	1.688	488.98	ppb	1.688	0.35%
Ba 233.527†	174470.0	508.51	ug/L	0.759	508.51	ppb	0.759	0.15%
Be 313.107†	1747473.6	497.74	ug/L	0.323	497.74	ppb	0.323	0.06%
Ca 317.933Radial†	127422.2	5073.8	ug/L	20.14	5073.8	ppb	20.14	0.40%
Cd 226.502†	97911.9	495.50	ug/L	0.719	495.50	ppb	0.719	0.15%
Co 228.616†	59783.8	492.90	ug/L	5.951	492.90	ppb	5.951	1.21%
Cr 267.716†	67773.2	499.86	ug/L	0.978	499.86	ppb	0.978	0.20%
Cu 324.752†	206401.3	502.08	ug/L	0.748	502.08	ppb	0.748	0.15%
Fe 238.204 Radial†	46484.3	4993.3	ug/L	13.26	4993.3	ppb	13.26	0.27%
K 766.490 Radial†	26044.7	5231.1	ug/L	21.45	5231.1	ppb	21.45	0.41%

Mg 279.077 IEC†	10944.0	5077.5	ug/L	18.96	5077.5	ppb	18.96	0.37%
Mn 257.610†	901682.1	506.41	ug/L	0.673	506.41	ppb	0.673	0.13%
Mo 202.031†	22293.7	489.51	ug/L	5.346	489.51	ppb	5.346	1.09%
Na 589.592 Radial†	85664.5	5067.0	ug/L	64.87	5067.0	ppb	64.87	1.28%
Ni 231.604†	47979.1	492.13	ug/L	5.563	492.13	ppb	5.563	1.13%
P 214.914†	3703.7	478.43	ug/L	7.723	478.43	ppb	7.723	1.61%
Pb 220.353†	11550.0	491.14	ug/L	3.623	491.14	ppb	3.623	0.74%
S 181.975 Axial†	15233.8	4963.4	ug/L	63.51	4963.4	ppb	63.51	1.28%
Sb 206.836†	5542.1	494.25	ug/L	6.788	494.25	ppb	6.788	1.37%
Se 196.026†	3089.8	492.13	ug/L	3.392	492.13	ppb	3.392	0.69%
Si 251.611†	287195.3	4901.6	ug/L	3.02	4901.6	ppb	3.02	0.06%
Sn 189.927†	10477.6	496.10	ug/L	6.429	496.10	ppb	6.429	1.30%
Sr 421.552†	598817.2	517.58	ug/L	6.189	517.58	ppb	6.189	1.20%
Ti 334.940†	394719.1	508.86	ug/L	0.290	508.86	ppb	0.290	0.06%
Tl 190.801†	6602.7	491.78	ug/L	7.007	491.78	ppb	7.007	1.42%
U 409.014†	12252.0	501.04	ug/L	4.627	501.04	ppb	4.627	0.92%
V 292.402†	91910.4	512.52	ug/L	0.722	512.52	ppb	0.722	0.14%
Zn 213.857†	151903.3	489.27	ug/L	0.850	489.27	ppb	0.850	0.17%
SiO2†	288039.1	10460	ug/L	134.8	10460	ppb	134.8	1.29%

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Sequence No.: 3 **Autosampler Location: 40**
Sample ID: 203493001|730799|1 **Date Collected: 3/6/2008 13:14:06**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: 203493001|730799|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	109123.9	109123.9	104	%			13:16:04
1	Y RADIAL	94186.4	94186.4	103.2	%			13:16:04
1	Al 396.153Radial†	60392.9	57543.7	6593.7	ug/L	6593.7	ppb	13:16:04
1	Ca 317.933Radial†	80884.5	77107.6	3070.3	ug/L	3070.3	ppb	13:16:04
1	Fe 238.204 Radial†	81174.4	78048.3	8358.9	ug/L	8358.9	ppb	13:16:04
1	K 766.490 Radial†	24329.0	20003.6	4017.8	ug/L	4017.8	ppb	13:16:04
1	Mg 279.077 IEC†	11823.5	11297.3	5226.4	ug/L	5226.4	ppb	13:16:04
1	Na 589.592 Radial†	22885.4	23363.2	1381.9	ug/L	1381.9	ppb	13:15:59
1	Sr 421.552†	28994.4	29871.2	25.734	ug/L	25.734	ppb	13:15:59
1	Sc 361.383	867636.4	867636.4	86.787	%			13:16:31
1	Y 371.029	730863.3	730863.3	86.222	%			13:16:31
1	Ag 328.068†	262.8	-823.6	-0.6091	ug/L	-0.6091	ppb	13:16:31
1	As 188.979†	-102.3	-56.0	-4.6693	ug/L	-4.6693	ppb	13:16:51
1	B 249.677†	2042.0	3132.9	41.205	ug/L	41.205	ppb	13:16:51
1	Ba 233.527†	23016.3	26492.4	77.096	ug/L	77.096	ppb	13:16:51
1	Be 313.107†	-4256.4	-1180.0	0.0763	ug/L	0.0763	ppb	13:16:31
1	Cd 226.502†	-78.2	132.8	0.0849	ug/L	0.0849	ppb	13:16:51
1	Co 228.616†	597.1	888.3	6.9824	ug/L	6.9824	ppb	13:16:51
1	Cr 267.716†	3575.2	4173.9	30.771	ug/L	30.771	ppb	13:16:51
1	Cu 324.752†	13636.5	7138.6	17.817	ug/L	17.817	ppb	13:16:31
1	Mn 257.610†	397515.4	456981.5	257.24	ug/L	257.24	ppb	13:16:31
1	Mo 202.031†	24.0	-2.1	0.4472	ug/L	0.4472	ppb	13:16:51
1	Ni 231.604†	5291.0	5812.7	59.666	ug/L	59.666	ppb	13:16:51
1	P 214.914†	4808.3	4741.4	697.05	ug/L	697.05	ppb	13:16:51
1	Pb 220.353†	117.7	245.1	11.133	ug/L	11.133	ppb	13:16:51
1	S 181.975 Axial†	1190.4	1208.6	392.99	ug/L	392.99	ppb	13:16:51
1	Sb 206.836†	143.9	33.8	3.1747	ug/L	3.1747	ppb	13:16:51
1	Se 196.026†	-213.1	-185.1	-4.1420	ug/L	-4.1420	ppb	13:16:51
1	Si 251.611†	953399.6	1097614.9	18763	ug/L	18763	ppb	13:16:31
1	Sn 189.927†	13.6	26.0	1.3241	ug/L	1.3241	ppb	13:16:51
1	Ti 334.940†	108420.4	126375.3	163.18	ug/L	163.18	ppb	13:16:31
1	Tl 190.801†	-149.7	-34.3	-0.4151	ug/L	-0.4151	ppb	13:16:51
1	U 409.014†	5526.8	986.0	39.363	ug/L	39.363	ppb	13:16:31
1	V 292.402†	1477.0	4203.9	22.027	ug/L	22.027	ppb	13:16:51
1	Zn 213.857†	35949.7	39389.4	126.43	ug/L	126.43	ppb	13:16:31
1	SiO2†	943948.6	1086680.6	39527	ug/L	39527	ppb	13:17:49
2	Sc Radial	102834.9	102834.9	97.9	%			13:16:14
2	Y RADIAL	88565.4	88565.4	97.06	%			13:16:14
2	Al 396.153Radial†	62069.1	62808.6	7196.9	ug/L	7196.9	ppb	13:16:14
2	Ca 317.933Radial†	83062.6	84090.7	3348.4	ug/L	3348.4	ppb	13:16:14
2	Fe 238.204 Radial†	83399.9	85096.8	9113.7	ug/L	9113.7	ppb	13:16:14
2	K 766.490 Radial†	24856.2	21973.4	4413.4	ug/L	4413.4	ppb	13:16:14
2	Mg 279.077 IEC†	12249.7	12428.2	5749.6	ug/L	5749.6	ppb	13:16:14
2	Na 589.592 Radial†	23331.8	25165.6	1488.5	ug/L	1488.5	ppb	13:16:09
2	Sr 421.552†	29331.8	31921.6	27.499	ug/L	27.499	ppb	13:16:09
2	Sc 361.383	973191.7	973191.7	97.346	%			13:16:57
2	Y 371.029	817544.6	817544.6	96.448	%			13:16:57
2	Ag 328.068†	362.8	-753.7	-0.0810	ug/L	-0.0810	ppb	13:16:57
2	As 188.979†	-79.4	-19.7	-0.7240	ug/L	-0.7240	ppb	13:17:17
2	B 249.677†	2044.6	2880.4	37.842	ug/L	37.842	ppb	13:17:17
2	Ba 233.527†	23043.2	23643.4	68.809	ug/L	68.809	ppb	13:17:17
2	Be 313.107†	-4191.8	-581.7	0.1884	ug/L	0.1884	ppb	13:16:57
2	Cd 226.502†	-61.1	160.1	0.1703	ug/L	0.1703	ppb	13:17:17
2	Co 228.616†	624.9	842.2	6.6500	ug/L	6.6500	ppb	13:17:17
2	Cr 267.716†	3564.8	3716.5	27.402	ug/L	27.402	ppb	13:17:17
2	Cu 324.752†	13586.5	5383.1	13.618	ug/L	13.618	ppb	13:16:57
2	Mn 257.610†	389645.4	399217.1	224.91	ug/L	224.91	ppb	13:16:57
2	Mo 202.031†	25.1	-4.1	0.4496	ug/L	0.4496	ppb	13:17:17
2	Ni 231.604†	5284.7	5145.0	52.811	ug/L	52.811	ppb	13:17:17

2	P 214.914†	4808.1	4140.2	607.86	ug/L	607.86	ppb	13:17:17
2	Pb 220.353†	83.0	194.8	9.0938	ug/L	9.0938	ppb	13:17:17
2	S 181.975 Axial†	1192.3	1061.7	345.05	ug/L	345.05	ppb	13:17:17
2	Sb 206.836†	124.4	-4.2	-0.3095	ug/L	-0.3095	ppb	13:17:17
2	Se 196.026†	-222.2	-167.8	0.7266	ug/L	0.7266	ppb	13:17:17
2	Si 251.611†	936951.2	961566.1	16437	ug/L	16437	ppb	13:16:57
2	Sn 189.927†	3.8	14.1	0.7716	ug/L	0.7716	ppb	13:17:17
2	Ti 334.940†	104311.9	108604.9	140.32	ug/L	140.32	ppb	13:16:57
2	Tl 190.801†	-131.8	2.8	2.0518	ug/L	2.0518	ppb	13:17:17
2	U 409.014†	5339.3	102.6	3.1264	ug/L	3.1264	ppb	13:16:57
2	V 292.402†	1491.4	4034.0	20.943	ug/L	20.943	ppb	13:17:17
2	Zn 213.857†	35298.7	34227.8	109.58	ug/L	109.58	ppb	13:16:57
2	SiO2†	947577.1	972437.3	35372	ug/L	35372	ppb	13:17:55
3	Sc Radial	101508.0	101508.0	96.7	%			13:16:24
3	Y RADIAL	87747.7	87747.7	96.17	%			13:16:24
3	Al 396.153Radial†	62259.9	63834.3	7314.5	ug/L	7314.5	ppb	13:16:24
3	Ca 317.933Radial†	83359.2	85506.0	3404.7	ug/L	3404.7	ppb	13:16:24
3	Fe 238.204 Radial†	83970.4	86799.9	9296.1	ug/L	9296.1	ppb	13:16:24
3	K 766.490 Radial†	24985.6	22439.0	4506.9	ug/L	4506.9	ppb	13:16:24
3	Mg 279.077 IEC†	12286.7	12630.0	5843.0	ug/L	5843.0	ppb	13:16:24
3	Na 589.592 Radial†	23153.0	25292.1	1496.0	ug/L	1496.0	ppb	13:16:19
3	Sr 421.552†	29089.6	32062.5	27.619	ug/L	27.619	ppb	13:16:19
3	Sc 361.383	979650.4	979650.4	97.992	%			13:17:22
3	Y 371.029	823567.4	823567.4	97.158	%			13:17:22
3	Ag 328.068†	394.3	-724.0	0.0935	ug/L	0.0935	ppb	13:17:22
3	As 188.979†	-73.4	-13.1	0.0298	ug/L	0.0298	ppb	13:17:42
3	B 249.677†	1942.6	2762.4	36.276	ug/L	36.276	ppb	13:17:42
3	Ba 233.527†	23070.7	23515.5	68.436	ug/L	68.436	ppb	13:17:42
3	Be 313.107†	-4146.8	-507.4	0.2117	ug/L	0.2117	ppb	13:17:22
3	Cd 226.502†	-85.5	135.7	0.0336	ug/L	0.0336	ppb	13:17:42
3	Co 228.616†	590.3	802.6	6.3222	ug/L	6.3222	ppb	13:17:42
3	Cr 267.716†	3564.9	3692.5	27.224	ug/L	27.224	ppb	13:17:42
3	Cu 324.752†	13611.9	5317.0	13.473	ug/L	13.473	ppb	13:17:22
3	Mn 257.610†	391011.9	397972.7	224.23	ug/L	224.23	ppb	13:17:22
3	Mo 202.031†	29.0	-0.2	0.5448	ug/L	0.5448	ppb	13:17:42
3	Ni 231.604†	5262.3	5086.3	52.209	ug/L	52.209	ppb	13:17:42
3	P 214.914†	4849.5	4150.0	609.21	ug/L	609.21	ppb	13:17:42
3	Pb 220.353†	98.4	210.0	9.7522	ug/L	9.7522	ppb	13:17:42
3	S 181.975 Axial†	1208.3	1070.0	347.74	ug/L	347.74	ppb	13:17:42
3	Sb 206.836†	141.4	12.4	1.1716	ug/L	1.1716	ppb	13:17:42
3	Se 196.026†	-216.0	-160.0	2.4687	ug/L	2.4687	ppb	13:17:42
3	Si 251.611†	941477.0	959839.0	16407	ug/L	16407	ppb	13:17:22
3	Sn 189.927†	7.7	18.1	0.9633	ug/L	0.9633	ppb	13:17:42
3	Ti 334.940†	105651.2	109265.2	141.18	ug/L	141.18	ppb	13:17:22
3	Tl 190.801†	-146.4	-11.2	1.0132	ug/L	1.0132	ppb	13:17:42
3	U 409.014†	5238.6	-36.3	-2.5798	ug/L	-2.5798	ppb	13:17:22
3	V 292.402†	1434.9	3966.3	20.534	ug/L	20.534	ppb	13:17:42
3	Zn 213.857†	35327.6	34018.3	108.88	ug/L	108.88	ppb	13:17:22
3	SiO2†	944865.4	963252.5	35038	ug/L	35038	ppb	13:18:01

Mean Data: 203493001|730799|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	940159.5	94.041	%	6.2907				6.69%
Sc Radial	104488.9	99.5	%	3.88				3.89%
Y 371.029	790658.4	93.276	%	6.1194				6.56%
Y RADIAL	90166.5	98.82	%	3.842				3.89%
Ag 328.068†	-767.1	-0.1989	ug/L	0.36581	-0.1989	ppb	0.36581	183.96%
Al 396.153Radial†	61395.5	7035.0	ug/L	386.72	7035.0	ppb	386.72	5.50%
As 188.979†	-29.6	-1.7878	ug/L	2.52374	-1.7878	ppb	2.52374	141.16%
B 249.677†	2925.3	38.441	ug/L	2.5182	38.441	ppb	2.5182	6.55%
Ba 233.527†	24550.4	71.447	ug/L	4.8959	71.447	ppb	4.8959	6.85%
Be 313.107†	-756.4	0.1588	ug/L	0.07238	0.1588	ppb	0.07238	45.58%
Ca 317.933Radial†	82234.8	3274.5	ug/L	179.04	3274.5	ppb	179.04	5.47%
Cd 226.502†	142.9	0.0963	ug/L	0.06909	0.0963	ppb	0.06909	71.78%
Co 228.616†	844.4	6.6515	ug/L	0.33010	6.6515	ppb	0.33010	4.96%
Cr 267.716†	3861.0	28.466	ug/L	1.9986	28.466	ppb	1.9986	7.02%
Cu 324.752†	5946.2	14.969	ug/L	2.4673	14.969	ppb	2.4673	16.48%
Fe 238.204 Radial†	83315.0	8922.9	ug/L	496.90	8922.9	ppb	496.90	5.57%
K 766.490 Radial†	21472.0	4312.7	ug/L	259.66	4312.7	ppb	259.66	6.02%

Mg 279.077 IEC†	12118.5	5606.4	ug/L	332.30	5606.4	ppb	332.30	5.93%
Mn 257.610†	418057.1	235.46	ug/L	18.871	235.46	ppb	18.871	8.01%
Mo 202.031†	-2.1	0.4805	ug/L	0.05566	0.4805	ppb	0.05566	11.58%
Na 589.592 Radial†	24606.9	1455.5	ug/L	63.82	1455.5	ppb	63.82	4.38%
Ni 231.604†	5348.0	54.895	ug/L	4.1421	54.895	ppb	4.1421	7.55%
P 214.914†	4343.9	638.04	ug/L	51.110	638.04	ppb	51.110	8.01%
Pb 220.353†	216.6	9.9930	ug/L	1.04063	9.9930	ppb	1.04063	10.41%
S 181.975 Axial†	1113.4	361.93	ug/L	26.936	361.93	ppb	26.936	7.44%
Sb 206.836†	14.0	1.3456	ug/L	1.74861	1.3456	ppb	1.74861	129.95%
Se 196.026†	-171.0	-0.3155	ug/L	3.42639	-0.3155	ppb	3.42639	>999.9%
Si 251.611†	1006340.0	17202	ug/L	1351.3	17202	ppb	1351.3	7.86%
Sn 189.927†	19.4	1.0197	ug/L	0.28052	1.0197	ppb	0.28052	27.51%
Sr 421.552†	31285.1	26.951	ug/L	1.0551	26.951	ppb	1.0551	3.92%
Ti 334.940†	114748.5	148.23	ug/L	12.953	148.23	ppb	12.953	8.74%
Tl 190.801†	-14.2	0.8833	ug/L	1.23853	0.8833	ppb	1.23853	140.22%
U 409.014†	350.8	13.303	ug/L	22.7481	13.303	ppb	22.7481	171.00%
V 292.402†	4068.1	21.168	ug/L	0.7715	21.168	ppb	0.7715	3.64%
Zn 213.857†	35878.5	114.96	ug/L	9.935	114.96	ppb	9.935	8.64%
SiO2†	1007456.8	36646	ug/L	2501.2	36646	ppb	2501.2	6.83%

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Sequence No.: 5 **Autosampler Location: 1**
Sample ID: CCV **Date Collected: 3/6/2008 13:27:15**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	100042.4	100042.4	95.3	%			13:29:12
1	Y RADIAL	86516.3	86516.3	94.82	%			13:29:12
1	Al 396.153Radial†	43819.5	45425.0	5185.9	ug/L	5185.9	ppb	13:29:12
1	Ca 317.933Radial†	119474.8	124671.4	4964.3	ug/L	4964.3	ppb	13:29:12
1	Fe 238.204 Radial†	43724.9	45835.8	4923.3	ug/L	4923.3	ppb	13:29:12
1	K 766.490 Radial†	27558.0	25517.2	5125.2	ug/L	5125.2	ppb	13:29:12
1	Mg 279.077 IEC†	10384.5	10819.8	5019.8	ug/L	5019.8	ppb	13:29:12
1	Na 589.592 Radial†	159757.8	169005.6	9996.6	ug/L	9996.6	ppb	13:29:07
1	Sr 421.552†	557252.5	586794.7	507.19	ug/L	507.19	ppb	13:29:07
1	Sc 361.383	969961.7	969961.7	97.022	%			13:29:41
1	Y 371.029	814883.8	814883.8	96.134	%			13:29:41
1	Ag 328.068†	125303.6	128022.7	500.95	ug/L	500.95	ppb	13:29:41
1	As 188.979†	4154.9	4344.2	474.09	ug/L	474.09	ppb	13:29:46
1	B 249.677†	34980.4	36834.0	487.13	ug/L	487.13	ppb	13:29:41
1	Ba 233.527†	165786.1	170845.8	497.94	ug/L	497.94	ppb	13:29:41
1	Be 313.107†	1685876.2	1741338.9	495.98	ug/L	495.98	ppb	13:29:41
1	Cd 226.502†	94426.1	97546.9	493.65	ug/L	493.65	ppb	13:29:41
1	Co 228.616†	55875.8	57790.8	476.47	ug/L	476.47	ppb	13:29:46
1	Cr 267.716†	65120.2	67173.2	495.42	ug/L	495.42	ppb	13:29:41
1	Cu 324.752†	205570.7	203305.6	494.56	ug/L	494.56	ppb	13:29:41
1	Mn 257.610†	858672.6	883971.3	496.46	ug/L	496.46	ppb	13:29:41
1	Mo 202.031†	21242.7	21864.8	480.09	ug/L	480.09	ppb	13:29:46
1	Ni 231.604†	45327.3	46434.5	476.29	ug/L	476.29	ppb	13:29:46
1	P 214.914†	16132.6	15828.7	2281.0	ug/L	2281.0	ppb	13:29:46
1	Pb 220.353†	10814.1	11255.5	478.64	ug/L	478.64	ppb	13:29:46
1	S 181.975 Axial†	2934.0	2860.9	931.60	ug/L	931.60	ppb	13:29:46
1	Sb 206.836†	5236.0	5264.8	469.38	ug/L	469.38	ppb	13:29:46
1	Se 196.026†	2898.4	3047.7	485.42	ug/L	485.42	ppb	13:29:46
1	Si 251.611†	141151.8	144549.3	2463.3	ug/L	2463.3	ppb	13:29:41
1	Sn 189.927†	9779.4	10089.8	477.74	ug/L	477.74	ppb	13:29:46
1	Ti 334.940†	373540.5	386452.8	498.20	ug/L	498.20	ppb	13:29:41
1	Tl 190.801†	6045.5	6369.3	474.46	ug/L	474.46	ppb	13:29:46
1	U 409.014†	16807.9	11941.4	488.31	ug/L	488.31	ppb	13:29:41
1	V 292.402†	84630.6	89729.9	500.37	ug/L	500.37	ppb	13:29:41
1	Zn 213.857†	149379.0	151929.9	489.48	ug/L	489.48	ppb	13:29:41
1	SiO2†	140674.6	144013.0	5221.5	ug/L	5221.5	ppb	13:30:16
2	Sc Radial	98894.0	98894.0	94.2	%			13:29:22
2	Y RADIAL	85492.1	85492.1	93.69	%			13:29:22
2	Al 396.153Radial†	43218.1	45320.5	5173.6	ug/L	5173.6	ppb	13:29:22
2	Ca 317.933Radial†	118048.1	124612.7	4961.9	ug/L	4961.9	ppb	13:29:22
2	Fe 238.204 Radial†	43134.3	45741.7	4913.4	ug/L	4913.4	ppb	13:29:22
2	K 766.490 Radial†	27346.2	25628.3	5147.5	ug/L	5147.5	ppb	13:29:22
2	Mg 279.077 IEC†	10226.4	10778.5	5000.8	ug/L	5000.8	ppb	13:29:22
2	Na 589.592 Radial†	160709.6	171963.0	10172	ug/L	10172	ppb	13:29:17
2	Sr 421.552†	560517.1	597051.6	516.06	ug/L	516.06	ppb	13:29:17
2	Sc 361.383	968264.2	968264.2	96.853	%			13:29:53
2	Y 371.029	814029.1	814029.1	96.033	%			13:29:53
2	Ag 328.068†	125328.3	128274.6	501.94	ug/L	501.94	ppb	13:29:53
2	As 188.979†	4210.4	4409.1	481.16	ug/L	481.16	ppb	13:29:58
2	B 249.677†	34970.7	36887.1	487.84	ug/L	487.84	ppb	13:29:53
2	Ba 233.527†	165948.9	171313.5	499.31	ug/L	499.31	ppb	13:29:53
2	Be 313.107†	1687056.2	1745603.6	497.19	ug/L	497.19	ppb	13:29:53
2	Cd 226.502†	94588.1	97884.8	495.37	ug/L	495.37	ppb	13:29:53
2	Co 228.616†	56517.5	58554.3	482.79	ug/L	482.79	ppb	13:29:58
2	Cr 267.716†	65216.0	67389.8	497.02	ug/L	497.02	ppb	13:29:53
2	Cu 324.752†	205519.9	203624.6	495.33	ug/L	495.33	ppb	13:29:53
2	Mn 257.610†	859437.5	886312.6	497.78	ug/L	497.78	ppb	13:29:53
2	Mo 202.031†	21560.9	22231.7	488.14	ug/L	488.14	ppb	13:29:58
2	Ni 231.604†	45980.1	47190.5	484.05	ug/L	484.05	ppb	13:29:58

2	P 214.914†	16348.5	16080.8	2318.4	ug/L	2318.4	ppb	13:29:58
2	Pb 220.353†	10991.4	11458.1	487.24	ug/L	487.24	ppb	13:29:58
2	S 181.975 Axial†	3006.4	2941.0	957.70	ug/L	957.70	ppb	13:29:58
2	Sb 206.836†	5305.0	5345.5	476.62	ug/L	476.62	ppb	13:29:58
2	Se 196.026†	2936.8	3092.7	492.34	ug/L	492.34	ppb	13:29:58
2	Si 251.611†	141337.2	144995.8	2470.8	ug/L	2470.8	ppb	13:29:53
2	Sn 189.927†	9854.4	10184.9	482.24	ug/L	482.24	ppb	13:29:58
2	Ti 334.940†	373759.5	387353.8	499.36	ug/L	499.36	ppb	13:29:53
2	Tl 190.801†	6168.2	6506.9	484.65	ug/L	484.65	ppb	13:29:58
2	U 409.014†	16784.5	11947.7	488.59	ug/L	488.59	ppb	13:29:53
2	V 292.402†	84825.5	90084.0	502.41	ug/L	502.41	ppb	13:29:53
2	Zn 213.857†	149510.6	152335.7	490.75	ug/L	490.75	ppb	13:29:53
2	SiO2†	141316.3	144929.7	5254.6	ug/L	5254.6	ppb	13:30:21
3	Sc Radial	100271.9	100271.9	95.5	%			13:29:32
3	Y RADIAL	86631.9	86631.9	94.94	%			13:29:32
3	Al 396.153Radial†	43682.1	45175.8	5157.0	ug/L	5157.0	ppb	13:29:32
3	Ca 317.933Radial†	119486.2	124396.4	4953.3	ug/L	4953.3	ppb	13:29:32
3	Fe 238.204 Radial†	43627.5	45628.9	4901.5	ug/L	4901.5	ppb	13:29:32
3	K 766.490 Radial†	27624.9	25521.1	5125.9	ug/L	5125.9	ppb	13:29:32
3	Mg 279.077 IEC†	10368.6	10778.2	5000.7	ug/L	5000.7	ppb	13:29:32
3	Na 589.592 Radial†	158789.0	167607.4	9913.9	ug/L	9913.9	ppb	13:29:27
3	Sr 421.552†	554322.5	582388.3	503.38	ug/L	503.38	ppb	13:29:27
3	Sc 361.383	970436.2	970436.2	97.070	%			13:30:06
3	Y 371.029	813643.5	813643.5	95.988	%			13:30:06
3	Ag 328.068†	125623.5	128289.1	501.99	ug/L	501.99	ppb	13:30:06
3	As 188.979†	4220.0	4409.3	481.16	ug/L	481.16	ppb	13:30:11
3	B 249.677†	35306.9	37152.6	491.35	ug/L	491.35	ppb	13:30:06
3	Ba 233.527†	167081.8	172097.2	501.58	ug/L	501.58	ppb	13:30:06
3	Be 313.107†	1697417.6	1752379.1	499.12	ug/L	499.12	ppb	13:30:06
3	Cd 226.502†	95237.0	98334.7	497.65	ug/L	497.65	ppb	13:30:06
3	Co 228.616†	57072.6	58995.6	486.42	ug/L	486.42	ppb	13:30:11
3	Cr 267.716†	65516.6	67548.8	498.19	ug/L	498.19	ppb	13:30:06
3	Cu 324.752†	206098.2	203745.4	495.62	ug/L	495.62	ppb	13:30:06
3	Mn 257.610†	865459.0	890529.8	500.14	ug/L	500.14	ppb	13:30:06
3	Mo 202.031†	21671.7	22296.1	489.55	ug/L	489.55	ppb	13:30:11
3	Ni 231.604†	46241.3	47353.3	485.72	ug/L	485.72	ppb	13:30:11
3	P 214.914†	16526.4	16226.3	2340.0	ug/L	2340.0	ppb	13:30:11
3	Pb 220.353†	10986.5	11427.6	485.95	ug/L	485.95	ppb	13:30:11
3	S 181.975 Axial†	3044.6	2973.4	968.24	ug/L	968.24	ppb	13:30:11
3	Sb 206.836†	5391.1	5421.9	483.46	ug/L	483.46	ppb	13:30:11
3	Se 196.026†	2961.2	3111.0	495.13	ug/L	495.13	ppb	13:30:11
3	Si 251.611†	141954.8	145305.3	2476.1	ug/L	2476.1	ppb	13:30:06
3	Sn 189.927†	9940.3	10250.6	485.35	ug/L	485.35	ppb	13:30:11
3	Ti 334.940†	375776.9	388568.4	500.92	ug/L	500.92	ppb	13:30:06
3	Tl 190.801†	6203.7	6529.2	486.30	ug/L	486.30	ppb	13:30:11
3	U 409.014†	16980.9	12111.1	495.28	ug/L	495.28	ppb	13:30:06
3	V 292.402†	85001.7	90069.5	502.36	ug/L	502.36	ppb	13:30:06
3	Zn 213.857†	150391.0	152897.2	492.56	ug/L	492.56	ppb	13:30:06
3	SiO2†	141192.9	144476.0	5238.0	ug/L	5238.0	ppb	13:30:26

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	969554.0	96.982	%	0.1142				0.12%
Sc Radial	99736.1	95.0	%	0.70				0.74%
Y 371.029	814185.4	96.051	%	0.0749				0.08%
Y RADIAL	86213.4	94.48	%	0.688				0.73%
Ag 328.068†	128195.5	501.63	ug/L	0.582	501.63	ppb	0.582	0.12%
QC value within limits for Ag 328.068 Recovery = 100.33%								
Al 396.153Radial†	45307.1	5172.1	ug/L	14.51	5172.1	ppb	14.51	0.28%
QC value within limits for Al 396.153Radial Recovery = 103.44%								
As 188.979†	4387.5	478.80	ug/L	4.084	478.80	ppb	4.084	0.85%
QC value within limits for As 188.979 Recovery = 95.76%								
B 249.677†	36957.9	488.77	ug/L	2.259	488.77	ppb	2.259	0.46%
QC value within limits for B 249.677 Recovery = 97.75%								
Ba 233.527†	171418.8	499.61	ug/L	1.841	499.61	ppb	1.841	0.37%
QC value within limits for Ba 233.527 Recovery = 99.92%								
Be 313.107†	1746440.5	497.43	ug/L	1.585	497.43	ppb	1.585	0.32%
QC value within limits for Be 313.107 Recovery = 99.49%								
Ca 317.933Radial†	124560.1	4959.8	ug/L	5.77	4959.8	ppb	5.77	0.12%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.20%
Cd 226.502†            97922.1      495.56 ug/L         2.002      495.56 ppb          2.002   0.40%
   QC value within limits for Cd 226.502  Recovery = 99.11%
Co 228.616†            58446.9      481.89 ug/L         5.033      481.89 ppb          5.033   1.04%
   QC value within limits for Co 228.616  Recovery = 96.38%
Cr 267.716†            67370.6      496.88 ug/L         1.390      496.88 ppb          1.390   0.28%
   QC value within limits for Cr 267.716  Recovery = 99.38%
Cu 324.752†           203558.5      495.17 ug/L         0.550      495.17 ppb          0.550   0.11%
   QC value within limits for Cu 324.752  Recovery = 99.03%
Fe 238.204 Radial†     45735.5      4912.7 ug/L         10.95      4912.7 ppb          10.95   0.22%
   QC value within limits for Fe 238.204 Radial  Recovery = 98.25%
K 766.490 Radial†      25555.5      5132.9 ug/L         12.66      5132.9 ppb          12.66   0.25%
   QC value within limits for K 766.490 Radial  Recovery = 102.66%
Mg 279.077 IEC†        10792.2      5007.1 ug/L         10.95      5007.1 ppb          10.95   0.22%
   QC value within limits for Mg 279.077 IEC  Recovery = 100.14%
Mn 257.610†           886937.9      498.13 ug/L         1.864      498.13 ppb          1.864   0.37%
   QC value within limits for Mn 257.610  Recovery = 99.63%
Mo 202.031†            22130.9      485.93 ug/L         5.104      485.93 ppb          5.104   1.05%
   QC value within limits for Mo 202.031  Recovery = 97.19%
Na 589.592 Radial†    169525.3       10027 ug/L         131.5       10027 ppb          131.5   1.31%
   QC value within limits for Na 589.592 Radial  Recovery = 100.27%
Ni 231.604†            46992.8      482.02 ug/L         5.029      482.02 ppb          5.029   1.04%
   QC value within limits for Ni 231.604  Recovery = 96.40%
P 214.914†             16045.3      2313.1 ug/L         29.82      2313.1 ppb          29.82   1.29%
   QC value within limits for P 214.914  Recovery = 92.53%
Pb 220.353†            11380.4      483.94 ug/L         4.639      483.94 ppb          4.639   0.96%
   QC value within limits for Pb 220.353  Recovery = 96.79%
S 181.975 Axial†        2925.1      952.51 ug/L        18.867      952.51 ppb         18.867   1.98%
   QC value within limits for S 181.975 Axial  Recovery = 95.25%
Sb 206.836†             5344.0      476.49 ug/L         7.041      476.49 ppb          7.041   1.48%
   QC value within limits for Sb 206.836  Recovery = 95.30%
Se 196.026†             3083.8      490.96 ug/L         4.999      490.96 ppb          4.999   1.02%
   QC value within limits for Se 196.026  Recovery = 98.19%
Si 251.611†           144950.1      2470.1 ug/L          6.42      2470.1 ppb           6.42   0.26%
   QC value within limits for Si 251.611  Recovery = 98.80%
Sn 189.927†            10175.1      481.77 ug/L         3.827      481.77 ppb          3.827   0.79%
   QC value within limits for Sn 189.927  Recovery = 96.35%
Sr 421.552†           588744.9      508.88 ug/L         6.505      508.88 ppb          6.505   1.28%
   QC value within limits for Sr 421.552  Recovery = 101.78%
Ti 334.940†           387458.3      499.49 ug/L         1.365      499.49 ppb          1.365   0.27%
   QC value within limits for Ti 334.940  Recovery = 99.90%
Tl 190.801†             6468.4      481.80 ug/L         6.411      481.80 ppb          6.411   1.33%
   QC value within limits for Tl 190.801  Recovery = 96.36%
U 409.014†             12000.1      490.73 ug/L         3.947      490.73 ppb          3.947   0.80%
   QC value within limits for U 409.014  Recovery = 98.15%
V 292.402†             89961.1      501.72 ug/L         1.162      501.72 ppb          1.162   0.23%
   QC value within limits for V 292.402  Recovery = 100.34%
Zn 213.857†           152387.6      490.93 ug/L         1.551      490.93 ppb          1.551   0.32%
   QC value within limits for Zn 213.857  Recovery = 98.19%
SiO2†                 144472.9      5238.1 ug/L         16.53      5238.1 ppb          16.53   0.32%
   QC value within limits for SiO2  Recovery = 97.95%
All analyte(s) passed QC.
```

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: CCB **Date Collected: 3/6/2008 13:32:36**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	98707.1	98707.1	94.0	%			13:34:28
1	Y RADIAL	85967.8	85967.8	94.21	%			13:34:28
1	Al 396.153Radial†	581.5	56.2	6.4328	ug/L	6.4328	ppb	13:34:28
1	Ca 317.933Radial†	633.5	-40.0	-1.5944	ug/L	-1.5944	ppb	13:34:48
1	Fe 238.204 Radial†	56.0	7.4	0.7864	ug/L	0.7864	ppb	13:34:48
1	K 766.490 Radial†	3432.4	246.9	49.590	ug/L	49.590	ppb	13:34:28
1	Mg 279.077 IEC†	72.0	-1.8	-0.8194	ug/L	-0.8194	ppb	13:34:48
1	Na 589.592 Radial†	-2138.1	-929.8	-54.997	ug/L	-54.997	ppb	13:34:28
1	Sr 421.552†	-2103.9	-263.1	-0.2275	ug/L	-0.2275	ppb	13:34:28
1	Sc 361.383	955929.4	955929.4	95.619	%			13:35:45
1	Y 371.029	810738.5	810738.5	95.645	%			13:35:45
1	Ag 328.068†	1058.7	-19.2	-0.0885	ug/L	-0.0885	ppb	13:35:45
1	As 188.979†	-65.2	-6.4	-0.7014	ug/L	-0.7014	ppb	13:36:05
1	B 249.677†	-691.5	56.9	0.7522	ug/L	0.7522	ppb	13:36:05
1	Ba 233.527†	36.4	10.0	0.0281	ug/L	0.0281	ppb	13:36:05
1	Be 313.107†	-3608.6	-49.6	-0.0142	ug/L	-0.0142	ppb	13:35:45
1	Cd 226.502†	-201.8	11.9	0.0600	ug/L	0.0600	ppb	13:36:05
1	Co 228.616†	-207.1	-16.4	-0.1341	ug/L	-0.1341	ppb	13:36:05
1	Cr 267.716†	-52.4	-0.3	-0.0027	ug/L	-0.0027	ppb	13:36:05
1	Cu 324.752†	8567.5	386.1	0.9263	ug/L	0.9263	ppb	13:35:45
1	Mn 257.610†	1042.4	36.8	0.0208	ug/L	0.0208	ppb	13:36:05
1	Mo 202.031†	40.8	12.9	0.2825	ug/L	0.2825	ppb	13:36:05
1	Ni 231.604†	286.4	15.7	0.1614	ug/L	0.1614	ppb	13:36:05
1	P 214.914†	798.9	36.5	5.2979	ug/L	5.2979	ppb	13:36:05
1	Pb 220.353†	-84.2	21.4	0.9013	ug/L	0.9013	ppb	13:36:05
1	S 181.975 Axial†	192.6	38.4	12.496	ug/L	12.496	ppb	13:36:05
1	Sb 206.836†	123.8	-2.5	-0.2060	ug/L	-0.2060	ppb	13:36:05
1	Se 196.026†	-66.5	-9.1	-1.4020	ug/L	-1.4020	ppb	13:36:05
1	Si 251.611†	971.5	81.6	1.3902	ug/L	1.3902	ppb	13:36:05
1	Sn 189.927†	5.8	16.4	0.7749	ug/L	0.7749	ppb	13:36:05
1	Ti 334.940†	-1426.1	-42.9	-0.0628	ug/L	-0.0628	ppb	13:36:05
1	Tl 190.801†	-120.1	12.7	0.9388	ug/L	0.9388	ppb	13:36:05
1	U 409.014†	5529.3	400.3	16.389	ug/L	16.389	ppb	13:35:45
1	V 292.402†	-2468.4	-79.5	-0.4051	ug/L	-0.4051	ppb	13:36:05
1	Zn 213.857†	1918.1	-27.4	-0.0914	ug/L	-0.0914	ppb	13:36:05
1	SiO2†	912.6	-24.4	-0.8969	ug/L	-0.8969	ppb	13:37:01
2	Sc Radial	99812.6	99812.6	95.1	%			13:34:53
2	Y RADIAL	86880.4	86880.4	95.21	%			13:34:53
2	Al 396.153Radial†	518.3	-17.1	-1.9622	ug/L	-1.9622	ppb	13:34:53
2	Ca 317.933Radial†	623.9	-57.6	-2.2954	ug/L	-2.2954	ppb	13:35:13
2	Fe 238.204 Radial†	62.0	13.0	1.3923	ug/L	1.3923	ppb	13:35:13
2	K 766.490 Radial†	3384.4	156.0	31.329	ug/L	31.329	ppb	13:34:53
2	Mg 279.077 IEC†	84.1	10.1	4.6567	ug/L	4.6567	ppb	13:35:13
2	Na 589.592 Radial†	-2157.0	-924.4	-54.679	ug/L	-54.679	ppb	13:34:53
2	Sr 421.552†	-2122.6	-258.0	-0.2230	ug/L	-0.2230	ppb	13:34:53
2	Sc 361.383	956995.4	956995.4	95.725	%			13:36:10
2	Y 371.029	812363.8	812363.8	95.837	%			13:36:10
2	Ag 328.068†	1241.8	170.9	0.6567	ug/L	0.6567	ppb	13:36:10
2	As 188.979†	-67.1	-8.2	-0.9003	ug/L	-0.9003	ppb	13:36:30
2	B 249.677†	-747.0	-0.3	-0.0042	ug/L	-0.0042	ppb	13:36:30
2	Ba 233.527†	42.8	16.7	0.0475	ug/L	0.0475	ppb	13:36:30
2	Be 313.107†	-3629.8	-67.5	-0.0194	ug/L	-0.0194	ppb	13:36:10
2	Cd 226.502†	-215.4	-2.1	-0.0109	ug/L	-0.0109	ppb	13:36:30
2	Co 228.616†	-208.9	-18.0	-0.1483	ug/L	-0.1483	ppb	13:36:30
2	Cr 267.716†	-46.9	5.4	0.0393	ug/L	0.0393	ppb	13:36:30
2	Cu 324.752†	8570.3	379.0	0.9144	ug/L	0.9144	ppb	13:36:10
2	Mn 257.610†	1112.2	108.5	0.0610	ug/L	0.0610	ppb	13:36:30
2	Mo 202.031†	30.7	2.3	0.0499	ug/L	0.0499	ppb	13:36:30
2	Ni 231.604†	328.3	59.2	0.6074	ug/L	0.6074	ppb	13:36:30

2	P 214.914†	823.6	61.5	9.0028	ug/L	9.0028	ppb	13:36:30
2	Pb 220.353†	-96.3	9.0	0.3748	ug/L	0.3748	ppb	13:36:30
2	S 181.975 Axial†	195.8	41.5	13.518	ug/L	13.518	ppb	13:36:30
2	Sb 206.836†	132.5	6.5	0.5844	ug/L	0.5844	ppb	13:36:30
2	Se 196.026†	-50.2	7.9	1.2298	ug/L	1.2298	ppb	13:36:30
2	Si 251.611†	1015.4	126.3	2.1580	ug/L	2.1580	ppb	13:36:30
2	Sn 189.927†	-1.3	8.9	0.4205	ug/L	0.4205	ppb	13:36:30
2	Ti 334.940†	-1469.1	-86.1	-0.1156	ug/L	-0.1156	ppb	13:36:30
2	Tl 190.801†	-129.4	3.0	0.2267	ug/L	0.2267	ppb	13:36:30
2	U 409.014†	5380.2	238.1	9.7467	ug/L	9.7467	ppb	13:36:10
2	V 292.402†	-2474.7	-83.2	-0.4404	ug/L	-0.4404	ppb	13:36:30
2	Zn 213.857†	1970.3	24.9	0.0754	ug/L	0.0754	ppb	13:36:30
2	SiO2†	1106.3	176.9	6.4330	ug/L	6.4330	ppb	13:37:06
3	Sc Radial	98840.9	98840.9	94.1	%			13:35:18
3	Y RADIAL	85868.8	85868.8	94.11	%			13:35:18
3	Al 396.153Radial†	527.9	-1.5	-0.1990	ug/L	-0.1990	ppb	13:35:18
3	Ca 317.933Radial†	607.1	-69.0	-2.7488	ug/L	-2.7488	ppb	13:35:38
3	Fe 238.204 Radial†	43.8	-5.6	-0.6092	ug/L	-0.6092	ppb	13:35:38
3	K 766.490 Radial†	3428.5	237.8	47.758	ug/L	47.758	ppb	13:35:18
3	Mg 279.077 IEC†	69.4	-4.7	-2.1596	ug/L	-2.1596	ppb	13:35:38
3	Na 589.592 Radial†	-2147.3	-936.4	-55.389	ug/L	-55.389	ppb	13:35:18
3	Sr 421.552†	-2074.0	-228.4	-0.1974	ug/L	-0.1974	ppb	13:35:18
3	Sc 361.383	953728.2	953728.2	95.399	%			13:36:36
3	Y 371.029	808465.4	808465.4	95.377	%			13:36:36
3	Ag 328.068†	1081.2	6.9	0.0131	ug/L	0.0131	ppb	13:36:36
3	As 188.979†	-63.6	-4.8	-0.5278	ug/L	-0.5278	ppb	13:36:56
3	B 249.677†	-756.7	-13.1	-0.1737	ug/L	-0.1737	ppb	13:36:56
3	Ba 233.527†	44.8	18.9	0.0541	ug/L	0.0541	ppb	13:36:56
3	Be 313.107†	-3649.8	-101.4	-0.0291	ug/L	-0.0291	ppb	13:36:36
3	Cd 226.502†	-247.9	-36.9	-0.1870	ug/L	-0.1870	ppb	13:36:56
3	Co 228.616†	-233.1	-44.1	-0.3617	ug/L	-0.3617	ppb	13:36:56
3	Cr 267.716†	-66.1	-14.8	-0.1093	ug/L	-0.1093	ppb	13:36:56
3	Cu 324.752†	8428.8	261.5	0.6229	ug/L	0.6229	ppb	13:36:36
3	Mn 257.610†	1060.7	58.5	0.0328	ug/L	0.0328	ppb	13:36:56
3	Mo 202.031†	54.3	27.2	0.5958	ug/L	0.5958	ppb	13:36:56
3	Ni 231.604†	340.8	73.4	0.7540	ug/L	0.7540	ppb	13:36:56
3	P 214.914†	788.3	27.4	3.9779	ug/L	3.9779	ppb	13:36:56
3	Pb 220.353†	-136.1	-33.1	-1.4108	ug/L	-1.4108	ppb	13:36:56
3	S 181.975 Axial†	186.8	32.7	10.651	ug/L	10.651	ppb	13:36:56
3	Sb 206.836†	148.7	24.0	2.1590	ug/L	2.1590	ppb	13:36:56
3	Se 196.026†	-36.8	21.8	3.3774	ug/L	3.3774	ppb	13:36:56
3	Si 251.611†	1008.4	122.6	2.0866	ug/L	2.0866	ppb	13:36:56
3	Sn 189.927†	2.6	13.0	0.6139	ug/L	0.6139	ppb	13:36:56
3	Ti 334.940†	-1458.3	-80.1	-0.1109	ug/L	-0.1109	ppb	13:36:56
3	Tl 190.801†	-131.0	0.9	0.0662	ug/L	0.0662	ppb	13:36:56
3	U 409.014†	5517.2	401.0	16.417	ug/L	16.417	ppb	13:36:36
3	V 292.402†	-2449.6	-65.7	-0.3254	ug/L	-0.3254	ppb	13:36:56
3	Zn 213.857†	1956.3	17.2	0.0505	ug/L	0.0505	ppb	13:36:56
3	SiO2†	1077.6	150.8	5.4640	ug/L	5.4640	ppb	13:37:11

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	955551.0	95.581	%	0.1667				0.17%
Sc Radial	99120.2	94.4	%	0.57				0.61%
Y 371.029	810522.5	95.619	%	0.2310				0.24%
Y RADIAL	86239.0	94.51	%	0.611				0.65%
Ag 328.068†	52.9	0.1937	ug/L	0.40412	0.1937	ppb	0.40412	208.60%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	12.5	1.4239	ug/L	4.42656	1.4239	ppb	4.42656	310.88%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-6.5	-0.7099	ug/L	0.18642	-0.7099	ppb	0.18642	26.26%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	14.5	0.1914	ug/L	0.49297	0.1914	ppb	0.49297	257.50%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	15.2	0.0432	ug/L	0.01349	0.0432	ppb	0.01349	31.22%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-72.8	-0.0209	ug/L	0.00753	-0.0209	ppb	0.00753	36.03%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-55.6	-2.2128	ug/L	0.58162	-2.2128	ppb	0.58162	26.28%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                -9.1     -0.0460 ug/L       0.12719     -0.0460 ppb        0.12719 276.70%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               -26.2     -0.2147 ug/L       0.12748     -0.2147 ppb        0.12748  59.38%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -3.2     -0.0242 ug/L       0.07663     -0.0242 ppb        0.07663 316.18%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               342.2      0.8212 ug/L       0.17186      0.8212 ppb        0.17186  20.93%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          4.9      0.5232 ug/L       1.02638      0.5232 ppb        1.02638 196.17%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         213.6      42.892 ug/L       10.0557      42.892 ppb        10.0557  23.44%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             1.2      0.5592 ug/L       3.61119      0.5592 ppb        3.61119 645.75%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                67.9      0.0382 ug/L       0.02064      0.0382 ppb        0.02064  54.07%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                14.1      0.3094 ug/L       0.27395      0.3094 ppb        0.27395  88.54%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -930.2     -55.021 ug/L        0.3557     -55.021 ppb         0.3557   0.65%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                49.4      0.5076 ug/L       0.30862      0.5076 ppb        0.30862  60.80%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 41.8      6.0929 ug/L       2.60507      6.0929 ppb        2.60507  42.76%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -0.9     -0.0449 ug/L       1.21180     -0.0449 ppb        1.21180 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           37.5      12.222 ug/L        1.4532      12.222 ppb         1.4532  11.89%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 9.3      0.8458 ug/L       1.20402      0.8458 ppb        1.20402 142.35%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 6.9      1.0684 ug/L       2.39378      1.0684 ppb        2.39378 224.06%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               110.2      1.8783 ug/L       0.42413      1.8783 ppb        0.42413  22.58%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                12.7      0.6031 ug/L       0.17748      0.6031 ppb        0.17748  29.43%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -249.8     -0.2160 ug/L       0.01624     -0.2160 ppb        0.01624   7.52%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -69.7     -0.0964 ug/L       0.02923     -0.0964 ppb        0.02923  30.31%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 5.5      0.4106 ug/L       0.46444      0.4106 ppb        0.46444 113.12%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                346.5      14.184 ug/L        3.8432      14.184 ppb         3.8432  27.09%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -76.1     -0.3903 ug/L       0.05888     -0.3903 ppb        0.05888  15.08%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                 4.9      0.0115 ug/L       0.08995      0.0115 ppb        0.08995 782.21%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     101.1      3.6667 ug/L       3.98176      3.6667 ppb        3.98176 108.59%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 7 **Autosampler Location: 42**
Sample ID: 1201524629|730799|1 **Date Collected: 3/6/2008 13:39:21**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: 1201524629|730799|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	101334.9	101334.9	96.5	%			13:41:19
1	Y RADIAL	87297.8	87297.8	95.67	%			13:41:19
1	Al 396.153Radial†	707.9	171.1	13.134	ug/L	13.134	ppb	13:41:19
1	Ca 317.933Radial†	941433.1	974690.6	38811	ug/L	38811	ppb	13:41:14
1	Fe 238.204 Radial†	99.9	51.3	5.4885	ug/L	5.4885	ppb	13:41:39
1	K 766.490 Radial†	29268.1	26920.2	5407.0	ug/L	5407.0	ppb	13:41:19
1	Mg 279.077 IEC†	37459.1	38732.4	17934	ug/L	17934	ppb	13:41:19
1	Na 589.592 Radial†	487646.5	506587.6	29964	ug/L	29964	ppb	13:41:14
1	Sr 421.552†	778912.7	808994.3	698.29	ug/L	698.29	ppb	13:41:14
1	Sc 361.383	951301.0	951301.0	95.156	%			13:42:47
1	Y 371.029	796597.6	796597.6	93.977	%			13:42:47
1	Ag 328.068†	1212.1	147.4	0.6059	ug/L	0.6059	ppb	13:42:47
1	As 188.979†	-38.2	21.7	1.4164	ug/L	1.4164	ppb	13:43:07
1	B 249.677†	11101.4	12446.6	164.54	ug/L	164.54	ppb	13:42:47
1	Ba 233.527†	44018.1	46230.9	134.48	ug/L	134.48	ppb	13:42:47
1	Be 313.107†	-3675.4	-138.1	-0.0492	ug/L	-0.0492	ppb	13:42:47
1	Cd 226.502†	-223.0	-11.4	-0.0580	ug/L	-0.0580	ppb	13:43:07
1	Co 228.616†	-231.5	-43.0	-0.3287	ug/L	-0.3287	ppb	13:43:07
1	Cr 267.716†	307.1	377.2	2.8011	ug/L	2.8011	ppb	13:43:07
1	Cu 324.752†	8363.7	215.6	0.5124	ug/L	0.5124	ppb	13:42:47
1	Mn 257.610†	3268.5	2381.5	1.0091	ug/L	1.0091	ppb	13:43:07
1	Mo 202.031†	320.7	307.2	6.7419	ug/L	6.7419	ppb	13:43:07
1	Ni 231.604†	227.4	-44.8	-0.4597	ug/L	-0.4597	ppb	13:43:07
1	P 214.914†	839.3	83.1	12.271	ug/L	12.271	ppb	13:43:07
1	Pb 220.353†	-136.0	-33.3	-1.4021	ug/L	-1.4021	ppb	13:43:07
1	S 181.975 Axial†	17568.2	18299.4	5963.0	ug/L	5963.0	ppb	13:43:07
1	Sb 206.836†	127.5	2.0	0.1649	ug/L	0.1649	ppb	13:43:07
1	Se 196.026†	-48.8	9.1	1.4294	ug/L	1.4294	ppb	13:43:07
1	Si 251.611†	800487.4	840303.6	14364	ug/L	14364	ppb	13:42:47
1	Sn 189.927†	-167.0	-165.2	-6.6291	ug/L	-6.6291	ppb	13:43:07
1	Ti 334.940†	-4297.3	-3067.6	0.3281	ug/L	0.3281	ppb	13:43:07
1	Tl 190.801†	-123.6	8.3	0.5837	ug/L	0.5837	ppb	13:43:07
1	U 409.014†	5479.9	376.6	15.427	ug/L	15.427	ppb	13:42:47
1	V 292.402†	-15.8	2485.4	14.051	ug/L	14.051	ppb	13:43:07
1	Zn 213.857†	5432.5	3675.7	11.346	ug/L	11.346	ppb	13:43:07
1	SiO2†	803136.9	843043.6	30665	ug/L	30665	ppb	13:44:04
2	Sc Radial	102909.7	102909.7	98.0	%			13:41:49
2	Y RADIAL	88639.3	88639.3	97.14	%			13:41:49
2	Al 396.153Radial†	647.6	98.5	4.8926	ug/L	4.8926	ppb	13:41:49
2	Ca 317.933Radial†	945579.7	963994.4	38385	ug/L	38385	ppb	13:41:44
2	Fe 238.204 Radial†	107.2	57.3	6.1219	ug/L	6.1219	ppb	13:42:09
2	K 766.490 Radial†	29706.8	26903.7	5403.6	ug/L	5403.6	ppb	13:41:49
2	Mg 279.077 IEC†	38214.5	38909.1	18015	ug/L	18015	ppb	13:41:49
2	Na 589.592 Radial†	491132.0	502411.8	29717	ug/L	29717	ppb	13:41:44
2	Sr 421.552†	783814.3	801645.2	691.95	ug/L	691.95	ppb	13:41:44
2	Sc 361.383	950718.9	950718.9	95.098	%			13:43:12
2	Y 371.029	795861.5	795861.5	93.890	%			13:43:12
2	Ag 328.068†	1171.0	105.0	0.4345	ug/L	0.4345	ppb	13:43:12
2	As 188.979†	-62.8	-4.2	-1.4290	ug/L	-1.4290	ppb	13:43:33
2	B 249.677†	11330.8	12695.0	167.82	ug/L	167.82	ppb	13:43:12
2	Ba 233.527†	44102.6	46348.1	134.82	ug/L	134.82	ppb	13:43:12
2	Be 313.107†	-3707.3	-174.0	-0.0591	ug/L	-0.0591	ppb	13:43:12
2	Cd 226.502†	-225.5	-14.2	-0.0721	ug/L	-0.0721	ppb	13:43:33
2	Co 228.616†	-232.0	-43.7	-0.3358	ug/L	-0.3358	ppb	13:43:33
2	Cr 267.716†	279.8	348.8	2.5912	ug/L	2.5912	ppb	13:43:33
2	Cu 324.752†	8397.0	256.0	0.6043	ug/L	0.6043	ppb	13:43:12
2	Mn 257.610†	3267.6	2382.7	1.0083	ug/L	1.0083	ppb	13:43:33
2	Mo 202.031†	302.2	288.0	6.3202	ug/L	6.3202	ppb	13:43:33
2	Ni 231.604†	242.5	-28.8	-0.2949	ug/L	-0.2949	ppb	13:43:33

2	P 214.914†	818.6	61.9	9.1079	ug/L	9.1079	ppb	13:43:33
2	Pb 220.353†	-157.9	-56.5	-2.3911	ug/L	-2.3911	ppb	13:43:33
2	S 181.975 Axial†	17573.3	18316.1	5968.5	ug/L	5968.5	ppb	13:43:33
2	Sb 206.836†	128.3	2.9	0.2516	ug/L	0.2516	ppb	13:43:33
2	Se 196.026†	-50.1	7.7	1.2199	ug/L	1.2199	ppb	13:43:33
2	Si 251.611†	803026.3	843488.5	14418	ug/L	14418	ppb	13:43:12
2	Sn 189.927†	-165.0	-163.2	-6.5473	ug/L	-6.5473	ppb	13:43:33
2	Ti 334.940†	-4210.6	-2979.1	0.3916	ug/L	0.3916	ppb	13:43:33
2	Tl 190.801†	-112.8	19.6	1.4168	ug/L	1.4168	ppb	13:43:33
2	U 409.014†	5657.4	566.7	23.211	ug/L	23.211	ppb	13:43:12
2	V 292.402†	-35.9	2464.3	13.945	ug/L	13.945	ppb	13:43:33
2	Zn 213.857†	5437.7	3684.6	11.371	ug/L	11.371	ppb	13:43:33
2	SiO2†	815078.7	856117.8	31140	ug/L	31140	ppb	13:44:10
3	Sc Radial	102966.2	102966.2	98.1	%			13:42:20
3	Y RADIAL	88619.9	88619.9	97.12	%			13:42:20
3	Al 396.153Radial†	764.8	217.6	18.618	ug/L	18.618	ppb	13:42:20
3	Ca 317.933Radial†	931980.8	949598.3	37812	ug/L	37812	ppb	13:42:15
3	Fe 238.204 Radial†	108.3	58.2	6.2287	ug/L	6.2287	ppb	13:42:40
3	K 766.490 Radial†	29490.5	26666.5	5356.0	ug/L	5356.0	ppb	13:42:20
3	Mg 279.077 IEC†	37957.0	38625.1	17884	ug/L	17884	ppb	13:42:20
3	Na 589.592 Radial†	484656.6	495533.9	29311	ug/L	29311	ppb	13:42:15
3	Sr 421.552†	774898.6	792115.0	683.73	ug/L	683.73	ppb	13:42:15
3	Sc 361.383	940691.3	940691.3	94.095	%			13:43:38
3	Y 371.029	787145.8	787145.8	92.862	%			13:43:38
3	Ag 328.068†	1182.3	130.1	0.5322	ug/L	0.5322	ppb	13:43:38
3	As 188.979†	-54.9	3.5	-0.5896	ug/L	-0.5896	ppb	13:43:58
3	B 249.677†	11193.3	12675.9	167.57	ug/L	167.57	ppb	13:43:38
3	Ba 233.527†	43792.9	46513.2	135.30	ug/L	135.30	ppb	13:43:38
3	Be 313.107†	-3697.1	-204.8	-0.0684	ug/L	-0.0684	ppb	13:43:38
3	Cd 226.502†	-241.8	-34.1	-0.1731	ug/L	-0.1731	ppb	13:43:58
3	Co 228.616†	-220.6	-34.3	-0.2565	ug/L	-0.2565	ppb	13:43:58
3	Cr 267.716†	264.0	335.0	2.4909	ug/L	2.4909	ppb	13:43:58
3	Cu 324.752†	8397.0	350.1	0.8318	ug/L	0.8318	ppb	13:43:38
3	Mn 257.610†	3231.6	2381.0	1.0098	ug/L	1.0098	ppb	13:43:58
3	Mo 202.031†	317.2	307.3	6.7435	ug/L	6.7435	ppb	13:43:58
3	Ni 231.604†	216.1	-54.1	-0.5549	ug/L	-0.5549	ppb	13:43:58
3	P 214.914†	833.5	86.8	12.783	ug/L	12.783	ppb	13:43:58
3	Pb 220.353†	-101.9	1.2	0.0591	ug/L	0.0591	ppb	13:43:58
3	S 181.975 Axial†	17523.3	18460.0	6015.4	ug/L	6015.4	ppb	13:43:58
3	Sb 206.836†	122.1	-2.2	-0.2033	ug/L	-0.2033	ppb	13:43:58
3	Se 196.026†	-41.0	16.8	2.6219	ug/L	2.6219	ppb	13:43:58
3	Si 251.611†	795836.5	844848.8	14442	ug/L	14442	ppb	13:43:38
3	Sn 189.927†	-198.4	-200.6	-8.3358	ug/L	-8.3358	ppb	13:43:58
3	Ti 334.940†	-4314.3	-3136.5	0.1246	ug/L	0.1246	ppb	13:43:58
3	Tl 190.801†	-127.2	3.0	0.1858	ug/L	0.1858	ppb	13:43:58
3	U 409.014†	5642.7	614.5	25.170	ug/L	25.170	ppb	13:43:38
3	V 292.402†	31.2	2535.1	14.343	ug/L	14.343	ppb	13:43:58
3	Zn 213.857†	5429.2	3736.5	11.546	ug/L	11.546	ppb	13:43:58
3	SiO2†	803703.9	853165.7	31033	ug/L	31033	ppb	13:44:15

Mean Data: 1201524629|730799|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	947570.4	94.783	%	0.5966				0.63%
Sc Radial	102403.6	97.5	%	0.88				0.90%
Y 371.029	793201.6	93.576	%	0.6202				0.66%
Y RADIAL	88185.7	96.65	%	0.843				0.87%
Ag 328.068†	127.5	0.5242	ug/L	0.08602	0.5242	ppb	0.08602	16.41%
Al 396.153Radial†	162.4	12.215	ug/L	6.9090	12.215	ppb	6.9090	56.56%
As 188.979†	7.0	-0.2007	ug/L	1.46201	-0.2007	ppb	1.46201	728.34%
B 249.677†	12605.8	166.64	ug/L	1.830	166.64	ppb	1.830	1.10%
Ba 233.527†	46364.1	134.87	ug/L	0.413	134.87	ppb	0.413	0.31%
Be 313.107†	-172.3	-0.0589	ug/L	0.00959	-0.0589	ppb	0.00959	16.28%
Ca 317.933Radial†	962761.1	38336	ug/L	501.4	38336	ppb	501.4	1.31%
Cd 226.502†	-19.9	-0.1011	ug/L	0.06275	-0.1011	ppb	0.06275	62.09%
Co 228.616†	-40.3	-0.3070	ug/L	0.04391	-0.3070	ppb	0.04391	14.30%
Cr 267.716†	353.7	2.6277	ug/L	0.15830	2.6277	ppb	0.15830	6.02%
Cu 324.752†	273.9	0.6495	ug/L	0.16443	0.6495	ppb	0.16443	25.32%
Fe 238.204 Radial†	55.6	5.9464	ug/L	0.40011	5.9464	ppb	0.40011	6.73%
K 766.490 Radial†	26830.2	5388.9	ug/L	28.51	5388.9	ppb	28.51	0.53%

Mg 279.077 IEC†	38755.5	17944	ug/L	66.4	17944	ppb	66.4	0.37%
Mn 257.610†	2381.7	1.0091	ug/L	0.00075	1.0091	ppb	0.00075	0.07%
Mo 202.031†	300.8	6.6019	ug/L	0.24395	6.6019	ppb	0.24395	3.70%
Na 589.592 Radial†	501511.1	29664	ug/L	330.1	29664	ppb	330.1	1.11%
Ni 231.604†	-42.5	-0.4365	ug/L	0.13152	-0.4365	ppb	0.13152	30.13%
P 214.914†	77.3	11.387	ug/L	1.9906	11.387	ppb	1.9906	17.48%
Pb 220.353†	-29.5	-1.2447	ug/L	1.23264	-1.2447	ppb	1.23264	99.03%
S 181.975 Axial†	18358.5	5982.3	ug/L	28.77	5982.3	ppb	28.77	0.48%
Sb 206.836†	0.9	0.0711	ug/L	0.24152	0.0711	ppb	0.24152	339.76%
Se 196.026†	11.2	1.7571	ug/L	0.75623	1.7571	ppb	0.75623	43.04%
Si 251.611†	842880.3	14408	ug/L	39.9	14408	ppb	39.9	0.28%
Sn 189.927†	-176.3	-7.1707	ug/L	1.00979	-7.1707	ppb	1.00979	14.08%
Sr 421.552†	800918.2	691.32	ug/L	7.302	691.32	ppb	7.302	1.06%
Ti 334.940†	-3061.1	0.2814	ug/L	0.13949	0.2814	ppb	0.13949	49.56%
Tl 190.801†	10.3	0.7287	ug/L	0.62821	0.7287	ppb	0.62821	86.20%
U 409.014†	519.3	21.269	ug/L	5.1533	21.269	ppb	5.1533	24.23%
V 292.402†	2494.9	14.113	ug/L	0.2063	14.113	ppb	0.2063	1.46%
Zn 213.857†	3698.9	11.421	ug/L	0.1088	11.421	ppb	0.1088	0.95%
SiO2†	850775.7	30946	ug/L	249.4	30946	ppb	249.4	0.81%

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Sequence No.: 8 **Autosampler Location: 43**
Sample ID: 1201524626|730799|1 **Date Collected: 3/6/2008 13:46:24**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: 1201524626|730799|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	101334.5	101334.5	96.5	%			13:48:23
1	Y RADIAL	87427.9	87427.9	95.81	%			13:48:23
1	Al 396.153Radial†	43987.0	45012.2	5131.3	ug/L	5131.3	ppb	13:48:23
1	Ca 317.933Radial†	1085377.0	1123833.0	44750	ug/L	44750	ppb	13:48:18
1	Fe 238.204 Radial†	45357.1	46941.8	5042.0	ug/L	5042.0	ppb	13:48:23
1	K 766.490 Radial†	54624.9	53192.1	10684	ug/L	10684	ppb	13:48:23
1	Mg 279.077 IEC†	48782.7	50464.8	23376	ug/L	23376	ppb	13:48:23
1	Na 589.592 Radial†	582256.7	604614.1	35763	ug/L	35763	ppb	13:48:18
1	Sr 421.552†	1382153.2	1434008.1	1238.5	ug/L	1238.5	ppb	13:48:18
1	Sc 361.383	951971.0	951971.0	95.223	%			13:48:53
1	Y 371.029	795174.5	795174.5	93.809	%			13:48:53
1	Ag 328.068†	129145.8	134498.3	526.29	ug/L	526.29	ppb	13:48:53
1	As 188.979†	4394.4	4676.7	509.36	ug/L	509.36	ppb	13:48:58
1	B 249.677†	48870.2	52101.9	688.99	ug/L	688.99	ppb	13:48:53
1	Ba 233.527†	213581.1	224267.9	653.39	ug/L	653.39	ppb	13:48:53
1	Be 313.107†	1721755.3	1811856.1	516.06	ug/L	516.06	ppb	13:48:53
1	Cd 226.502†	94930.4	99915.8	505.64	ug/L	505.64	ppb	13:48:53
1	Co 228.616†	55706.5	58701.4	484.00	ug/L	484.00	ppb	13:48:58
1	Cr 267.716†	65796.1	69151.5	510.06	ug/L	510.06	ppb	13:48:53
1	Cu 324.752†	210487.3	212473.0	516.84	ug/L	516.84	ppb	13:48:53
1	Mn 257.610†	862990.4	905231.2	508.07	ug/L	508.07	ppb	13:48:53
1	Mo 202.031†	21869.7	22937.1	503.63	ug/L	503.63	ppb	13:48:58
1	Ni 231.604†	44401.9	46345.7	475.37	ug/L	475.37	ppb	13:48:58
1	P 214.914†	4449.4	3873.6	501.57	ug/L	501.57	ppb	13:48:58
1	Pb 220.353†	10883.4	11539.0	490.67	ug/L	490.67	ppb	13:48:58
1	S 181.975 Axial†	32522.3	33990.7	11076	ug/L	11076	ppb	13:48:58
1	Sb 206.836†	5559.9	5706.9	508.99	ug/L	508.99	ppb	13:48:58
1	Se 196.026†	2938.8	3146.6	501.05	ug/L	501.05	ppb	13:48:58
1	Si 251.611†	1101377.5	1155696.6	19747	ug/L	19747	ppb	13:48:53
1	Sn 189.927†	9956.0	10465.7	496.75	ug/L	496.75	ppb	13:48:58
1	Ti 334.940†	381161.5	401732.0	522.26	ug/L	522.26	ppb	13:48:53
1	Tl 190.801†	6088.3	6532.0	486.58	ug/L	486.58	ppb	13:48:58
1	U 409.014†	17365.9	12854.8	525.72	ug/L	525.72	ppb	13:48:53
1	V 292.402†	89986.5	97002.9	541.06	ug/L	541.06	ppb	13:48:53
1	Zn 213.857†	152154.9	157754.8	507.76	ug/L	507.76	ppb	13:48:53
1	SiO2†	1098040.9	1152148.2	41891	ug/L	41891	ppb	13:49:29
2	Sc Radial	100637.2	100637.2	95.9	%			13:48:33
2	Y RADIAL	86721.8	86721.8	95.04	%			13:48:33
2	Al 396.153Radial†	43799.6	45132.4	5144.7	ug/L	5144.7	ppb	13:48:33
2	Ca 317.933Radial†	1085277.2	1131520.2	45056	ug/L	45056	ppb	13:48:28
2	Fe 238.204 Radial†	44961.7	46854.9	5032.9	ug/L	5032.9	ppb	13:48:33
2	K 766.490 Radial†	54439.7	53391.1	10724	ug/L	10724	ppb	13:48:33
2	Mg 279.077 IEC†	48435.2	50452.5	23371	ug/L	23371	ppb	13:48:33
2	Na 589.592 Radial†	581854.9	608374.6	35985	ug/L	35985	ppb	13:48:28
2	Sr 421.552†	1381898.9	1443664.5	1246.8	ug/L	1246.8	ppb	13:48:28
2	Sc 361.383	946819.3	946819.3	94.708	%			13:49:05
2	Y 371.029	790324.0	790324.0	93.236	%			13:49:05
2	Ag 328.068†	128324.4	134369.0	525.80	ug/L	525.80	ppb	13:49:05
2	As 188.979†	4376.8	4683.3	510.05	ug/L	510.05	ppb	13:49:10
2	B 249.677†	48720.4	52223.0	690.59	ug/L	690.59	ppb	13:49:05
2	Ba 233.527†	212813.6	224677.9	654.58	ug/L	654.58	ppb	13:49:05
2	Be 313.107†	1712673.9	1812105.3	516.13	ug/L	516.13	ppb	13:49:05
2	Cd 226.502†	94479.2	99981.7	505.98	ug/L	505.98	ppb	13:49:05
2	Co 228.616†	56382.7	59733.7	492.53	ug/L	492.53	ppb	13:49:10
2	Cr 267.716†	65504.7	69219.7	510.56	ug/L	510.56	ppb	13:49:05
2	Cu 324.752†	209185.2	212300.9	516.43	ug/L	516.43	ppb	13:49:05
2	Mn 257.610†	860176.0	907190.7	509.17	ug/L	509.17	ppb	13:49:05
2	Mo 202.031†	22112.5	23318.4	512.00	ug/L	512.00	ppb	13:49:10
2	Ni 231.604†	44872.7	47096.5	483.07	ug/L	483.07	ppb	13:49:10

2	P 214.914†	4500.5	3953.1	513.44	ug/L	513.44 ppb	13:49:10
2	Pb 220.353†	10964.5	11686.7	496.96	ug/L	496.96 ppb	13:49:10
2	S 181.975 Axial†	33041.7	34725.0	11315	ug/L	11315 ppb	13:49:10
2	Sb 206.836†	5571.5	5750.9	512.95	ug/L	512.95 ppb	13:49:10
2	Se 196.026†	2961.6	3187.5	507.33	ug/L	507.33 ppb	13:49:10
2	Si 251.611†	1096638.4	1156985.9	19769	ug/L	19769 ppb	13:49:05
2	Sn 189.927†	10099.5	10674.2	506.63	ug/L	506.63 ppb	13:49:10
2	Ti 334.940†	379679.8	402345.4	523.09	ug/L	523.09 ppb	13:49:05
2	Tl 190.801†	6176.7	6660.1	496.05	ug/L	496.05 ppb	13:49:10
2	U 409.014†	16997.2	12564.7	513.87	ug/L	513.87 ppb	13:49:05
2	V 292.402†	89581.6	97089.5	541.60	ug/L	541.60 ppb	13:49:05
2	Zn 213.857†	151502.9	157935.7	508.30	ug/L	508.30 ppb	13:49:05
2	SiO2†	1101897.8	1162494.8	42267	ug/L	42267 ppb	13:49:35
3	Sc Radial	100543.3	100543.3	95.8	%		13:48:44
3	Y RADIAL	86670.4	86670.4	94.98	%		13:48:44
3	Al 396.153Radial†	43787.2	45162.2	5148.1	ug/L	5148.1 ppb	13:48:44
3	Ca 317.933Radial†	1093672.3	1141344.7	45447	ug/L	45447 ppb	13:48:39
3	Fe 238.204 Radial†	44997.1	46935.7	5041.5	ug/L	5041.5 ppb	13:48:44
3	K 766.490 Radial†	54160.2	53152.3	10676	ug/L	10676 ppb	13:48:44
3	Mg 279.077 IEC†	48485.5	50552.2	23417	ug/L	23417 ppb	13:48:44
3	Na 589.592 Radial†	585444.8	612690.5	36240	ug/L	36240 ppb	13:48:39
3	Sr 421.552†	1390057.5	1453531.2	1255.4	ug/L	1255.4 ppb	13:48:39
3	Sc 361.383	947202.3	947202.3	94.746	%		13:49:17
3	Y 371.029	790006.2	790006.2	93.199	%		13:49:17
3	Ag 328.068†	128402.8	134397.0	525.90	ug/L	525.90 ppb	13:49:17
3	As 188.979†	4414.9	4721.6	514.25	ug/L	514.25 ppb	13:49:23
3	B 249.677†	48643.7	52121.3	689.24	ug/L	689.24 ppb	13:49:17
3	Ba 233.527†	213030.5	224816.0	654.98	ug/L	654.98 ppb	13:49:17
3	Be 313.107†	1711246.3	1809867.4	515.50	ug/L	515.50 ppb	13:49:17
3	Cd 226.502†	94368.9	99825.1	505.18	ug/L	505.18 ppb	13:49:17
3	Co 228.616†	56187.1	59503.2	490.62	ug/L	490.62 ppb	13:49:23
3	Cr 267.716†	65451.6	69135.7	509.94	ug/L	509.94 ppb	13:49:17
3	Cu 324.752†	209252.1	212282.2	516.39	ug/L	516.39 ppb	13:49:17
3	Mn 257.610†	861002.8	907696.1	509.45	ug/L	509.45 ppb	13:49:17
3	Mo 202.031†	22028.2	23219.9	509.84	ug/L	509.84 ppb	13:49:23
3	Ni 231.604†	44805.7	47006.6	482.15	ug/L	482.15 ppb	13:49:23
3	P 214.914†	4489.4	3939.4	511.41	ug/L	511.41 ppb	13:49:23
3	Pb 220.353†	10924.5	11639.8	494.97	ug/L	494.97 ppb	13:49:23
3	S 181.975 Axial†	32805.6	34461.7	11229	ug/L	11229 ppb	13:49:23
3	Sb 206.836†	5574.8	5752.0	513.05	ug/L	513.05 ppb	13:49:23
3	Se 196.026†	2938.4	3161.7	503.37	ug/L	503.37 ppb	13:49:23
3	Si 251.611†	1096854.2	1156745.6	19765	ug/L	19765 ppb	13:49:17
3	Sn 189.927†	10080.3	10649.6	505.47	ug/L	505.47 ppb	13:49:23
3	Ti 334.940†	380026.3	402549.1	523.40	ug/L	523.40 ppb	13:49:17
3	Tl 190.801†	6107.7	6584.6	490.48	ug/L	490.48 ppb	13:49:23
3	U 409.014†	16967.0	12525.6	512.26	ug/L	512.26 ppb	13:49:17
3	V 292.402†	89381.7	96840.3	540.19	ug/L	540.19 ppb	13:49:17
3	Zn 213.857†	151703.8	158083.1	508.78	ug/L	508.78 ppb	13:49:17
3	SiO2†	1103115.8	1163310.0	42297	ug/L	42297 ppb	13:49:41

Mean Data: 1201524626|730799|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	948664.2	94.892	%	0.2871				0.30%
Sc Radial	100838.3	96.0	%	0.41				0.43%
Y 371.029	791834.9	93.415	%	0.3417				0.37%
Y RADIAL	86940.0	95.28	%	0.464				0.49%
Ag 328.068†	134421.4	526.00	ug/L	0.261	526.00	ppb	0.261	0.05%
Al 396.153Radial†	45102.3	5141.4	ug/L	8.90	5141.4	ppb	8.90	0.17%
As 188.979†	4693.9	511.22	ug/L	2.648	511.22	ppb	2.648	0.52%
B 249.677†	52148.7	689.61	ug/L	0.860	689.61	ppb	0.860	0.12%
Ba 233.527†	224587.3	654.32	ug/L	0.828	654.32	ppb	0.828	0.13%
Be 313.107†	1811276.3	515.90	ug/L	0.348	515.90	ppb	0.348	0.07%
Ca 317.933Radial†	1132232.6	45084	ug/L	349.5	45084	ppb	349.5	0.78%
Cd 226.502†	99907.5	505.60	ug/L	0.399	505.60	ppb	0.399	0.08%
Co 228.616†	59312.8	489.05	ug/L	4.476	489.05	ppb	4.476	0.92%
Cr 267.716†	69168.9	510.19	ug/L	0.330	510.19	ppb	0.330	0.06%
Cu 324.752†	212352.0	516.55	ug/L	0.250	516.55	ppb	0.250	0.05%
Fe 238.204 Radial†	46910.8	5038.8	ug/L	5.10	5038.8	ppb	5.10	0.10%
K 766.490 Radial†	53245.2	10694	ug/L	25.7	10694	ppb	25.7	0.24%

Mg 279.077 IEC†	50489.8	23388	ug/L	25.2	23388	ppb	25.2	0.11%
Mn 257.610†	906706.0	508.90	ug/L	0.730	508.90	ppb	0.730	0.14%
Mo 202.031†	23158.5	508.49	ug/L	4.344	508.49	ppb	4.344	0.85%
Na 589.592 Radial†	608559.7	35996	ug/L	239.0	35996	ppb	239.0	0.66%
Ni 231.604†	46816.2	480.20	ug/L	4.205	480.20	ppb	4.205	0.88%
P 214.914†	3922.0	508.81	ug/L	6.350	508.81	ppb	6.350	1.25%
Pb 220.353†	11621.8	494.20	ug/L	3.216	494.20	ppb	3.216	0.65%
S 181.975 Axial†	34392.5	11206	ug/L	121.2	11206	ppb	121.2	1.08%
Sb 206.836†	5736.6	511.66	ug/L	2.315	511.66	ppb	2.315	0.45%
Se 196.026†	3165.3	503.92	ug/L	3.175	503.92	ppb	3.175	0.63%
Si 251.611†	1156476.0	19761	ug/L	11.7	19761	ppb	11.7	0.06%
Sn 189.927†	10596.5	502.95	ug/L	5.400	502.95	ppb	5.400	1.07%
Sr 421.552†	1443734.6	1246.9	ug/L	8.43	1246.9	ppb	8.43	0.68%
Ti 334.940†	402208.8	522.92	ug/L	0.588	522.92	ppb	0.588	0.11%
Tl 190.801†	6592.2	491.04	ug/L	4.761	491.04	ppb	4.761	0.97%
U 409.014†	12648.4	517.28	ug/L	7.351	517.28	ppb	7.351	1.42%
V 292.402†	96977.6	540.95	ug/L	0.707	540.95	ppb	0.707	0.13%
Zn 213.857†	157924.5	508.28	ug/L	0.511	508.28	ppb	0.511	0.10%
SiO2†	1159317.7	42152	ug/L	226.2	42152	ppb	226.2	0.54%

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Sequence No.: 9 **Autosampler Location: 44**
Sample ID: 1201529766|730799|1 **Date Collected: 3/6/2008 13:51:50**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: 1201529766|730799|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	101461.1	101461.1	96.6	%			13:53:49
1	Y RADIAL	87287.4	87287.4	95.66	%			13:53:49
1	Al 396.153Radial†	44155.7	45129.9	5144.5	ug/L	5144.5	ppb	13:53:49
1	Ca 317.933Radial†	1097528.5	1135003.7	45194	ug/L	45194	ppb	13:53:44
1	Fe 238.204 Radial†	45576.1	47109.8	5060.1	ug/L	5060.1	ppb	13:53:49
1	K 766.490 Radial†	55083.0	53595.6	10765	ug/L	10765	ppb	13:53:49
1	Mg 279.077 IEC†	49534.3	51179.5	23707	ug/L	23707	ppb	13:53:49
1	Na 589.592 Radial†	587333.3	609114.3	36029	ug/L	36029	ppb	13:53:44
1	Sr 421.552†	1390235.6	1440584.4	1244.2	ug/L	1244.2	ppb	13:53:44
1	Sc 361.383	946157.1	946157.1	94.641	%			13:54:19
1	Y 371.029	788721.4	788721.4	93.047	%			13:54:19
1	Ag 328.068†	128368.0	134510.0	526.36	ug/L	526.36	ppb	13:54:19
1	As 188.979†	4408.5	4720.0	514.06	ug/L	514.06	ppb	13:54:24
1	B 249.677†	49017.6	52573.0	695.22	ug/L	695.22	ppb	13:54:19
1	Ba 233.527†	213167.7	225209.3	656.13	ug/L	656.13	ppb	13:54:19
1	Be 313.107†	1712767.1	1813469.6	516.52	ug/L	516.52	ppb	13:54:19
1	Cd 226.502†	94397.7	99965.5	505.89	ug/L	505.89	ppb	13:54:19
1	Co 228.616†	55820.0	59180.8	487.96	ug/L	487.96	ppb	13:54:24
1	Cr 267.716†	65655.8	69427.8	512.09	ug/L	512.09	ppb	13:54:19
1	Cu 324.752†	209732.0	213033.2	518.21	ug/L	518.21	ppb	13:54:19
1	Mn 257.610†	862717.1	910511.4	511.03	ug/L	511.03	ppb	13:54:19
1	Mo 202.031†	21918.7	23129.9	507.86	ug/L	507.86	ppb	13:54:24
1	Ni 231.604†	44664.4	46909.6	481.16	ug/L	481.16	ppb	13:54:24
1	P 214.914†	4498.2	3954.0	513.30	ug/L	513.30	ppb	13:54:24
1	Pb 220.353†	10806.3	11527.6	490.21	ug/L	490.21	ppb	13:54:24
1	S 181.975 Axial†	32950.4	34653.0	11291	ug/L	11291	ppb	13:54:24
1	Sb 206.836†	5534.7	5716.1	509.81	ug/L	509.81	ppb	13:54:24
1	Se 196.026†	2925.2	3151.2	501.81	ug/L	501.81	ppb	13:54:24
1	Si 251.611†	1107343.6	1169107.8	19977	ug/L	19977	ppb	13:54:19
1	Sn 189.927†	10006.2	10583.0	502.31	ug/L	502.31	ppb	13:54:24
1	Ti 334.940†	380861.5	403874.7	525.08	ug/L	525.08	ppb	13:54:19
1	Tl 190.801†	6069.0	6550.8	487.99	ug/L	487.99	ppb	13:54:24
1	U 409.014†	16974.7	12553.5	513.39	ug/L	513.39	ppb	13:54:19
1	V 292.402†	89725.7	97308.0	542.76	ug/L	542.76	ppb	13:54:19
1	Zn 213.857†	152008.8	158582.2	510.40	ug/L	510.40	ppb	13:54:19
1	SiO2†	1109709.8	1171563.6	42597	ug/L	42597	ppb	13:54:55
2	Sc Radial	101103.4	101103.4	96.3	%			13:53:59
2	Y RADIAL	86934.2	86934.2	95.27	%			13:53:59
2	Al 396.153Radial†	43928.7	45055.8	5135.8	ug/L	5135.8	ppb	13:53:59
2	Ca 317.933Radial†	1103098.3	1144806.4	45585	ug/L	45585	ppb	13:53:54
2	Fe 238.204 Radial†	45338.7	47030.2	5051.8	ug/L	5051.8	ppb	13:53:59
2	K 766.490 Radial†	54821.2	53525.5	10751	ug/L	10751	ppb	13:53:59
2	Mg 279.077 IEC†	49237.2	51052.3	23649	ug/L	23649	ppb	13:53:59
2	Na 589.592 Radial†	591462.5	615552.9	36410	ug/L	36410	ppb	13:53:54
2	Sr 421.552†	1400993.7	1456846.6	1258.2	ug/L	1258.2	ppb	13:53:54
2	Sc 361.383	951725.6	951725.6	95.198	%			13:54:31
2	Y 371.029	794889.1	794889.1	93.775	%			13:54:31
2	Ag 328.068†	128891.2	134265.8	525.39	ug/L	525.39	ppb	13:54:31
2	As 188.979†	4472.7	4760.2	518.44	ug/L	518.44	ppb	13:54:36
2	B 249.677†	49224.1	52486.9	694.08	ug/L	694.08	ppb	13:54:31
2	Ba 233.527†	213152.0	223874.9	652.25	ug/L	652.25	ppb	13:54:31
2	Be 313.107†	1716908.3	1807230.9	514.75	ug/L	514.75	ppb	13:54:31
2	Cd 226.502†	94173.6	99146.5	501.75	ug/L	501.75	ppb	13:54:31
2	Co 228.616†	56813.4	59879.2	493.73	ug/L	493.73	ppb	13:54:36
2	Cr 267.716†	65656.3	69022.4	509.11	ug/L	509.11	ppb	13:54:31
2	Cu 324.752†	211176.5	213254.0	518.75	ug/L	518.75	ppb	13:54:31
2	Mn 257.610†	862849.3	905316.7	508.12	ug/L	508.12	ppb	13:54:31
2	Mo 202.031†	22280.2	23374.1	513.22	ug/L	513.22	ppb	13:54:36
2	Ni 231.604†	45274.0	47273.8	484.89	ug/L	484.89	ppb	13:54:36

2	P 214.914†	4560.1	3991.2	518.77	ug/L	518.77	ppb	13:54:36
2	Pb 220.353†	11088.1	11757.0	499.94	ug/L	499.94	ppb	13:54:36
2	S 181.975 Axial†	33613.1	35145.4	11452	ug/L	11452	ppb	13:54:36
2	Sb 206.836†	5603.2	5753.8	513.24	ug/L	513.24	ppb	13:54:36
2	Se 196.026†	3036.0	3249.5	516.97	ug/L	516.97	ppb	13:54:36
2	Si 251.611†	1109490.4	1164516.9	19898	ug/L	19898	ppb	13:54:31
2	Sn 189.927†	10191.3	10715.6	508.60	ug/L	508.60	ppb	13:54:36
2	Ti 334.940†	381972.0	402686.6	523.59	ug/L	523.59	ppb	13:54:31
2	Tl 190.801†	6248.0	6701.3	499.10	ug/L	499.10	ppb	13:54:36
2	U 409.014†	17249.8	12737.5	520.95	ug/L	520.95	ppb	13:54:31
2	V 292.402†	90015.9	97058.2	541.45	ug/L	541.45	ppb	13:54:31
2	Zn 213.857†	151996.2	157629.2	507.28	ug/L	507.28	ppb	13:54:31
2	SiO2†	1109687.3	1164679.4	42346	ug/L	42346	ppb	13:55:01
3	Sc Radial	102177.9	102177.9	97.3	%			13:54:10
3	Y RADIAL	87955.3	87955.3	96.39	%			13:54:10
3	Al 396.153Radial†	44415.8	45076.6	5138.2	ug/L	5138.2	ppb	13:54:10
3	Ca 317.933Radial†	1100181.4	1129762.1	44986	ug/L	44986	ppb	13:54:05
3	Fe 238.204 Radial†	45891.8	47103.3	5059.6	ug/L	5059.6	ppb	13:54:10
3	K 766.490 Radial†	55370.3	53491.0	10744	ug/L	10744	ppb	13:54:10
3	Mg 279.077 IEC†	49793.4	51086.1	23664	ug/L	23664	ppb	13:54:10
3	Na 589.592 Radial†	590738.5	608349.6	35984	ug/L	35984	ppb	13:54:05
3	Sr 421.552†	1399042.2	1439541.0	1243.3	ug/L	1243.3	ppb	13:54:05
3	Sc 361.383	948274.1	948274.1	94.853	%			13:54:44
3	Y 371.029	792400.5	792400.5	93.481	%			13:54:44
3	Ag 328.068†	128366.9	134206.0	525.18	ug/L	525.18	ppb	13:54:44
3	As 188.979†	4418.5	4720.1	514.05	ug/L	514.05	ppb	13:54:49
3	B 249.677†	49124.8	52570.4	695.19	ug/L	695.19	ppb	13:54:44
3	Ba 233.527†	213040.2	224572.0	654.28	ug/L	654.28	ppb	13:54:44
3	Be 313.107†	1714996.9	1811780.0	516.04	ug/L	516.04	ppb	13:54:44
3	Cd 226.502†	94472.6	99821.8	505.17	ug/L	505.17	ppb	13:54:44
3	Co 228.616†	56796.2	60078.3	495.38	ug/L	495.38	ppb	13:54:49
3	Cr 267.716†	65751.2	69373.5	511.69	ug/L	511.69	ppb	13:54:44
3	Cu 324.752†	209727.6	212533.8	517.00	ug/L	517.00	ppb	13:54:44
3	Mn 257.610†	860676.8	906325.2	508.68	ug/L	508.68	ppb	13:54:44
3	Mo 202.031†	22298.8	23478.9	515.52	ug/L	515.52	ppb	13:54:49
3	Ni 231.604†	45275.2	47448.1	486.68	ug/L	486.68	ppb	13:54:49
3	P 214.914†	4582.1	4031.8	525.03	ug/L	525.03	ppb	13:54:49
3	Pb 220.353†	11057.2	11766.7	500.36	ug/L	500.36	ppb	13:54:49
3	S 181.975 Axial†	33613.7	35274.6	11494	ug/L	11494	ppb	13:54:49
3	Sb 206.836†	5631.8	5805.4	517.83	ug/L	517.83	ppb	13:54:49
3	Se 196.026†	2987.7	3210.2	510.91	ug/L	510.91	ppb	13:54:49
3	Si 251.611†	1105653.8	1164714.1	19901	ug/L	19901	ppb	13:54:44
3	Sn 189.927†	10204.7	10768.7	511.10	ug/L	511.10	ppb	13:54:49
3	Ti 334.940†	380467.4	402560.7	523.36	ug/L	523.36	ppb	13:54:44
3	Tl 190.801†	6159.0	6631.4	493.92	ug/L	493.92	ppb	13:54:49
3	U 409.014†	16908.8	12444.0	508.93	ug/L	508.93	ppb	13:54:44
3	V 292.402†	89899.8	97279.9	542.67	ug/L	542.67	ppb	13:54:44
3	Zn 213.857†	151858.1	158064.7	508.68	ug/L	508.68	ppb	13:54:44
3	SiO2†	1109903.8	1169150.3	42509	ug/L	42509	ppb	13:55:07

Mean Data: 1201529766|730799|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	948718.9	94.898	%	0.2812				0.30%
Sc Radial	101580.8	96.8	%	0.52				0.54%
Y 371.029	792003.7	93.435	%	0.3661				0.39%
Y RADIAL	87392.3	95.78	%	0.568				0.59%
Ag 328.068†	134327.3	525.64	ug/L	0.628	525.64	ppb	0.628	0.12%
Al 396.153Radial†	45087.4	5139.5	ug/L	4.53	5139.5	ppb	4.53	0.09%
As 188.979†	4733.4	515.52	ug/L	2.530	515.52	ppb	2.530	0.49%
B 249.677†	52543.4	694.83	ug/L	0.648	694.83	ppb	0.648	0.09%
Ba 233.527†	224552.1	654.22	ug/L	1.943	654.22	ppb	1.943	0.30%
Be 313.107†	1810826.8	515.77	ug/L	0.918	515.77	ppb	0.918	0.18%
Ca 317.933Radial†	1136524.1	45255	ug/L	304.1	45255	ppb	304.1	0.67%
Cd 226.502†	99644.6	504.27	ug/L	2.214	504.27	ppb	2.214	0.44%
Co 228.616†	59712.7	492.35	ug/L	3.896	492.35	ppb	3.896	0.79%
Cr 267.716†	69274.6	510.96	ug/L	1.622	510.96	ppb	1.622	0.32%
Cu 324.752†	212940.3	517.99	ug/L	0.893	517.99	ppb	0.893	0.17%
Fe 238.204 Radial†	47081.1	5057.2	ug/L	4.69	5057.2	ppb	4.69	0.09%
K 766.490 Radial†	53537.3	10753	ug/L	10.7	10753	ppb	10.7	0.10%

Mg 279.077 IEC†	51106.0	23673	ug/L	30.4	23673	ppb	30.4	0.13%
Mn 257.610†	907384.4	509.28	ug/L	1.545	509.28	ppb	1.545	0.30%
Mo 202.031†	23327.7	512.20	ug/L	3.930	512.20	ppb	3.930	0.77%
Na 589.592 Radial†	611005.6	36141	ug/L	234.0	36141	ppb	234.0	0.65%
Ni 231.604†	47210.5	484.24	ug/L	2.818	484.24	ppb	2.818	0.58%
P 214.914†	3992.3	519.04	ug/L	5.870	519.04	ppb	5.870	1.13%
Pb 220.353†	11683.8	496.84	ug/L	5.742	496.84	ppb	5.742	1.16%
S 181.975 Axial†	35024.3	11412	ug/L	106.9	11412	ppb	106.9	0.94%
Sb 206.836†	5758.4	513.63	ug/L	4.025	513.63	ppb	4.025	0.78%
Se 196.026†	3203.7	509.90	ug/L	7.630	509.90	ppb	7.630	1.50%
Si 251.611†	1166112.9	19925	ug/L	44.4	19925	ppb	44.4	0.22%
Sn 189.927†	10689.1	507.34	ug/L	4.526	507.34	ppb	4.526	0.89%
Sr 421.552†	1445657.3	1248.6	ug/L	8.38	1248.6	ppb	8.38	0.67%
Ti 334.940†	403040.7	524.01	ug/L	0.932	524.01	ppb	0.932	0.18%
Tl 190.801†	6627.8	493.67	ug/L	5.559	493.67	ppb	5.559	1.13%
U 409.014†	12578.3	514.42	ug/L	6.076	514.42	ppb	6.076	1.18%
V 292.402†	97215.4	542.29	ug/L	0.732	542.29	ppb	0.732	0.14%
Zn 213.857†	158092.1	508.78	ug/L	1.563	508.78	ppb	1.563	0.31%
SiO2†	1168464.4	42484	ug/L	127.1	42484	ppb	127.1	0.30%

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Sequence No.: 10 **Autosampler Location: 45**
Sample ID: 1201524636|730799|5 **Date Collected: 3/6/2008 13:57:17**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: 1201524636|730799|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	102379.3	102379.3	97.5	%			13:59:10
1	Y RADIAL	88610.7	88610.7	97.11	%			13:59:10
1	Al 396.153Radial†	523.9	-25.0	-4.1524	ug/L	-4.1524	ppb	13:59:10
1	Ca 317.933Radial†	188667.2	192767.0	7675.7	ug/L	7675.7	ppb	13:59:10
1	Fe 238.204 Radial†	69.9	19.5	2.0853	ug/L	2.0853	ppb	13:59:30
1	K 766.490 Radial†	8416.5	5227.2	1049.9	ug/L	1049.9	ppb	13:59:10
1	Mg 279.077 IEC†	7395.8	7506.1	3475.4	ug/L	3475.4	ppb	13:59:30
1	Na 589.592 Radial†	97274.6	101100.9	5980.1	ug/L	5980.1	ppb	13:59:10
1	Sr 421.552†	154529.8	160447.3	138.49	ug/L	138.49	ppb	13:59:10
1	Sc 361.383	958714.8	958714.8	95.897	%			14:00:27
1	Y 371.029	807603.4	807603.4	95.275	%			14:00:27
1	Ag 328.068†	1049.7	-31.8	-0.1296	ug/L	-0.1296	ppb	14:00:27
1	As 188.979†	-74.0	-15.3	-1.8834	ug/L	-1.8834	ppb	14:00:48
1	B 249.677†	1901.5	2762.8	36.526	ug/L	36.526	ppb	14:00:48
1	Ba 233.527†	8780.5	9128.0	26.552	ug/L	26.552	ppb	14:00:48
1	Be 313.107†	-3705.5	-139.7	-0.0417	ug/L	-0.0417	ppb	14:00:27
1	Cd 226.502†	-239.6	-26.9	-0.1363	ug/L	-0.1363	ppb	14:00:48
1	Co 228.616†	-221.5	-30.7	-0.2476	ug/L	-0.2476	ppb	14:00:48
1	Cr 267.716†	-4.0	50.3	0.3749	ug/L	0.3749	ppb	14:00:48
1	Cu 324.752†	8416.3	202.4	0.4778	ug/L	0.4778	ppb	14:00:27
1	Mn 257.610†	1414.8	422.0	0.1735	ug/L	0.1735	ppb	14:00:48
1	Mo 202.031†	96.9	71.2	1.5635	ug/L	1.5635	ppb	14:00:48
1	Ni 231.604†	254.0	-19.0	-0.1943	ug/L	-0.1943	ppb	14:00:48
1	P 214.914†	830.8	67.4	9.9415	ug/L	9.9415	ppb	14:00:48
1	Pb 220.353†	-121.4	-17.1	-0.7319	ug/L	-0.7319	ppb	14:00:48
1	S 181.975 Axial†	3592.9	3583.5	1167.7	ug/L	1167.7	ppb	14:00:48
1	Sb 206.836†	123.4	-3.3	-0.2829	ug/L	-0.2829	ppb	14:00:48
1	Se 196.026†	-49.8	8.4	1.3139	ug/L	1.3139	ppb	14:00:48
1	Si 251.611†	157420.9	163221.1	2790.1	ug/L	2790.1	ppb	14:00:27
1	Sn 189.927†	-65.4	-57.9	-2.5054	ug/L	-2.5054	ppb	14:00:48
1	Ti 334.940†	-1984.1	-620.4	0.0404	ug/L	0.0404	ppb	14:00:48
1	Tl 190.801†	-125.0	7.9	0.5769	ug/L	0.5769	ppb	14:00:48
1	U 409.014†	5592.7	449.6	18.409	ug/L	18.409	ppb	14:00:27
1	V 292.402†	-1966.0	451.9	2.5905	ug/L	2.5905	ppb	14:00:48
1	Zn 213.857†	2740.2	824.0	2.5619	ug/L	2.5619	ppb	14:00:48
1	SiO2†	157557.0	163318.6	5940.5	ug/L	5940.5	ppb	14:01:44
2	Sc Radial	102880.1	102880.1	98.0	%			13:59:35
2	Y RADIAL	89088.5	89088.5	97.63	%			13:59:35
2	Al 396.153Radial†	461.0	-91.8	-11.805	ug/L	-11.805	ppb	13:59:35
2	Ca 317.933Radial†	188698.5	191857.2	7639.5	ug/L	7639.5	ppb	13:59:35
2	Fe 238.204 Radial†	78.1	27.5	2.9521	ug/L	2.9521	ppb	13:59:55
2	K 766.490 Radial†	8772.5	5548.5	1114.4	ug/L	1114.4	ppb	13:59:35
2	Mg 279.077 IEC†	7401.0	7474.4	3460.8	ug/L	3460.8	ppb	13:59:55
2	Na 589.592 Radial†	97676.6	101025.7	5975.6	ug/L	5975.6	ppb	13:59:35
2	Sr 421.552†	154978.5	160133.9	138.22	ug/L	138.22	ppb	13:59:35
2	Sc 361.383	971339.2	971339.2	97.160	%			14:00:53
2	Y 371.029	818660.3	818660.3	96.579	%			14:00:53
2	Ag 328.068†	1142.9	49.9	0.1945	ug/L	0.1945	ppb	14:00:53
2	As 188.979†	-66.7	-6.8	-0.9414	ug/L	-0.9414	ppb	14:01:13
2	B 249.677†	1827.8	2661.3	35.183	ug/L	35.183	ppb	14:01:13
2	Ba 233.527†	8759.1	8987.0	26.142	ug/L	26.142	ppb	14:01:13
2	Be 313.107†	-3597.4	21.8	0.0041	ug/L	0.0041	ppb	14:00:53
2	Cd 226.502†	-215.3	1.4	0.0066	ug/L	0.0066	ppb	14:01:13
2	Co 228.616†	-173.6	21.6	0.1837	ug/L	0.1837	ppb	14:01:13
2	Cr 267.716†	51.5	107.5	0.7961	ug/L	0.7961	ppb	14:01:13
2	Cu 324.752†	8440.9	113.7	0.2676	ug/L	0.2676	ppb	14:00:53
2	Mn 257.610†	1388.1	375.3	0.1476	ug/L	0.1476	ppb	14:01:13
2	Mo 202.031†	101.0	74.2	1.6283	ug/L	1.6283	ppb	14:01:13
2	Ni 231.604†	262.6	-13.5	-0.1384	ug/L	-0.1384	ppb	14:01:13

2	P 214.914†	822.9	48.0	7.0925	ug/L	7.0925	ppb	14:01:13
2	Pb 220.353†	-108.8	-2.4	-0.1082	ug/L	-0.1082	ppb	14:01:13
2	S 181.975 Axial†	3586.5	3528.3	1149.7	ug/L	1149.7	ppb	14:01:13
2	Sb 206.836†	120.4	-8.0	-0.7192	ug/L	-0.7192	ppb	14:01:13
2	Se 196.026†	-51.6	7.3	1.1422	ug/L	1.1422	ppb	14:01:13
2	Si 251.611†	159818.1	163554.8	2795.8	ug/L	2795.8	ppb	14:00:53
2	Sn 189.927†	-52.8	-44.1	-1.8509	ug/L	-1.8509	ppb	14:01:13
2	Ti 334.940†	-2025.4	-636.0	0.0192	ug/L	0.0192	ppb	14:01:13
2	Tl 190.801†	-108.6	26.5	1.9531	ug/L	1.9531	ppb	14:01:13
2	U 409.014†	5498.4	276.8	11.334	ug/L	11.334	ppb	14:00:53
2	V 292.402†	-1972.8	471.5	2.6857	ug/L	2.6857	ppb	14:01:13
2	Zn 213.857†	2777.9	825.7	2.5678	ug/L	2.5678	ppb	14:01:13
2	SiO2†	157997.9	161637.0	5879.4	ug/L	5879.4	ppb	14:01:49
3	Sc Radial	102093.1	102093.1	97.2	%			14:00:01
3	Y RADIAL	88406.8	88406.8	96.89	%			14:00:01
3	Al 396.153Radial†	424.3	-125.9	-15.711	ug/L	-15.711	ppb	14:00:01
3	Ca 317.933Radial†	188101.1	192727.4	7674.2	ug/L	7674.2	ppb	14:00:01
3	Fe 238.204 Radial†	73.0	22.9	2.4537	ug/L	2.4537	ppb	14:00:21
3	K 766.490 Radial†	8461.3	5297.5	1064.0	ug/L	1064.0	ppb	14:00:01
3	Mg 279.077 IEC†	7437.0	7569.7	3504.9	ug/L	3504.9	ppb	14:00:21
3	Na 589.592 Radial†	96999.9	101098.2	5979.9	ug/L	5979.9	ppb	14:00:01
3	Sr 421.552†	154099.1	160448.7	138.49	ug/L	138.49	ppb	14:00:01
3	Sc 361.383	961509.1	961509.1	96.177	%			14:01:19
3	Y 371.029	809545.9	809545.9	95.504	%			14:01:19
3	Ag 328.068†	1168.4	88.5	0.3418	ug/L	0.3418	ppb	14:01:19
3	As 188.979†	-77.4	-18.6	-2.2427	ug/L	-2.2427	ppb	14:01:39
3	B 249.677†	1870.0	2724.4	36.018	ug/L	36.018	ppb	14:01:39
3	Ba 233.527†	8809.3	9131.4	26.561	ug/L	26.561	ppb	14:01:39
3	Be 313.107†	-3517.0	67.5	0.0172	ug/L	0.0172	ppb	14:01:19
3	Cd 226.502†	-218.6	-4.4	-0.0223	ug/L	-0.0223	ppb	14:01:39
3	Co 228.616†	-207.8	-15.9	-0.1254	ug/L	-0.1254	ppb	14:01:39
3	Cr 267.716†	22.3	77.7	0.5760	ug/L	0.5760	ppb	14:01:39
3	Cu 324.752†	8399.7	159.7	0.3775	ug/L	0.3775	ppb	14:01:19
3	Mn 257.610†	1399.2	401.4	0.1615	ug/L	0.1615	ppb	14:01:39
3	Mo 202.031†	90.1	63.9	1.4018	ug/L	1.4018	ppb	14:01:39
3	Ni 231.604†	248.2	-25.7	-0.2636	ug/L	-0.2636	ppb	14:01:39
3	P 214.914†	831.9	66.1	9.7555	ug/L	9.7555	ppb	14:01:39
3	Pb 220.353†	-106.4	-1.1	-0.0537	ug/L	-0.0537	ppb	14:01:39
3	S 181.975 Axial†	3619.0	3599.8	1173.0	ug/L	1173.0	ppb	14:01:39
3	Sb 206.836†	148.5	22.5	2.0147	ug/L	2.0147	ppb	14:01:39
3	Se 196.026†	-55.4	2.8	0.4365	ug/L	0.4365	ppb	14:01:39
3	Si 251.611†	158912.4	164294.8	2808.4	ug/L	2808.4	ppb	14:01:19
3	Sn 189.927†	-69.6	-62.1	-2.7046	ug/L	-2.7046	ppb	14:01:39
3	Ti 334.940†	-1995.0	-625.8	0.0352	ug/L	0.0352	ppb	14:01:39
3	Tl 190.801†	-121.4	12.0	0.8812	ug/L	0.8812	ppb	14:01:39
3	U 409.014†	5502.7	339.2	13.887	ug/L	13.887	ppb	14:01:19
3	V 292.402†	-1984.3	438.8	2.5082	ug/L	2.5082	ppb	14:01:39
3	Zn 213.857†	2761.2	837.5	2.6055	ug/L	2.6055	ppb	14:01:39
3	SiO2†	159043.6	164386.8	5979.4	ug/L	5979.4	ppb	14:01:55

Mean Data: 1201524636|730799|5

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	963854.3	96.412	%	0.6633				0.69%
Sc Radial	102450.8	97.6	%	0.38				0.39%
Y 371.029	811936.5	95.786	%	0.6964				0.73%
Y RADIAL	88702.0	97.21	%	0.383				0.39%
Ag 328.068†	35.5	0.1356	ug/L	0.24119	0.1356	ppb	0.24119	177.93%
Al 396.153Radial†	-80.9	-10.556	ug/L	5.8796	-10.556	ppb	5.8796	55.70%
As 188.979†	-13.6	-1.6892	ug/L	0.67204	-1.6892	ppb	0.67204	39.79%
B 249.677†	2716.2	35.909	ug/L	0.6783	35.909	ppb	0.6783	1.89%
Ba 233.527†	9082.1	26.418	ug/L	0.2395	26.418	ppb	0.2395	0.91%
Be 313.107†	-16.8	-0.0068	ug/L	0.03092	-0.0068	ppb	0.03092	454.21%
Ca 317.933Radial†	192450.6	7663.1	ug/L	20.48	7663.1	ppb	20.48	0.27%
Cd 226.502†	-10.0	-0.0507	ug/L	0.07560	-0.0507	ppb	0.07560	149.23%
Co 228.616†	-8.3	-0.0631	ug/L	0.22231	-0.0631	ppb	0.22231	352.29%
Cr 267.716†	78.5	0.5823	ug/L	0.21066	0.5823	ppb	0.21066	36.18%
Cu 324.752†	158.6	0.3743	ug/L	0.10512	0.3743	ppb	0.10512	28.09%
Fe 238.204 Radial†	23.3	2.4971	ug/L	0.43504	2.4971	ppb	0.43504	17.42%
K 766.490 Radial†	5357.7	1076.1	ug/L	33.93	1076.1	ppb	33.93	3.15%

Mg 279.077 IEC†	7516.7	3480.3	ug/L	22.46	3480.3	ppb	22.46	0.65%
Mn 257.610†	399.6	0.1609	ug/L	0.01294	0.1609	ppb	0.01294	8.04%
Mo 202.031†	69.8	1.5312	ug/L	0.11664	1.5312	ppb	0.11664	7.62%
Na 589.592 Radial†	101074.9	5978.5	ug/L	2.53	5978.5	ppb	2.53	0.04%
Ni 231.604†	-19.4	-0.1988	ug/L	0.06269	-0.1988	ppb	0.06269	31.54%
P 214.914†	60.5	8.9298	ug/L	1.59390	8.9298	ppb	1.59390	17.85%
Pb 220.353†	-6.9	-0.2980	ug/L	0.37678	-0.2980	ppb	0.37678	126.46%
S 181.975 Axial†	3570.5	1163.5	ug/L	12.22	1163.5	ppb	12.22	1.05%
Sb 206.836†	3.7	0.3375	ug/L	1.46878	0.3375	ppb	1.46878	435.14%
Se 196.026†	6.2	0.9642	ug/L	0.46504	0.9642	ppb	0.46504	48.23%
Si 251.611†	163690.2	2798.1	ug/L	9.39	2798.1	ppb	9.39	0.34%
Sn 189.927†	-54.7	-2.3536	ug/L	0.44664	-2.3536	ppb	0.44664	18.98%
Sr 421.552†	160343.3	138.40	ug/L	0.156	138.40	ppb	0.156	0.11%
Ti 334.940†	-627.4	0.0316	ug/L	0.01101	0.0316	ppb	0.01101	34.82%
Tl 190.801†	15.4	1.1371	ug/L	0.72290	1.1371	ppb	0.72290	63.58%
U 409.014†	355.2	14.543	ug/L	3.5826	14.543	ppb	3.5826	24.63%
V 292.402†	454.1	2.5948	ug/L	0.08883	2.5948	ppb	0.08883	3.42%
Zn 213.857†	829.1	2.5784	ug/L	0.02366	2.5784	ppb	0.02366	0.92%
SiO2†	163114.2	5933.1	ug/L	50.43	5933.1	ppb	50.43	0.85%

Sequence No.: 15 **Autosampler Location: 1**
Sample ID: CCV **Date Collected: 3/6/2008 14:32:15**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	98009.1	98009.1	93.3	%			14:34:12
1	Y RADIAL	84606.4	84606.4	92.72	%			14:34:12
1	Al 396.153Radial†	43887.4	46451.8	5302.7	ug/L	5302.7	ppb	14:34:12
1	Ca 317.933Radial†	120037.4	127875.2	5091.8	ug/L	5091.8	ppb	14:34:12
1	Fe 238.204 Radial†	43868.6	46941.7	5042.4	ug/L	5042.4	ppb	14:34:12
1	K 766.490 Radial†	27959.2	26547.0	5332.0	ug/L	5332.0	ppb	14:34:12
1	Mg 279.077 IEC†	10360.1	11019.7	5112.8	ug/L	5112.8	ppb	14:34:12
1	Na 589.592 Radial†	162499.4	175420.6	10376	ug/L	10376	ppb	14:34:07
1	Sr 421.552†	564645.7	606846.9	524.53	ug/L	524.53	ppb	14:34:07
1	Sc 361.383	939527.5	939527.5	93.978	%			14:34:42
1	Y 371.029	787466.2	787466.2	92.899	%			14:34:42
1	Ag 328.068†	124856.3	131730.2	515.45	ug/L	515.45	ppb	14:34:42
1	As 188.979†	4151.5	4479.4	488.82	ug/L	488.82	ppb	14:34:47
1	B 249.677†	34956.6	37976.5	502.24	ug/L	502.24	ppb	14:34:42
1	Ba 233.527†	165880.1	176481.1	514.36	ug/L	514.36	ppb	14:34:42
1	Be 313.107†	1679033.8	1790344.8	509.94	ug/L	509.94	ppb	14:34:42
1	Cd 226.502†	94057.3	100307.1	507.62	ug/L	507.62	ppb	14:34:42
1	Co 228.616†	56683.7	60516.0	498.96	ug/L	498.96	ppb	14:34:47
1	Cr 267.716†	64795.5	69001.9	508.91	ug/L	508.91	ppb	14:34:42
1	Cu 324.752†	204898.6	209453.9	509.51	ug/L	509.51	ppb	14:34:42
1	Mn 257.610†	859460.8	913478.7	513.03	ug/L	513.03	ppb	14:34:42
1	Mo 202.031†	21523.6	22873.0	502.22	ug/L	502.22	ppb	14:34:47
1	Ni 231.604†	45933.3	48592.8	498.43	ug/L	498.43	ppb	14:34:47
1	P 214.914†	16411.7	16664.3	2403.1	ug/L	2403.1	ppb	14:34:47
1	Pb 220.353†	10891.3	11698.7	497.48	ug/L	497.48	ppb	14:34:47
1	S 181.975 Axial†	2982.4	3010.4	980.29	ug/L	980.29	ppb	14:34:47
1	Sb 206.836†	5280.1	5486.5	489.23	ug/L	489.23	ppb	14:34:47
1	Se 196.026†	2956.8	3206.7	510.33	ug/L	510.33	ppb	14:34:47
1	Si 251.611†	141274.3	149392.3	2545.8	ug/L	2545.8	ppb	14:34:42
1	Sn 189.927†	9803.4	10441.8	494.40	ug/L	494.40	ppb	14:34:47
1	Ti 334.940†	373378.6	398751.9	514.05	ug/L	514.05	ppb	14:34:42
1	Tl 190.801†	6165.6	6698.9	498.95	ug/L	498.95	ppb	14:34:47
1	U 409.014†	16837.8	12534.4	512.60	ug/L	512.60	ppb	14:34:42
1	V 292.402†	84392.6	92302.2	514.83	ug/L	514.83	ppb	14:34:42
1	Zn 213.857†	149256.9	156787.4	505.09	ug/L	505.09	ppb	14:34:42
1	SiO2†	142315.5	150455.7	5455.1	ug/L	5455.1	ppb	14:35:17
2	Sc Radial	98032.7	98032.7	93.4	%			14:34:23
2	Y RADIAL	84638.1	84638.1	92.76	%			14:34:23
2	Al 396.153Radial†	43842.5	46392.4	5296.2	ug/L	5296.2	ppb	14:34:23
2	Ca 317.933Radial†	120102.6	127914.1	5093.4	ug/L	5093.4	ppb	14:34:23
2	Fe 238.204 Radial†	43913.1	46978.1	5046.1	ug/L	5046.1	ppb	14:34:23
2	K 766.490 Radial†	27877.1	26451.8	5312.9	ug/L	5312.9	ppb	14:34:23
2	Mg 279.077 IEC†	10394.0	11053.4	5128.2	ug/L	5128.2	ppb	14:34:23
2	Na 589.592 Radial†	162125.4	174978.3	10350	ug/L	10350	ppb	14:34:18
2	Sr 421.552†	563122.2	605069.9	522.99	ug/L	522.99	ppb	14:34:18
2	Sc 361.383	952967.0	952967.0	95.323	%			14:34:54
2	Y 371.029	798792.2	798792.2	94.235	%			14:34:54
2	Ag 328.068†	126930.6	132032.7	516.62	ug/L	516.62	ppb	14:34:54
2	As 188.979†	4169.1	4435.6	484.04	ug/L	484.04	ppb	14:34:59
2	B 249.677†	35678.0	38208.8	505.32	ug/L	505.32	ppb	14:34:54
2	Ba 233.527†	168157.3	176380.6	514.07	ug/L	514.07	ppb	14:34:54
2	Be 313.107†	1703269.3	1790573.1	510.00	ug/L	510.00	ppb	14:34:54
2	Cd 226.502†	95528.8	100439.4	508.29	ug/L	508.29	ppb	14:34:54
2	Co 228.616†	56534.8	59509.2	490.64	ug/L	490.64	ppb	14:34:59
2	Cr 267.716†	65823.2	69107.7	509.69	ug/L	509.69	ppb	14:34:54
2	Cu 324.752†	208289.2	209936.0	510.68	ug/L	510.68	ppb	14:34:54
2	Mn 257.610†	871337.1	913040.2	512.79	ug/L	512.79	ppb	14:34:54
2	Mo 202.031†	21450.9	22473.7	493.46	ug/L	493.46	ppb	14:34:59
2	Ni 231.604†	45876.5	47843.8	490.75	ug/L	490.75	ppb	14:34:59

2	P 214.914†	16313.2	16314.7	2351.0	ug/L	2351.0	ppb	14:34:59
2	Pb 220.353†	10877.3	11520.6	489.91	ug/L	489.91	ppb	14:34:59
2	S 181.975 Axial†	2977.5	2960.5	964.04	ug/L	964.04	ppb	14:34:59
2	Sb 206.836†	5274.4	5401.3	481.56	ug/L	481.56	ppb	14:34:59
2	Se 196.026†	2951.9	3157.1	502.69	ug/L	502.69	ppb	14:34:59
2	Si 251.611†	143556.6	149666.5	2550.6	ug/L	2550.6	ppb	14:34:54
2	Sn 189.927†	9839.7	10332.8	489.24	ug/L	489.24	ppb	14:34:59
2	Ti 334.940†	378856.1	398895.1	514.23	ug/L	514.23	ppb	14:34:54
2	Tl 190.801†	6200.9	6643.4	494.87	ug/L	494.87	ppb	14:34:59
2	U 409.014†	17139.8	12598.6	515.20	ug/L	515.20	ppb	14:34:54
2	V 292.402†	85630.1	92334.0	514.92	ug/L	514.92	ppb	14:34:54
2	Zn 213.857†	151400.8	156796.6	505.17	ug/L	505.17	ppb	14:34:54
2	SiO2†	141842.2	147823.6	5359.7	ug/L	5359.7	ppb	14:35:22
3	Sc Radial	98981.0	98981.0	94.3	%			14:34:33
3	Y RADIAL	85557.3	85557.3	93.77	%			14:34:33
3	Al 396.153Radial†	44192.3	46313.6	5286.7	ug/L	5286.7	ppb	14:34:33
3	Ca 317.933Radial†	121458.4	128119.9	5101.6	ug/L	5101.6	ppb	14:34:33
3	Fe 238.204 Radial†	44411.7	47056.4	5054.8	ug/L	5054.8	ppb	14:34:33
3	K 766.490 Radial†	28123.5	26427.2	5307.9	ug/L	5307.9	ppb	14:34:33
3	Mg 279.077 IEC†	10498.2	11057.3	5130.3	ug/L	5130.3	ppb	14:34:33
3	Na 589.592 Radial†	164855.0	176210.0	10423	ug/L	10423	ppb	14:34:28
3	Sr 421.552†	572153.8	608871.6	526.28	ug/L	526.28	ppb	14:34:28
3	Sc 361.383	942760.0	942760.0	94.302	%			14:35:06
3	Y 371.029	791041.1	791041.1	93.321	%			14:35:06
3	Ag 328.068†	125525.2	131984.1	516.44	ug/L	516.44	ppb	14:35:06
3	As 188.979†	4197.0	4512.5	492.42	ug/L	492.42	ppb	14:35:11
3	B 249.677†	35284.2	38196.4	505.15	ug/L	505.15	ppb	14:35:06
3	Ba 233.527†	166303.0	176324.2	513.90	ug/L	513.90	ppb	14:35:06
3	Be 313.107†	1682427.2	1787817.4	509.22	ug/L	509.22	ppb	14:35:06
3	Cd 226.502†	94159.7	100072.6	506.44	ug/L	506.44	ppb	14:35:06
3	Co 228.616†	57096.1	60746.5	500.86	ug/L	500.86	ppb	14:35:11
3	Cr 267.716†	64917.7	68895.0	508.12	ug/L	508.12	ppb	14:35:06
3	Cu 324.752†	206056.6	209934.3	510.67	ug/L	510.67	ppb	14:35:06
3	Mn 257.610†	861814.9	912839.3	512.68	ug/L	512.68	ppb	14:35:06
3	Mo 202.031†	21692.2	22973.2	504.42	ug/L	504.42	ppb	14:35:11
3	Ni 231.604†	46281.9	48794.9	500.50	ug/L	500.50	ppb	14:35:11
3	P 214.914†	16531.9	16731.9	2412.9	ug/L	2412.9	ppb	14:35:11
3	Pb 220.353†	11041.0	11817.7	502.52	ug/L	502.52	ppb	14:35:11
3	S 181.975 Axial†	3019.8	3039.1	989.66	ug/L	989.66	ppb	14:35:11
3	Sb 206.836†	5393.1	5587.0	498.25	ug/L	498.25	ppb	14:35:11
3	Se 196.026†	2938.1	3176.1	505.64	ug/L	505.64	ppb	14:35:11
3	Si 251.611†	141924.2	149566.0	2548.7	ug/L	2548.7	ppb	14:35:06
3	Sn 189.927†	9948.4	10559.8	499.99	ug/L	499.99	ppb	14:35:11
3	Ti 334.940†	374925.9	399030.5	514.41	ug/L	514.41	ppb	14:35:06
3	Tl 190.801†	6223.5	6737.8	501.82	ug/L	501.82	ppb	14:35:11
3	U 409.014†	16921.4	12561.7	513.73	ug/L	513.73	ppb	14:35:06
3	V 292.402†	84661.6	92279.6	514.72	ug/L	514.72	ppb	14:35:06
3	Zn 213.857†	149580.3	156585.7	504.42	ug/L	504.42	ppb	14:35:06
3	SiO2†	143164.4	150836.7	5468.9	ug/L	5468.9	ppb	14:35:27

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	945084.9	94.534	%	0.7017				0.74%
Sc Radial	98341.0	93.7	%	0.53				0.56%
Y 371.029	792433.2	93.485	%	0.6830				0.73%
Y RADIAL	84933.9	93.08	%	0.592				0.64%
Ag 328.068†	131915.7	516.17	ug/L	0.633	516.17	ppb	0.633	0.12%
QC value within limits for Ag 328.068 Recovery = 103.23%								
Al 396.153Radial†	46385.9	5295.2	ug/L	8.01	5295.2	ppb	8.01	0.15%
QC value within limits for Al 396.153Radial Recovery = 105.90%								
As 188.979†	4475.8	488.43	ug/L	4.208	488.43	ppb	4.208	0.86%
QC value within limits for As 188.979 Recovery = 97.69%								
B 249.677†	38127.2	504.24	ug/L	1.729	504.24	ppb	1.729	0.34%
QC value within limits for B 249.677 Recovery = 100.85%								
Ba 233.527†	176395.3	514.11	ug/L	0.231	514.11	ppb	0.231	0.04%
QC value within limits for Ba 233.527 Recovery = 102.82%								
Be 313.107†	1789578.4	509.72	ug/L	0.434	509.72	ppb	0.434	0.09%
QC value within limits for Be 313.107 Recovery = 101.94%								
Ca 317.933Radial†	127969.7	5095.6	ug/L	5.24	5095.6	ppb	5.24	0.10%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.91%
Cd 226.502†           100273.0      507.45 ug/L         0.941      507.45 ppb          0.941   0.19%
   QC value within limits for Cd 226.502  Recovery = 101.49%
Co 228.616†            60257.2      496.82 ug/L         5.438      496.82 ppb          5.438   1.09%
   QC value within limits for Co 228.616  Recovery = 99.36%
Cr 267.716†            69001.5      508.91 ug/L         0.783      508.91 ppb          0.783   0.15%
   QC value within limits for Cr 267.716  Recovery = 101.78%
Cu 324.752†           209774.7      510.29 ug/L         0.676      510.29 ppb          0.676   0.13%
   QC value within limits for Cu 324.752  Recovery = 102.06%
Fe 238.204 Radial†     46992.1      5047.8 ug/L          6.34      5047.8 ppb           6.34   0.13%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.96%
K 766.490 Radial†      26475.3      5317.6 ug/L         12.71      5317.6 ppb          12.71   0.24%
   QC value within limits for K 766.490 Radial  Recovery = 106.35%
Mg 279.077 IEC†        11043.5      5123.7 ug/L          9.53      5123.7 ppb           9.53   0.19%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.47%
Mn 257.610†           913119.4      512.83 ug/L         0.183      512.83 ppb          0.183   0.04%
   QC value within limits for Mn 257.610  Recovery = 102.57%
Mo 202.031†            22773.3      500.04 ug/L         5.799      500.04 ppb          5.799   1.16%
   QC value within limits for Mo 202.031  Recovery = 100.01%
Na 589.592 Radial†    175536.3       10383 ug/L          36.9       10383 ppb           36.9   0.36%
   QC value within limits for Na 589.592 Radial  Recovery = 103.83%
Ni 231.604†            48410.5      496.56 ug/L         5.139      496.56 ppb          5.139   1.03%
   QC value within limits for Ni 231.604  Recovery = 99.31%
P 214.914†             16570.3      2389.0 ug/L         33.30      2389.0 ppb          33.30   1.39%
   QC value within limits for P 214.914  Recovery = 95.56%
Pb 220.353†            11679.0      496.63 ug/L         6.349      496.63 ppb          6.349   1.28%
   QC value within limits for Pb 220.353  Recovery = 99.33%
S 181.975 Axial†        3003.4      978.00 ug/L        12.965      978.00 ppb         12.965   1.33%
   QC value within limits for S 181.975 Axial  Recovery = 97.80%
Sb 206.836†             5491.6      489.68 ug/L         8.351      489.68 ppb          8.351   1.71%
   QC value within limits for Sb 206.836  Recovery = 97.94%
Se 196.026†             3180.0      506.22 ug/L         3.852      506.22 ppb          3.852   0.76%
   QC value within limits for Se 196.026  Recovery = 101.24%
Si 251.611†           149541.6      2548.4 ug/L          2.43      2548.4 ppb           2.43   0.10%
   QC value within limits for Si 251.611  Recovery = 101.93%
Sn 189.927†            10444.8      494.54 ug/L         5.375      494.54 ppb          5.375   1.09%
   QC value within limits for Sn 189.927  Recovery = 98.91%
Sr 421.552†           606929.5      524.60 ug/L         1.645      524.60 ppb          1.645   0.31%
   QC value within limits for Sr 421.552  Recovery = 104.92%
Ti 334.940†           398892.5      514.23 ug/L         0.180      514.23 ppb          0.180   0.03%
   QC value within limits for Ti 334.940  Recovery = 102.85%
Tl 190.801†             6693.3      498.54 ug/L         3.494      498.54 ppb          3.494   0.70%
   QC value within limits for Tl 190.801  Recovery = 99.71%
U 409.014†             12564.9      513.84 ug/L         1.304      513.84 ppb          1.304   0.25%
   QC value within limits for U 409.014  Recovery = 102.77%
V 292.402†             92305.3      514.82 ug/L         0.097      514.82 ppb          0.097   0.02%
   QC value within limits for V 292.402  Recovery = 102.96%
Zn 213.857†           156723.2      504.89 ug/L         0.413      504.89 ppb          0.413   0.08%
   QC value within limits for Zn 213.857  Recovery = 100.98%
SiO2†                 149705.4      5427.9 ug/L         59.48      5427.9 ppb          59.48   1.10%
   QC value within limits for SiO2  Recovery = 101.50%
All analyte(s) passed QC.
```

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Sequence No.: 16 **Autosampler Location: 6**
Sample ID: CCB **Date Collected: 3/6/2008 14:37:37**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	98915.2	98915.2	94.2	%			14:39:29
1	Y RADIAL	85796.9	85796.9	94.03	%			14:39:29
1	Al 396.153Radial†	520.2	-10.1	-1.1611	ug/L	-1.1611	ppb	14:39:29
1	Ca 317.933Radial†	643.6	-30.8	-1.2271	ug/L	-1.2271	ppb	14:39:49
1	Fe 238.204 Radial†	61.3	13.0	1.3888	ug/L	1.3888	ppb	14:39:49
1	K 766.490 Radial†	3566.5	381.6	76.638	ug/L	76.638	ppb	14:39:29
1	Mg 279.077 IEC†	80.2	6.7	3.1175	ug/L	3.1175	ppb	14:39:49
1	Na 589.592 Radial†	-1687.2	-446.4	-26.402	ug/L	-26.402	ppb	14:39:29
1	Sr 421.552†	-2120.8	-276.4	-0.2389	ug/L	-0.2389	ppb	14:39:29
1	Sc 361.383	938480.6	938480.6	93.873	%			14:40:46
1	Y 371.029	795959.4	795959.4	93.901	%			14:40:46
1	Ag 328.068†	1207.9	160.4	0.6076	ug/L	0.6076	ppb	14:40:46
1	As 188.979†	-64.1	-6.5	-0.7097	ug/L	-0.7097	ppb	14:41:06
1	B 249.677†	-717.6	15.5	0.2057	ug/L	0.2057	ppb	14:40:46
1	Ba 233.527†	30.9	4.8	0.0132	ug/L	0.0132	ppb	14:41:06
1	Be 313.107†	-3617.0	-128.7	-0.0371	ug/L	-0.0371	ppb	14:40:46
1	Cd 226.502†	-267.8	-62.3	-0.3156	ug/L	-0.3156	ppb	14:41:06
1	Co 228.616†	-183.4	4.9	0.0409	ug/L	0.0409	ppb	14:41:06
1	Cr 267.716†	-45.3	6.2	0.0451	ug/L	0.0451	ppb	14:41:06
1	Cu 324.752†	8521.3	503.5	1.2084	ug/L	1.2084	ppb	14:40:46
1	Mn 257.610†	1115.2	134.6	0.0756	ug/L	0.0756	ppb	14:40:46
1	Mo 202.031†	33.9	6.4	0.1398	ug/L	0.1398	ppb	14:41:06
1	Ni 231.604†	341.3	79.8	0.8190	ug/L	0.8190	ppb	14:41:06
1	P 214.914†	790.5	43.1	6.2322	ug/L	6.2322	ppb	14:41:06
1	Pb 220.353†	-109.6	-7.2	-0.3170	ug/L	-0.3170	ppb	14:41:06
1	S 181.975 Axial†	179.4	28.0	9.1163	ug/L	9.1163	ppb	14:41:06
1	Sb 206.836†	127.2	3.5	0.3279	ug/L	0.3279	ppb	14:41:06
1	Se 196.026†	-52.6	4.4	0.6914	ug/L	0.6914	ppb	14:41:06
1	Si 251.611†	1070.5	205.9	3.5181	ug/L	3.5181	ppb	14:41:06
1	Sn 189.927†	-8.7	1.0	0.0488	ug/L	0.0488	ppb	14:41:06
1	Ti 334.940†	-1514.3	-164.5	-0.2214	ug/L	-0.2214	ppb	14:40:46
1	Tl 190.801†	-113.9	16.9	1.2501	ug/L	1.2501	ppb	14:41:06
1	U 409.014†	5523.0	501.2	20.517	ug/L	20.517	ppb	14:40:46
1	V 292.402†	-2411.1	-66.4	-0.3262	ug/L	-0.3262	ppb	14:40:46
1	Zn 213.857†	1896.0	-13.7	-0.0517	ug/L	-0.0517	ppb	14:41:06
1	SiO2†	1070.0	161.0	5.8515	ug/L	5.8515	ppb	14:42:03
2	Sc Radial	98304.2	98304.2	93.6	%			14:39:54
2	Y RADIAL	85544.1	85544.1	93.75	%			14:39:54
2	Al 396.153Radial†	560.4	36.3	4.1545	ug/L	4.1545	ppb	14:39:54
2	Ca 317.933Radial†	645.6	-24.4	-0.9729	ug/L	-0.9729	ppb	14:40:14
2	Fe 238.204 Radial†	60.3	12.2	1.3135	ug/L	1.3135	ppb	14:40:14
2	K 766.490 Radial†	3446.3	276.7	55.579	ug/L	55.579	ppb	14:39:54
2	Mg 279.077 IEC†	67.0	-6.9	-3.1825	ug/L	-3.1825	ppb	14:40:14
2	Na 589.592 Radial†	-1643.4	-410.7	-24.295	ug/L	-24.295	ppb	14:39:54
2	Sr 421.552†	-1984.4	-144.7	-0.1250	ug/L	-0.1250	ppb	14:39:54
2	Sc 361.383	939505.0	939505.0	93.976	%			14:41:12
2	Y 371.029	795718.6	795718.6	93.873	%			14:41:12
2	Ag 328.068†	952.5	-112.8	-0.4551	ug/L	-0.4551	ppb	14:41:12
2	As 188.979†	-63.6	-5.8	-0.6366	ug/L	-0.6366	ppb	14:41:32
2	B 249.677†	-745.1	-12.8	-0.1695	ug/L	-0.1695	ppb	14:41:12
2	Ba 233.527†	46.0	20.9	0.0594	ug/L	0.0594	ppb	14:41:32
2	Be 313.107†	-3599.4	-105.7	-0.0308	ug/L	-0.0308	ppb	14:41:12
2	Cd 226.502†	-207.9	1.7	0.0087	ug/L	0.0087	ppb	14:41:32
2	Co 228.616†	-172.2	17.0	0.1406	ug/L	0.1406	ppb	14:41:32
2	Cr 267.716†	-70.9	-20.9	-0.1551	ug/L	-0.1551	ppb	14:41:32
2	Cu 324.752†	8539.2	512.7	1.2322	ug/L	1.2322	ppb	14:41:12
2	Mn 257.610†	1170.8	192.5	0.1082	ug/L	0.1082	ppb	14:41:12
2	Mo 202.031†	28.6	0.6	0.0140	ug/L	0.0140	ppb	14:41:32
2	Ni 231.604†	338.5	76.4	0.7846	ug/L	0.7846	ppb	14:41:32

2	P 214.914†	800.9	53.3	7.7511	ug/L	7.7511	ppb	14:41:32
2	Pb 220.353†	-139.6	-39.0	-1.6617	ug/L	-1.6617	ppb	14:41:32
2	S 181.975 Axial†	181.9	30.4	9.9148	ug/L	9.9148	ppb	14:41:32
2	Sb 206.836†	136.1	12.9	1.1687	ug/L	1.1687	ppb	14:41:32
2	Se 196.026†	-41.2	16.6	2.5738	ug/L	2.5738	ppb	14:41:32
2	Si 251.611†	1002.4	132.2	2.2602	ug/L	2.2602	ppb	14:41:32
2	Sn 189.927†	-0.7	9.5	0.4506	ug/L	0.4506	ppb	14:41:32
2	Ti 334.940†	-1586.0	-239.1	-0.3167	ug/L	-0.3167	ppb	14:41:12
2	Tl 190.801†	-126.6	3.5	0.2572	ug/L	0.2572	ppb	14:41:32
2	U 409.014†	5491.6	461.3	18.884	ug/L	18.884	ppb	14:41:12
2	V 292.402†	-2447.8	-102.7	-0.5309	ug/L	-0.5309	ppb	14:41:12
2	Zn 213.857†	1898.8	-12.9	-0.0488	ug/L	-0.0488	ppb	14:41:32
2	SiO2†	1023.6	110.4	4.0153	ug/L	4.0153	ppb	14:42:08
3	Sc Radial	98093.7	98093.7	93.4	%			14:40:19
3	Y RADIAL	85205.4	85205.4	93.38	%			14:40:19
3	Al 396.153Radial†	509.9	-16.5	-1.9130	ug/L	-1.9130	ppb	14:40:19
3	Ca 317.933Radial†	731.4	68.9	2.7439	ug/L	2.7439	ppb	14:40:39
3	Fe 238.204 Radial†	62.8	15.0	1.6051	ug/L	1.6051	ppb	14:40:39
3	K 766.490 Radial†	3424.6	261.4	52.493	ug/L	52.493	ppb	14:40:19
3	Mg 279.077 IEC†	79.1	6.3	2.9285	ug/L	2.9285	ppb	14:40:39
3	Na 589.592 Radial†	-1596.8	-364.7	-21.570	ug/L	-21.570	ppb	14:40:19
3	Sr 421.552†	-2103.7	-276.9	-0.2395	ug/L	-0.2395	ppb	14:40:19
3	Sc 361.383	939411.5	939411.5	93.967	%			14:41:37
3	Y 371.029	797605.9	797605.9	94.096	%			14:41:37
3	Ag 328.068†	1169.7	118.4	0.4477	ug/L	0.4477	ppb	14:41:37
3	As 188.979†	-75.3	-18.3	-2.0102	ug/L	-2.0102	ppb	14:41:58
3	B 249.677†	-616.8	123.6	1.6357	ug/L	1.6357	ppb	14:41:37
3	Ba 233.527†	34.5	8.7	0.0222	ug/L	0.0222	ppb	14:41:58
3	Be 313.107†	-3566.4	-71.0	-0.0207	ug/L	-0.0207	ppb	14:41:37
3	Cd 226.502†	-230.8	-22.7	-0.1150	ug/L	-0.1150	ppb	14:41:58
3	Co 228.616†	-203.2	-16.0	-0.1302	ug/L	-0.1302	ppb	14:41:58
3	Cr 267.716†	-80.9	-31.6	-0.2352	ug/L	-0.2352	ppb	14:41:58
3	Cu 324.752†	8588.1	565.6	1.3667	ug/L	1.3667	ppb	14:41:37
3	Mn 257.610†	1130.5	149.7	0.0841	ug/L	0.0841	ppb	14:41:37
3	Mo 202.031†	49.6	22.9	0.5037	ug/L	0.5037	ppb	14:41:58
3	Ni 231.604†	286.9	21.5	0.2210	ug/L	0.2210	ppb	14:41:58
3	P 214.914†	786.6	38.2	5.4804	ug/L	5.4804	ppb	14:41:58
3	Pb 220.353†	-101.9	1.1	0.0417	ug/L	0.0417	ppb	14:41:58
3	S 181.975 Axial†	162.1	9.4	3.0549	ug/L	3.0549	ppb	14:41:58
3	Sb 206.836†	140.3	17.3	1.5597	ug/L	1.5597	ppb	14:41:58
3	Se 196.026†	-61.8	-5.4	-0.8295	ug/L	-0.8295	ppb	14:41:58
3	Si 251.611†	985.9	114.8	1.9548	ug/L	1.9548	ppb	14:41:58
3	Sn 189.927†	5.6	16.3	0.7704	ug/L	0.7704	ppb	14:41:58
3	Ti 334.940†	-1504.7	-152.8	-0.2018	ug/L	-0.2018	ppb	14:41:37
3	Tl 190.801†	-132.8	-3.1	-0.2257	ug/L	-0.2257	ppb	14:41:58
3	U 409.014†	5332.2	292.3	11.968	ug/L	11.968	ppb	14:41:37
3	V 292.402†	-2589.7	-254.0	-1.3755	ug/L	-1.3755	ppb	14:41:37
3	Zn 213.857†	1917.2	6.9	0.0190	ug/L	0.0190	ppb	14:41:58
3	SiO2†	989.3	74.1	2.6767	ug/L	2.6767	ppb	14:42:13

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	939132.4	93.939	%	0.0567				0.06%
Sc Radial	98437.7	93.8	%	0.41				0.43%
Y 371.029	796428.0	93.957	%	0.1212				0.13%
Y RADIAL	85515.5	93.72	%	0.325				0.35%
Ag 328.068†	55.3	0.2001	ug/L	0.57300	0.2001	ppb	0.57300	286.38%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.2	0.3601	ug/L	3.30743	0.3601	ppb	3.30743	918.38%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-10.2	-1.1188	ug/L	0.77280	-1.1188	ppb	0.77280	69.07%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	42.1	0.5573	ug/L	0.95260	0.5573	ppb	0.95260	170.92%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	11.5	0.0316	ug/L	0.02448	0.0316	ppb	0.02448	77.45%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-101.8	-0.0295	ug/L	0.00829	-0.0295	ppb	0.00829	28.08%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	4.6	0.1813	ug/L	2.22290	0.1813	ppb	2.22290	>999.9%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              -27.8     -0.1406 ug/L       0.16367     -0.1406 ppb        0.16367 116.38%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                1.9      0.0171 ug/L       0.13694      0.0171 ppb        0.13694 800.80%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -15.4     -0.1151 ug/L       0.14440     -0.1151 ppb        0.14440 125.47%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              527.3      1.2691 ug/L       0.08532      1.2691 ppb        0.08532   6.72%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        13.4      1.4358 ug/L       0.15137      1.4358 ppb        0.15137  10.54%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        306.5      61.570 ug/L       13.1404      61.570 ppb        13.1404  21.34%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            2.1      0.9545 ug/L       3.58398      0.9545 ppb        3.58398 375.47%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              158.9      0.0893 ug/L       0.01690      0.0893 ppb        0.01690  18.92%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               10.0      0.2192 ug/L       0.25431      0.2192 ppb        0.25431 116.04%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -407.3     -24.089 ug/L        2.4226     -24.089 ppb         2.4226  10.06%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               59.2      0.6082 ug/L       0.33574      0.6082 ppb        0.33574  55.20%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                44.9      6.4879 ug/L       1.15675      6.4879 ppb        1.15675  17.83%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -15.0     -0.6457 ug/L       0.89799     -0.6457 ppb        0.89799 139.07%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          22.6      7.3620 ug/L       3.75137      7.3620 ppb        3.75137  50.96%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               11.2      1.0188 ug/L       0.62945      1.0188 ppb        0.62945  61.79%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                5.2      0.8119 ug/L       1.70485      0.8119 ppb        1.70485 209.98%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              151.0      2.5777 ug/L       0.82857      2.5777 ppb        0.82857  32.14%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                8.9      0.4233 ug/L       0.36158      0.4233 ppb        0.36158  85.43%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             -232.6     -0.2012 ug/L       0.06592     -0.2012 ppb        0.06592  32.77%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             -185.5     -0.2466 ug/L       0.06144     -0.2466 ppb        0.06144  24.91%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                5.8      0.4272 ug/L       0.75244      0.4272 ppb        0.75244 176.13%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               418.2      17.123 ug/L        4.5385      17.123 ppb         4.5385  26.51%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -141.0     -0.7442 ug/L       0.55626     -0.7442 ppb        0.55626  74.75%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -6.6     -0.0271 ug/L       0.04002     -0.0271 ppb        0.04002 147.44%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    115.2      4.1812 ug/L       1.59388      4.1812 ppb        1.59388  38.12%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Miscellaneous

Serial ID: UI070503-42 **Opened:** 04-MAY-07 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 03-MAY-07 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-08 **Lot Number :** 1007782
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L+/-0.5%IN5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI070618-41 **Opened:** 06-AUG-07 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 18-JUN-07 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 06-AUG-08 **Lot Number :** 1008002
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silicon	1000 mg/L		

Serial ID: UI070807-40 **Opened:** 08-AUG-07 **Amount :** 500 mL
Name: SILICON **Received:** 07-AUG-07 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 08-AUG-08 **Lot Number :** 0715855
Employee: Helen Camello **Solvent :** H20/tr HF
Supplier: ENVIRNMENTAL EXPRESS
Description: SILICON 1000mg/L H20/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silicon	1000 mg/L		

Serial ID: UI070903-40 **Opened:** 01-NOV-07 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUR **Received:** 03-SEP-07 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 01-NOV-08 **Lot Number :** 0724201
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L

Analyte	Concentration	Analyte	Concentration
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI070903-41 **Opened:** 01-NOV-07 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUR **Received:** 03-SEP-07 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 01-NOV-08 **Lot Number :** 0724223
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Serial ID: UI080103-40 **Opened:** 04-JAN-08 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 03-JAN-08 **Catalog Number :** 160358-01-03
Type: Source Material **Expires:** 04-JAN-09 **Lot Number :** 1011177
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: 02si
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Standard Logbook

Serial ID: UI080103-41 **Opened:** 04-JAN-08 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 03-JAN-08 **Catalog Number :** 160358-01-03
Type: Source Material **Expires:** 04-JAN-09 **Lot Number :** 1011177
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: 02si
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID: UI080124-48.2 **Opened:** 27-FEB-08 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 28-JAN-08 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 27-FEB-09 **Lot Number :** 1011278
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI080131-01 **Opened:** 31-JAN-08 **Lot Number :** 1011322
Name: METALSPIKE-1 **Received:** 31-JAN-08
Type: Source Material **Expires:** 31-JAN-09
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Standard Logbook

Serial ID: UI080131-06 **Opened:** 31-JAN-08 **Lot Number :** 1011323
Name: METALSPIKE-2 **Received:** 31-JAN-08
Type: Source Material **Expires:** 31-JAN-09
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI080218-40 **Opened:** **Amount :** 250 mL
Name: TRACE ICP Na-1000SOUR **Received:** 18-FEB-08 **Catalog Number :** HP100052-1
Type: Source Material **Expires:** 30-SEP-09 **Lot Number :** 0717321
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: ENVIRONMENTAL EXPRESS
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI080227-49.6 **Opened:** 06-MAR-08 **Amount :** 100 ml
Name: Trace ICP ICSAB **Received:** 27-FEB-08 **Catalog Number :** 160066-04
Type: Source Material **Expires:** 07-MAR-08 **Lot Number :** 1011562
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Inteferent Check Standard AB
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Antimony	500 ug/L
Arsenic	500 ug/L	Barium	500 ug/L
Beryllium	250 ug/L	Boron	500 ug/L
Cadmium	500 ug/L	Calcium	500000 ug/L
Chromium	500 ug/L	Cobalt	500 ug/L
Copper	500 ug/L	Iron	200000 ug/L
Lead	500 ug/L	Magnesium	500000 ug/L
Manganese	500 ug/L	Molybdenum	500 ug/L

Analyte	Concentration	Analyte	Concentration
Nickel	500 ug/L	Phosphorous	2500 ug/L
Potassium	5000 ug/L	Selenium	2500 ug/L
Silica	10696.5 ug/L	Silicon	5000 ug/L
Silver	250 ug/L	Sodium	5000 ug/L
Strontium	500 ug/L	Sulfur	2500 ug/L
Thallium	500 ug/L	Tin	500 ug/L
Titanium	500 ug/L	Uranium	500 ug/L
Vanadium	500 ug/L	Zinc	500 ug/L

Serial ID: UI080303-40 **Opened:** 04-MAR-08 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 03-MAR-08 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 04-MAR-09 **Lot Number :** 1011390
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI080303-41 **Opened:** 04-MAR-08 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 03-MAR-08 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 04-MAR-09 **Lot Number :** 1011390
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	400000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Standard Logbook

Serial ID: WI080306-42 **Opened:** 06-MAR-08 **Solvent :** 3%HCL AND 1%HNO3 -748573
Name: TRACE ICP 0.1 PPM STD. **Received:** 03-SEP-07
Type: Working **Expires:** 07-MAR-08
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI080306-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI080306-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI080306-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI080306-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI080306-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI080306-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI080306-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI080306-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI080306-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI080306-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI080306-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI080306-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI080306-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI080306-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI080306-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI080306-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI080306-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI080306-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI080306-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI080306-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI080306-44	Silica	1069605 ug/L	10 mL	100 mL	1069 ug/L
WI080306-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI080306-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI080306-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI080306-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI080306-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI080306-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI080306-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI080306-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI080306-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI080306-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI080306-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Serial ID: WI080306-43 **Opened:** 06-MAR-08 **Solvent :** 3%HCL and 1%HNO3 -748573
Name: TRACE ICP 0.5/CCV STD. **Received:** 03-SEP-07
Type: Working **Expires:** 07-MAR-08
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP O.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI070618-41	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI070903-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI070903-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI070903-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI070903-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI070903-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI070903-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI070903-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI070903-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI070903-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI070903-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI070903-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI070903-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI070903-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI070903-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI070903-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI070903-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI070903-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI070903-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI070903-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI070903-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI070903-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI070903-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI070903-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI070903-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI070903-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI070903-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI070903-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI070903-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI070903-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI070903-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI080218-40	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L

Standard Logbook

Serial ID: WI080306-44 **Opened:** 06-MAR-08 **Solvent :** 3%HCL and 1 %HNO3 - 748573
Name: TRACE ICP SCAL 1.0 **Received:** 03-SEP-07
Type: Working **Expires:** 07-MAR-08
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI070618-41	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI070903-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI070903-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI070903-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI070903-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI070903-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI070903-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI070903-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI070903-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI070903-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI070903-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI070903-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI070903-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI070903-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI070903-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI070903-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI070903-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI070903-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI070903-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI070903-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI070903-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI070903-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI070903-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI070903-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI070903-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI070903-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI070903-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI070903-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI070903-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI070903-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI070903-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI080306-45 **Opened:** 06-MAR-08 **Solvent :** 3%HCL and 1%HNO3 - 748573
Name: TRACE ICP S-10 STD **Received:** 04-MAY-07
Type: Working **Expires:** 07-MAR-08
Employee: Helen Camello
Supplier: GEL

Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI070503-42	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI070503-42	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI070503-42	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI070503-42	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI080218-40	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI080306-46 **Opened:** 06-MAR-08 **Solvent :** 3%HCL AND 1%HNO3 -748573
Name: ICP TRACE ICV **Received:** 04-JAN-08
Type: Working **Expires:** 07-MAR-08
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI070807-40	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI080103-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI080103-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI080103-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI080103-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI080103-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI080103-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI080103-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI080103-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI080103-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI080103-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI080103-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI080103-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI080103-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI080103-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI080103-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI080103-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI080103-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI080103-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI080103-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI080103-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI080103-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI080103-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI080103-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI080103-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI080103-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI080103-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI080103-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI080103-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI080103-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI080103-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L

Serial ID: 740998 **Opened:** 08-FEB-08 **Lot Number :** E50047
Name: I-HCL **Received:** 08-FEB-08 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 08-FEB-09
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 745778 **Opened:** 22-FEB-08 **Lot Number :** E50082 L
Name: I-HNO3 **Received:** 22-FEB-08 **Preservative_Id :** 4 none
Type: Reagent/Solvent **Expires:** 22-FEB-09
Employee: Francena Armstrong
Supplier: J.T. Baker
Description: 4M Nitric Acid
Comments: None

Serial ID: 748573 **Opened:** 03-MAR-08 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 15-FEB-08 **Lot Number :** E26057+E22071
Type: Reagent/Solvent **Expires:** 09-MAR-08 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Prep LogBook

Analyst: BXA1 Verified by:_____

Batch: 730795

Lab SOP: GL-MA-E-006 REV# 9

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201524625	UI080131-01	.25	mL
LCS	1201524625	UI080131-06	.25	mL
MS	1201524626	UI080131-01	.25	mL
MS	1201524626	UI080131-06	.25	mL
MSD	1201529766	UI080131-01	.25	mL
MSD	1201529766	UI080131-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201524624		SW846 3005A	04-MAR-2008 22:02	50 mL	50 mL	1	WATER
LCS	1201524625		SW846 3005A	04-MAR-2008 22:02	50 mL	50 mL	1	WATER
SAMPLE	203493001		SW846 3005A	04-MAR-2008 22:02	50 mL	50 mL	1	STORM WATER
SAMPLE	203581001		SW846 3005A	04-MAR-2008 22:02	50 mL	50 mL	1	WATER
MS	1201524626	203581001	SW846 3005A	04-MAR-2008 22:02	50 mL	50 mL	1	WATER
MSD	1201529766	203581001	SW846 3005A	04-MAR-2008 22:02	50 mL	50 mL	1	WATER
DUP	1201524629	203581001	SW846 3005A	04-MAR-2008 22:02	50 mL	50 mL	1	WATER
SDILT	1201524636	203581001	SW846 3005A	04-MAR-2008 22:02	50 mL	50 mL	1	WATER
SAMPLE	203581002		SW846 3005A	04-MAR-2008 22:02	50 mL	50 mL	1	WATER
SAMPLE	203581003		SW846 3005A	04-MAR-2008 22:02	50 mL	50 mL	1	WATER
SAMPLE	203581004		SW846 3005A	04-MAR-2008 22:02	50 mL	50 mL	1	WATER
SAMPLE	203581005		SW846 3005A	04-MAR-2008 22:02	50 mL	50 mL	1	WATER

Reagent/Solvent Lot ID	Amount	Description
740998	2.5 mL	HYDROCHLORIC ACID
745778	1 mL	4M Nitric Acid

Comments:

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
UC Davis (DMOP)
SDG 203493

Method/Analysis Information

Product: **Carbon, Total Organic**

Analytical Batch: 730487 **Method:** SM 5310 D

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SM 5310 D:

Sample ID	Client ID
203493001	STMW0144
1201523907	Method Blank (MB)
1201523909	203493001(STMW0144) Sample Duplicate (DUP)
1201523911	203493001(STMW0144) Post Spike (PS)
1201523912	Laboratory Control Sample (LCS)

The sample in this SDG was analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-093 REV# 8.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Carbon analysis was performed on a O-I Analytical Model 1010 Total Organic Carbon Analyzer.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
The following sample was selected for QC analysis: 203493001 (STMW0144).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recoveries for this sample set were within the required acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The following samples in this sample group were diluted due to matrix interference. 1201523909 (STMW0144), 1201523911 (STMW0144) and 203493001 (STMW0144).

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
An NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product: **Ion Chromatography**

Analytical Batch: 730350 **Method:** EPA 300.0

Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA 300.0:

Sample ID	Client ID
203493001	STMW0144
1201523598	Method Blank (MB)
1201523599	Laboratory Control Sample (LCS)
1201523600	203493001(STMW0144) Sample Duplicate (DUP)
1201523601	203493001(STMW0144) Post Spike (PS)

The sample in this SDG was analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-086 REV# 14.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Ion Chromatography analysis was performed on a Dionex DX300 Ion Chromatograph equipped with a Dionex AS9-HC general purpose anion column.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
The following sample was selected for QC analysis: 203493001 (STMW0144).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recovery for this sample set was within the required acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
An NCR was not required for this SDG.

Manual Integrations
Manual integrations were not required for the samples in this SDG.

Additional Comments
The duplicate and post-spike were analyzed out of the method-specified holding time; however, the sample was analyzed within holding. 1201523600 (STMW0144) and 1201523601 (STMW0144).

Method/Analysis Information

Product: **Oil & Grease**

Analytical Batch: 731946 **Method:** SW846 9070

Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA 413.1:

Sample ID	Client ID
203493001	STMW0144
1201527203	Method Blank (MB)
1201527204	203131001(BLEU Sewer) Matrix Spike (MS)
1201527205	Laboratory Control Sample (LCS)

The sample in this SDG was analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-017 REV# 8.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Oil & Grease analysis was performed on a Sartorius Balance.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recovery met the acceptance limits.

Laboratory Control Sample Duplicate (LCSD) Recovery

LCSD N/A

LCS/LCSD Relative Percent Difference (RPD) Statement

N/A

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recovery for this sample set was within the required acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
An NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product: **Solids, Total Dissolved**

Analytical Batch: 731200 **Method:** EPA 160.1

Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA 160.1:

Sample ID	Client ID
203493001	STMW0144
1201525441	Method Blank (MB)
1201525443	203480006(CASA-08-10569) Sample Duplicate (DUP)
1201525446	Laboratory Control Sample (LCS)

The sample in this SDG was analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-001 REV# 8.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Solids analysis was performed on a Sartorius Balance BAL216. Solids lab

Initial Calibration

All initial calibration requirements have been met for this SDG.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation

The following sample was selected for QC analysis: 203480006 (CASA-08-10569).

Duplicate Relative Percent Difference (RPD) Statement

The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Sample Aliquot
A sufficient amount of sample was provided by the client for analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
An NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product: **Solids, Total Suspended**

Analytical Batch: 730665 **Method:** EPA 160.2

Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA 160.2:

Sample ID	Client ID
203493001	STMW0144
1201524283	Method Blank (MB)
1201524284	203471001(TSS001) Sample Duplicate (DUP)
1201524286	Laboratory Control Sample (LCS)

The sample in this SDG was analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-012 REV# 8.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Solids analysis was performed on a Sartorius Balance BAL216. Solids lab

Initial Calibration

All initial calibration requirements have been met for this SDG.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation

The following sample was selected for QC analysis: 203471001 (TSS001).

Duplicate Relative Percent Difference (RPD) Statement

The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Sample Aliquot
A sufficient amount of sample was provided by the client for analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
An NCR was not required for this SDG.

Additional Comments
Due to sample matrix, a smaller aliquot was used for analysis. 1201524284 (TSS001) and 203493001 (STMW0144).

Method/Analysis Information

Product: **Total Hardness**

Analytical Batch: 730544 **Method:** EPA 130.2

Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA 130.2:

Sample ID	Client ID
203493001	STMW0144
1201524860	Method Blank (MB)
1201524861	203170001(Back Wash Filter Waste Pond Ef) Sample Duplicate (DUP)
1201524862	203170001(Back Wash Filter Waste Pond Ef) Matrix Spike (MS)
1201524863	Laboratory Control Sample (LCS)

The sample in this SDG was analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-100 REV# 3.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Titration analysis was performed on a manually operated buret.

Initial Standardization

The titrant was properly standardized

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation

The following sample was selected for QC analysis: 203170001 (Back Wash Filter Waste Pond Ef).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

The MS/PS recovery for this sample set was within the required acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
An NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer:_____ **Date:** 17 MAR 08

Sample Data Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

DMOP001 UC Davis

Client SDG: 203493 GEL Work Order: 203493

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

H Analytical holding time was exceeded

J Value is estimated

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Joanne Harley.

Reviewed by _____

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : UC Davis
Address : EH & S
One Shields Avenue
Davis, California 95616
Contact: Ms. Christine Judal
Project: **LEHR GW Monitoring-Cert.of Analysis Package**

Report Date: March 14, 2008

Client Sample ID:	STMW0144	Project:	DMOP00104
Sample ID:	203493001	Client ID:	DMOP001
Matrix:	Storm Water		
Collect Date:	24-FEB-08 10:30		
Receive Date:	26-FEB-08		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis											
SM 5310 D Total Organic Carbon											
Total Organic Carbon Average		5.41	0.660	2.00	mg/L	2	TSM	02/28/08	1815	730487	1
Ion Chromatography Federal											
EPA 300.0 Nitrate in Liquid											
Nitrate-N		0.654	0.033	0.100	mg/L	1	VXP1	02/26/08	1317	730350	2
Oil & Grease Analysis Federal											
SW9070 OIL & GREASE Federal											
Oil & Grease		7.30	1.09	5.00	mg/L		JXT1	03/03/08	0949	731946	3
Solids Analysis Federal											
EPA 160.1 Solids, Dissolved-F											
Total Dissolved Solids		71.0	2.38	20.0	mg/L		NXM1	02/28/08	1202	731200	4
EPA 160.2 Total Suspended Liq											
Total Suspended Solids		119	3.43	15.1	mg/L		NXM1	02/27/08	1059	730665	5
Titration Analysis Federal											
EPA 130.2 Total Hardness Federal											
Hardness as CaCO3		10.8	1.00	10.0	mg/L		TXT1	02/27/08	1535	730544	6

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SM 5310 D	
2	EPA 300.0	
3	SW846 9070	
4	EPA 160.1	
5	EPA 160.2	
6	EPA 130.2	

Quality Control Summary

QC Summary

Report Date: March 14, 2008

UC Davis
EH & S
One Shields Avenue
Davis, California
Contact: **Ms. Christine Judal**

Workorder: **203493**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Carbon Analysis										
Batch 730487										
QC1201523909 203493001 DUP										
Total Organic Carbon Average		5.41		5.62	mg/L	4 ^		(+/-2.00)	TSM	02/28/08 18:33
QC1201523912 LCS										
Total Organic Carbon Average	10.0			10.5	mg/L		105	(85%-115%)		02/28/08 12:32
QC1201523907 MB										
Total Organic Carbon Average			U	-0.393	mg/L					02/28/08 12:21
QC1201523911 203493001 PS										
Total Organic Carbon Average	10.0	2.70		13.3	mg/L		106	(80%-120%)		02/28/08 18:53
Ion Chromatography										
Batch 730350										
QC1201523600 203493001 DUP										
Nitrate-N		0.654	H	0.648	mg/L	1		(0%-20%)	VXP1	02/26/08 13:37
QC1201523599 LCS										
Nitrate-N	5.00			4.86	mg/L		97	(90%-110%)		02/26/08 14:38
QC1201523598 MB										
Nitrate-N			U	0.00	mg/L					02/26/08 14:18
QC1201523601 203493001 PS										
Nitrate-N	5.00	0.654	H	5.35	mg/L		94	(90%-110%)		02/26/08 13:58
Oil & Grease Analysis										
Batch 731946										
QC1201527205 LCS										
Oil & Grease	200			187	mg/L		93	(79%-111%)	JXT1	03/03/08 09:46
QC1201527203 MB										
Oil & Grease			U	0.00	mg/L					03/03/08 09:46
QC1201527204 203131001 MS										
Oil & Grease	523	9.00		485	mg/L		91	(73%-116%)		03/03/08 09:46
Solids Analysis										
Batch 730665										
QC1201524284 203471001 DUP										
Total Suspended Solids		123		132	mg/L	8		(0%-20%)	NXM1	02/27/08 10:59
QC1201524286 LCS										
Total Suspended Solids	500			496	mg/L		99	(95%-105%)		02/27/08 10:59
QC1201524283 MB										
Total Suspended Solids			U	-0.80	mg/L					02/27/08 10:59
Batch 731200										
QC1201525443 203480006 DUP										
Total Dissolved Solids		499		499	mg/L	0		(0%-10%)	NXM1	02/28/08 12:02
QC1201525446 LCS										
Total Dissolved Solids	300			304	mg/L		101	(95%-105%)		02/28/08 12:02
QC1201525441 MB										
Total Dissolved Solids			U	2.00	mg/L					02/28/08 12:02
Titration Analysis										

QC Summary

Workorder: 203493

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Titration Analysis										
Batch 730544										
QC1201524861 203170001 DUP										
Hardness as CaCO3		240		241	mg/L	0		(0%-10%)	TXT1	02/27/08 15:23
QC1201524863 LCS										
Hardness as CaCO3	250			254	mg/L		102	(90%-110%)		02/27/08 15:16
QC1201524860 MB										
Hardness as CaCO3			U	0.00	mg/L					02/27/08 15:10
QC1201524862 203170001 MS										
Hardness as CaCO3	100	240		340	mg/L		100	(90%-110%)		02/27/08 15:27

Notes:
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- H Analytical holding time was exceeded
- J Value is estimated
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
- ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
- d 5-day BOD--The 2:1 depletion requirement was not met for this sample
- h Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 14-MAR-2008 13:16

GEL Laboratories LLC

Contract: DMOP00104

SDG #: 203493

Carbon Analysis

Method: SM 5310 D Concentration Units:mg/L

Instrument: O-I Analytical Model 1010 Total Organic Carbon Analyzer

Parmname: Total Organic Carbon
Average

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**28-FEB-2008 10:11:00**	**XM441.rlt**	**10.704**	**10**	**107**	**(90%-110%)**	**Yes**
CCV	28-FEB-2008 16:50:00	XM455.rlt	10.352	10	104	(90%-110%)	Yes
CCV	28-FEB-2008 20:51:00	XM468.rlt	10.742	10	107	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**28-FEB-2008 10:20:00**	**XM442.rlt**	**-0.313**	**1**	**Yes**
CCB	28-FEB-2008 17:00:00	XM456.rlt	-0.288	1	Yes
CCB	28-FEB-2008 21:02:00	XM469.rlt	-0.349	1	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 14-MAR-2008 13:16

GEL Laboratories LLC

Contract: DMOP00104

SDG #: 203493

Ion Chromatography

Method: EPA 300.0 Concentration Units:mg/L

Instrument: Dionex DX300 Ion Chromatograph equipped with a Dionex AS9-HC general purpose anion column

Parmname: Nitrate-N

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**26-FEB-2008 10:14:03**	**AZBZNC01.D02**	**4.932**	**5**	**99**	**(90%-110%)**	**Yes**
CCV	26-FEB-2008 12:36:34	AZBZNC01.D09	7.355	7.5	98	(90%-110%)	Yes
CCV	26-FEB-2008 16:00:09	AZBZNC01.D19	4.868	5	97	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**26-FEB-2008 10:34:24**	**AZBZNC01.D03**	**0**	**0.1**	**Yes**
CCB	26-FEB-2008 12:57:03	AZBZNC01.D10	0	0.1	Yes
CCB	26-FEB-2008 16:20:30	AZBZNC01.D20	0	0.1	Yes

Carbon, Total Organic

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
ICAL-01		1	TSM	28-Feb-08 9:26	XM436.rlt
ICAL-02		1	TSM	28-Feb-08 9:35	XM437.rlt
ICAL-03		1	TSM	28-Feb-08 9:44	XM438.rlt
ICAL-04		1	TSM	28-Feb-08 9:53	XM439.rlt
ICAL-05		1	TSM	28-Feb-08 10:02	XM440.rlt
ICV		1	TSM	28-Feb-08 10:11	XM441.rlt
ICB		1	TSM	28-Feb-08 10:20	XM442.rlt
TIC	730487	1	TSM	28-Feb-08 10:30	XM443.rlt
1201523907	730487	1	TSM	28-Feb-08 12:21	XM444.rlt
1201524768	730873	1	TSM	28-Feb-08 12:21	XM444.rlt
1201523912	730487	1	TSM	28-Feb-08 12:32	XM445.rlt
1201524771	730873	1	TSM	28-Feb-08 12:32	XM445.rlt
202304001	730487	1	TSM	28-Feb-08 12:40	XM446.rlt
202304003	730487	1	TSM	28-Feb-08 13:14	XM447.rlt
202304005	730487	1	TSM	28-Feb-08 13:47	XM448.rlt
202304007	730487	1	TSM	28-Feb-08 14:21	XM449.rlt
202304009	730487	1	TSM	28-Feb-08 14:54	XM450.rlt
202304011	730487	1	TSM	28-Feb-08 15:28	XM451.rlt
1201523908	730487	1	TSM	28-Feb-08 16:02	XM452.rlt
1201523910	730487	1	TSM	28-Feb-08 16:21	XM453.rlt
CCV		1	TSM	28-Feb-08 16:50	XM455.rlt
CCB		1	TSM	28-Feb-08 17:00	XM456.rlt
202304013	730487	1	TSM	28-Feb-08 17:08	XM457.rlt
202304016	730487	1	TSM	28-Feb-08 17:42	XM458.rlt
203493001	730487	2	TSM	28-Feb-08 18:15	XM459.rlt
1201523909	730487	2	TSM	28-Feb-08 18:33	XM460.rlt
1201523911	730487	2	TSM	28-Feb-08 18:53	XM461.rlt
203624001	730487	250	TSM	28-Feb-08 19:02	XM462.rlt
203638001	730487	1	TSM	28-Feb-08 19:20	XM463.rlt
203624002	730873	250	TSM	28-Feb-08 19:38	XM464.rlt
1201524769	730873	250	TSM	28-Feb-08 19:56	XM465.rlt
1201524770	730873	250	TSM	28-Feb-08 20:15	XM466.rlt
CCV		1	TSM	28-Feb-08 20:51	XM468.rlt
CCV		1	TSM	28-Feb-08 21:02	XM469.rlt
1201523892	730482	1	TSM	28-Feb-08 21:12	XM470.rlt
1201523897	730482	1	TSM	28-Feb-08 21:48	XM472.rlt
203283002	730482	1	TSM	28-Feb-08 21:56	XM473.rlt
203286001	730482	1	TSM	28-Feb-08 22:30	XM474.rlt
203287002	730482	1	TSM	28-Feb-08 23:03	XM475.rlt
1201523893	730482	1	TSM	28-Feb-08 23:37	XM476.rlt
1201523895	730482	1	TSM	28-Feb-08 23:57	XM477.rlt
203389001	730482	1	TSM	29-Feb-08 0:05	XM478.rlt
203389007	730482	1	TSM	29-Feb-08 0:39	XM479.rlt
203391002	730482	2	TSM	29-Feb-08 1:12	XM480.rlt
CCV		1	TSM	29-Feb-08 2:13	XM482.rlt
CCB		1	TSM	29-Feb-08 2:23	XM483.rlt
203391008	730482	1	TSM	29-Feb-08 2:32	XM484.rlt
1201523894	730482	1	TSM	29-Feb-08 3:05	XM485.rlt
1201523896	730482	1	TSM	29-Feb-08 3:25	XM486.rlt
203417003	730482	1	TSM	29-Feb-08 3:33	XM487.rlt
203418003	730482	1	TSM	29-Feb-08 4:07	XM488.rlt
203480002	730482	1	TSM	29-Feb-08 4:41	XM489.rlt
203485003	730482	1	TSM	29-Feb-08 5:14	XM490.rlt
203485004	730482	1	TSM	29-Feb-08 5:48	XM491.rlt
203485008	730482	1	TSM	29-Feb-08 6:21	XM492.rlt
203567001	730482	1	TSM	29-Feb-08 6:55	XM493.rlt
CCV		1	TSM	29-Feb-08 7:56	XM495.rlt

CCB		1	TSM	29-Feb-08 8:06	XM496.rlt
203567005	730482	1	TSM	29-Feb-08 8:15	XM497.rlt
CCV		1	TSM	29-Feb-08 9:24	XM499.rlt
CCB		1	TSM	29-Feb-08 9:34	XM500.rlt

```
*********************************************************************
**                          CONFIGURATION                          **
*********************************************************************

Analysis Mode:  TOC         Spl Intro:  Autosampler 53
Remote Start :  OFF

Loop Size:  5 mL        Actual Volume  1mL   5mL   10mL   25mL
                        -------------  ----  ----  -----  -----
                         Loop A (uL):  1000  4900  10000  25000
                         Loop B (uL):  1000  4900  10000  25000

Tray Type:             53 Vial  Vial Option:                 Neither
Needle Depth:          97 %     Preacid Volume (uL):             200
Wash Needle Depth:     94 %     Preacid Purge Time (min:sec):   0:30

            TIC    TOC    TC
Blank      ----   ----   ----            Linearization Coeff:  53000
 Average:   254   1688    511

                          Sample Transfer Times (sec)
          Initial Fill      |        Loop Fill       | Sample Inject
     Non-AS    AS  AS w/Sep | Non-AS    AS  AS w/Sep |    (all)
     ------  ----- -------- | ------  ----- -------- | -------------
1mL:    6.0    4.5      3.5 |    1.2    1.2      1.0 |      4.5
5mL:    8.1    7.0      8.0 |    5.1    3.0      5.5 |     10.3
10mL:  14.2   12.2     11.0 |   10.5   10.5     11.0 |     16.5
25mL:  35.0   35.0     32.0 |    n/a    n/a      n/a |     38.0

Analog Concentration Signal indicates TOC
Analog Conc. Signal Timer is OFF, Timer duration (h:m:s): 00:00:00
Min Signal Range:   0.000 ppmC,  Max Signal Range:   0.000 ppmC

Alarms DISABLED
Alarm Relay Timer is OFF, Timer duration (h:m:s): 00:00:00
       Conc. Alarm Setpoints (ppm C)
          Low      |    High
      -----------  | -----------
TIC:     0.000          0.000
TOC:     0.000          0.000
TC:      0.000          0.000
```

```
*******************************************************************
**                          CALIBRATION                          **
*******************************************************************
```

02/28/08 Thu Feb 28 10:02:11 2008

Std. #	Used	Conc. (ppm)	Volume (mL)
1	Yes	20.000	5.000
2	Yes	10.000	5.000
3	Yes	1.000	5.000
4	Yes	0.200	5.000
5	Yes	0.000	5.000

RF (ugC/k-cts):	1.198
R-Squared:	0.9993
Offset (cts):	2163
Offset (ugC):	-2.592
Calibration Mode:	TOC
Allow Editing:	No

Rep	Std. 1	Std. 2	Std. 3	Std. 4	Std. 5
1	83838	43139	7739	2553	1186
2	-	-	-	-	-
3	-	-	-	-	-
4	-	-	-	-	-
5	-	-	-	-	-
6	-	-	-	-	-
7	-	-	-	-	-
8	-	-	-	-	-
9	-	-	-	-	-
10	-	-	-	-	-

(* = unused)

```
                                |- - - - - T I C  - - - -| |- - - - - T O C  - - - -| |- - - - - - T C  - - - -|
Pos/ Run  Rep   Run     Run    Area    Mass     Conc      Area    Mass     Conc      Area    Mass    Conc
Vial Type  #    Date    Time   (cts)   (ugC)    (ppm)     (cts)   (ugC)    (ppm)     (cts)   (ugC)   (ppm)
---- ---- --- --------- ----- ------- ------- ---------- ------- ------- ---------- ------- ------- ----------

** Std1     Name:    ICAL-01                      Data File: XM436
            Remarks: 730487|1|1|WTC080228-01

1    Std1   1 28Feb2008 09:26      -       -          -    83838  98.000     20.000      -       -          -

** Calibration:    RF (ugC/k-cts):   1.173
                   R-Squared:       1.0000
                   Offset (cts):         0
                   Offset (ugC):     0.000


** Std2     Name:    ICAL-02                      Data File: XM437
            Remarks: 730487|1|1|WTC080228-02

2    Std2   1 28Feb2008 09:35      -       -          -    43139  49.000     10.000      -       -          -

** Calibration:    RF (ugC/k-cts):   1.204
                   R-Squared:       1.0000
                   Offset (cts):      2440
                   Offset (ugC):    -2.938


** Std3     Name:    ICAL-03                      Data File: XM438
            Remarks: 730487|1|1|WTC080228-03

3    Std3   1 28Feb2008 09:44      -       -          -     7739   4.900      1.000      -       -          -

** Calibration:    RF (ugC/k-cts):   1.223
                   R-Squared:       0.9999
                   Offset (cts):      3501
                   Offset (ugC):    -4.282


** Std4     Name:    ICAL-04                      Data File: XM439
            Remarks: 730487|1|1|WTC080228-04

4    Std4   1 28Feb2008 09:53      -       -          -     2553   0.980      0.200      -       -          -

** Calibration:    RF (ugC/k-cts):   1.207
                   R-Squared:       0.9996
                   Offset (cts):      2649
                   Offset (ugC):    -3.198


** Std5     Name:    ICAL-05                      Data File: XM440
            Remarks: 730487|1|1|

5    Std5   1 28Feb2008 10:02      -       -          -     1186   0.000      0.000      -       -          -

** Calibration:    RF (ugC/k-cts):   1.198
                   R-Squared:       0.9993
                   Offset (cts):      2163
                   Offset (ugC):    -2.592


** Chk2     Name:    ICV                          Data File: XM441
            Remarks: 730487|1|1|WTC080228-05

6    Chk2   1 28Feb2008 10:11      -       -          -    45953  52.450     10.704      -       -          -
```

```
** Chk5     Name:    ICB                          Data File: XM442
            Remarks: 730487|1|1|

7    Chk5   1 28Feb2008 10:20      -       -          -      885  -1.531     -0.312      -       -          -


** Spl      Name:    TIC                          Data File: XM443
            Remarks: 730487|1|1|WIC080228-01

8    Spl    1 28Feb2008 10:30      -       -          -     1098   0.938      0.191      -       -          -
```

Pos/ Vial	Run Type	Rep #	Run Date	Run Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (ppm)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (ppm)	TC Area (cts)	TC Mass (ugC)	TC Conc (ppm)
** Chk5			Name: 1201523907					Data File: XM444					
			Remarks: 730487|1|1|MB										
1	Chk5	1	28Feb2008	12:21	-	-	-	555	-1.927	-0.393	-	-	-
** Chk2			Name: 1201523912					Data File: XM445					
			Remarks: 730487|1|1|WTC080228-05:LCS										
2	Chk2	1	28Feb2008	12:32	-	-	-	45020	51.332	10.476	-	-	-
** Spl			Name: 202304001					Data File: XM446					
			Remarks: 730487|1|1|									
3	Spl	1	28Feb2008	12:40	-	-	-	7458	8.556	1.746	-	-	-
3	Spl	2	28Feb2008	12:48	-	-	-	6967	7.968	1.626	-	-	-
3	Spl	3	28Feb2008	12:56	-	-	-	6543	7.460	1.522	-	-	-
3	Spl	4	28Feb2008	13:05	-	-	-	6572	7.494	1.530	-	-	-
3	Spl	Avg						6885	7.869	1.606			
3	Spl	SDev						428.169					
3	Spl	%RSD						6.22					
** Spl			Name: 202304003					Data File: XM447					
			Remarks: 730487|1|1|									
4	Spl	1	28Feb2008	13:14	-	-	-	19262	22.694	4.631	-	-	-
4	Spl	2	28Feb2008	13:21	-	-	-	19838	23.384	4.772	-	-	-
4	Spl	3	28Feb2008	13:29	-	-	-	19040	22.428	4.577	-	-	-
4	Spl	4	28Feb2008	13:39	-	-	-	19828	23.372	4.770	-	-	-
4	Spl	Avg						19492	22.970	4.688			
4	Spl	SDev						404.069					
4	Spl	%RSD						2.07					
** Spl			Name: 202304005					Data File: XM448					
			Remarks: 730487|1|1|									
5	Spl	1	28Feb2008	13:47	-	-	-	6267	7.129	1.455	-	-	-
5	Spl	2	28Feb2008	13:55	-	-	-	6457	7.357	1.501	-	-	-
5	Spl	3	28Feb2008	14:03	-	-	-	6385	7.270	1.484	-	-	-
5	Spl	4	28Feb2008	14:12	-	-	-	6053	6.873	1.403	-	-	-
5	Spl	Avg						6290	7.157	1.461			
5	Spl	SDev						176.646					
5	Spl	%RSD						2.81					
** Spl			Name: 202304007					Data File: XM449					
			Remarks: 730487|1|1|									
6	Spl	1	28Feb2008	14:21	-	-	-	5385	6.073	1.239	-	-	-
6	Spl	2	28Feb2008	14:29	-	-	-	5146	5.786	1.181	-	-	-
6	Spl	3	28Feb2008	14:36	-	-	-	4683	5.232	1.068	-	-	-
6	Spl	4	28Feb2008	14:46	-	-	-	5036	5.655	1.154	-	-	-
6	Spl	Avg						5062	5.686	1.161			
6	Spl	SDev						291.948					
6	Spl	%RSD						5.77					

** Spl Name: 202304009 Data File: XM450
Remarks: 730487|1|1|

7	Spl	1	28Feb2008 14:54	-	-	-	11312	13.172	2.688	-	-	-
7	Spl	2	28Feb2008 15:02	-	-	-	10595	12.313	2.513	-	-	-
7	Spl	3	28Feb2008 15:10	-	-	-	10773	12.526	2.556	-	-	-
7	Spl	4	28Feb2008 15:20	-	-	-	10986	12.781	2.609	-	-	-
7	Spl	Avg					10916	12.698	2.592			
7	Spl	SDev					308.332					
7	Spl	%RSD					2.82					

** Spl Name: 202304011 Data File: XM451
Remarks: 730487|1|1|

8	Spl	1	28Feb2008 15:28	-	-	-	18132	21.341	4.355	-	-	-
8	Spl	2	28Feb2008 15:36	-	-	-	18085	21.284	4.344	-	-	-
8	Spl	3	28Feb2008 15:44	-	-	-	17503	20.587	4.201	-	-	-
8	Spl	4	28Feb2008 15:53	-	-	-	18201	21.423	4.372	-	-	-
8	Spl	Avg					17980	21.159	4.318			
8	Spl	SDev					321.714					
8	Spl	%RSD					1.79					

** Spl Name: 1201523908 Data File: XM452
Remarks: 730487|1|1|202304011:DUP

9	Spl	1	28Feb2008 16:02	-	-	-	17331	20.381	4.159	-	-	-
9	Spl	2	28Feb2008 16:11	-	-	-	17716	20.842	4.254	-	-	-
9	Spl	Avg					17523	20.612	4.207			
9	Spl	SDev					272.236					
9	Spl	%RSD					1.55					

** Spl Name: 1201523910 Data File: XM453
Remarks: 730487|1|1|202304011:PS

10	Spl	1	28Feb2008 16:21	-	-	-	44651	53.104	10.838	-	-	-
11	Blk	1	28Feb2008 16:30	-	-	-	1301	-	-	-	-	-
11	Blk	2	28Feb2008 16:40	-	-	-	570	-	-	-	-	-

** Chk2 Name: CCV Data File: XM455
Remarks: 730487|1|1|WTC080228-02

11	Chk2	1	28Feb2008 16:50	-	-	-	44511	50.723	10.351	-	-	-

** Chk5 Name: CCB Data File: XM456
Remarks: 730487|1|1|

12	Chk5	1	28Feb2008 17:00	-	-	-	986	-1.411	-0.288	-	-	-

** Spl Name: 202304013 Data File: XM457
Remarks: 730487|1|1|

13	Spl	1	28Feb2008 17:08	-	-	-	27702	32.298	6.591	-	-	-
13	Spl	2	28Feb2008 17:16	-	-	-	28766	33.572	6.852	-	-	-
13	Spl	3	28Feb2008 17:24	-	-	-	27596	32.171	6.565	-	-	-
13	Spl	4	28Feb2008 17:33	-	-	-	29622	34.598	7.061	-	-	-
13	Spl	Avg					28421	33.160	6.767			
13	Spl	SDev					958.994					
13	Spl	%RSD					3.37					

```
** Spl      Name:    202304016                    Data File: XM458
            Remarks: 730487|1|1|

14   Spl    1 28Feb2008 17:42      -       -          -     8987   9.882      2.017      -       -          -
14   Spl    2 28Feb2008 17:50      -       -          -     8613   9.434      1.925      -       -          -
14   Spl    3 28Feb2008 17:57      -       -          -     8441   9.228      1.883      -       -          -
14   Spl    4 28Feb2008 18:07      -       -          -     8274   9.028      1.842      -       -          -
14   Spl  Avg                                           8578   9.393      1.917
14   Spl  SDev                                       305.335
14   Spl  %RSD                                          3.56


** Spl      Name:    203493001                    Data File: XM459
            Remarks: 730487|2|1|

15   Spl    1 28Feb2008 18:15      -       -          -    12844  14.501      2.960      -       -          -
15   Spl    2 28Feb2008 18:25      -       -          -    10754  11.998      2.449      -       -          -
15   Spl  Avg                                          11799  13.250      2.704
15   Spl  SDev                                      1477.853
15   Spl  %RSD                                          12.53


** Spl      Name:    1201523909                   Data File: XM460
            Remarks: 730487|2|1|203493001:DUP

16   Spl    1 28Feb2008 18:33      -       -          -    13475  15.257      3.114      -       -          -
16   Spl    2 28Feb2008 18:43      -       -          -    10972  12.259      2.502      -       -          -
16   Spl  Avg                                          12223  13.758      2.808
16   Spl  SDev                                      1769.888
16   Spl  %RSD                                          14.48


** Spl      Name:    1201523911                   Data File: XM461
            Remarks: 730487|2|1|203493001:PS

17   Spl    1 28Feb2008 18:53      -       -          -    55274  65.323     13.331      -       -          -


** Spl      Name:    203624001                    Data File: XM462
            Remarks: 730487|250|1|

18   Spl    1 28Feb2008 19:02      -       -          -    18162  20.871      4.259      -       -          -
18   Spl    2 28Feb2008 19:11      -       -          -    17712  20.332      4.149      -       -          -
18   Spl  Avg                                          17937  20.602      4.204
18   Spl  SDev                                       318.198
18   Spl  %RSD                                           1.77


** Spl      Name:    203638001                    Data File: XM463
            Remarks: 730487|1|1|

19   Spl    1 28Feb2008 19:20      -       -          -    32777  38.377      7.832      -       -          -
19   Spl    2 28Feb2008 19:29      -       -          -    33989  39.828      8.128      -       -          -
19   Spl  Avg                                          33383  39.102      7.980
19   Spl  SDev                                       857.013
19   Spl  %RSD                                           2.57


** Spl      Name:    203624002                    Data File: XM464
            Remarks: 730873|250|1|DOC

20   Spl    1 28Feb2008 19:38      -       -          -    21551  24.930      5.088      -       -          -
20   Spl    2 28Feb2008 19:47      -       -          -    20996  24.266      4.952      -       -          -
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20   Spl  Avg                                          21273  24.598      5.020
20   Spl  SDev                                        392.444
20   Spl  %RSD                                          1.84


** Spl      Name:    1201524769                  Data File: XM465
            Remarks: 730873|250|1|203624002:DUP

21   Spl    1 28Feb2008 19:56      -       -         -    21290  24.618      5.024      -       -          -
21   Spl    2 28Feb2008 20:05      -       -         -    20177  23.285      4.752      -       -          -
21   Spl  Avg                                          20733  23.951      4.888
21   Spl  SDev                                        787.010
21   Spl  %RSD                                          3.80


** Spl      Name:    1201524770                  Data File: XM466
            Remarks: 730873|250|1|203624002:PS

22   Spl    1 28Feb2008 20:15      -       -         -    62795  74.331     15.170      -       -          -

23   Blk    1 28Feb2008 20:24      -       -         -      484      -          -       -       -          -
23   Blk    2 28Feb2008 20:32      -       -         -      336      -          -       -       -          -
23   Blk    3 28Feb2008 20:41      -       -         -      315      -          -       -       -          -


** Chk2     Name:    CCV                         Data File: XM468
            Remarks: 730873|1|1|WTC080228-02

23   Chk2   1 28Feb2008 20:51      -       -         -    46108  52.635     10.742      -       -          -


** Chk5     Name:    CCV                         Data File: XM469
            Remarks: 730873|1|1|

24   Chk5   1 28Feb2008 21:02      -       -         -      737  -1.709     -0.349      -       -          -


** Chk5     Name:    1201523892                  Data File: XM470
            Remarks: 730482|1|1|MB

25   Chk5   1 28Feb2008 21:12      -       -         -      690  -1.765     -0.360      -       -          -

26   Blk    1 28Feb2008 21:20      -       -         -      390      -          -       -       -          -
26   Blk    2 28Feb2008 21:28      -       -         -      310      -          -       -       -          -
26   Blk    3 28Feb2008 21:38      -       -         -      319      -          -       -       -          -


** Chk2     Name:    1201523897                  Data File: XM472
            Remarks: 730482|1|1|WTC080228-05:LCS

26   Chk2   1 28Feb2008 21:48      -       -         -    45006  51.315     10.472      -       -          -


** Spl      Name:    203283002                   Data File: XM473
            Remarks: 730482|1|1|

27   Spl    1 28Feb2008 21:56      -       -         -    11622  13.514      2.758      -       -          -
27   Spl    2 28Feb2008 22:04      -       -         -    11357  13.197      2.693      -       -          -
27   Spl    3 28Feb2008 22:12      -       -         -    11717  13.628      2.781      -       -          -
27   Spl    4 28Feb2008 22:22      -       -         -    10977  12.742      2.600      -       -          -
27   Spl  Avg                                          11418  13.270      2.708
27   Spl  SDev                                        331.270
27   Spl  %RSD                                          2.90
```

```
** Spl      Name:    203286001                    Data File: XM474
            Remarks: 730482|1|1|

28   Spl    1 28Feb2008 22:30      -       -          -    18294  21.506      4.389      -       -          -
28   Spl    2 28Feb2008 22:38      -       -          -    17319  20.338      4.151      -       -          -
28   Spl    3 28Feb2008 22:45      -       -          -    16611  19.490      3.978      -       -          -
28   Spl    4 28Feb2008 22:55      -       -          -    17131  20.113      4.105      -       -          -
28   Spl  Avg                                           17338  20.362      4.155
28   Spl  SDev                                        703.722
28   Spl  %RSD                                           4.06


** Spl      Name:    203287002                    Data File: XM475
            Remarks: 730482|1|1|

29   Spl    1 28Feb2008 23:03      -       -          -     9328  10.767      2.197      -       -          -
29   Spl    2 28Feb2008 23:11      -       -          -     8766  10.094      2.060      -       -          -
29   Spl    3 28Feb2008 23:19      -       -          -     8959  10.325      2.107      -       -          -
29   Spl    4 28Feb2008 23:28      -       -          -     8586   9.878      2.016      -       -          -
29   Spl  Avg                                            8909  10.266      2.095
29   Spl  SDev                                        317.719
29   Spl  %RSD                                           3.57


** Spl      Name:    1201523893                   Data File: XM476
            Remarks: 730482|1|1|203287002:DUP

30   Spl    1 28Feb2008 23:37      -       -          -     9755  11.278      2.302      -       -          -
30   Spl    2 28Feb2008 23:46      -       -          -     9048  10.431      2.129      -       -          -
30   Spl  Avg                                            9401  10.855      2.215
30   Spl  SDev                                        499.924
30   Spl  %RSD                                           5.32


** Spl      Name:    1201523895                   Data File: XM477
            Remarks: 730482|1|1|203287002:PS

31   Spl    1 28Feb2008 23:57      -       -          -    51437  61.204     12.491      -       -          -


** Spl      Name:    203389001                    Data File: XM478
            Remarks: 730482|1|1|

32   Spl    1 29Feb2008 00:05      -       -          -     3375   3.636      0.742      -       -          -
32   Spl    2 29Feb2008 00:13      -       -          -     3228   3.460      0.706      -       -          -
32   Spl    3 29Feb2008 00:21      -       -          -     3155   3.373      0.688      -       -          -
32   Spl    4 29Feb2008 00:30      -       -          -     3088   3.293      0.672      -       -          -
32   Spl  Avg                                            3211   3.441      0.702
32   Spl  SDev                                        123.084
32   Spl  %RSD                                           3.83


** Spl      Name:    203389007                    Data File: XM479
            Remarks: 730482|1|1|

33   Spl    1 29Feb2008 00:39      -       -          -     4833   5.383      1.099      -       -          -
33   Spl    2 29Feb2008 00:46      -       -          -     4780   5.319      1.086      -       -          -
33   Spl    3 29Feb2008 00:54      -       -          -     4634   5.144      1.050      -       -          -
33   Spl    4 29Feb2008 01:04      -       -          -     4591   5.093      1.039      -       -          -
33   Spl  Avg                                            4709   5.235      1.068
33   Spl  SDev                                        115.420
33   Spl  %RSD                                           2.45


** Spl      Name:    203391002                    Data File: XM480
```

```
            Remarks: 730482|2|1|

34   Spl    1 29Feb2008 01:12      -       -          -    21559  25.417      5.187      -       -          -
34   Spl    2 29Feb2008 01:20      -       -          -    20212  23.803      4.858      -       -          -
34   Spl    3 29Feb2008 01:28      -       -          -    21355  25.172      5.137      -       -          -
34   Spl    4 29Feb2008 01:37      -       -          -    19801  23.311      4.757      -       -          -
34   Spl  Avg                                             20731  24.426      4.985
34   Spl  SDev                                           858.141
34   Spl  %RSD                                              4.14

35   Blk    1 29Feb2008 01:45      -       -          -      459      -          -       -       -          -
35   Blk    2 29Feb2008 01:53      -       -          -      338      -          -       -       -          -
35   Blk    3 29Feb2008 02:03      -       -          -      299      -          -       -       -          -


** Chk2     Name:    CCV                          Data File: XM482
            Remarks: 730482|1|1|WTC080228-02

35   Chk2   1 29Feb2008 02:13      -       -          -    46500  53.105     10.838      -       -          -


** Chk5     Name:    CCB                          Data File: XM483
            Remarks: 730482|1|1|

36   Chk5   1 29Feb2008 02:23      -       -          -      741  -1.704     -0.348      -       -          -


** Spl      Name:    203391008                    Data File: XM484
            Remarks: 730482|1|1|

37   Spl    1 29Feb2008 02:32      -       -          -    46655  55.445     11.315      -       -          -
37   Spl    2 29Feb2008 02:40      -       -          -    43781  52.002     10.613      -       -          -
37   Spl    3 29Feb2008 02:47      -       -          -    44868  53.304     10.878      -       -          -
37   Spl    4 29Feb2008 02:57      -       -          -    44454  52.809     10.777      -       -          -
37   Spl  Avg                                             44939  53.390     10.896
37   Spl  SDev                                          1228.262
37   Spl  %RSD                                              2.73


** Spl      Name:    1201523894                   Data File: XM485
            Remarks: 730482|1|1|203391008:DUP

38   Spl    1 29Feb2008 03:05      -       -          -    44374  52.713     10.758      -       -          -
38   Spl    2 29Feb2008 03:15      -       -          -    41671  49.475     10.097      -       -          -
38   Spl  Avg                                             43022  51.094     10.427
38   Spl  SDev                                          1911.310
38   Spl  %RSD                                              4.44


** Spl      Name:    1201523896                   Data File: XM486
            Remarks: 730482|1|1|203391008:PS

39   Spl    1 29Feb2008 03:25      -       -          -    90602 108.083     22.058      -       -          -


** Spl      Name:    203417003                    Data File: XM487
            Remarks: 730482|1|1|

40   Spl    1 29Feb2008 03:33      -       -          -    24380  28.765      5.870      -       -          -
40   Spl    2 29Feb2008 03:41      -       -          -    22811  26.885      5.487      -       -          -
40   Spl    3 29Feb2008 03:49      -       -          -    23165  27.309      5.573      -       -          -
40   Spl    4 29Feb2008 03:59      -       -          -    23383  27.570      5.627      -       -          -
40   Spl  Avg                                             23434  27.632      5.639
40   Spl  SDev                                           672.806
40   Spl  %RSD                                              2.87
```

```
** Spl      Name:    203418003                    Data File: XM488
            Remarks: 730482|1|1|

41   Spl    1 29Feb2008 04:07      -       -          -    31974  37.860      7.727      -       -          -
41   Spl    2 29Feb2008 04:15      -       -          -    30349  35.914      7.329      -       -          -
41   Spl    3 29Feb2008 04:23      -       -          -    30664  36.291      7.406      -       -          -
41   Spl    4 29Feb2008 04:32      -       -          -    30109  35.627      7.271      -       -          -
41   Spl  Avg                                           30774  36.423      7.433
41   Spl  SDev                                        831.655
41   Spl  %RSD                                           2.70


** Spl      Name:    203480002                    Data File: XM489
            Remarks: 730482|1|1|

42   Spl    1 29Feb2008 04:41      -       -          -     8452   9.686      1.977      -       -          -
42   Spl    2 29Feb2008 04:48      -       -          -     7827   8.938      1.824      -       -          -
42   Spl    3 29Feb2008 04:56      -       -          -     8046   9.200      1.878      -       -          -
42   Spl    4 29Feb2008 05:06      -       -          -     7907   9.034      1.844      -       -          -
42   Spl  Avg                                            8058   9.214      1.880
42   Spl  SDev                                        277.814
42   Spl  %RSD                                           3.45


** Spl      Name:    203485003                    Data File: XM490
            Remarks: 730482|1|1|

43   Spl    1 29Feb2008 05:14      -       -          -     6899   7.826      1.597      -       -          -
43   Spl    2 29Feb2008 05:22      -       -          -     6668   7.550      1.541      -       -          -
43   Spl    3 29Feb2008 05:30      -       -          -     6320   7.133      1.456      -       -          -
43   Spl    4 29Feb2008 05:39      -       -          -     6147   6.926      1.413      -       -          -
43   Spl  Avg                                            6508   7.359      1.502
43   Spl  SDev                                        338.696
43   Spl  %RSD                                           5.20


** Spl      Name:    203485004                    Data File: XM491
            Remarks: 730482|1|1|

44   Spl    1 29Feb2008 05:48      -       -          -     3604   3.880      0.792      -       -          -
44   Spl    2 29Feb2008 05:55      -       -          -     3651   3.936      0.803      -       -          -
44   Spl    3 29Feb2008 06:03      -       -          -     3760   4.066      0.830      -       -          -
44   Spl    4 29Feb2008 06:13      -       -          -     3490   3.743      0.764      -       -          -
44   Spl  Avg                                            3626   3.906      0.797
44   Spl  SDev                                        111.894
44   Spl  %RSD                                           3.09


** Spl      Name:    203485008                    Data File: XM492
            Remarks: 730482|1|1|

45   Spl    1 29Feb2008 06:21      -       -          -     3321   3.541      0.723      -       -          -
45   Spl    2 29Feb2008 06:29      -       -          -     3113   3.291      0.672      -       -          -
45   Spl    3 29Feb2008 06:37      -       -          -     3001   3.157      0.644      -       -          -
45   Spl    4 29Feb2008 06:46      -       -          -     3098   3.274      0.668      -       -          -
45   Spl  Avg                                            3133   3.316      0.677
45   Spl  SDev                                        134.651
45   Spl  %RSD                                           4.30


** Spl      Name:    203567001                    Data File: XM493
            Remarks: 730482|1|1|
```

46	Spl	1 29Feb2008 06:55	-	-	-	3280	3.492	0.713	-	-	-
46	Spl	2 29Feb2008 07:03	-	-	-	2942	3.087	0.630	-	-	-
46	Spl	3 29Feb2008 07:10	-	-	-	3111	3.289	0.671	-	-	-
46	Spl	4 29Feb2008 07:20	-	-	-	3046	3.211	0.655	-	-	-
46	Spl	Avg				3094	3.270	0.667			
46	Spl	SDev				141.764					
46	Spl	%RSD				4.58					
47	Blk	1 29Feb2008 07:28	-	-	-	496	-	-	-	-	-
47	Blk	2 29Feb2008 07:36	-	-	-	293	-	-	-	-	-
47	Blk	3 29Feb2008 07:46	-	-	-	282	-	-	-	-	-

** Chk2 Name: CCV Data File: XM495
Remarks: 730482|1|1|

47	Chk2	1 29Feb2008 07:56	-	-	-	48276	55.232	11.272	-	-	-

** Chk5 Name: CCB Data File: XM496
Remarks: 730482|1|1|

48	Chk5	1 29Feb2008 08:06	-	-	-	902	-1.511	-0.308	-	-	-

** Spl Name: 203567005 Data File: XM497
Remarks: 730482|1|1|

49	Spl	1 29Feb2008 08:15	-	-	-	14003	16.345	3.336	-	-	-
49	Spl	2 29Feb2008 08:23	-	-	-	13492	15.733	3.211	-	-	-
49	Spl	3 29Feb2008 08:30	-	-	-	13913	16.237	3.314	-	-	-
49	Spl	4 29Feb2008 08:40	-	-	-	13600	15.862	3.237	-	-	-
49	Spl	Avg				13752	16.044	3.274			
49	Spl	SDev				244.694					
49	Spl	%RSD				1.78					
50	Blk	1 29Feb2008 08:48	-	-	-	483	-	-	-	-	-
50	Blk	2 29Feb2008 08:56	-	-	-	326	-	-	-	-	-
50	Blk	3 29Feb2008 09:04	-	-	-	265	-	-	-	-	-
50	Blk	4 29Feb2008 09:14	-	-	-	320	-	-	-	-	-

** Chk2 Name: CCV Data File: XM499
Remarks: 730482|1|1|WTC080228-02

50	Chk2	1 29Feb2008 09:24	-	-	-	47100	53.824	10.984	-	-	-

** Chk5 Name: CCB Data File: XM500
Remarks: 730482|1|1|

51	Chk5	1 29Feb2008 09:34	-	-	-	721	-1.728	-0.353	-	-	-

Ion Chromatography

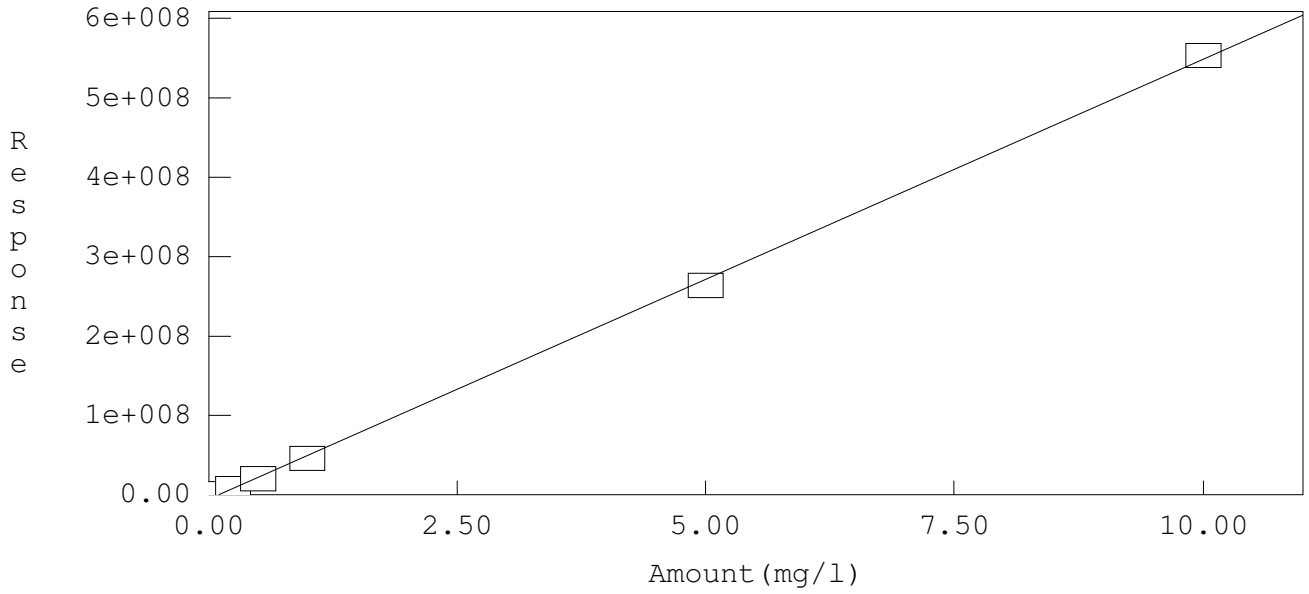
METHOD: 300/9056
SOP NUMBER: GL-GC-E-086

SAMPLENAME	BATCH	DILUTION	USER	RUNTIME	FILENAME
BLK:			VXP1	02/16/2008 08:32:27	AZBPNC01.R01
WIC080216-02ICV:1		1	VXP1	02/16/2008 08:52:47	AZBPNC01.R02
ICB:			VXP1	02/16/2008 09:13:08	AZBPNC01.R03
1201516985:1	727407	1	VXP1	02/16/2008 09:33:28	AZBPNC01.R04
1201516986:1	727407	1	VXP1	02/16/2008 09:53:48	AZBPNC01.R05
202771001:1	727407	100	VXP1	02/16/2008 10:14:09	AZBPNC01.R06
1201516987:1	727407	100	VXP1	02/16/2008 10:34:29	AZBPNC01.R07
1201516988:1	727407	100	VXP1	02/16/2008 10:54:50	AZBPNC01.R08
202771002:1	727407	100	VXP1	02/16/2008 11:15:10	AZBPNC01.R09
202807001:1	727407	1	VXP1	02/16/2008 11:35:30	AZBPNC01.R10
1201516989:1	727407	1	VXP1	02/16/2008 11:55:53	AZBPNC01.R11
1201516990:1	727407	1	VXP1	02/16/2008 12:16:13	AZBPNC01.R12
202807002:1	727407	1	VXP1	02/16/2008 12:36:33	AZBPNC01.R13
WIC080216-02CVH:1		1	VXP1	02/16/2008 12:56:55	AZBPNC01.R14
CCB:			VXP1	02/16/2008 13:17:15	AZBPNC01.R15
202915001:1	727407	1	VXP1	02/16/2008 13:37:36	AZBPNC01.R16
1201516991:1	727407	1	VXP1	02/16/2008 13:57:56	AZBPNC01.R17
1201516992:1	727407	1	VXP1	02/16/2008 14:18:16	AZBPNC01.R18
202915003:1	727407	1	VXP1	02/16/2008 14:38:37	AZBPNC01.R19
202915005:1	727407	1	VXP1	02/16/2008 14:58:57	AZBPNC01.R20
WIC080216-02CCV:1		1	VXP1	02/16/2008 15:19:18	AZBPNC01.R21
CCB:			VXP1	02/16/2008 15:39:39	AZBPNC01.R22
1201514092:1	726203	1	VXP1	02/16/2008 16:00:11	AZBPNC01.R23
1201514093:1	726203	10	VXP1	02/16/2008 16:20:32	AZBPNC01.R24
202375001:1	726203	1	VXP1	02/16/2008 16:40:52	AZBPNC01.R25
1201514094:1	726203	1	VXP1	02/16/2008 17:01:13	AZBPNC01.R26
1201514095:1	726203	1	VXP1	02/16/2008 17:21:34	AZBPNC01.R27
202425003:1	726203	1	VXP1	02/16/2008 17:41:54	AZBPNC01.R28
202425004:1	726203	1	VXP1	02/16/2008 18:02:15	AZBPNC01.R29
202425005:1	726203	1	VXP1	02/16/2008 18:22:35	AZBPNC01.R30
202684001:1	726203	1	VXP1	02/16/2008 18:42:59	AZBPNC01.R31
WIC080216-02CVH:1		1	VXP1	02/16/2008 19:03:32	AZBPNC01.R32
CCB:			VXP1	02/16/2008 19:23:55	AZBPNC01.R33
1201516250:1	727132	1	VXP1	02/16/2008 19:44:16	AZBPNC01.R34
1201516251:1	727132	1	VXP1	02/16/2008 20:04:36	AZBPNC01.R35
202825001:1	727132	1	VXP1	02/16/2008 20:24:57	AZBPNC01.R36
1201516252:1	727132	1	VXP1	02/16/2008 20:45:17	AZBPNC01.R37
1201516253:1	727132	1	VXP1	02/16/2008 21:05:38	AZBPNC01.R38
1201516256:1	727132	1	VXP1	02/16/2008 21:25:58	AZBPNC01.R39
202825002:1	727132	1	VXP1	02/16/2008 21:46:19	AZBPNC01.R40
202825003:1	727132	1	VXP1	02/16/2008 22:06:39	AZBPNC01.R41
202825004:1	727132	1	VXP1	02/16/2008 22:26:59	AZBPNC01.R42
202836001:1	727132	1	VXP1	02/16/2008 22:47:20	AZBPNC01.R43
WIC080216-02CCV:1		1	VXP1	02/16/2008 23:07:40	AZBPNC01.R44
CCB:			VXP1	02/16/2008 23:28:01	AZBPNC01.R45
202836002:1	727132	1	VXP1	02/16/2008 23:48:21	AZBPNC01.R46
202836003:1	727132	1	VXP1	02/17/2008 00:08:44	AZBPNC01.R47
202836004:1	727132	1	VXP1	02/17/2008 00:29:06	AZBPNC01.R48
WIC080216-02CVH:1		1	VXP1	02/17/2008 00:49:29	AZBPNC01.R49
CCB:			VXP1	02/17/2008 01:09:51	AZBPNC01.R50
AUTOCAL7:			VXP1	02/17/2008 01:30:26	AZBPNC01.R51
AUTOCAL6:			VXP1	02/17/2008 01:50:47	AZBPNC01.R52
AUTOCAL5:			VXP1	02/17/2008 02:11:09	AZBPNC01.R53
AUTOCAL4:			VXP1	02/17/2008 02:31:32	AZBPNC01.R54
AUTOCAL3:			VXP1	02/17/2008 02:51:52	AZBPNC01.R55

```
AUTOCAL2:                           VXP1  02/17/2008 03:12:15 AZBPNC01.R56
AUTOCAL1:                           VXP1  02/17/2008 03:32:35 AZBPNC01.R57
WIC080216-02ICV:1             1     VXP1  02/17/2008 03:52:58 AZBPNC01.R58
ICB:                                VXP1  02/17/2008 04:13:21 AZBPNC01.R59
```

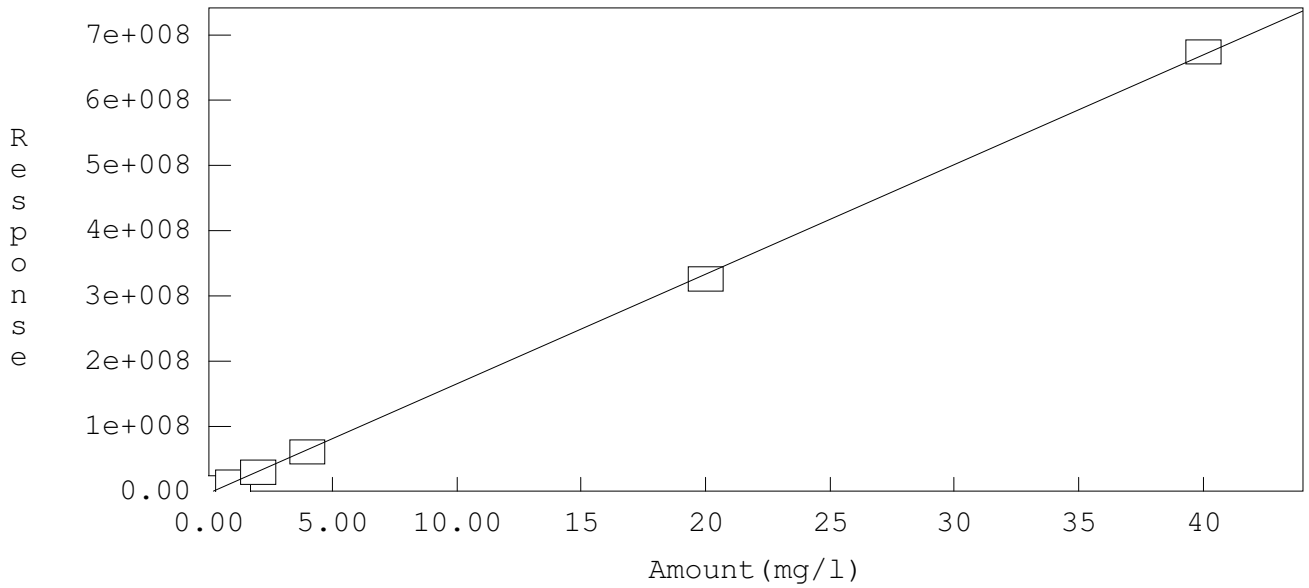
Method: C:\DX\METHOD\FEB16.MET

Component: Nitrate-N
Fit Type: Linear
r^2 = 0.999491
Amt = Resp * 1.802e-008 + 0.1084
Resp = Amt * 5.55e+007 + -6.018e+006
Standardization: External
Calibration: Area



Method: C:\DX\METHOD\FEB16.MET

Component: Sulfate
Fit Type: Linear
r^2 = 0.999731
Amt = Resp * 5.938e-008 + 0.218
Resp = Amt * 1.684e+007 + -3.672e+006
Standardization: External
Calibration: Area

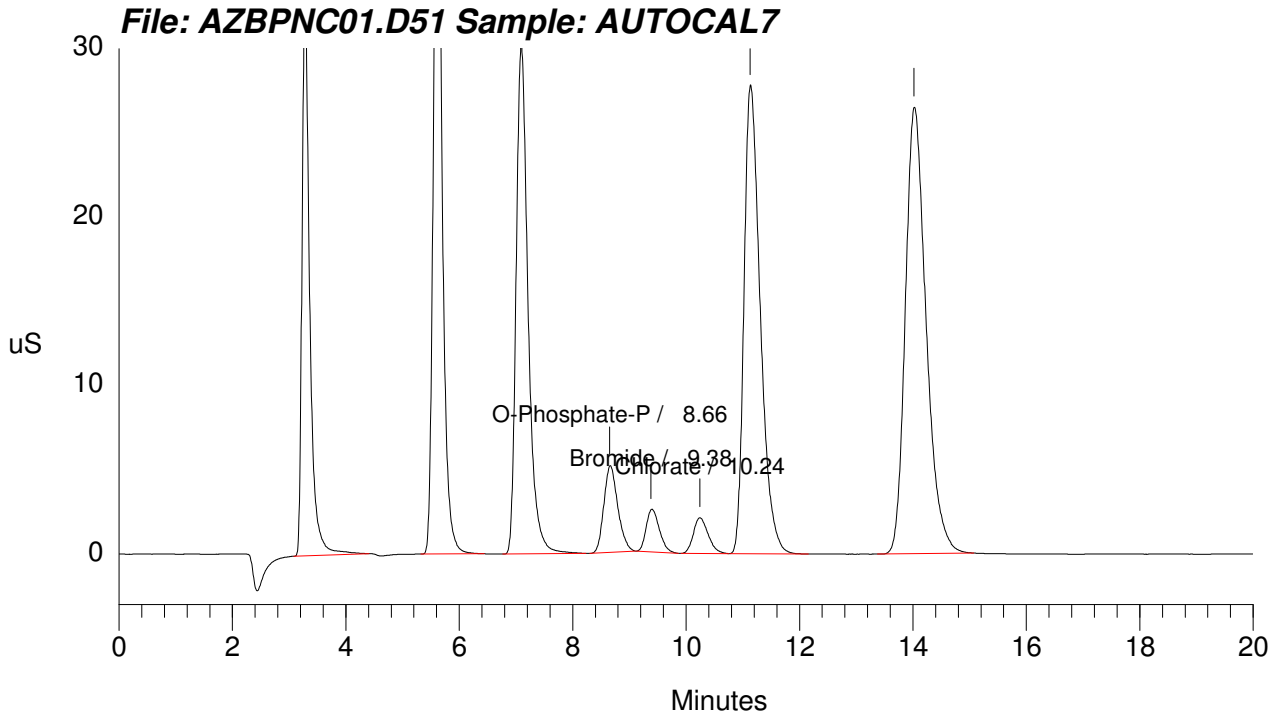


```
==============================================================================
| Sample Name: AUTOCAL7                        Date: 02/17/2008 01:30:26      |
| Data File  : C:\TMP\HORIZON\AZBPNC01.D51                                    |
| Method     : C:\DX\METHOD\FEB16.MET                                         |
| ACI Address: 1  System: 1  Inject#: 51                  Detector:CDM-2      |
| Analyst    : VXP1           Column: AS9HC#014050;GLGCE-086;300;9056        |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	10.000	32098979	314745874	1	0.00
2	5.60	Chloride	20.000	42688181	481893292	1	0.00
3	7.09	Nitrite-N	10.000	30096831	440174316	1	0.00
4	8.66	O-Phosphate-P	5.000	5143180	87589788	1	0.00
5	9.38	Bromide	5.000	2503860	41132391	1	0.00
6	10.24	Chlorate	0.000	2121891	38359834	1	0.00
7	11.13	Nitrate-N	10.000	27780504	553033884	1	0.00
8	14.02	Sulfate	40.000	26510306	673852700	1	0.00
		Totals	100.000	168943731	2630782079		



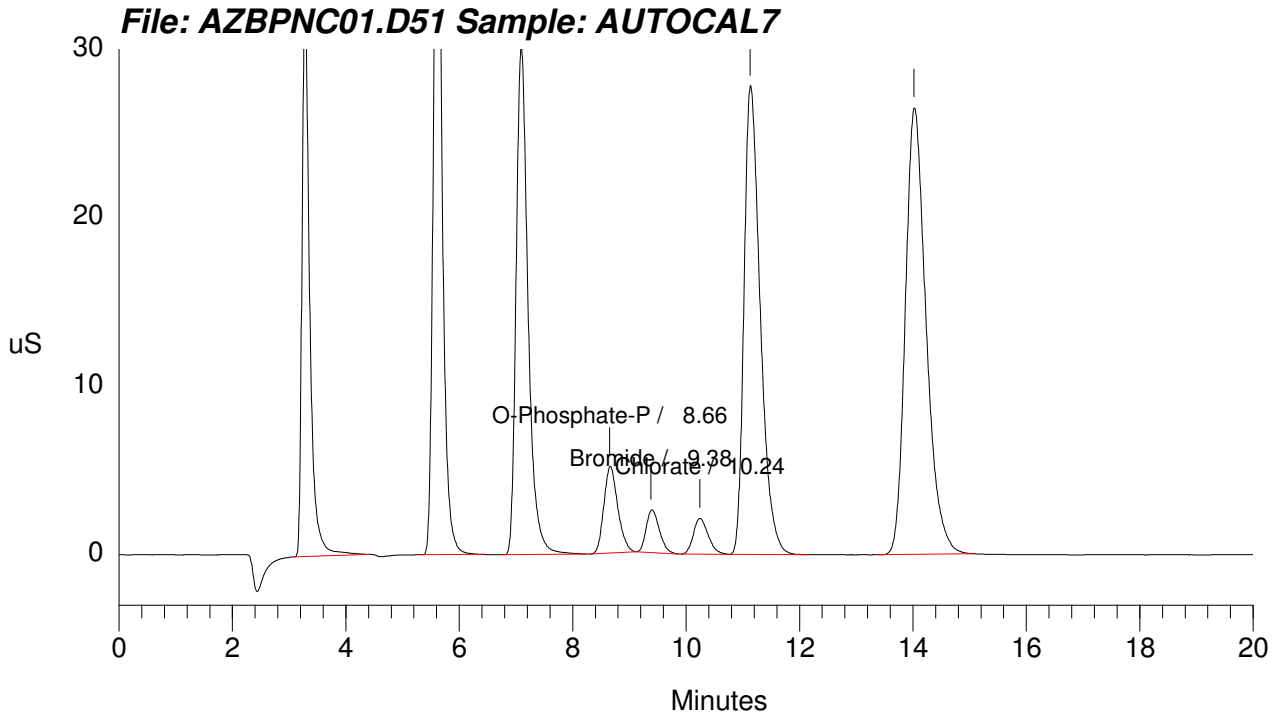
Data Reprocessed On 02/19/2008 07:32:44

Sample Name: AUTOCAL7	Date: 02/17/2008 01:30:26
Data File : C:\TMP\HORIZON\AZBPNC01.D51	
Method : C:\DX\METHOD\FEB16.MET	
ACI Address: 1 System: 1 Inject#: 51	Detector:CDM-2
Analyst : VXP1	Column: AS9HC#014050;GLGCE-086;300;9056

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	10.000	32098979	314745874	1	0.00
2	5.60	Chloride	20.000	42688181	481893292	1	0.00
3	7.09	Nitrite-N	10.000	30096831	440174316	1	0.00
4	8.66	O-Phosphate-P	5.000	5143180	87589788	1	0.00
5	9.38	Bromide	5.000	2503860	41132391	1	0.00
6	10.24	Chlorate	5.000	2121891	38359834	1	0.00
7	11.13	Nitrate-N	10.000	27780504	553033884	1	0.00
8	14.02	Sulfate	40.000	26510306	673852700	1	0.00
		Totals	105.000	168943731	2630782079		

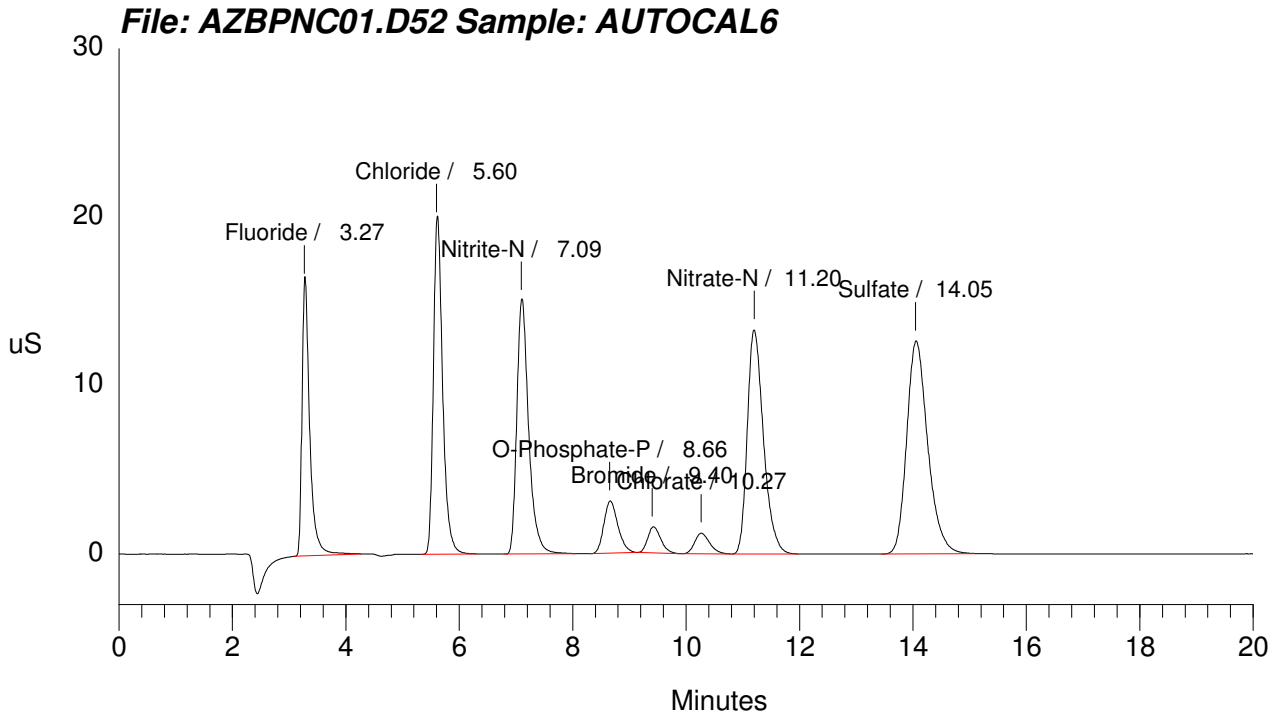


```
==============================================================================
| Sample Name: AUTOCAL6                        Date: 02/17/2008 01:50:47      |
| Data File  : C:\TMP\HORIZON\AZBPNC01.D52                                    |
| Method     : C:\DX\METHOD\FEB16.MET                                         |
| ACI Address: 1  System: 1  Inject#: 52                  Detector:CDM-2      |
| Analyst    : VXP1           Column: AS9HC#014050;GLGCE-086;300;9056        |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	5.000	16129770	155786668	1	0.00
2	5.60	Chloride	10.000	19655922	226637666	1	0.00
3	7.09	Nitrite-N	5.000	15027765	219005012	1	0.00
4	8.66	O-Phosphate-P	3.000	3097380	53340037	1	0.00
5	9.40	Bromide	3.000	1517500	24952246	1	0.00
6	10.27	Chlorate	0.000	1223426	22461732	1	0.00
7	11.20	Nitrate-N	5.000	13298930	263530116	1	0.00
8	14.05	Sulfate	20.000	12613397	325705454	1	0.00
		Totals	51.000	82564089	1291418931		



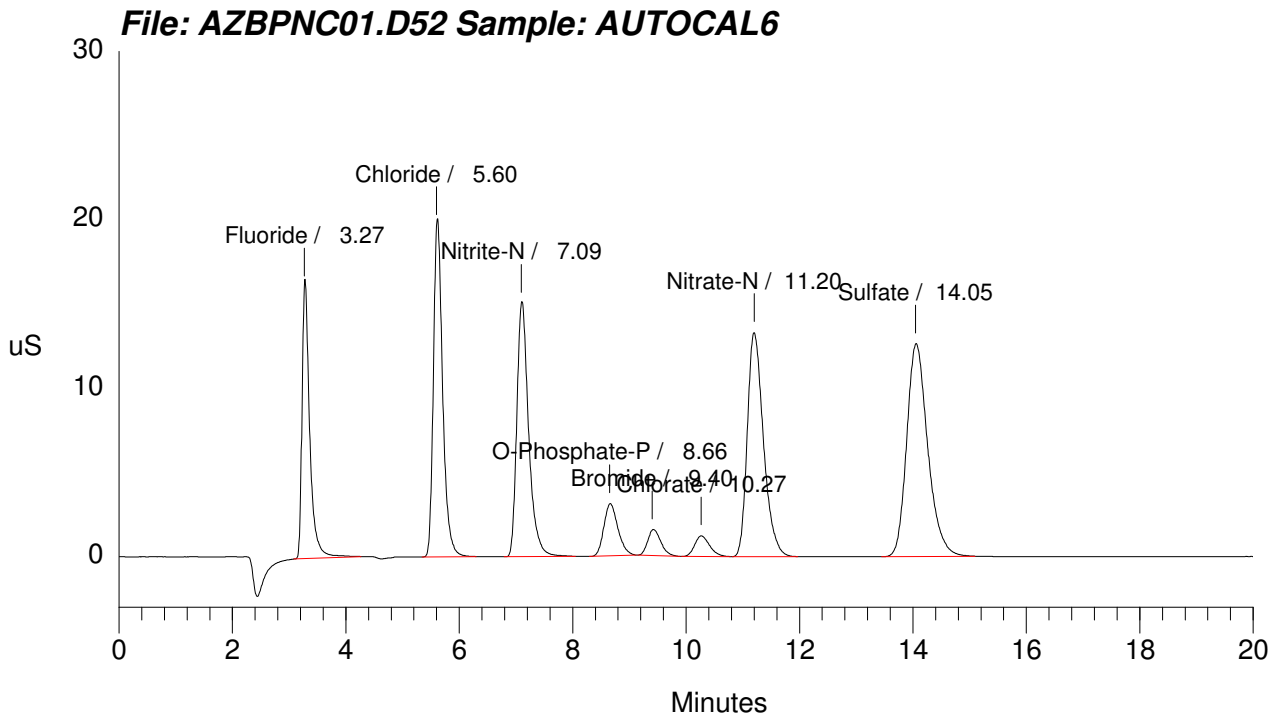
Data Reprocessed On 02/19/2008 07:32:44

Sample Name: AUTOCAL6	Date: 02/17/2008 01:50:47
Data File : C:\TMP\HORIZON\AZBPNC01.D52	
Method : C:\DX\METHOD\FEB16.MET	
ACI Address: 1 System: 1 Inject#: 52	Detector:CDM-2
Analyst : VXP1	Column: AS9HC#014050;GLGCE-086;300;9056

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	5.000	16129770	155786668	1	0.00
2	5.60	Chloride	10.000	19655922	226637666	1	0.00
3	7.09	Nitrite-N	5.000	15027765	219005012	1	0.00
4	8.66	O-Phosphate-P	3.000	3097380	53340037	1	0.00
5	9.40	Bromide	3.000	1517500	24952246	1	0.00
6	10.27	Chlorate	3.000	1223426	22461732	1	0.00
7	11.20	Nitrate-N	5.000	13298930	263530116	1	0.00
8	14.05	Sulfate	20.000	12613397	325705454	1	0.00
		Totals	54.000	82564089	1291418931		

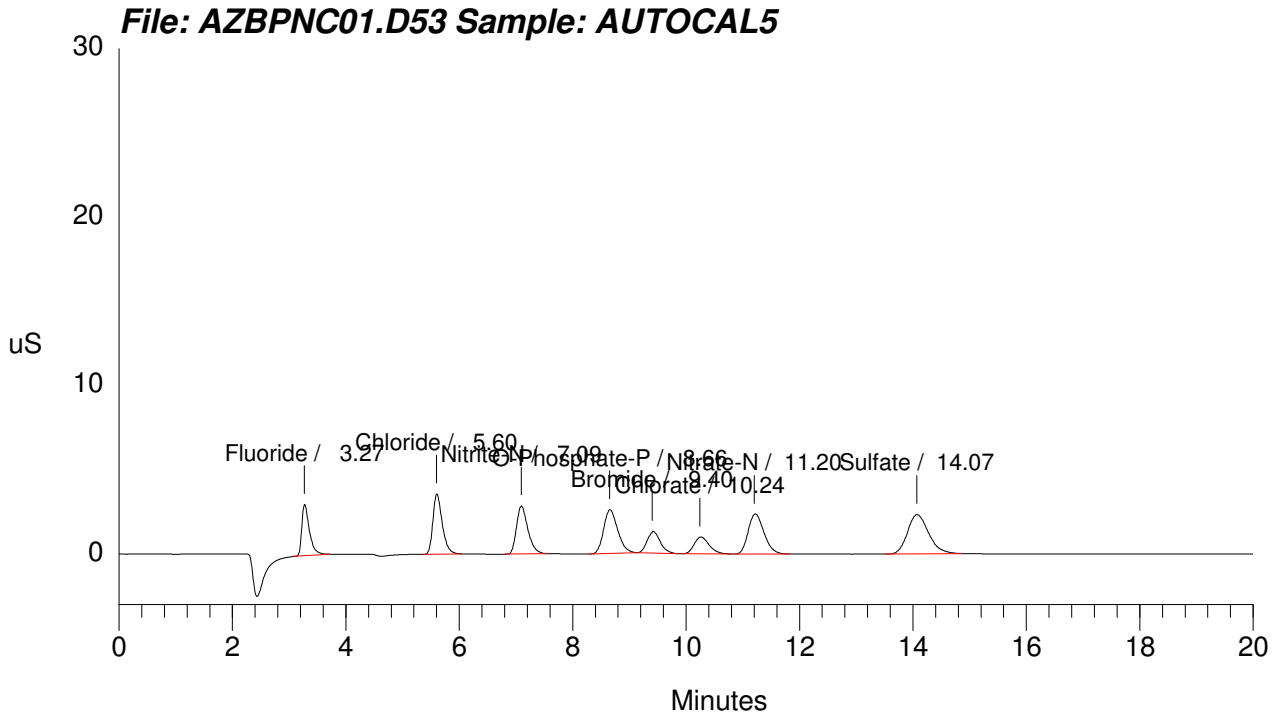


```
==============================================================================
| Sample Name: AUTOCAL5                        Date: 02/17/2008 02:11:09      |
| Data File  : C:\TMP\HORIZON\AZBPNC01.D53                                    |
| Method     : C:\DX\METHOD\FEB16.MET                                         |
| ACI Address: 1  System: 1  Inject#: 53                  Detector:CDM-2      |
| Analyst    : VXP1           Column: AS9HC#014050;GLGCE-086;300;9056        |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	1.000	3039698	28657957	1	0.00
2	5.60	Chloride	2.000	3572585	41184932	1	0.00
3	7.09	Nitrite-N	1.000	2846748	39710458	1	0.00
4	8.66	O-Phosphate-P	2.500	2602843	44798370	1	0.00
5	9.40	Bromide	2.500	1285100	20417968	1	0.00
6	10.24	Chlorate	0.000	993116	18553434	1	0.00
7	11.20	Nitrate-N	1.000	2353456	46186338	1	0.00
8	14.07	Sulfate	4.000	2330847	60515994	1	0.00
		Totals	14.000	19024393	300025451		



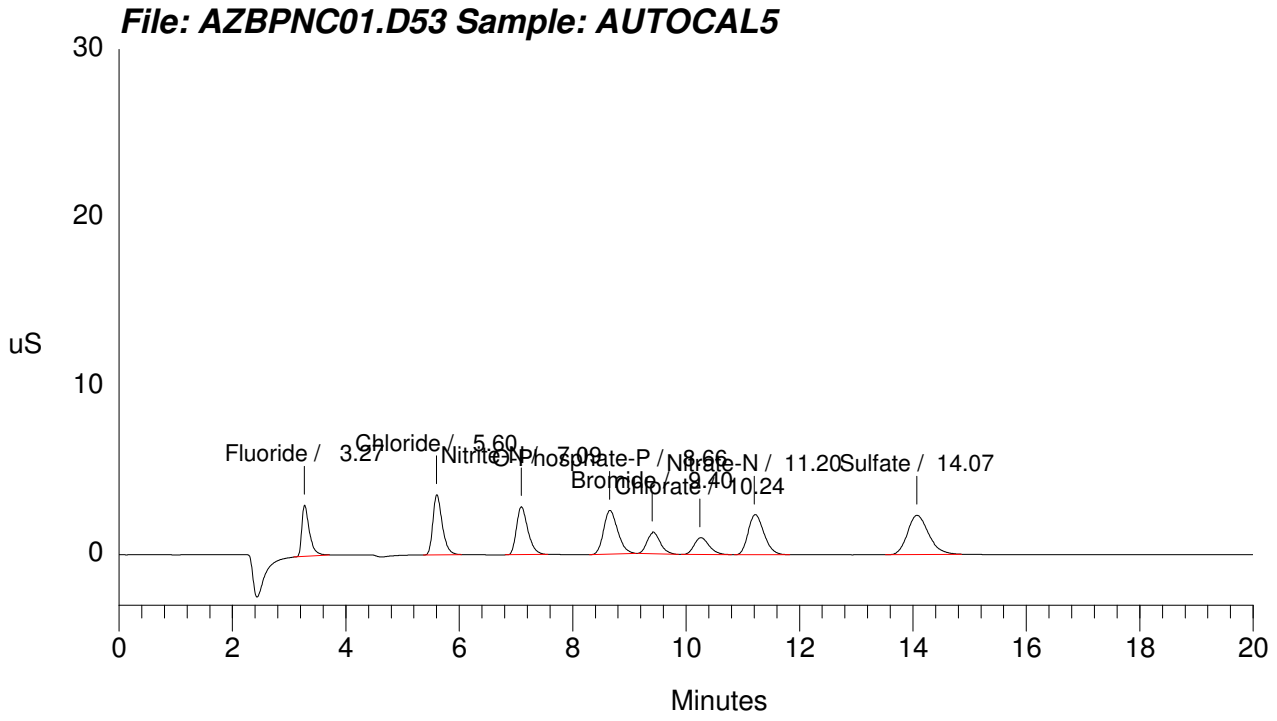
Data Reprocessed On 02/19/2008 07:32:49

Sample Name: AUTOCAL5	Date: 02/17/2008 02:11:09
Data File : C:\TMP\HORIZON\AZBPNC01.D53	
Method : C:\DX\METHOD\FEB16.MET	
ACI Address: 1 System: 1 Inject#: 53	Detector:CDM-2
Analyst : VXP1	Column: AS9HC#014050;GLGCE-086;300;9056

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	1.000	3039698	28657957	1	0.00
2	5.60	Chloride	2.000	3572585	41184932	1	0.00
3	7.09	Nitrite-N	1.000	2846748	39710458	1	0.00
4	8.66	O-Phosphate-P	2.500	2602843	44798370	1	0.00
5	9.40	Bromide	2.500	1285100	20417968	1	0.00
6	10.24	Chlorate	2.500	993116	18553434	1	0.00
7	11.20	Nitrate-N	1.000	2353456	46186338	1	0.00
8	14.07	Sulfate	4.000	2330847	60515994	1	0.00
		Totals	16.500	19024393	300025451		

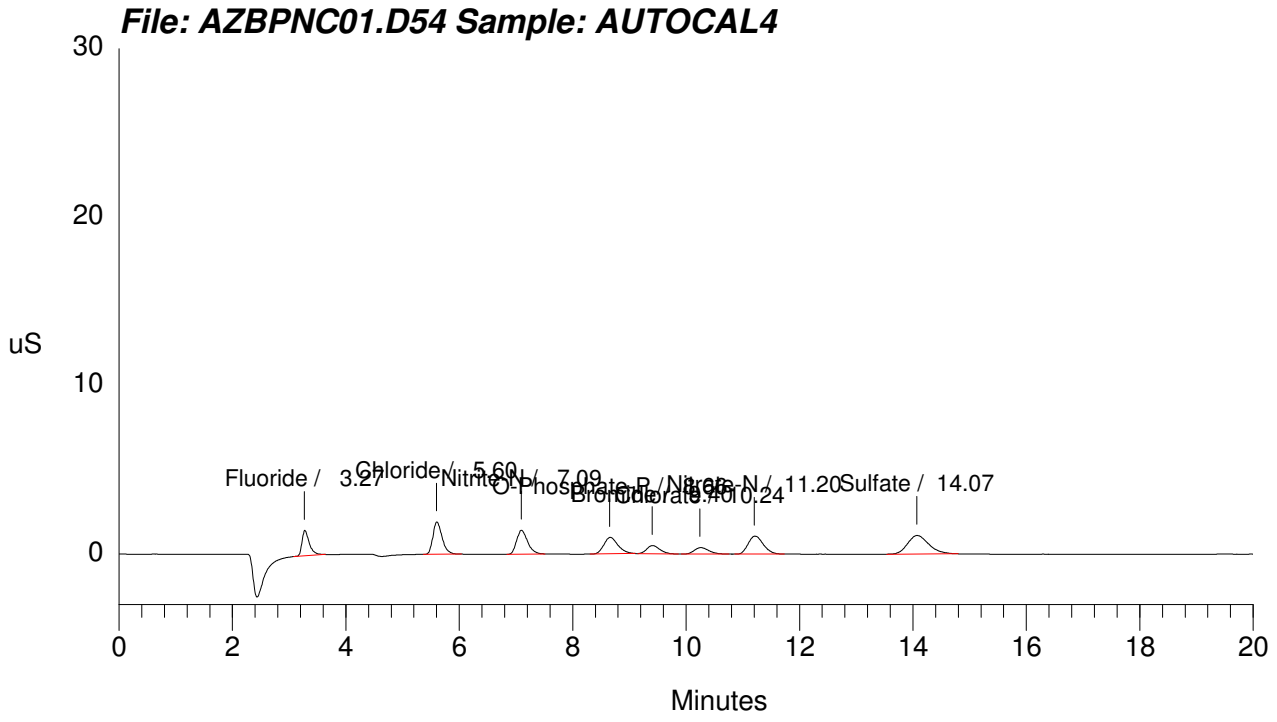


```
==============================================================================
| Sample Name: AUTOCAL4                        Date: 02/17/2008 02:31:32      |
| Data File  : C:\TMP\HORIZON\AZBPNC01.D54                                    |
| Method     : C:\DX\METHOD\FEB16.MET                                         |
| ACI Address: 1  System: 1  Inject#: 54                  Detector:CDM-2      |
| Analyst    : VXP1           Column: AS9HC#014050;GLGCE-086;300;9056        |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	0.500	1509483	13750635	1	0.00
2	5.60	Chloride	1.000	1923183	22065664	1	0.00
3	7.09	Nitrite-N	0.500	1423725	19222032	1	0.00
4	8.66	O-Phosphate-P	1.000	976052	16948782	1	0.00
5	9.40	Bromide	1.000	481996	7835054	1	0.00
6	10.24	Chlorate	0.000	389798	7212086	1	0.00
7	11.20	Nitrate-N	0.500	1065616	20110682	1	0.00
8	14.07	Sulfate	2.000	1107357	28952692	1	0.00
		Totals	6.500	8877210	136097627		



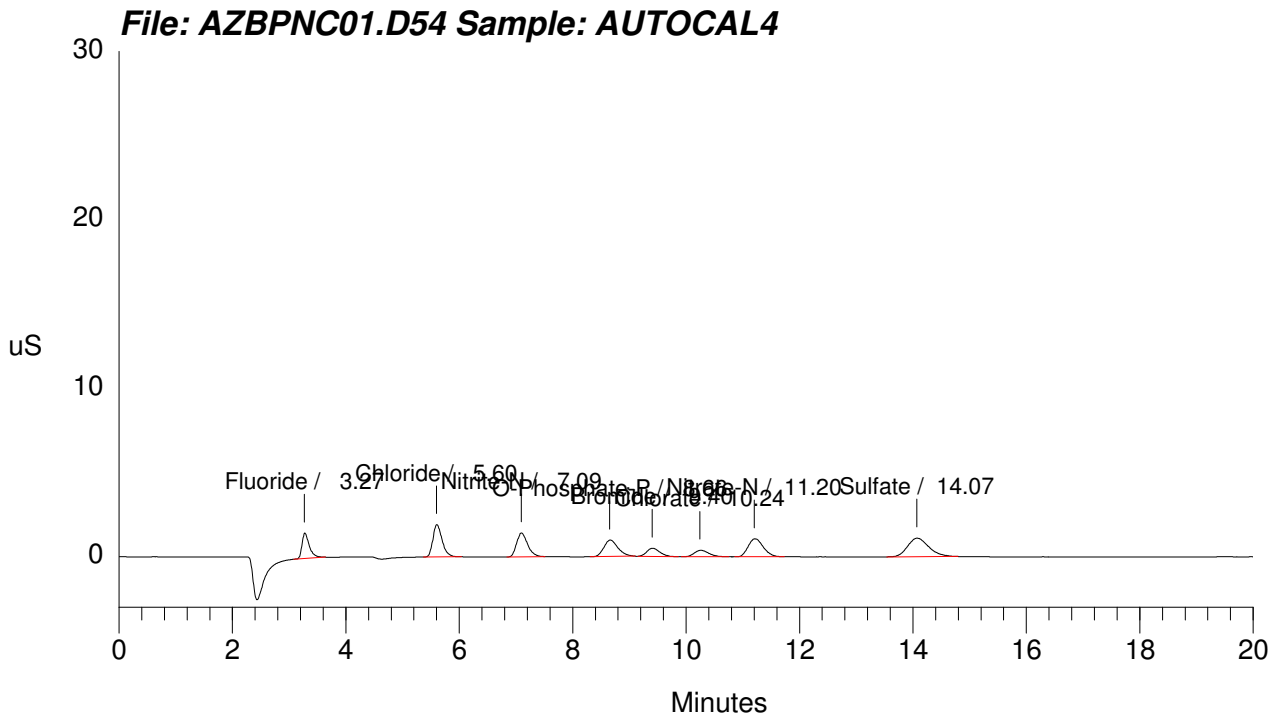
Data Reprocessed On 02/19/2008 07:32:49

Sample Name: AUTOCAL4	Date: 02/17/2008 02:31:32
Data File : C:\TMP\HORIZON\AZBPNC01.D54	
Method : C:\DX\METHOD\FEB16.MET	
ACI Address: 1 System: 1 Inject#: 54	Detector:CDM-2
Analyst : VXP1	Column: AS9HC#014050;GLGCE-086;300;9056

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	0.500	1509483	13750635	1	0.00
2	5.60	Chloride	1.000	1923183	22065664	1	0.00
3	7.09	Nitrite-N	0.500	1423725	19222032	1	0.00
4	8.66	O-Phosphate-P	1.000	976052	16948782	1	0.00
5	9.40	Bromide	1.000	481996	7835054	1	0.00
6	10.24	Chlorate	1.000	389798	7212086	1	0.00
7	11.20	Nitrate-N	0.500	1065616	20110682	1	0.00
8	14.07	Sulfate	2.000	1107357	28952692	1	0.00
		Totals	7.500	8877210	136097627		



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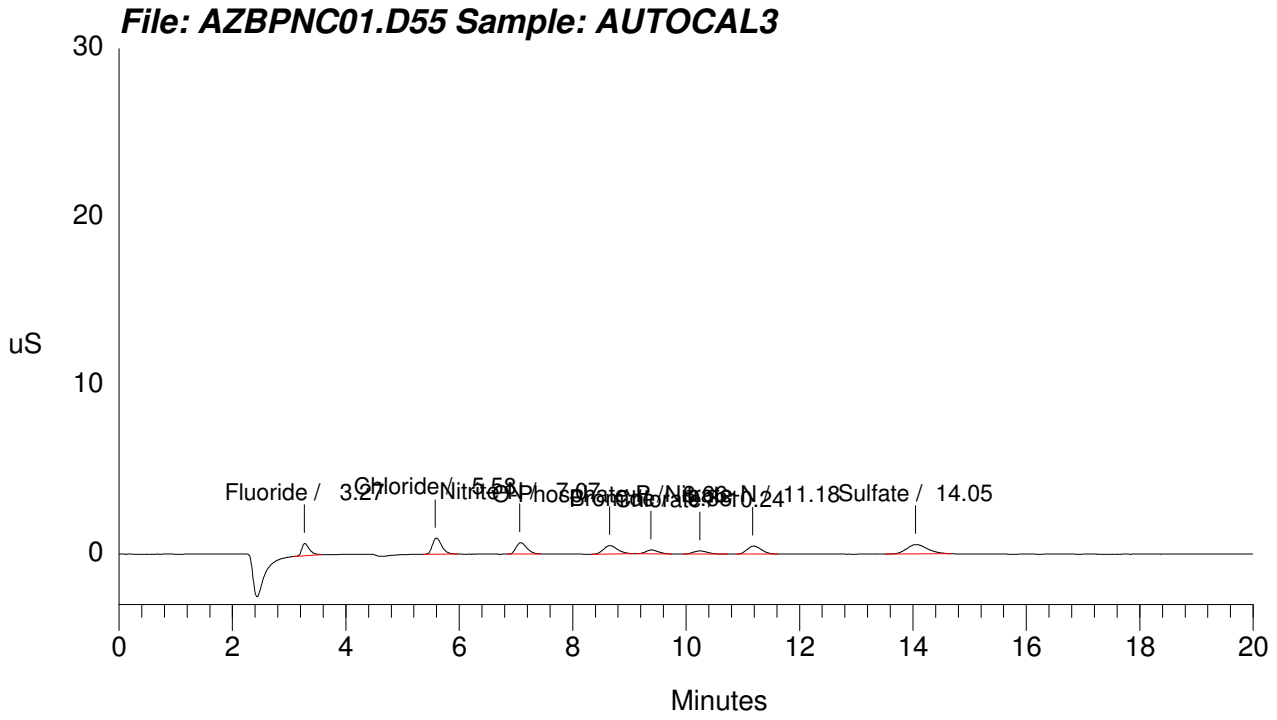
==============================================================================
| Sample Name: AUTOCAL3                        Date: 02/17/2008 02:51:52      |
| Data File  : C:\TMP\HORIZON\AZBPNC01.D55                                    |
| Method     : C:\DX\METHOD\FEB16.MET                                         |
| ACI Address: 1  System: 1  Inject#: 55                  Detector:CDM-2      |
| Analyst    : VXP1           Column: AS9HC#014050;GLGCE-086;300;9056        |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	0.250	732745	6996280	1	0.00
2	5.58	Chloride	0.500	937063	11270042	1	0.00
3	7.07	Nitrite-N	0.250	671038	9018556	1	0.00
4	8.66	O-Phosphate-P	0.500	500779	8692392	1	0.00
5	9.38	Bromide	0.500	227558	3610748	1	0.00
6	10.24	Chlorate	0.000	191829	3500948	1	0.00
7	11.18	Nitrate-N	0.250	474802	8415084	1	0.00
8	14.05	Sulfate	1.000	561061	14584846	1	0.00
		Totals	3.250	4296875	66088896		



Data Reprocessed On 02/19/2008 07:32:50

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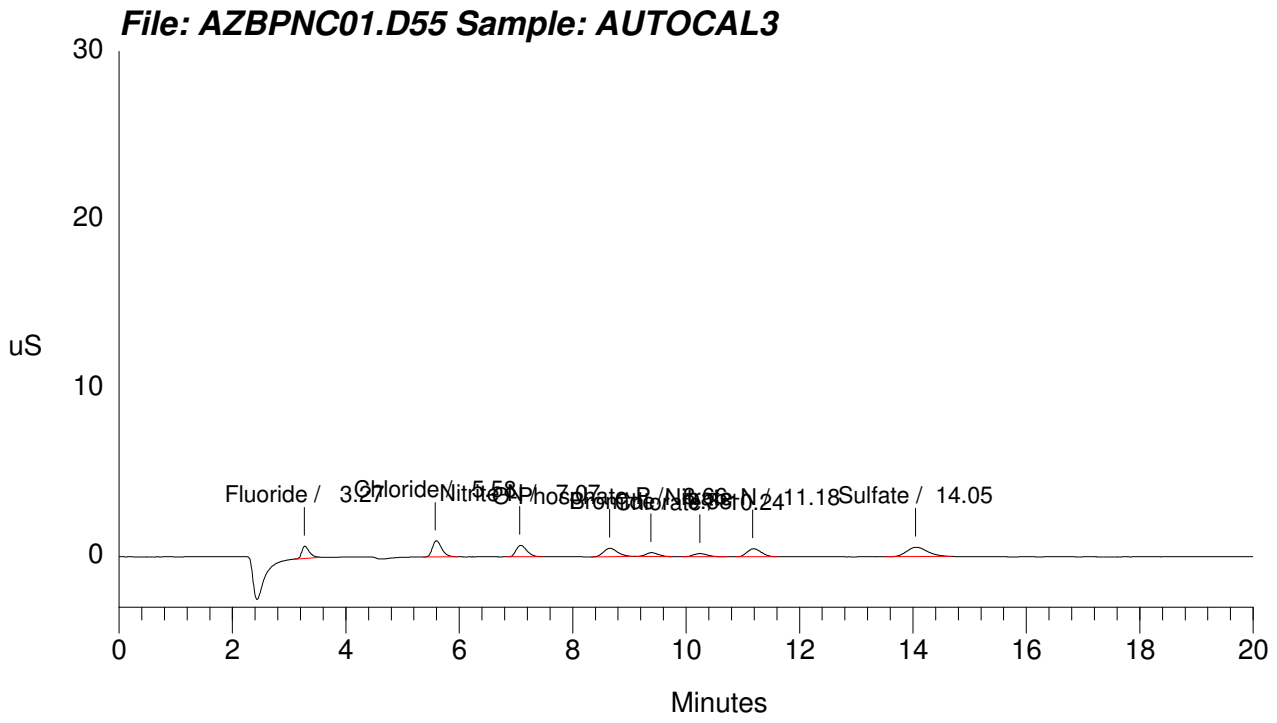
==============================================================================
| Sample Name: AUTOCAL3                        Date: 02/17/2008 02:51:52      |
| Data File  : C:\TMP\HORIZON\AZBPNC01.D55                                    |
| Method     : C:\DX\METHOD\FEB16.MET                                         |
| ACI Address: 1  System: 1  Inject#: 55                  Detector:CDM-2      |
| Analyst    : VXP1           Column: AS9HC#014050;GLGCE-086;300;9056        |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	0.250	732745	6996280	1	0.00
2	5.58	Chloride	0.500	937063	11270042	1	0.00
3	7.07	Nitrite-N	0.250	671038	9018556	1	0.00
4	8.66	O-Phosphate-P	0.500	500779	8692392	1	0.00
5	9.38	Bromide	0.500	227558	3610748	1	0.00
6	10.24	Chlorate	0.500	191829	3500948	1	0.00
7	11.18	Nitrate-N	0.250	474802	8415084	1	0.00
8	14.05	Sulfate	1.000	561061	14584846	1	0.00
		Totals	3.750	4296875	66088896		



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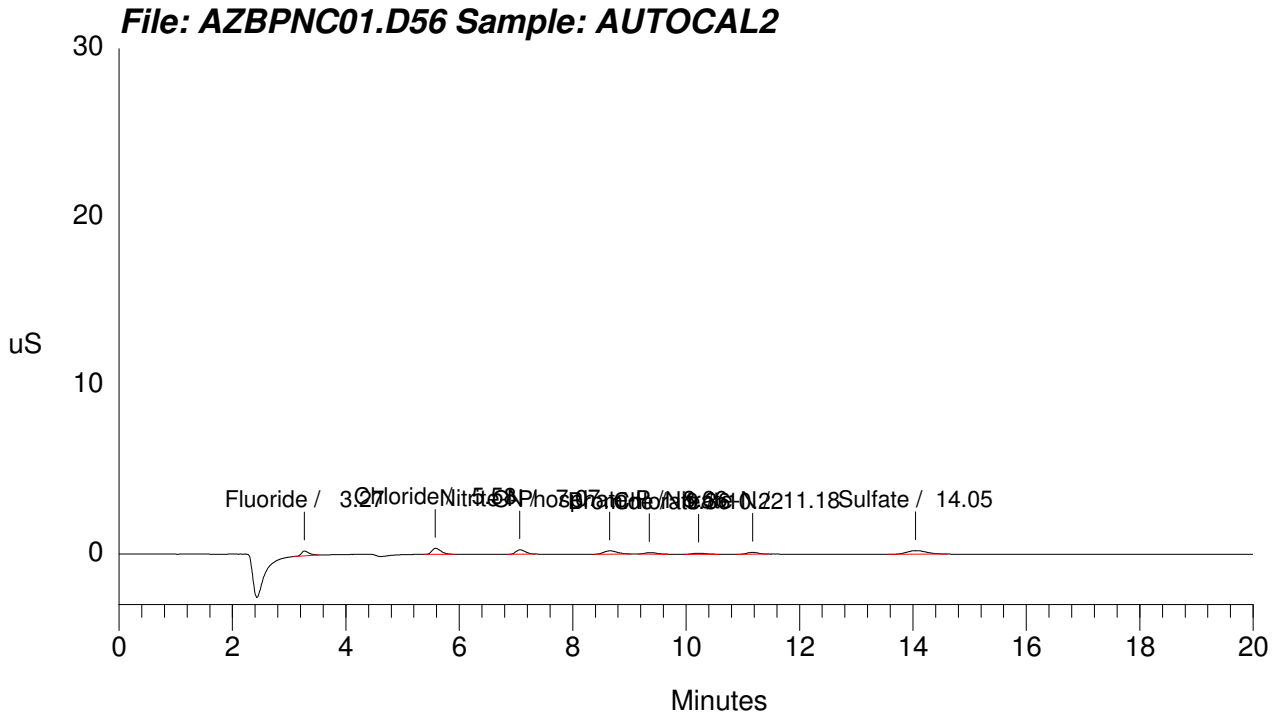
==============================================================================
| Sample Name: AUTOCAL2                        Date: 02/17/2008 03:12:15      |
| Data File  : C:\TMP\HORIZON\AZBPNC01.D56                                    |
| Method     : C:\DX\METHOD\FEB16.MET                                         |
| ACI Address: 1  System: 1  Inject#: 56                  Detector:CDM-2      |
| Analyst    : VXP1           Column: AS9HC#014050;GLGCE-086;300;9056        |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	0.100	291006	2727814	1	0.00
2	5.58	Chloride	0.200	367650	4212454	1	0.00
3	7.07	Nitrite-N	0.100	265452	3228494	1	0.00
4	8.66	O-Phosphate-P	0.200	196219	3346852	1	0.00
5	9.36	Bromide	0.200	91814	1417532	1	0.00
6	10.22	Chlorate	0.000	72660	1236476	1	0.00
7	11.18	Nitrate-N	0.100	114827	1698004	1	0.00
8	14.05	Sulfate	0.400	226676	5781406	1	0.00
		Totals	1.300	1626304	23649032		



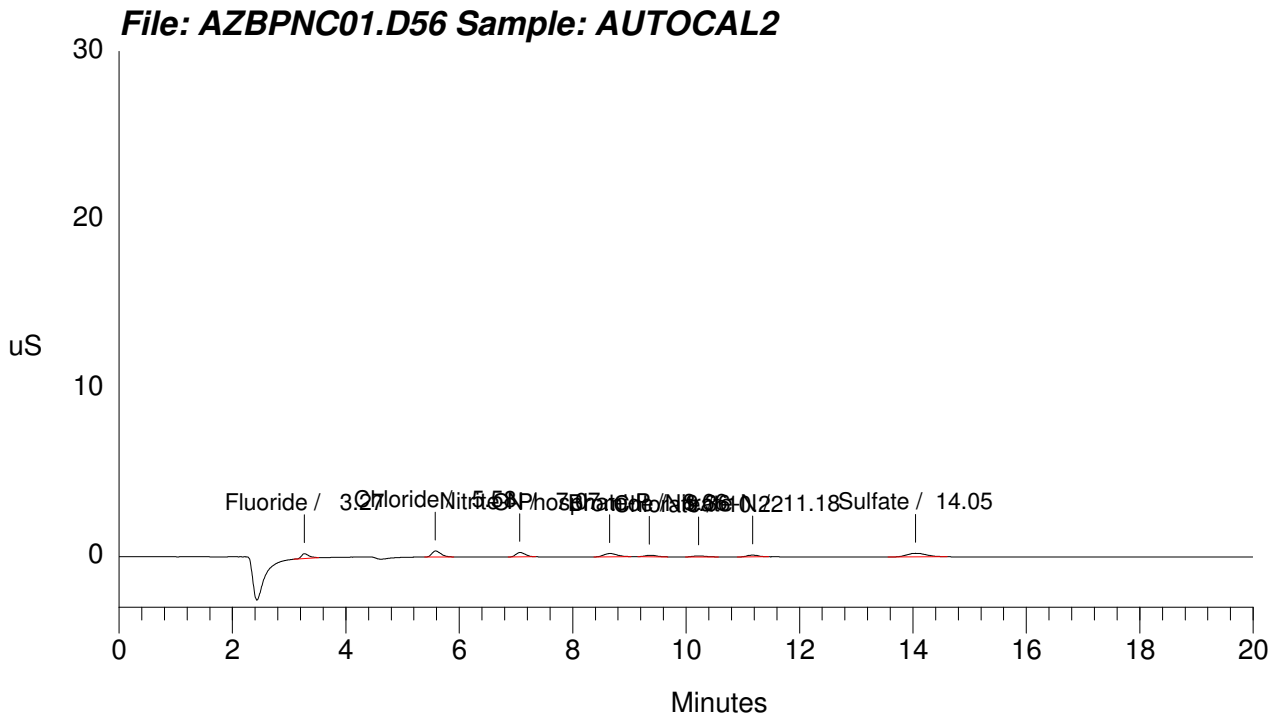
Data Reprocessed On 02/19/2008 07:32:50

```
================================================================================
| Sample Name: AUTOCAL2                        Date: 02/17/2008 03:12:15      |
| Data File  : C:\TMP\HORIZON\AZBPNC01.D56                                    |
| Method     : C:\DX\METHOD\FEB16.MET                                         |
| ACI Address: 1  System: 1  Inject#: 56                  Detector:CDM-2      |
| Analyst    : VXP1           Column: AS9HC#014050;GLGCE-086;300;9056         |
================================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	0.100	291006	2727814	1	0.00
2	5.58	Chloride	0.200	367650	4212454	1	0.00
3	7.07	Nitrite-N	0.100	265452	3228494	1	0.00
4	8.66	O-Phosphate-P	0.200	196219	3346852	1	0.00
5	9.36	Bromide	0.200	91814	1417532	1	0.00
6	10.22	Chlorate	0.200	72660	1236476	1	0.00
7	11.18	Nitrate-N	0.100	114827	1698004	1	0.00
8	14.05	Sulfate	0.400	226676	5781406	1	0.00
		Totals	1.500	1626304	23649032		

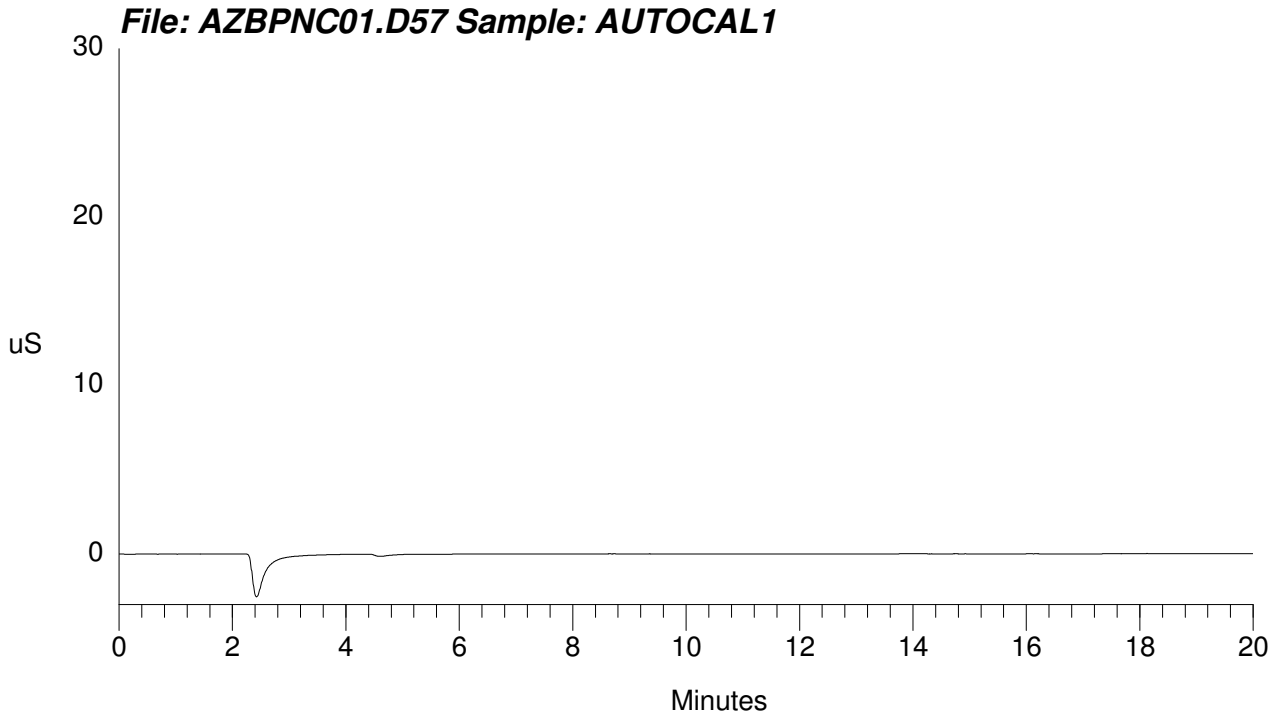


```
==============================================================================
| Sample Name: AUTOCAL1                        Date: 02/17/2008 03:32:35     |
| Data File  : C:\TMP\HORIZON\AZBPNC01.D57                                   |
| Method     : C:\DX\METHOD\FEB16.MET                                        |
| ACI Address: 1  System: 1  Inject#: 57                  Detector:CDM-2     |
| Analyst    : VXP1           Column: AS9HC#014050;GLGCE-086;300;9056        |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
0	0.00	Fluoride	0.000	0	0	0	0.00
0	0.00	Chloride	0.000	0	0	0	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
0	0.00	O-Phosphate-P	0.000	0	0	0	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
0	0.00	Chlorate	0.000	0	0	0	0.00
0	0.00	Nitrate-N	0.000	0	0	0	0.00
0	0.00	Sulfate	0.000	0	0	0	0.00
		Totals	0.000	0	0		



Data Reprocessed On 02/19/2008 07:32:51

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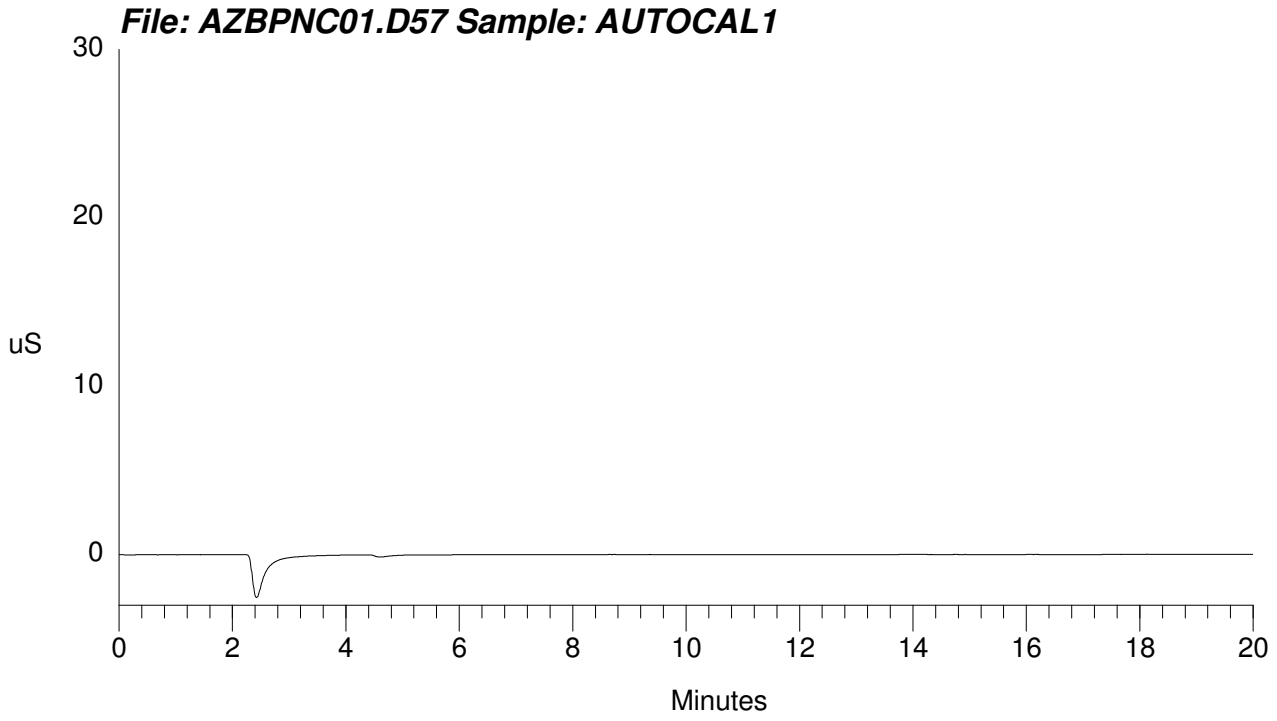
==============================================================================
| Sample Name: AUTOCAL1                        Date: 02/17/2008 03:32:35     |
| Data File  : C:\TMP\HORIZON\AZBPNC01.D57                                   |
| Method     : C:\DX\METHOD\FEB16.MET                                        |
| ACI Address: 1  System: 1  Inject#: 57                  Detector:CDM-2     |
| Analyst    : VXP1           Column: AS9HC#014050;GLGCE-086;300;9056        |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
0	0.00	Fluoride	0.000	0	0	0	0.00
0	0.00	Chloride	0.000	0	0	0	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
0	0.00	O-Phosphate-P	0.000	0	0	0	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
0	0.00	Chlorate	0.000	0	0	0	0.00
0	0.00	Nitrate-N	0.000	0	0	0	0.00
0	0.00	Sulfate	0.000	0	0	0	0.00
		Totals	0.000	0	0		

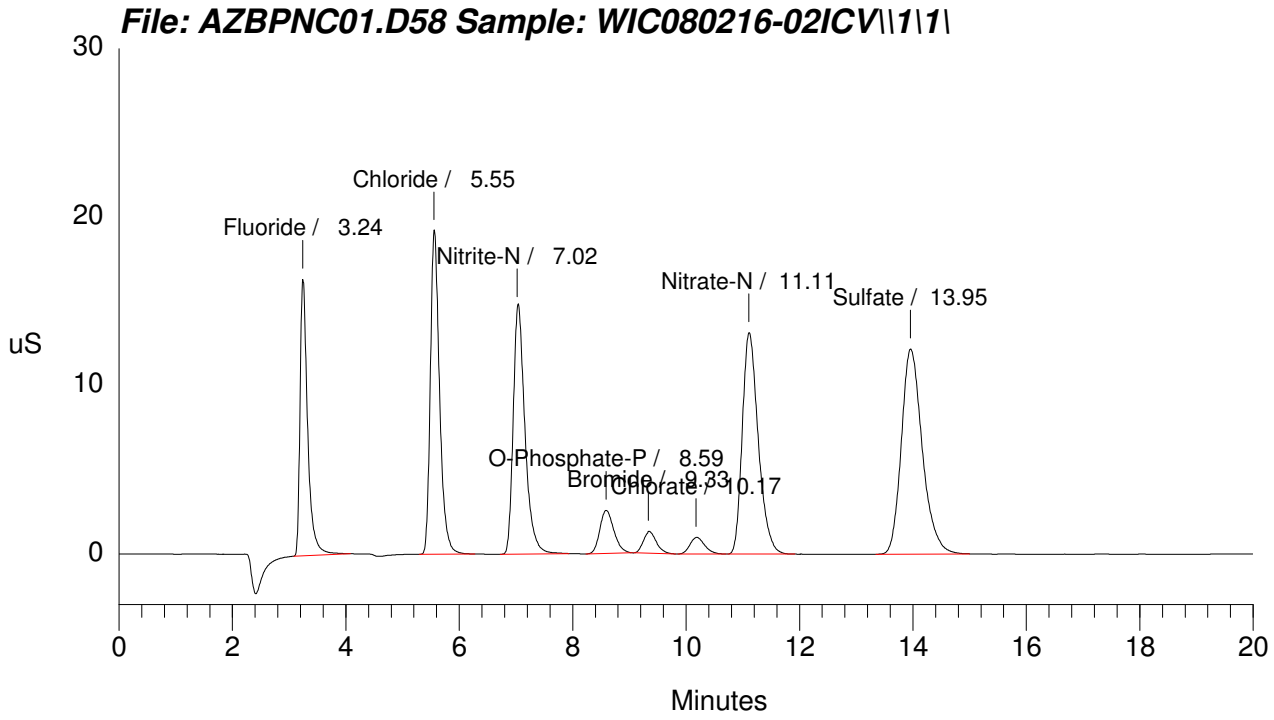


```
==============================================================================
| Sample Name: WIC080216-02ICV\\1\1\          Date: 02/17/2008 03:52:58      |
| Data File  : C:\TMP\HORIZON\AZBPNC01.D58                                   |
| Method     : C:\DX\METHOD\FEB16.MET                                        |
| ACI Address: 1  System: 1  Inject#: 58                  Detector:CDM-2     |
| Analyst    : VXP1           Column: AS9HC#014050;GLGCE-086;300;9056        |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	4.902	16415239	153383070	1	0.00
2	5.55	Chloride	9.161	19202214	216783546	1	0.00
3	7.02	Nitrite-N	4.869	14609595	213158480	1	0.00
4	8.59	O-Phosphate-P	2.504	2563050	44103538	1	0.00
5	9.33	Bromide	2.521	1292620	20653928	1	0.00
6	10.17	Chlorate	0.000	982196	18018946	1	0.00
7	11.11	Nitrate-N	4.753	13132952	257742386	1	0.00
8	13.95	Sulfate	18.812	12172864	313143950	1	0.00
		Totals	47.522	80370730	1236987844		



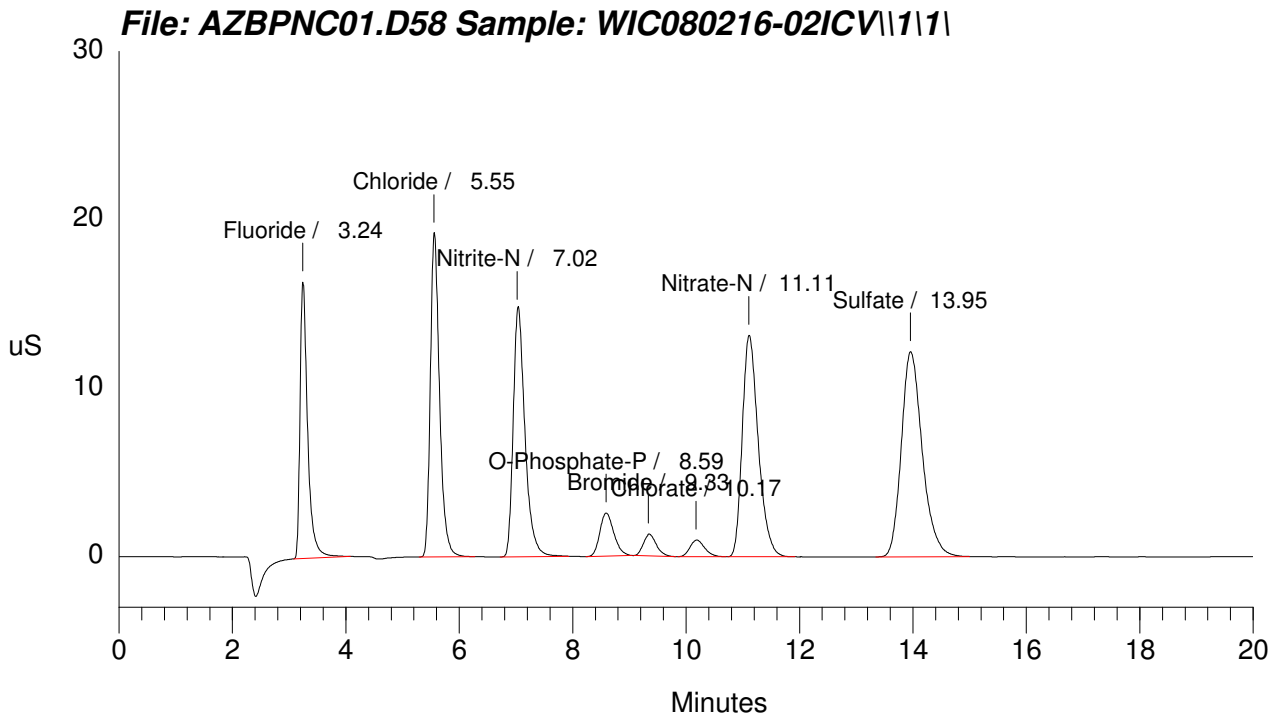
Data Reprocessed On 02/19/2008 07:37:06

```
==============================================================================
| Sample Name: WIC080216-02ICV\\1\1\          Date: 02/17/2008 03:52:58      |
| Data File  : C:\TMP\HORIZON\AZBPNC01.D58                                   |
| Method     : C:\DX\METHOD\FEB16.MET                                        |
| ACI Address: 1  System: 1  Inject#: 58                  Detector:CDM-2     |
| Analyst    : VXP1           Column: AS9HC#014050;GLGCE-086;300;9056        |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	4.902	16415239	153383070	1	0.00
2	5.55	Chloride	9.161	19202214	216783546	1	0.00
3	7.02	Nitrite-N	4.869	14609595	213158480	1	0.00
4	8.59	O-Phosphate-P	2.504	2563050	44103538	1	0.00
5	9.33	Bromide	2.521	1292620	20653928	1	0.00
6	10.17	Chlorate	2.391	982196	18018946	1	0.00
7	11.11	Nitrate-N	4.753	13132952	257742386	1	0.00
8	13.95	Sulfate	18.812	12172864	313143950	1	0.00
		Totals	49.913	80370730	1236987844		

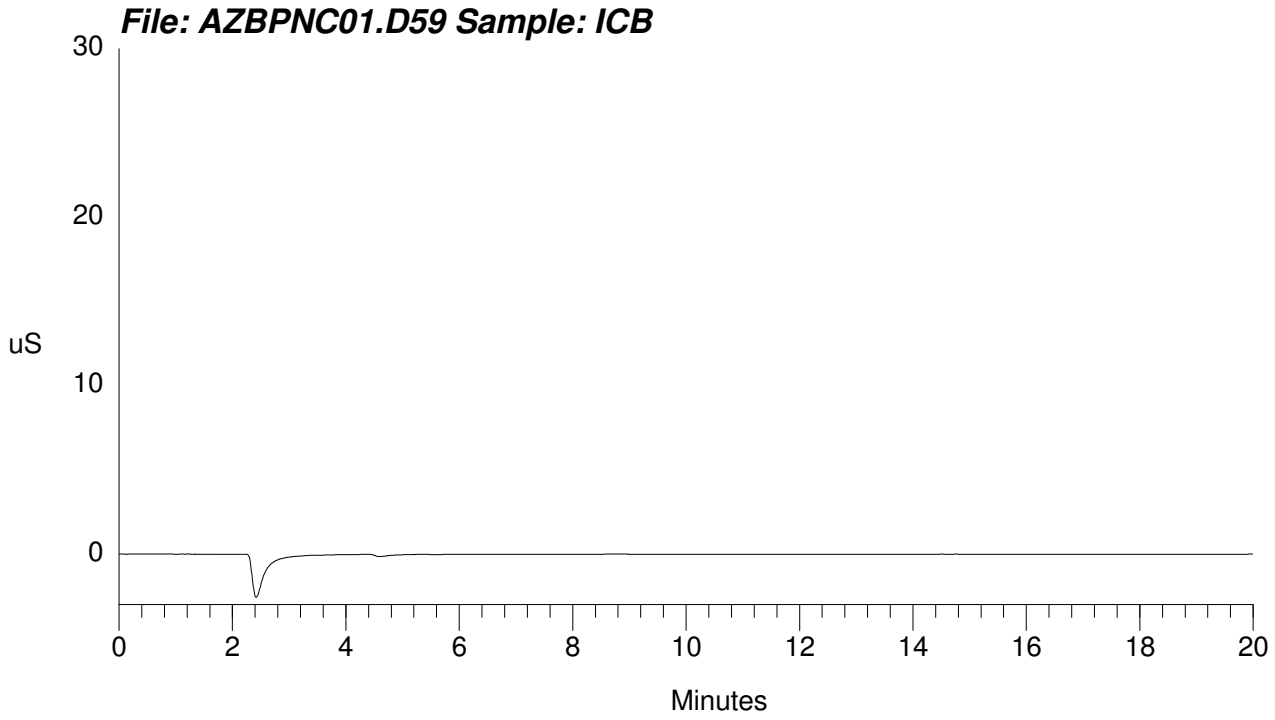


```
==============================================================================
| Sample Name: ICB                            Date: 02/17/2008 04:13:21      |
| Data File  : C:\TMP\HORIZON\AZBPNC01.D59                                   |
| Method     : C:\DX\METHOD\FEB16.MET                                        |
| ACI Address: 1  System: 1  Inject#: 59                  Detector:CDM-2     |
| Analyst    : VXP1           Column: AS9HC#014050;GLGCE-086;300;9056        |
==============================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components **********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                        Code
------------------------------------------------------------------------------
   0   0.00 Fluoride                 0.000          0          0    0   0.00
   0   0.00 Chloride                 0.000          0          0    0   0.00
   0   0.00 Nitrite-N                0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P            0.000          0          0    0   0.00
   0   0.00 Bromide                  0.000          0          0    0   0.00
   0   0.00 Chlorate                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N                0.000          0          0    0   0.00
   0   0.00 Sulfate                  0.000          0          0    0   0.00
                              ----------------------------------
                        Totals      0.000          0          0
```



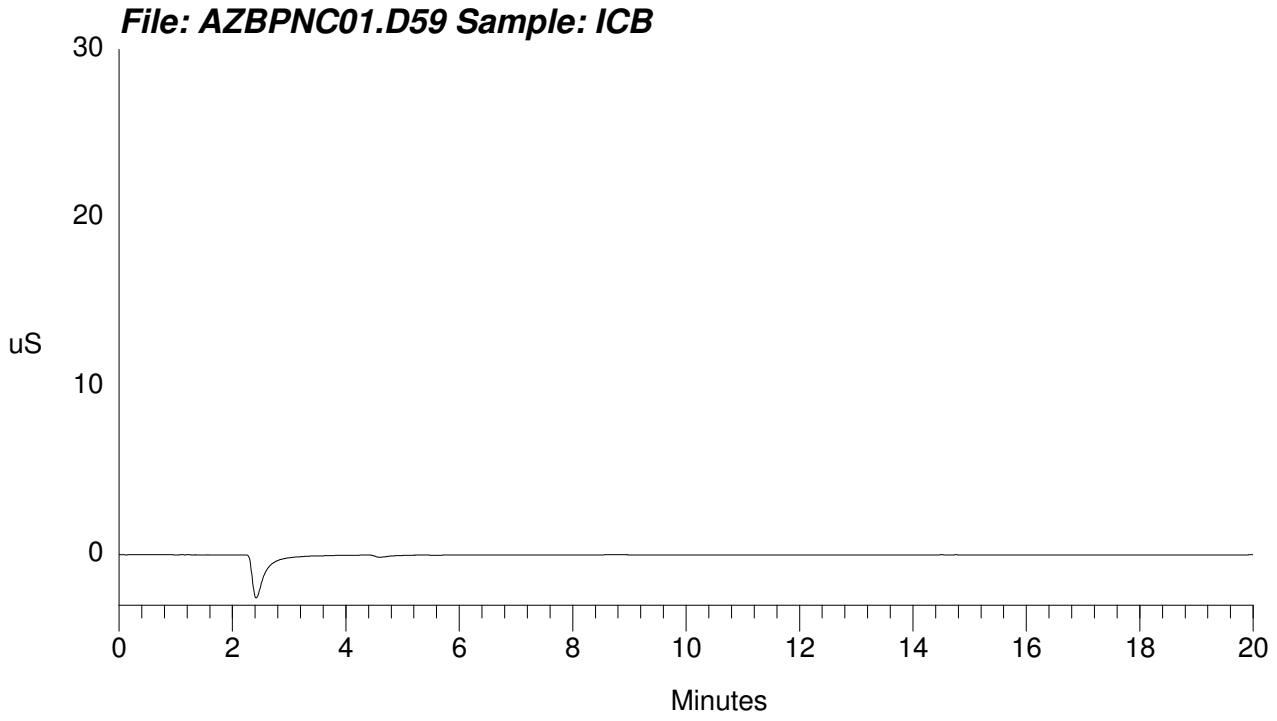
Data Reprocessed On 02/19/2008 07:37:06

Sample Name: ICB	Date: 02/17/2008 04:13:21
Data File : C:\TMP\HORIZON\AZBPNC01.D59	
Method : C:\DX\METHOD\FEB16.MET	
ACI Address: 1 System: 1 Inject#: 59	Detector:CDM-2
Analyst : VXP1	Column: AS9HC#014050;GLGCE-086;300;9056

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
0	0.00	Fluoride	0.000	0	0	0	0.00
0	0.00	Chloride	0.000	0	0	0	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
0	0.00	O-Phosphate-P	0.000	0	0	0	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
0	0.00	Chlorate	0.000	0	0	0	0.00
0	0.00	Nitrate-N	0.000	0	0	0	0.00
0	0.00	Sulfate	0.000	0	0	0	0.00
		Totals	0.000	0	0		



METHOD: 300/9056
SOP NUMBER: GL-GC-E-086

SAMPLENAME	BATCH	DILUTION	USER	RUNTIME	FILENAME
BLK:			VXP1	02/26/2008 09:53:43	AZBZNC01.R01
WIC080226-02ICV:1		1	VXP1	02/26/2008 10:14:03	AZBZNC01.R02
ICB:			VXP1	02/26/2008 10:34:24	AZBZNC01.R03
1201523487:1	730281	1	VXP1	02/26/2008 10:54:45	AZBZNC01.R04
1201523490:1	730281	1	VXP1	02/26/2008 11:15:05	AZBZNC01.R05
203467001:1	730281	1	VXP1	02/26/2008 11:35:25	AZBZNC01.R06
1201523488:1	730281	1	VXP1	02/26/2008 11:55:46	AZBZNC01.R07
1201523489:1	730281	1	VXP1	02/26/2008 12:16:11	AZBZNC01.R08
WIC080226-02CVH:1		1	VXP1	02/26/2008 12:36:34	AZBZNC01.R09
CCB:			VXP1	02/26/2008 12:57:03	AZBZNC01.R10
203493001:1	730350	1	VXP1	02/26/2008 13:17:24	AZBZNC01.R11
1201523600:1	730350	1	VXP1	02/26/2008 13:37:45	AZBZNC01.R12
1201523601:1	730350	1	VXP1	02/26/2008 13:58:05	AZBZNC01.R13
1201523598:1	730350	1	VXP1	02/26/2008 14:18:26	AZBZNC01.R14
1201523599:1	730350	1	VXP1	02/26/2008 14:38:46	AZBZNC01.R15
203467001:2	730281	1	VXP1	02/26/2008 14:59:05	AZBZNC01.R16
1201523488:2	730281	1	VXP1	02/26/2008 15:19:29	AZBZNC01.R17
1201523489:2	730281	1	VXP1	02/26/2008 15:39:49	AZBZNC01.R18
WIC080226-02CCV:1		1	VXP1	02/26/2008 16:00:09	AZBZNC01.R19
CCB:			VXP1	02/26/2008 16:20:30	AZBZNC01.R20
1201523540:1	730314	1	VXP1	02/26/2008 16:40:49	AZBZNC01.R21
1201523541:1	730314	1	VXP1	02/26/2008 17:01:10	AZBZNC01.R22
203328001:1	730314	1	VXP1	02/26/2008 17:21:30	AZBZNC01.R23
1201523542:1	730314	1	VXP1	02/26/2008 17:41:51	AZBZNC01.R24
1201523543:1	730314	1	VXP1	02/26/2008 18:02:11	AZBZNC01.R25
203328004:1	730314	1	VXP1	02/26/2008 18:22:32	AZBZNC01.R26
203328006:1	730314	1	VXP1	02/26/2008 18:42:52	AZBZNC01.R27
203328009:1	730314	1	VXP1	02/26/2008 19:03:13	AZBZNC01.R28
WIC080226-02CVH:1		1	VXP1	02/26/2008 19:23:33	AZBZNC01.R29
CCB:			VXP1	02/26/2008 19:43:54	AZBZNC01.R30
1201520318:1	728914	1	VXP1	02/26/2008 20:04:14	AZBZNC01.R31
1201520319:1	728914	1	VXP1	02/26/2008 20:24:36	AZBZNC01.R32
203080001:1	728914	1	VXP1	02/26/2008 20:44:56	AZBZNC01.R33
1201520320:1	728914	1	VXP1	02/26/2008 21:05:17	AZBZNC01.R34
1201520321:1	728914	1	VXP1	02/26/2008 21:25:37	AZBZNC01.R35
1201520323:1	728914	1	VXP1	02/26/2008 21:45:58	AZBZNC01.R36
203080002:1	728914	1	VXP1	02/26/2008 22:06:18	AZBZNC01.R37
203080003:1	728914	1	VXP1	02/26/2008 22:26:39	AZBZNC01.R38
203080004:1	728914	1	VXP1	02/26/2008 22:46:59	AZBZNC01.R39
203080005:1	728914	1	VXP1	02/26/2008 23:07:20	AZBZNC01.R40
WIC080226-02CCV:1		1	VXP1	02/26/2008 23:27:40	AZBZNC01.R41
CCB:			VXP1	02/26/2008 23:48:01	AZBZNC01.R42
203081001:1	728914	1	VXP1	02/27/2008 00:08:22	AZBZNC01.R43
203081002:1	728914	1	VXP1	02/27/2008 00:28:42	AZBZNC01.R44
203081003:1	728914	1	VXP1	02/27/2008 00:49:05	AZBZNC01.R45
WIC080226-02CVH:1		1	VXP1	02/27/2008 01:09:27	AZBZNC01.R46
CCB:			VXP1	02/27/2008 01:29:50	AZBZNC01.R47
1201523032:1	730060	1	VXP1	02/27/2008 01:50:12	AZBZNC01.R48
1201523035:1	730060	1	VXP1	02/27/2008 02:10:35	AZBZNC01.R49
203379002:1	730060	1	VXP1	02/27/2008 02:30:57	AZBZNC01.R50
1201523033:1	730060	1	VXP1	02/27/2008 02:51:20	AZBZNC01.R51
1201523034:1	730060	1	VXP1	02/27/2008 03:11:43	AZBZNC01.R52
203379003:1	730060	1	VXP1	02/27/2008 03:32:05	AZBZNC01.R53
203379004:1	730060	1	VXP1	02/27/2008 03:52:28	AZBZNC01.R54
203379005:1	730060	1	VXP1	02/27/2008 04:12:50	AZBZNC01.R55

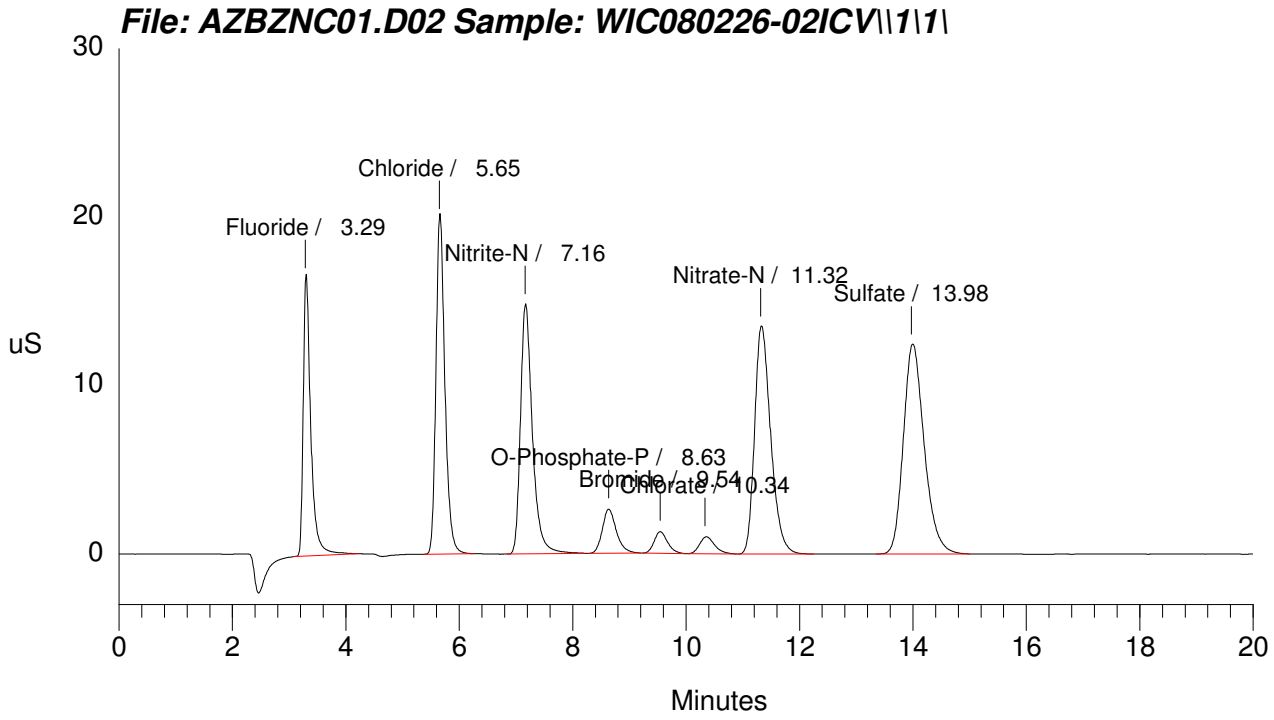
203379006:1	730060	1	VXP1	02/27/2008	04:33:13	AZBZNC01.R56
203379007:1	730060	1	VXP1	02/27/2008	04:53:36	AZBZNC01.R57
WIC080226-02CCV:1		1	VXP1	02/27/2008	05:13:58	AZBZNC01.R58
CCB:			VXP1	02/27/2008	05:34:21	AZBZNC01.R59
203379008:1	730060	1	VXP1	02/27/2008	05:54:43	AZBZNC01.R60
203379009:1	730060	1	VXP1	02/27/2008	06:15:06	AZBZNC01.R61
203379010:1	730060	1	VXP1	02/27/2008	06:35:29	AZBZNC01.R62
203379011:1	730060	1	VXP1	02/27/2008	06:55:56	AZBZNC01.R63
WIC080226-02CVH:1		1	VXP1	02/27/2008	07:16:18	AZBZNC01.R64
CCB:			VXP1	02/27/2008	07:36:41	AZBZNC01.R65

```
==============================================================================
| Sample Name: WIC080226-02ICV\\1\1\          Date: 02/26/2008 10:14:03      |
| Data File  : C:\TMP\HORIZON\AZBZNC01.D02                                   |
| Method     : C:\DX\METHOD\FEB16.MET                                        |
| ACI Address: 1  System: 1  Inject#: 2                   Detector:CDM-2     |
| Analyst    : VXP1           Column: AS9HC#014050;GLGCE-086;300;9056        |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.29	Fluoride	4.952	16453885	154966062	1	0.00
2	5.65	Chloride	9.333	19849403	220905018	1	0.00
3	7.16	Nitrite-N	4.946	14783365	216558264	1	0.00
4	8.63	O-Phosphate-P	2.540	2611416	44731318	1	0.00
5	9.54	Bromide	2.553	1283684	20918600	1	0.00
6	10.34	Chlorate	2.452	987828	18491726	1	0.00
7	11.32	Nitrate-N	4.932	13463204	267661888	1	0.00
8	13.98	Sulfate	19.146	12381227	318776246	1	0.00
		Totals	50.854	81814012	1263009122		

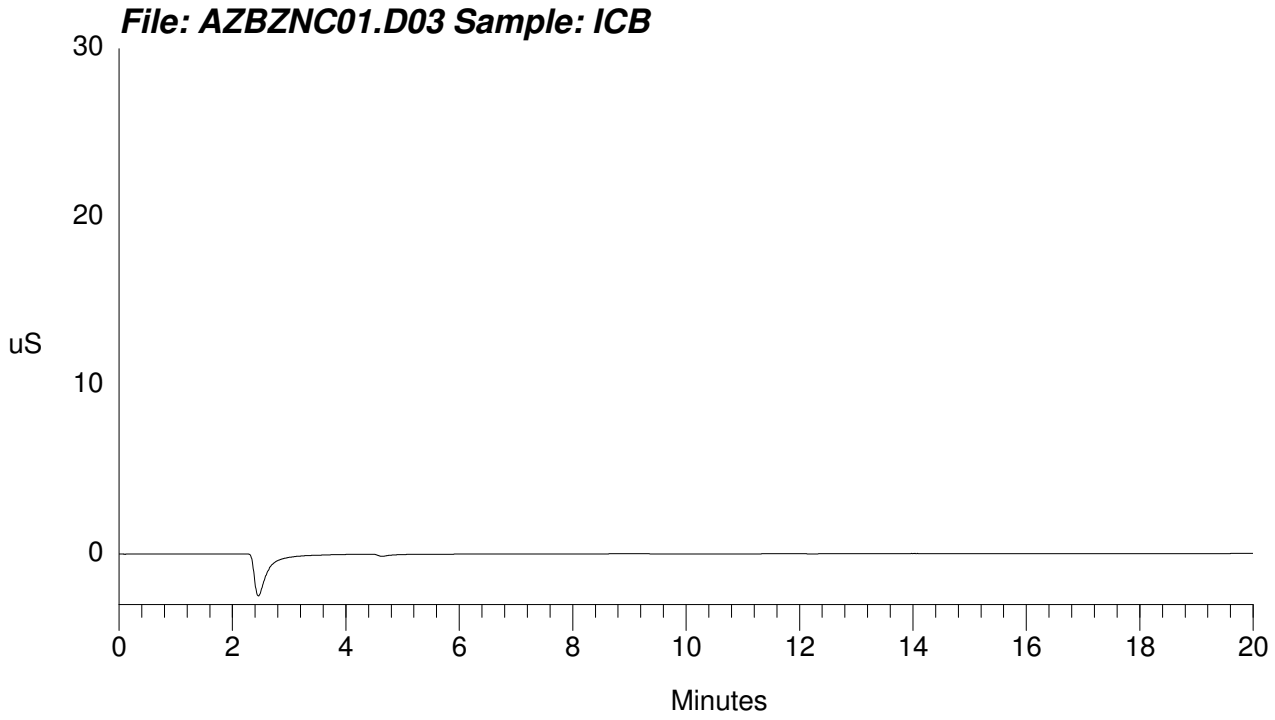


```
==============================================================================
| Sample Name: ICB                            Date: 02/26/2008 10:34:24      |
| Data File  : C:\TMP\HORIZON\AZBZNC01.D03                                   |
| Method     : C:\DX\METHOD\FEB16.MET                                        |
| ACI Address: 1  System: 1  Inject#: 3                   Detector:CDM-2     |
| Analyst    : VXP1           Column: AS9HC#014050;GLGCE-086;300;9056        |
==============================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components **********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                        Code
------------------------------------------------------------------------------
   0   0.00 Fluoride                 0.000          0          0    0   0.00
   0   0.00 Chloride                 0.000          0          0    0   0.00
   0   0.00 Nitrite-N                0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P            0.000          0          0    0   0.00
   0   0.00 Bromide                  0.000          0          0    0   0.00
   0   0.00 Chlorate                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N                0.000          0          0    0   0.00
   0   0.00 Sulfate                  0.000          0          0    0   0.00
                              ----------------------------------
                        Totals      0.000          0          0
```

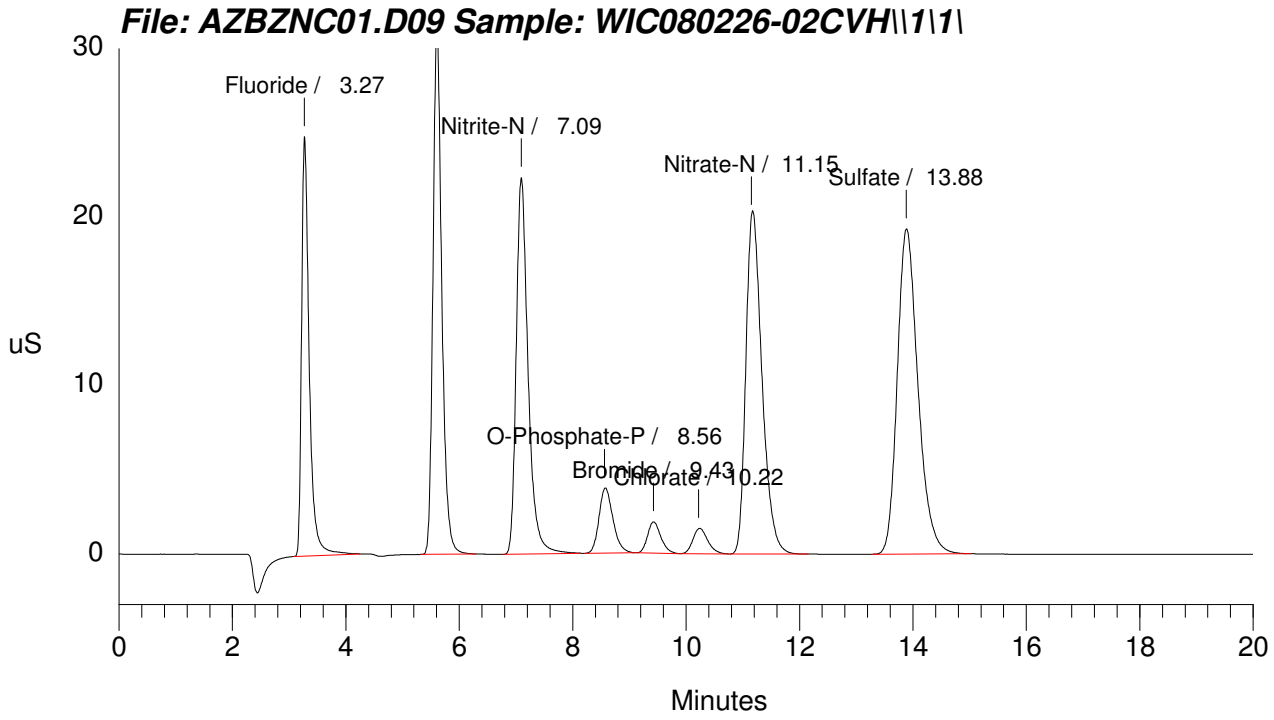


```
==============================================================================
| Sample Name: WIC080226-02CVH\\1\1\          Date: 02/26/2008 12:36:34     |
| Data File  : C:\TMP\HORIZON\AZBZNC01.D09                                  |
| Method     : C:\DX\METHOD\FEB16.MET                                       |
| ACI Address: 1  System: 1  Inject#: 9                   Detector:CDM-2    |
| Analyst    : VXP1           Column: AS9HC#014050;GLGCE-086;300;9056       |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	7.406	24892977	232393835	1	0.00
2	5.60	Chloride	14.240	31170687	338652960	1	0.00
3	7.09	Nitrite-N	7.372	22351020	323810144	1	0.00
4	8.56	O-Phosphate-P	3.743	3847591	65974602	1	0.00
5	9.43	Bromide	3.667	1856362	30172756	1	0.00
6	10.22	Chlorate	3.584	1485576	27182956	1	0.00
7	11.15	Nitrate-N	7.355	20084179	402125606	1	0.00
8	13.88	Sulfate	29.292	19290011	489648564	1	0.00
		Totals	76.661	124978403	1909961423		

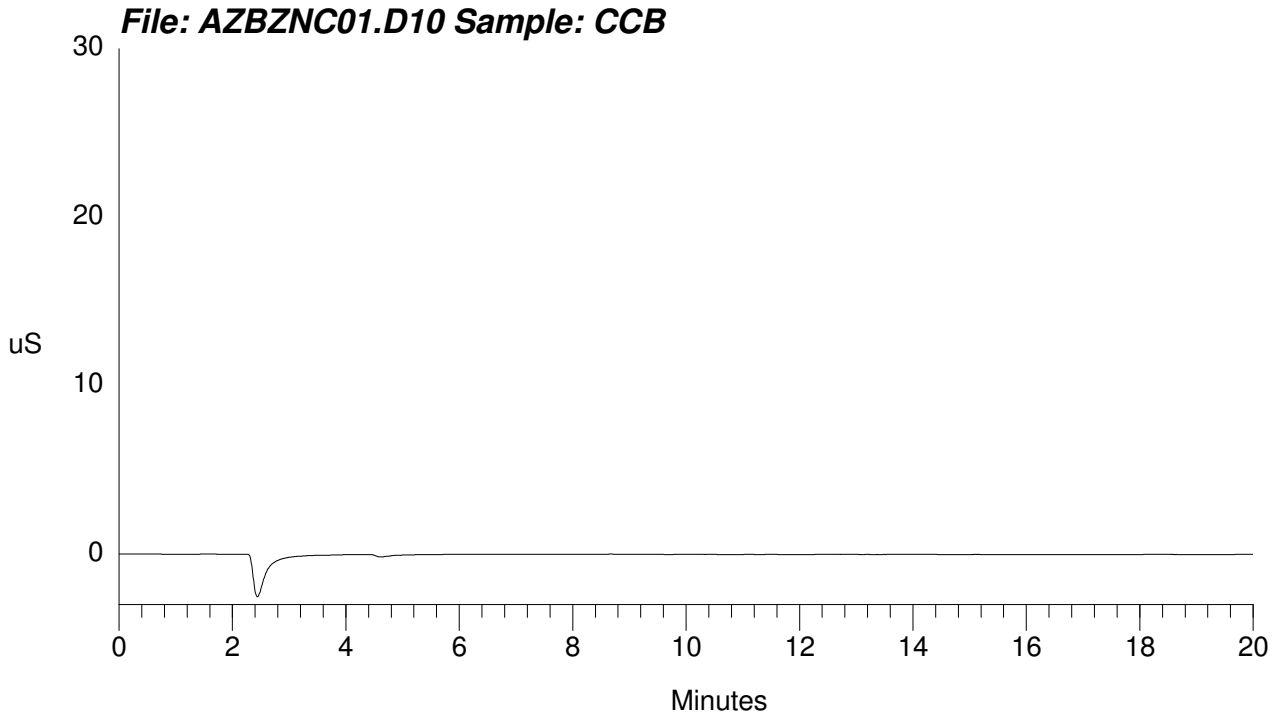


```
==============================================================================
| Sample Name: CCB                            Date: 02/26/2008 12:57:03      |
| Data File  : C:\TMP\HORIZON\AZBZNC01.D10                                   |
| Method     : C:\DX\METHOD\FEB16.MET                                        |
| ACI Address: 1  System: 1  Inject#: 10                  Detector:CDM-2     |
| Analyst    : VXP1           Column: AS9HC#014050;GLGCE-086;300;9056        |
==============================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components **********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                        Code
------------------------------------------------------------------------------
   0   0.00 Fluoride                 0.000          0          0    0   0.00
   0   0.00 Chloride                 0.000          0          0    0   0.00
   0   0.00 Nitrite-N                0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P            0.000          0          0    0   0.00
   0   0.00 Bromide                  0.000          0          0    0   0.00
   0   0.00 Chlorate                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N                0.000          0          0    0   0.00
   0   0.00 Sulfate                  0.000          0          0    0   0.00
                              ----------------------------------
                        Totals      0.000          0          0
```

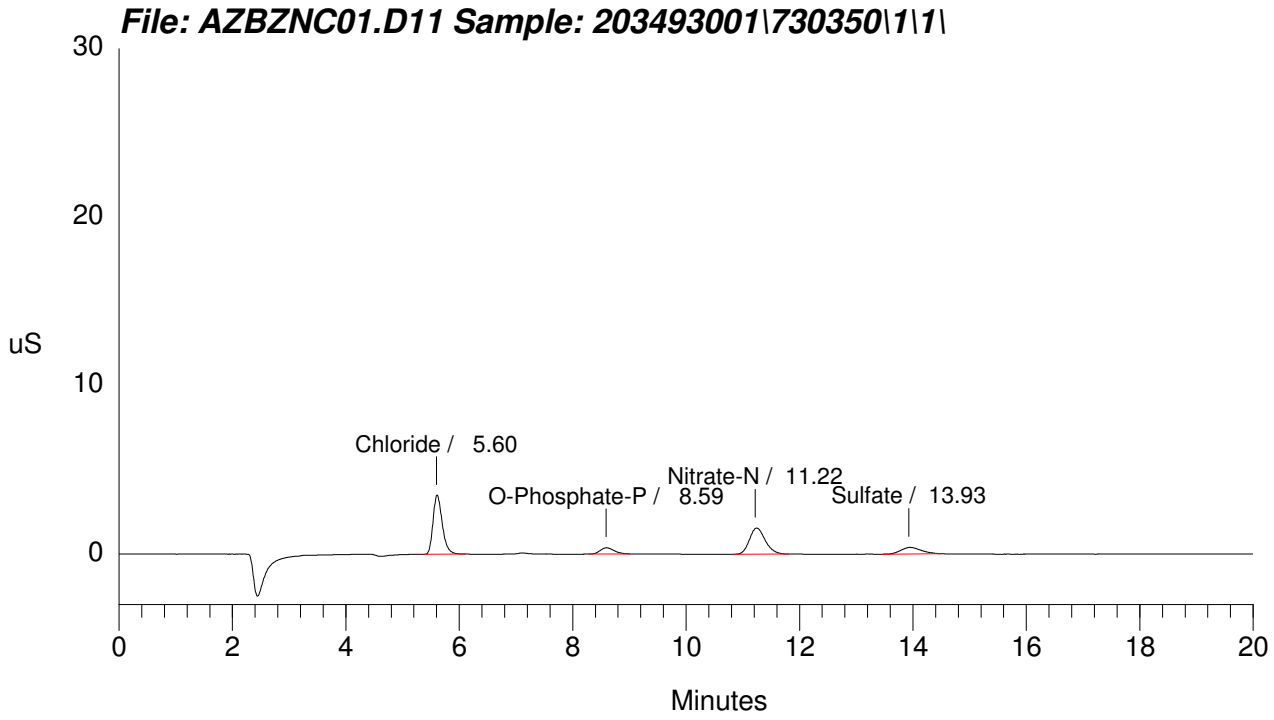


```
==============================================================================
| Sample Name: 203493001\730350\1\1\          Date: 02/26/2008 13:17:24     |
| Data File  : C:\TMP\HORIZON\AZBZNC01.D11                                  |
| Method     : C:\DX\METHOD\FEB16.MET                                       |
| ACI Address: 1  System: 1  Inject#: 11                  Detector:CDM-2    |
| Analyst    : VXP1           Column: AS9HC#014050;GLGCE-086;300;9056       |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
0	0.00	Fluoride	0.000	0	0	0	0.00
1	5.60	Chloride	1.799	3498266	40120330	1	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
2	8.59	O-Phosphate-P	0.372	374163	6475922	1	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
0	0.00	Chlorate	0.000	0	0	0	0.00
3	11.22	Nitrate-N	0.654	1537905	30262720	1	0.00
4	13.93	Sulfate	0.812	388063	9996996	1	0.00
		Totals	3.636	5798398	86855968		

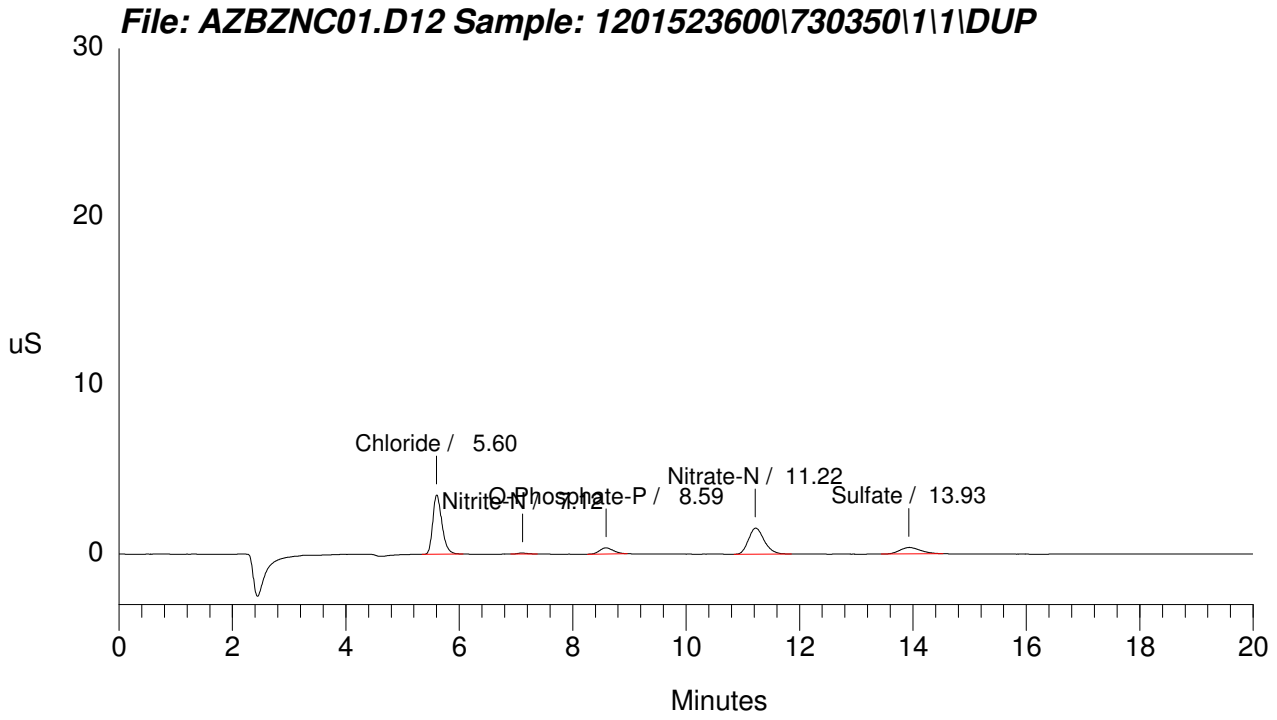


```
==============================================================================
| Sample Name: 1201523600\730350\1\1\DUP      Date: 02/26/2008 13:37:45     |
| Data File  : C:\TMP\HORIZON\AZBZNC01.D12                                  |
| Method     : C:\DX\METHOD\FEB16.MET                                       |
| ACI Address: 1  System: 1  Inject#: 12                  Detector:CDM-2    |
| Analyst    : VXP1           Column: AS9HC#014050;GLGCE-086;300;9056       |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
0	0.00	Fluoride	0.000	0	0	0	0.00
1	5.60	Chloride	1.792	3522431	39936644	1	0.00
2	7.12	Nitrite-N	0.067	69188	891364	1	0.00
3	8.59	O-Phosphate-P	0.359	368899	6249744	1	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
0	0.00	Chlorate	0.000	0	0	0	0.00
4	11.22	Nitrate-N	0.648	1549828	29950822	1	0.00
5	13.93	Sulfate	0.813	386906	10015574	1	0.00
		Totals	3.678	5897253	87044148		

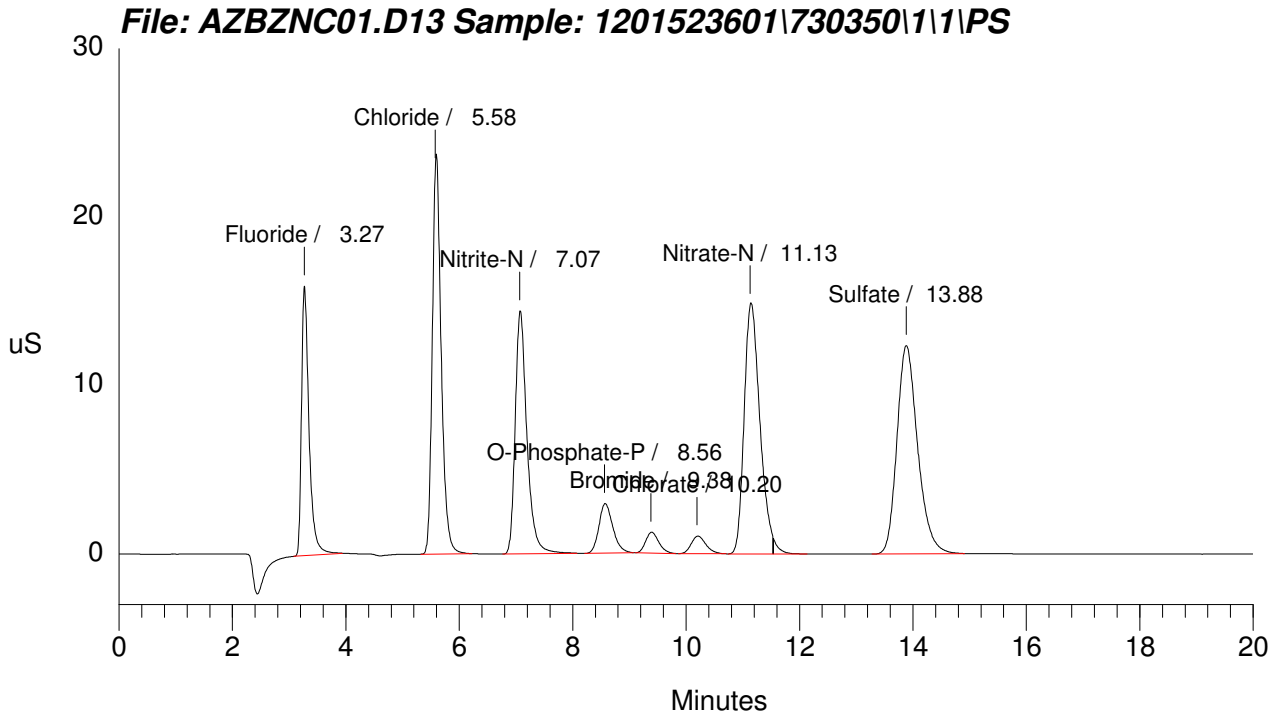


```
==============================================================================
| Sample Name: 1201523601\730350\1\1\PS       Date: 02/26/2008 13:58:05     |
| Data File  : C:\TMP\HORIZON\AZBZNC01.D13                                  |
| Method     : C:\DX\METHOD\FEB16.MET                                       |
| ACI Address: 1  System: 1  Inject#: 13                  Detector:CDM-2    |
| Analyst    : VXP1           Column: AS9HC#014050;GLGCE-086;300;9056       |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	4.705	16010972	147171444	1	0.00
2	5.58	Chloride	10.867	22867985	257700900	1	0.00
3	7.07	Nitrite-N	4.704	14414998	205857790	1	0.00
4	8.56	O-Phosphate-P	2.846	2931526	50133760	1	0.00
5	9.38	Bromide	2.435	1230627	19939534	1	0.00
6	10.20	Chlorate	2.497	1038888	18834928	1	0.00
7	11.13	Nitrate-N	5.350	14797368	290889418	1	0.00
8	13.88	Sulfate	18.868	12359497	314095142	1	0.00
		Totals	52.271	85651860	1304622916		

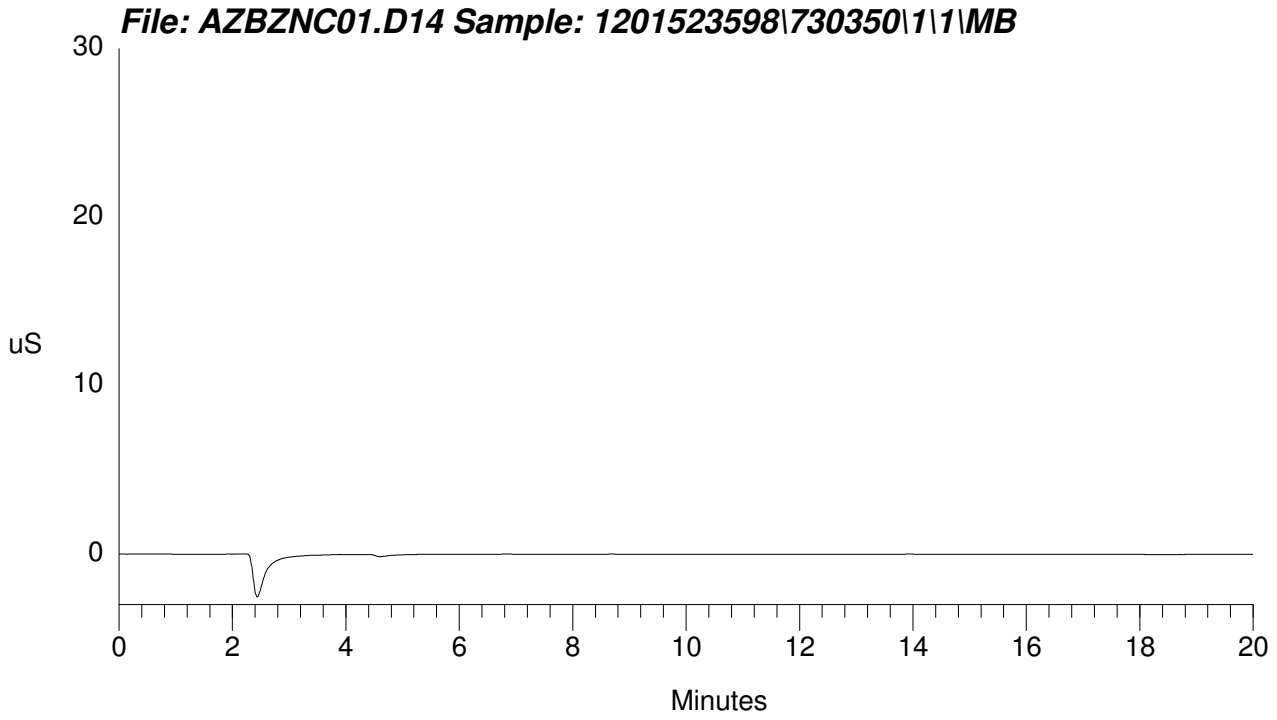


```
==============================================================================
| Sample Name: 1201523598\730350\1\1\MB       Date: 02/26/2008 14:18:26     |
| Data File  : C:\TMP\HORIZON\AZBZNC01.D14                                  |
| Method     : C:\DX\METHOD\FEB16.MET                                       |
| ACI Address: 1  System: 1  Inject#: 14                  Detector:CDM-2    |
| Analyst    : VXP1           Column: AS9HC#014050;GLGCE-086;300;9056       |
==============================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components **********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                        Code
------------------------------------------------------------------------------
   0   0.00 Fluoride                 0.000          0          0    0   0.00
   0   0.00 Chloride                 0.000          0          0    0   0.00
   0   0.00 Nitrite-N                0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P            0.000          0          0    0   0.00
   0   0.00 Bromide                  0.000          0          0    0   0.00
   0   0.00 Chlorate                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N                0.000          0          0    0   0.00
   0   0.00 Sulfate                  0.000          0          0    0   0.00
                          ----------------------------------
                       Totals        0.000          0          0
```

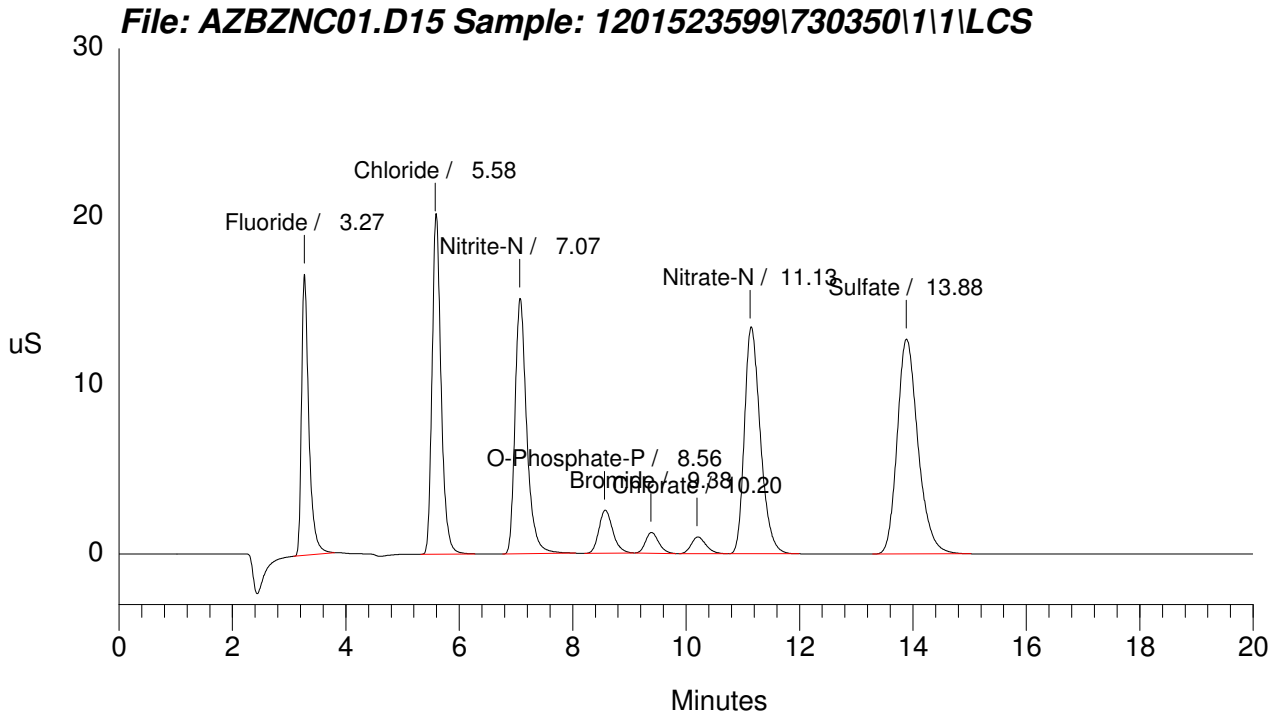


```
==============================================================================
| Sample Name: 1201523599\730350\1\1\LCS      Date: 02/26/2008 14:38:46      |
| Data File  : C:\TMP\HORIZON\AZBZNC01.D15                                   |
| Method     : C:\DX\METHOD\FEB16.MET                                        |
| ACI Address: 1  System: 1  Inject#: 15                  Detector:CDM-2     |
| Analyst    : VXP1           Column: AS9HC#014050;GLGCE-086;300;9056        |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	4.779	16689555	149502892	1	0.00
2	5.58	Chloride	9.402	19717611	222546188	1	0.00
3	7.07	Nitrite-N	4.978	15178123	217973518	1	0.00
4	8.56	O-Phosphate-P	2.465	2544548	43421126	1	0.00
5	9.38	Bromide	2.423	1229332	19843054	1	0.00
6	10.20	Chlorate	2.392	990806	18028098	1	0.00
7	11.13	Nitrate-N	4.858	13329219	263598790	1	0.00
8	13.88	Sulfate	19.568	12766523	325874862	1	0.00
		Totals	50.865	82445719	1260788528		

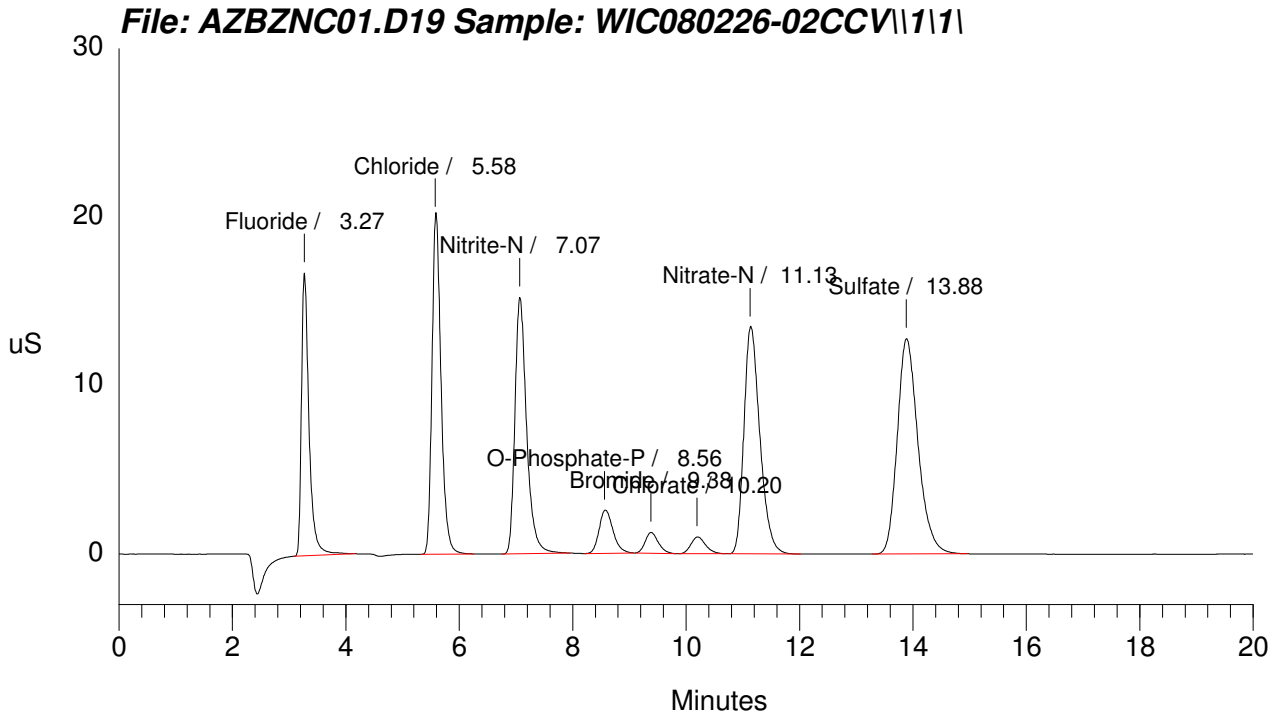


```
==============================================================================
| Sample Name: WIC080226-02CCV\\1\1\          Date: 02/26/2008 16:00:09      |
| Data File  : C:\TMP\HORIZON\AZBZNC01.D19                                   |
| Method     : C:\DX\METHOD\FEB16.MET                                        |
| ACI Address: 1  System: 1  Inject#: 19                  Detector:CDM-2     |
| Analyst    : VXP1           Column: AS9HC#014050;GLGCE-086;300;9056        |
==============================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	4.982	16798827	155914037	1	0.00
2	5.58	Chloride	9.435	19979610	223350956	1	0.00
3	7.07	Nitrite-N	4.971	15234664	217649920	1	0.00
4	8.56	O-Phosphate-P	2.477	2550172	43633636	1	0.00
5	9.38	Bromide	2.424	1235026	19848534	1	0.00
6	10.20	Chlorate	2.387	997478	17990948	1	0.00
7	11.13	Nitrate-N	4.868	13456501	264156602	1	0.00
8	13.88	Sulfate	19.524	12787338	325138390	1	0.00
		Totals	51.069	83039617	1267683023		

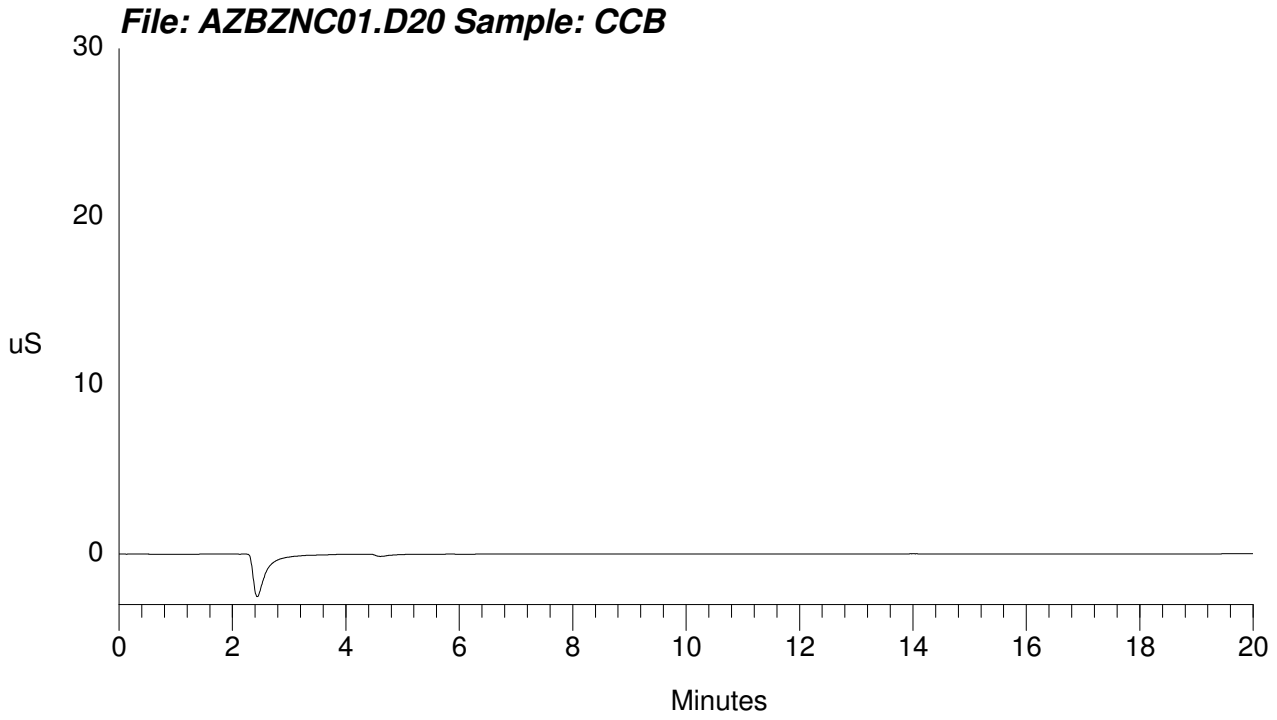


```
==============================================================================
| Sample Name: CCB                            Date: 02/26/2008 16:20:30      |
| Data File  : C:\TMP\HORIZON\AZBZNC01.D20                                   |
| Method     : C:\DX\METHOD\FEB16.MET                                        |
| ACI Address: 1  System: 1  Inject#: 20                  Detector:CDM-2     |
| Analyst    : VXP1           Column: AS9HC#014050;GLGCE-086;300;9056        |
==============================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components **********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                        Code
------------------------------------------------------------------------------
   0   0.00 Fluoride                 0.000          0          0    0   0.00
   0   0.00 Chloride                 0.000          0          0    0   0.00
   0   0.00 Nitrite-N                0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P            0.000          0          0    0   0.00
   0   0.00 Bromide                  0.000          0          0    0   0.00
   0   0.00 Chlorate                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N                0.000          0          0    0   0.00
   0   0.00 Sulfate                  0.000          0          0    0   0.00
                              ----------------------------------
                        Totals      0.000          0          0
```



Oil & Grease

Oil & Grease / TPH LogBook

Batch: 731946.0
Analyst: John Thomas
Procedure Code BALOGEP_L
Procedure Description EPA 413.1 Oil & Grease
Lab SOP :GL-GC-E-017

Sample Type	Sample Id	Lot Id	Nc(mg/L)	Recovery(%)
LCS	1201527205		200.4	93.313
MS	1201527204		523.3	90.866

Sample Type	Sample Id	Rpd(%)

Sample Identification	Run Date	Aliquot	Initial Holder Wt.	1st Final Holder Wt.	2nd Final Holder Wt.	3rd Final Holder Wt.	Result	Result
1201527203 MB	03-MAR-08 09:46	1 L	108.6489	108.6497	108.6497	N/A	0	mg/L
1201527205 LCS	03-MAR-08 09:46	1 L	91.5907	91.7785	91.7785	N/A	187	mg/L
203131001	03-MAR-08 09:46	1 L	106.8117	106.8215	106.8215	N/A	9	mg/L
1201527204 MS(203131001)	03-MAR-08 09:46	1 L	93.182	93.667	93.6673	N/A	484.5	mg/L
203317001	03-MAR-08 09:49	1 L	91.2761	91.3056	91.3058	N/A	28.9	mg/L
203318001	03-MAR-08 09:49	1 L	78.2366	78.28	78.2801	N/A	42.7	mg/L
203320001	03-MAR-08 09:49	1 L	79.1277	79.1414	79.1417	N/A	13.2	mg/L
203493001	03-MAR-08 09:49	1 L	92.9648	92.9729	92.9729	N/A	7.3	mg/L

All Weights are in Grams

Time in Desiccator: 03-MAR-08 10:15:00
Time out Desiccator: 04-MAR-08 15:19:41
Water Bath Temperature: 70 C

Comments:

A) Result Liquid = ((Final - Initial) - Blank) / Aliquot * 1000
B) Result Hexane Liquid = (Final - Initial)/ Aliquot * 1000
C) Result Solid = ((Final - Initial) / Aliquot) / (1 - Moisture) * 1000
D) All samples were cooled in the desiccator for at least 30 minutes before they are weighed.
E) Note: Aliquot is used for the determination of the MDL and PQL in LIMS

Solids, Total Dissolved

Batch: 731200.0
Analyst: NXM1

TDS/TS/VS LogBook

Procedure Code BALDSEP_LF
Procedure Description EPA 160.1 Solids, Dissolved
Lab Sop GL-GC-E-001

Sample Type	Sample Id	Lot Id	Nc(mg/L)	Recovery(%)
LCS	1201525446	WTD730145-01	300	101.333

Sample Type	Sample Id	Rpd(%)
DUP	1201525442	0
DUP	1201525443	0
DUP	1201525444	2.2289766970618
DUP	1201525445	2.8673835125448

Sample Id	Sample Type	Original Hsn	Instrument	Run Date	Crucible ID	Aliquot (L)	Crucible Wt(g)	Final Wt Event 1	Final Wt Event 2	Final Wt Event 3	Final Wt Event 4	Result	Units
1201525441	MB		BAL216	28-FEB-2008 12:02	DMR	0.1	56.3655	56.3658	56.3657			2	mg/L
1201525446	LCS		BAL216	28-FEB-2008 12:02	ER	0.1	59.6488	59.6788	59.6792			304	mg/L
203418001	SAMPLE		BAL216	28-FEB-2008 12:02	HU	0.1	56.8064	56.8376	56.8376			312	mg/L
1201525442	DUP	203418001	BAL216	28-FEB-2008 12:02	5G	0.1	57.6014	57.6321	57.6326			312	mg/L
203480006	SAMPLE		BAL216	28-FEB-2008 12:02	6J	0.1	56.4126	56.4628	56.4625			499	mg/L
1201525443	DUP	203480006	BAL216	28-FEB-2008 12:02	MB	0.1	52.2805	52.3304	52.3304			499	mg/L
203485001	SAMPLE		BAL216	28-FEB-2008 12:02	LX3	0.1	56.8445	56.8813	56.8815			370	mg/L
203485005	SAMPLE		BAL216	28-FEB-2008 12:02	IN	0.1	58.4835	58.4969	58.4974			139	mg/L
203485007	SAMPLE		BAL216	28-FEB-2008 12:02	LSH	0.1	67.2298	67.244	67.2441			143	mg/L
203493001	SAMPLE		BAL216	28-FEB-2008 12:02	5C	0.1	48.283	48.2899	48.2901			71	mg/L
203567003	SAMPLE		BAL216	28-FEB-2008 12:02	SML	0.1	66.6661	66.6795	66.6791			130	mg/L
203567006	SAMPLE		BAL216	28-FEB-2008 12:02	TE	0.1	55.3939	55.4239	55.4244			305	mg/L
203569001	SAMPLE		BAL216	28-FEB-2008 12:02	Hi	0.1	50.4521	50.5009	50.5009			488	mg/L
1201525444	DUP	203569001	BAL216	28-FEB-2008 12:02	R2	0.1	59.1036	59.1536	59.1535			499	mg/L
203569002	SAMPLE		BAL216	28-FEB-2008 12:02	NAM	0.1	59.889	59.9442	59.9442			552	mg/L
203569003	SAMPLE		BAL216	28-FEB-2008 12:02	J1	0.1	50.175	50.2306	50.2304			554	mg/L
203581001	SAMPLE		BAL216	28-FEB-2008 12:02	FUM	0.1	64.8753	64.9035	64.9036			283	mg/L
1201525445	DUP	203581001	BAL216	28-FEB-2008 12:02	MD	0.1	58.3955	58.4228	58.423			275	mg/L
203581003	SAMPLE		BAL216	28-FEB-2008 12:02	VIT	0.1	53.7599	53.7848	53.7851			252	mg/L
203581005	SAMPLE		BAL216	28-FEB-2008 12:02	Z1	0.1	50.6297	50.651	50.6514			217	mg/L

Comments: **All Weights are in Grams**
A) Result = (Final - Crucible)/Aliquot * 1000
B) Prep Factor = 0.5 / Aliquot

Date: 28-FEB-08 12:02:18
Date: 03-MAR-08 08:30:00
Temperature: 180 C
Temperature: 180 C

Note: Aliquot is used for the determination of the effective MDL and PQL in LIMS

Solids, Total Suspended

TSS/VSS LogBook

Batch: 730665.0
Analyst: NXM1
Procedure Code TSS2540DL
Procedure Description SM 2540D Total Suspended Solids
Lab Sop GL-GC-E-012

Sample Type	Sample Id	Lot Id	Nc(mg/L)	Recovery(%)
LCS	1201524286	WTS747078	500	99.2

Sample Type	Sample Id	Rpd(%)
DUP	1201524284	7.8431372549020
DUP	1201524285	2.1978021978022

Sample Id	Run Date	Instrument	Filter ID	Aliquot (L)	Initial Filter Wt Event 1	Initial Filter Wt Event 2	Final Filter Wt Event 1	Final Filter Wt Event 2	Final Filter Wt Event 3	Final Filter Wt Event 4	Result (mg/L)
1201524283-MB	27-FEB-2008 10:59	BAL216	1	0.5	0.1193	0.1193	0.1193	0.1189			-0.8
1201524286-LCS	27-FEB-2008 10:59	BAL216	2	0.1	0.1175	0.1173	0.167	0.1669			496
203471001	27-FEB-2008 10:59	BAL216	3	0.12	0.1153	0.1154	0.1301	0.1301			122.5
1201524284-DUP (203471001)	27-FEB-2008 10:59	BAL216	4	0.12	0.1157	0.1158	0.1317	0.1316			131.6666
203471002	27-FEB-2008 10:59	BAL216	5	0.158	0.1164	0.1165	0.1302	0.1302			86.70886
203471003	27-FEB-2008 10:59	BAL216	6	0.156	0.1149	0.1148	0.1287	0.1287			89.10256
203484001	27-FEB-2008 10:59	BAL216	7	0.028	0.1179	0.1177	0.132	0.1319			507.1428
203493001	27-FEB-2008 10:59	BAL216	8	0.166	0.1167	0.1167	0.1365	0.1364			118.6747
203519001	27-FEB-2008 10:59	BAL216	9	0.39	0.1179	0.118	0.127	0.1271			23.33333
203542001	27-FEB-2008 10:59	BAL216	10	0.25	0.1167	0.1167	0.1349	0.1347			72
1201524285-DUP (203542001)	27-FEB-2008 10:59	BAL216	11	0.25	0.1184	0.1185	0.1372	0.1369			73.6
203542002	27-FEB-2008 10:59	BAL216	12	0.25	0.1155	0.1153	0.1228	0.1228			30
203542003	27-FEB-2008 10:59	BAL216	13	0.25	0.1174	0.1175	0.1243	0.1243			27.2
203542004	27-FEB-2008 10:59	BAL216	14	0.388	0.116	0.1161	0.1246	0.1246			21.90722
203542005	27-FEB-2008 10:59	BAL216	15	0.369	0.1197	0.1197	0.1304	0.1305			29.26829
203542006	27-FEB-2008 10:59	BAL216	16	0.25	0.1175	0.1175	0.1512	0.151			134
203542007	27-FEB-2008 10:59	BAL216	17	0.25	0.1168	0.1166	0.1374	0.1373			82.8

Comments: **A) TSS** Result = (Final Filter Wt - Initial Filter Wt) * 1000 / Aliquot

In Oven Date/Time: 27-FEB-08 10:59:24
Out Oven Date/Time: 28-FEB-08 09:45:43
In Oven Temperature: 103 C
Out Oven Temperature: 103 C

Note: Aliquot is used for the determination of the effective MDL and PQL in LIMS
All Weights are in Grams

Total Hardness

Analytical Logbook

Total Hardness by Titration

Batch ID: **730544.0**
Analyst: **Travis Tola**
Method: **EPA 130.2 (ha) SM 2340 C (2162)**
Lab SOP: **GL-GC-E-100 REV# 3**
Instrument: **Titration**

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
	All	HARNESS INDICATOR FOR HARDNESS	061103	1	uL
	All	BUFFER SOLUTION FOR HARDNESS	IMM070716-01	1	mL
	All	EDTA TIRTRANT FOR HARDNESS	IMM080227-D	20	mL
LCS	1201524863	2500MG/L AS CACO3 FOR HARDNESS LCS	WHA070518-02	5	mL
MS	1201524862	1000MG/L AS CACO3 FOR HARDNESS SPIKE	WHA080220-01	5	mL

Sample ID	Run Date	Aliquot (mL)	EDTA Normality (mg/L)	EDTA Titrated (mL)	Hardness as CaCO3 Initial Result (mg/L)	Hardness as CaCO3 Result (mg/L)
1201524860 MB	27-FEB-2008 15:10:18	50	0.01968	0	0	0
1201524863 LCS	27-FEB-2008 15:16:02	50	0.01968	12.9	253.872	253.872
203170001 (2162)	27-FEB-2008 15:20:01	50	0.01968	12.2	240.096	240.096
1201524861 DUP (203170001)	27-FEB-2008 15:23:22	50	0.01968	12.25	241.08	241.08
1201524862 MS (203170001)	27-FEB-2008 15:27:18	50	0.01968	17.3	340.464	340.464
203353002 (2162)	27-FEB-2008 15:31:06	10	0.01968	7.45	733.08	733.08
203493001 (ha)	27-FEB-2008 15:35:51	50	0.01968	0.55	10.824	10.824

Calibration Information:

Run Date: 27-FEB-08 11:57
Instrument: PHX370
Analyst: TXT1

Standard	Observed	Theoretical		%Recovery
IMM090101-02	10.03	10	SU	100.3
070420-A	12	12	SU	100
UPH060808-02	2.1	2	SU	105
IMM090101-PH2	4.02	4	SU	100.5
IMM090101-01	7.05	7	SU	100.71
IMM090101-PH	7.05	7	SU	100.71

Comments:

Run Date: 27-FEB-2008 13:15
Instrument: TIT001
Analyst: TXT1

Reagent ID	Reagent Amount (mL)	Reagent Conc. (N)	EDTA Titrated (mL)	Actual Normality (N)	Normality Average (N)
649078	10	1000	10.05	.01923	.01968
	10	1000	10.05	.0199	
	10	1000	10.4	.0199	

GEL Laboratories LLC

a member of The GEL Group LLC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407

P 843.556.8171 F 843.766.1178

www.gel.com

January 14, 2009

Mr. Tim Utterback
Weiss Associates
5801 Christie Ave
Suite 600
Emeryville, California 94608

Re: LEHR PO# 130-4110-05-P-C074
Work Orders: 221329 221349

Dear Mr. Utterback:

Enclosed is the original data package for the Linde FUSRAP sample(s) we received on December 16, 2008, and analyzed for GC Semivolatile Pesticide, GC/MS Volatile, General Chemistry, Metals and Radiochemistry parameters.

GEL Laboratories, LLC (GEL) appreciates this opportunity to provide you with analytical results and trusts that you will find everything in order and to your satisfaction. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext 4453.

Sincerely,

Edith M. Kent

Edith Kent
Project Manager

problem solved

Weiss Associates (128-4108-124-2)
LEHR PO# 130-4110-05-P-C074
Chain of Custody 130-4113-139-1 and
SDG: 221329 and 221349

Table of Contents

Gereral Narrative **1**

Chain of Custody and Supporting Documentation **4**

Data Review Qualifier Definitions **15**

Laboratory Certifications **17**

GC/MS Volatile Analysis **19**
- Sample Data Summary 25
- QC Summary 32
- Sample Data 41
- Standard Data 59
- QC Data 148
- Miscellaneous Data 177

GC Semivolatile Pesticide Analysis **180**
- Sample Data Summary 186
- Quality Control Summary 189
- Sample Data 193
- Standards Data 204
- Quality Control Data 436
- Miscellaneous Data 451

Metals Analysis **465**
- Case Narrative 466
- Sample Data Summary 471
- Quality Control Summary 474
- Standards 493
- Raw Data 496
- Miscellaneous 644

General Chemistry Analysis **665**
- Case Narrative 666
- Sample Data Summary 676
- Quality Control Summary 680
- Carbon, Total Organic 683
- Ion Chromatography 695
- Solids, Total Dissolved 719
- Solids, Total Suspended 721
- Miscellaneous 723

General Chemistry Analysis **725**
Case Narrative 726
Sample Data Summary 730
Quality Control Summary 734
n-Hexane Extractable Material 737
Miscellaneous 739

Radiological Analysis **741**
Sample Data Summary 749
Quality Control Data 753
Raw Data 757
Continuing Calibration Data 800
Runlogs 807

General Narrative

General Narrative
for
Weiss Associates (128-4108-124-2)
LEHR PO# 130-4110-05-P-C074
SDG: 221329 and 221349

January 14, 2009

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample receipt

The sample(s) arrived at GEL Laboratories, LLC, Charleston, South Carolina on December 16, 2008, for analysis. Shipping container temperatures were checked, documented, and within specifications. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Upon receipt of the samples under SDG 221329, the client was notified that the lab is no longer certified to use the requested method of 413.1 for Oil and Grease analysis. GEL is certified for method 1664A. The sample was received as preserved with H2S04, and method 1664A requires preservation by HCL. The client instructed the lab to proceed with analysis on the sample as is using method 1664A. Also, the client was requested to verify that Mercury was not required and that the Pesticide and PCB analysis by method 8081 was acceptable. Please refer to the attached e-mails for further details regarding these issues.

Sample Identification
The laboratory received the following samples:

Laboratory Identification	Sample Description
221329001	RWSW0049
221329002	RWSW0048
221329003	RWSW0048TB
221349001	RWSW0049
221349002	RWSW0048

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package

The enclosed data package contains the following sections: General Narrative, Chain of Custody and Supporting Documentation, and data from the following fractions: GC Semivolatile Pesticide, GC/MS Volatile, General Chemistry, Metals and Radiochemistry. This package, to the best of my knowledge, is in compliance with technical and administrative requirements.

GEL Laboratories, LLC appreciates this opportunity to provide you with analytical results and trusts that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate in contacting me at (843) 556-8171.

Edith M. Kent

Edith Kent

Project Manager

Chain of Custody and Supporting Documentation

Weiss Associates Environmental Science, Engineering and Management
5801 Christie Avenue, Suite 600, Emeryville, CA 94608-1939 Fax: 510-547-5043 Phone: 510-450-6000

LEHR Chain-of-Custody Record

221329

Lab Name: General Engineering Labs
Lab Address: 2040 Savage Road
Charleston, SC 29407
Lab Login:

Project Name: LEHR/RWSW
Project Number: 130-4113-139-1
Sampled by: DMB
Samplers Signature: MBP

Control Number: LEHR-RWSW
Send Results To: Tim Utterback
Email: data@weiss.com
Fax: (510) 547-5043

xdx # 8473 3152 5987

Sample ID	Sample Date	Sample Time	Matrix (1) / Container (2)	Number of Containers	Preservative Y/N	Volatiles (EPA 8260)	Total Organic Carbon (EPA 415.2)	Pesticides/PCBs (EPA 8081/8082)	Metals (EPA 6020)		Oil and Grease (EPA 413.1)	Radium-226 (DOE 300)	Strontium-90 (905.0 M)	Carbon-14 (EPAEERFC-01)	Tritium (906.0M)	Nitrate (300.0)	TDS (EPA 160.1)	TSS (EPA 160.2)								Additional Comments
RWSW 0049	12-15-08	942	W/V	3	Y	X																				Turnaround Time: 30 Days
RWSW0049			W/A	2	n			X																		
RWSW 0049			W/G	1	n										X											
RWSW 0049			W/P	1	no									X												
RWSW 0049			W/P	1	Y							X														

1 of 4

Signature		Company	Date	Time
Relinquished by: MBP	DMB	WEBS	12.15-08	1245
Received by: Dorothy Shaffer		GEL	12/16/08	0955
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

(1) Matrix: S - Soil, W - Water, O - Other (describe)
(2) Container:
V = VOA Vial
P = Polyethylene Bottle
G = Glass Bottle/Jar
T = BrassTube
O = Other (describe)

Weiss Associates Environmental Science, Engineering and Management
5801 Christie Avenue, Suite 600, Emeryville, CA 94608-1939 Fax: 510-547-5043 Phone: 510-450-6000

LEHR Chain-of-Custody Record

Lab Name: General Engineering Labs
Lab Address: 2040 Savage Road
Charleston, SC 29407
Lab Login:

Project Name: LEHR/RWSW
Project Number: 130-4113-139-1
Sampled by: DMB
Samplers Signature:

Control Number: LEHR-RWSW
Send Results To: Tim Utterback
Email: data@weiss.com
Fax: (510) 547-5043

Fed ex # 8473 3152 6012

Sample ID	Sample Date	Sample Time	Matrix (1) / Container (2)	Number of Containers	Preservative Y/N	Volatiles (EPA 8260)	Total Organic Carbon (EPA 415.2)	Pesticides/PCBs (EPA 8081/8082)	Metals (EPA 6020)		Oil and Grease (EPA 413.1)	Radium-226 (DOE 300)	Strontium-90 (905.0 M)	Carbon-14 (EPAEERFC-01)	Tritium (906.0M)	Nitrate (300.0)	TDS (EPA 160.1)	TSS (EPA 160.2)								Additional Comments
RWSW0049	12/15/08	8:42	W/P	1	X								X													
RWSW0049			W/P	1	X				X																	
RWSW0049			W/G	1	Y		X																			
RWSW0049			W/G	2	Y						X															
RWSW0049			W/P	1	NO											X	X	X								

Turnaround Time: **30 Days**

4 of 4

Signature	Company	Date	Time
Relinquished by: DMB	WEISS	12/15/08	1245
Received by: Heather Shaffer	GEL	12/16/08	0955
Relinquished by:			
Received by:			
Relinquished by:			
Received by:			

(1) Matrix: S - Soil, W - Water, O - Other (describe)
(2) Container:
V = VOA Vial
P = Polyethylene Bottle
G = Glass Bottle/Jar
T = BrassTube
O = Other (describe)

Weiss Associates Environmental Science, Engineering and Management
5801 Christie Avenue, Suite 600, Emeryville, CA 94608-1939 Fax: 510-547-5043 Phone: 510-450-6000

LEHR Chain-of-Custody Record

Lab Name: General Engineering Labs
Lab Address: 2040 Savage Road
Charleston, SC 29407
Lab Login:

Project Name: LEHR/RWSW
Project Number: 130-4113-139-1
Sampled by: DMD
Samplers Signature: MBy

Control Number: LEHR-RWSW
Send Results To: Tim Utterback
Email: data@weiss.com
Fax: (510) 547-5043

Fedex # 8473 3152 5998

Sample ID	Sample Date	Sample Time	Matrix (1) / Container (2)	Number of Containers	Preservative Y/N	Volatiles (EPA 8260)	Total Organic Carbon (EPA 415.2)	Pesticides/PCBs (EPA 8081/8082)	Metals (EPA 6020)		Oil and Grease (EPA 413.1)	Radium-226 (DOE 300)	Strontium-90 (905.0 M)	Carbon-14 (EPAEERFC-01)	Tritium (906.0M)	Nitrate (300.0)	TDS (EPA 160.1)	TSS (EPA 160.2)								Additional Comments
RWSW 0048	12-5-08	840	W/P	1	Y								X													
RWSW 0048	12-5-08		W/P	1	Y				X																	
RWSW 0048			W/G	1	Y		X																			
RWSW 0048			W/G	2	Y						X															
RWSW 0048			W/P	1	N											X	X	X								

Analysis Requested

Turnaround Time: **30 Days**

2 of 4

Signature	Company	Date	Time
Relinquished by: MBy DMB	WEISS	12-5-08	1440
Received by: Beatrice Snyder	GEL	12/16/08	0955
Relinquished by:			
Received by:			
Relinquished by:			
Received by:			

(1) Matrix: S - Soil, W - Water, O - Other (describe)
(2) Container:
V = VOA Vial
P = Polyethylene Bottle
G = Glass Bottle/Jar
T = BrassTube
O = Other (describe)

Weiss Associates Environmental Science, Engineering and Management
5801 Christie Avenue, Suite 600, Emeryville, CA 94608-1939 Fax: 510-547-5043 Phone: 510-450-6000

LEHR Chain-of-Custody Record

Lab Name: General Engineering Labs
Lab Address: 2040 Savage Road
Charleston, SC 29407
Lab Login:

Project Name: LEHR/RWSW
Project Number: 130-4113-139-1
Sampled by: DMB
Samplers Signature: MBy

Control Number: LEHR-RWSW
Send Results To: Tim Utterback
Email: data@weiss.com
Fax: (510) 547-5043

FedEx # 8473 3152 6001

Sample ID	Sample Date	Sample Time	Matrix (1) / Container (2)	Number of Containers	Preservative Y/N	Volatiles (EPA 8260)	Total Organic Carbon (EPA 415.2)	Pesticides/PCBs (EPA 8081/8082)	Metals (EPA 6020)		Oil and Grease (EPA 413.1)	Radium-226 (DOE 300)	Strontium-90 (905.0 M)	Carbon-14 (EPAEERFC-01)	Tritium (906.0M)	Nitrate (300.0)	TDS (EPA 160.1)	TSS (EPA 160.2)								Additional Comments
RWSW 0048	12-17-08	840	W / V	3	X	X																				Turnaround Time: 30 Days
RWSW 0048			W / A	2	n			X																		
RWSW 0048			W / B	1	n										X											
RWSW 0048			W / P	1	n									X												
RWSW 0048			W / P	1	X							X														
RWSW0048TB		430	W / V	1	X	X																				

3 of 4

Signature	Company	Date	Time
Relinquished by: MBy DMB	Weiss	12-15-08	1245
Received by: Deedee Smaller	GEL	12/16/08	0955
Relinquished by:			
Received by:			
Relinquished by:			
Received by:			

(1) Matrix: S - Soil, W - Water, O - Other (describe)
(2) Container:
V = VOA Vial
P = Polyethylene Bottle
G = Glass Bottle/Jar
T = BrassTube
O = Other (describe)

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: Weiss	**SDG/ARCOC/Work Order:**
Received By: HS	**Date Received:** 12/16/08

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
COC/Samples marked as radioactive?		✓	Maximum Counts Observed*: 20CPM
Classified Radioactive II or III by RSO?		✓	
COC/Samples marked containing PCBs?		✓	
Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		✓	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within 0 ≤ 6 deg. C?	✓			Preservation Method: blue ice dry ice none other (describe) ice bags See Below
3	Chain of custody documents included with shipment?	✓			
4	Sample containers intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?	✓			Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?	✓			Sample ID's and containers affected:
7	Are Encore containers present?			✓	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	✓			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Sample ID's affected:
11	Number of containers received match number indicated on COC?	✓			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	✓			

Comments: Fed ex 847331526001 4°
847331525987 5°
847331525998 4°
847331526012 3°

PM (or PMA) review: Initials EM Date 12/16/08

Subject: Method Updates
From: Edith Kent <emk@gel.com>
Date: Wed, 17 Dec 2008 08:32:48 -0500
To: Tim Utterback <tru@weiss.com>
CC: Cheryl Duffy <Cheryl.Duffy@gel.com>, Heather Shaffer <heather.shaffer@gel.com>

Tim:
Attached is a list of the methods that were updated in the Federal Register. The only method where the preservation has changed is the Oil and Grease method. For that method, we need HCl preservation rather than H2SO4 preservation. The bottle requirements are the same.

Edie

--

Edith M. Kent
Project Manager
GEL Laboratories, LLC
2040 Savage Road
Charleston, SC (USA) 29407
Direct: 843.769.7385 x4453
Main: 843.556.8171
Fax: 843.766.1178
E-mail: emk@gel.com
Web: www.gel.com

gchem_update.pdf	**Content-Type:** application/pdf **Content-Encoding:** base64

Subject: Re: Oil & Grease Method
From: Edie Kent <emk@gel.com>
Date: Wed, 17 Dec 2008 18:18:03 -0500
To: "Tim R. Utterback" <tru@weiss.com>
CC: Cheryl Duffy <Cheryl.Duffy@gel.com>, Heather Shaffer <heather.shaffer@gel.com>, Jamie Johnson <Jamie.Johnson@gel.com>, Martha Harrison <Martha.Harrison@gel.com>

Tim:
We will log the samples in using method 1664 and report with the NCR.

Edie

Tim R. Utterback wrote:

> Edie,
> Please proceed with the oil and grease analysis.
> -Tim
>
> > > > Edie Kent <emk@gel.com> 12/17/2008 1:56 pm >>>
>
> Tim:
> We really don't know what impact it has, if any. We could analyze it
> as non-conforming to the method but whether it will give you reliable results we don't
> know.
>
> Edie
>
> Tim R. Utterback wrote:
>
> > Edie,
> > How does sulfuric acid preservation cause problems with the new
> > method?
> > -Tim
> >
> > > > > Edie Kent <emk@gel.com> 12/17/2008 7:43 am >>>
> >
> > Tim:
> > I checked with our Quality department. We do not have a lab under subcontract that
> > is certified in the state of California to perform
>
> Oil
>
> > and Grease method 413.1. Also, our Quality Officer who handles our certifications
> > said that method 413.1 has been removed from the state
> > of California certification application so she does not believe that California is
> > accepting that method anymore. Do you want us to
>
> return
>
> > the Oil and Grease containers to see if you have a lab that can do

> that
>
> > method will you just cancel the Oil and Grease test?
> >
> > Edie

--
Edith M. Kent
Project Manager
GEL Laboratories, LLC
2040 Savage Road
Charleston, SC (USA) 29407
Direct: 843.769.7385 x4453
Main: 843.556.8171
Fax: 843.766.1178
E-mail: emk@gel.com
Web: www.gel.com

Subject: [Fwd: Stormwater Sample Purchase Order Info]
From: Cheryl Duffy <Cheryl.Duffy@gel.com>
Date: Tue, 16 Dec 2008 14:07:54 -0500
To: Edith Kent <emk@gel.com>

--
Cheryl Duffy
Project Manager Assistant
GEL Laboratories, LLC
2040 Savage Road
Charleston, SC (USA) 29407
Direct: 843.769.7372
Main: 843.556.8171 x4433
Fax: 843.766.1178
E-mail: cheryl.duffy@gel.com
Web: www.gel.com

Subject: Stormwater Sample Purchase Order Info
From: "Tim R. Utterback" <tru@weiss.com>
Date: Tue, 16 Dec 2008 11:08:58 -0800
To: "Cheryl Duffy" <Cheryl.Duffy@gel.com>

Cheryl,
The purchase order number for the stormwater samples you received today is: 130-4110-05-P-C074, Modification No. 3.
Please have the new PM send the method and sample preservation information we discussed.
Thanks,
-Tim

Stormwater Sample Purchase Order Info.eml	**Content-Type:** message/rfc822 **Content-Encoding:** 7bit

Subject: Re: Stormwater Sample Purchase Order Info
From: "Tim R. Utterback" <tru@weiss.com>
Date: Tue, 16 Dec 2008 11:53:55 -0800
To: "Cheryl Duffy" <Cheryl.Duffy@gel.com>
CC: "Edith Kent" <emk@gel.com>

Cheryl, Edith,
Mercury is not requested. Please proceed with PCBs and pesticides by
8081.
Thanks,
-Tim

> Cheryl Duffy <Cheryl.Duffy@gel.com> 12/16/2008 11:23 am >>>

Tim,

Also, please confirm that you do not require Mercury for the samples
received today. Metals by 6020 is listed but, we would like to confirm

the absence of Mercury. We have also in the past performed the PCB's
and Pesticides by 8081. Your request indicates 8081 and 8082. Please

clarify which method you would require.

Thank you
Cheryl Duffy

Tim R. Utterback wrote:

> Cheryl,
> The purchase order number for the stormwater samples you received
today
> is: 130-4110-05-P-C074, Modification No. 3.
> Please have the new PM send the method and sample preservation
> information we discussed.
> Thanks,
> -Tim

--
Cheryl Duffy
Project Manager Assistant
GEL Laboratories, LLC
2040 Savage Road
Charleston, SC (USA) 29407
Direct: 843.769.7372
Main: 843.556.8171 x4433
Fax: 843.766.1178
E-mail: cheryl.duffy@gel.com
Web: www.gel.com

Data Review Qualifier Definitions

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

Laboratory Certifications

List of current GEL Certifications as of 14 January 2009

State	Certification
Arizona	AZ0668
Arkansas	88-0651
CLIA	42D0904046
California – NELAP	01151CA
Colorado	GEL
Connecticut	PH-0169
Dept. of Navy	NFESC 413
EPA Region 5	WG-15J
Florida – NELAP	E87156
Georgia	E87156 FL/NELAP
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois – NELAP	200029
Indiana	C-SC-01
Kansas – NELAP	E-10332
Kentucky	90129
Louisiana – NELAP	03046
Maryland	270
Massachusetts	M-SC012
Nevada	SC00012
New Jersey – NELAP	SC002
New Mexico	FL NELAP E87156
New York – NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania – NELAP	68-00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas – NELAP	T104704235-07B-TX
U.S. Dept. of Agriculture	S-52597
Utah – NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

GC/MS Volatile Analysis

GC/MS Volatile Organics
Weiss Associates (WEIS)
SDG 221329

Method/Analysis Information

Procedure: Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer
Analytical Method: SW846 8260B
Prep Method: SW846 5030B
Analytical Batch Number: 828777

Sample Analysis

The following client and quality control samples were analyzed to complete this SDG using the methods referenced in the Analysis Information section:

Sample ID	Client ID
221329001	RWSW0049
221329002	RWSW0048
221329003	RWSW0048TB
1201747465	Method Blank (MB)
1201747466	Laboratory Control Sample (LCS)
1201747467	221329001(RWSW0049) Post Spike (PS)
1201747468	221329001(RWSW0049) Post Spike Duplicate (PSD)

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.
The samples in this SDG were analyzed on an "as received" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 12.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 19.1.2.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

The surrogate compounds were calibrated using a minimum five-point calibration curve. The surrogates were added by the auto sampler at a concentration of 50 ug/L. GEL Laboratories LLC will not have surrogate recoveries reported for Dibromofluoromethane. This is due to increased regulations for this analyte and an industry shortage.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Initial Calibration
All initial calibration requirements have been met for this sample delivery groups (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

Continuing Calibration Verification Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
Surrogate recoveries, in all samples and quality control samples, were within the acceptance limits.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 221329001 (RWSW0049) was designated for spike analysis in this SDG.

Matrix Spike (PS) Recovery Statement
The spike recoveries for this SDG were within the required acceptance limits.

Matrix Spike Duplicate (PSD) Recovery Statement
The spike duplicate recoveries for this SDG were within the required acceptance limits.

Relative Percent Difference (RPD) Statement
The RPD(s) between the matrix spike pair met the acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standard responses, in all samples and quality control samples, met the required acceptance criteria.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Preservation and Integrity
All samples met the sample preservation and integrity requirements.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-analyses were not required for samples in this SDG except for dilutions and/or confirmations.

Miscellaneous Information

Electronic Package Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
A nonconformance report was not required for this SDG.

Manual Integrations
Data files associated with the initial calibration, continuing calibration check, and samples did not require manual integrations.

TIC Comment
Tentatively identified compounds (TIC) were not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Residual Chlorine
Residual Chlorine was not detected in any of the samples in this SDG.

System Configuration
The Volatile-GC/MS analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description	P & T Trap
VOA5.I	Volatile Organic Analysis by Gas Chromotography/Mass Spectroscopy	HP5890/HP5972	J&W1	DB-624, 60m x 0.25mm, 1.4um	Trap 10

Certification Statement
When the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Erin Haubert Date: 01/13/09

Roadmap for WEIS 221329 VOA

This roadmap was analyzed by dav01267 on 12-31-2008, 15:16.
This roadmap was reviewed by dav01267 on 01-12-2009, 08:36.
This roadmap was reviewed by CRY00643 on 01-12-2009, 08:45.

Sample

exclude	manual	datafile	smpid	clientid	injdate	injtime	sublist	dilution	batchid	comment
☐	N	/chem/VOA5.i/122408v5/5q312.d	221329001	RWSW0049	24-DEC-2008	14:35	221329.sub	1	828777	
☐	N	/chem/VOA5.i/122408v5/5q313.d	221329002	RWSW0048	24-DEC-2008	15:00	221329.sub	1	828777	
☐	N	/chem/VOA5.i/122408v5/5q314.d	221329003	RWSW0048TB	24-DEC-2008	15:25	221329.sub	1	828777	

QC Sample

exclude	manual	datafile	smpid	clientid	sampletype	injdate	injtime	sublist	dilution	batchid	comment
☐	N	/chem/VOA5.i/122408v5/5q302LW.d	1201747466	LCS	lcs	24-DEC-2008	10:23	all.sub	1	828777	
☐	N	/chem/VOA5.i/122408v5/5q305BW.d	1201747465	MB	mb	24-DEC-2008	11:39	all.sub	1	828777	
☐	N	/chem/VOA5.i/122408v5/5q323.d	1201747467	RWSW0049MS	ms	24-DEC-2008	19:12	221329.sub	1	828777	
☐	N	/chem/VOA5.i/122408v5/5q324.d	1201747468	RWSW0049MSD	msd	24-DEC-2008	19:37	221329.sub	1	828777	

Sample Data Summary

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	221329	**Date Collected:**	12/15/2008 08:40	**Matrix:**	WATER
Lab Sample ID:	221329002	**Date Received:**	12/16/2008 09:55		
		Client:	WEIS001	**Project:**	WEIS00405
Client ID:	RWSW0048	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	828777	**Inst:**	VOA5.I	**Dilution:**	1
Run Date:	12/24/2008 15:00	**Analyst:**	DXK1	**Purge Vol:**	5 mL
Prep Date:	12/24/2008 15:00				
Data File:	5q313.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
74-87-3	Chloromethane	U	1.00	ug/L	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/L	0.500	1.00
74-83-9	Bromomethane	U	1.00	ug/L	0.500	1.00
75-00-3	Chloroethane	U	1.00	ug/L	0.300	1.00
67-64-1	Acetone	J	2.46	ug/L	1.50	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/L	0.300	1.00
75-09-2	Methylene chloride	U	5.00	ug/L	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/L	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/L	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/L	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/L	1.25	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/L	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/L	0.250	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/L	0.325	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/L	0.260	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/L	0.250	1.00
71-43-2	Benzene	U	1.00	ug/L	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/L	0.250	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/L	0.250	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/L	0.250	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/L	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00
108-88-3	Toluene	U	1.00	ug/L	0.250	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/L	0.250	1.00
591-78-6	2-Hexanone	U	5.00	ug/L	1.25	5.00
127-18-4	Tetrachloroethylene	U	1.00	ug/L	0.450	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/L	0.260	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/L	0.250	1.00
108-90-7	Chlorobenzene	U	1.00	ug/L	0.250	1.00
100-41-4	Ethylbenzene	U	1.00	ug/L	0.250	1.00
100-42-5	Styrene	U	1.00	ug/L	0.250	1.00
75-25-2	Bromoform	U	1.00	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/L	0.250	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/L	0.500	1.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	0.600	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	221329	**Date Collected:**	12/15/2008 08:40	**Matrix:**	WATER
Lab Sample ID:	221329002	**Date Received:**	12/16/2008 09:55		
		Client:	WEIS001	**Project:**	WEIS00405
Client ID:	RWSW0048	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	828777	**Inst:**	VOA5.I	**Dilution:**	1
Run Date:	12/24/2008 15:00	**Analyst:**	DXK1	**Purge Vol:**	5 mL
Prep Date:	12/24/2008 15:00				
Data File:	5q313.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	221329	**Date Collected:**	12/15/2008 16:30	**Matrix:**	WATER
Lab Sample ID:	221329003	**Date Received:**	12/16/2008 09:55		
		Client:	WEIS001	**Project:**	WEIS00405
Client ID:	RWSW0048TB	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	828777	**Inst:**	VOA5.I	**Dilution:**	1
Run Date:	12/24/2008 15:25	**Analyst:**	DXK1	**Purge Vol:**	5 mL
Prep Date:	12/24/2008 15:25				
Data File:	5q314.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
74-87-3	Chloromethane	U	1.00	ug/L	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/L	0.500	1.00
74-83-9	Bromomethane	U	1.00	ug/L	0.500	1.00
75-00-3	Chloroethane	U	1.00	ug/L	0.300	1.00
67-64-1	Acetone	U	5.00	ug/L	1.50	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/L	0.300	1.00
75-09-2	Methylene chloride	U	5.00	ug/L	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/L	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/L	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/L	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/L	1.25	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/L	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/L	0.250	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/L	0.325	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/L	0.260	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/L	0.250	1.00
71-43-2	Benzene	U	1.00	ug/L	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/L	0.250	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/L	0.250	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/L	0.250	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/L	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00
108-88-3	Toluene	U	1.00	ug/L	0.250	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/L	0.250	1.00
591-78-6	2-Hexanone	U	5.00	ug/L	1.25	5.00
127-18-4	Tetrachloroethylene	U	1.00	ug/L	0.450	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/L	0.260	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/L	0.250	1.00
108-90-7	Chlorobenzene	U	1.00	ug/L	0.250	1.00
100-41-4	Ethylbenzene	U	1.00	ug/L	0.250	1.00
100-42-5	Styrene	U	1.00	ug/L	0.250	1.00
75-25-2	Bromoform	U	1.00	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/L	0.250	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/L	0.500	1.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	0.600	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	221329	Date Collected:	12/15/2008 16:30	Matrix:	WATER
Lab Sample ID:	221329003	Date Received:	12/16/2008 09:55		
		Client:	WEIS001	Project:	WEIS00405
Client ID:	RWSW0048TB	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	828777	Inst:	VOA5.I	Dilution:	1
Run Date:	12/24/2008 15:25	Analyst:	DXK1	Purge Vol:	5 mL
Prep Date:	12/24/2008 15:25				
Data File:	5q314.d	Column:	DB-624	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	221329	**Date Collected:**	12/15/2008 08:42	**Matrix:**	WATER
Lab Sample ID:	221329001	**Date Received:**	12/16/2008 09:55		
		Client:	WEIS001	**Project:**	WEIS00405
Client ID:	RWSW0049	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	828777	**Inst:**	VOA5.I	**Dilution:**	1
Run Date:	12/24/2008 14:35	**Analyst:**	DXK1	**Purge Vol:**	5 mL
Prep Date:	12/24/2008 14:35				
Data File:	5q312.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
74-87-3	Chloromethane	U	1.00	ug/L	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/L	0.500	1.00
74-83-9	Bromomethane	U	1.00	ug/L	0.500	1.00
75-00-3	Chloroethane	U	1.00	ug/L	0.300	1.00
67-64-1	Acetone	J	2.18	ug/L	1.50	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/L	0.300	1.00
75-09-2	Methylene chloride	U	5.00	ug/L	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/L	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/L	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/L	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/L	1.25	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/L	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/L	0.250	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/L	0.325	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/L	0.260	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/L	0.250	1.00
71-43-2	Benzene	U	1.00	ug/L	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/L	0.250	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/L	0.250	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/L	0.250	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/L	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00
108-88-3	Toluene	U	1.00	ug/L	0.250	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/L	0.250	1.00
591-78-6	2-Hexanone	U	5.00	ug/L	1.25	5.00
127-18-4	Tetrachloroethylene	U	1.00	ug/L	0.450	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/L	0.260	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/L	0.250	1.00
108-90-7	Chlorobenzene	U	1.00	ug/L	0.250	1.00
100-41-4	Ethylbenzene	U	1.00	ug/L	0.250	1.00
100-42-5	Styrene	U	1.00	ug/L	0.250	1.00
75-25-2	Bromoform	U	1.00	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/L	0.250	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/L	0.500	1.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	0.600	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	221329	**Date Collected:**	12/15/2008 08:42	**Matrix:**	WATER
Lab Sample ID:	221329001	**Date Received:**	12/16/2008 09:55		
		Client:	WEIS001	**Project:**	WEIS00405
Client ID:	RWSW0049	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	828777	**Inst:**	VOA5.I	**Dilution:**	1
Run Date:	12/24/2008 14:35	**Analyst:**	DXK1	**Purge Vol:**	5 mL
Prep Date:	12/24/2008 14:35				
Data File:	5q312.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/L	0.250	1.00

QC Summary

Volatile

Surrogate Recovery Report

SDG Number: 221329

Matrix Type: LIQUID

CAP Column (1) : DB-624

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1201747466	LCS for batch 828777	97	100	100
1201747465	MB for batch 828777	96	101	105
221329001	RWSW0049	95	98	101
221329002	RWSW0048	92	96	98
221329003	RWSW0048TB	93	96	97
1201747467	RWSW0049||PS	91	95	96
1201747468	RWSW0049||PSD	94	96	97

Surrogate		Acceptance Limits
DCED4	= 1,2-Dichloroethane-d4	(67%-126%)
TOL	= Toluene-d8	(77%-128%)
BFB	= Bromofluorobenzene	(76%-121%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 221329
Client ID: LCS for batch 828777
Lab Sample ID: 1201747466
Instrument: VOA5.I
Analyst: DXK1
Purge Vol: 5 mL

Sample Type: Laboratory Control Sample
Matrix: WATER
Analysis Date: 12/24/2008 10:23
Dilution: 1
Prep Batch ID: 828777
Batch ID: 828777

CAS No	Parmname	Amount Added ug/L	Sample Conc. ug/L	Spike Conc. ug/L	Recovery %	Acceptance Limits
75-35-4	LCS 1,1-Dichloroethylene	50.0	0.0	51.8	104	73-127
71-43-2	LCS Benzene	50.0	0.0	48.8	98	75-119
79-01-6	LCS Trichloroethylene	50.0	0.0	53.4	107	76-124
108-88-3	LCS Toluene	50.0	0.0	51.2	102	75-120
108-90-7	LCS Chlorobenzene	50.0	0.0	52.5	105	78-116

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 221329 **Sample Type:** Post Spike

Client ID: RWSW0049||PS **Matrix:** WATER

Lab Sample ID: 1201747467

Instrument: VOA5.I **Analysis Date:** 12/24/2008 19:12 **Dilution:** 1

Analyst: DXK1 **Prep Batch ID:** 828777

Purge Vol: 5 mL **Batch ID:** 828777

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits
75-35-4	PS	1,1-Dichloroethylene	50.0	0.00	U	43.7	87	69-123
71-43-2	PS	Benzene	50.0	0.00	U	42.8	86	70-115
79-01-6	PS	Trichloroethylene	50.0	0.00	U	45.5	91	68-125
108-88-3	PS	Toluene	50.0	0.00	U	45.9	92	69-118
108-90-7	PS	Chlorobenzene	50.0	0.00	U	47.4	95	78-113

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 221329 **Sample Type:** Post Spike Duplicate

Client ID: RWSW0049||PSD **Matrix:** WATER

Lab Sample ID: 1201747468

Instrument: VOA5.I **Analysis Date:** 12/24/2008 19:37 **Dilution:** 1

Analyst: DXK1 **Prep Batch ID:** 828777

Purge Vol: 5 mL **Batch ID:** 828777

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
75-35-4	PSD	1,1-Dichloroethylene	50.0	0.00	U	45.1	90	69-123	3	0-20
71-43-2	PSD	Benzene	50.0	0.00	U	43.9	88	70-115	3	0-20
79-01-6	PSD	Trichloroethylene	50.0	0.00	U	46.8	94	68-125	3	0-20
108-88-3	PSD	Toluene	50.0	0.00	U	45.9	92	69-118	0	0-20
108-90-7	PSD	Chlorobenzene	50.0	0.00	U	48.2	96	78-113	2	0-20

Method Blank Summary

SDG Number:	221329	Client:	WEIS001	Matrix:	WATER
Client ID:	MB for batch 828777	Instrument ID:	VOA5.I	Data File:	5q305BW.d
Lab Sample ID:	1201747465	Prep Date:	12/24/2008 11:39	Analyzed:	12/24/08 11:39
Column:	DB-624	Heated Purge:	Yes		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 828777	1201747466	5q302LW.d	12/24/08	1023
02 RWSW0049	221329001	5q312.d	12/24/08	1435
03 RWSW0048	221329002	5q313.d	12/24/08	1500
04 RWSW0048TB	221329003	5q314.d	12/24/08	1525
05 RWSW0049||PS	1201747467	5q323.d	12/24/08	1912
06 RWSW0049||PSD	1201747468	5q324.d	12/24/08	1937

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 221329

Instrument ID: VOA5.I **Injection Date/Time:** 19-DEC-08 16:53

Column Description: db624 **Lab File ID** /121908v5/5p511.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 – 40.0% of mass 95	22.7
75	30.0 – 60.0% of mass 95	50
96	5.0 – 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.8
174	50.0 – 100.0% of mass 95	79.9
175	5.0 –9.0% of mass 174	7.3
176	95.0 – 101.0% of mass 174	96.4
177	5.0 – 9.0% of mass 176	6.5

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD0005	W5VM081219-01	/121908v5/5p512.d	19-DEC-08 17:21
VSTD001	W5VM081219-02	/121908v5/5p513.d	19-DEC-08 17:46
VSTD002	W5VM081219-03	/121908v5/5p514.d	19-DEC-08 18:11
VSTD005	W5VM081219-04	/121908v5/5p515.d	19-DEC-08 18:36
VSTD010	W5VM081219-05	/121908v5/5p516.d	19-DEC-08 19:01
VSTD020	W5VM081219-06	/121908v5/5p517.d	19-DEC-08 19:27
VSTD050	W5VM081219-07	/121908v5/5p518.d	19-DEC-08 19:52
VSTD100	W5VM081219-08	/121908v5/5p519.d	19-DEC-08 20:17
LICV	W5VM081219-10	/121908v5/5p522.d	19-DEC-08 21:32
VSTD005	W5VM081219-11	/121908v5/5p523.d	19-DEC-08 21:58
VSTD010	W5VM081219-12	/121908v5/5p524.d	19-DEC-08 22:23
VSTD025	W5VM081219-13	/121908v5/5p525.d	19-DEC-08 22:48
VSTD050	W5VM081219-14	/121908v5/5p526.d	19-DEC-08 23:13
VSTD100	W5VM081219-15	/121908v5/5p527.d	19-DEC-08 23:38
VSTD250	W5VM081219-16	/121908v5/5p528.d	20-DEC-08 00:03
VSTD500	W5VM081219-17	/121908v5/5p529.d	20-DEC-08 00:28
SICV	W5VM081219-18	/121908v5/5p531.d	20-DEC-08 01:19

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC **Client SDG:** 221329

Instrument ID: VOA5.I **Injection Date/Time:** 24-DEC-08 09:58

Column Description: db624 **Lab File ID** /122408v5/5q301.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 – 40.0% of mass 95	24
75	30.0 – 60.0% of mass 95	50.7
96	5.0 – 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.7
174	50.0 – 100.0% of mass 95	72.8
175	5.0 –9.0% of mass 174	7.4
176	95.0 – 101.0% of mass 174	95.5
177	5.0 – 9.0% of mass 176	6.6

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050	UVM081214-01A	/122408v5/5q302.d	24-DEC-08 10:23
LCS	1201747466	/122408v5/5q302LW.d	24-DEC-08 10:23
MB	1201747465	/122408v5/5q305BW.d	24-DEC-08 11:39
RWSW0049	221329001	/122408v5/5q312.d	24-DEC-08 14:35
RWSW0048	221329002	/122408v5/5q313.d	24-DEC-08 15:00
RWSW0048TB	221329003	/122408v5/5q314.d	24-DEC-08 15:25
RWSW0049MS	1201747467	/122408v5/5q323.d	24-DEC-08 19:12
RWSW0049MSD	1201747468	/122408v5/5q324.d	24-DEC-08 19:37

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Instrument: VOA5.I

GC Column: DB-624

Client SDG: 221329

STD Analysis Time: 24-DEC-08 10:23

Data File: /chem/VOA5.i/122408v5/5q302.d

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	1407225		10.5	1061126		13.7	569637		16.1
Upper Limit	2814450		11.0	2122252		14.2	1139274		16.6
Lower Limit	703612.5		10.0	530563		13.2	284818.5		15.6
Sample ID									
BLK01LCS	1407225		10.5	1061126		13.7	569637		16.1
BLK01	1430618		10.5	1039139		13.7	516667		16.1
RWSW0049	1242326		10.5	897675		13.7	444400		16.1
RWSW0048	1263266		10.5	920577		13.7	459587		16.1
RWSW0048TB	1277953		10.5	927080		13.7	465209		16.1
RWSW0049MS	1458930		10.5	1085189		13.7	567540		16.1
RWSW0049MSD	1429401		10.5	1070832		13.7	563516		16.1

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	221329	**Date Collected:**	12/15/2008 08:40	**Matrix:**	WATER
Lab Sample ID:	221329002	**Date Received:**	12/16/2008 09:55		
		Client:	WEIS001	**Project:**	WEIS00405
Client ID:	RWSW0048	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	828777	**Inst:**	VOA5.I	**Dilution:**	1
Run Date:	12/24/2008 15:00	**Analyst:**	DXK1	**Purge Vol:**	5 mL
Prep Date:	12/24/2008 15:00				
Data File:	5q313.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
74-87-3	Chloromethane	U	1.00	ug/L	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/L	0.500	1.00
74-83-9	Bromomethane	U	1.00	ug/L	0.500	1.00
75-00-3	Chloroethane	U	1.00	ug/L	0.300	1.00
67-64-1	Acetone	J	2.46	ug/L	1.50	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/L	0.300	1.00
75-09-2	Methylene chloride	U	5.00	ug/L	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/L	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/L	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/L	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/L	1.25	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/L	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/L	0.250	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/L	0.325	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/L	0.260	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/L	0.250	1.00
71-43-2	Benzene	U	1.00	ug/L	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/L	0.250	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/L	0.250	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/L	0.250	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/L	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00
108-88-3	Toluene	U	1.00	ug/L	0.250	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/L	0.250	1.00
591-78-6	2-Hexanone	U	5.00	ug/L	1.25	5.00
127-18-4	Tetrachloroethylene	U	1.00	ug/L	0.450	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/L	0.260	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/L	0.250	1.00
108-90-7	Chlorobenzene	U	1.00	ug/L	0.250	1.00
100-41-4	Ethylbenzene	U	1.00	ug/L	0.250	1.00
100-42-5	Styrene	U	1.00	ug/L	0.250	1.00
75-25-2	Bromoform	U	1.00	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/L	0.250	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/L	0.500	1.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	0.600	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	221329	**Date Collected:**	12/15/2008 08:40	**Matrix:**	WATER
Lab Sample ID:	221329002	**Date Received:**	12/16/2008 09:55		
		Client:	WEIS001	**Project:**	WEIS00405
Client ID:	RWSW0048	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	828777	**Inst:**	VOA5.I	**Dilution:**	1
Run Date:	12/24/2008 15:00	**Analyst:**	DXK1	**Purge Vol:**	5 mL
Prep Date:	12/24/2008 15:00				
Data File:	5q313.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/L	0.250	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA5.i/122408v5/5q313.d
Lab Smp Id: 221329002 Client Smp ID: RWSW0048
Inj Date : 24-DEC-2008 15:00
Operator : DXK1 Inst ID: VOA5.i
Smp Info : |221329002|828777|1|VOA|1|
Misc Info : WEIS 5mL pH2
Comment :
Method : /chem/VOA5.i/122408v5/VOA5-8260B-121908.m
Meth Date : 24-Dec-2008 12:56 dav01267 Quant Type: ISTD
Cal Date : 20-DEC-2008 00:03 Cal File: 5p528.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 221329.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 51 Fluorobenzene	96	10.524	10.524	(1.000)	1263266	50.0000	
* 75 Chlorobenzene-d5	117	13.698	13.698	(1.000)	920577	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	16.117	16.117	(1.000)	459587	50.0000	
$ 47 1,2-Dichloroethane-d4	65	10.167	10.167	(0.966)	304368	46.1220	46.1
$ 64 Toluene-d8	98	12.168	12.161	(0.888)	999060	48.1188	48.1
$ 85 Bromofluorobenzene	95	14.890	14.884	(0.924)	404238	49.0731	49.1
13 Acetone	43	7.242	7.235	(0.688)	11371	2.46115	2.5(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

Data file: 5q313.d
Report Date: 12/26/2008 09:29
Lab. ID: 221329002 SampleType: SAMPLE
Injection Date: 24-DEC-2008 15:00
Operator: DXK1 Instrument: VOA5.i
Sample Info: |221329002|828777|1|VOA|1|
Miscellaneous Info: WEIS 5mL pH2
Comment:
Method used: /chem/VOA5.i/122408v5/VOA5-8260B-121908.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 221329
Sample Matrix: WATER

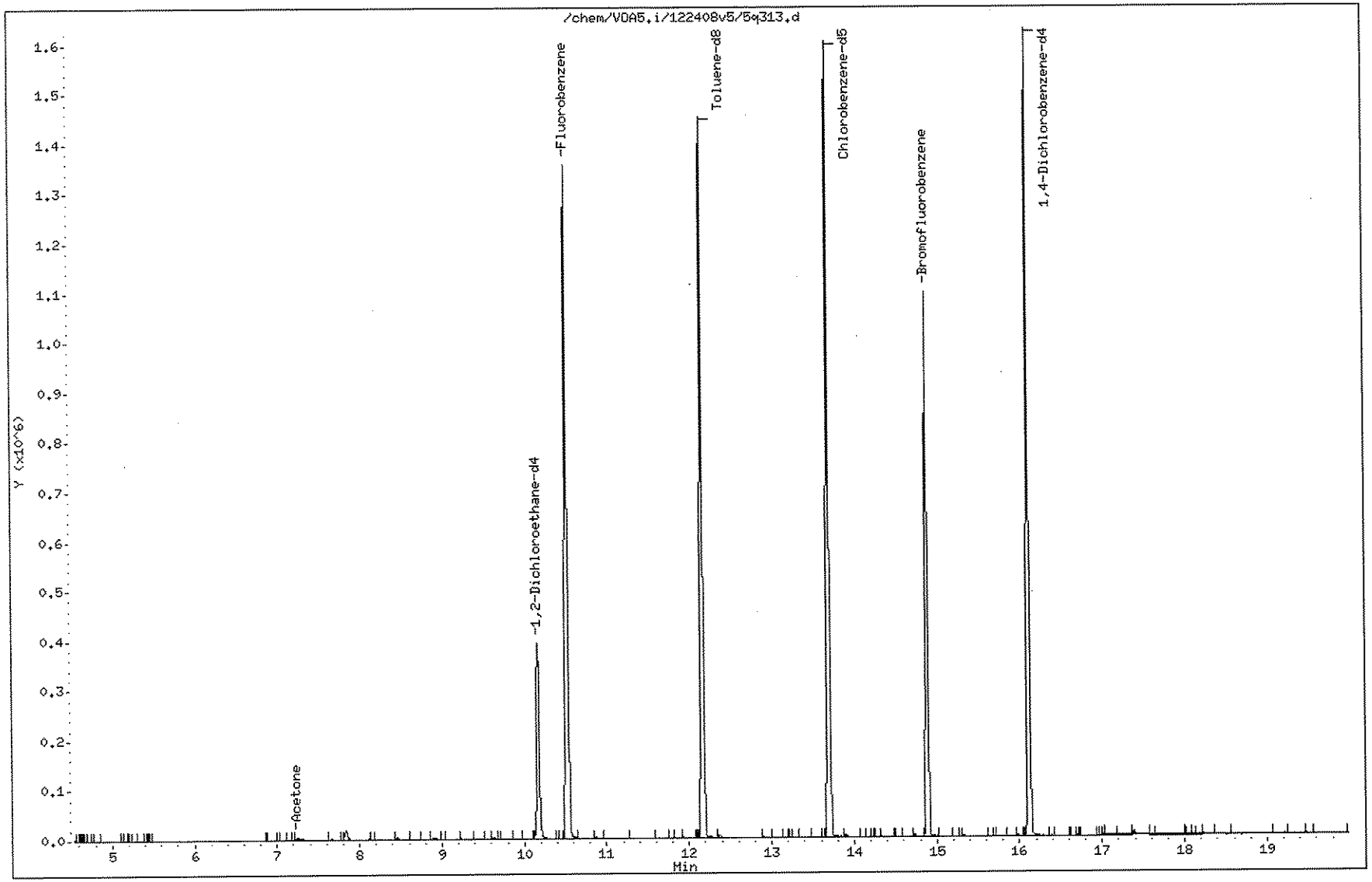
MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
13 Acetone			CAS#: 67-64-1			
43	11371	7.24	7.24	80-120	100	( )
58	2487	7.24	7.24	0- 60	22	( )
48 1,2-Dichloroethane			CAS#: 107-06-2			
62	19906	10.52	10.25	80-120	100	(T)
64	3592	10.53	10.25	2- 62	18	(T)
63 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	10329	12.17	11.93	80-120	100	(T)
43	5695	12.17	11.93	238-298	55	(QT)
100	645629	12.17	11.93	1- 61	6251	(QT)
82 Bromoform			CAS#: 75-25-2			
173	2208	14.89	14.60	80-120	100	(T)
175	22317	14.89	14.60	17- 77	1011	(QT)

Q qualifier indicates ion failed ratio requirement
T qualifier indicates RT outside 0.06 minute window of expected RT

Data File: /chem/VOA5.i/122408v5/5q313.d
Date : 24-DEC-2008 15:00
Client ID: RWSW0048
Sample Info: |221329002|828777|1|VOA|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA5.i

Operator: DXK1
Column diameter: 0.25



Data File: /chem/VOA5.i/122408v5/5q313.d

Date : 24-DEC-2008 15:00

Client ID: RWSW0048

Instrument: VOA5.i

Sample Info: |2213290021828777|1|VOA|1|

Purge Volume: 5.0

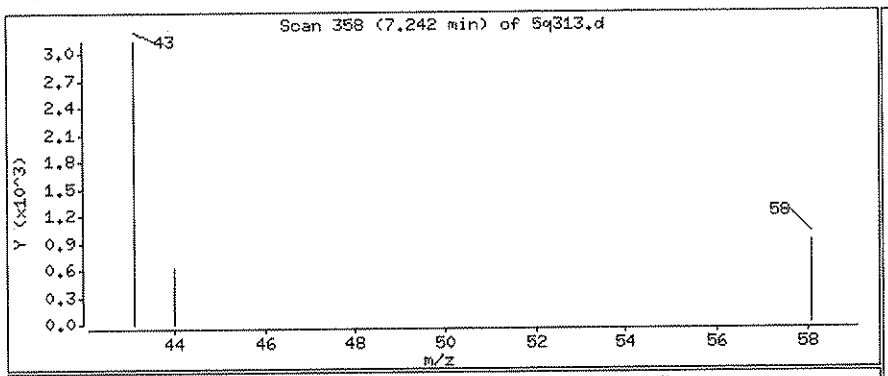
Operator: DXK1

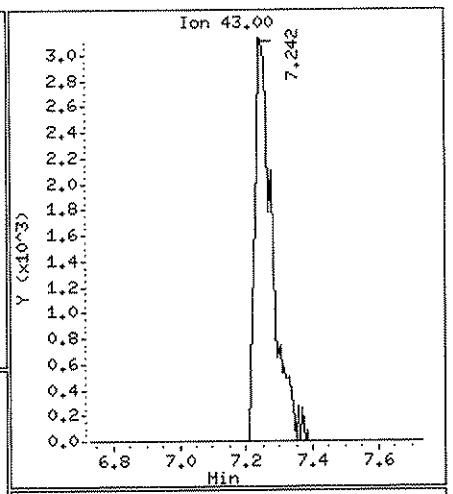
Column phase: DB-624

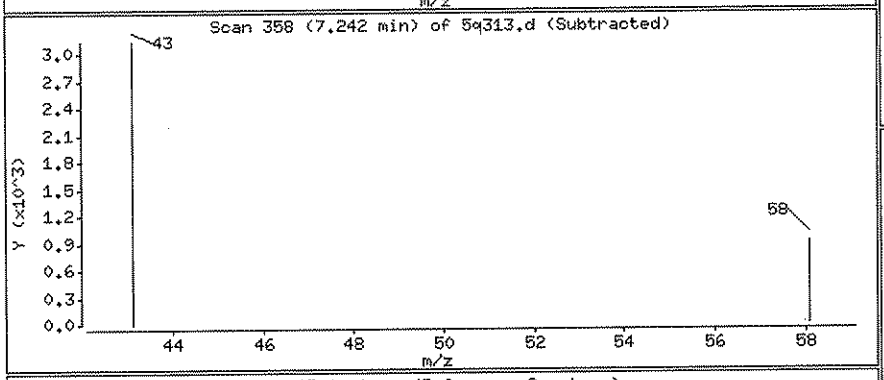
Column diameter: 0.25

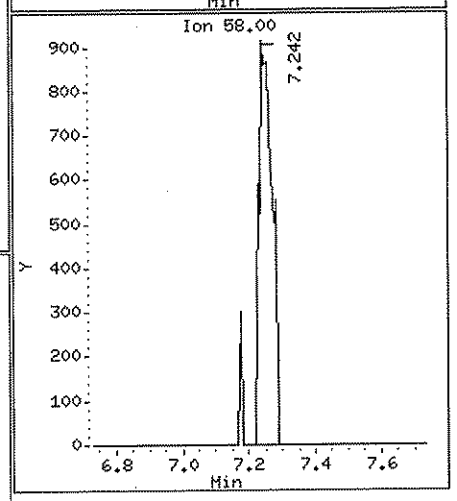
13 Acetone

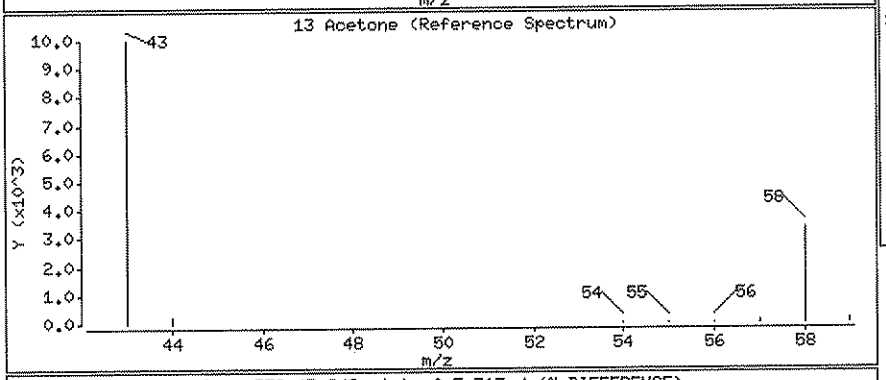
Concentration: 2.5 ug/l

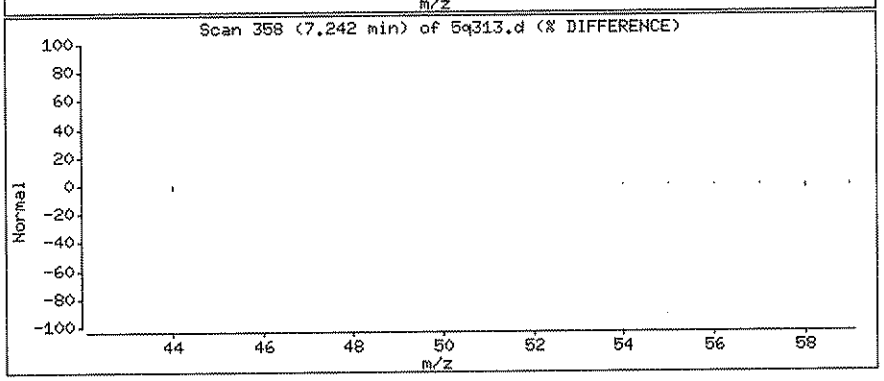












Volatile
Certificate of Analysis
Sample Summary

SDG Number:	221329	**Date Collected:**	12/15/2008 16:30	**Matrix:**	WATER
Lab Sample ID:	221329003	**Date Received:**	12/16/2008 09:55		
		Client:	WEIS001	**Project:**	WEIS00405
Client ID:	RWSW0048TB	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	828777	**Inst:**	VOA5.I	**Dilution:**	1
Run Date:	12/24/2008 15:25	**Analyst:**	DXK1	**Purge Vol:**	5 mL
Prep Date:	12/24/2008 15:25				
Data File:	5q314.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
74-87-3	Chloromethane	U	1.00	ug/L	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/L	0.500	1.00
74-83-9	Bromomethane	U	1.00	ug/L	0.500	1.00
75-00-3	Chloroethane	U	1.00	ug/L	0.300	1.00
67-64-1	Acetone	U	5.00	ug/L	1.50	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/L	0.300	1.00
75-09-2	Methylene chloride	U	5.00	ug/L	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/L	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/L	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/L	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/L	1.25	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/L	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/L	0.250	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/L	0.325	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/L	0.260	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/L	0.250	1.00
71-43-2	Benzene	U	1.00	ug/L	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/L	0.250	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/L	0.250	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/L	0.250	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/L	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00
108-88-3	Toluene	U	1.00	ug/L	0.250	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/L	0.250	1.00
591-78-6	2-Hexanone	U	5.00	ug/L	1.25	5.00
127-18-4	Tetrachloroethylene	U	1.00	ug/L	0.450	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/L	0.260	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/L	0.250	1.00
108-90-7	Chlorobenzene	U	1.00	ug/L	0.250	1.00
100-41-4	Ethylbenzene	U	1.00	ug/L	0.250	1.00
100-42-5	Styrene	U	1.00	ug/L	0.250	1.00
75-25-2	Bromoform	U	1.00	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/L	0.250	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/L	0.500	1.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	0.600	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	221329	Date Collected:	12/15/2008 16:30	Matrix:	WATER
Lab Sample ID:	221329003	Date Received:	12/16/2008 09:55		
		Client:	WEIS001	Project:	WEIS00405
Client ID:	RWSW0048TB	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	828777	Inst:	VOA5.I	Dilution:	1
Run Date:	12/24/2008 15:25	Analyst:	DXK1	Purge Vol:	5 mL
Prep Date:	12/24/2008 15:25				
Data File:	5q314.d	Column:	DB-624	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/L	0.250	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA5.i/122408v5/5q314.d
Lab Smp Id: 221329003 Client Smp ID: RWSW0048TB
Inj Date : 24-DEC-2008 15:25
Operator : DXK1 Inst ID: VOA5.i
Smp Info : |221329003|828777|1|VOA|1|
Misc Info : WEIS 5mL pH2
Comment :
Method : /chem/VOA5.i/122408v5/VOA5-8260B-121908.m
Meth Date : 24-Dec-2008 12:56 dav01267 Quant Type: ISTD
Cal Date : 20-DEC-2008 00:03 Cal File: 5p528.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 221329.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 51 Fluorobenzene	96	10.524	10.524	(1.000)	1277953	50.0000	
* 75 Chlorobenzene-d5	117	13.698	13.698	(1.000)	927080	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	16.117	16.117	(1.000)	465209	50.0000	
$ 47 1,2-Dichloroethane-d4	65	10.167	10.167	(0.966)	310049	46.4429	46.4
$ 64 Toluene-d8	98	12.168	12.161	(0.888)	1006928	48.1575	48.2
$ 85 Bromofluorobenzene	95	14.891	14.884	(0.924)	405776	48.6645	48.7

ION RATIO REPORT

VOA REPORT

Data file: 5q314.d
Report Date: 12/26/2008 09:29
Lab. ID: 221329003 SampleType: SAMPLE
Injection Date: 24-DEC-2008 15:25
Operator: DXK1 Instrument: VOA5.i
Sample Info: |221329003|828777|1|VOA|1|
Miscellaneous Info: WEIS 5mL pH2
Comment:
Method used: /chem/VOA5.i/122408v5/VOA5-8260B-121908.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 221329
Sample Matrix: WATER

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
48 1,2-Dichloroethane			CAS#: 107-06-2			
62	20219	10.52	10.25	80-120	100	(T)
64	3507	10.52	10.25	2- 62	17	(T)
63 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	10122	12.16	11.93	80-120	100	(T)
43	5520	12.17	11.93	238-298	55	(QT)
100	651102	12.17	11.93	1- 61	6433	(QT)
82 Bromoform			CAS#: 75-25-2			
173	2299	14.89	14.60	80-120	100	(T)
175	23196	14.89	14.60	17- 77	1009	(QT)

Q qualifier indicates ion failed ratio requirement
T qualifier indicates RT outside 0.06 minute window of expected RT

Data File: /chem/VOA5.i/122408v5/5q314.d

Date : 24-DEC-2008 15:25

Client ID: RWSW0048TB

Sample Info: |221329003|828777|1|VOA|1|

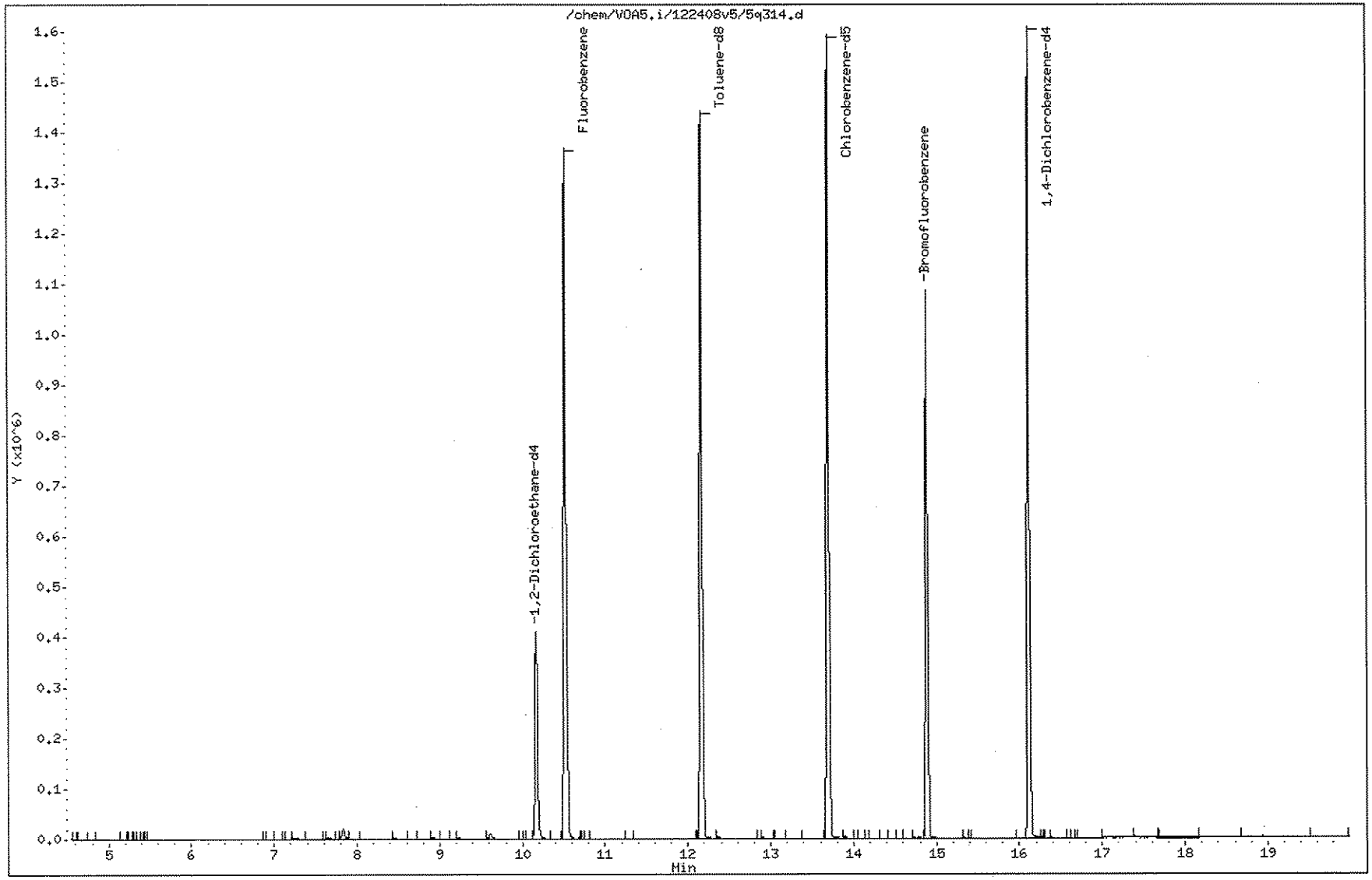
Purge Volume: 5.0

Column phase: DB-624

Instrument: VOA5.i

Operator: DXK1

Column diameter: 0.25



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	221329	**Date Collected:**	12/15/2008 08:42	**Matrix:**	WATER
Lab Sample ID:	221329001	**Date Received:**	12/16/2008 09:55		
		Client:	WEIS001	**Project:**	WEIS00405
Client ID:	RWSW0049	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	828777	**Inst:**	VOA5.I	**Dilution:**	1
Run Date:	12/24/2008 14:35	**Analyst:**	DXK1	**Purge Vol:**	5 mL
Prep Date:	12/24/2008 14:35				
Data File:	5q312.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
74-87-3	Chloromethane	U	1.00	ug/L	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/L	0.500	1.00
74-83-9	Bromomethane	U	1.00	ug/L	0.500	1.00
75-00-3	Chloroethane	U	1.00	ug/L	0.300	1.00
67-64-1	Acetone	J	2.18	ug/L	1.50	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/L	0.300	1.00
75-09-2	Methylene chloride	U	5.00	ug/L	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/L	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/L	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/L	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/L	1.25	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/L	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/L	0.250	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/L	0.325	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/L	0.260	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/L	0.250	1.00
71-43-2	Benzene	U	1.00	ug/L	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/L	0.250	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/L	0.250	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/L	0.250	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/L	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00
108-88-3	Toluene	U	1.00	ug/L	0.250	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/L	0.250	1.00
591-78-6	2-Hexanone	U	5.00	ug/L	1.25	5.00
127-18-4	Tetrachloroethylene	U	1.00	ug/L	0.450	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/L	0.260	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/L	0.250	1.00
108-90-7	Chlorobenzene	U	1.00	ug/L	0.250	1.00
100-41-4	Ethylbenzene	U	1.00	ug/L	0.250	1.00
100-42-5	Styrene	U	1.00	ug/L	0.250	1.00
75-25-2	Bromoform	U	1.00	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/L	0.250	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/L	0.500	1.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	0.600	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	221329	**Date Collected:**	12/15/2008 08:42	**Matrix:**	WATER
Lab Sample ID:	221329001	**Date Received:**	12/16/2008 09:55		
		Client:	WEIS001	**Project:**	WEIS00405
Client ID:	RWSW0049	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	828777	**Inst:**	VOA5.I	**Dilution:**	1
Run Date:	12/24/2008 14:35	**Analyst:**	DXK1	**Purge Vol:**	5 mL
Prep Date:	12/24/2008 14:35				
Data File:	5q312.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/L	0.250	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA5.i/122408v5/5q312.d
Lab Smp Id: 221329001 Client Smp ID: RWSW0049
Inj Date : 24-DEC-2008 14:35
Operator : DXK1 Inst ID: VOA5.i
Smp Info : |221329001|828777|1|VOA|1|
Misc Info : WEIS 5mL pH2
Comment :
Method : /chem/VOA5.i/122408v5/VOA5-8260B-121908.m
Meth Date : 24-Dec-2008 12:56 dav01267 Quant Type: ISTD
Cal Date : 20-DEC-2008 00:03 Cal File: 5p528.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 221329.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 51 Fluorobenzene	96	10.524	10.524	(1.000)	1242326	50.0000	
* 75 Chlorobenzene-d5	117	13.698	13.698	(1.000)	897675	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	16.117	16.117	(1.000)	444400	50.0000	
$ 47 1,2-Dichloroethane-d4	65	10.167	10.167	(0.966)	307128	47.3247	47.3
$ 64 Toluene-d8	98	12.168	12.161	(0.888)	994045	49.0987	49.1
$ 85 Bromofluorobenzene	95	14.890	14.884	(0.924)	402900	50.5821	50.6
13 Acetone	43	7.242	7.235	(0.688)	9895	2.17778	2.2(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

ION RATIO REPORT

VOA REPORT

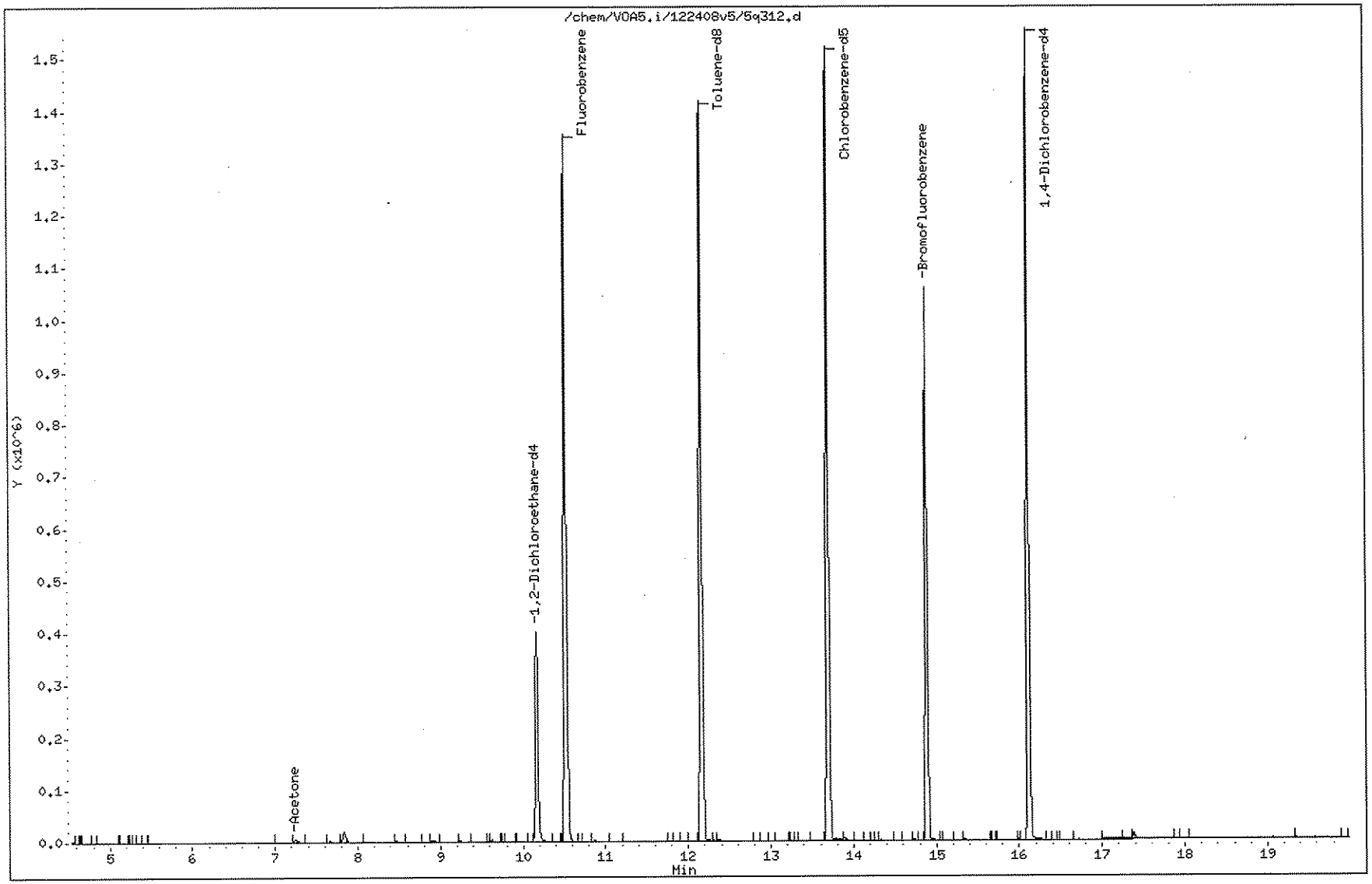
Data file: 5q312.d
Report Date: 12/26/2008 09:29
Lab. ID: 221329001 SampleType: SAMPLE
Injection Date: 24-DEC-2008 14:35
Operator: DXK1 Instrument: VOA5.i
Sample Info: |221329001|828777|1|VOA|1|
Miscellaneous Info: WEIS 5mL pH2
Comment:
Method used: /chem/VOA5.i/122408v5/VOA5-8260B-121908.m
Dilution Factor= 1.0
Integrator: HP RTE Compound Sublist: 221329
Sample Matrix: WATER

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
13 Acetone			CAS#: 67-64-1			
43	9895	7.24	7.24	80-120	100	( )
58	3033	7.26	7.24	0- 60	31	( )
48 1,2-Dichloroethane			CAS#: 107-06-2			
62	20096	10.52	10.25	80-120	100	(T)
64	3490	10.52	10.25	2- 62	17	(T)
63 4-Methyl-2-pentanone			CAS#: 108-10-1			
58	9630	12.17	11.93	80-120	100	(T)
43	5836	12.16	11.93	238-298	61	(QT)
100	644163	12.17	11.93	1- 61	6689	(QT)
80 o-Xylene			CAS#: 95-47-6			
106	2279	13.89	14.33	80-120	100	(T)
91	4361	13.89	14.33	187-247	191	(T)
82 Bromoform			CAS#: 75-25-2			
173	2287	14.89	14.60	80-120	100	(T)
175	22066	14.89	14.60	17- 77	965	(QT)

Q qualifier indicates ion failed ratio requirement
T qualifier indicates RT outside 0.06 minute window of expected RT

Data File: /chem/VOA5.i/122408v5/5q312.d
Date : 24-DEC-2008 14:35
Client ID: RWSW0049
Sample Info: |22132900|828777|1|VOA|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA5.i
Operator: DXK1
Column diameter: 0.25



Data File: /chem/VOA5.i/122408v5/5q312.d

Date : 24-DEC-2008 14:35

Client ID: RWSW0049

Instrument: VOA5.i

Sample Info: |2213290011828777|1|VOA|1|

Purge Volume: 5.0

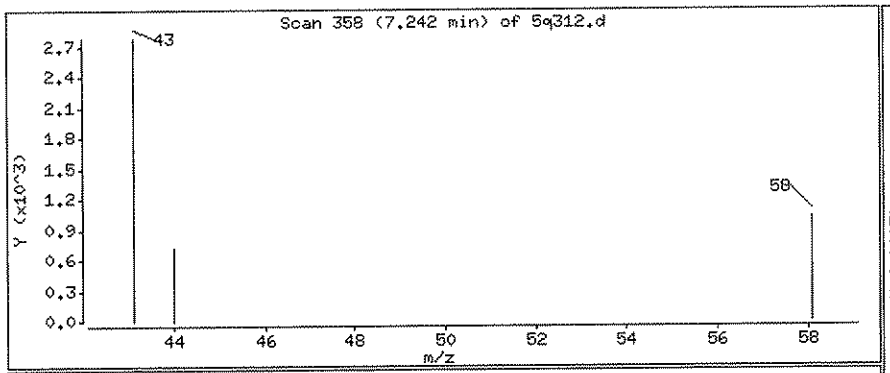
Operator: DXK1

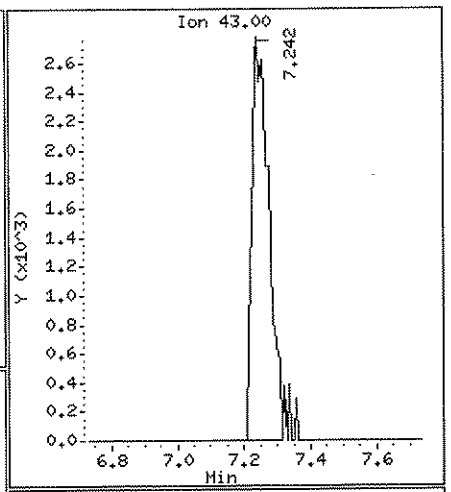
Column phase: DB-624

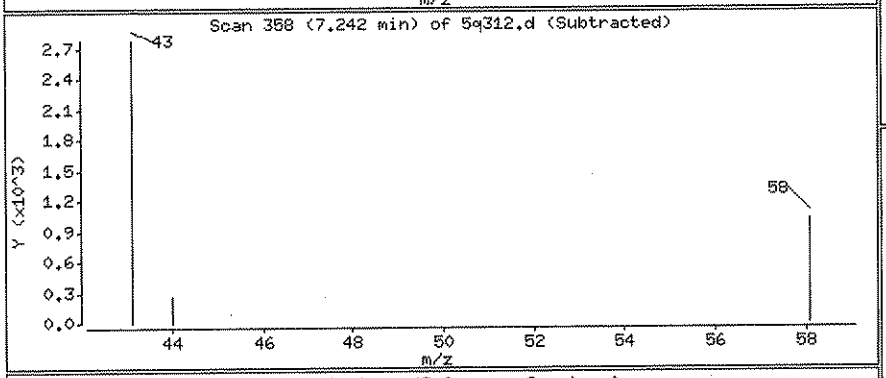
Column diameter: 0.25

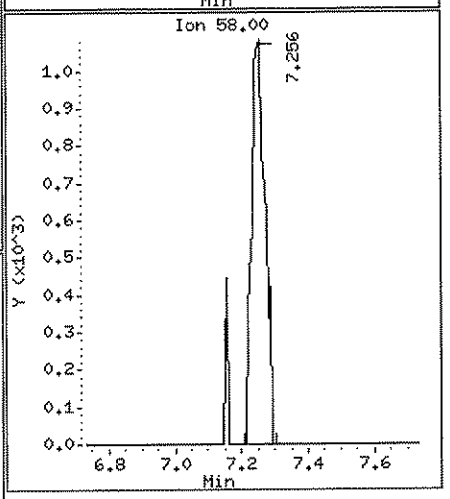
13 Acetone

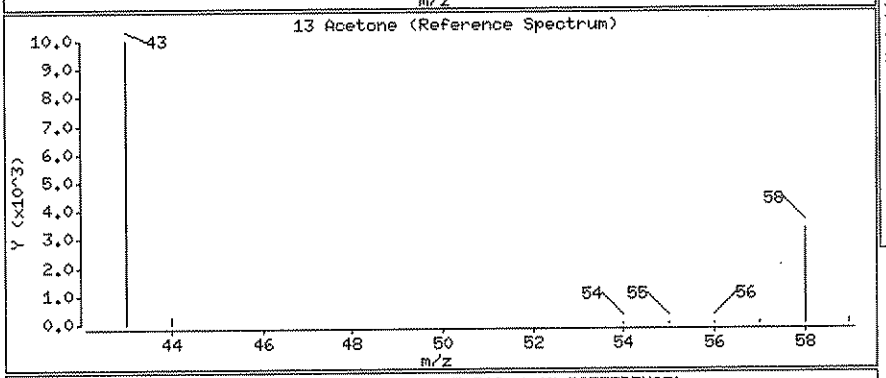
Concentration: 2.2 ug/l

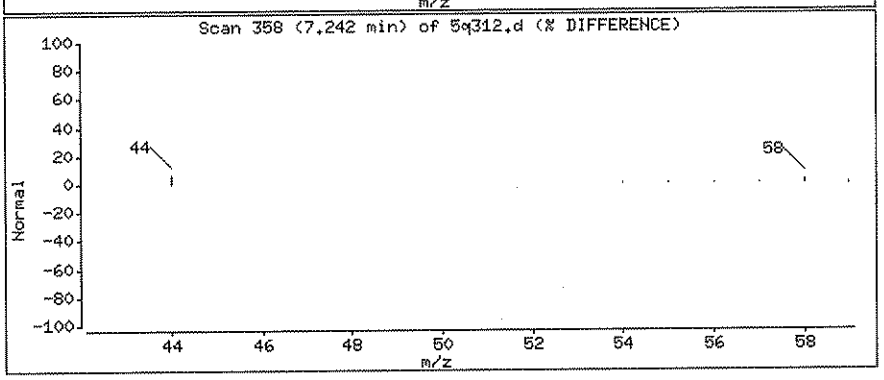












Standard Data

EPA 524.2/Low level SW846 8260B and Regular level 8260B and EPA 624
Calibration Standard Concentration Levels

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
Fluorobenzene (IS)									
Dibromofluoromethane (surr		0.5	1	2	5	10	20	50	100
Dichlorodifluoromethane		0.5	1	2	5	10	20	50	100
Chloromethane		0.5	1	2	5	10	20	50	100
Vinyl chloride		0.5	1	2	5	10	20	50	100
Bromomethane		0.5	1	2	5	10	20	50	100
Chloroethane		0.5	1	2	5	10	20	50	100
Trichlorofluoromethane		0.5	1	2	5	10	20	50	100
1,1-Dichloroethene		0.5	1	2	5	10	20	50	100
Acetone	1	2.5	5	10	25	50	100	250	500
Iodomethane	1	2.5	5	10	25	50	100	250	500
Carbon disulfide	1	2.5	5	10	25	50	100	250	500
Methylene chloride		0.5	1	2	5	10	20	50	100
trans-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,1-Dichloroethane		0.5	1	2	5	10	20	50	100
Vinyl acetate	1	2.5	5	10	25	50	100	250	500
cis-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
2,2-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Butanone	1	2.5	5	10	25	50	100	250	500
Bromochloromethane		0.5	1	2	5	10	20	50	100
Chloroform		0.5	1	2	5	10	20	50	100
1,1,1-Trichloroethane		0.5	1	2	5	10	20	50	100
1,1-Dichloropropene		0.5	1	2	5	10	20	50	100
Carbon tetrachloride		0.5	1	2	5	10	20	50	100
Benzene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethane		0.5	1	2	5	10	20	50	100
Trichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloropropane		0.5	1	2	5	10	20	50	100
Dibromomethane		0.5	1	2	5	10	20	50	100
Bromodichloromethane		0.5	1	2	5	10	20	50	100
cis-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
tert-Butylmethylether		0.5	1	2	5	10	20	50	100
Acetonitrile			25	50	125	250	500	1250	2500
Methyl acetate			5	10	25	50	100	250	500
Cyclohexane			1	2	5	10	20	50	100
Methylcyclohexane			1	2	5	10	20	50	100
n-Butly alcohol			50	100	250	500	1000	2500	5000
2-Nitropropane			5	10	25	50	100	250	500
Ethyl acetate			5	10	25	50	100	250	500
Acrolein			10	20	50	100	200	500	1000
Trichlorotrifluoroethane			5	10	25	50	100	250	500
Allyl chloride			5	10	25	50	100	250	500
Acrylonitrile			10	20	50	100	200	500	1000
1,4-Dioxane			50	100	250	500	1000	2500	5000
tert-Butylmethylether			1	2	5	10	20	50	100
Isobutyl alcohol			50	100	250	500	1000	2500	5000
Methacrylonitrile			5	10	25	50	100	250	500
Propionitrile			5	10	25	50	100	250	500
Methyl methacrylate			5	10	25	50	100	250	500
2-Chloro-1,3-butadiene(chloroprene)			1	2	5	10	20	50	100
Chlorobenzene-d5 (IS)									
Toluene-d8 (surr)		0.5	1	2	5	10	20	50	100
4-Methyl-2-pentanone	1	2.5	5	10	25	50	100	250	500

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
Toluene		0.5	1	2	5	10	20	50	100
trans-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
1,1,2-Trichloroethane		0.5	1	2	5	10	20	50	100
Tetrachloroethene		0.5	1	2	5	10	20	50	100
1,3-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Hexanone	1	2.5	5	10	25	50	20	250	500
Dibromochloromethane		0.5	1	2	5	10	20	50	100
1,2-Dibromoethane		0.5	1	2	5	10	20	50	100
Chlorobenzene		0.5	1	2	5	10	20	50	100
1,1,1,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Ethylbenzene		0.5	1	2	5	10	20	50	100
m,p-Xylene		1	2	4	10	20	20	100	200
o-Xylene		0.5	1	2	5	10	20	50	100
Stryene		0.5	1	2	5	10	20	50	100
Cyclohexanone			5	10	25	50	100	250	500
Ethyl methacrylate			5	10	25	50	100	250	500
1,4-Dichlorobenzene-d4 (IS)									
Bromofluorobenzene (surr)		0.5	1	2	5	10	20	50	100
Bromoform		0.5	1	2	5	10	20	50	100
Isopropylbenzene		0.5	1	2	5	10	20	50	100
1,1,2,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Bromobenzene		0.5	1	2	5	10	20	50	100
1,2,3-Trichloropropane		0.5	1	2	5	10	20	50	100
n-Propylbenzene		0.5	1	2	5	10	20	50	100
2-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,3,5-Trimethylbenzene		0.5	1	2	5	10	20	50	100
4-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,2,4-Trimethylbenzene		0.5	1	2	5	10	20	50	100
sec-Butylbenzene		0.5	1	2	5	10	20	50	100
1,3-Dichlorobenzene		0.5	1	2	5	10	20	50	100
tert-Butylbenzene		0.5	1	2	5	10	20	50	100
Isopropyltoluene		0.5	1	2	5	10	20	50	100
1,4-Dichlorobenzene		0.5	1	2	5	10	20	50	100
n-Butylbenzene		0.5	1	2	5	10	20	50	100
1,2-Dichlorobenzene		0.5	1	2	5	10	20	50	100
1,2-Dibromo-3-chloropropan		0.5	1	2	5	10	20	50	100
1,2,4-Trichlorobenzene		0.5	1	2	5	10	20	50	100
Hexachlorobutadiene		0.5	1	2	5	10	20	50	100
Naphthalene		0.5	1	2	5	10	20	50	100
1,2,3-Trichlorobenzene		0.5	1	2	5	10	20	50	100
cis-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
trans-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
Tetrahydrofuran			5	10	25	50	100	250	500
Pentachloroethane			5	10	25	50	100	250	500
Benzyl chloride			5	10	25	50	100	250	500
bis(2-Chloro-isopropyl)ether			5	10	25	50	100	250	500

Method	PQL	Concentration range
EPA 524.2	Level 1a	Levels 1a -> 7a (no level
SW 846 8260B low level	Level 1a	Levels 1-> 7a (no level 6)
EPA 624	Level 2	Levels 2-> 7a
SW846 8260B	Level 2	Levels 2-> 7a

#: Indicates calibration verification concentration level used for low level analysis

!: Indicates calibration verification concentration level used for regular level analysis

Report Date: 24-Dec-2008 13:05

Calibration History

Method : /chem/VOA5.i/122408v5/VOA5-8260B-121908.m
Start Cal Date: 19-DEC-2008 17:21
End Cal Date : 20-DEC-2008 00:28

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
19-DEC-2008 21:58	ICALsubS	/chem/VOA5.i/121908v5/5p523.d
19-DEC-2008 17:46	ICALsubL+	/chem/VOA5.i/121908v5/5p513.d
Cal Level: 2 , Cal Amount: 2.00000		
19-DEC-2008 22:23	ICALsubS	/chem/VOA5.i/121908v5/5p524.d
19-DEC-2008 18:11	ICALsubL+	/chem/VOA5.i/121908v5/5p514.d
Cal Level: 3 , Cal Amount: 5.00000		
19-DEC-2008 22:48	ICALsubS	/chem/VOA5.i/121908v5/5p525.d
19-DEC-2008 18:36	ICALsubL+	/chem/VOA5.i/121908v5/5p515.d
Cal Level: 4 , Cal Amount: 10.00000		
19-DEC-2008 23:13	ICALsubS	/chem/VOA5.i/121908v5/5p526.d
19-DEC-2008 19:01	ICALsubL+	/chem/VOA5.i/121908v5/5p516.d
Cal Level: 5 , Cal Amount: 20.00000		
19-DEC-2008 23:38	ICALsubS	/chem/VOA5.i/121908v5/5p527.d
19-DEC-2008 19:27	ICALsubL+	/chem/VOA5.i/121908v5/5p517.d
Cal Level: 6 , Cal Amount: 50.00000		
20-DEC-2008 00:03	ICALsubS	/chem/VOA5.i/121908v5/5p528.d
19-DEC-2008 19:52	ICALsubL+	/chem/VOA5.i/121908v5/5p518.d
Cal Level: 7 , Cal Amount: 100.00000		
20-DEC-2008 00:28	ICALsubS	/chem/VOA5.i/121908v5/5p529.d
19-DEC-2008 20:17	ICALsubL+	/chem/VOA5.i/121908v5/5p519.d
Cal Level: 8 , Cal Amount: 200.00000		
19-DEC-2008 17:21	BENZENE+	/chem/VOA5.i/121908v5/5p512.d
19-DEC-2008 17:21	ICALsubL+	/chem/VOA5.i/121908v5/5p512.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 6

Ccal Level: 6 , Ccal Amount: 50.0		
24-DEC-2008 10:23	CALsubL+	/chem/VOA5.i/122408v5/5q302.d
Ccal Level: 6 , Ccal Amount: 50.0		
24-DEC-2008 11:14	CALsubS+SS	/chem/VOA5.i/122408v5/5q304.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 19-DEC-2008 17:21
End Cal Date : 20-DEC-2008 00:28
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA5.i/122408v5/VOA5-8260B-121908.m
Cal Date : 24-Dec-2008 12:56 dav01267

Calibration File Names:
Level 1: /chem/VOA5.i/121908v5/5p523.d
Level 2: /chem/VOA5.i/121908v5/5p524.d
Level 3: /chem/VOA5.i/121908v5/5p525.d
Level 4: /chem/VOA5.i/121908v5/5p526.d
Level 5: /chem/VOA5.i/121908v5/5p527.d
Level 6: /chem/VOA5.i/121908v5/5p528.d
Level 7: /chem/VOA5.i/121908v5/5p529.d
Level 8: /chem/VOA5.i/121908v5/5p512.d

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
M 1 1,3-Dichloropropylene	0.29011	0.27117	0.27857	0.28824	0.31073	0.31679					
	0.31895	++++++					AVRG		0.29636		6.44661
M 2 Xylenes (total)	0.50968	0.49362	0.46801	0.45462	0.50032	0.49892					
	0.48553	++++++					AVRG		0.48724		4.00826
M 3 1,2-Dichloroethylene (total)	0.37525	0.35784	0.34845	0.33732	0.35427	0.34703					
	0.33633	++++++					AVRG		0.35093		3.80544
148 Chlorotrifluoroethylene	++++++	++++++	++++++	++++++	++++++	++++++					
	++++++	++++++					AVRG		0.000e+00		0.000e+00
149 2-Chloro-1,1,1-trifluoroethan	++++++	++++++	++++++	++++++	++++++	++++++					
	++++++	++++++					AVRG		0.000e+00		0.000e+00

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Method file : /chem/VOA5.i/122408v5/VOA5-8260B-121908.m
Cal Date : 24-Dec-2008 12:56 dav01267

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
4 Dichlorodifluoromethane	0.17771	0.17193	0.16667	0.16017	0.14346	0.15422					
	0.14651	+++++					AVRG		0.16009		8.02188
5 Chloromethane	0.37379	0.35198	0.32632	0.30845	0.31184	0.28968					
	0.26531	+++++					AVRG		0.31820		11.50722
6 Vinyl chloride	0.30346	0.28521	0.26037	0.25061	0.25746	0.24803					
	0.22828	+++++					AVRG		0.26192		9.53577
7 Bromomethane	0.17368	0.16570	0.15794	0.15804	0.16535	0.15953					
	0.13323	+++++					AVRG		0.15907		7.98151
8 Chloroethane	0.16344	0.15764	0.15094	0.14574	0.15554	0.15223					
	0.14641	+++++					AVRG		0.15314		4.11094
9 Trichlorofluoromethane	0.31882	0.30662	0.28383	0.27463	0.28693	0.28918					
	0.27755	+++++					AVRG		0.29108		5.50009
10 Ethyl Ether	0.14049	0.12820	0.13006	0.13043	0.13719	0.14164					
	0.13941	+++++					AVRG		0.13535		4.14833
11 Acrolein	0.05960	0.06439	0.06132	0.06425	0.06712	0.06463					
	0.06430	+++++					AVRG		0.06366		3.85393
12 Trichlorotrifluoroethane	0.08453	0.08082	0.07977	0.07954	0.07711	0.07882					
	0.07625	+++++					AVRG		0.07955		3.39540

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Cal Date : 24-Dec-2008 12:56 dav01267

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
13 Acetone	0.23174	0.19111	0.18605	0.18089	0.17047	0.16146					
	0.15837	+++++					AVRG		0.18287		13.54792
14 1,1-Dichloroethylene	0.33925	0.34357	0.31719	0.30761	0.32796	0.32469					
	0.31522	+++++					AVRG		0.32507		4.00352
15 Iodomethane	0.31787	0.30145	0.29432	0.28929	0.30541	0.30452					
	0.29938	+++++					AVRG		0.30175		3.01593
16 Acetonitrile	0.03955	0.03558	0.03606	0.03499	0.03451	0.04309					
	0.03403	+++++					AVRG		0.03683		8.96414
17 Methyl acetate	0.22265	0.19853	0.20472	0.20192	0.20311	0.20459					
	0.20534	+++++					AVRG		0.20584		3.77324
18 Carbon disulfide	0.69584	0.65461	0.63341	0.61464	0.65400	0.65360					
	0.62104	+++++					AVRG		0.64673		4.20659
19 Allyl chloride	0.37261	0.35113	0.36341	0.36273	0.35102	0.35955					
	0.35131	+++++					AVRG		0.35882		2.28491
20 Methylene chloride	+++++	27609	45220	78897	148907	364178					
	755746	+++++					WLINR	-0.04843	0.20982		0.99913
147 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+00		0.000e+00

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Method file : /chem/VOA5.i/122408v5/VOA5-8260B-121908.m
Cal Date : 24-Dec-2008 12:56 dav01267

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
21 Acrylonitrile	0.09743	0.09251	0.09576	0.09794	0.09853	0.09545					
	0.09268	+++++					AVRG		0.09576		2.53279
22 tert-Butyl methyl ether	0.18903	0.18542	0.18338	0.19713	0.21330	0.24480					
	+++++	+++++					AVRG		0.20218		11.64756
23 trans-1,2-Dichloroethylene	0.36139	0.33925	0.32917	0.31810	0.33643	0.32853					
	0.31747	+++++					AVRG		0.33291		4.51343
24 Vinyl acetate	0.49565	0.46923	0.49741	0.51686	0.53941	0.54649					
	0.53480	+++++					AVRG		0.51426		5.47597
25 1,1-Dichloroethane	0.44518	0.41650	0.39373	0.38686	0.40252	0.39646					
	0.38190	+++++					AVRG		0.40331		5.35138
26 Isopropyl Alcohol	0.01914	0.01805	0.01887	0.02022	0.02070	0.01969					
	0.01965	+++++					AVRG		0.01948		4.50697
27 2-Chloro-1,3-butadiene	0.27091	0.26686	0.28548	0.28761	0.29576	0.30708					
	0.30997	+++++					AVRG		0.28910		5.72602
28 tert-butyl alcohol	0.01907	0.01835	0.01928	0.02048	0.02202	0.02258					
	0.02382	+++++					AVRG		0.02080		9.83710
29 Ethyl acetate	0.29326	0.26023	0.26530	0.27351	0.27143	0.26202					
	0.25252	+++++					AVRG		0.26833		4.86524

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
30 2-Butanone	0.21161	0.18991	0.19927	0.19725	0.18876	0.18525					
	0.18174	++++++					AVRG		0.19340		5.24309
31 cis-1,2-Dichloroethylene	0.38911	0.37642	0.36773	0.35655	0.37211	0.36552					
	0.35520	++++++					AVRG		0.36895		3.18532
32 Propionitrile	0.03760	0.03749	0.03746	0.04076	0.03968	0.03902					
	0.03812	++++++					AVRG		0.03859		3.31229
33 2,2-Dichloropropane	0.29648	0.27487	0.26552	0.26356	0.27820	0.27882					
	0.26979	++++++					AVRG		0.27532		4.01592
34 Isopropyl ether	++++++	0.88107	0.92311	0.91284	0.89422	0.89335					
	0.88423	++++++					AVRG		0.89814		1.83826
35 Bromochloromethane	0.10158	0.09993	0.10445	0.10088	0.10162	0.10204					
	0.10042	++++++					AVRG		0.10156		1.44833
36 Chloroform	0.40643	0.37916	0.35786	0.34740	0.36193	0.35465					
	0.34546	++++++					AVRG		0.36470		5.89765
37 Methacrylonitrile	0.15434	0.14948	0.15751	0.16130	0.16275	0.16083					
	0.15705	++++++					AVRG		0.15761		2.92482
38 Tetrahydrofuran	0.31474	0.25147	0.23309	0.23145	0.22843	0.21772					
	0.21269	++++++					AVRG		0.24137		14.35363

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
40 1,1,1-Trichloroethane	0.31732	0.30975	0.28926	0.28930	0.30525	0.30874					
	0.29765	+++++					AVRG		0.30247		3.55042
41 Ethyl tert-butyl ether	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+00		0.000e+00
42 Isobutyl alcohol	0.00685	0.00787	0.00833	0.00923	0.00978	0.00973					
	0.00939	+++++					AVRG		0.00874		12.56094
43 Cyclohexane	0.45104	0.44053	0.40394	0.38660	0.41691	0.42256					
	0.40231	+++++					AVRG		0.41770		5.39845
44 1,1-Dichloropropene	0.28909	0.26345	0.25372	0.25257	0.26942	0.26786					
	0.25654	+++++					AVRG		0.26467		4.78683
45 Methyl tert-amyl ether	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+00		0.000e+00
46 Carbon tetrachloride	0.24692	0.25725	0.23909	0.24008	0.25008	0.25767					
	0.24911	+++++					AVRG		0.24860		2.96274
48 1,2-Dichloroethane	0.32424	0.32640	0.31508	0.31795	0.31912	0.30941					
	0.30410	+++++					AVRG		0.31661		2.48999
49 Benzene	0.96892	0.88637	0.83472	0.79967	0.83687	0.81670					
	0.78433	1.12906					AVRG		0.88208		13.09992

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
50 Cyclohexene	0.43704	0.40949	0.38889	0.38065	0.40876	0.41250					
	0.39871	+++++					AVRG		0.40515		4.51659
52 n-Butyl alcohol	15881	29484	97851	210064	457340	1334182					
	2920649	9700					LINR	1.81843	0.00823		0.99970
53 Trichloroethylene	0.22744	0.22157	0.20332	0.20087	0.20589	0.20559					
	0.19752	+++++					AVRG		0.20888		5.34987
54 Methyl methacrylate	0.13363	0.12623	0.14526	0.15263	0.15634	0.15954					
	0.15673	+++++					AVRG		0.14719		8.69923
55 1,2-Dichloropropane	0.25994	0.22748	0.23313	0.22626	0.23652	0.23158					
	0.22764	+++++					AVRG		0.23465		4.99937
56 Methylcyclohexane	0.38050	0.35107	0.33694	0.32810	0.35634	0.36180					
	0.34400	+++++					AVRG		0.35125		4.91195
57 1,4-Dioxane	0.00212	0.00186	0.00205	0.00205	0.00201	0.00175					
	0.00180	+++++					AVRG		0.00195		7.26348
58 Dibromomethane	0.11762	0.12315	0.12272	0.12211	0.12476	0.12341					
	0.12151	+++++					AVRG		0.12218		1.85108
59 Bromodichloromethane	0.24672	0.24199	0.25297	0.25139	0.26843	0.26873					
	0.27074	+++++					AVRG		0.25728		4.58630

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
60 2-Nitropropane	0.06251	0.06050	0.06623	0.07241	0.07719	0.07971					
	0.07852	+++++					AVRG		0.07101		11.17539
61 2-Chloroethylvinyl ether	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+00		0.000e+00
62 cis-1,3-Dichloropropylene	0.29543	0.28483	0.28478	0.29935	0.32030	0.32865					
	0.32973	+++++					AVRG		0.30615		6.44380
63 4-Methyl-2-pentanone	0.11430	0.11682	0.12540	0.13037	0.13408	0.13509					
	0.13500	+++++					AVRG		0.12730		6.86291
65 Toluene	0.77729	0.74923	0.68343	0.65333	0.68079	0.67250					
	0.65455	+++++					AVRG		0.69587		6.92235
66 Ethyl methacrylate	0.30758	0.31818	0.35932	0.38819	0.39640	0.40157					
	0.39281	+++++					AVRG		0.36629		10.65802
67 trans-1,3-Dichloropropylene	0.37983	0.34245	0.36231	0.36929	0.39846	0.40274					
	0.40795	+++++					AVRG		0.38043		6.32609
68 1,1,2-Trichloroethane	0.21713	0.20695	0.20198	0.20291	0.20533	0.20025					
	0.20092	+++++					AVRG		0.20507		2.84109
69 2-Hexanone	0.30182	0.28505	0.30287	0.31941	0.31020	0.30703					
	0.30583	+++++					AVRG		0.30460		3.41926

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
70 1,3-Dichloropropane	0.45108	0.43184	0.43284	0.42510	0.42928	0.42087					
	0.41666	+++++					AVRG		0.42967		2.58606
71 Tetrachloroethylene	7783	12780	26376	48153	103829	271558					
	565234	+++++					WLINR	-0.01657	0.20897		0.99967
72 Dibromochloromethane	0.21921	0.20383	0.21441	0.22573	0.24552	0.25148					
	0.26164	+++++					AVRG		0.23169		9.23377
73 1,2-Dibromoethane	0.21198	0.21483	0.22109	0.22328	0.23762	0.23647					
	0.23699	+++++					AVRG		0.22604		4.84056
74 1-Chlorohexane	+++++	0.26710	0.28867	0.28491	0.28407	0.28736					
	0.28958	+++++					AVRG		0.28361		2.94921
76 Chlorobenzene	0.79913	0.76269	0.73489	0.71292	0.74697	0.72643					
	0.70952	+++++					AVRG		0.74179		4.23084
77 1,1,1,2-Tetrachloroethane	0.25131	0.22869	0.22945	0.23658	0.25521	0.25142					
	0.25300	+++++					AVRG		0.24366		4.78383
78 Ethylbenzene	1.40450	1.30894	1.26079	1.20991	1.30262	1.29459					
	1.24879	+++++					AVRG		1.29002		4.75914
79 m,p-Xylenes	0.50648	0.50053	0.47090	0.45533	0.50074	0.50001					
	0.48525	+++++					AVRG		0.48846		3.89400

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Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
80 o-Xylene	0.51609	0.47980	0.46225	0.45318	0.49946	0.49675					
	0.48611	++++++					AVRG		0.48480		4.51228
81 Styrene	0.62137	0.61357	0.65440	0.67234	0.77664	0.80507					
	0.81795	++++++					AVRG		0.70876		12.45857
82 Bromoform	0.25143	0.23503	0.25635	0.26845	0.28689	0.30786					
	0.32429	++++++					AVRG		0.27576		11.64791
83 Isopropylbenzene	2.17857	2.10601	2.09227	1.96538	2.15070	2.12851					
	2.03228	++++++					AVRG		2.09339		3.49159
84 cis-1,4-Dichloro-2-butene	0.21750	0.20944	0.23487	0.24982	0.25718	0.26526					
	0.26187	++++++					AVRG		0.24228		9.13351
86 Cyclohexanone	0.07107	0.07245	0.07349	0.08331	0.08390	0.07315					
	0.07333	++++++					AVRG		0.07581		7.10482
87 1,1,2,2-Tetrachloroethane	0.62544	0.57125	0.60948	0.60293	0.61054	0.60699					
	0.59743	++++++					AVRG		0.60344		2.75282
88 1,2,3-Trichloropropane	0.16869	0.17316	0.18065	0.17373	0.16998	0.16739					
	0.16299	++++++					AVRG		0.17094		3.28148
89 trans-1,4-Dichloro-2-butene	0.20448	0.20880	0.22946	0.24783	0.24728	0.25268					
	0.24643	++++++					AVRG		0.23385		8.54940

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Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
90 Bromobenzene	0.64679	0.58117	0.59755	0.54854	0.58588	0.57147					
	0.55518	+++++					AVRG		0.58380		5.58658
91 n-Propylbenzene	3.05927	2.99012	2.86454	2.66994	2.93935	2.90262					
	2.75707	+++++					AVRG		2.88327		4.64670
92 1,3,5-Trimethylbenzene	2.23423	2.03732	2.02954	1.90866	2.06721	2.05131					
	1.99272	+++++					AVRG		2.04586		4.80398
93 2-Chlorotoluene	2.25291	2.13810	2.02469	1.89220	2.03871	2.00140					
	1.91809	+++++					AVRG		2.03801		6.12067
94 4-Chlorotoluene	1.98451	1.87288	1.82931	1.70390	1.85875	1.80453					
	1.73965	+++++					AVRG		1.82765		5.05503
95 tert-Butylbenzene	2.11781	2.04046	1.93889	1.78938	1.97109	1.95789					
	1.89104	+++++					AVRG		1.95808		5.34792
96 1,2,4-Trimethylbenzene	2.72967	2.39160	2.15397	1.98927	2.16519	2.10524					
	2.05505	+++++					AVRG		2.22714		11.44501
97 Pentachloroethane	0.29494	0.28963	0.31421	0.31656	0.32368	0.32735					
	0.32513	+++++					AVRG		0.31307		4.79810
98 sec-Butylbenzene	2.90586	2.79138	2.60867	2.38737	2.67237	2.65668					
	2.55962	+++++					AVRG		2.65456		6.24140

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 19-DEC-2008 17:21
End Cal Date : 20-DEC-2008 00:28
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA5.i/122408v5/VOA5-8260B-121908.m
Cal Date : 24-Dec-2008 12:56 dav01267

Compound	1 Level 1 100 Level 7	2 Level 2 200 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
99 4-Isopropyltoluene	2.29696	2.15616	2.10196	1.92000	2.17135	2.14969					
	2.09795	*****					AVRG		2.12772		5.30805
100 1,3-Dichlorobenzene	1.24765	1.15552	1.15985	1.06968	1.15462	1.13488					
	1.11472	*****					AVRG		1.14813		4.71528
102 1,4-Dichlorobenzene	1.37247	1.24692	1.20689	1.10743	1.21135	1.16643					
	1.14967	*****					AVRG		1.20874		7.07014
103 Benzyl chloride	0.89449	0.90280	1.01082	1.09690	1.12659	1.15660					
	1.12773	*****					AVRG		1.04513		10.53173
104 n-Butylbenzene	1.23157	1.17225	1.18179	1.04920	1.21006	1.21373					
	1.18553	*****					AVRG		1.17773		5.12588
105 bis(2-Chloroisopropyl)ether	0.07580	0.06943	0.07552	0.07930	0.08133	0.07733					
	0.07778	*****					AVRG		0.07664		4.90733
106 1,2-Dichlorobenzene	1.24899	1.16393	1.11899	1.06035	1.13179	1.10039					
	1.09995	*****					AVRG		1.13206		5.35331
107 1,2-Dibromo-3-chloropropane	424	1496	4426	9841	20907	60522					
	143850	*****					LINR	0.02973	0.09850		0.99893
108 1,2,4-Trichlorobenzene	0.65126	0.61007	0.57686	0.56140	0.61490	0.57627					
	0.58193	*****					AVRG		0.59610		5.19747

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 19-DEC-2008 17:21
End Cal Date : 20-DEC-2008 00:28
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA5.i/122408v5/VOA5-8260B-121908.m
Cal Date : 24-Dec-2008 12:56 dav01267

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
109 Hexachlorobutadiene	0.43414	0.39155	0.37027	0.33515	0.36569	0.35208					
	0.35538	+++++					AVRG		0.37204		8.72186
110 Naphthalene	1.08987	1.02902	1.01952	1.07773	1.12795	1.00365					
	0.87171	+++++					AVRG		1.03135		8.04469
111 1,2,3-Trichlorobenzene	0.34828	0.33268	0.34743	0.33734	0.34897	0.28072					
	+++++	+++++					AVRG		0.33257		7.89561
$ 47 1,2-Dichloroethane-d4	0.26069	0.26564	0.27178	0.26648	0.25994	0.25302					
	0.25083	+++++					AVRG		0.26120		2.86438
$ 64 Toluene-d8	1.14334	1.14441	1.16277	1.12776	1.11639	1.10185					
	1.09725	+++++					AVRG		1.12768		2.13474
$ 85 Bromofluorobenzene	0.90348	0.88797	0.92433	0.88564	0.88735	0.89177					
	0.89273	+++++					AVRG		0.89618		1.53391

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 19-DEC-2008 17:21
End Cal Date : 20-DEC-2008 00:28
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA5.i/122408v5/VOA5-8260B-121908.m
Cal Date : 24-Dec-2008 12:56 dav01267

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response
Wt Linear	Amt = b + Rsp/ml	Response

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA5.i/121908v5/5p512.d
Lab Smp Id: W5VM081219-01 Client Smp ID: VSTD0005
Inj Date : 19-DEC-2008 17:21
Operator : DXK1 Inst ID: VOA5.i
Smp Info : |W5VM081219-01|L8|1|VOA|1|
Misc Info : GEL 5mL N/A UVM+UVM
Comment :
Method : /chem/VOA5.i/121908v5/VOA5-8260B-121908.m
Meth Date : 06-Jan-2009 18:16 eh1 Quant Type: ISTD
Cal Date : 19-DEC-2008 17:21 Cal File: 5p512.d
Als bottle: 12 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BENZENE+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

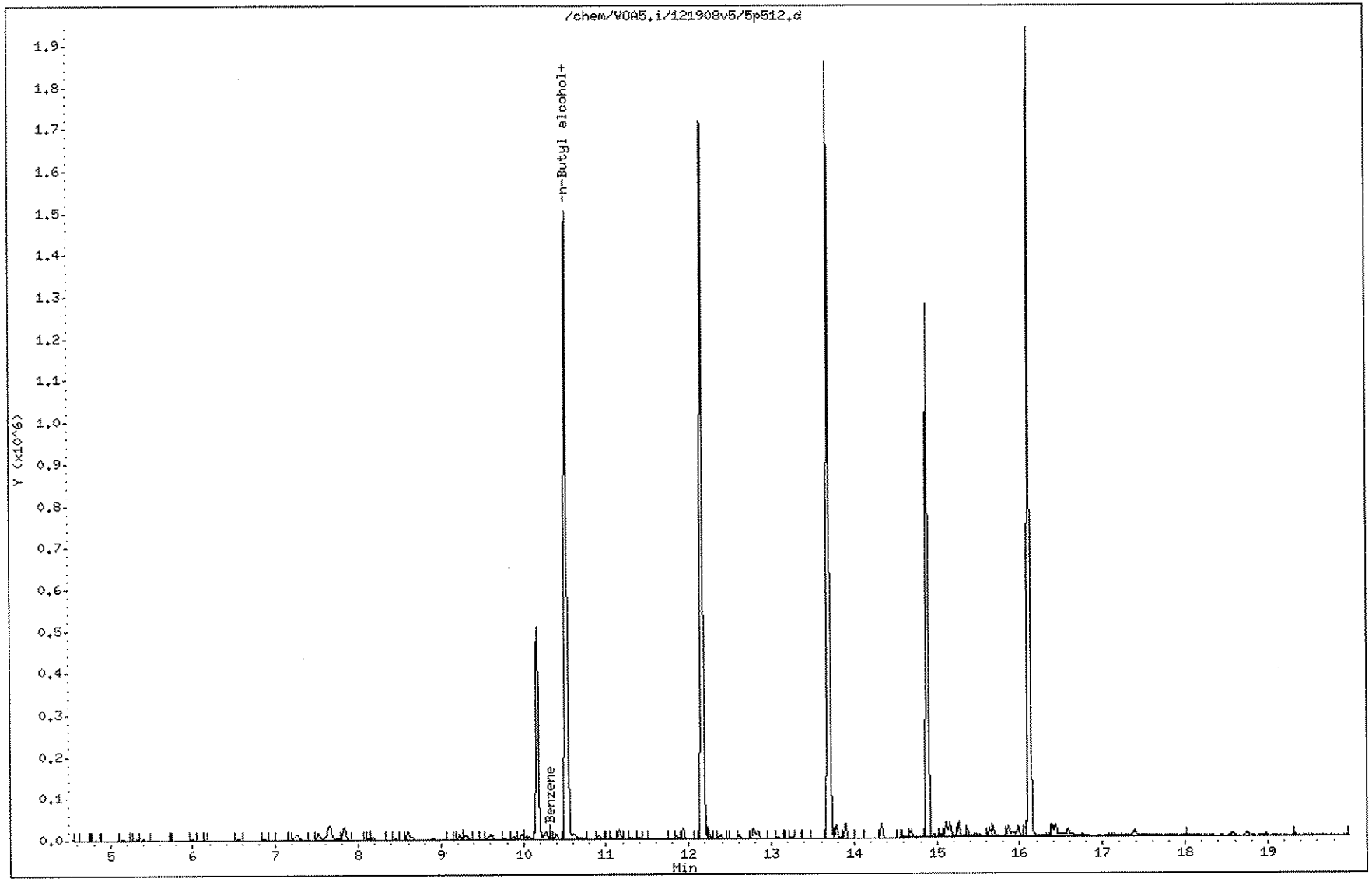
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
49 Benzene	78	10.275	10.275	(0.976)	16260	0.50000	0.64(aQ)
52 n-Butyl alcohol	56	10.611	10.611	(1.008)	9700	50.0000	132
* 51 Fluorobenzene	96	10.524	10.524	(1.000)	1440136	50.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA5.i/121908v5/5p512.d
Date : 19-DEC-2008 17:21
Client ID: VSTD0005
Sample Info: |W5VM081219-01|L8|1|VOA|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA5.i
Operator: DXK1
Column diameter: 0.25



GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA5.i/121908v5/5p513.d
Lab Smp Id: W5VM081219-02 Client Smp ID: VSTD001
Inj Date : 19-DEC-2008 17:46
Operator : DXK1 Inst ID: VOA5.i
Smp Info : |W5VM081219-02|L1|1|VOA|1|
Misc Info : GEL 5mL N/A UVM081124-01B+UVM081123-01D
Comment :
Method : /chem/VOA5.i/121908v5/VOA5-8260B-121908.m
Meth Date : 06-Jan-2009 18:16 eh1 Quant Type: ISTD
Cal Date : 19-DEC-2008 21:58 Cal File: 5p523.d
Als bottle: 13 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
M 2 Xylenes (total)	106				33823	3.00000	3.1
M 3 1,2-Dichloroethylene (total)	96				22142	2.00000	2.1
M 1 1,3-Dichloropropylene	75				17118	2.00000	2.0
4 Dichlorodifluoromethane	85	4.833	4.833	(0.459)	5243	1.00000	1.1
5 Chloromethane	50	5.152	5.152	(0.490)	11028	1.00000	1.2
6 Vinyl chloride	62	5.403	5.403	(0.513)	8953	1.00000	1.2
7 Bromomethane	94	5.995	5.995	(0.570)	5124	1.00000	1.1
8 Chloroethane	64	6.140	6.140	(0.583)	4822	1.00000	1.1
9 Trichlorofluoromethane	101	6.550	6.550	(0.622)	9406	1.00000	1.1
10 Ethyl Ether	74	6.869	6.869	(0.653)	4145	1.00000	1.0
13 Acetone	43	7.249	7.249	(0.689)	34185	5.00000	6.3
16 Acetonitrile	41	7.599	7.599	(0.722)	29174	25.0000	26.8
14 1,1-Dichloroethylene	61	7.269	7.269	(0.691)	10009	1.00000	1.0
17 Methyl acetate	43	7.633	7.633	(0.725)	32844	5.00000	5.4
15 Iodomethane	142	7.512	7.512	(0.714)	46890	5.00000	5.3

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
20 Methylene chloride	84	7.835	7.835	(0.745)	20360	1.00000	0.87
18 Carbon disulfide	76	7.660	7.660	(0.728)	102646	5.00000	5.4
22 tert-Butyl methyl ether	73	8.125	8.125	(0.772)	5577	1.00000	0.93(a)
23 trans-1,2-Dichloroethylene	61	8.179	8.179	(0.777)	10662	1.00000	1.1
24 Vinyl acetate	43	8.603	8.603	(0.818)	73115	5.00000	4.8(a)
25 1,1-Dichloroethane	63	8.657	8.657	(0.823)	13134	1.00000	1.1
30 2-Butanone	43	9.230	9.230	(0.877)	31215	5.00000	5.5
31 cis-1,2-Dichloroethylene	61	9.284	9.284	(0.882)	11480	1.00000	1.0
33 2,2-Dichloropropane	77	9.311	9.311	(0.885)	8747	1.00000	1.1
36 Chloroform	83	9.601	9.601	(0.912)	11991	1.00000	1.1
35 Bromochloromethane	128	9.567	9.567	(0.909)	2997	1.00000	1.0(Q)
40 1,1,1-Trichloroethane	97	9.884	9.884	(0.939)	9362	1.00000	1.0
43 Cyclohexane	56	9.978	9.978	(0.948)	13307	1.00000	1.1
44 1,1-Dichloropropene	75	10.032	10.032	(0.953)	8529	1.00000	1.1
52 n-Butyl alcohol	56	10.611	10.611	(1.008)	15881	100.000	156
46 Carbon tetrachloride	117	10.079	10.079	(0.958)	7285	1.00000	0.99(a)
48 1,2-Dichloroethane	62	10.248	10.248	(0.974)	9566	1.00000	1.0
49 Benzene	78	10.275	10.275	(0.976)	28586	1.00000	1.1
50 Cyclohexene	67	10.396	10.396	(0.988)	12894	1.00000	1.1
* 51 Fluorobenzene	96	10.524	10.524	(1.000)	1475146	50.0000	
53 Trichloroethylene	95	10.915	10.915	(1.037)	6710	1.00000	1.1
55 1,2-Dichloropropane	63	11.157	11.157	(1.060)	7669	1.00000	1.1
56 Methylcyclohexane	83	11.171	11.171	(1.061)	11226	1.00000	1.1
59 Bromodichloromethane	83	11.400	11.400	(1.083)	7279	1.00000	0.96(a)
58 Dibromomethane	93	11.292	11.292	(1.073)	3470	1.00000	0.96(a)
63 4-Methyl-2-pentanone	58	11.932	11.932	(0.871)	12642	5.00000	4.5(a)
62 cis-1,3-Dichloropropylene	75	11.851	11.851	(1.126)	8716	1.00000	0.96(a)
65 Toluene	92	12.242	12.242	(0.894)	17194	1.00000	1.1
67 trans-1,3-Dichloropropylene	75	12.390	12.390	(0.905)	8402	1.00000	1.00
68 1,1,2-Trichloroethane	83	12.606	12.606	(0.920)	4803	1.00000	1.0
69 2-Hexanone	43	12.781	12.781	(0.933)	33382	5.00000	5.0
70 1,3-Dichloropropane	76	12.801	12.801	(0.935)	9978	1.00000	1.0
71 Tetrachloroethylene	164	12.842	12.842	(0.938)	7783	1.00000	0.86(a)
72 Dibromochloromethane	129	13.078	13.078	(0.955)	4849	1.00000	0.95(a)
73 1,2-Dibromoethane	107	13.253	13.253	(0.968)	4689	1.00000	0.94(a)
* 75 Chlorobenzene-d5	117	13.698	13.698	(1.000)	1106019	50.0000	
76 Chlorobenzene	112	13.725	13.725	(1.002)	17677	1.00000	1.1(Q)
77 1,1,1,2-Tetrachloroethane	131	13.779	13.779	(1.006)	5559	1.00000	1.0
78 Ethylbenzene	91	13.785	13.785	(1.006)	31068	1.00000	1.1
79 m,p-Xylenes	106	13.893	13.893	(1.014)	22407	2.00000	2.1
80 o-Xylene	106	14.331	14.331	(1.046)	11416	1.00000	1.1
81 Styrene	104	14.331	14.331	(1.046)	13745	1.00000	0.88(a)
82 Bromoform	173	14.594	14.594	(0.906)	2814	1.00000	0.91(a)
83 Isopropylbenzene	105	14.688	14.688	(0.911)	24383	1.00000	1.0
87 1,1,2,2-Tetrachloroethane	83	14.958	14.958	(0.928)	7000	1.00000	1.0
88 1,2,3-Trichloropropane	110	15.045	15.045	(0.934)	1888	1.00000	0.99(aQ)
90 Bromobenzene	156	15.106	15.106	(0.937)	7239	1.00000	1.1

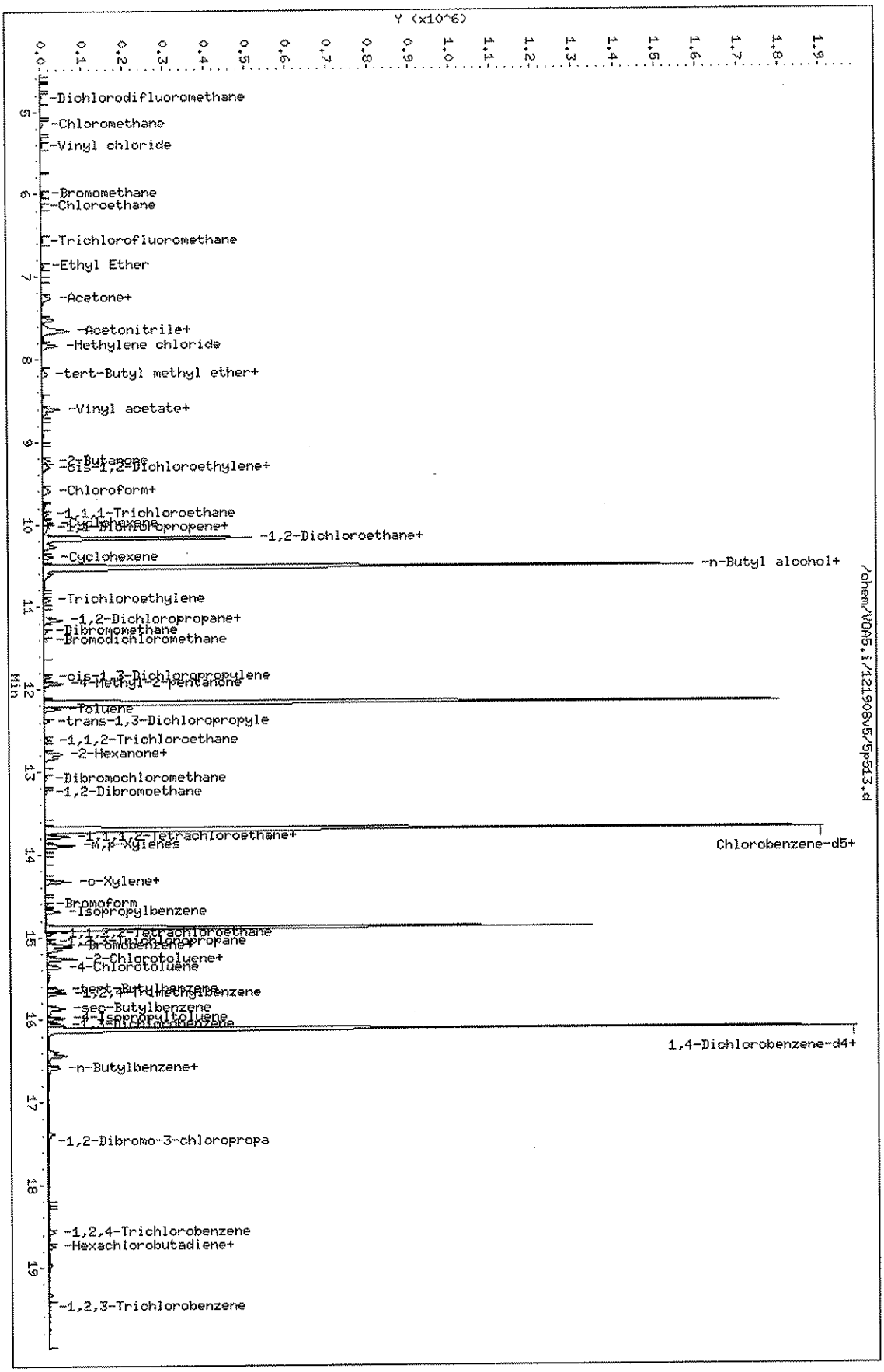
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
91 n-Propylbenzene	91	15.113	15.113	(0.938)	34240	1.00000	1.1
93 2-Chlorotoluene	91	15.268	15.268	(0.947)	25215	1.00000	1.1
92 1,3,5-Trimethylbenzene	105	15.261	15.261	(0.947)	25006	1.00000	1.1
94 4-Chlorotoluene	91	15.369	15.369	(0.954)	22211	1.00000	1.1
95 tert-Butylbenzene	119	15.638	15.638	(0.970)	23703	1.00000	1.1
96 1,2,4-Trimethylbenzene	105	15.672	15.672	(0.972)	30551	1.00000	1.2
98 sec-Butylbenzene	105	15.861	15.861	(0.984)	32523	1.00000	1.1
99 4-Isopropyltoluene	119	15.982	15.982	(0.992)	25708	1.00000	1.1
100 1,3-Dichlorobenzene	146	16.063	16.063	(0.997)	13964	1.00000	1.1
* 101 1,4-Dichlorobenzene-d4	152	16.117	16.117	(1.000)	559610	50.0000	
102 1,4-Dichlorobenzene	146	16.151	16.151	(1.002)	15361	1.00000	1.1(Q)
104 n-Butylbenzene	92	16.434	16.434	(1.020)	13784	1.00000	1.0
106 1,2-Dichlorobenzene	146	16.582	16.582	(1.029)	13979	1.00000	1.1
107 1,2-Dibromo-3-chloropropane	157	17.476	17.476	(1.084)	424	1.00000	1.9(Q)
108 1,2,4-Trichlorobenzene	180	18.571	18.571	(1.152)	7289	1.00000	1.1
109 Hexachlorobutadiene	225	18.746	18.746	(1.163)	4859	1.00000	1.2
110 Naphthalene	128	18.972	18.972	(1.177)	12198	1.00000	1.0
111 1,2,3-Trichlorobenzene	180	19.335	19.335	(1.200)	3898	1.00000	1.0

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA5.i/121908v5/5p513.d
Date : 19-DEC-2008 17:46
Client ID: VSTD001
Sample Info: IWSVH081219-021L1I1|VOA|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA5.i
Operator: BXK1
Column diameter: 0.25



Page 1

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA5.i/121908v5/5p514.d
Lab Smp Id: W5VM081219-03 Client Smp ID: VSTD002
Inj Date : 19-DEC-2008 18:11
Operator : DXK1 Inst ID: VOA5.i
Smp Info : |W5VM081219-03|L2|1|VOA|1|
Misc Info : GEL 5mL N/A UVM081124-02B+UVM081123-02D
Comment :
Method : /chem/VOA5.i/121908v5/VOA5-8260B-121908.m
Meth Date : 06-Jan-2009 18:16 eh1 Quant Type: ISTD
Cal Date : 19-DEC-2008 22:23 Cal File: 5p524.d
Als bottle: 14 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 2 Xylenes (total)	106				65932	6.00000	6.1
M 3 1,2-Dichloroethylene (total)	96				42375	4.00000	4.1
M 1 1,3-Dichloropropylene	75				32112	4.00000	3.6
4 Dichlorodifluoromethane	85	4.826	4.826	(0.459)	10180	2.00000	2.1
5 Chloromethane	50	5.152	5.152	(0.490)	20841	2.00000	2.2
6 Vinyl chloride	62	5.410	5.410	(0.514)	16887	2.00000	2.2
7 Bromomethane	94	5.995	5.995	(0.570)	9811	2.00000	2.1
8 Chloroethane	64	6.147	6.147	(0.584)	9334	2.00000	2.0
9 Trichlorofluoromethane	101	6.573	6.573	(0.625)	18155	2.00000	2.1
10 Ethyl Ether	74	6.877	6.877	(0.653)	7591	2.00000	1.9
13 Acetone	43	7.242	7.242	(0.688)	56577	10.0000	10.4
16 Acetonitrile	41	7.606	7.606	(0.723)	52674	50.0000	48.3
14 1,1-Dichloroethylene	61	7.269	7.269	(0.691)	20343	2.00000	2.1
17 Methyl acetate	43	7.633	7.633	(0.725)	58774	10.0000	9.6
15 Iodomethane	142	7.519	7.519	(0.714)	89244	10.0000	10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
20 Methylene chloride	84	7.835	7.835	(0.745)	27609	2.00000	2.0
18 Carbon disulfide	76	7.660	7.660	(0.728)	193797	10.0000	10.1
22 tert-Butyl methyl ether	73	8.132	8.132	(0.773)	10979	2.00000	1.8
23 trans-1,2-Dichloroethylene	61	8.179	8.179	(0.777)	20087	2.00000	2.0
24 Vinyl acetate	43	8.604	8.604	(0.818)	138915	10.0000	9.1
25 1,1-Dichloroethane	63	8.657	8.657	(0.823)	24661	2.00000	2.1
30 2-Butanone	43	9.230	9.230	(0.877)	56224	10.0000	9.8
31 cis-1,2-Dichloroethylene	61	9.291	9.291	(0.883)	22288	2.00000	2.0
33 2,2-Dichloropropane	77	9.325	9.325	(0.886)	16275	2.00000	2.0
36 Chloroform	83	9.594	9.594	(0.912)	22450	2.00000	2.1
35 Bromochloromethane	128	9.567	9.567	(0.909)	5917	2.00000	2.0
40 1,1,1-Trichloroethane	97	9.884	9.884	(0.939)	18340	2.00000	2.0
43 Cyclohexane	56	9.985	9.985	(0.949)	26084	2.00000	2.1
44 1,1-Dichloropropene	75	10.039	10.039	(0.954)	15599	2.00000	2.0
52 n-Butyl alcohol	56	10.612	10.612	(1.008)	29484	200.000	212
46 Carbon tetrachloride	117	10.079	10.079	(0.958)	15232	2.00000	2.1
48 1,2-Dichloroethane	62	10.248	10.248	(0.974)	19326	2.00000	2.1
49 Benzene	78	10.275	10.275	(0.976)	52482	2.00000	2.0
50 Cyclohexene	67	10.396	10.396	(0.988)	24246	2.00000	2.0
* 51 Fluorobenzene	96	10.524	10.524	(1.000)	1480249	50.0000	
53 Trichloroethylene	95	10.915	10.915	(1.037)	13119	2.00000	2.1
55 1,2-Dichloropropane	63	11.157	11.157	(1.060)	13469	2.00000	1.9
56 Methylcyclohexane	83	11.164	11.164	(1.061)	20787	2.00000	2.0
59 Bromodichloromethane	83	11.407	11.407	(1.084)	14328	2.00000	1.9
58 Dibromomethane	93	11.292	11.292	(1.073)	7292	2.00000	2.0
63 4-Methyl-2-pentanone	58	11.932	11.932	(0.871)	26005	10.0000	9.2
62 cis-1,3-Dichloropropylene	75	11.851	11.851	(1.126)	16865	2.00000	1.9
65 Toluene	92	12.242	12.242	(0.894)	33358	2.00000	2.2
67 trans-1,3-Dichloropropylene	75	12.391	12.391	(0.905)	15247	2.00000	1.8
68 1,1,2-Trichloroethane	83	12.613	12.613	(0.921)	9214	2.00000	2.0
69 2-Hexanone	43	12.781	12.781	(0.933)	63457	10.0000	9.4
70 1,3-Dichloropropane	76	12.808	12.808	(0.935)	19227	2.00000	2.0
71 Tetrachloroethylene	164	12.842	12.842	(0.938)	12780	2.00000	1.9
72 Dibromochloromethane	129	13.078	13.078	(0.955)	9075	2.00000	1.8
73 1,2-Dibromoethane	107	13.246	13.246	(0.967)	9565	2.00000	1.9
* 75 Chlorobenzene-d5	117	13.698	13.698	(1.000)	1113073	50.0000	
76 Chlorobenzene	112	13.732	13.732	(1.002)	33957	2.00000	2.0(Q)
77 1,1,1,2-Tetrachloroethane	131	13.785	13.785	(1.006)	10182	2.00000	1.9
78 Ethylbenzene	91	13.785	13.785	(1.006)	58278	2.00000	2.0
79 m,p-Xylenes	106	13.893	13.893	(1.014)	44570	4.00000	4.1
80 o-Xylene	106	14.331	14.331	(1.046)	21362	2.00000	2.0
81 Styrene	104	14.331	14.331	(1.046)	27318	2.00000	1.7
82 Bromoform	173	14.601	14.601	(0.906)	5310	2.00000	1.7
83 Isopropylbenzene	105	14.688	14.688	(0.911)	47580	2.00000	2.0
87 1,1,2,2-Tetrachloroethane	83	14.965	14.965	(0.928)	12906	2.00000	1.9
88 1,2,3-Trichloropropane	110	15.052	15.052	(0.934)	3912	2.00000	2.0(Q)
90 Bromobenzene	156	15.106	15.106	(0.937)	13130	2.00000	2.0

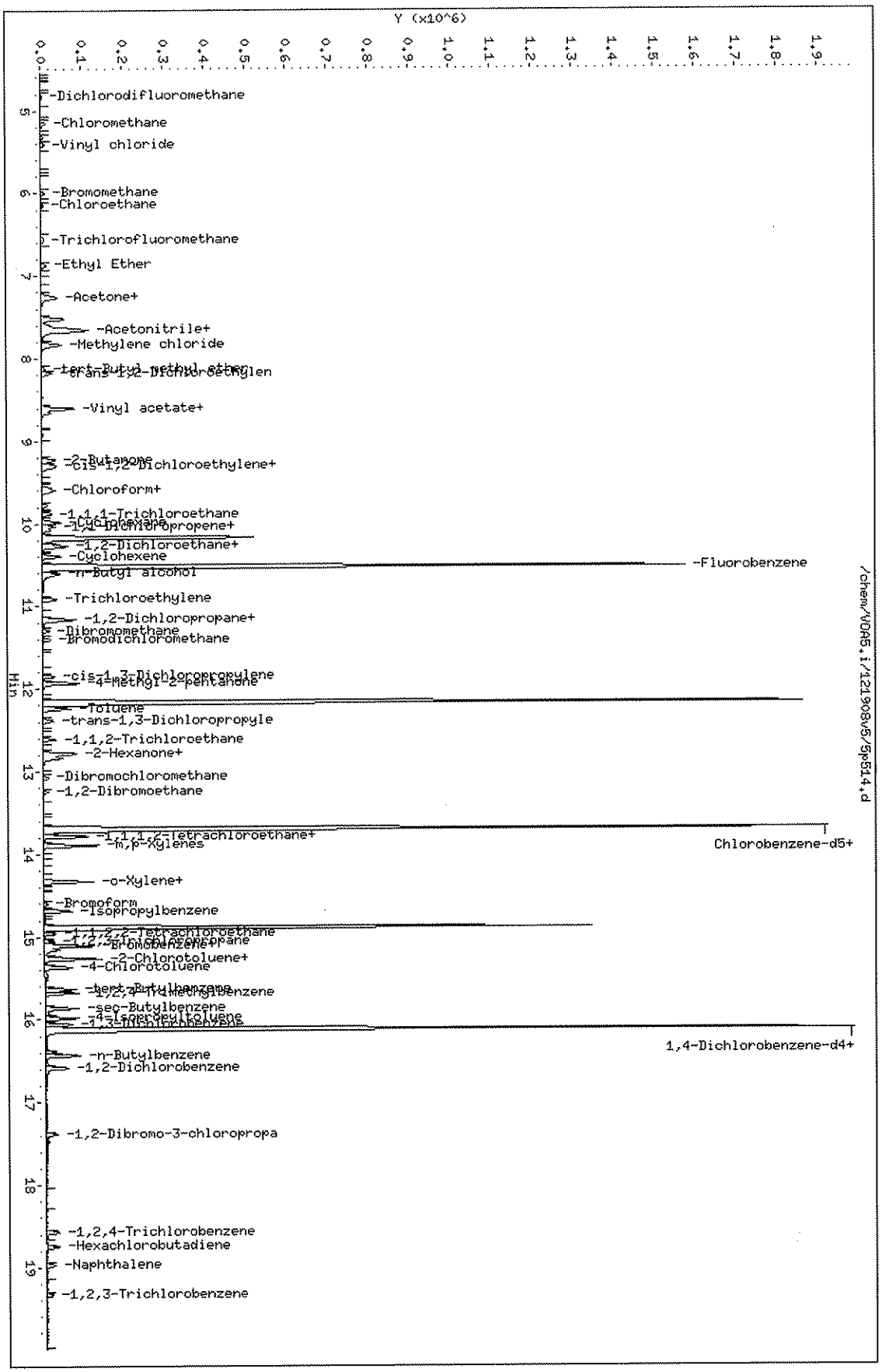
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
91 n-Propylbenzene	91	15.113	15.113	(0.938)	67554	2.00000	2.1
93 2-Chlorotoluene	91	15.268	15.268	(0.947)	48305	2.00000	2.1
92 1,3,5-Trimethylbenzene	105	15.261	15.261	(0.947)	46028	2.00000	2.0
94 4-Chlorotoluene	91	15.369	15.369	(0.954)	42313	2.00000	2.0
95 tert-Butylbenzene	119	15.639	15.639	(0.970)	46099	2.00000	2.1
96 1,2,4-Trimethylbenzene	105	15.672	15.672	(0.972)	54032	2.00000	2.1
98 sec-Butylbenzene	105	15.861	15.861	(0.984)	63064	2.00000	2.1
99 4-Isopropyltoluene	119	15.982	15.982	(0.992)	48713	2.00000	2.0
100 1,3-Dichlorobenzene	146	16.063	16.063	(0.997)	26106	2.00000	2.0
* 101 1,4-Dichlorobenzene-d4	152	16.117	16.117	(1.000)	564811	50.0000	
102 1,4-Dichlorobenzene	146	16.144	16.144	(1.002)	28171	2.00000	2.1
104 n-Butylbenzene	92	16.434	16.434	(1.020)	26484	2.00000	2.0
106 1,2-Dichlorobenzene	146	16.582	16.582	(1.029)	26296	2.00000	2.0
107 1,2-Dibromo-3-chloropropane	157	17.481	17.481	(1.085)	1496	2.00000	2.8
108 1,2,4-Trichlorobenzene	180	18.571	18.571	(1.152)	13783	2.00000	2.0
109 Hexachlorobutadiene	225	18.746	18.746	(1.163)	8846	2.00000	2.1
110 Naphthalene	128	18.972	18.972	(1.177)	23248	2.00000	2.0
111 1,2,3-Trichlorobenzene	180	19.326	19.326	(1.199)	7516	2.00000	2.0

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA5.i/121908v5/5p514.d
Date : 19-DEC-2008 18:11
Client ID: VSTD002
Sample Info: IW5VH081219-031L2I1IVOA!1!
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA5.i
Operator: DXK1
Column diameter: 0.25



Page 1

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA5.i/121908v5/5p515.d
Lab Smp Id: W5VM081219-04 Client Smp ID: VSTD005
Inj Date : 19-DEC-2008 18:36
Operator : DXK1 Inst ID: VOA5.i
Smp Info : |W5VM081219-04|L3|1|VOA|1|
Misc Info : GEL 5mL N/A UVM081124-03B+UVM081123-03D
Comment :
Method : /chem/VOA5.i/121908v5/VOA5-8260B-121908.m
Meth Date : 06-Jan-2009 18:17 eh1 Quant Type: ISTD
Cal Date : 19-DEC-2008 22:48 Cal File: 5p525.d
Als bottle: 15 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

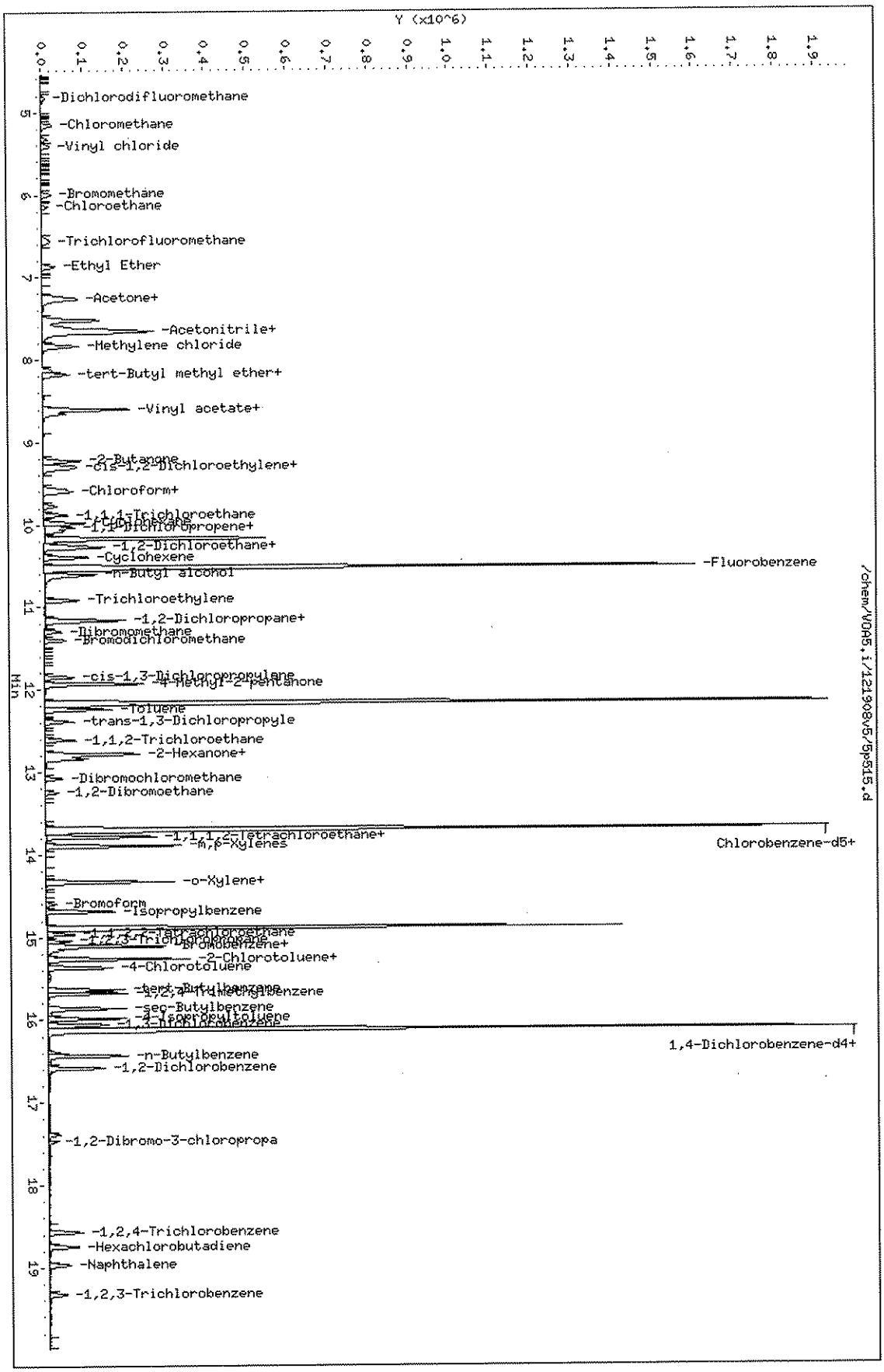
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 2 Xylenes (total)	106				157602	15.0000	14.4
M 3 1,2-Dichloroethylene (total)	96				104060	10.0000	9.9
M 1 1,3-Dichloropropylene	75				83192	10.0000	9.4
4 Dichlorodifluoromethane	85	4.833	4.833	(0.459)	24887	5.00000	5.2
5 Chloromethane	50	5.160	5.160	(0.490)	48726	5.00000	5.1
6 Vinyl chloride	62	5.410	5.410	(0.514)	38878	5.00000	5.0
7 Bromomethane	94	6.003	6.003	(0.570)	23584	5.00000	5.0
8 Chloroethane	64	6.147	6.147	(0.584)	22538	5.00000	4.9
9 Trichlorofluoromethane	101	6.572	6.572	(0.625)	42381	5.00000	4.9
10 Ethyl Ether	74	6.876	6.876	(0.653)	19421	5.00000	4.8
13 Acetone	43	7.242	7.242	(0.688)	138902	25.0000	25.4
16 Acetonitrile	41	7.606	7.606	(0.723)	134612	125.000	122
14 1,1-Dichloroethylene	61	7.269	7.269	(0.691)	47363	5.00000	4.9
17 Methyl acetate	43	7.633	7.633	(0.725)	152844	25.0000	24.9
15 Iodomethane	142	7.518	7.518	(0.714)	219739	25.0000	24.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
20 Methylene chloride	84	7.835	7.835	(0.744)	45220	5.00000	4.8
18 Carbon disulfide	76	7.660	7.660	(0.728)	472901	25.0000	24.5
22 tert-Butyl methyl ether	73	8.125	8.125	(0.772)	27382	5.00000	4.5
23 trans-1,2-Dichloroethylene	61	8.179	8.179	(0.777)	49151	5.00000	4.9
24 Vinyl acetate	43	8.603	8.603	(0.818)	371367	25.0000	24.2
25 1,1-Dichloroethane	63	8.657	8.657	(0.823)	58792	5.00000	4.9
30 2-Butanone	43	9.223	9.223	(0.876)	148778	25.0000	25.8
31 cis-1,2-Dichloroethylene	61	9.291	9.291	(0.883)	54909	5.00000	5.0
33 2,2-Dichloropropane	77	9.324	9.324	(0.886)	39647	5.00000	4.8
36 Chloroform	83	9.594	9.594	(0.912)	53435	5.00000	4.9
35 Bromochloromethane	128	9.567	9.567	(0.909)	15596	5.00000	5.1
40 1,1,1-Trichloroethane	97	9.884	9.884	(0.939)	43192	5.00000	4.8
43 Cyclohexane	56	9.978	9.978	(0.948)	60316	5.00000	4.8
44 1,1-Dichloropropene	75	10.032	10.032	(0.953)	37885	5.00000	4.8
52 n-Butyl alcohol	56	10.605	10.605	(1.008)	97851	500.000	489
46 Carbon tetrachloride	117	10.079	10.079	(0.958)	35701	5.00000	4.8
48 1,2-Dichloroethane	62	10.254	10.254	(0.974)	47048	5.00000	5.0
49 Benzene	78	10.274	10.274	(0.976)	124640	5.00000	4.7
50 Cyclohexene	67	10.396	10.396	(0.988)	58069	5.00000	4.8
* 51 Fluorobenzene	96	10.524	10.524	(1.000)	1493199	50.0000	
53 Trichloroethylene	95	10.915	10.915	(1.037)	30359	5.00000	4.9
55 1,2-Dichloropropane	63	11.150	11.150	(1.060)	34811	5.00000	5.0
56 Methylcyclohexane	83	11.164	11.164	(1.061)	50312	5.00000	4.8
59 Bromodichloromethane	83	11.406	11.406	(1.084)	37773	5.00000	4.9
58 Dibromomethane	93	11.292	11.292	(1.073)	18324	5.00000	5.0
63 4-Methyl-2-pentanone	58	11.932	11.932	(0.871)	70381	25.0000	24.6
62 cis-1,3-Dichloropropylene	75	11.851	11.851	(1.126)	42523	5.00000	4.6
65 Toluene	92	12.242	12.242	(0.894)	76714	5.00000	4.9
67 trans-1,3-Dichloropropylene	75	12.390	12.390	(0.905)	40669	5.00000	4.8
68 1,1,2-Trichloroethane	83	12.613	12.613	(0.921)	22672	5.00000	4.9
69 2-Hexanone	43	12.781	12.781	(0.933)	169984	25.0000	24.8
70 1,3-Dichloropropane	76	12.801	12.801	(0.935)	48586	5.00000	5.0
71 Tetrachloroethylene	164	12.835	12.835	(0.937)	26376	5.00000	4.8
72 Dibromochloromethane	129	13.078	13.078	(0.955)	24067	5.00000	4.6
73 1,2-Dibromoethane	107	13.253	13.253	(0.968)	24817	5.00000	4.9
* 75 Chlorobenzene-d5	117	13.698	13.698	(1.000)	1122488	50.0000	
76 Chlorobenzene	112	13.731	13.731	(1.002)	82490	5.00000	5.0
77 1,1,1,2-Tetrachloroethane	131	13.778	13.778	(1.006)	25756	5.00000	4.7
78 Ethylbenzene	91	13.785	13.785	(1.006)	141522	5.00000	4.9
79 m,p-Xylenes	106	13.893	13.893	(1.014)	105715	10.0000	9.6
80 o-Xylene	106	14.331	14.331	(1.046)	51887	5.00000	4.8
81 Styrene	104	14.331	14.331	(1.046)	73456	5.00000	4.6
82 Bromoform	173	14.601	14.601	(0.906)	14687	5.00000	4.6
83 Isopropylbenzene	105	14.688	14.688	(0.911)	119872	5.00000	5.0
87 1,1,2,2-Tetrachloroethane	83	14.958	14.958	(0.928)	34919	5.00000	5.0
88 1,2,3-Trichloropropane	110	15.045	15.045	(0.934)	10350	5.00000	5.3
90 Bromobenzene	156	15.106	15.106	(0.937)	34235	5.00000	5.1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
91 n-Propylbenzene	91	15.113	15.113	(0.938)	164117	5.00000	5.0
93 2-Chlorotoluene	91	15.268	15.268	(0.947)	116000	5.00000	5.0
92 1,3,5-Trimethylbenzene	105	15.261	15.261	(0.947)	116278	5.00000	5.0
94 4-Chlorotoluene	91	15.369	15.369	(0.954)	104806	5.00000	5.0
95 tert-Butylbenzene	119	15.638	15.638	(0.970)	111084	5.00000	5.0
96 1,2,4-Trimethylbenzene	105	15.679	15.679	(0.973)	123407	5.00000	4.8
98 sec-Butylbenzene	105	15.861	15.861	(0.984)	149458	5.00000	4.9
99 4-Isopropyltoluene	119	15.982	15.982	(0.992)	120427	5.00000	4.9
100 1,3-Dichlorobenzene	146	16.063	16.063	(0.997)	66451	5.00000	5.0
* 101 1,4-Dichlorobenzene-d4	152	16.117	16.117	(1.000)	572927	50.0000	
102 1,4-Dichlorobenzene	146	16.144	16.144	(1.002)	69146	5.00000	5.0
104 n-Butylbenzene	92	16.433	16.433	(1.020)	67708	5.00000	5.0
106 1,2-Dichlorobenzene	146	16.588	16.588	(1.029)	64110	5.00000	4.9
107 1,2-Dibromo-3-chloropropane	157	17.471	17.471	(1.084)	4426	5.00000	5.4
108 1,2,4-Trichlorobenzene	180	18.576	18.576	(1.153)	33050	5.00000	4.8
109 Hexachlorobutadiene	225	18.751	18.751	(1.163)	21214	5.00000	5.0
110 Naphthalene	128	18.967	18.967	(1.177)	58411	5.00000	4.9
111 1,2,3-Trichlorobenzene	180	19.322	19.322	(1.199)	19905	5.00000	5.2

Data File: /chem/VOA5.i/121908v5/5p515.d
Date : 19-DEC-2008 18:36
Client ID: VSTD005
Sample Info: IW5VH081219-04L3|1|VOA11
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA5.i
Operator: DKK1
Column diameter: 0.25



Page 1

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA5.i/121908v5/5p516.d
Lab Smp Id: W5VM081219-05 Client Smp ID: VSTD010
Inj Date : 19-DEC-2008 19:01
Operator : DXK1 Inst ID: VOA5.i
Smp Info : |W5VM081219-05|L4|1|VOA|1|
Misc Info : GEL 5mL N/A UVM081124-04B+UVM081123-04D
Comment :
Method : /chem/VOA5.i/121908v5/VOA5-8260B-121908.m
Meth Date : 06-Jan-2009 18:17 eh1 Quant Type: ISTD
Cal Date : 19-DEC-2008 23:13 Cal File: 5p526.d
Als bottle: 16 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
M 2 Xylenes (total)	106				307103	30.0000	28.0
M 3 1,2-Dichloroethylene (total)	96				202438	20.0000	19.2
M 1 1,3-Dichloropropylene	75				172979	20.0000	19.4
4 Dichlorodifluoromethane	85	4.825	4.825	(0.459)	48061	10.0000	10.0
5 Chloromethane	50	5.160	5.160	(0.490)	92554	10.0000	9.7
6 Vinyl chloride	62	5.410	5.410	(0.514)	75200	10.0000	9.6
7 Bromomethane	94	5.995	5.995	(0.570)	47421	10.0000	9.9
8 Chloroethane	64	6.147	6.147	(0.584)	43732	10.0000	9.5
9 Trichlorofluoromethane	101	6.565	6.565	(0.624)	82407	10.0000	9.4
10 Ethyl Ether	74	6.876	6.876	(0.653)	39137	10.0000	9.6
13 Acetone	43	7.242	7.242	(0.688)	271388	50.0000	49.4
16 Acetonitrile	41	7.606	7.606	(0.723)	262510	250.000	238
14 1,1-Dichloroethylene	61	7.269	7.269	(0.691)	92302	10.0000	9.5
17 Methyl acetate	43	7.633	7.633	(0.725)	302947	50.0000	49.0
15 Iodomethane	142	7.519	7.519	(0.714)	434034	50.0000	47.9

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
20 Methylene chloride	84	7.835	7.835	(0.745)	78897	10.0000	10.1
18 Carbon disulfide	76	7.660	7.660	(0.728)	922163	50.0000	47.5
22 tert-Butyl methyl ether	73	8.132	8.132	(0.773)	59151	10.0000	9.8
23 trans-1,2-Dichloroethylene	61	8.179	8.179	(0.777)	95450	10.0000	9.6
24 Vinyl acetate	43	8.597	8.597	(0.817)	775463	50.0000	50.2
25 1,1-Dichloroethane	63	8.657	8.657	(0.823)	116084	10.0000	9.6
30 2-Butanone	43	9.223	9.223	(0.876)	295943	50.0000	51.0
31 cis-1,2-Dichloroethylene	61	9.291	9.291	(0.883)	106988	10.0000	9.7
33 2,2-Dichloropropane	77	9.318	9.318	(0.885)	79084	10.0000	9.6
36 Chloroform	83	9.601	9.601	(0.912)	104242	10.0000	9.5
35 Bromochloromethane	128	9.567	9.567	(0.909)	30272	10.0000	9.9
40 1,1,1-Trichloroethane	97	9.884	9.884	(0.939)	86808	10.0000	9.6
43 Cyclohexane	56	9.985	9.985	(0.949)	116005	10.0000	9.2
44 1,1-Dichloropropene	75	10.032	10.032	(0.953)	75789	10.0000	9.5
52 n-Butyl alcohol	56	10.605	10.605	(1.008)	210064	1000.00	942
46 Carbon tetrachloride	117	10.079	10.079	(0.958)	72040	10.0000	9.6
48 1,2-Dichloroethane	62	10.254	10.254	(0.974)	95407	10.0000	10.0
49 Benzene	78	10.275	10.275	(0.976)	239954	10.0000	9.1
50 Cyclohexene	67	10.396	10.396	(0.988)	114220	10.0000	9.4
* 51 Fluorobenzene	96	10.524	10.524	(1.000)	1500329	50.0000	
53 Trichloroethylene	95	10.915	10.915	(1.037)	60274	10.0000	9.6
55 1,2-Dichloropropane	63	11.157	11.157	(1.060)	67894	10.0000	9.6
56 Methylcyclohexane	83	11.164	11.164	(1.061)	98452	10.0000	9.3
59 Bromodichloromethane	83	11.400	11.400	(1.083)	75433	10.0000	9.8
58 Dibromomethane	93	11.292	11.292	(1.073)	36642	10.0000	10
63 4-Methyl-2-pentanone	58	11.932	11.932	(0.871)	146779	50.0000	51.2
62 cis-1,3-Dichloropropylene	75	11.851	11.851	(1.126)	89825	10.0000	9.8
65 Toluene	92	12.242	12.242	(0.894)	147113	10.0000	9.4
67 trans-1,3-Dichloropropylene	75	12.390	12.390	(0.905)	83154	10.0000	9.7
68 1,1,2-Trichloroethane	83	12.606	12.606	(0.920)	45691	10.0000	9.9
69 2-Hexanone	43	12.781	12.781	(0.933)	359612	50.0000	52.4
70 1,3-Dichloropropane	76	12.802	12.802	(0.935)	95721	10.0000	9.9
71 Tetrachloroethylene	164	12.842	12.842	(0.938)	48153	10.0000	9.4
72 Dibromochloromethane	129	13.078	13.078	(0.955)	50828	10.0000	9.7
73 1,2-Dibromoethane	107	13.246	13.246	(0.967)	50277	10.0000	9.9
* 75 Chlorobenzene-d5	117	13.698	13.698	(1.000)	1125867	50.0000	
76 Chlorobenzene	112	13.731	13.731	(1.002)	160530	10.0000	9.6
77 1,1,1,2-Tetrachloroethane	131	13.779	13.779	(1.006)	53271	10.0000	9.7
78 Ethylbenzene	91	13.785	13.785	(1.006)	272439	10.0000	9.4
79 m,p-Xylenes	106	13.893	13.893	(1.014)	205058	20.0000	18.6
80 o-Xylene	106	14.331	14.331	(1.046)	102045	10.0000	9.3
81 Styrene	104	14.331	14.331	(1.046)	151393	10.0000	9.5
82 Bromoform	173	14.601	14.601	(0.906)	31370	10.0000	9.7
83 Isopropylbenzene	105	14.688	14.688	(0.911)	229667	10.0000	9.4
87 1,1,2,2-Tetrachloroethane	83	14.958	14.958	(0.928)	70456	10.0000	10
88 1,2,3-Trichloropropane	110	15.045	15.045	(0.934)	20302	10.0000	10.2(Q)
90 Bromobenzene	156	15.106	15.106	(0.937)	64100	10.0000	9.4

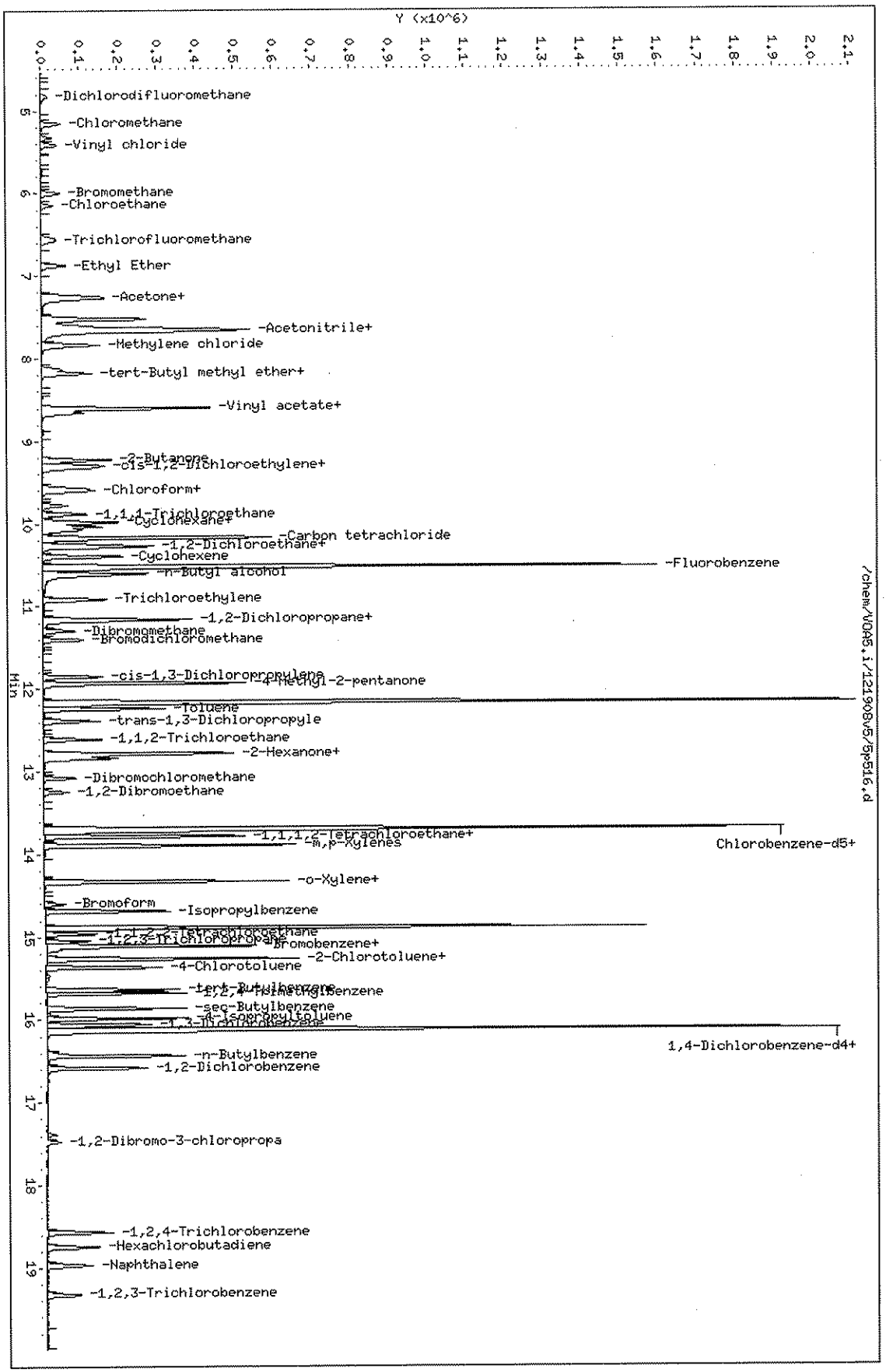
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
91 n-Propylbenzene	91	15.113	15.113	(0.938)	311999	10.0000	9.3
93 2-Chlorotoluene	91	15.268	15.268	(0.947)	221115	10.0000	9.3
92 1,3,5-Trimethylbenzene	105	15.261	15.261	(0.947)	223039	10.0000	9.3
94 4-Chlorotoluene	91	15.369	15.369	(0.954)	199111	10.0000	9.3
95 tert-Butylbenzene	119	15.638	15.638	(0.970)	209100	10.0000	9.1
96 1,2,4-Trimethylbenzene	105	15.679	15.679	(0.973)	232458	10.0000	8.9
98 sec-Butylbenzene	105	15.861	15.861	(0.984)	278979	10.0000	9.0
99 4-Isopropyltoluene	119	15.982	15.982	(0.992)	224364	10.0000	9.0
100 1,3-Dichlorobenzene	146	16.056	16.056	(0.996)	124999	10.0000	9.3
* 101 1,4-Dichlorobenzene-d4	152	16.117	16.117	(1.000)	584281	50.0000	
102 1,4-Dichlorobenzene	146	16.144	16.144	(1.002)	129410	10.0000	9.2
104 n-Butylbenzene	92	16.434	16.434	(1.020)	122606	10.0000	8.9
106 1,2-Dichlorobenzene	146	16.589	16.589	(1.029)	123909	10.0000	9.4
107 1,2-Dibromo-3-chloropropane	157	17.476	17.476	(1.084)	9841	10.0000	10.0
108 1,2,4-Trichlorobenzene	180	18.571	18.571	(1.152)	65603	10.0000	9.4
109 Hexachlorobutadiene	225	18.746	18.746	(1.163)	39164	10.0000	9.0
110 Naphthalene	128	18.967	18.967	(1.177)	125940	10.0000	10.4
111 1,2,3-Trichlorobenzene	180	19.331	19.331	(1.199)	39420	10.0000	10.1

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA5.i/121908v5/5p516.d
Date : 19-DEC-2008 19:01
Client ID: VSTD010
Sample Info: H5UH081219-051L41|VOA1|1
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA5.i
Operator: DXK1
Column diameter: 0.25



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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA5.i/121908v5/5p517.d
Lab Smp Id: W5VM081219-06 Client Smp ID: VSTD020
Inj Date : 19-DEC-2008 19:27
Operator : DXK1 Inst ID: VOA5.i
Smp Info : |W5VM081219-06|L5|1|VOA|1|
Misc Info : GEL 5mL N/A UVM081124-05B+UVM081123-05D
Comment :
Method : /chem/VOA5.i/121908v5/VOA5-8260B-121908.m
Meth Date : 06-Jan-2009 18:17 ehl Quant Type: ISTD
Cal Date : 19-DEC-2008 23:38 Cal File: 5p527.d
Als bottle: 17 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

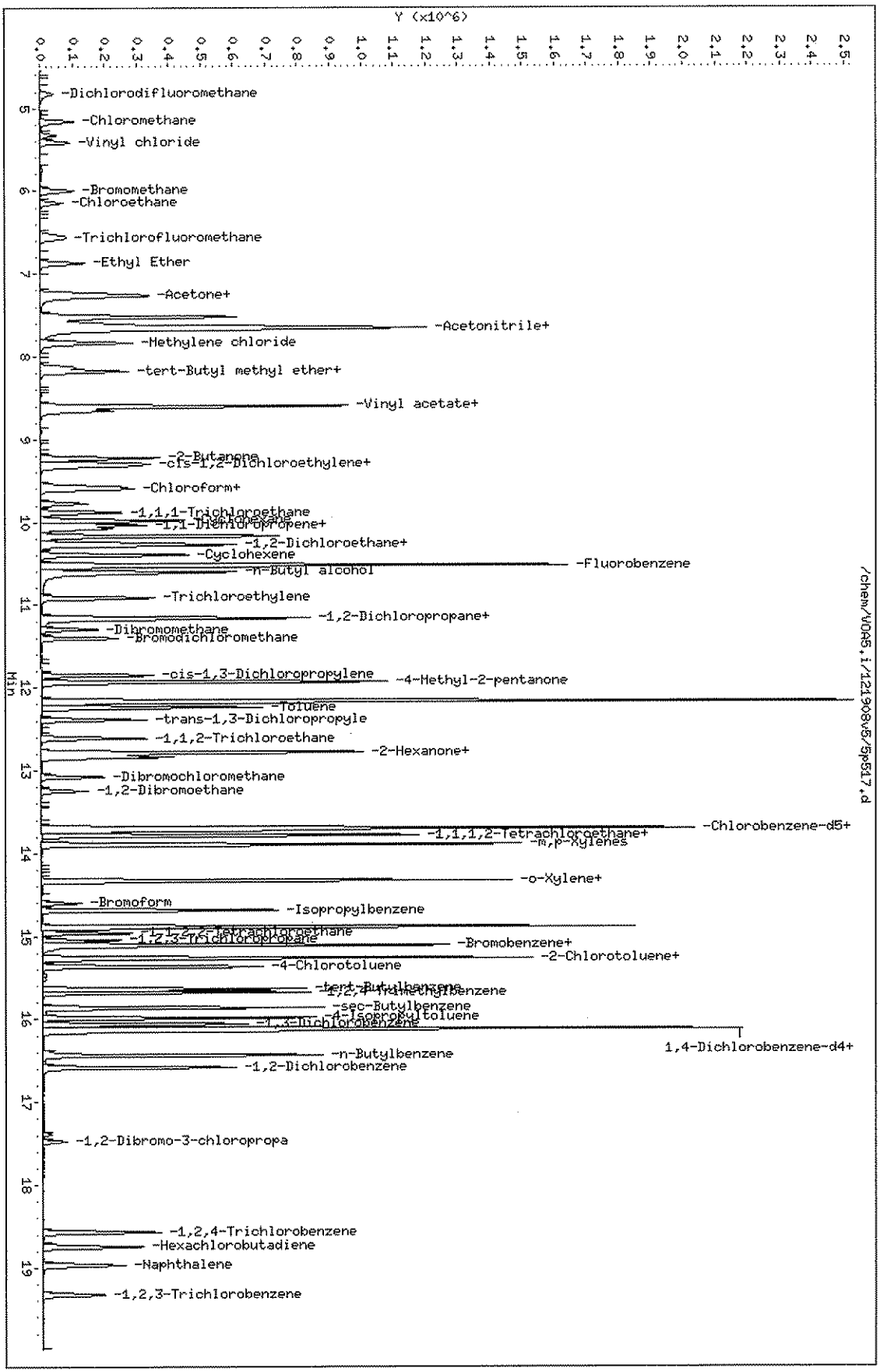
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 2 Xylenes (total)	106				700988	60.0000	61.6
M 3 1,2-Dichloroethylene (total)	96				437839	40.0000	40.4
M 1 1,3-Dichloropropylene	75				384019	40.0000	41.9
4 Dichlorodifluoromethane	85	4.825	4.825	(0.459)	88647	20.0000	17.9
5 Chloromethane	50	5.160	5.160	(0.490)	192700	20.0000	19.6
6 Vinyl chloride	62	5.410	5.410	(0.514)	159095	20.0000	19.6
7 Bromomethane	94	5.995	5.995	(0.570)	102177	20.0000	20.8
8 Chloroethane	64	6.147	6.147	(0.584)	96113	20.0000	20.3
9 Trichlorofluoromethane	101	6.565	6.565	(0.624)	177308	20.0000	19.7
10 Ethyl Ether	74	6.869	6.869	(0.653)	84776	20.0000	20.3
13 Acetone	43	7.242	7.242	(0.688)	526692	100.000	93.2
16 Acetonitrile	41	7.606	7.606	(0.723)	533099	500.000	468
14 1,1-Dichloroethylene	61	7.269	7.269	(0.691)	202660	20.0000	20.2
17 Methyl acetate	43	7.633	7.633	(0.725)	627542	100.000	98.7
15 Iodomethane	142	7.518	7.518	(0.714)	943613	100.000	101

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
20 Methylene chloride	84	7.835	7.835	(0.745)	148907	20.0000	20.5
18 Carbon disulfide	76	7.660	7.660	(0.728)	2020657	100.000	101
22 tert-Butyl methyl ether	73	8.132	8.132	(0.773)	131805	20.0000	21.1
23 trans-1,2-Dichloroethylene	61	8.179	8.179	(0.777)	207895	20.0000	20.2
24 Vinyl acetate	43	8.597	8.597	(0.817)	1666628	100.000	105
25 1,1-Dichloroethane	63	8.657	8.657	(0.823)	248736	20.0000	20.0
30 2-Butanone	43	9.223	9.223	(0.876)	583216	100.000	97.6
31 cis-1,2-Dichloroethylene	61	9.291	9.291	(0.883)	229944	20.0000	20.2
33 2,2-Dichloropropane	77	9.318	9.318	(0.885)	171911	20.0000	20.2
36 Chloroform	83	9.601	9.601	(0.912)	223654	20.0000	19.8
35 Bromochloromethane	128	9.567	9.567	(0.909)	62796	20.0000	20.0
40 1,1,1-Trichloroethane	97	9.884	9.884	(0.939)	188629	20.0000	20.2
43 Cyclohexane	56	9.978	9.978	(0.948)	257625	20.0000	20.0
44 1,1-Dichloropropene	75	10.032	10.032	(0.953)	166488	20.0000	20.4
52 n-Butyl alcohol	56	10.605	10.605	(1.008)	457340	2000.00	1890
46 Carbon tetrachloride	117	10.079	10.079	(0.958)	154535	20.0000	20.1
48 1,2-Dichloroethane	62	10.248	10.248	(0.974)	197200	20.0000	20.2
49 Benzene	78	10.275	10.275	(0.976)	517138	20.0000	19.0
50 Cyclohexene	67	10.396	10.396	(0.988)	252592	20.0000	20.2
* 51 Fluorobenzene	96	10.524	10.524	(1.000)	1544850	50.0000	
53 Trichloroethylene	95	10.915	10.915	(1.037)	127225	20.0000	19.7
55 1,2-Dichloropropane	63	11.157	11.157	(1.060)	146155	20.0000	20.2
56 Methylcyclohexane	83	11.164	11.164	(1.061)	220194	20.0000	20.3
59 Bromodichloromethane	83	11.400	11.400	(1.083)	165875	20.0000	20.9
58 Dibromomethane	93	11.292	11.292	(1.073)	77092	20.0000	20.4
63 4-Methyl-2-pentanone	58	11.932	11.932	(0.871)	313105	100.000	105
62 cis-1,3-Dichloropropylene	75	11.851	11.851	(1.126)	197928	20.0000	20.9
65 Toluene	92	12.242	12.242	(0.894)	317950	20.0000	19.6
67 trans-1,3-Dichloropropylene	75	12.390	12.390	(0.905)	186091	20.0000	20.9
68 1,1,2-Trichloroethane	83	12.613	12.613	(0.921)	95897	20.0000	20.0
69 2-Hexanone	43	12.774	12.774	(0.933)	724361	100.000	102
70 1,3-Dichloropropane	76	12.801	12.801	(0.935)	200485	20.0000	20.0
71 Tetrachloroethylene	164	12.842	12.842	(0.938)	103829	20.0000	20.4
72 Dibromochloromethane	129	13.078	13.078	(0.955)	114666	20.0000	21.2
73 1,2-Dibromoethane	107	13.246	13.246	(0.967)	110976	20.0000	21.0
* 75 Chlorobenzene-d5	117	13.698	13.698	(1.000)	1167577	50.0000	
76 Chlorobenzene	112	13.731	13.731	(1.002)	348857	20.0000	20.1
77 1,1,1,2-Tetrachloroethane	131	13.779	13.779	(1.006)	119191	20.0000	20.9
78 Ethylbenzene	91	13.785	13.785	(1.006)	608364	20.0000	20.2
79 m,p-Xylenes	106	13.893	13.893	(1.014)	467723	40.0000	41.0
80 o-Xylene	106	14.331	14.331	(1.046)	233265	20.0000	20.6
81 Styrene	104	14.331	14.331	(1.046)	362714	20.0000	21.9
82 Bromoform	173	14.601	14.601	(0.906)	70542	20.0000	20.8
83 Isopropylbenzene	105	14.688	14.688	(0.911)	528828	20.0000	20.5
87 1,1,2,2-Tetrachloroethane	83	14.958	14.958	(0.928)	150123	20.0000	20.2
88 1,2,3-Trichloropropane	110	15.045	15.045	(0.934)	41796	20.0000	19.9
90 Bromobenzene	156	15.106	15.106	(0.937)	144059	20.0000	20.1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
91 n-Propylbenzene	91	15.113	15.113	(0.938)	722745	20.0000	20.4
93 2-Chlorotoluene	91	15.268	15.268	(0.947)	501292	20.0000	20.0
92 1,3,5-Trimethylbenzene	105	15.261	15.261	(0.947)	508299	20.0000	20.2
94 4-Chlorotoluene	91	15.362	15.362	(0.953)	457041	20.0000	20.3
95 tert-Butylbenzene	119	15.638	15.638	(0.970)	484664	20.0000	20.1
96 1,2,4-Trimethylbenzene	105	15.679	15.679	(0.973)	532390	20.0000	19.4
98 sec-Butylbenzene	105	15.861	15.861	(0.984)	657099	20.0000	20.1
99 4-Isopropyltoluene	119	15.982	15.982	(0.992)	533905	20.0000	20.4
100 1,3-Dichlorobenzene	146	16.056	16.056	(0.996)	283906	20.0000	20.1
* 101 1,4-Dichlorobenzene-d4	152	16.117	16.117	(1.000)	614716	50.0000	
102 1,4-Dichlorobenzene	146	16.144	16.144	(1.002)	297854	20.0000	20.0
104 n-Butylbenzene	92	16.434	16.434	(1.020)	297538	20.0000	20.5
106 1,2-Dichlorobenzene	146	16.582	16.582	(1.029)	278292	20.0000	20.0
107 1,2-Dibromo-3-chloropropane	157	17.476	17.476	(1.084)	20907	20.0000	18.8
108 1,2,4-Trichlorobenzene	180	18.571	18.571	(1.152)	151195	20.0000	20.6
109 Hexachlorobutadiene	225	18.751	18.751	(1.163)	89919	20.0000	19.6
110 Naphthalene	128	18.967	18.967	(1.177)	277347	20.0000	21.9
111 1,2,3-Trichlorobenzene	180	19.326	19.326	(1.199)	85806	20.0000	21.0

Data File: /chem/VOA5.i/121908v5/5p517.d
Date : 19-DEC-2008 19:27
Client ID: VSTD020
Sample Info: IW5VH081219-061L5I1IVOA1I
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA5.i
Operator: DKK1
Column diameter: 0.25



Page 1

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA5.i/121908v5/5p518.d
Lab Smp Id: W5VM081219-07 Client Smp ID: VSTD050
Inj Date : 19-DEC-2008 19:52
Operator : DXK1 Inst ID: VOA5.i
Smp Info : |W5VM081219-07|L6|1|VOA|1|
Misc Info : GEL 5mL N/A UVM081124-06B+UVM081123-06D
Comment :
Method : /chem/VOA5.i/121908v5/VOA5-8260B-121908.m
Meth Date : 06-Jan-2009 18:17 ehl Quant Type: ISTD
Cal Date : 20-DEC-2008 00:03 Cal File: 5p528.d
Als bottle: 18 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

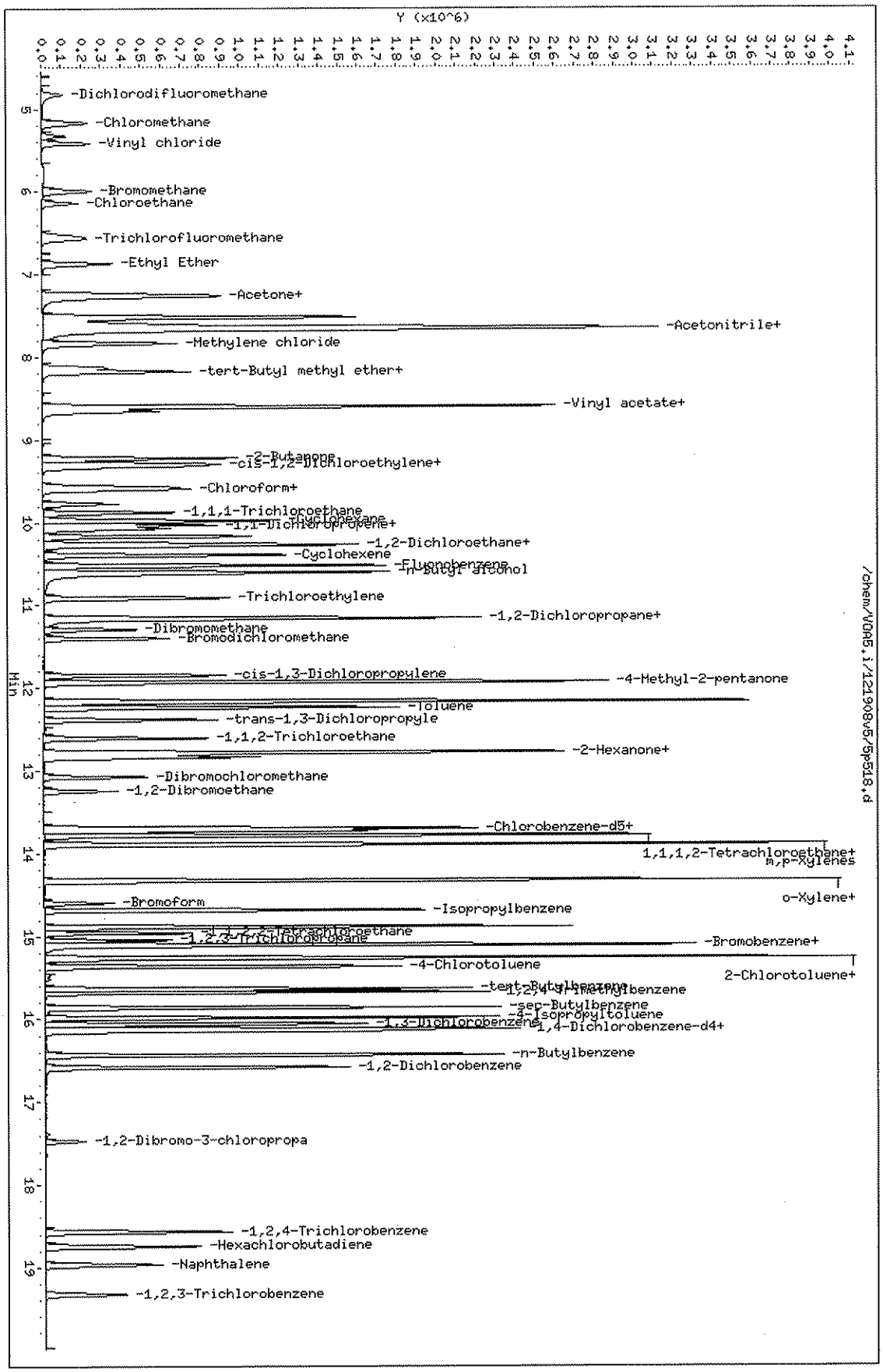
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
M 2 Xylenes (total)	106				1867710	150.000	154
M 3 1,2-Dichloroethylene (total)	96				1143907	100.000	98.9
M 1 1,3-Dichloropropylene	75				1044229	100.000	107
4 Dichlorodifluoromethane	85	4.826	4.826	(0.459)	254175	50.0000	48.2
5 Chloromethane	50	5.175	5.175	(0.492)	477437	50.0000	45.5
6 Vinyl chloride	62	5.418	5.418	(0.515)	408790	50.0000	47.3
7 Bromomethane	94	5.995	5.995	(0.570)	262929	50.0000	50.1
8 Chloroethane	64	6.140	6.140	(0.583)	250902	50.0000	49.7
9 Trichlorofluoromethane	101	6.565	6.565	(0.624)	476618	50.0000	49.7
10 Ethyl Ether	74	6.877	6.877	(0.653)	233451	50.0000	52.3
13 Acetone	43	7.242	7.242	(0.688)	1330537	250.000	221
16 Acetonitrile	41	7.606	7.606	(0.723)	1420461	1000.00	1170
14 1,1-Dichloroethylene	61	7.269	7.269	(0.691)	535137	50.0000	49.9
17 Methyl acetate	43	7.633	7.633	(0.725)	1685957	250.000	248
15 Iodomethane	142	7.519	7.519	(0.714)	2509514	250.000	252

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
20 Methylene chloride	84	7.835	7.835	(0.745)	364178	50.0000	50.2
18 Carbon disulfide	76	7.660	7.660	(0.728)	5386158	250.000	253
22 tert-Butyl methyl ether	73	8.125	8.125	(0.772)	403469	50.0000	60.5
23 trans-1,2-Dichloroethylene	61	8.179	8.179	(0.777)	541476	50.0000	49.3
24 Vinyl acetate	43	8.597	8.597	(0.817)	4503503	250.000	266
25 1,1-Dichloroethane	63	8.651	8.651	(0.822)	653424	50.0000	49.2
30 2-Butanone	43	9.223	9.223	(0.876)	1526580	250.000	239
31 cis-1,2-Dichloroethylene	61	9.291	9.291	(0.883)	602431	50.0000	49.5
33 2,2-Dichloropropane	77	9.318	9.318	(0.885)	459542	50.0000	50.6
36 Chloroform	83	9.601	9.601	(0.912)	584519	50.0000	48.6
35 Bromochloromethane	128	9.567	9.567	(0.909)	168185	50.0000	50.2
40 1,1,1-Trichloroethane	97	9.884	9.884	(0.939)	508846	50.0000	51.0
43 Cyclohexane	56	9.978	9.978	(0.948)	696452	50.0000	50.6
44 1,1-Dichloropropene	75	10.032	10.032	(0.953)	441480	50.0000	50.6
52 n-Butyl alcohol	56	10.605	10.605	(1.008)	1334182	5000.00	5010
46 Carbon tetrachloride	117	10.079	10.079	(0.958)	424688	50.0000	51.8
48 1,2-Dichloroethane	62	10.248	10.248	(0.974)	509959	50.0000	48.9
49 Benzene	78	10.275	10.275	(0.976)	1346054	50.0000	46.3
50 Cyclohexene	67	10.396	10.396	(0.988)	679862	50.0000	50.9
* 51 Fluorobenzene	96	10.524	10.524	(1.000)	1648159	50.0000	
53 Trichloroethylene	95	10.915	10.915	(1.037)	338843	50.0000	49.2
55 1,2-Dichloropropane	63	11.157	11.157	(1.060)	381685	50.0000	49.3
56 Methylcyclohexane	83	11.164	11.164	(1.061)	596297	50.0000	51.5
59 Bromodichloromethane	83	11.400	11.400	(1.083)	442913	50.0000	52.2
58 Dibromomethane	93	11.292	11.292	(1.073)	203406	50.0000	50.5
63 4-Methyl-2-pentanone	58	11.932	11.932	(0.871)	842865	250.000	265
62 cis-1,3-Dichloropropylene	75	11.851	11.851	(1.126)	541673	50.0000	53.7
65 Toluene	92	12.236	12.236	(0.893)	839161	50.0000	48.3
67 trans-1,3-Dichloropropylene	75	12.391	12.391	(0.905)	502556	50.0000	52.9
68 1,1,2-Trichloroethane	83	12.606	12.606	(0.920)	249882	50.0000	48.8
69 2-Hexanone	43	12.775	12.775	(0.933)	1915598	250.000	252
70 1,3-Dichloropropane	76	12.802	12.802	(0.935)	525171	50.0000	49.0
71 Tetrachloroethylene	164	12.842	12.842	(0.938)	271558	50.0000	51.2
72 Dibromochloromethane	129	13.078	13.078	(0.955)	313806	50.0000	54.3
73 1,2-Dibromoethane	107	13.246	13.246	(0.967)	295078	50.0000	52.3
* 75 Chlorobenzene-d5	117	13.698	13.698	(1.000)	1247831	50.0000	
76 Chlorobenzene	112	13.732	13.732	(1.002)	906468	50.0000	49.0
77 1,1,1,2-Tetrachloroethane	131	13.779	13.779	(1.006)	313727	50.0000	51.6
78 Ethylbenzene	91	13.785	13.785	(1.006)	1615430	50.0000	50.2
79 m,p-Xylenes	106	13.893	13.893	(1.014)	1247855	100.000	102
80 o-Xylene	106	14.331	14.331	(1.046)	619855	50.0000	51.2
81 Styrene	104	14.331	14.331	(1.046)	1004587	50.0000	56.8
82 Bromoform	173	14.601	14.601	(0.906)	203465	50.0000	55.8
83 Isopropylbenzene	105	14.688	14.688	(0.911)	1406732	50.0000	50.8
87 1,1,2,2-Tetrachloroethane	83	14.958	14.958	(0.928)	401159	50.0000	50.3
88 1,2,3-Trichloropropane	110	15.052	15.052	(0.934)	110629	50.0000	49.0
90 Bromobenzene	156	15.106	15.106	(0.937)	377687	50.0000	48.9

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
91 n-Propylbenzene	91	15.113	15.113	(0.938)	1918343	50.0000	50.3
93 2-Chlorotoluene	91	15.268	15.268	(0.947)	1322725	50.0000	49.1
92 1,3,5-Trimethylbenzene	105	15.261	15.261	(0.947)	1355713	50.0000	50.1
94 4-Chlorotoluene	91	15.362	15.362	(0.953)	1192617	50.0000	49.4
95 tert-Butylbenzene	119	15.639	15.639	(0.970)	1293971	50.0000	50.0
96 1,2,4-Trimethylbenzene	105	15.672	15.672	(0.972)	1391355	50.0000	47.3
98 sec-Butylbenzene	105	15.861	15.861	(0.984)	1755802	50.0000	50.0
99 4-Isopropyltoluene	119	15.982	15.982	(0.992)	1420729	50.0000	50.5
100 1,3-Dichlorobenzene	146	16.056	16.056	(0.996)	750042	50.0000	49.4
* 101 1,4-Dichlorobenzene-d4	152	16.117	16.117	(1.000)	660901	50.0000	
102 1,4-Dichlorobenzene	146	16.144	16.144	(1.002)	770893	50.0000	48.2
104 n-Butylbenzene	92	16.434	16.434	(1.020)	802156	50.0000	51.5
106 1,2-Dichlorobenzene	146	16.582	16.582	(1.029)	727248	50.0000	48.6
107 1,2-Dibromo-3-chloropropane	157	17.476	17.476	(1.084)	60522	50.0000	48.0
108 1,2,4-Trichlorobenzene	180	18.571	18.571	(1.152)	380855	50.0000	48.3
109 Hexachlorobutadiene	225	18.746	18.746	(1.163)	232692	50.0000	47.3
110 Naphthalene	128	18.967	18.967	(1.177)	663315	50.0000	48.6
111 1,2,3-Trichlorobenzene	180	19.326	19.326	(1.199)	185528	50.0000	42.2

Data File: /chem/VOA5.i/121908v5/5p518.d
Date : 19-DEC-2008 19:52
Client ID: VSTD050
Sample Info: IWSVH081219-07IL611IVOA11
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA5.i
Operator: DXK1
Column diameter: 0.25



Page 1

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA5.i/121908v5/5p519.d
Lab Smp Id: W5VM081219-08 Client Smp ID: VSTD100
Inj Date : 19-DEC-2008 20:17
Operator : DXK1 Inst ID: VOA5.i
Smp Info : |W5VM081219-08|L7|1|VOA|1|
Misc Info : GEL 5mL N/A UVM081124-07B+UVM081123-07D
Comment :
Method : /chem/VOA5.i/121908v5/VOA5-8260B-121908.m
Meth Date : 06-Jan-2009 18:17 eh1 Quant Type: ISTD
Cal Date : 20-DEC-2008 00:28 Cal File: 5p529.d
Als bottle: 19 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 2 Xylenes (total)	106				3933364	300.000	299
M 3 1,2-Dichloroethylene (total)	96				2404573	200.000	192
M 1 1,3-Dichloropropylene	75				2280306	200.000	215(A)
4 Dichlorodifluoromethane	85	4.826	4.826	(0.459)	523728	100.000	91.5
5 Chloromethane	50	5.183	5.183	(0.492)	948405	100.000	83.4
6 Vinyl chloride	62	5.418	5.418	(0.515)	816029	100.000	87.2
7 Bromomethane	94	5.988	5.988	(0.569)	476250	100.000	83.8
8 Chloroethane	64	6.132	6.132	(0.583)	523387	100.000	95.6
9 Trichlorofluoromethane	101	6.565	6.565	(0.624)	992156	100.000	95.4
10 Ethyl Ether	74	6.877	6.877	(0.653)	498332	100.000	103(A)
13 Acetone	43	7.242	7.242	(0.688)	2830609	500.000	433
16 Acetonitrile	41	7.606	7.606	(0.723)	3040859	2500.00	2310
14 1,1-Dichloroethylene	61	7.269	7.269	(0.691)	1126807	100.000	97.0
17 Methyl acetate	43	7.633	7.633	(0.725)	3670090	500.000	499
15 Iodomethane	142	7.519	7.519	(0.714)	5350938	500.000	496

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
20 Methylene chloride	84	7.835	7.835	(0.745)	755746	100.000	98.3
147 2-Methylpentane	71	8.139	8.139	(0.773)	1653	100.000	(aQ)
18 Carbon disulfide	76	7.660	7.660	(0.728)	11100090	500.000	480
22 tert-Butyl methyl ether	73	8.132	8.132	(0.773)	1065850	100.000	147(A)
23 trans-1,2-Dichloroethylene	61	8.179	8.179	(0.777)	1134857	100.000	95.4
24 Vinyl acetate	43	8.597	8.597	(0.817)	9558690	500.000	520(A)
25 1,1-Dichloroethane	63	8.657	8.657	(0.823)	1365190	100.000	94.7
30 2-Butanone	43	9.223	9.223	(0.876)	3248305	500.000	470
31 cis-1,2-Dichloroethylene	61	9.291	9.291	(0.883)	1269716	100.000	96.3
33 2,2-Dichloropropane	77	9.318	9.318	(0.885)	964432	100.000	98.0
36 Chloroform	83	9.601	9.601	(0.912)	1234925	100.000	94.7
35 Bromochloromethane	128	9.567	9.567	(0.909)	358963	100.000	98.9
40 1,1,1-Trichloroethane	97	9.877	9.877	(0.939)	1064003	100.000	98.4
43 Cyclohexane	56	9.978	9.978	(0.948)	1438128	100.000	96.3
44 1,1-Dichloropropene	75	10.032	10.032	(0.953)	917038	100.000	96.9
52 n-Butyl alcohol	56	10.605	10.605	(1.008)	2920649	10000.0	10000(A)
46 Carbon tetrachloride	117	10.079	10.079	(0.958)	890485	100.000	100(A)
48 1,2-Dichloroethane	62	10.248	10.248	(0.974)	1087045	100.000	96.0
49 Benzene	78	10.275	10.275	(0.976)	2803744	100.000	88.9
50 Cyclohexene	67	10.396	10.396	(0.988)	1425261	100.000	98.4
* 51 Fluorobenzene	96	10.524	10.524	(1.000)	1787344	50.0000	
53 Trichloroethylene	95	10.915	10.915	(1.037)	706068	100.000	94.6
55 1,2-Dichloropropane	63	11.157	11.157	(1.060)	813744	100.000	97.0
56 Methylcyclohexane	83	11.164	11.164	(1.061)	1229708	100.000	97.9
59 Bromodichloromethane	83	11.400	11.400	(1.083)	967812	100.000	105(A)
58 Dibromomethane	93	11.292	11.292	(1.073)	434349	100.000	99.4
63 4-Methyl-2-pentanone	58	11.932	11.932	(0.871)	1822754	500.000	530(A)
62 cis-1,3-Dichloropropylene	75	11.852	11.852	(1.126)	1178690	100.000	108(A)
65 Toluene	92	12.242	12.242	(0.894)	1767525	100.000	94.1
67 trans-1,3-Dichloropropylene	75	12.384	12.384	(0.904)	1101616	100.000	107(A)
68 1,1,2-Trichloroethane	83	12.613	12.613	(0.921)	542559	100.000	98.0
69 2-Hexanone	43	12.775	12.775	(0.933)	4129257	500.000	502(A)
70 1,3-Dichloropropane	76	12.802	12.802	(0.935)	1125145	100.000	97.0
71 Tetrachloroethylene	164	12.842	12.842	(0.938)	565234	100.000	99.3
72 Dibromochloromethane	129	13.078	13.078	(0.955)	706516	100.000	113(A)
73 1,2-Dibromoethane	107	13.246	13.246	(0.967)	639955	100.000	105(A)
* 75 Chlorobenzene-d5	117	13.698	13.698	(1.000)	1350186	50.0000	
76 Chlorobenzene	112	13.732	13.732	(1.002)	1915957	100.000	95.6
77 1,1,1,2-Tetrachloroethane	131	13.779	13.779	(1.006)	683184	100.000	104(A)
78 Ethylbenzene	91	13.785	13.785	(1.006)	3372194	100.000	96.8
79 m,p-Xylenes	106	13.893	13.893	(1.014)	2620697	200.000	199
80 o-Xylene	106	14.331	14.331	(1.046)	1312667	100.000	100(A)
81 Styrene	104	14.331	14.331	(1.046)	2208768	100.000	115(A)
82 Bromoform	173	14.601	14.601	(0.906)	475314	100.000	118(A)
83 Isopropylbenzene	105	14.688	14.688	(0.911)	2978743	100.000	97.1
87 1,1,2,2-Tetrachloroethane	83	14.958	14.958	(0.928)	875668	100.000	99.0
88 1,2,3-Trichloropropane	110	15.046	15.046	(0.934)	238899	100.000	95.3

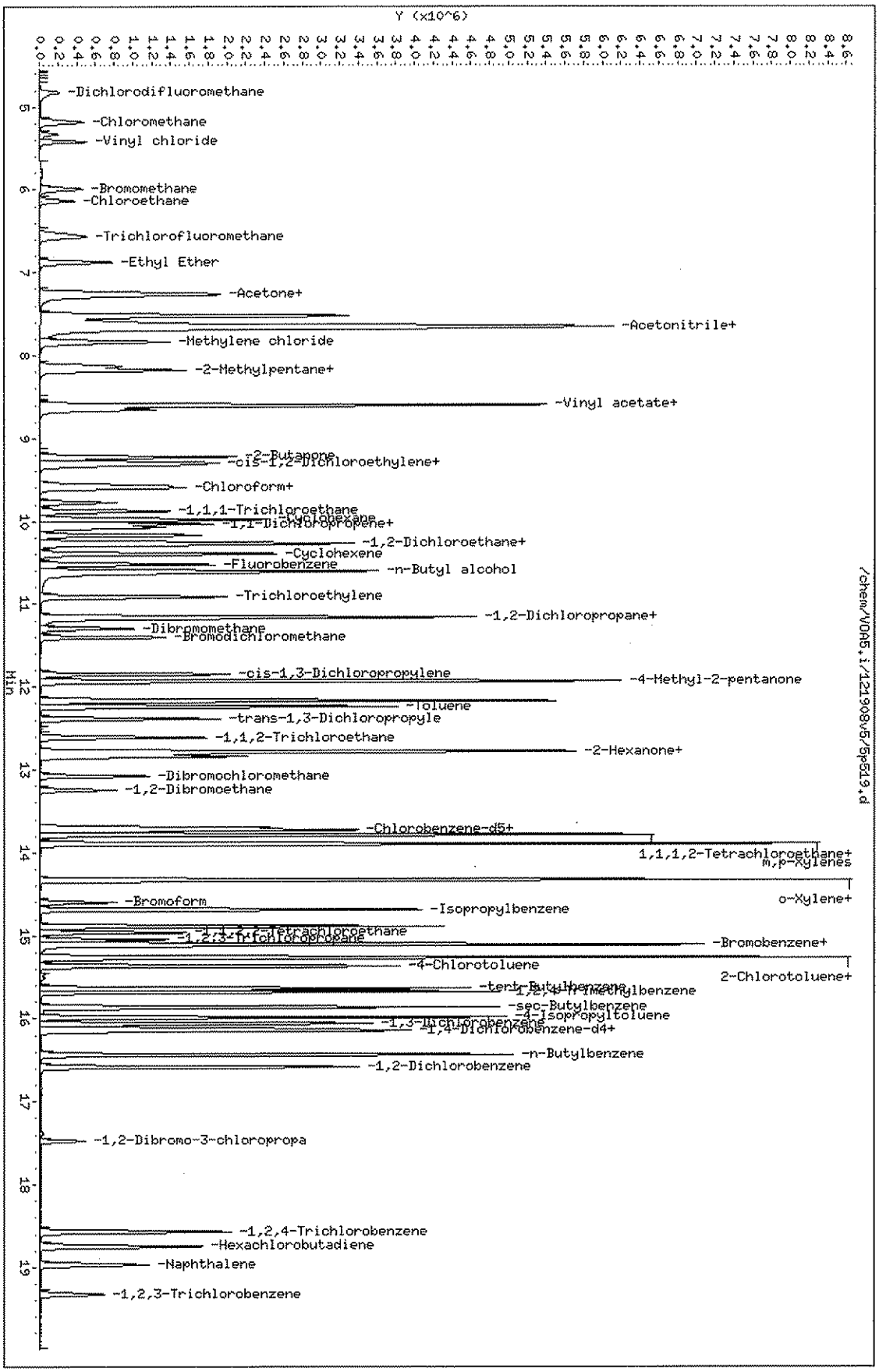
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
90 Bromobenzene	156	15.106	15.106	(0.937)	813744	100.000	95.1
91 n-Propylbenzene	91	15.113	15.113	(0.938)	4041087	100.000	95.6
93 2-Chlorotoluene	91	15.268	15.268	(0.947)	2811380	100.000	94.1
92 1,3,5-Trimethylbenzene	105	15.261	15.261	(0.947)	2920766	100.000	97.4
94 4-Chlorotoluene	91	15.369	15.369	(0.954)	2549834	100.000	95.2
95 tert-Butylbenzene	119	15.639	15.639	(0.970)	2771736	100.000	96.6
96 1,2,4-Trimethylbenzene	105	15.672	15.672	(0.972)	3012118	100.000	92.3
98 sec-Butylbenzene	105	15.861	15.861	(0.984)	3751681	100.000	96.4
99 4-Isopropyltoluene	119	15.982	15.982	(0.992)	3074996	100.000	98.6
100 1,3-Dichlorobenzene	146	16.063	16.063	(0.997)	1633862	100.000	97.1
* 101 1,4-Dichlorobenzene-d4	152	16.117	16.117	(1.000)	732859	50.0000	
102 1,4-Dichlorobenzene	146	16.144	16.144	(1.002)	1685096	100.000	95.1
104 n-Butylbenzene	92	16.434	16.434	(1.020)	1737654	100.000	101(A)
106 1,2-Dichlorobenzene	146	16.582	16.582	(1.029)	1612218	100.000	97.2
107 1,2-Dibromo-3-chloropropane	157	17.476	17.476	(1.084)	143850	100.000	101(A)
108 1,2,4-Trichlorobenzene	180	18.572	18.572	(1.152)	852942	100.000	97.6
109 Hexachlorobutadiene	225	18.751	18.751	(1.163)	520886	100.000	95.5
110 Naphthalene	128	18.967	18.967	(1.177)	1277687	100.000	84.5
111 1,2,3-Trichlorobenzene	180	19.326	19.326	(1.199)	313922	100.000	64.4

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA5.i/121908v5/5p519.d
Date : 19-DEC-2008 20:17
Client ID: VSTD100
Sample Info: IWSVH081219-081L711|VOA1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA5.i
Operator: DXK1
Column diameter: 0.25



Page 1

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA5.i/121908v5/5p523.d
Lab Smp Id: W5VM081219-11 Client Smp ID: VSTD005S
Inj Date : 19-DEC-2008 21:58
Operator : DXK1 Inst ID: VOA5.i
Smp Info : |W5VM081219-11|S1|1|VOA|1|
Misc Info : GEL 5mL N/A UVM081212-01+UVM081125-01C
Comment :
Method : /chem/VOA5.i/121908v5/VOA5-8260B-121908.m
Meth Date : 06-Jan-2009 18:17 eh1 Quant Type: ISTD
Cal Date : 19-DEC-2008 21:58 Cal File: 5p523.d
Als bottle: 23 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
148 Chlorotrifluoroethylene	116	4.750	4.750	(0.451)	6234	5.00000	(a)
149 2-Chloro-1,1,1-trifluoroethane	118	5.517	5.517	(0.524)	15290	5.00000	(a)
11 Acrolein	56	7.074	7.074	(0.672)	9623	5.00000	4.7(Q)
12 Trichlorotrifluoroethane	85	7.236	7.236	(0.688)	13647	5.00000	5.3
19 Allyl chloride	41	7.694	7.694	(0.731)	60159	5.00000	5.2
21 Acrylonitrile	53	8.078	8.078	(0.768)	15731	5.00000	5.1(a)
27 2-Chloro-1,3-butadiene	53	8.758	8.758	(0.832)	8748	1.00000	0.94(a)
32 Propionitrile	54	9.304	9.304	(0.884)	6070	5.00000	4.9(a)
29 Ethyl acetate	43	9.237	9.237	(0.878)	47348	5.00000	5.5
37 Methacrylonitrile	41	9.479	9.479	(0.901)	24919	5.00000	4.9(a)
42 Isobutyl alcohol	41	9.918	9.918	(0.942)	11055	50.0000	39.2(a)
38 Tetrahydrofuran	42	9.614	9.614	(0.597)	19673	5.00000	6.5
* 51 Fluorobenzene	96	10.524	10.524	(1.000)	1614542	50.0000	
54 Methyl methacrylate	69	11.117	11.117	(1.056)	21575	5.00000	4.5(a)
57 1,4-Dioxane	88	11.245	11.245	(1.068)	3427	50.0000	54.5

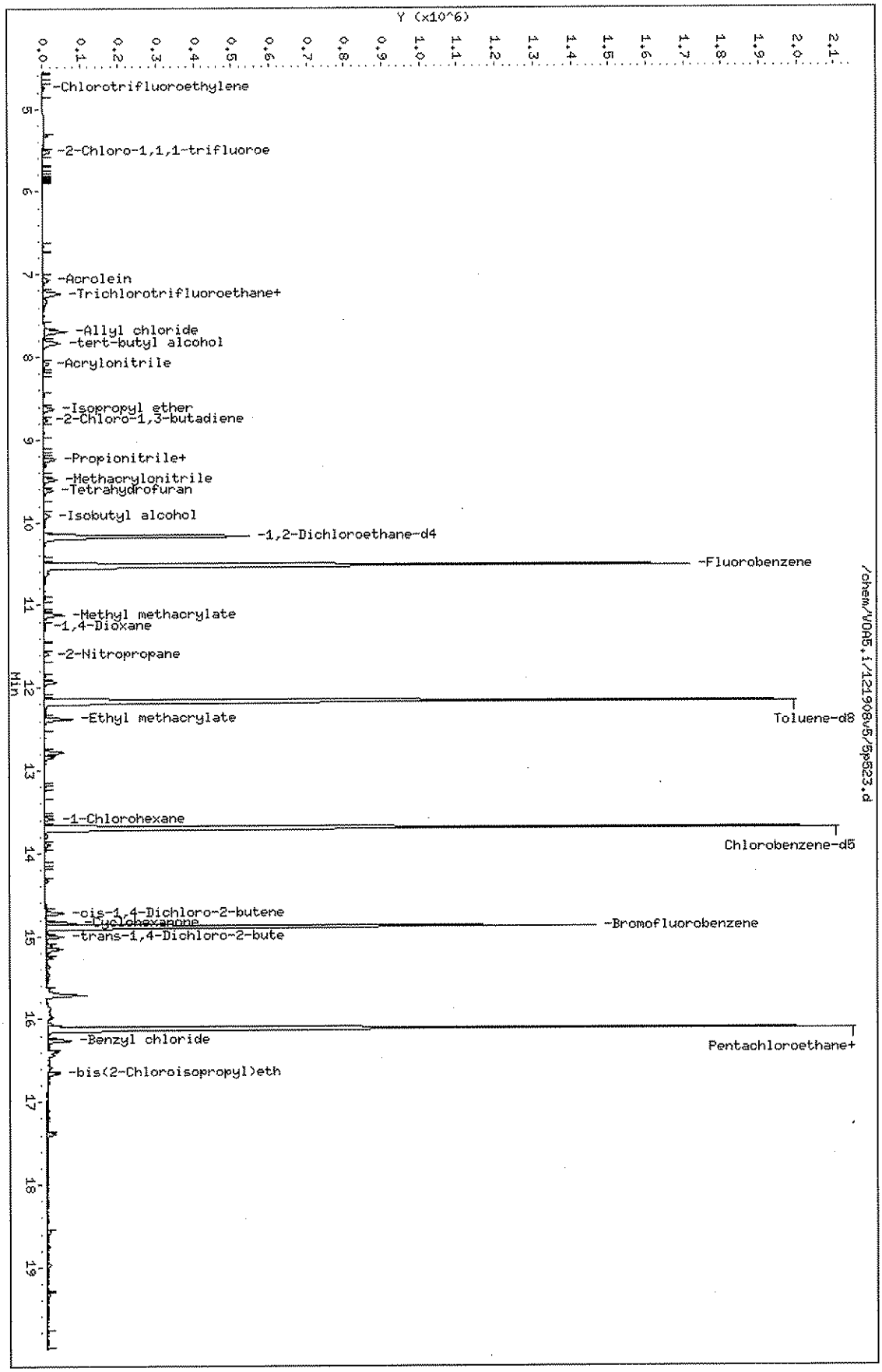
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
60 2-Nitropropane	43	11.595	11.595	(1.102)	10093	5.00000	4.4(a)
66 Ethyl methacrylate	69	12.384	12.384	(0.904)	37776	5.00000	4.2(a)
* 75 Chlorobenzene-d5	117	13.698	13.698	(1.000)	1228150	50.0000	
86 Cyclohexanone	55	14.843	14.843	(1.084)	43642	25.0000	23.4
84 cis-1,4-Dichloro-2-butene	53	14.722	14.722	(0.913)	13595	5.00000	4.5(a)
89 trans-1,4-Dichloro-2-butene	53	14.998	14.998	(0.931)	12781	5.00000	4.4(a)
97 Pentachloroethane	167	15.713	15.713	(0.975)	18435	5.00000	4.7(a)
* 101 1,4-Dichlorobenzene-d4	152	16.117	16.117	(1.000)	625052	50.0000	
103 Benzyl chloride	91	16.258	16.258	(1.009)	55910	5.00000	4.3(a)
105 bis(2-Chloroisopropyl)ether	121	16.663	16.663	(1.034)	4738	5.00000	4.9(a)
26 Isopropyl Alcohol	45	7.337	7.337	(0.697)	30909	50.0000	49.1(a)
28 tert-butyl alcohol	59	7.822	7.822	(0.743)	30787	50.0000	45.8(a)
34 Isopropyl ether	45	8.630	8.630	(0.820)	29452	1.00000	1.0
74 1-Chlorohexane	55	13.583	13.583	(0.992)	7037	1.00000	1.0
$ 47 1,2-Dichloroethane-d4	65	10.167	10.167	(0.966)	420891	50.0000	49.9
$ 64 Toluene-d8	98	12.168	12.168	(0.888)	1404194	50.0000	50.7
$ 85 Bromofluorobenzene	95	14.891	14.891	(0.924)	564725	50.0000	50.4

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA5.i/121908v5/5p523.d
Date : 19-DEC-2008 21:58
Client ID: VSTD005S
Sample Info: IW5VH081219-11|S1|1|VOA|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA5.i
Operator: DKK1
Column diameter: 0.25



Page 1

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA5.i/121908v5/5p524.d
Lab Smp Id: W5VM081219-12 Client Smp ID: VSTD010S
Inj Date : 19-DEC-2008 22:23
Operator : DXK1 Inst ID: VOA5.i
Smp Info : |W5VM081219-12|S2|1|VOA|1|
Misc Info : GEL 5mL N/A UVM081212-02+UVM081125-02C
Comment :
Method : /chem/VOA5.i/121908v5/VOA5-8260B-121908.m
Meth Date : 06-Jan-2009 18:17 eh1 Quant Type: ISTD
Cal Date : 19-DEC-2008 22:23 Cal File: 5p524.d
Als bottle: 24 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
148 Chlorotrifluoroethylene	116	4.742	4.742	(0.451)	12465	10.0000	(a)
149 2-Chloro-1,1,1-trifluoroethane	118	5.524	5.524	(0.525)	28213	10.0000	(a)
11 Acrolein	56	7.081	7.081	(0.673)	20051	10.0000	10.1
12 Trichlorotrifluoroethane	85	7.236	7.236	(0.688)	25167	10.0000	10.2
19 Allyl chloride	41	7.687	7.687	(0.730)	109336	10.0000	9.8
21 Acrylonitrile	53	8.078	8.078	(0.768)	28807	10.0000	9.7(a)
27 2-Chloro-1,3-butadiene	53	8.765	8.765	(0.833)	16619	2.00000	1.8
32 Propionitrile	54	9.298	9.298	(0.883)	11673	10.0000	9.7
29 Ethyl acetate	43	9.237	9.237	(0.878)	81031	10.0000	9.7
37 Methacrylonitrile	41	9.480	9.480	(0.901)	46546	10.0000	9.5
42 Isobutyl alcohol	41	9.924	9.924	(0.943)	24506	100.000	90.0
38 Tetrahydrofuran	42	9.614	9.614	(0.597)	30944	10.0000	10.4
* 51 Fluorobenzene	96	10.524	10.524	(1.000)	1556908	50.0000	
54 Methyl methacrylate	69	11.117	11.117	(1.056)	39306	10.0000	8.6
57 1,4-Dioxane	88	11.245	11.245	(1.068)	5807	100.000	95.7

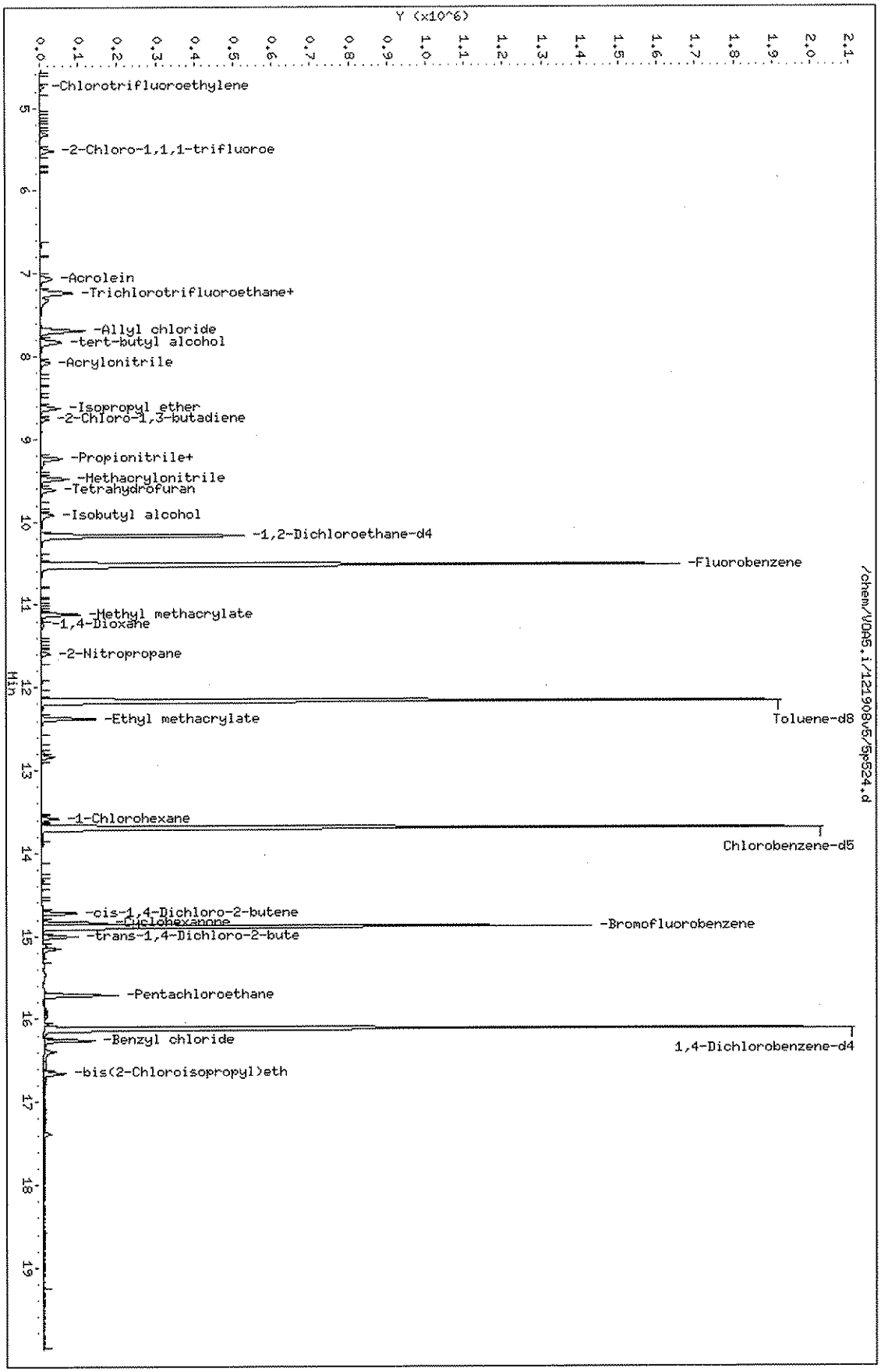
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
60 2-Nitropropane	43	11.595	11.595	(1.102)	18839	10.0000	8.5
66 Ethyl methacrylate	69	12.384	12.384	(0.904)	74994	10.0000	8.7
* 75 Chlorobenzene-d5	117	13.698	13.698	(1.000)	1178495	50.0000	
86 Cyclohexanone	55	14.843	14.843	(1.084)	85385	50.0000	47.8
84 cis-1,4-Dichloro-2-butene	53	14.722	14.722	(0.913)	25772	10.0000	8.6
89 trans-1,4-Dichloro-2-butene	53	15.005	15.005	(0.931)	25693	10.0000	8.9
97 Pentachloroethane	167	15.719	15.719	(0.975)	35639	10.0000	9.2
* 101 1,4-Dichlorobenzene-d4	152	16.117	16.117	(1.000)	615259	50.0000	
103 Benzyl chloride	91	16.258	16.258	(1.009)	111091	10.0000	8.6
105 bis(2-Chloroisopropyl)ether	121	16.663	16.663	(1.034)	8543	10.0000	9.0
26 Isopropyl Alcohol	45	7.323	7.323	(0.696)	56212	100.000	92.7
28 tert-butyl alcohol	59	7.822	7.822	(0.743)	57153	100.000	88.2
34 Isopropyl ether	45	8.624	8.624	(0.819)	54870	2.00000	2.0
74 1-Chlorohexane	55	13.583	13.583	(0.992)	12591	2.00000	1.9
$ 47 1,2-Dichloroethane-d4	65	10.167	10.167	(0.966)	413579	50.0000	50.8
$ 64 Toluene-d8	98	12.168	12.168	(0.888)	1348687	50.0000	50.7
$ 85 Bromofluorobenzene	95	14.884	14.884	(0.923)	546331	50.0000	49.5

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/VOA5.i/121908v5/5pc524.d
Date : 19-DEC-2008 22:23
Client ID: VSID010S
Sample Info: IW5VHO81219-121S21I1VOA1I1
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA5.i
Operator: BXK1
Column diameter: 0.25



Page 1

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA5.i/121908v5/5p525.d
Lab Smp Id: W5VM081219-13 Client Smp ID: VSTD025S
Inj Date : 19-DEC-2008 22:48
Operator : DXK1 Inst ID: VOA5.i
Smp Info : |W5VM081219-13|S3|1|VOA|1|
Misc Info : GEL 5mL N/A UVM081212-03+UVM081125-03C
Comment :
Method : /chem/VOA5.i/121908v5/VOA5-8260B-121908.m
Meth Date : 06-Jan-2009 18:18 eh1 Quant Type: ISTD
Cal Date : 19-DEC-2008 22:48 Cal File: 5p525.d
Als bottle: 25 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
148 Chlorotrifluoroethylene	116	4.749	4.749	(0.451)	32880	25.0000	(a)
149 2-Chloro-1,1,1-trifluoroethane	118	5.524	5.524	(0.525)	70311	25.0000	(a)
11 Acrolein	56	7.067	7.067	(0.672)	47591	25.0000	24.1
12 Trichlorotrifluoroethane	85	7.235	7.235	(0.688)	61908	25.0000	25.1
19 Allyl chloride	41	7.694	7.694	(0.731)	282048	25.0000	25.3
21 Acrylonitrile	53	8.071	8.071	(0.767)	74323	25.0000	25.0
27 2-Chloro-1,3-butadiene	53	8.765	8.765	(0.833)	44312	5.00000	4.9
32 Propionitrile	54	9.297	9.297	(0.883)	29073	25.0000	24.3
29 Ethyl acetate	43	9.237	9.237	(0.878)	205903	25.0000	24.7
37 Methacrylonitrile	41	9.479	9.479	(0.901)	122245	25.0000	25.0
42 Isobutyl alcohol	41	9.917	9.917	(0.942)	64676	250.000	238
38 Tetrahydrofuran	42	9.614	9.614	(0.597)	70757	25.0000	24.1
* 51 Fluorobenzene	96	10.524	10.524	(1.000)	1552216	50.0000	
54 Methyl methacrylate	69	11.117	11.117	(1.056)	112737	25.0000	24.7
57 1,4-Dioxane	88	11.238	11.238	(1.068)	15878	250.000	262

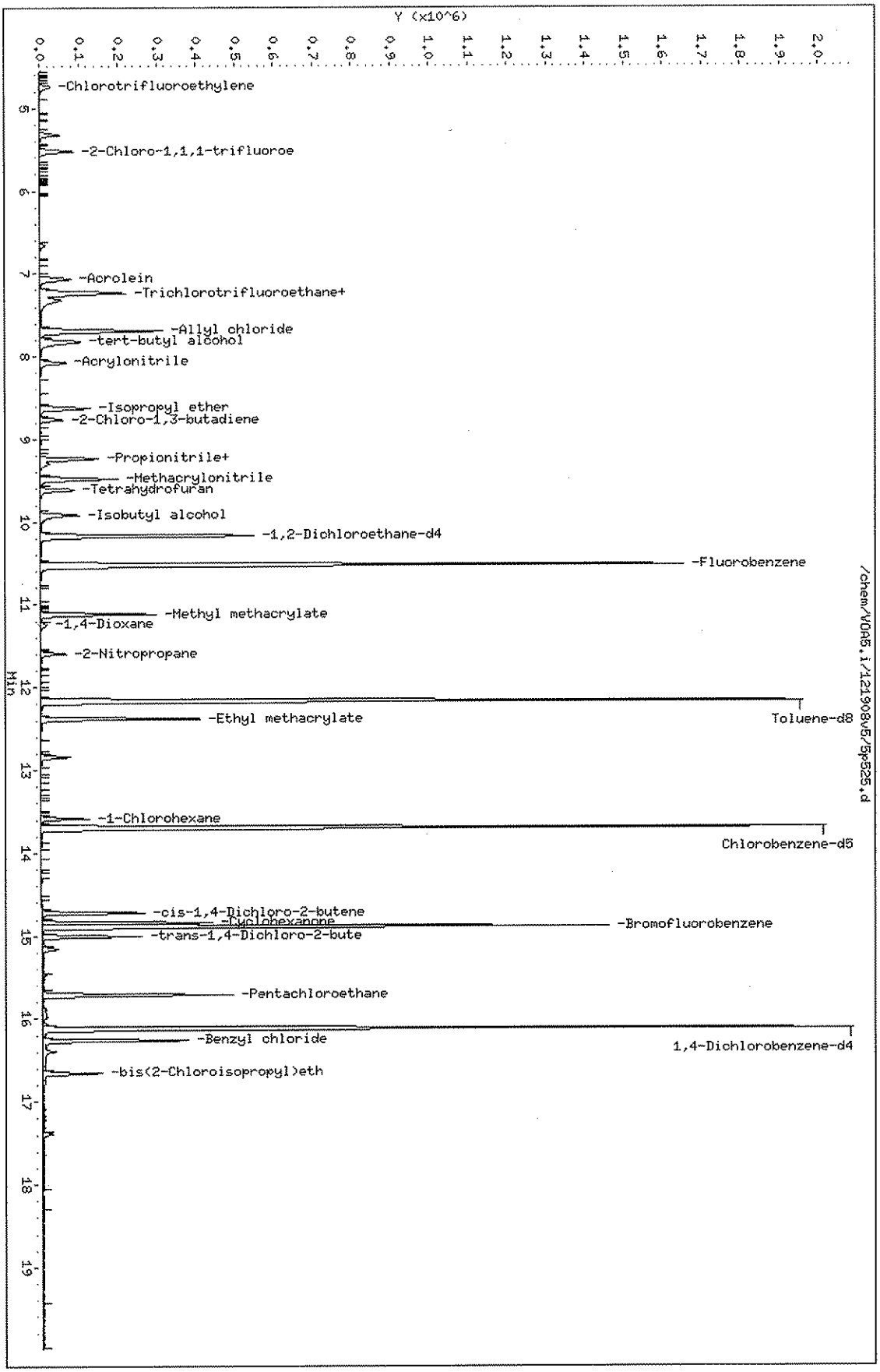
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
60 2-Nitropropane	43	11.595	11.595	(1.102)	51399	25.0000	23.3
66 Ethyl methacrylate	69	12.384	12.384	(0.904)	212186	25.0000	24.5
* 75 Chlorobenzene-d5	117	13.698	13.698	(1.000)	1181042	50.0000	
86 Cyclohexanone	55	14.843	14.843	(1.084)	216984	125.000	121
84 cis-1,4-Dichloro-2-butene	53	14.722	14.722	(0.913)	71297	25.0000	24.2
89 trans-1,4-Dichloro-2-butene	53	15.005	15.005	(0.931)	69657	25.0000	24.5
97 Pentachloroethane	167	15.712	15.712	(0.975)	95382	25.0000	25.1
* 101 1,4-Dichlorobenzene-d4	152	16.117	16.117	(1.000)	607127	50.0000	
103 Benzyl chloride	91	16.258	16.258	(1.009)	306849	25.0000	24.2
105 bis(2-Chloroisopropyl)ether	121	16.656	16.656	(1.033)	22925	25.0000	24.6
26 Isopropyl Alcohol	45	7.323	7.323	(0.696)	146472	250.000	242
28 tert-butyl alcohol	59	7.822	7.822	(0.743)	149668	250.000	232
34 Isopropyl ether	45	8.624	8.624	(0.819)	143287	5.00000	5.1
74 1-Chlorohexane	55	13.583	13.583	(0.992)	34093	5.00000	5.1
$ 47 1,2-Dichloroethane-d4	65	10.167	10.167	(0.966)	421857	50.0000	52.0
$ 64 Toluene-d8	98	12.168	12.168	(0.888)	1373284	50.0000	51.6
$ 85 Bromofluorobenzene	95	14.890	14.890	(0.924)	561188	50.0000	51.6

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/VOA5.i/121908v5/5p525.d
Date : 19-DEC-2008 22:48
Client ID: VSTD025S
Sample Info: IWSVH081219-13|S3|1|VOA|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA5.i
Operator: DKK1
Column diameter: 0.25



Page 1

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA5.i/121908v5/5p526.d
Lab Smp Id: W5VM081219-14 Client Smp ID: VSTD050S
Inj Date : 19-DEC-2008 23:13
Operator : DXK1 Inst ID: VOA5.i
Smp Info : |W5VM081219-14|S4|1|VOA|1|
Misc Info : GEL 5mL N/A UVM081212-04+UVM081125-04C
Comment :
Method : /chem/VOA5.i/121908v5/VOA5-8260B-121908.m
Meth Date : 06-Jan-2009 18:18 eh1 Quant Type: ISTD
Cal Date : 19-DEC-2008 23:13 Cal File: 5p526.d
Als bottle: 26 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
148 Chlorotrifluoroethylene	116	4.742	4.742	(0.451)	64564	50.0000	(a)
149 2-Chloro-1,1,1-trifluoroethane	118	5.532	5.532	(0.526)	139074	50.0000	(a)
11 Acrolein	56	7.074	7.074	(0.672)	101234	50.0000	50.5
12 Trichlorotrifluoroethane	85	7.235	7.235	(0.688)	125328	50.0000	50.0
19 Allyl chloride	41	7.694	7.694	(0.731)	571540	50.0000	50.5
21 Acrylonitrile	53	8.071	8.071	(0.767)	154314	50.0000	51.1
27 2-Chloro-1,3-butadiene	53	8.765	8.765	(0.833)	90636	10.0000	9.9
32 Propionitrile	54	9.297	9.297	(0.883)	64232	50.0000	52.8
29 Ethyl acetate	43	9.237	9.237	(0.878)	430969	50.0000	51.0
37 Methacrylonitrile	41	9.479	9.479	(0.901)	254150	50.0000	51.2
42 Isobutyl alcohol	41	9.917	9.917	(0.942)	145396	500.000	528
38 Tetrahydrofuran	42	9.614	9.614	(0.597)	144186	50.0000	47.9
* 51 Fluorobenzene	96	10.524	10.524	(1.000)	1575670	50.0000	
54 Methyl methacrylate	69	11.117	11.117	(1.056)	240492	50.0000	51.8
57 1,4-Dioxane	88	11.238	11.238	(1.068)	32240	500.000	525

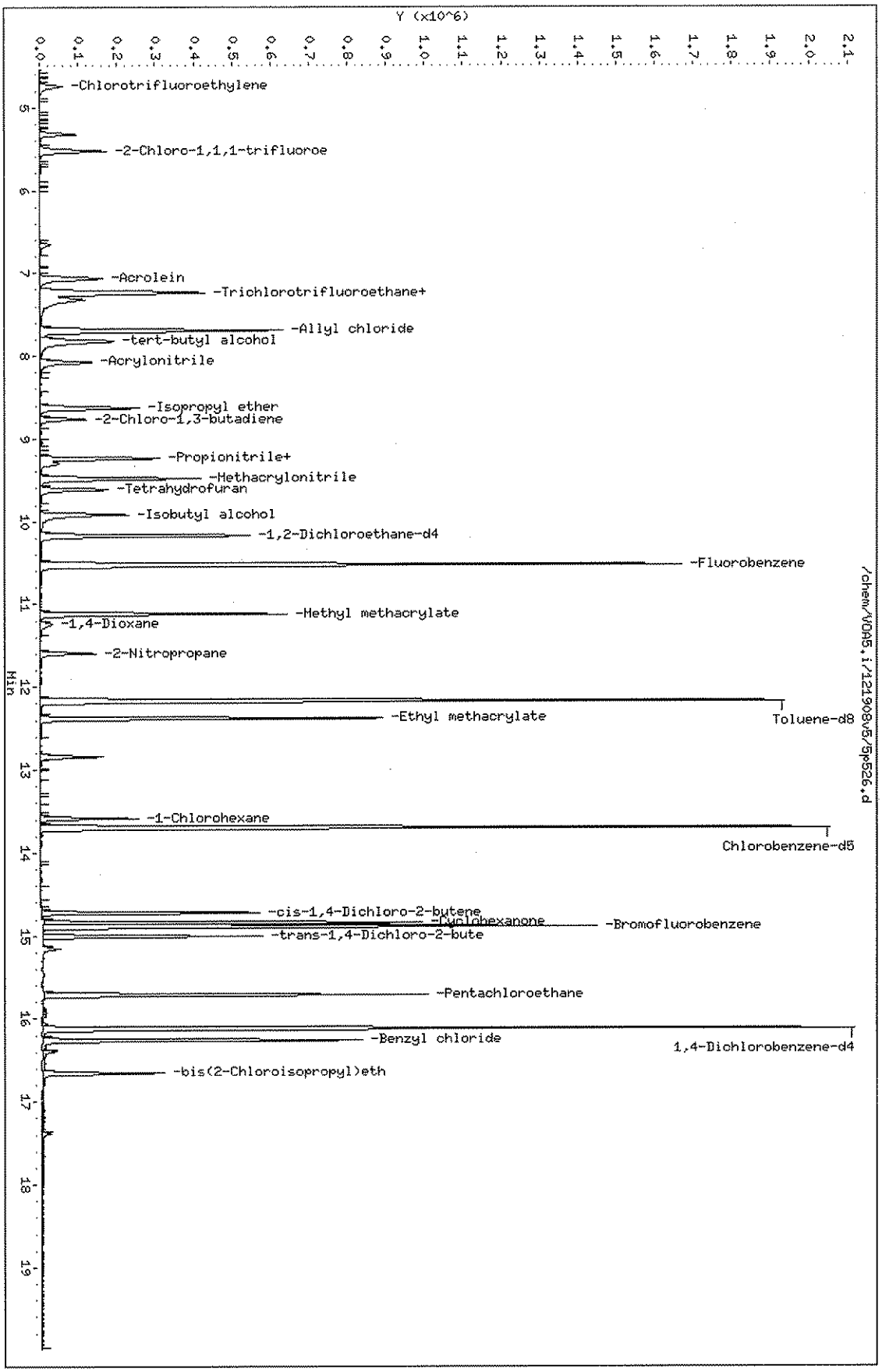
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
60 2-Nitropropane	43	11.595	11.595	(1.102)	114095	50.0000	51.0
66 Ethyl methacrylate	69	12.377	12.377	(0.904)	465049	50.0000	53.0
* 75 Chlorobenzene-d5	117	13.698	13.698	(1.000)	1197982	50.0000	
86 Cyclohexanone	55	14.843	14.843	(1.084)	499033	250.000	275
84 cis-1,4-Dichloro-2-butene	53	14.722	14.722	(0.913)	155627	50.0000	51.6
89 trans-1,4-Dichloro-2-butene	53	15.005	15.005	(0.931)	154390	50.0000	53.0
97 Pentachloroethane	167	15.712	15.712	(0.975)	197205	50.0000	50.6
* 101 1,4-Dichlorobenzene-d4	152	16.117	16.117	(1.000)	622967	50.0000	
103 Benzyl chloride	91	16.258	16.258	(1.009)	683335	50.0000	52.5
105 bis(2-Chloroisopropyl)ether	121	16.656	16.656	(1.033)	49404	50.0000	51.7
26 Isopropyl Alcohol	45	7.323	7.323	(0.696)	318629	500.000	519
28 tert-butyl alcohol	59	7.822	7.822	(0.743)	322711	500.000	492
34 Isopropyl ether	45	8.624	8.624	(0.819)	287668	10.0000	10.2
74 1-Chlorohexane	55	13.583	13.583	(0.992)	68263	10.0000	10.0
$ 47 1,2-Dichloroethane-d4	65	10.173	10.173	(0.967)	419883	50.0000	51.0
$ 64 Toluene-d8	98	12.168	12.168	(0.888)	1351031	50.0000	50.0
$ 85 Bromofluorobenzene	95	14.890	14.890	(0.924)	551726	50.0000	49.4

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/VOA5.i/121908v5/5p526.d
Date : 19-DEC-2008 23:13
Client ID: VSTD050S
Sample Info: IW5VH081219-14|S4|1|VOA1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA5.i
Operator: DXK1
Column diameter: 0.25



Page 1

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA5.i/121908v5/5p527.d
Lab Smp Id: W5VM081219-15 Client Smp ID: VSTD100S
Inj Date : 19-DEC-2008 23:38
Operator : DXK1 Inst ID: VOA5.i
Smp Info : |W5VM081219-15|S5|1|VOA|1|
Misc Info : GEL 5mL N/A UVM081212-05+UVM081125-05C
Comment :
Method : /chem/VOA5.i/121908v5/VOA5-8260B-121908.m
Meth Date : 06-Jan-2009 18:18 eh1 Quant Type: ISTD
Cal Date : 19-DEC-2008 23:38 Cal File: 5p527.d
Als bottle: 27 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
148 Chlorotrifluoroethylene	116	4.742	4.742	(0.451)	132498	100.000	(a)
149 2-Chloro-1,1,1-trifluoroethane	118	5.532	5.532	(0.526)	278278	100.000	(a)
11 Acrolein	56	7.074	7.074	(0.672)	220529	100.000	105
12 Trichlorotrifluoroethane	85	7.236	7.236	(0.688)	253370	100.000	96.9
19 Allyl chloride	41	7.694	7.694	(0.731)	1153377	100.000	97.8
21 Acrylonitrile	53	8.078	8.078	(0.768)	323744	100.000	103
27 2-Chloro-1,3-butadiene	53	8.765	8.765	(0.833)	194360	20.0000	20.5
32 Propionitrile	54	9.298	9.298	(0.883)	130374	100.000	103
29 Ethyl acetate	43	9.237	9.237	(0.878)	891864	100.000	101
37 Methacrylonitrile	41	9.480	9.480	(0.901)	534769	100.000	103
42 Isobutyl alcohol	41	9.918	9.918	(0.942)	321327	1000.00	1120
38 Tetrahydrofuran	42	9.614	9.614	(0.597)	291399	100.000	94.6
* 51 Fluorobenzene	96	10.524	10.524	(1.000)	1642898	50.0000	
54 Methyl methacrylate	69	11.117	11.117	(1.056)	513690	100.000	106
57 1,4-Dioxane	88	11.238	11.238	(1.068)	65896	1000.00	1030

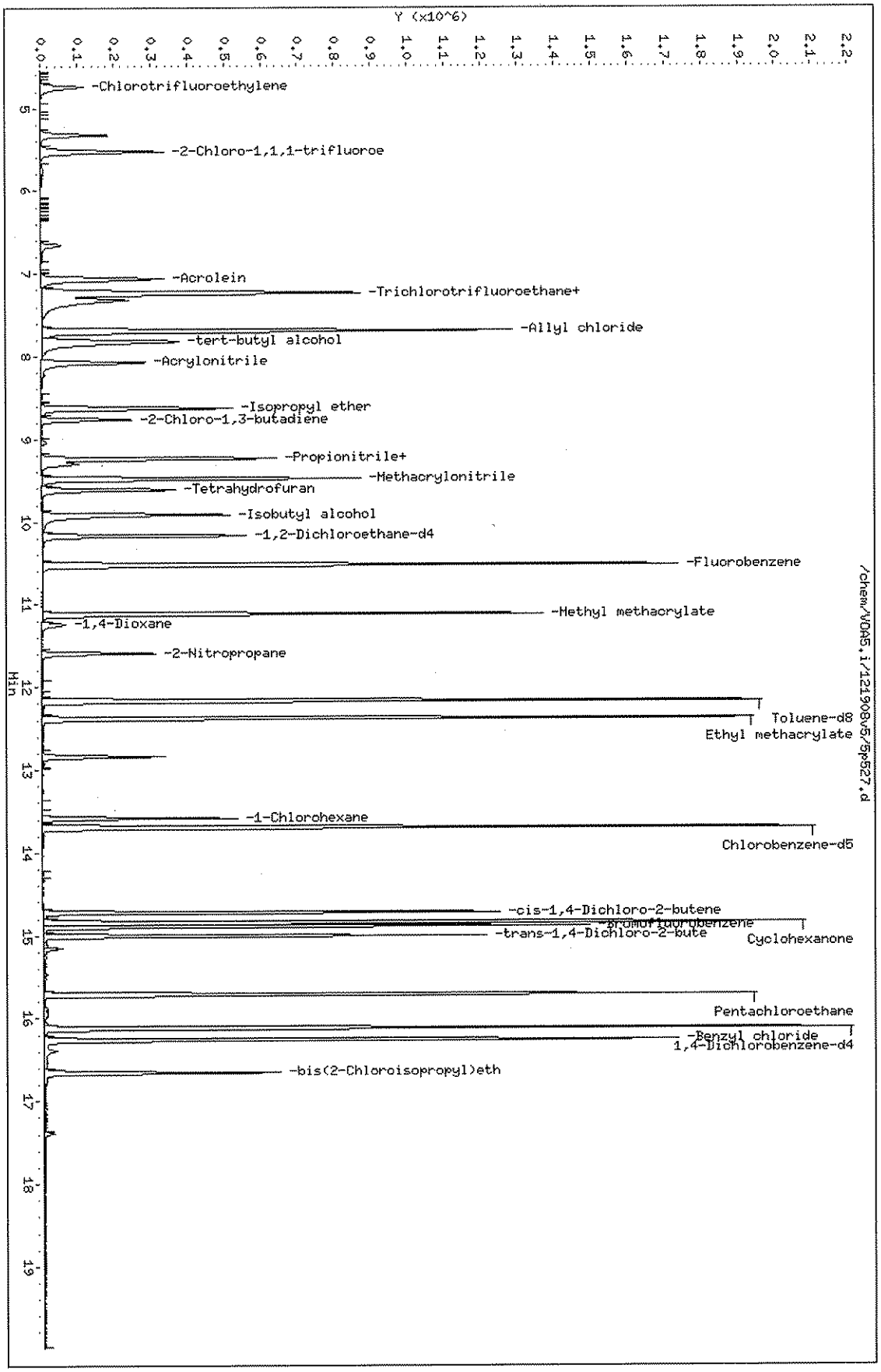
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
60 2-Nitropropane	43	11.595	11.595	(1.102)	253634	100.000	109
66 Ethyl methacrylate	69	12.377	12.377	(0.904)	981714	100.000	108
* 75 Chlorobenzene-d5	117	13.698	13.698	(1.000)	1238282	50.0000	
86 Cyclohexanone	55	14.843	14.843	(1.084)	1038907	500.000	553
84 cis-1,4-Dichloro-2-butene	53	14.722	14.722	(0.913)	328074	100.000	106
89 trans-1,4-Dichloro-2-butene	53	15.005	15.005	(0.931)	315445	100.000	106
97 Pentachloroethane	167	15.713	15.713	(0.975)	412898	100.000	103
* 101 1,4-Dichlorobenzene-d4	152	16.117	16.117	(1.000)	637824	50.0000	
103 Benzyl chloride	91	16.259	16.259	(1.009)	1437134	100.000	108
105 bis(2-Chloroisopropyl)ether	121	16.656	16.656	(1.033)	103750	100.000	106
26 Isopropyl Alcohol	45	7.316	7.316	(0.695)	680030	1000.00	1060
28 tert-butyl alcohol	59	7.815	7.815	(0.743)	723378	1000.00	1060
34 Isopropyl ether	45	8.624	8.624	(0.819)	587643	20.0000	19.9
74 1-Chlorohexane	55	13.583	13.583	(0.992)	140703	20.0000	20.0
$ 47 1,2-Dichloroethane-d4	65	10.167	10.167	(0.966)	427055	50.0000	49.8
$ 64 Toluene-d8	98	12.168	12.168	(0.888)	1382403	50.0000	49.5
$ 85 Bromofluorobenzene	95	14.891	14.891	(0.924)	565974	50.0000	49.5

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/VOA5.i/121908v5/5p527.d
Date : 19-DEC-2008 23:38
Client ID: VSTD100S
Sample Info: IWSVH081219-15ISSI1!VOA1!1
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA5.i
Operator: DXK1
Column diameter: 0.25



Page 1

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA5.i/121908v5/5p528.d
Lab Smp Id: W5VM081219-16 Client Smp ID: VSTD250S
Inj Date : 20-DEC-2008 00:03
Operator : DXK1 Inst ID: VOA5.i
Smp Info : |W5VM081219-16|S6|1|VOA|1|
Misc Info : GEL 5mL N/A UVM081212-06+UVM081125-06C
Comment :
Method : /chem/VOA5.i/121908v5/VOA5-8260B-121908.m
Meth Date : 06-Jan-2009 18:18 eh1 Quant Type: ISTD
Cal Date : 20-DEC-2008 00:03 Cal File: 5p528.d
Als bottle: 28 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
148 Chlorotrifluoroethylene	116	4.742	4.742	(0.451)	336720	150.000	(a)
149 2-Chloro-1,1,1-trifluoroethane	118	5.532	5.532	(0.526)	716734	150.000	(a)
11 Acrolein	56	7.074	7.074	(0.672)	549981	250.000	254
12 Trichlorotrifluoroethane	85	7.235	7.235	(0.688)	670785	250.000	248
19 Allyl chloride	41	7.694	7.694	(0.731)	3059749	250.000	250
21 Acrylonitrile	53	8.078	8.078	(0.768)	812315	250.000	249
27 2-Chloro-1,3-butadiene	53	8.765	8.765	(0.833)	522657	50.0000	53.1
32 Propionitrile	54	9.297	9.297	(0.883)	332049	250.000	253
29 Ethyl acetate	43	9.237	9.237	(0.878)	2229785	250.000	244
37 Methacrylonitrile	41	9.479	9.479	(0.901)	1368705	250.000	255
42 Isobutyl alcohol	41	9.917	9.917	(0.942)	828277	2500.00	2780
38 Tetrahydrofuran	42	9.614	9.614	(0.597)	725548	250.000	226
* 51 Fluorobenzene	96	10.524	10.524	(1.000)	1702008	50.0000	
54 Methyl methacrylate	69	11.117	11.117	(1.056)	1357697	250.000	271
57 1,4-Dioxane	88	11.245	11.245	(1.068)	148877	2500.00	2240

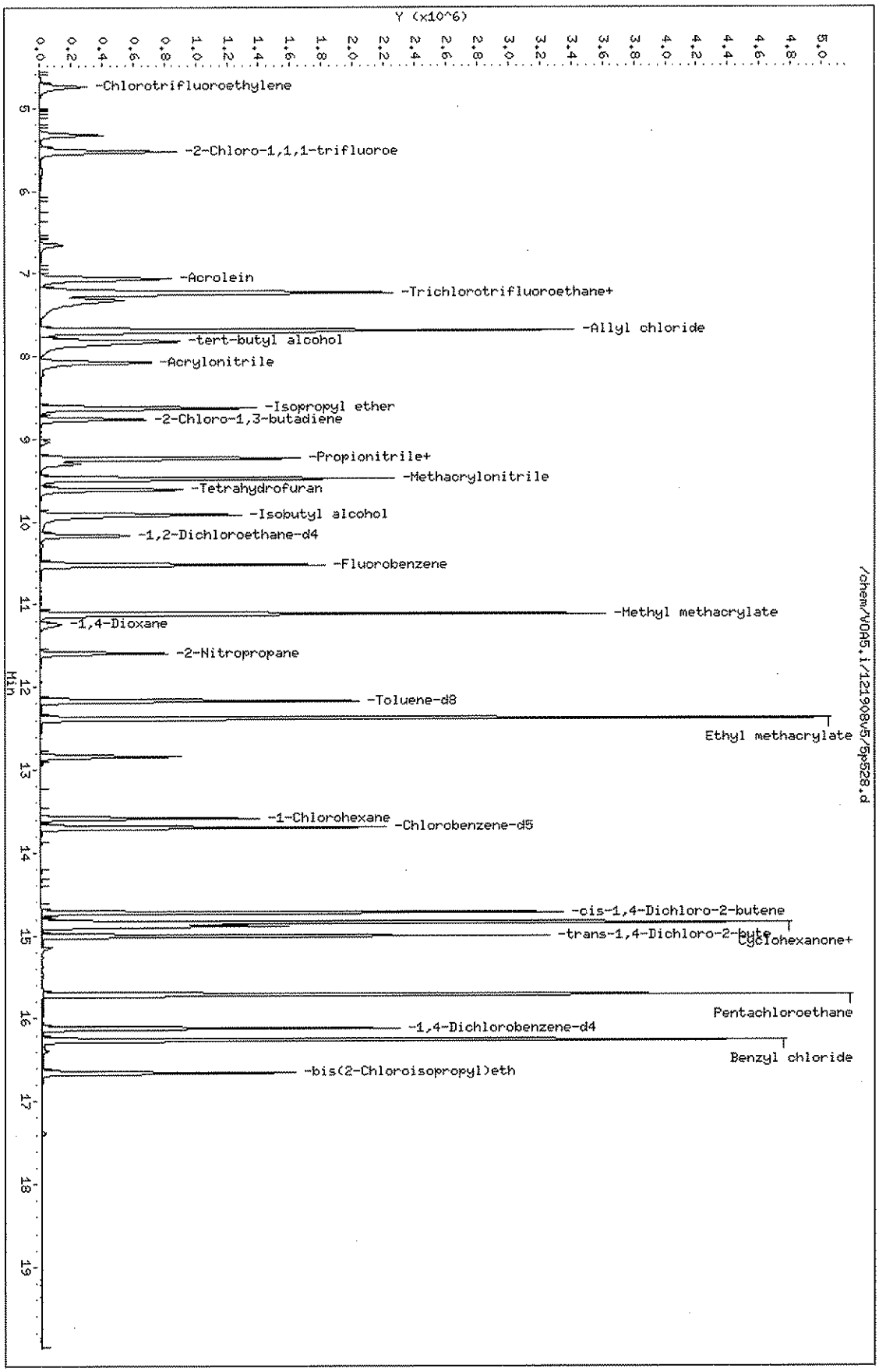
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
60 2-Nitropropane	43	11.595	11.595	(1.102)	678370	250.000	281
66 Ethyl methacrylate	69	12.377	12.377	(0.904)	2612215	250.000	274
* 75 Chlorobenzene-d5	117	13.698	13.698	(1.000)	1300985	50.0000	
86 Cyclohexanone	55	14.843	14.843	(1.084)	2379247	1250.00	1210
84 cis-1,4-Dichloro-2-butene	53	14.722	14.722	(0.913)	883974	250.000	274
89 trans-1,4-Dichloro-2-butene	53	15.005	15.005	(0.931)	842058	250.000	270
97 Pentachloroethane	167	15.712	15.712	(0.975)	1090874	250.000	261
* 101 1,4-Dichlorobenzene-d4	152	16.117	16.117	(1.000)	666493	50.0000	
103 Benzyl chloride	91	16.258	16.258	(1.009)	3854329	250.000	277
105 bis(2-Chloroisopropyl)ether	121	16.656	16.656	(1.033)	257705	250.000	252
26 Isopropyl Alcohol	45	7.323	7.323	(0.696)	1675662	2500.00	2530
28 tert-butyl alcohol	59	7.822	7.822	(0.743)	1921403	2500.00	2710
34 Isopropyl ether	45	8.630	8.630	(0.820)	1520483	50.0000	49.7
74 1-Chlorohexane	55	13.583	13.583	(0.992)	373857	50.0000	50.7
$ 47 1,2-Dichloroethane-d4	65	10.173	10.173	(0.967)	430644	50.0000	48.4
$ 64 Toluene-d8	98	12.168	12.168	(0.888)	1433496	50.0000	48.8
$ 85 Bromofluorobenzene	95	14.890	14.890	(0.924)	594356	50.0000	49.8

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/VOA5.i/121908v5/5p528.d
Date : 20-DEC-2008 00:03
Client ID: VSTD250S
Sample Info: IW5VH081219-16IS611VOA11
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA5.i
Operator: DXK1
Column diameter: 0.25



Page 1

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA5.i/121908v5/5p529.d
Lab Smp Id: W5VM081219-17 Client Smp ID: VSTD500S
Inj Date : 20-DEC-2008 00:28
Operator : DXK1 Inst ID: VOA5.i
Smp Info : |W5VM081219-17|S7|1|VOA|1|
Misc Info : GEL 5mL N/A UVM081212-07+UVM081125-07C
Comment :
Method : /chem/VOA5.i/121908v5/VOA5-8260B-121908.m
Meth Date : 06-Jan-2009 18:18 eh1 Quant Type: ISTD
Cal Date : 20-DEC-2008 00:28 Cal File: 5p529.d
Als bottle: 29 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
148 Chlorotrifluoroethylene	116	4.742	4.742	(0.451)	700906	200.000	(a)
149 2-Chloro-1,1,1-trifluoroethane	118	5.532	5.532	(0.526)	1462159	200.000	(a)
11 Acrolein	56	7.074	7.074	(0.672)	1176434	500.000	505(A)
12 Trichlorotrifluoroethane	85	7.236	7.236	(0.688)	1395161	500.000	479
19 Allyl chloride	41	7.687	7.687	(0.730)	6427745	500.000	490
21 Acrylonitrile	53	8.071	8.071	(0.767)	1695774	500.000	484
27 2-Chloro-1,3-butadiene	53	8.758	8.758	(0.832)	1134276	100.000	107(A)
32 Propionitrile	54	9.297	9.297	(0.883)	697389	500.000	494
29 Ethyl acetate	43	9.237	9.237	(0.878)	4620208	500.000	470
37 Methacrylonitrile	41	9.479	9.479	(0.901)	2873360	500.000	498
42 Isobutyl alcohol	41	9.917	9.917	(0.942)	1718063	5000.00	5370(A)
38 Tetrahydrofuran	42	9.614	9.614	(0.597)	1518453	500.000	440
* 51 Fluorobenzene	96	10.524	10.524	(1.000)	1829640	50.0000	
54 Methyl methacrylate	69	11.117	11.117	(1.056)	2867675	500.000	532(A)
57 1,4-Dioxane	88	11.238	11.238	(1.068)	330002	5000.00	4630

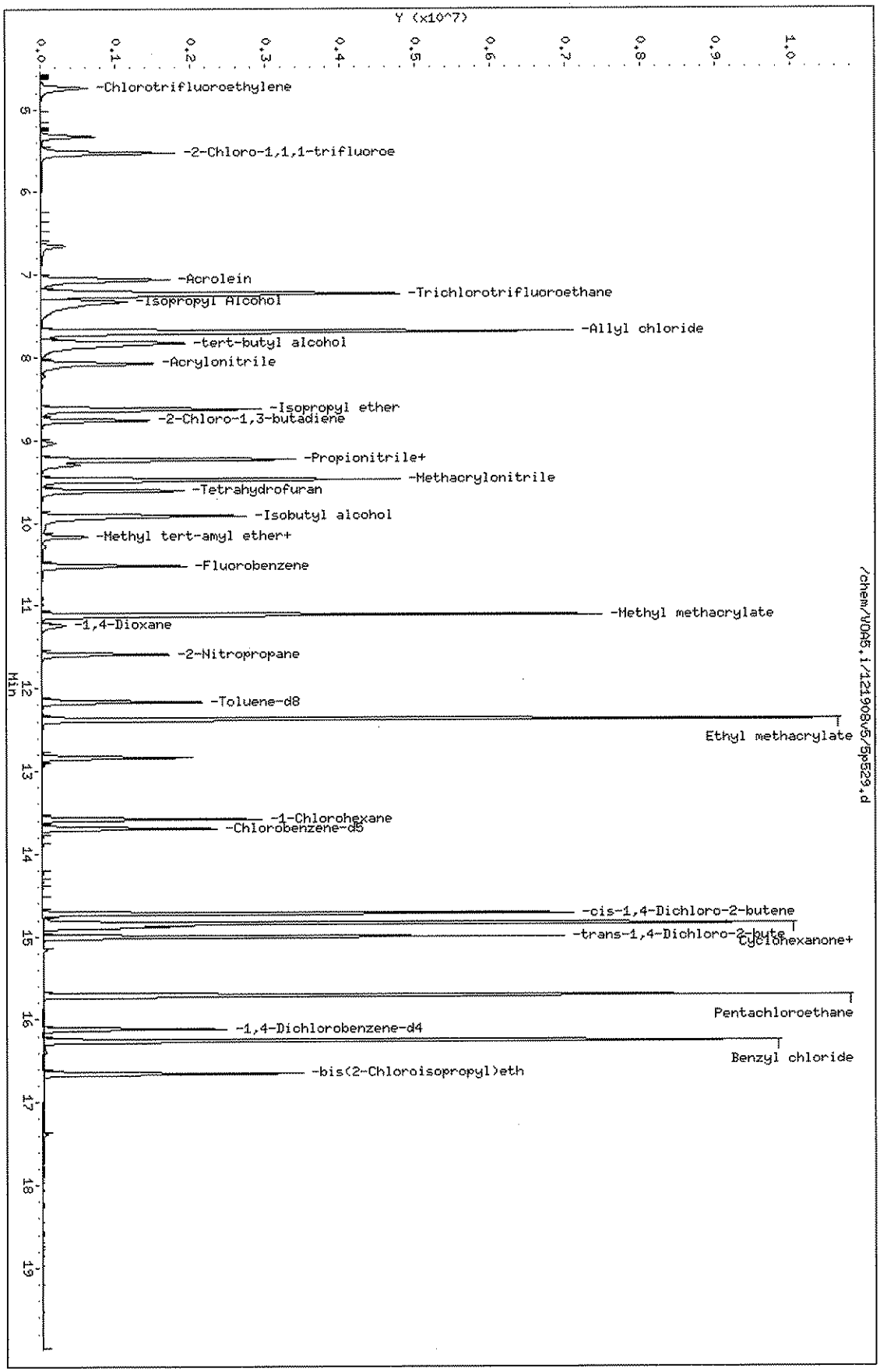
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
60 2-Nitropropane	43	11.595	11.595	(1.102)	1436658	500.000	553(A)
66 Ethyl methacrylate	69	12.377	12.377	(0.904)	5459993	500.000	536(A)
* 75 Chlorobenzene-d5	117	13.698	13.698	(1.000)	1389981	50.0000	
86 Cyclohexanone	55	14.843	14.843	(1.084)	5096065	2500.00	2420
84 cis-1,4-Dichloro-2-butene	53	14.722	14.722	(0.913)	1869562	500.000	540(A)
89 trans-1,4-Dichloro-2-butene	53	15.005	15.005	(0.931)	1759365	500.000	527(A)
97 Pentachloroethane	167	15.713	15.713	(0.975)	2321259	500.000	519(A)
* 101 1,4-Dichlorobenzene-d4	152	16.117	16.117	(1.000)	713938	50.0000	
103 Benzyl chloride	91	16.258	16.258	(1.009)	8051271	500.000	540(A)
105 bis(2-Chloroisopropyl)ether	121	16.656	16.656	(1.033)	555268	500.000	507(A)
26 Isopropyl Alcohol	45	7.323	7.323	(0.696)	3595864	5000.00	5040(A)
28 tert-butyl alcohol	59	7.828	7.828	(0.744)	4357717	5000.00	5720(A)
34 Isopropyl ether	45	8.624	8.624	(0.819)	3235649	100.000	98.4
45 Methyl tert-amyl ether	73	10.288	10.288	(0.978)	23172	100.000	(a)
74 1-Chlorohexane	55	13.583	13.583	(0.992)	805017	100.000	102(A)
$ 47 1,2-Dichloroethane-d4	65	10.167	10.167	(0.966)	458920	50.0000	48.0
$ 64 Toluene-d8	98	12.168	12.168	(0.888)	1525162	50.0000	48.6
$ 85 Bromofluorobenzene	95	14.890	14.890	(0.924)	637351	50.0000	49.8

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/VOA5.i/121908v5/5p523.d
Date : 20-DEC-2008 00:28
Client ID: VSTD500S
Sample Info: IW5VH081219-17|S7|1|VOA1|1
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA5.i
Operator: DXK1
Column diameter: 0.25



Page 1

Data File: /chem/VOA5.i/121908v5/5p522.d
Report Date: 22-Dec-2008 10:31

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA5.i
Lab File ID: 5p522.d
Analysis Type: WATER
Lab Sample ID: W5VM081219-10
Method: /chem/VOA5.i/121908v5/VOA5-8260B-121908.m

Injection Date: 19-DEC-2008 21:32
Init. Cal. Date(s): 19-DEC-2008 20-DEC-2008
Init. Cal. Times: 17:21 00:28
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M 2 Xylenes (total)	0.48724	0.50721	0.50721	0.050	4.09760	60.00000	Averaged	
M 3 1,2-Dichloroethylene (total	0.35093	0.35473	0.35473	0.050	1.08488	60.00000	Averaged	
M 1 1,3-Dichloropropylene	0.29636	0.34381	0.34381	0.050	16.00848	60.00000	Averaged	
4 Dichlorodifluoromethane	0.16009	0.17527	0.17527	0.050	9.47623	60.00000	Averaged	
5 Chloromethane	0.31820	0.32392	0.32392	0.100	1.79985	60.00000	Averaged	spcc
6 Vinyl chloride	0.26192	0.26646	0.26646	0.050	1.73445	20.00000	Averaged	ccc
7 Bromomethane	0.15907	0.16478	0.16478	0.050	3.59146	60.00000	Averaged	
8 Chloroethane	0.15314	0.15061	0.15061	0.050	-1.64620	60.00000	Averaged	
9 Trichlorofluoromethane	0.29108	0.30427	0.30427	0.050	4.53230	60.00000	Averaged	
10 Ethyl Ether	0.13535	0.15408	0.15408	0.001	13.84368	60.00000	Averaged	
13 Acetone	0.18287	0.10530	0.10530	0.020	-42.41988	60.00000	Averaged	
16 Acetonitrile	0.03683	0.04632	0.04632	0.010	-25.77465	60.00000	Averaged	
14 1,1-Dichloroethylene	0.32507	0.31116	0.31116	0.050	-4.27804	20.00000	Averaged	ccc
17 Methyl acetate	0.20584	0.22553	0.22553	0.010	9.56998	60.00000	Averaged	
15 Iodomethane	0.30175	0.31900	0.31900	0.050	5.71888	60.00000	Averaged	
20 Methylene chloride	53.91286	50.00000	0.23640	0.050	7.82571	60.00000	Wt Linear	
18 Carbon disulfide	0.64673	0.58624	0.58624	0.050	-9.35402	60.00000	Averaged	
22 tert-Butyl methyl ether	0.20218	0.23974	0.23974	0.050	18.57960	60.00000	Averaged	
23 trans-1,2-Dichloroethylene	0.33291	0.32305	0.32305	0.050	-2.96111	60.00000	Averaged	
24 Vinyl acetate	0.51426	0.53598	0.53598	0.010	4.22338	60.00000	Averaged	
25 1,1-Dichloroethane	0.40331	0.40691	0.40691	0.100	0.89397	60.00000	Averaged	spcc
30 2-Butanone	0.19340	0.14930	0.14930	0.030	-22.80021	60.00000	Averaged	
31 cis-1,2-Dichloroethylene	0.36895	0.38642	0.38642	0.050	4.73561	60.00000	Averaged	
33 2,2-Dichloropropane	0.27532	0.28556	0.28556	0.050	3.72045	60.00000	Averaged	
36 Chloroform	0.36470	0.37780	0.37780	0.010	3.59237	20.00000	Averaged	ccc
35 Bromochloromethane	0.10156	0.10942	0.10942	0.010	7.73999	60.00000	Averaged	
40 1,1,1-Trichloroethane	0.30247	0.30615	0.30615	0.010	1.21815	60.00000	Averaged	
43 Cyclohexane	0.41770	0.40096	0.40096	0.010	-4.00624	60.00000	Averaged	
44 1,1-Dichloropropene	0.26467	0.26590	0.26590	0.010	0.46516	60.00000	Averaged	
52 n-Butyl alcohol	5715	5000	0.00926	0.001	14.30161	60.00000	Linear	
46 Carbon tetrachloride	0.24860	0.26185	0.26185	0.010	5.32795	60.00000	Averaged	
48 1,2-Dichloroethane	0.31661	0.33182	0.33182	0.010	4.80129	60.00000	Averaged	
49 Benzene	0.88208	0.83228	0.83228	0.010	-5.64639	60.00000	Averaged	
50 Cyclohexene	0.40515	0.41272	0.41272	0.001	1.86763	60.00000	Averaged	
53 Trichloroethylene	0.20888	0.20799	0.20799	0.010	-0.42604	60.00000	Averaged	
55 1,2-Dichloropropane	0.23465	0.24799	0.24799	0.010	5.68653	20.00000	Averaged	ccc

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA5.i
Lab File ID: 5p522.d
Analysis Type: WATER
Lab Sample ID: W5VM081219-10
Method: /chem/VOA5.i/121908v5/VOA5-8260B-121908.m

Injection Date: 19-DEC-2008 21:32
Init. Cal. Date(s): 19-DEC-2008 20-DEC-2008
Init. Cal. Times: 17:21 00:28
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
56 Methylcyclohexane	0.35125	0.35355	0.35355	0.010	0.65387	60.00000	Averaged
59 Bromodichloromethane	0.25728	0.29799	0.29799	0.010	15.82460	60.00000	Averaged
58 Dibromomethane	0.12218	0.13448	0.13448	0.010	10.06852	60.00000	Averaged
61 2-Chloroethylvinyl ether	++++	0.04960	0.04960	0.010	++++	60.00000	Averaged<-
63 4-Methyl-2-pentanone	0.12730	0.14763	0.14763	0.010	15.97101	60.00000	Averaged
62 cis-1,3-Dichloropropylene	0.30615	0.35351	0.35351	0.010	15.46884	60.00000	Averaged
65 Toluene	0.69587	0.68076	0.68076	0.010	-2.17255	20.00000	Averaged ccc
67 trans-1,3-Dichloropropylene	0.38043	0.43629	0.43629	0.010	14.68293	60.00000	Averaged
68 1,1,2-Trichloroethane	0.20507	0.22168	0.22168	0.010	8.10006	60.00000	Averaged
69 2-Hexanone	0.30460	0.28561	0.28561	0.010	-6.23427	60.00000	Averaged
70 1,3-Dichloropropane	0.42967	0.45545	0.45545	0.010	6.00079	60.00000	Averaged
71 Tetrachloroethylene	51.28254	50.00000	0.21780	0.010	2.56507	60.00000	Wt Linear
72 Dibromochloromethane	0.23169	0.27950	0.27950	0.010	20.63684	60.00000	Averaged
73 1,2-Dibromoethane	0.22604	0.25509	0.25509	0.010	12.85208	60.00000	Averaged
76 Chlorobenzene	0.74179	0.75408	0.75408	0.300	1.65617	60.00000	Averaged spcc
77 1,1,1,2-Tetrachloroethane	0.24366	0.27133	0.27133	0.010	11.35383	60.00000	Averaged
78 Ethylbenzene	1.29002	1.30271	1.30271	0.010	0.98345	20.00000	Averaged ccc
79 m,p-Xylenes	0.48846	0.50392	0.50392	0.010	3.16491	60.00000	Averaged
80 o-Xylene	0.48480	0.51378	0.51378	0.010	5.97706	60.00000	Averaged
81 Styrene	0.70876	0.85722	0.85722	0.010	20.94584	60.00000	Averaged
82 Bromoform	0.27576	0.35039	0.35039	0.100	27.06531	60.00000	Averaged spcc
83 Isopropylbenzene	2.09339	2.03420	2.03420	0.010	-2.82733	60.00000	Averaged
87 1,1,2,2-Tetrachloroethane	0.60344	0.65224	0.65224	0.300	8.08672	60.00000	Averaged spcc
88 1,2,3-Trichloropropane	0.17094	0.20070	0.20070	0.010	17.40930	60.00000	Averaged
90 Bromobenzene	0.58380	0.59825	0.59825	0.010	2.47582	60.00000	Averaged
91 n-Propylbenzene	2.88327	2.79109	2.79109	0.010	-3.19718	60.00000	Averaged
93 2-Chlorotoluene	2.03801	2.01609	2.01609	0.010	-1.07601	60.00000	Averaged
92 1,3,5-Trimethylbenzene	2.04586	2.05677	2.05677	0.010	0.53364	60.00000	Averaged
94 4-Chlorotoluene	1.82765	1.83067	1.83067	0.010	0.16565	60.00000	Averaged
95 tert-Butylbenzene	1.95808	1.94758	1.94758	0.010	-0.53620	60.00000	Averaged
96 1,2,4-Trimethylbenzene	2.22714	2.16279	2.16279	0.010	-2.88942	60.00000	Averaged
98 sec-Butylbenzene	2.65456	2.62635	2.62635	0.010	-1.06300	60.00000	Averaged
99 4-Isopropyltoluene	2.12772	2.22063	2.22063	0.010	4.36659	60.00000	Averaged
100 1,3-Dichlorobenzene	1.14813	1.16792	1.16792	0.010	1.72306	60.00000	Averaged
102 1,4-Dichlorobenzene	1.20874	1.19895	1.19895	0.010	-0.80946	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA5.i
Lab File ID: 5p522.d
Analysis Type: WATER
Lab Sample ID: W5VM081219-10
Method: /chem/VOA5.i/121908v5/VOA5-8260B-121908.m

Injection Date: 19-DEC-2008 21:32
Init. Cal. Date(s): 19-DEC-2008 20-DEC-2008
Init. Cal. Times: 17:21 00:28
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
104 n-Butylbenzene	1.17773	1.21894	1.21894	0.010	3.49892	60.00000	Averaged
106 1,2-Dichlorobenzene	1.13206	1.14730	1.14730	0.010	1.34605	60.00000	Averaged
107 1,2-Dibromo-3-chloropropane	52.33793	50.00000	0.10017	0.010	4.67587	60.00000	Linear
108 1,2,4-Trichlorobenzene	0.59610	0.57195	0.57195	0.010	-4.05076	60.00000	Averaged
109 Hexachlorobutadiene	0.37204	0.33923	0.33923	0.010	-8.81775	60.00000	Averaged
110 Naphthalene	1.03135	1.04345	1.04345	0.010	1.17324	60.00000	Averaged
111 1,2,3-Trichlorobenzene	0.33257	0.28655	0.28655	0.010	-13.83577	60.00000	Averaged
$ 47 1,2-Dichloroethane-d4	0.26120	0.26482	0.26482	0.001	1.38906	60.00000	Averaged
$ 64 Toluene-d8	1.12768	1.14169	1.14169	0.010	1.24217	60.00000	Averaged
$ 85 Bromofluorobenzene	0.89618	0.86935	0.86935	0.010	-2.99439	60.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 7.10389
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA5.i/121908v5/5p522.d
Lab Smp Id: W5VM081219-10 Client Smp ID: SECOND SOURCE
Inj Date : 19-DEC-2008 21:32
Operator : DXK1 Inst ID: VOA5.i
Smp Info : |W5VM081219-10|L-ICV|1|VOA|1|
Misc Info : GEL 5mL N/A UVM081126-01E+IVM081218-01
Comment :
Method : /chem/VOA5.i/121908v5/VOA5-8260B-121908.m
Meth Date : 22-Dec-2008 10:31 dav01267 Quant Type: ISTD
Cal Date : 20-DEC-2008 00:03 Cal File: 5p528.d
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

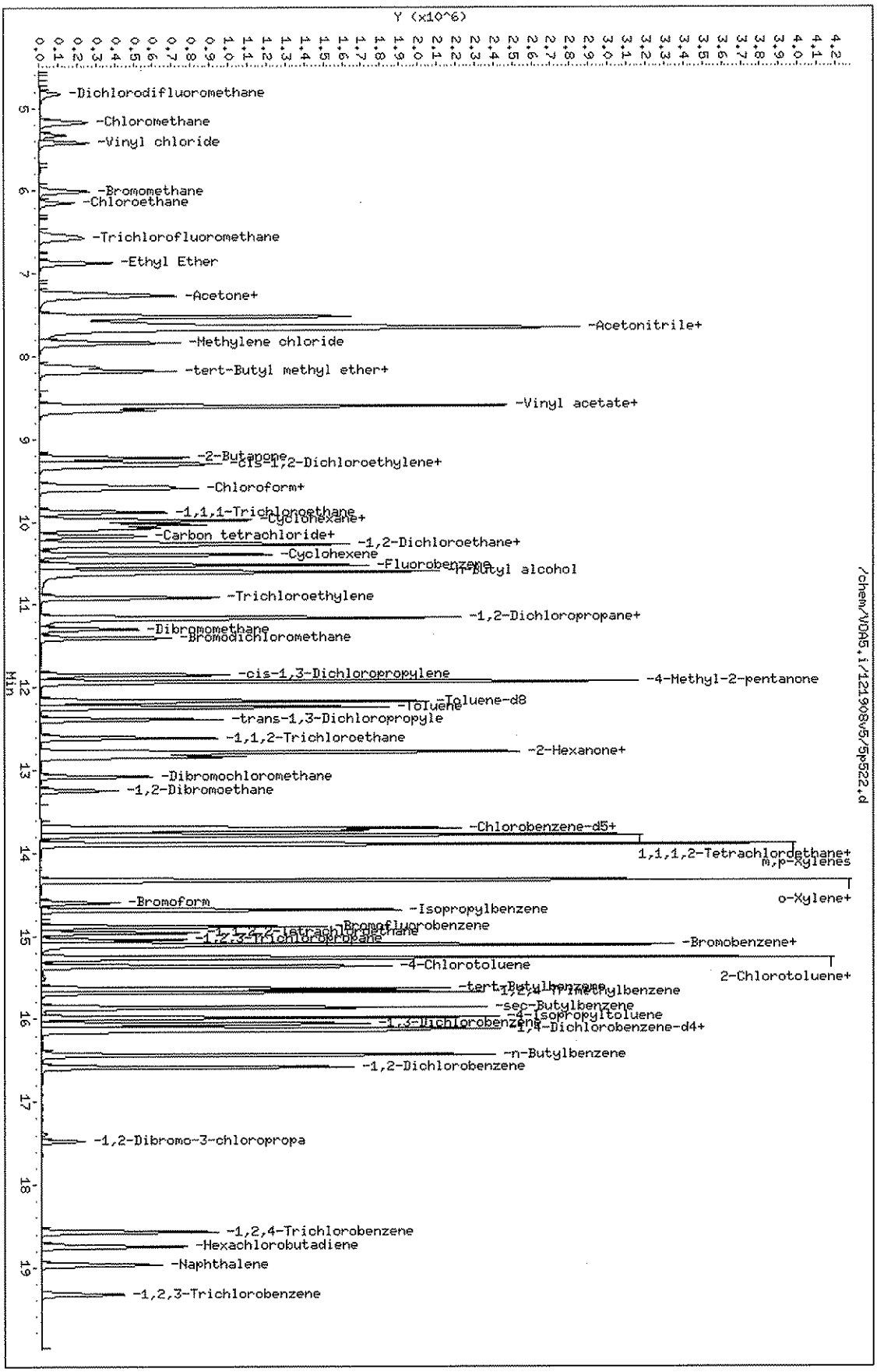
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
M 2 Xylenes (total)	106				1911392	150.000	156
M 3 1,2-Dichloroethylene (total)	96				1163789	100.000	101
M 1 1,3-Dichloropropylene	75				1127940	100.000	116
4 Dichlorodifluoromethane	85	4.826	4.826	(0.459)	287500	50.0000	54.7
5 Chloromethane	50	5.175	5.175	(0.492)	531354	50.0000	50.9
6 Vinyl chloride	62	5.418	5.418	(0.515)	437091	50.0000	50.9
7 Bromomethane	94	6.003	6.003	(0.570)	270298	50.0000	51.8
8 Chloroethane	64	6.147	6.147	(0.584)	247063	50.0000	49.2
9 Trichlorofluoromethane	101	6.573	6.573	(0.625)	499119	50.0000	52.3
10 Ethyl Ether	74	6.876	6.876	(0.653)	252755	50.0000	56.9
13 Acetone	43	7.242	7.242	(0.688)	863615	250.000	144
16 Acetonitrile	41	7.599	7.599	(0.722)	1519784	1000.00	1260
14 1,1-Dichloroethylene	61	7.269	7.269	(0.691)	510423	50.0000	47.9
17 Methyl acetate	43	7.633	7.633	(0.725)	1849794	250.000	274
15 Iodomethane	142	7.519	7.519	(0.714)	2616426	250.000	264

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
20 Methylene chloride	84	7.835	7.835	(0.745)	387791	50.0000	53.9
18 Carbon disulfide	76	7.660	7.660	(0.728)	4808220	250.000	227
22 tert-Butyl methyl ether	73	8.132	8.132	(0.773)	393262	50.0000	59.3
23 trans-1,2-Dichloroethylene	61	8.179	8.179	(0.777)	529917	50.0000	48.5
24 Vinyl acetate	43	8.597	8.597	(0.817)	4396051	250.000	260
25 1,1-Dichloroethane	63	8.657	8.657	(0.823)	667488	50.0000	50.4
30 2-Butanone	43	9.223	9.223	(0.876)	1224565	250.000	193
31 cis-1,2-Dichloroethylene	61	9.291	9.291	(0.883)	633872	50.0000	52.4
33 2,2-Dichloropropane	77	9.325	9.325	(0.886)	468428	50.0000	51.9
36 Chloroform	83	9.601	9.601	(0.912)	619732	50.0000	51.8
35 Bromochloromethane	128	9.567	9.567	(0.909)	179493	50.0000	53.9
40 1,1,1-Trichloroethane	97	9.884	9.884	(0.939)	502200	50.0000	50.6
43 Cyclohexane	56	9.978	9.978	(0.948)	657730	50.0000	48.0
44 1,1-Dichloropropene	75	10.032	10.032	(0.953)	436168	50.0000	50.2
52 n-Butyl alcohol	56	10.605	10.605	(1.008)	1518340	5000.00	5720
46 Carbon tetrachloride	117	10.079	10.079	(0.958)	429526	50.0000	52.7
48 1,2-Dichloroethane	62	10.254	10.254	(0.974)	544301	50.0000	52.4
49 Benzene	78	10.275	10.275	(0.976)	1365238	50.0000	47.2
50 Cyclohexene	67	10.396	10.396	(0.988)	677006	50.0000	50.9
* 51 Fluorobenzene	96	10.524	10.524	(1.000)	1640368	50.0000	
53 Trichloroethylene	95	10.915	10.915	(1.037)	341185	50.0000	49.8
55 1,2-Dichloropropane	63	11.157	11.157	(1.060)	406802	50.0000	52.8
56 Methylcyclohexane	83	11.164	11.164	(1.061)	579948	50.0000	50.3
59 Bromodichloromethane	83	11.407	11.407	(1.084)	488821	50.0000	57.9
58 Dibromomethane	93	11.292	11.292	(1.073)	220604	50.0000	55.0
63 4-Methyl-2-pentanone	58	11.932	11.932	(0.871)	927200	250.000	290
62 cis-1,3-Dichloropropylene	75	11.851	11.851	(1.126)	579891	50.0000	57.7
65 Toluene	92	12.242	12.242	(0.894)	855133	50.0000	48.9
67 trans-1,3-Dichloropropylene	75	12.391	12.391	(0.905)	548049	50.0000	57.3
68 1,1,2-Trichloroethane	83	12.613	12.613	(0.921)	278463	50.0000	54.0
69 2-Hexanone	43	12.775	12.775	(0.933)	1793858	250.000	234
70 1,3-Dichloropropane	76	12.802	12.802	(0.935)	572115	50.0000	53.0
71 Tetrachloroethylene	164	12.842	12.842	(0.938)	273584	50.0000	51.3
72 Dibromochloromethane	129	13.078	13.078	(0.955)	351095	50.0000	60.3
73 1,2-Dibromoethane	107	13.246	13.246	(0.967)	320429	50.0000	56.4
* 75 Chlorobenzene-d5	117	13.698	13.698	(1.000)	1256152	50.0000	
76 Chlorobenzene	112	13.732	13.732	(1.002)	947234	50.0000	50.8
77 1,1,1,2-Tetrachloroethane	131	13.779	13.779	(1.006)	340832	50.0000	55.7
78 Ethylbenzene	91	13.785	13.785	(1.006)	1636397	50.0000	50.5
79 m,p-Xylenes	106	13.893	13.893	(1.014)	1266004	100.000	103
80 o-Xylene	106	14.331	14.331	(1.046)	645388	50.0000	53.0
81 Styrene	104	14.331	14.331	(1.046)	1076798	50.0000	60.5
82 Bromoform	173	14.601	14.601	(0.906)	236675	50.0000	63.5
83 Isopropylbenzene	105	14.688	14.688	(0.911)	1374022	50.0000	48.6
87 1,1,2,2-Tetrachloroethane	83	14.958	14.958	(0.928)	440559	50.0000	54.0
88 1,2,3-Trichloropropane	110	15.052	15.052	(0.934)	135566	50.0000	58.7
90 Bromobenzene	156	15.106	15.106	(0.937)	404094	50.0000	51.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
91 n-Propylbenzene	91	15.113	15.113	(0.938)	1885268	50.0000	48.4
93 2-Chlorotoluene	91	15.268	15.268	(0.947)	1361785	50.0000	49.5
92 1,3,5-Trimethylbenzene	105	15.261	15.261	(0.947)	1389269	50.0000	50.3
94 4-Chlorotoluene	91	15.369	15.369	(0.954)	1236547	50.0000	50.1
95 tert-Butylbenzene	119	15.638	15.638	(0.970)	1315513	50.0000	49.7
96 1,2,4-Trimethylbenzene	105	15.672	15.672	(0.972)	1460877	50.0000	48.6
98 sec-Butylbenzene	105	15.861	15.861	(0.984)	1773992	50.0000	49.5
99 4-Isopropyltoluene	119	15.982	15.982	(0.992)	1499948	50.0000	52.2
100 1,3-Dichlorobenzene	146	16.063	16.063	(0.997)	788880	50.0000	50.9
* 101 1,4-Dichlorobenzene-d4	152	16.117	16.117	(1.000)	675460	50.0000	
102 1,4-Dichlorobenzene	146	16.144	16.144	(1.002)	809845	50.0000	49.6
104 n-Butylbenzene	92	16.434	16.434	(1.020)	823347	50.0000	51.7
106 1,2-Dichlorobenzene	146	16.582	16.582	(1.029)	774952	50.0000	50.7
107 1,2-Dibromo-3-chloropropane	157	17.476	17.476	(1.084)	67663	50.0000	52.3
108 1,2,4-Trichlorobenzene	180	18.571	18.571	(1.152)	386330	50.0000	48.0
109 Hexachlorobutadiene	225	18.746	18.746	(1.163)	229138	50.0000	45.6
110 Naphthalene	128	18.967	18.967	(1.177)	704809	50.0000	50.6
111 1,2,3-Trichlorobenzene	180	19.326	19.326	(1.199)	193556	50.0000	43.1
$ 47 1,2-Dichloroethane-d4	65	10.174	10.174	(0.967)	434409	50.0000	50.7
$ 64 Toluene-d8	98	12.168	12.168	(0.888)	1434137	50.0000	50.6
$ 85 Bromofluorobenzene	95	14.884	14.884	(0.923)	587209	50.0000	48.5

Data File: /chem/VOA5.i/121908v5/5p522.d
Date : 19-DEC-2008 21:32
Client ID: SECOND SOURCE
Sample Info: IW5VH081219-101L-ICV1|1|VOA|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA5.i
Operator: DXK1
Column diameter: 0.25



Page 1

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA5.i
Lab File ID: 5p531.d
Analysis Type: WATER
Lab Sample ID: W5VM081219-18
Method: /chem/VOA5.i/121908v5/VOA5-8260B-121908.m

Injection Date: 20-DEC-2008 01:19
Init. Cal. Date(s): 19-DEC-2008 20-DEC-2008
Init. Cal. Times: 17:21 00:28
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
148 Chlorotrifluoroethylene	++++	0.09369	0.09369	0.010	++++	60.00000	Averaged <-
149 2-Chloro-1,1,1-trifluoroeth	++++	0.20764	0.20764	0.010	++++	60.00000	Averaged <-
11 Acrolein	0.06366	0.06075	0.06075	0.001	-4.57099	60.00000	Averaged
12 Trichlorotrifluoroethane	0.07955	0.06494	0.06494	0.050	-18.36056	60.00000	Averaged
19 Allyl chloride	0.35882	0.32013	0.32013	0.010	-10.78273	60.00000	Averaged
21 Acrylonitrile	0.09576	0.08864	0.08864	0.010	-7.43836	60.00000	Averaged
27 2-Chloro-1,3-butadiene	0.28910	0.28887	0.28887	0.010	-0.07801	60.00000	Averaged
32 Propionitrile	0.03859	0.03513	0.03513	0.010	-8.95947	60.00000	Averaged
29 Ethyl acetate	0.26833	0.22877	0.22877	0.010	-14.74178	60.00000	Averaged
37 Methacrylonitrile	0.15761	0.14770	0.14770	0.010	-6.28771	60.00000	Averaged
42 Isobutyl alcohol	0.00874	0.00908	0.00908	0.005	3.93198	60.00000	Averaged
38 Tetrahydrofuran	0.24137	0.20004	0.20004	0.010	-17.12479	60.00000	Averaged
54 Methyl methacrylate	0.14719	0.14786	0.14786	0.010	0.45358	60.00000	Averaged
57 1,4-Dioxane	0.00195	0.00189	0.00189	0.001	-3.12396	40.00000	Averaged
60 2-Nitropropane	0.07101	0.07152	0.07152	0.010	0.72043	60.00000	Averaged
66 Ethyl methacrylate	0.36629	0.36982	0.36982	0.010	0.96228	60.00000	Averaged
86 Cyclohexanone	0.07581	0.05507	0.05507	0.010	-27.36524	60.00000	Averaged
84 cis-1,4-Dichloro-2-butene	0.24228	0.22592	0.22592	0.010	-6.75261	60.00000	Averaged
89 trans-1,4-Dichloro-2-butene	0.23385	0.22044	0.22044	0.010	-5.73724	60.00000	Averaged
97 Pentachloroethane	0.31307	0.30982	0.30982	0.010	-1.03798	60.00000	Averaged
103 Benzyl chloride	1.04513	0.94928	0.94928	0.010	-9.17162	60.00000	Averaged
105 bis(2-Chloroisopropyl)ether	0.07664	0.07090	0.07090	0.010	-7.48895	60.00000	Averaged
26 Isopropyl Alcohol	0.01948	0.01935	0.01935	0.001	-0.67034	60.00000	Averaged
28 tert-butyl alcohol	0.02080	0.02048	0.02048	0.001	-1.53698	60.00000	Averaged
34 Isopropyl ether	0.89814	0.88775	0.88775	0.001	-1.15634	60.00000	Averaged
41 Ethyl tert-butyl ether	++++	0.09067	0.09067	0.001	++++	60.00000	Averaged <-
45 Methyl tert-amyl ether	++++	0.00165	0.00165	0.001	++++	60.00000	Averaged <-
74 1-Chlorohexane	0.28361	0.28329	0.28329	0.001	-0.11289	60.00000	Averaged
$ 47 1,2-Dichloroethane-d4	0.26120	0.25903	0.25903	0.001	-0.83051	60.00000	Averaged
$ 64 Toluene-d8	1.12768	1.12510	1.12510	0.010	-0.22933	60.00000	Averaged
$ 85 Bromofluorobenzene	0.89618	0.90513	0.90513	0.010	0.99798	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA5.i Injection Date: 20-DEC-2008 01:19
Lab File ID: 5p531.d Init. Cal. Date(s): 19-DEC-2008 20-DEC-2008
Analysis Type: WATER Init. Cal. Times: 17:21 00:28
Lab Sample ID: W5VM081219-18 Quant Type: ISTD
Method: /chem/VOA5.i/121908v5/VOA5-8260B-121908.m

Average %D / Drift Results.
Calculated Average %D/Drift = 5.94906
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA5.i/121908v5/5p531.d
Lab Smp Id: W5VM081219-18 Client Smp ID: SECOND SOURCE
Inj Date : 20-DEC-2008 01:19
Operator : DXK1 Inst ID: VOA5.i
Smp Info : |W5VM081219-18|S-ICV|1|VOA|1|
Misc Info : GEL 5mL N/A UVM080901-08E+UVM081122-02E
Comment :
Method : /chem/VOA5.i/121908v5/VOA5-8260B-121908.m
Meth Date : 20-Dec-2008 10:02 dav01267 Quant Type: ISTD
Cal Date : 20-DEC-2008 00:28 Cal File: 5p529.d
Als bottle: 31 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
148 Chlorotrifluoroethylene	116	4.742	4.742	(0.451)	475818	150.000	(a)
149 2-Chloro-1,1,1-trifluoroethane	118	5.532	5.532	(0.526)	1054590	150.000	(a)
11 Acrolein	56	7.074	7.074	(0.672)	514219	250.000	238
12 Trichlorotrifluoroethane	85	7.236	7.236	(0.688)	549730	250.000	204
19 Allyl chloride	41	7.694	7.694	(0.731)	2709839	250.000	223
21 Acrylonitrile	53	8.071	8.071	(0.767)	750282	250.000	231
27 2-Chloro-1,3-butadiene	53	8.765	8.765	(0.833)	489044	50.0000	50.0
32 Propionitrile	54	9.298	9.298	(0.883)	297379	250.000	228
29 Ethyl acetate	43	9.237	9.237	(0.878)	1936477	250.000	213
37 Methacrylonitrile	41	9.479	9.479	(0.901)	1250235	250.000	234
42 Isobutyl alcohol	41	9.918	9.918	(0.942)	768917	2500.00	2600
38 Tetrahydrofuran	42	9.614	9.614	(0.597)	664989	250.000	207
* 51 Fluorobenzene	96	10.524	10.524	(1.000)	1692953	50.0000	
54 Methyl methacrylate	69	11.117	11.117	(1.056)	1251616	250.000	251
57 1,4-Dioxane	88	11.238	11.238	(1.068)	159766	2500.00	2420

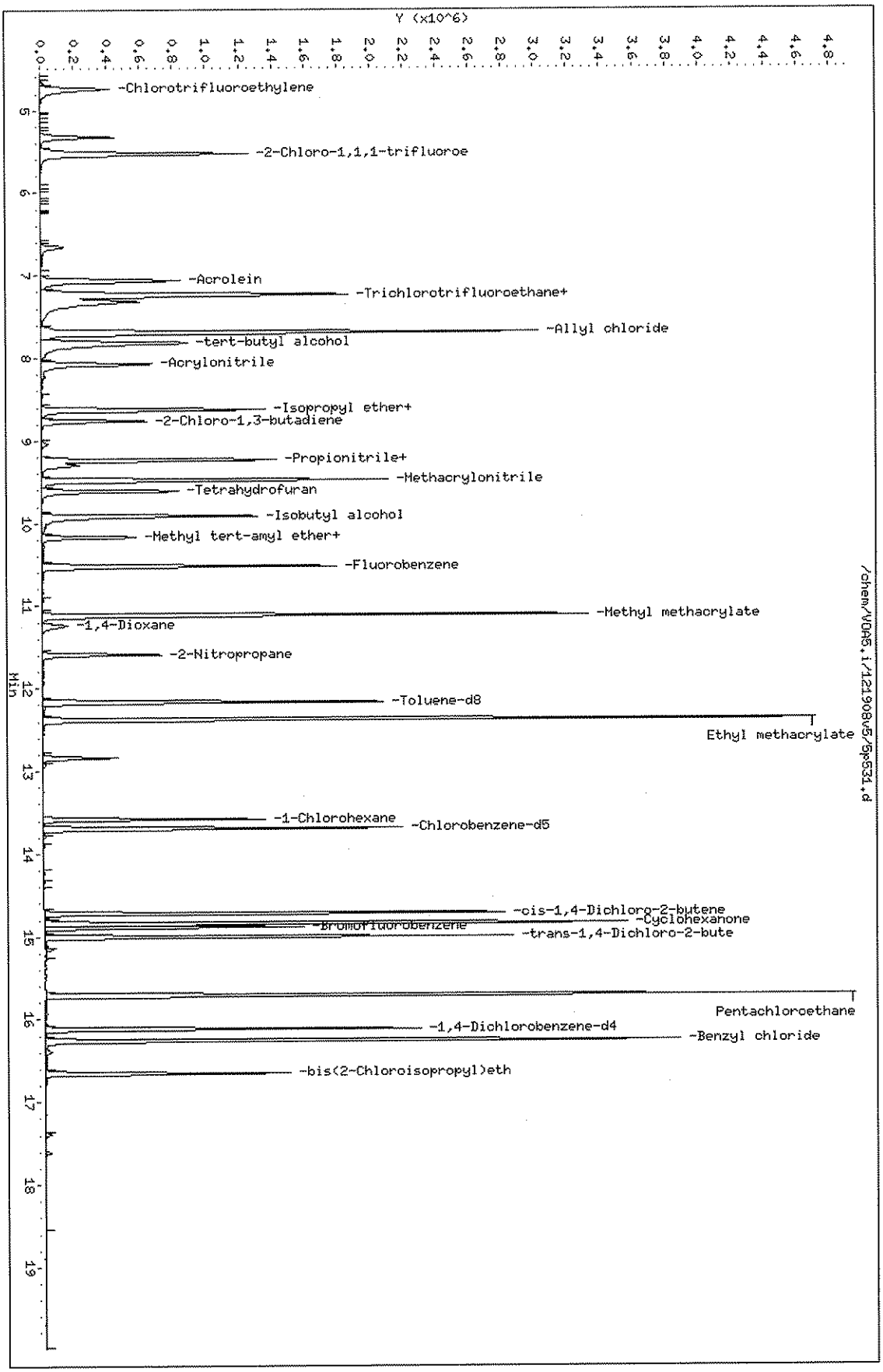
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
60 2-Nitropropane	43	11.595	11.595	(1.102)	605423	250.000	252
66 Ethyl methacrylate	69	12.377	12.377	(0.904)	2393364	250.000	252
* 75 Chlorobenzene-d5	117	13.698	13.698	(1.000)	1294342	50.0000	
86 Cyclohexanone	55	14.843	14.843	(1.084)	1781906	1250.00	908
84 cis-1,4-Dichloro-2-butene	53	14.722	14.722	(0.913)	751024	250.000	233
89 trans-1,4-Dichloro-2-butene	53	15.005	15.005	(0.931)	732805	250.000	236
97 Pentachloroethane	167	15.713	15.713	(0.975)	1029948	250.000	247
* 101 1,4-Dichlorobenzene-d4	152	16.117	16.117	(1.000)	664869	50.0000	
103 Benzyl chloride	91	16.258	16.258	(1.009)	3155725	250.000	227
105 bis(2-Chloroisopropyl)ether	121	16.656	16.656	(1.033)	235702	250.000	231
26 Isopropyl Alcohol	45	7.316	7.316	(0.695)	1637533	2500.00	2480
28 tert-butyl alcohol	59	7.815	7.815	(0.743)	1733601	2500.00	2460
34 Isopropyl ether	45	8.624	8.624	(0.819)	1502922	50.0000	49.4
41 Ethyl tert-butyl ether	59	8.624	8.624	(0.819)	153504	50.0000	(a)
45 Methyl tert-amyl ether	73	10.295	10.295	(0.978)	2799	50.0000	(a)
74 1-Chlorohexane	55	13.583	13.583	(0.992)	366680	50.0000	49.9
$ 47 1,2-Dichloroethane-d4	65	10.167	10.167	(0.966)	438520	50.0000	49.6
$ 64 Toluene-d8	98	12.168	12.168	(0.888)	1456260	50.0000	49.9
$ 85 Bromofluorobenzene	95	14.884	14.884	(0.923)	601790	50.0000	50.5

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/VOA5.i/121908v5/5p531.d
Date : 20-DEC-2008 01:19
Client ID: SECOND SOURCE
Sample Info: IWSVH084219-1818-ICV1!VOA1!
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA5.i
Operator: DXK1
Column diameter: 0.25



Page 1

Data File: /chem/VOA5.i/122408v5/5q302.d
Report Date: 24-Dec-2008 12:56

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA5.i
Lab File ID: 5q302.d
Analysis Type: WATER
Lab Sample ID: UVM081214-01A
Method: /chem/VOA5.i/122408v5/VOA5-8260B-121908.m

Injection Date: 24-DEC-2008 10:23
Init. Cal. Date(s): 19-DEC-2008 20-DEC-2008
Init. Cal. Times: 17:21 00:28
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M	2 Xylenes (total)	0.48724	0.53538	0.53538	0.050	9.87915	60.00000	Averaged	
M	3 1,2-Dichloroethylene (total	0.35093	0.36598	0.36598	0.050	4.29067	60.00000	Averaged	
M	1 1,3-Dichloropropylene	0.29636	0.33692	0.33692	0.050	13.68303	60.00000	Averaged	
	4 Dichlorodifluoromethane	0.16009	0.14311	0.14311	0.050	-10.60599	60.00000	Averaged	
	5 Chloromethane	0.31820	0.29101	0.29101	0.100	-8.54252	60.00000	Averaged	spcc
	6 Vinyl chloride	0.26192	0.26274	0.26274	0.050	0.31333	20.00000	Averaged	ccc
	7 Bromomethane	0.15907	0.16652	0.16652	0.050	4.68466	60.00000	Averaged	
	8 Chloroethane	0.15314	0.15685	0.15685	0.050	2.42519	60.00000	Averaged	
	9 Trichlorofluoromethane	0.29108	0.32202	0.32202	0.050	10.63047	60.00000	Averaged	
	10 Ethyl Ether	0.13535	0.14130	0.14130	0.001	4.40131	60.00000	Averaged	
	13 Acetone	0.18287	0.21755	0.21755	0.020	18.96636	60.00000	Averaged	
	16 Acetonitrile	0.03683	0.04403	0.04403	0.010	19.55485	60.00000	Averaged	
	14 1,1-Dichloroethylene	0.32507	0.33667	0.33667	0.050	3.56913	20.00000	Averaged	ccc
	17 Methyl acetate	0.20584	0.20371	0.20371	0.010	-1.03281	60.00000	Averaged	
	15 Iodomethane	0.30175	0.33353	0.33353	0.050	10.53263	60.00000	Averaged	
	20 Methylene chloride	51.81022	50.00000	0.22758	0.050	3.62044	60.00000	Wt Linear	
	18 Carbon disulfide	0.64673	0.69869	0.69869	0.050	8.03450	60.00000	Averaged	
	22 tert-Butyl methyl ether	0.20218	0.48613	0.48613	0.050	140	60.00000	Averaged	<-
	23 trans-1,2-Dichloroethylene	0.33291	0.33731	0.33731	0.050	1.32223	60.00000	Averaged	
	24 Vinyl acetate	0.51426	0.57323	0.57323	0.010	11.46700	60.00000	Averaged	
	25 1,1-Dichloroethane	0.40331	0.41645	0.41645	0.100	3.25925	60.00000	Averaged	spcc
	30 2-Butanone	0.19340	0.26903	0.26903	0.030	39.10402	60.00000	Averaged	
	31 cis-1,2-Dichloroethylene	0.36895	0.39466	0.39466	0.050	6.96912	60.00000	Averaged	
	33 2,2-Dichloropropane	0.27532	0.31233	0.31233	0.050	13.44125	60.00000	Averaged	
	36 Chloroform	0.36470	0.38277	0.38277	0.010	4.95624	20.00000	Averaged	ccc
	35 Bromochloromethane	0.10156	0.10578	0.10578	0.010	4.15692	60.00000	Averaged	
	40 1,1,1-Trichloroethane	0.30247	0.33211	0.33211	0.010	9.80101	60.00000	Averaged	
	43 Cyclohexane	0.41770	0.44912	0.44912	0.010	7.52176	60.00000	Averaged	
	44 1,1-Dichloropropene	0.26467	0.29236	0.29236	0.010	10.46369	60.00000	Averaged	
	52 n-Butyl alcohol	5959	5000	0.00966	0.001	19.18356	60.00000	Linear	
	46 Carbon tetrachloride	0.24860	0.29240	0.29240	0.010	17.61900	60.00000	Averaged	
	48 1,2-Dichloroethane	0.31661	0.32574	0.32574	0.010	2.88178	60.00000	Averaged	
	49 Benzene	0.88208	0.86015	0.86015	0.010	-2.48587	60.00000	Averaged	
	50 Cyclohexene	0.40515	0.42836	0.42836	0.001	5.72931	60.00000	Averaged	
	53 Trichloroethylene	0.20888	0.22296	0.22296	0.010	6.73995	60.00000	Averaged	
	55 1,2-Dichloropropane	0.23465	0.24605	0.24605	0.010	4.85831	20.00000	Averaged	ccc

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA5.i Injection Date: 24-DEC-2008 10:23
Lab File ID: 5q302.d Init. Cal. Date(s): 19-DEC-2008 20-DEC-2008
Analysis Type: WATER Init. Cal. Times: 17:21 00:28
Lab Sample ID: UVM081214-01A Quant Type: ISTD
Method: /chem/VOA5.i/122408v5/VOA5-8260B-121908.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
56 Methylcyclohexane	0.35125	0.39129	0.39129	0.010	11.39802	60.00000	Averaged	
59 Bromodichloromethane	0.25728	0.27720	0.27720	0.010	7.74161	60.00000	Averaged	
58 Dibromomethane	0.12218	0.12818	0.12818	0.010	4.91209	60.00000	Averaged	
61 2-Chloroethylvinyl ether	++++	0.04921	0.04921	0.010	++++	60.00000	Averaged	<-
63 4-Methyl-2-pentanone	0.12730	0.15758	0.15758	0.010	23.79223	60.00000	Averaged	
62 cis-1,3-Dichloropropylene	0.30615	0.34661	0.34661	0.010	13.21272	60.00000	Averaged	
65 Toluene	0.69587	0.71273	0.71273	0.010	2.42193	20.00000	Averaged	ccc
67 trans-1,3-Dichloropropylene	0.38043	0.43395	0.43395	0.010	14.06817	60.00000	Averaged	
68 1,1,2-Trichloroethane	0.20507	0.20934	0.20934	0.010	2.08281	60.00000	Averaged	
69 2-Hexanone	0.30460	0.46880	0.46880	0.010	53.90696	60.00000	Averaged	
70 1,3-Dichloropropane	0.42967	0.44594	0.44594	0.010	3.78833	60.00000	Averaged	
71 Tetrachloroethylene	56.06225	50.00000	0.23777	0.010	12.12450	60.00000	Wt Linear	
72 Dibromochloromethane	0.23169	0.27566	0.27566	0.010	18.98129	60.00000	Averaged	
73 1,2-Dibromoethane	0.22604	0.25030	0.25030	0.010	10.73610	60.00000	Averaged	
76 Chlorobenzene	0.74179	0.77931	0.77931	0.300	5.05793	60.00000	Averaged	spcc
77 1,1,1,2-Tetrachloroethane	0.24366	0.27218	0.27218	0.010	11.70170	60.00000	Averaged	
78 Ethylbenzene	1.29002	1.41232	1.41232	0.010	9.48019	20.00000	Averaged	ccc
79 m,p-Xylenes	0.48846	0.53935	0.53935	0.010	10.41792	60.00000	Averaged	
80 o-Xylene	0.48480	0.52744	0.52744	0.010	8.79349	60.00000	Averaged	
81 Styrene	0.70876	0.86791	0.86791	0.010	22.45379	60.00000	Averaged	
82 Bromoform	0.27576	0.34246	0.34246	0.100	24.18935	60.00000	Averaged	spcc
83 Isopropylbenzene	2.09339	2.55614	2.55614	0.010	22.10553	60.00000	Averaged	
87 1,1,2,2-Tetrachloroethane	0.60344	0.64809	0.64809	0.300	7.39943	60.00000	Averaged	spcc
88 1,2,3-Trichloropropane	0.17094	0.18003	0.18003	0.010	5.31877	60.00000	Averaged	
90 Bromobenzene	0.58380	0.60691	0.60691	0.010	3.95908	60.00000	Averaged	
91 n-Propylbenzene	2.88327	3.14717	3.14717	0.010	9.15261	60.00000	Averaged	
93 2-Chlorotoluene	2.03801	2.16375	2.16375	0.010	6.16933	60.00000	Averaged	
92 1,3,5-Trimethylbenzene	2.04586	2.20261	2.20261	0.010	7.66221	60.00000	Averaged	
94 4-Chlorotoluene	1.82765	1.94299	1.94299	0.010	6.31085	60.00000	Averaged	
95 tert-Butylbenzene	1.95808	2.11655	2.11655	0.010	8.09292	60.00000	Averaged	
96 1,2,4-Trimethylbenzene	2.22714	2.26021	2.26021	0.010	1.48502	60.00000	Averaged	
98 sec-Butylbenzene	2.65456	2.91145	2.91145	0.010	9.67702	60.00000	Averaged	
99 4-Isopropyltoluene	2.12772	2.32702	2.32702	0.010	9.36654	60.00000	Averaged	
100 1,3-Dichlorobenzene	1.14813	1.20734	1.20734	0.010	5.15695	60.00000	Averaged	
102 1,4-Dichlorobenzene	1.20874	1.25685	1.25685	0.010	3.98064	60.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA5.i Injection Date: 24-DEC-2008 10:23
Lab File ID: 5q302.d Init. Cal. Date(s): 19-DEC-2008 20-DEC-2008
Analysis Type: WATER Init. Cal. Times: 17:21 00:28
Lab Sample ID: UVM081214-01A Quant Type: ISTD
Method: /chem/VOA5.i/122408v5/VOA5-8260B-121908.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
104 n-Butylbenzene	1.17773	1.31439	1.31439	0.010	11.60306	60.00000	Averaged
106 1,2-Dichlorobenzene	1.13206	1.17533	1.17533	0.010	3.82243	60.00000	Averaged
107 1,2-Dibromo-3-chloropropane	51.98114	50.00000	0.09947	0.010	3.96228	60.00000	Linear
108 1,2,4-Trichlorobenzene	0.59610	0.61200	0.61200	0.010	2.66753	60.00000	Averaged
109 Hexachlorobutadiene	0.37204	0.37916	0.37916	0.010	1.91314	60.00000	Averaged
110 Naphthalene	1.03135	1.09465	1.09465	0.010	6.13771	60.00000	Averaged
111 1,2,3-Trichlorobenzene	0.33257	0.32771	0.32771	0.010	-1.46104	60.00000	Averaged
$ 47 1,2-Dichloroethane-d4	0.26120	0.25468	0.25468	0.001	-2.49440	60.00000	Averaged
$ 64 Toluene-d8	1.12768	1.12723	1.12723	0.010	-0.04059	60.00000	Averaged
$ 85 Bromofluorobenzene	0.89618	0.89469	0.89469	0.010	-0.16678	60.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 10.73176
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA5.i/122408v5/5q302.d
Lab Smp Id: UVM081214-01A Client Smp ID: VSTD050
Inj Date : 24-DEC-2008 10:23
Operator : DXK1 Inst ID: VOA5.i
Smp Info : |UVM081214-01A|CCV/LCS|1|VOA|1|
Misc Info : GEL 5mL N/A
Comment :
Method : /chem/VOA5.i/122408v5/VOA5-8260B-121908.m
Meth Date : 24-Dec-2008 12:56 dav01267 Quant Type: ISTD
Cal Date : 20-DEC-2008 00:03 Cal File: 5p528.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
M 2 Xylenes (total)	106				1704312	150.000	165
M 3 1,2-Dichloroethylene (total)	96				1030044	100.000	104
M 1 1,3-Dichloropropylene	75				948231	100.000	114
4 Dichlorodifluoromethane	85	4.825	4.825	(0.459)	201395	50.0000	44.7
5 Chloromethane	50	5.160	5.160	(0.490)	409523	50.0000	45.7
6 Vinyl chloride	62	5.410	5.410	(0.514)	369730	50.0000	50.2
7 Bromomethane	94	5.995	5.995	(0.570)	234328	50.0000	52.3
8 Chloroethane	64	6.139	6.139	(0.583)	220722	50.0000	51.2
9 Trichlorofluoromethane	101	6.557	6.557	(0.623)	453159	50.0000	55.3
10 Ethyl Ether	74	6.869	6.869	(0.653)	198847	50.0000	52.2
13 Acetone	43	7.235	7.235	(0.688)	1530714	250.000	297
16 Acetonitrile	41	7.593	7.593	(0.721)	1239305	1000.00	1200
14 1,1-Dichloroethylene	61	7.269	7.269	(0.691)	473774	50.0000	51.8
17 Methyl acetate	43	7.633	7.633	(0.725)	1433327	250.000	247
15 Iodomethane	142	7.518	7.518	(0.714)	2346760	250.000	276

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
20 Methylene chloride	84	7.835	7.835	(0.744)	320258	50.0000	51.8
18 Carbon disulfide	76	7.653	7.653	(0.727)	4916098	250.000	270
22 tert-Butyl methyl ether	73	8.125	8.125	(0.772)	684088	50.0000	120(A)
23 trans-1,2-Dichloroethylene	61	8.172	8.172	(0.777)	474667	50.0000	50.7
24 Vinyl acetate	43	8.597	8.597	(0.817)	4033352	250.000	279
25 1,1-Dichloroethane	63	8.650	8.650	(0.822)	586043	50.0000	51.6
30 2-Butanone	43	9.223	9.223	(0.876)	1892900	250.000	348
31 cis-1,2-Dichloroethylene	61	9.291	9.291	(0.883)	555377	50.0000	53.5
33 2,2-Dichloropropane	77	9.318	9.318	(0.885)	439513	50.0000	56.7
36 Chloroform	83	9.594	9.594	(0.912)	538650	50.0000	52.5
35 Bromochloromethane	128	9.567	9.567	(0.909)	148861	50.0000	52.1
40 1,1,1-Trichloroethane	97	9.877	9.877	(0.939)	467355	50.0000	54.9
43 Cyclohexane	56	9.978	9.978	(0.948)	632009	50.0000	53.8
44 1,1-Dichloropropene	75	10.032	10.032	(0.953)	411415	50.0000	55.2
52 n-Butyl alcohol	56	10.605	10.605	(1.008)	1359073	5000.00	5960
46 Carbon tetrachloride	117	10.072	10.072	(0.957)	411477	50.0000	58.8
48 1,2-Dichloroethane	62	10.248	10.248	(0.974)	458388	50.0000	51.4
49 Benzene	78	10.274	10.274	(0.976)	1210430	50.0000	48.8
50 Cyclohexene	67	10.389	10.389	(0.987)	602801	50.0000	52.9
* 51 Fluorobenzene	96	10.524	10.524	(1.000)	1407225	50.0000	
53 Trichloroethylene	95	10.915	10.915	(1.037)	313757	50.0000	53.4
55 1,2-Dichloropropane	63	11.150	11.150	(1.060)	346249	50.0000	52.4
56 Methylcyclohexane	83	11.164	11.164	(1.061)	550628	50.0000	55.7
59 Bromodichloromethane	83	11.400	11.400	(1.083)	390081	50.0000	53.9
58 Dibromomethane	93	11.292	11.292	(1.073)	180384	50.0000	52.4
63 4-Methyl-2-pentanone	58	11.932	11.932	(0.871)	836069	250.000	309
62 cis-1,3-Dichloropropylene	75	11.851	11.851	(1.126)	487752	50.0000	56.6
65 Toluene	92	12.235	12.235	(0.893)	756294	50.0000	51.2
67 trans-1,3-Dichloropropylene	75	12.384	12.384	(0.904)	460479	50.0000	57.0
68 1,1,2-Trichloroethane	83	12.606	12.606	(0.920)	222136	50.0000	51.0
69 2-Hexanone	43	12.774	12.774	(0.933)	2487293	250.000	385
70 1,3-Dichloropropane	76	12.801	12.801	(0.935)	473203	50.0000	51.9
71 Tetrachloroethylene	164	12.842	12.842	(0.938)	252306	50.0000	56.1
72 Dibromochloromethane	129	13.078	13.078	(0.955)	292515	50.0000	59.5
73 1,2-Dibromoethane	107	13.246	13.246	(0.967)	265605	50.0000	55.4
* 75 Chlorobenzene-d5	117	13.698	13.698	(1.000)	1061126	50.0000	
76 Chlorobenzene	112	13.731	13.731	(1.002)	826946	50.0000	52.5
77 1,1,1,2-Tetrachloroethane	131	13.778	13.778	(1.006)	288815	50.0000	55.8
78 Ethylbenzene	91	13.785	13.785	(1.006)	1498645	50.0000	54.7
79 m,p-Xylenes	106	13.893	13.893	(1.014)	1144636	100.000	110
80 o-Xylene	106	14.331	14.331	(1.046)	559676	50.0000	54.4
81 Styrene	104	14.331	14.331	(1.046)	920959	50.0000	61.2
82 Bromoform	173	14.601	14.601	(0.906)	195078	50.0000	62.1
83 Isopropylbenzene	105	14.688	14.688	(0.911)	1456074	50.0000	61.0
87 1,1,2,2-Tetrachloroethane	83	14.958	14.958	(0.928)	369175	50.0000	53.7
88 1,2,3-Trichloropropane	110	15.045	15.045	(0.934)	102554	50.0000	52.6
90 Bromobenzene	156	15.106	15.106	(0.937)	345718	50.0000	52.0

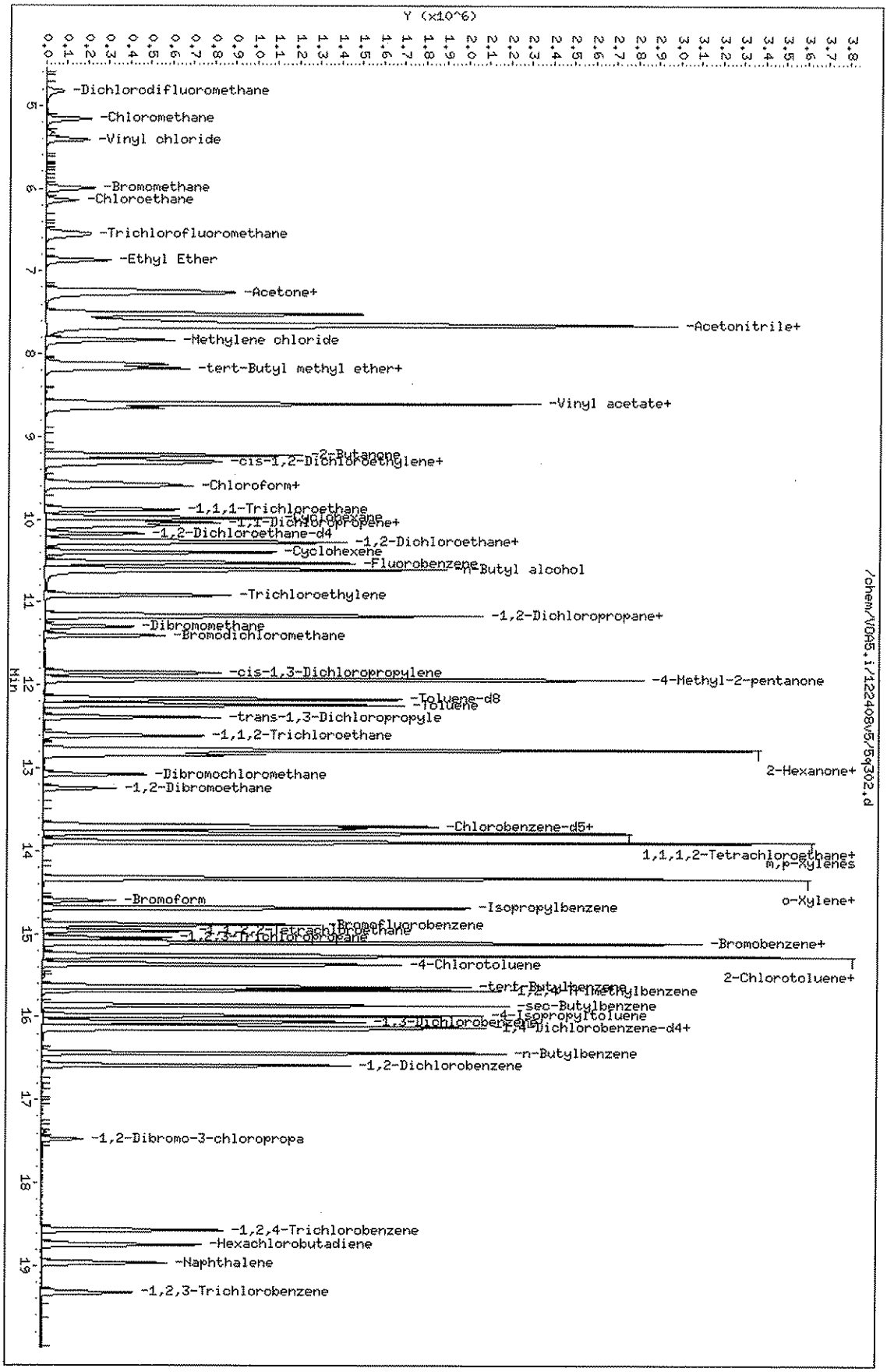
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
91 n-Propylbenzene	91	15.113	15.113	(0.938)	1792742	50.0000	54.6
93 2-Chlorotoluene	91	15.261	15.261	(0.947)	1232550	50.0000	53.1
92 1,3,5-Trimethylbenzene	105	15.261	15.261	(0.947)	1254691	50.0000	53.8
94 4-Chlorotoluene	91	15.362	15.362	(0.953)	1106797	50.0000	53.2
95 tert-Butylbenzene	119	15.632	15.632	(0.970)	1205663	50.0000	54.0
96 1,2,4-Trimethylbenzene	105	15.672	15.672	(0.972)	1287501	50.0000	50.7
98 sec-Butylbenzene	105	15.861	15.861	(0.984)	1658468	50.0000	54.8
99 4-Isopropyltoluene	119	15.982	15.982	(0.992)	1325555	50.0000	54.7
100 1,3-Dichlorobenzene	146	16.056	16.056	(0.996)	687746	50.0000	52.6
* 101 1,4-Dichlorobenzene-d4	152	16.117	16.117	(1.000)	569637	50.0000	
102 1,4-Dichlorobenzene	146	16.144	16.144	(1.002)	715950	50.0000	52.0
104 n-Butylbenzene	92	16.433	16.433	(1.020)	748724	50.0000	55.8
106 1,2-Dichlorobenzene	146	16.582	16.582	(1.029)	669511	50.0000	51.9
107 1,2-Dibromo-3-chloropropane	157	17.471	17.471	(1.084)	56662	50.0000	52.0
108 1,2,4-Trichlorobenzene	180	18.571	18.571	(1.152)	348617	50.0000	51.3
109 Hexachlorobutadiene	225	18.746	18.746	(1.163)	215981	50.0000	51.0
110 Naphthalene	128	18.967	18.967	(1.177)	623554	50.0000	53.1
111 1,2,3-Trichlorobenzene	180	19.326	19.326	(1.199)	186675	50.0000	49.3
$ 47 1,2-Dichloroethane-d4	65	10.167	10.167	(0.966)	358393	50.0000	48.8
$ 64 Toluene-d8	98	12.161	12.161	(0.888)	1196128	50.0000	50.0
$ 85 Bromofluorobenzene	95	14.884	14.884	(0.923)	509647	50.0000	49.9

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/VOA5.i/122408v5/5q302.d
Date : 24-DEC-2008 10:23
Client ID: VSTD050
Sample Info: IUVM081214-01A|CCV|LCS|1|VOA|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA5.i
Operator: DXK1
Column diameter: 0.25



QC Data

Data File: /chem/VOA5.i/121908v5/5p511.d

Page 1

Date : 19-DEC-2008 16:53

Client ID: BFB01

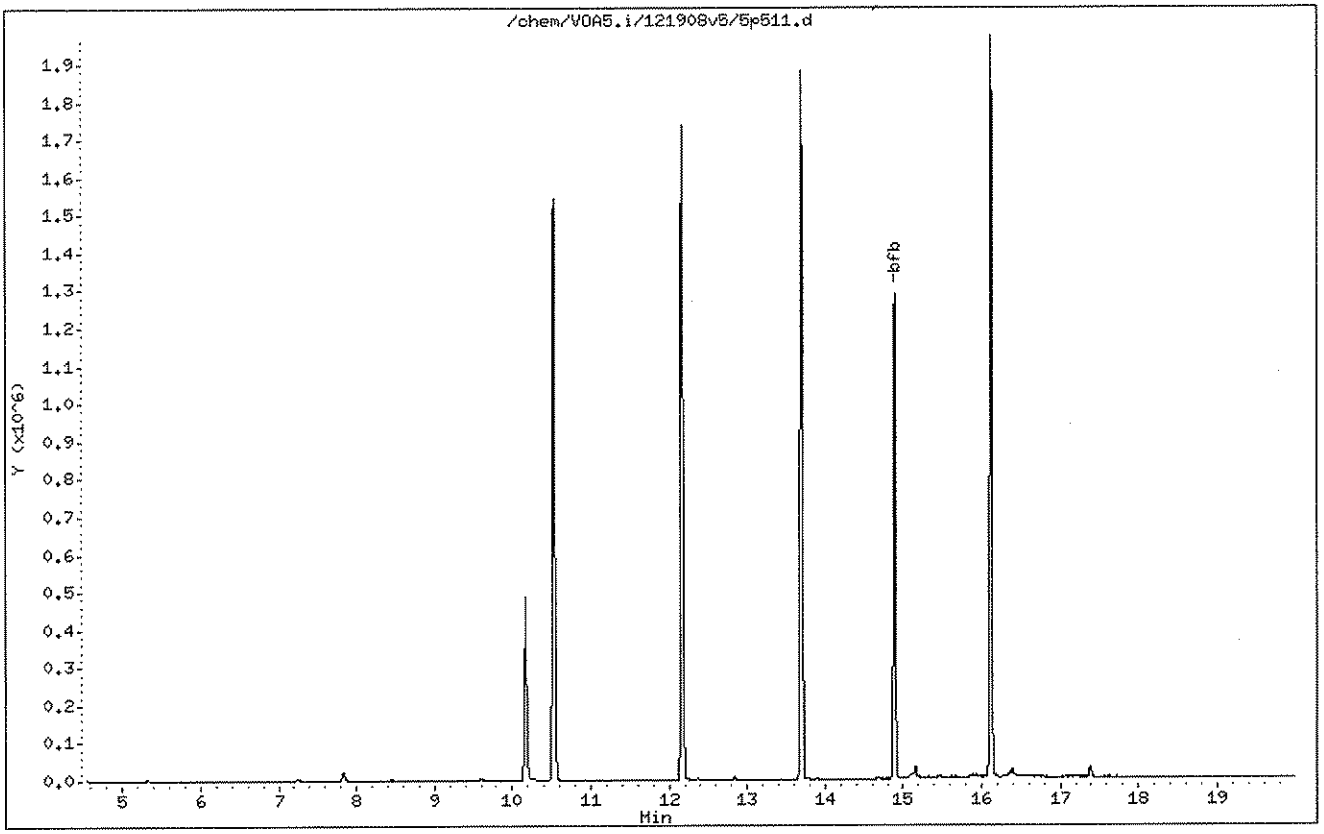
Instrument: VOA5.i

Sample Info: |UVH081114-02|BFB|1|VOA|1|

Operator: DXK1

Column phase: db624

Column diameter: 0.25



Data File: /chem/VOA5.i/121908v5/5p511.d

Date : 19-DEC-2008 16:53

Client ID: BFB01

Instrument: VOA5.i

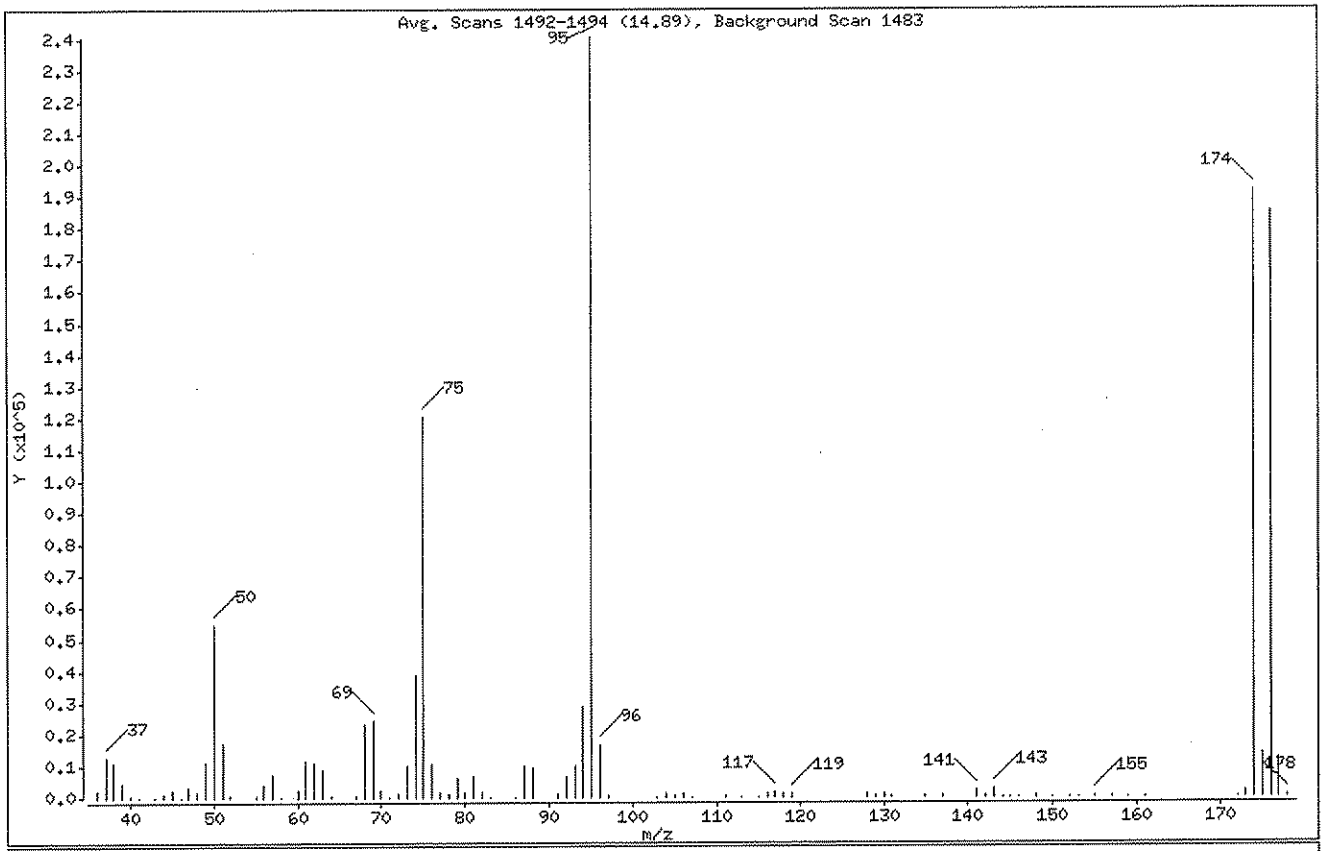
Sample Info: |UVM081114-02|BFB|1|VOA|1|

Operator: DXK1

Column phase: db624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	22.71
75	30.00 - 60.00% of mass 95	50.01
96	5.00 - 9.00% of mass 95	6.88
173	Less than 2.00% of mass 174	0.62 (0.77)
174	50.00 - 100.00% of mass 95	79.87
175	5.00 - 9.00% of mass 174	5.79 (7.25)
176	95.00 - 101.00% of mass 174	77.02 (96.43)
177	5.00 - 9.00% of mass 176	5.02 (6.51)

Data File: /chem/VOA5.i/121908v5/5p511.d

Date : 19-DEC-2008 16:53

Client ID: BFB01

Instrument: VOA5.i

Sample Info: |UVM081114-02|BFB|1|VOA|1|

Operator: DXK1

Column phase: db624

Column diameter: 0.25

Data File: 5p511.d

Spectrum: Avg. Scans 1492-1494 (14.89), Background Scan 1483

Location of Maximum: 95.00

Number of points: 91

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2170	63.00	8702	92.00	6889	137.00	398
37.00	12512	64.00	751	93.00	10103	141.00	2447
38.00	11130	67.00	624	94.00	28904	142.00	323
39.00	4470	68.00	22944	95.00	240384	143.00	2500
40.00	404	69.00	24384	96.00	16528	144.00	83
41.00	27	70.00	1999	97.00	683	145.00	97
43.00	155	71.00	110	103.00	84	146.00	224
44.00	1361	72.00	1148	104.00	1179	148.00	569
45.00	2268	73.00	10163	105.00	486	150.00	267
46.00	114	74.00	38864	106.00	1136	152.00	87
47.00	3492	75.00	120216	107.00	188	153.00	94
48.00	1494	76.00	10227	111.00	323	155.00	661
49.00	11239	77.00	1440	113.00	85	157.00	391
50.00	54584	78.00	843	115.00	185	159.00	191
51.00	17024	79.00	6226	116.00	887	161.00	103
52.00	721	80.00	1641	117.00	1474	172.00	220
55.00	820	81.00	6510	118.00	1023	173.00	1480
56.00	3796	82.00	1440	119.00	1320	174.00	192000
57.00	7048	83.00	189	128.00	839	175.00	13929
58.00	224	86.00	178	129.00	429	176.00	185152
60.00	2250	87.00	9697	130.00	852	177.00	12057
61.00	11841	88.00	9151	131.00	318	178.00	402
62.00	11279	91.00	861	135.00	539		

Data File: /chem/VOA5.i/122408v5/5q301.d

Page 1

Date : 24-DEC-2008 09:58

Client ID: BFB01

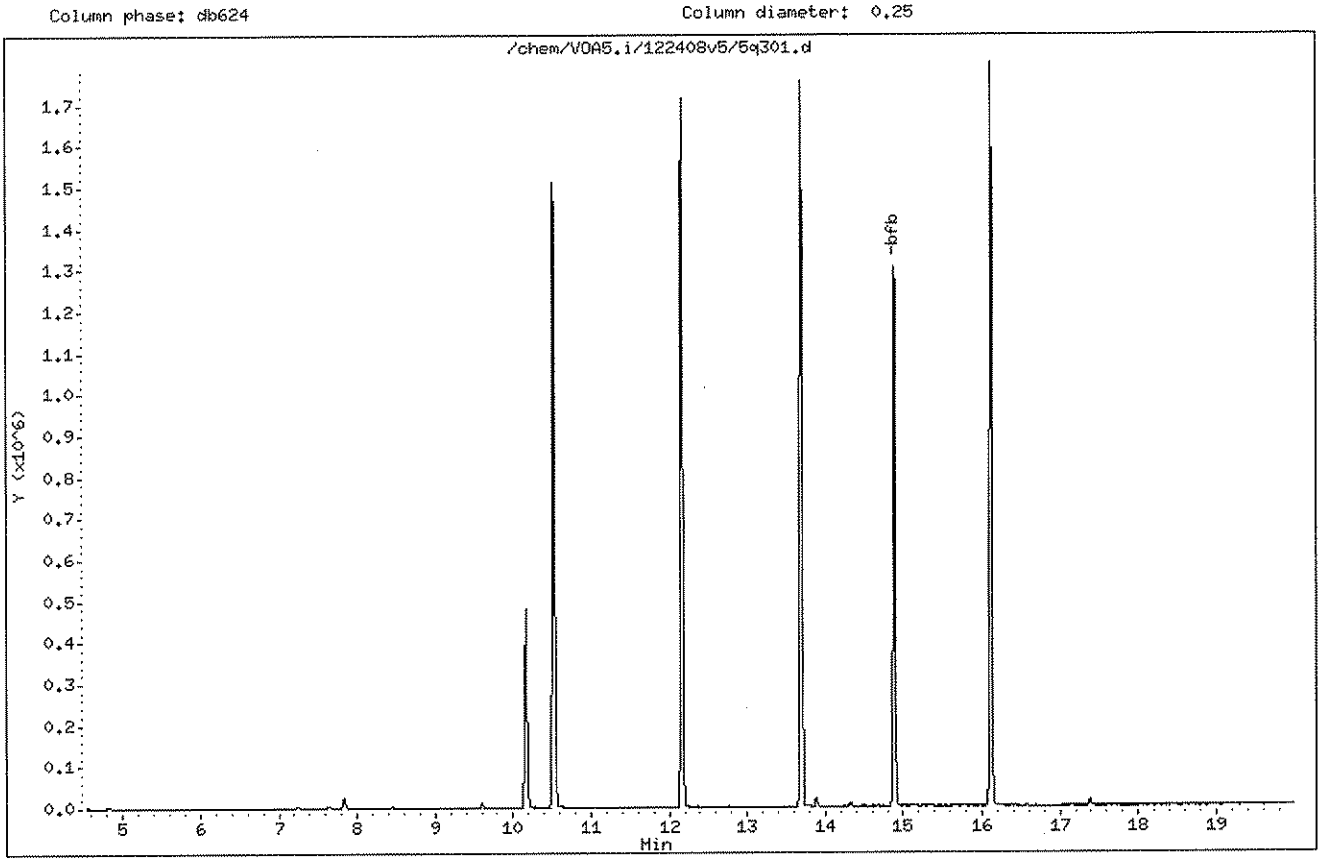
Instrument: VOA5.i

Sample Info: |UVM081114-02|BFB|1|VOA|1|

Operator: DXK1

Column phase: db624

Column diameter: 0.25



Data File: /chem/VOA5.i/122408v5/5q301.d

Date : 24-DEC-2008 09:58

Client ID: BFB01

Instrument: VOA5.i

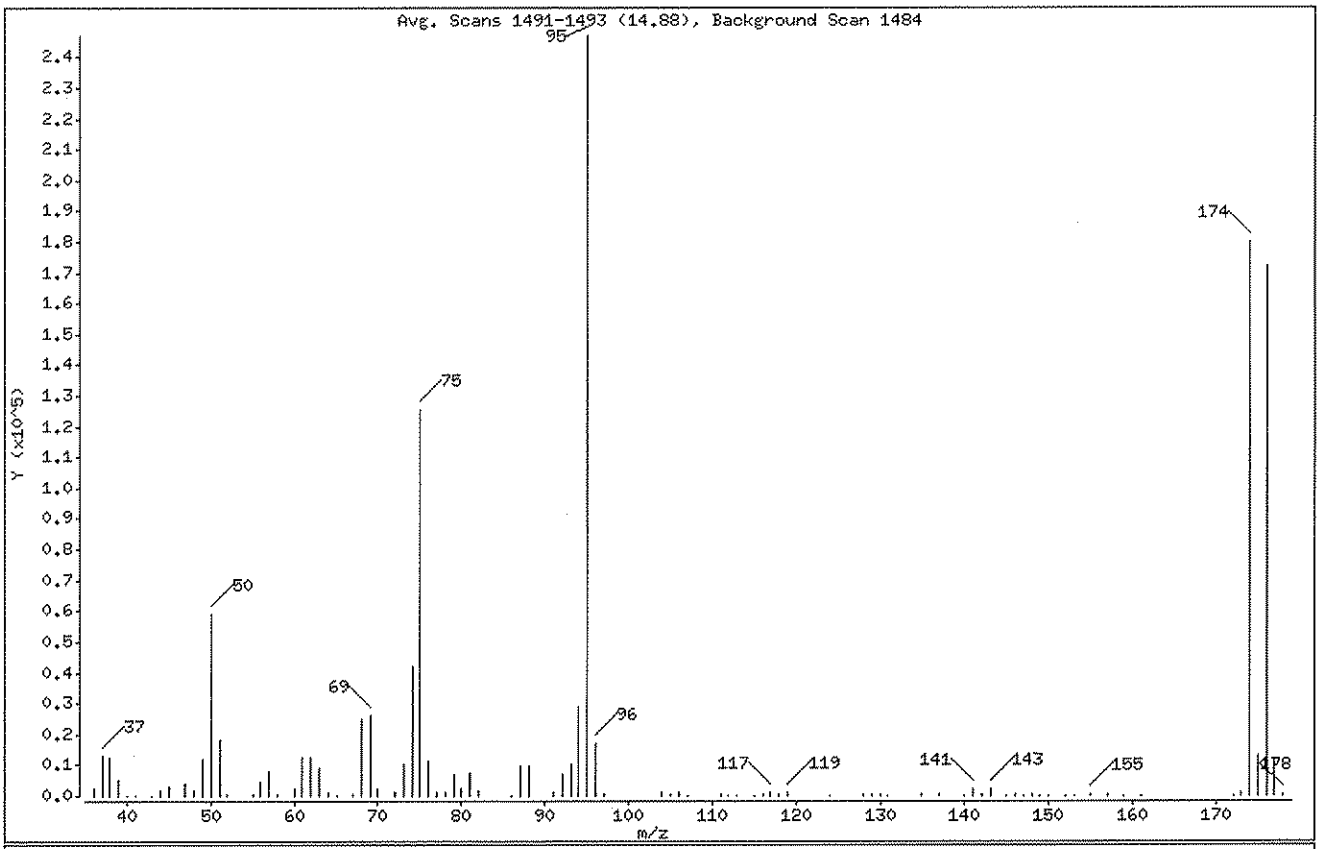
Sample Info: |UVM081114-02|BFB|1|VOA|1|

Operator: DXK1

Column phase: db624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	23.99
75	30.00 - 60.00% of mass 95	50.72
96	5.00 - 9.00% of mass 95	6.87
173	Less than 2.00% of mass 174	0.52 (0.72)
174	50.00 - 100.00% of mass 95	72.84
175	5.00 - 9.00% of mass 174	5.37 (7.38)
176	95.00 - 101.00% of mass 174	69.58 (95.52)
177	5.00 - 9.00% of mass 176	4.58 (6.58)

Data File: /chem/VOA5.i/122408v5/5q301.d

Date : 24-DEC-2008 09:58

Client ID: BFB01

Instrument: VOA5.i

Sample Info: |UVM081114-02|BFB|1|VOA|1|

Operator: DXK1

Column phase: db624

Column diameter: 0.25

Data File: 5q301.d
Spectrum: Avg. Scans 1491-1493 (14.88), Background Scan 1484
Location of Maximum: 95.00
Number of points: 92

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2443	65.00	97	96.00	16960	143.00	2363
37.00	13334	67.00	609	97.00	621	145.00	214
38.00	12660	68.00	25112	104.00	1061	146.00	349
39.00	5058	69.00	26144	105.00	456	147.00	94
40.00	48	70.00	2094	106.00	1167	148.00	519
41.00	20	72.00	1306	107.00	221	149.00	97
43.00	155	73.00	10349	111.00	339	150.00	106
44.00	1454	74.00	42160	112.00	125	152.00	89
45.00	2710	75.00	125272	113.00	190	153.00	87
47.00	3852	76.00	11174	115.00	211	155.00	529
48.00	1597	77.00	1197	116.00	787	157.00	432
49.00	12147	78.00	932	117.00	1373	159.00	190
50.00	59240	79.00	6635	118.00	847	161.00	88
51.00	18000	80.00	1992	119.00	1399	172.00	241
52.00	754	81.00	7102	124.00	89	173.00	1292
55.00	800	82.00	1544	128.00	753	174.00	179904
56.00	4560	86.00	200	129.00	338	175.00	13274
57.00	8066	87.00	9798	130.00	768	176.00	171840
58.00	513	88.00	9502	131.00	215	177.00	11310
60.00	2299	91.00	1004	135.00	389	178.00	307
61.00	12242	92.00	7071	137.00	431		
62.00	12266	93.00	10430	140.00	104		
63.00	9030	94.00	28840	141.00	2359		
64.00	907	95.00	246976	142.00	295		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	221329			**Matrix:**	WATER
Lab Sample ID:	1201747465				
Client Sample:	QC for batch 828777	**Client:**	WEIS001	**Project:**	QC
Client ID:	MB for batch 828777	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	828777	**Inst:**	VOA5.I	**Dilution:**	1
Run Date:	12/24/2008 11:39	**Analyst:**	DXK1	**Purge Vol:**	5 mL
Prep Date:	12/24/2008 11:39				
Data File:	5q305BW.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
74-87-3	Chloromethane	U	1.00	ug/L	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/L	0.500	1.00
74-83-9	Bromomethane	U	1.00	ug/L	0.500	1.00
75-00-3	Chloroethane	U	1.00	ug/L	0.300	1.00
67-64-1	Acetone	U	5.00	ug/L	1.50	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/L	0.300	1.00
75-09-2	Methylene chloride	U	5.00	ug/L	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/L	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/L	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/L	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/L	1.25	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/L	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/L	0.250	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/L	0.325	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/L	0.260	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/L	0.250	1.00
71-43-2	Benzene	U	1.00	ug/L	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/L	0.250	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/L	0.250	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/L	0.250	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/L	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00
108-88-3	Toluene	U	1.00	ug/L	0.250	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/L	0.250	1.00
591-78-6	2-Hexanone	U	5.00	ug/L	1.25	5.00
127-18-4	Tetrachloroethylene	U	1.00	ug/L	0.450	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/L	0.260	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/L	0.250	1.00
108-90-7	Chlorobenzene	U	1.00	ug/L	0.250	1.00
100-41-4	Ethylbenzene	U	1.00	ug/L	0.250	1.00
100-42-5	Styrene	U	1.00	ug/L	0.250	1.00
75-25-2	Bromoform	U	1.00	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/L	0.250	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/L	0.500	1.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	0.600	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	221329			Matrix:	WATER
Lab Sample ID:	1201747465				
Client Sample:	QC for batch 828777	Client:	WEIS001	Project:	QC
Client ID:	MB for batch 828777	Method:	SW846 8260B	SOP Ref:	GL-OA-E-038
Batch ID:	828777	Inst:	VOA5.I	Dilution:	1
Run Date:	12/24/2008 11:39	Analyst:	DXK1	Purge Vol:	5 mL
Prep Date:	12/24/2008 11:39				
Data File:	5q305BW.d	Column:	DB-624	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/L	0.250	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA5.i/122408v5/5q305BW.d
Lab Smp Id: 1201747465 Client Smp ID: MB
Inj Date : 24-DEC-2008 11:39
Operator : DXK1 Inst ID: VOA5.i
Smp Info : |1201747465|828777|1|VOA|1|
Misc Info : GEL 5mL N/A
Comment :
Method : /chem/VOA5.i/122408v5/VOA5-8260B-121908.m
Meth Date : 24-Dec-2008 12:56 dav01267 Quant Type: ISTD
Cal Date : 20-DEC-2008 00:03 Cal File: 5p528.d
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

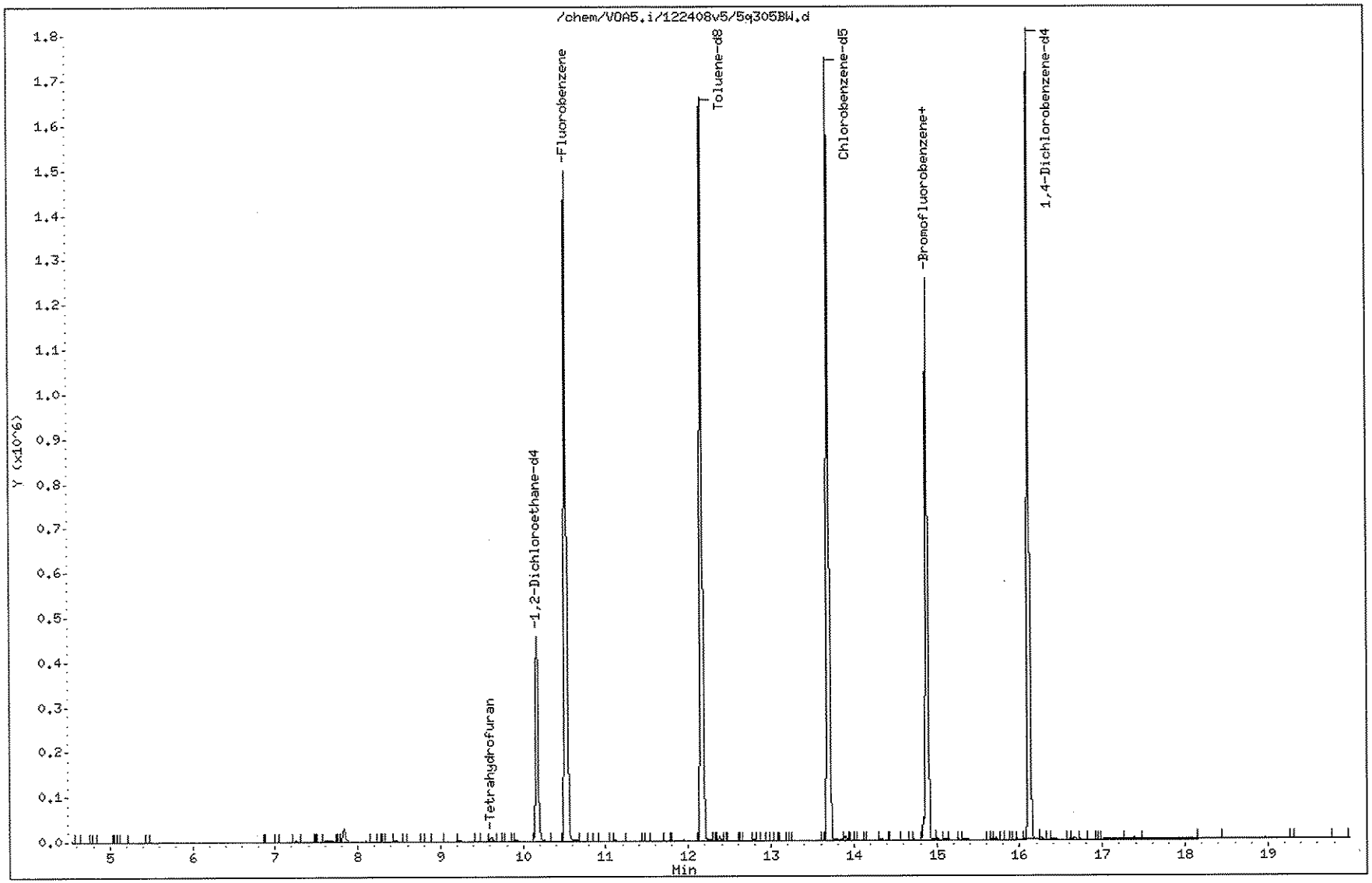
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
38 Tetrahydrofuran	42	9.614	9.614	(0.597)	6087	2.44050	2.4(a)
$ 47 1,2-Dichloroethane-d4	65	10.167	10.167	(0.966)	358496	47.9694	48.0
* 51 Fluorobenzene	96	10.524	10.524	(1.000)	1430618	50.0000	
$ 64 Toluene-d8	98	12.168	12.161	(0.888)	1179910	50.3452	50.3
* 75 Chlorobenzene-d5	117	13.698	13.698	(1.000)	1039139	50.0000	
$ 85 Bromofluorobenzene	95	14.890	14.884	(0.924)	484304	52.2975	52.3
86 Cyclohexanone	55	14.843	14.843	(1.084)	26133	16.5857	16.6(a)
* 101 1,4-Dichlorobenzene-d4	152	16.117	16.117	(1.000)	516667	50.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/VOA5.i/122408v5/5q305BW.d
Date : 24-DEC-2008 11:39
Client ID: MB
Sample Info: |1201747465|828777|1|VOA|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA5.i
Operator: DXK1
Column diameter: 0.25



Data File: /chem/VOA5.i/122408v5/5q305BW.d

Date : 24-DEC-2008 11:39

Client ID: MB

Instrument: VOA5.i

Sample Info: !1201747465!8287771!VOA!1!

Purge Volume: 5.0

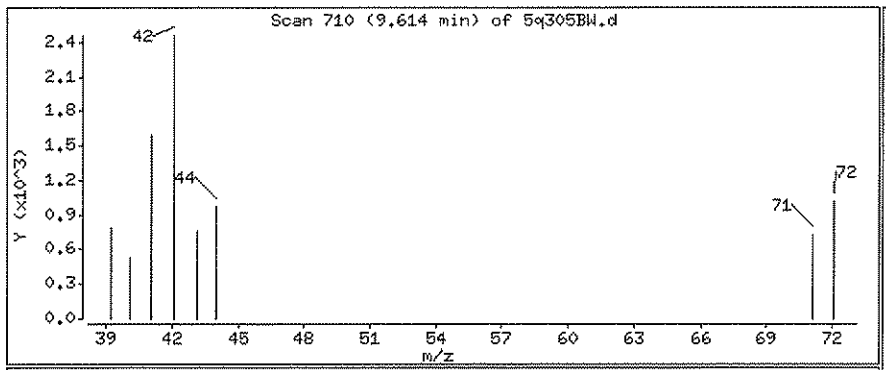
Operator: DXK1

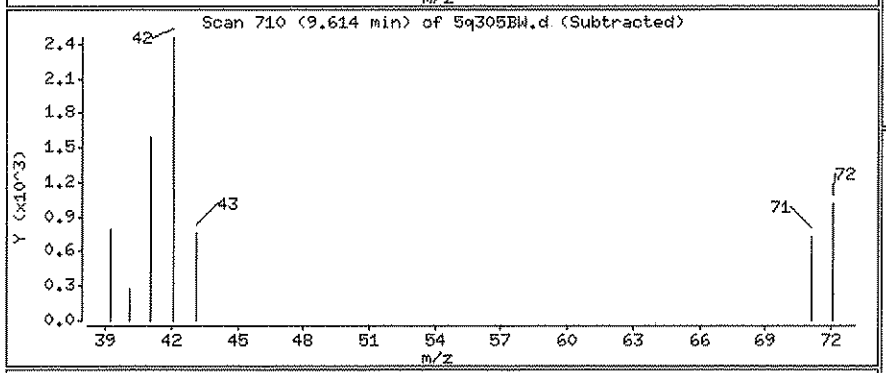
Column phase: DB-624

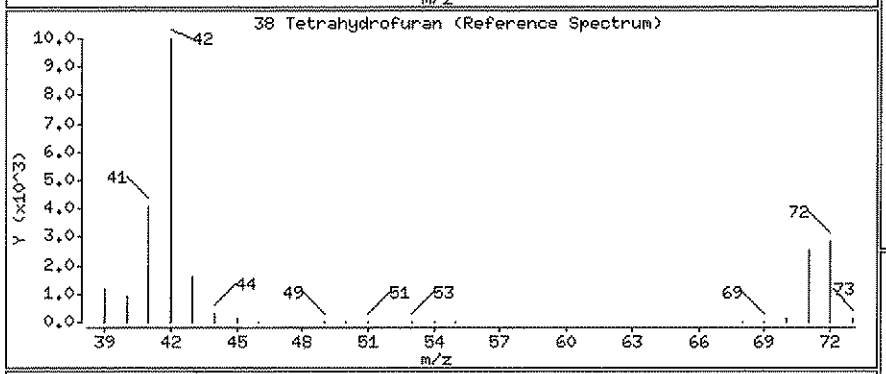
Column diameter: 0.25

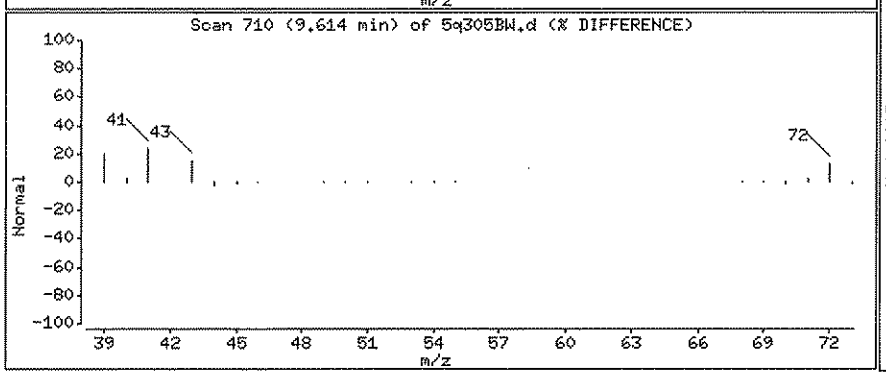
38 Tetrahydrofuran

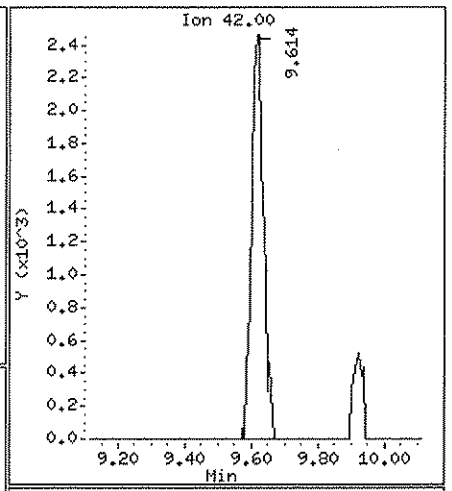
Concentration: 2.4 ug/l

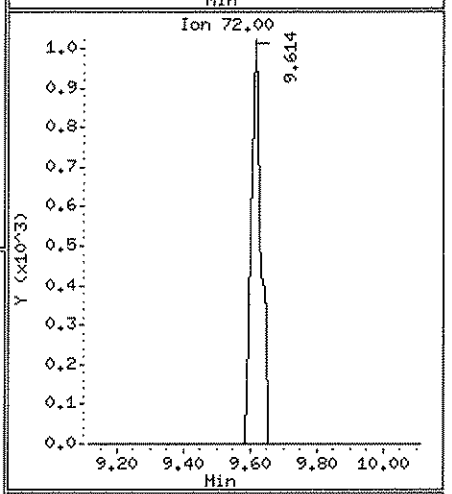


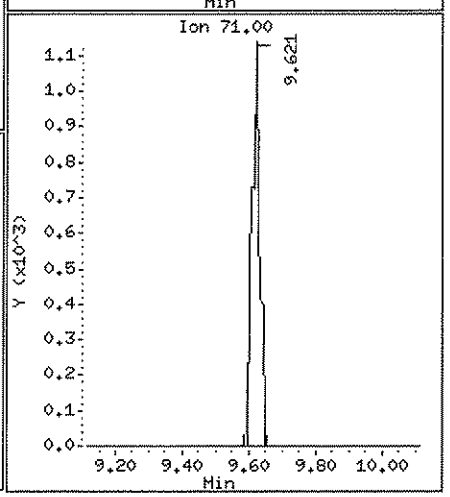












Data File: /chem/VOA5.i/122408v5/5q305BW.d

Date : 24-DEC-2008 11:39

Client ID: MB

Instrument: VOA5.i

Sample Info: |1201747465|8287771|VOA|1|

Purge Volume: 5.0

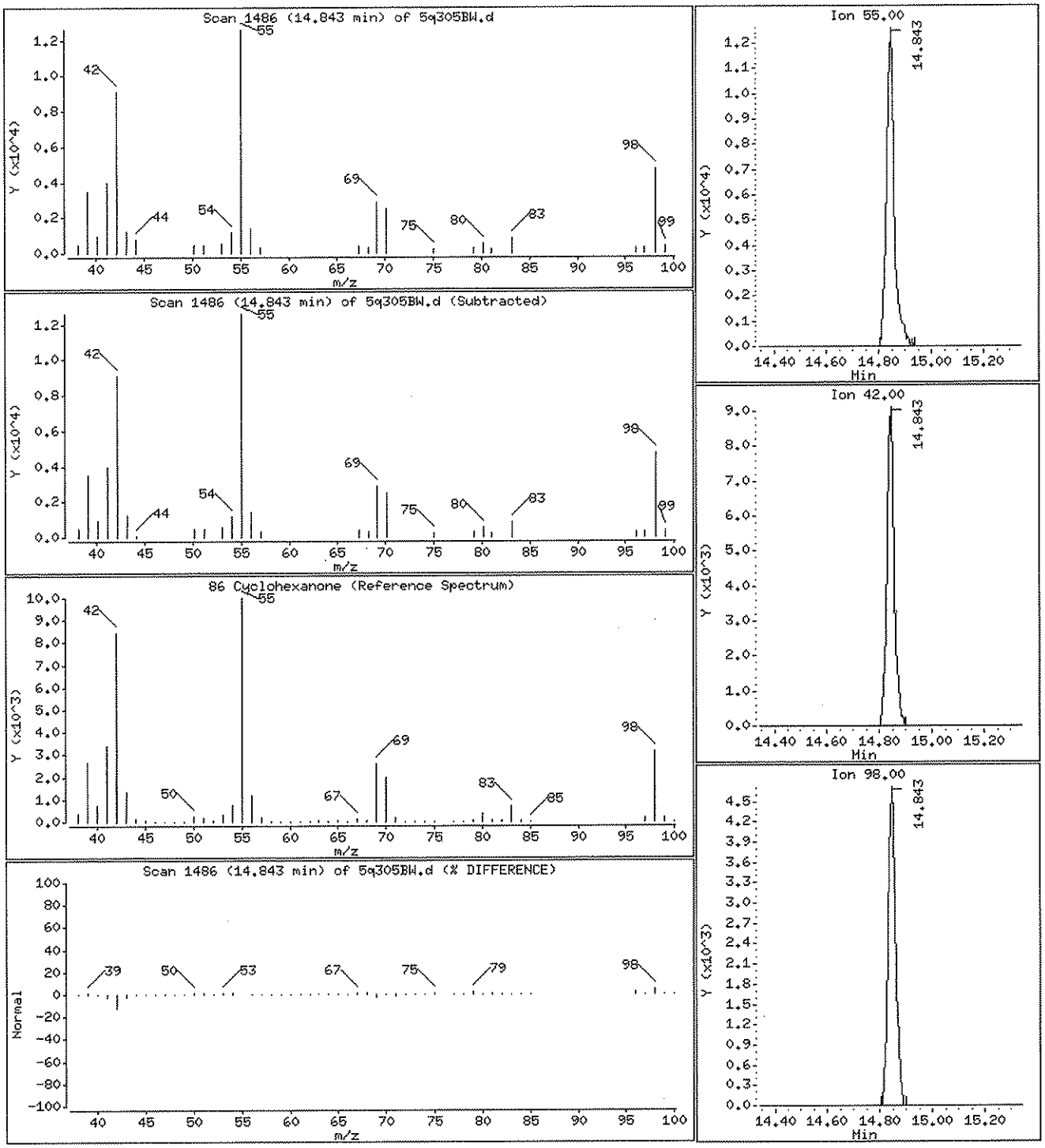
Operator: DXK1

Column phase: DB-624

Column diameter: 0.25

86 Cyclohexanone

Concentration: 16.6 ug/l



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	221329			**Matrix:**	WATER
Lab Sample ID:	1201747466				
Client Sample:	QC for batch 828777	**Client:**	WEIS001	**Project:**	QC
Client ID:	LCS for batch 828777	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	828777	**Inst:**	VOA5.I	**Dilution:**	1
Run Date:	12/24/2008 10:23	**Analyst:**	DXK1	**Purge Vol:**	5 mL
Prep Date:	12/24/2008 10:23				
Data File:	5q302LW.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
74-87-3	Chloromethane		45.7	ug/L	0.300	1.00
75-01-4	Vinyl chloride		50.1	ug/L	0.500	1.00
74-83-9	Bromomethane		52.3	ug/L	0.500	1.00
75-00-3	Chloroethane		51.2	ug/L	0.300	1.00
67-64-1	Acetone		297	ug/L	1.50	5.00
75-35-4	1,1-Dichloroethylene		51.8	ug/L	0.300	1.00
75-09-2	Methylene chloride		51.8	ug/L	2.00	5.00
75-15-0	Carbon disulfide		270	ug/L	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		50.7	ug/L	0.300	1.00
75-34-3	1,1-Dichloroethane		51.6	ug/L	0.300	1.00
78-93-3	2-Butanone		348	ug/L	1.25	5.00
156-59-2	cis-1,2-Dichloroethylene		53.5	ug/L	0.300	1.00
67-66-3	Chloroform		52.5	ug/L	0.250	1.00
71-55-6	1,1,1-Trichloroethane		54.9	ug/L	0.325	1.00
56-23-5	Carbon tetrachloride		58.8	ug/L	0.260	1.00
107-06-2	1,2-Dichloroethane		51.4	ug/L	0.250	1.00
71-43-2	Benzene		48.8	ug/L	0.300	1.00
79-01-6	Trichloroethylene		53.4	ug/L	0.250	1.00
78-87-5	1,2-Dichloropropane		52.4	ug/L	0.250	1.00
75-27-4	Bromodichloromethane		53.9	ug/L	0.250	1.00
108-10-1	4-Methyl-2-pentanone		309	ug/L	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		56.6	ug/L	0.250	1.00
108-88-3	Toluene		51.2	ug/L	0.250	1.00
10061-02-6	trans-1,3-Dichloropropylene		57.0	ug/L	0.250	1.00
79-00-5	1,1,2-Trichloroethane		51.0	ug/L	0.250	1.00
591-78-6	2-Hexanone		385	ug/L	1.25	5.00
127-18-4	Tetrachloroethylene		56.1	ug/L	0.450	1.00
124-48-1	Dibromochloromethane		59.5	ug/L	0.260	1.00
106-93-4	1,2-Dibromoethane		55.4	ug/L	0.250	1.00
108-90-7	Chlorobenzene		52.5	ug/L	0.250	1.00
100-41-4	Ethylbenzene		54.7	ug/L	0.250	1.00
100-42-5	Styrene		61.2	ug/L	0.250	1.00
75-25-2	Bromoform		62.1	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane		53.7	ug/L	0.250	1.00
541-73-1	1,3-Dichlorobenzene		52.6	ug/L	0.250	1.00
106-46-7	1,4-Dichlorobenzene		52.0	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane		52.0	ug/L	0.500	1.00
1330-20-7	Xylenes (total)		165	ug/L	0.600	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	221329			**Matrix:**	WATER
Lab Sample ID:	1201747466				
Client Sample:	QC for batch 828777	**Client:**	WEIS001	**Project:**	QC
Client ID:	LCS for batch 828777	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	828777	**Inst:**	VOA5.I	**Dilution:**	1
Run Date:	12/24/2008 10:23	**Analyst:**	DXK1	**Purge Vol:**	5 mL
Prep Date:	12/24/2008 10:23				
Data File:	5q302LW.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
95-50-1	1,2-Dichlorobenzene		51.9	ug/L	0.250	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA5.i/122408v5/5q302LW.d
Lab Smp Id: 1201747466 Client Smp ID: LCS
Inj Date : 24-DEC-2008 10:23
Operator : DXK1 Inst ID: VOA5.i
Smp Info : |1201747466|828777|1|VOA|1|
Misc Info : GEL 5mL N/A
Comment :
Method : /chem/VOA5.i/122408v5/VOA5-8260B-121908.m
Meth Date : 24-Dec-2008 12:56 dav01267 Quant Type: ISTD
Cal Date : 20-DEC-2008 00:03 Cal File: 5p528.d
Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
M 1 1,3-Dichloropropylene	75				948231	113.683	114
M 2 Xylenes (total)	106				1704312	164.815	165
M 3 1,2-Dichloroethylene (total)	96				1030044	104.146	104
4 Dichlorodifluoromethane	85	4.825	4.825	(0.459)	201395	44.6970	44.7
5 Chloromethane	50	5.160	5.160	(0.490)	409523	45.7287	45.7
6 Vinyl chloride	62	5.410	5.410	(0.514)	369324	50.1016	50.1
7 Bromomethane	94	5.995	5.995	(0.570)	234328	52.3423	52.3
8 Chloroethane	64	6.139	6.139	(0.583)	220722	51.2126	51.2
9 Trichlorofluoromethane	101	6.557	6.557	(0.623)	453159	55.3152	55.3
10 Ethyl Ether	74	6.869	6.869	(0.653)	198847	52.2007	52.2
13 Acetone	43	7.235	7.235	(0.688)	1530966	297.465	297
14 1,1-Dichloroethylene	61	7.269	7.269	(0.691)	473774	51.7846	51.8
15 Iodomethane	142	7.518	7.518	(0.714)	2346760	276.332	276
16 Acetonitrile	41	7.593	7.593	(0.721)	1237174	1193.49	1190
17 Methyl acetate	43	7.633	7.633	(0.725)	1433327	247.418	247

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	18 Carbon disulfide	76	7.653	7.653	(0.727)	4916098	270.086	270
	20 Methylene chloride	84	7.835	7.835	(0.744)	320258	51.8102	51.8
	22 tert-Butyl methyl ether	73	8.125	8.125	(0.772)	684088	120.223	120(AR)
	23 trans-1,2-Dichloroethylene	61	8.172	8.172	(0.777)	474667	50.6611	50.7
	24 Vinyl acetate	43	8.597	8.597	(0.817)	4033352	278.667	279
	25 1,1-Dichloroethane	63	8.650	8.650	(0.822)	586043	51.6296	51.6
	30 2-Butanone	43	9.223	9.223	(0.876)	1892900	347.760	348
	31 cis-1,2-Dichloroethylene	61	9.291	9.291	(0.883)	555377	53.4846	53.5
	33 2,2-Dichloropropane	77	9.318	9.318	(0.885)	439513	56.7206	56.7
	35 Bromochloromethane	128	9.567	9.567	(0.909)	148861	52.0785	52.1
	36 Chloroform	83	9.594	9.594	(0.912)	538650	52.4781	52.5
	40 1,1,1-Trichloroethane	97	9.877	9.877	(0.939)	467355	54.9005	54.9
	43 Cyclohexane	56	9.978	9.978	(0.948)	632009	53.7609	53.8
	44 1,1-Dichloropropene	75	10.032	10.032	(0.953)	411415	55.2318	55.2
	46 Carbon tetrachloride	117	10.072	10.072	(0.957)	411477	58.8095	58.8
$	47 1,2-Dichloroethane-d4	65	10.167	10.167	(0.966)	356986	48.5614	48.6
	48 1,2-Dichloroethane	62	10.248	10.248	(0.974)	458388	51.4409	51.4
	49 Benzene	78	10.274	10.274	(0.976)	1210430	48.7571	48.8
	50 Cyclohexene	67	10.389	10.389	(0.987)	602801	52.8647	52.9
*	51 Fluorobenzene	96	10.524	10.524	(1.000)	1407225	50.0000	
	52 n-Butyl alcohol	56	10.605	10.605	(1.008)	1359073	5959.18	5960(A)
	53 Trichloroethylene	95	10.915	10.915	(1.037)	313757	53.3700	53.4
	55 1,2-Dichloropropane	63	11.150	11.150	(1.060)	346249	52.4292	52.4
	56 Methylcyclohexane	83	11.164	11.164	(1.061)	550628	55.6990	55.7
	58 Dibromomethane	93	11.292	11.292	(1.073)	180384	52.4560	52.4
	59 Bromodichloromethane	83	11.400	11.400	(1.083)	390081	53.8708	53.9
	62 cis-1,3-Dichloropropylene	75	11.851	11.851	(1.126)	487752	56.6064	56.6
	63 4-Methyl-2-pentanone	58	11.932	11.932	(0.871)	836069	309.481	309
$	64 Toluene-d8	98	12.161	12.161	(0.888)	1196128	49.9797	50.0
	65 Toluene	92	12.235	12.235	(0.893)	756294	51.2110	51.2
	67 trans-1,3-Dichloropropylene	75	12.384	12.384	(0.904)	460479	57.0341	57.0
	68 1,1,2-Trichloroethane	83	12.606	12.606	(0.920)	222136	51.0414	51.0
	69 2-Hexanone	43	12.774	12.774	(0.933)	2487293	384.767	385(R)
	70 1,3-Dichloropropane	76	12.801	12.801	(0.935)	473203	51.8942	51.9
	71 Tetrachloroethylene	164	12.842	12.842	(0.938)	252306	56.0622	56.1
	72 Dibromochloromethane	129	13.078	13.078	(0.955)	292515	59.4906	59.5
	73 1,2-Dibromoethane	107	13.246	13.246	(0.967)	265605	55.3681	55.4
*	75 Chlorobenzene-d5	117	13.698	13.698	(1.000)	1061126	50.0000	
	76 Chlorobenzene	112	13.731	13.731	(1.002)	826946	52.5290	52.5
	77 1,1,1,2-Tetrachloroethane	131	13.778	13.778	(1.006)	288815	55.8509	55.8
	78 Ethylbenzene	91	13.785	13.785	(1.006)	1498645	54.7401	54.7
	79 m,p-Xylenes	106	13.893	13.893	(1.014)	1144636	110.418	110
	80 o-Xylene	106	14.331	14.331	(1.046)	559676	54.3967	54.4
	81 Styrene	104	14.331	14.331	(1.046)	920959	61.2269	61.2(R)
	82 Bromoform	173	14.601	14.601	(0.906)	195078	62.0947	62.1
	83 Isopropylbenzene	105	14.688	14.688	(0.911)	1456074	61.0528	61.0(R)
$	85 Bromofluorobenzene	95	14.884	14.884	(0.923)	509647	49.9166	49.9

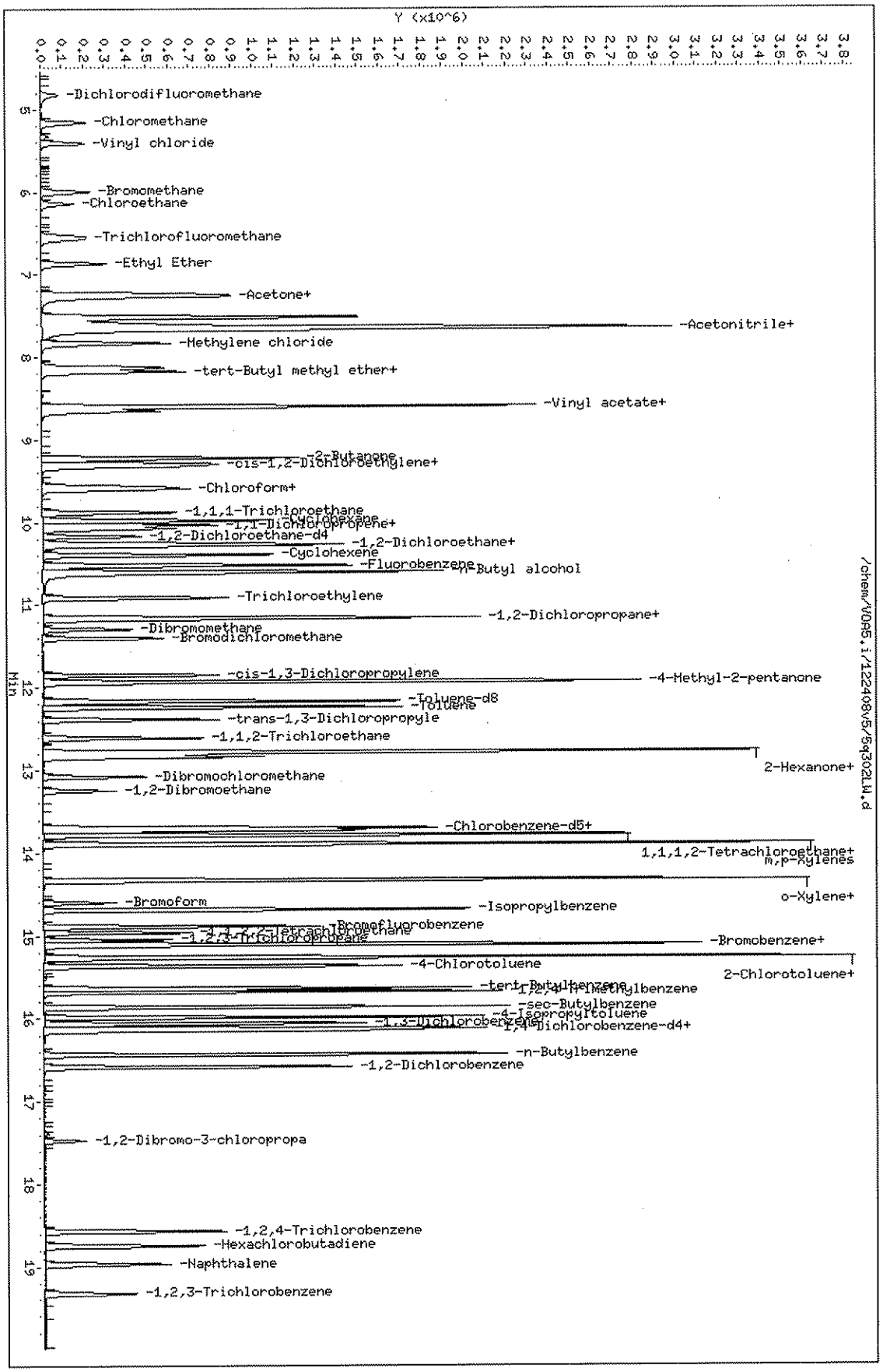
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
87 1,1,2,2-Tetrachloroethane	83	14.958	14.958	(0.928)	369175	53.6997	53.7
88 1,2,3-Trichloropropane	110	15.045	15.045	(0.934)	102554	52.6594	52.6(A)
90 Bromobenzene	156	15.106	15.106	(0.937)	345718	51.9795	52.0
91 n-Propylbenzene	91	15.113	15.113	(0.938)	1792742	54.5763	54.6
92 1,3,5-Trimethylbenzene	105	15.261	15.261	(0.947)	1254691	53.8311	53.8
93 2-Chlorotoluene	91	15.261	15.261	(0.947)	1232550	53.0847	53.1
94 4-Chlorotoluene	91	15.362	15.362	(0.953)	1106797	53.1554	53.2
95 tert-Butylbenzene	119	15.632	15.632	(0.970)	1205663	54.0465	54.0
96 1,2,4-Trimethylbenzene	105	15.672	15.672	(0.972)	1287501	50.7425	50.7
98 sec-Butylbenzene	105	15.861	15.861	(0.984)	1658468	54.8385	54.8
99 4-Isopropyltoluene	119	15.982	15.982	(0.992)	1325555	54.6833	54.7
100 1,3-Dichlorobenzene	146	16.056	16.056	(0.996)	687746	52.5785	52.6
* 101 1,4-Dichlorobenzene-d4	152	16.117	16.117	(1.000)	569637	50.0000	
102 1,4-Dichlorobenzene	146	16.144	16.144	(1.002)	715950	51.9903	52.0
104 n-Butylbenzene	92	16.433	16.433	(1.020)	748724	55.8015	55.8
106 1,2-Dichlorobenzene	146	16.582	16.582	(1.029)	669511	51.9112	51.9
107 1,2-Dibromo-3-chloropropane	157	17.471	17.471	(1.084)	56658	51.9776	52.0
108 1,2,4-Trichlorobenzene	180	18.571	18.571	(1.152)	348617	51.3338	51.3
109 Hexachlorobutadiene	225	18.746	18.746	(1.163)	215981	50.9566	51.0
110 Naphthalene	128	18.967	18.967	(1.177)	623554	53.0689	53.1
111 1,2,3-Trichlorobenzene	180	19.326	19.326	(1.199)	186675	49.2695	49.3

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/VOA5.i/122408v5/5q302LW.d
Date : 24-DEC-2008 10:23
Client ID: LCS
Sample Info: 1120174746618287771|1|VOA|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA5.i
Operator: DKK1
Column diameter: 0.25



Page 1

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	221329	**Date Collected:**	12/15/2008 08:42	**Matrix:**	WATER
Lab Sample ID:	1201747467	**Date Received:**	12/16/2008 09:55		
Client Sample:	QC for batch 828777	**Client:**	WEIS001	**Project:**	QC
Client ID:	RWSW0049‖PS	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	828777	**Inst:**	VOA5.I	**Dilution:**	1
Run Date:	12/24/2008 19:12	**Analyst:**	DXK1	**Purge Vol:**	5 mL
Prep Date:	12/24/2008 19:12				
Data File:	5q323.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
74-87-3	Chloromethane		40.9	ug/L	0.300	1.00
75-01-4	Vinyl chloride		42.3	ug/L	0.500	1.00
74-83-9	Bromomethane		46.1	ug/L	0.500	1.00
75-00-3	Chloroethane		44.0	ug/L	0.300	1.00
67-64-1	Acetone		106	ug/L	1.50	5.00
75-35-4	1,1-Dichloroethylene		43.7	ug/L	0.300	1.00
75-09-2	Methylene chloride		47.4	ug/L	2.00	5.00
75-15-0	Carbon disulfide		229	ug/L	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		44.0	ug/L	0.300	1.00
75-34-3	1,1-Dichloroethane		45.7	ug/L	0.300	1.00
78-93-3	2-Butanone		167	ug/L	1.25	5.00
156-59-2	cis-1,2-Dichloroethylene		47.4	ug/L	0.300	1.00
67-66-3	Chloroform		47.1	ug/L	0.250	1.00
71-55-6	1,1,1-Trichloroethane		46.2	ug/L	0.325	1.00
56-23-5	Carbon tetrachloride		48.8	ug/L	0.260	1.00
107-06-2	1,2-Dichloroethane		48.4	ug/L	0.250	1.00
71-43-2	Benzene		42.8	ug/L	0.300	1.00
79-01-6	Trichloroethylene		45.5	ug/L	0.250	1.00
78-87-5	1,2-Dichloropropane		47.5	ug/L	0.250	1.00
75-27-4	Bromodichloromethane		50.6	ug/L	0.250	1.00
108-10-1	4-Methyl-2-pentanone		279	ug/L	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		51.9	ug/L	0.250	1.00
108-88-3	Toluene		45.9	ug/L	0.250	1.00
10061-02-6	trans-1,3-Dichloropropylene		53.0	ug/L	0.250	1.00
79-00-5	1,1,2-Trichloroethane		48.9	ug/L	0.250	1.00
591-78-6	2-Hexanone		224	ug/L	1.25	5.00
127-18-4	Tetrachloroethylene		47.0	ug/L	0.450	1.00
124-48-1	Dibromochloromethane		56.6	ug/L	0.260	1.00
106-93-4	1,2-Dibromoethane		52.2	ug/L	0.250	1.00
108-90-7	Chlorobenzene		47.4	ug/L	0.250	1.00
100-41-4	Ethylbenzene		47.8	ug/L	0.250	1.00
100-42-5	Styrene		54.6	ug/L	0.250	1.00
75-25-2	Bromoform		59.2	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane		51.8	ug/L	0.250	1.00
541-73-1	1,3-Dichlorobenzene		48.6	ug/L	0.250	1.00
106-46-7	1,4-Dichlorobenzene		47.9	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane		48.3	ug/L	0.500	1.00
1330-20-7	Xylenes (total)		145	ug/L	0.600	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	221329	**Date Collected:**	12/15/2008 08:42	**Matrix:**	WATER
Lab Sample ID:	1201747467	**Date Received:**	12/16/2008 09:55		
Client Sample:	QC for batch 828777	**Client:**	WEIS001	**Project:**	QC
Client ID:	RWSW0049||PS	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	828777	**Inst:**	VOA5.I	**Dilution:**	1
Run Date:	12/24/2008 19:12	**Analyst:**	DXK1	**Purge Vol:**	5 mL
Prep Date:	12/24/2008 19:12				
Data File:	5q323.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
95-50-1	1,2-Dichlorobenzene		49.1	ug/L	0.250	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA5.i/122408v5/5q323.d
Lab Smp Id: 1201747467 Client Smp ID: RWSW0049MS
Inj Date : 24-DEC-2008 19:12
Operator : DXK1 Inst ID: VOA5.i
Smp Info : |1201747467|828777|1|VOA|1|
Misc Info : WEIS 5mL pH2 MS 221329001
Comment :
Method : /chem/VOA5.i/122408v5/VOA5-8260B-121908.m
Meth Date : 24-Dec-2008 12:56 dav01267 Quant Type: ISTD
Cal Date : 20-DEC-2008 00:03 Cal File: 5p528.d
Als bottle: 23 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 221329.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

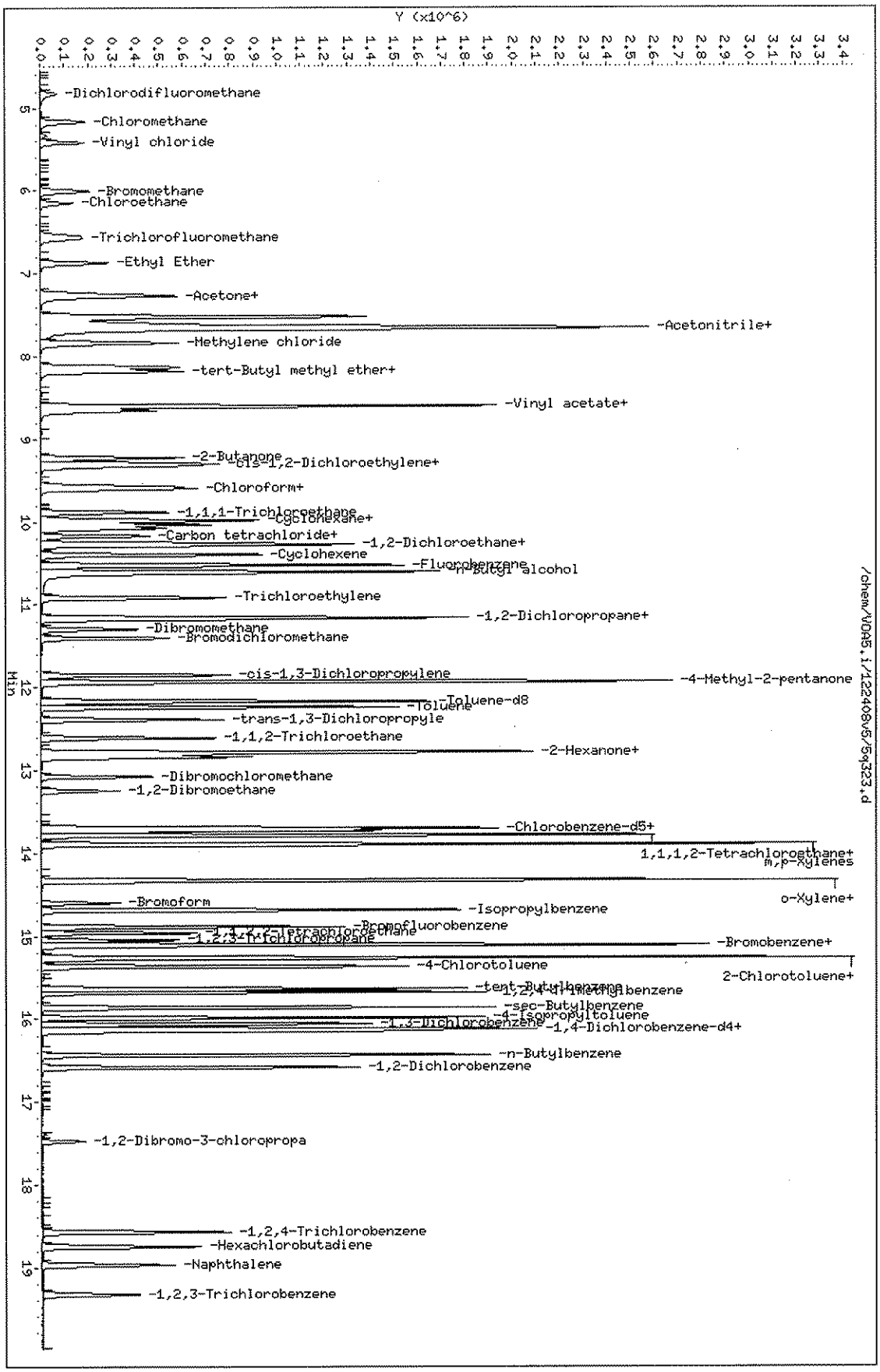
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 51 Fluorobenzene	96	10.524	10.524	(1.000)	1458930	50.0000	
* 75 Chlorobenzene-d5	117	13.698	13.698	(1.000)	1085189	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	16.117	16.117	(1.000)	567540	50.0000	
$ 47 1,2-Dichloroethane-d4	65	10.167	10.167	(0.966)	348384	45.7117	45.7
$ 64 Toluene-d8	98	12.168	12.161	(0.888)	1162730	47.5069	47.5
$ 85 Bromofluorobenzene	95	14.891	14.884	(0.924)	490371	48.2061	48.2
5 Chloromethane	50	5.167	5.160	(0.491)	379594	40.8846	40.9
6 Vinyl chloride	62	5.418	5.410	(0.515)	323399	42.3167	42.3
7 Bromomethane	94	6.003	5.995	(0.570)	213847	46.0746	46.1
8 Chloroethane	64	6.147	6.139	(0.584)	196804	44.0448	44.0
13 Acetone	43	7.242	7.235	(0.688)	563228	105.556	106
14 1,1-Dichloroethylene	61	7.269	7.269	(0.691)	414596	43.7102	43.7
102 1,4-Dichlorobenzene	146	16.144	16.144	(1.002)	656596	47.8564	47.8
20 Methylene chloride	84	7.835	7.835	(0.745)	305323	47.4488	47.4
18 Carbon disulfide	76	7.660	7.653	(0.728)	4317768	228.808	229

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
23 trans-1,2-Dichloroethylene	61	8.179	8.172	(0.777)	426927	43.9510	44.0
25 1,1-Dichloroethane	63	8.657	8.650	(0.823)	538066	45.7229	45.7
30 2-Butanone	43	9.223	9.223	(0.876)	943187	167.139	167
31 cis-1,2-Dichloroethylene	61	9.291	9.291	(0.883)	510114	47.3846	47.4
100 1,3-Dichlorobenzene	146	16.056	16.056	(0.996)	633950	48.6448	48.6
36 Chloroform	83	9.601	9.594	(0.912)	501741	47.1498	47.1
106 1,2-Dichlorobenzene	146	16.582	16.582	(1.029)	631100	49.1138	49.1
40 1,1,1-Trichloroethane	97	9.884	9.877	(0.939)	407402	46.1617	46.2
46 Carbon tetrachloride	117	10.079	10.072	(0.958)	353937	48.7929	48.8
48 1,2-Dichloroethane	62	10.248	10.248	(0.974)	447548	48.4444	48.4
49 Benzene	78	10.275	10.274	(0.976)	1100896	42.7734	42.8
53 Trichloroethylene	95	10.915	10.915	(1.037)	277160	45.4740	45.5
55 1,2-Dichloropropane	63	11.157	11.150	(1.060)	324995	47.4668	47.5
59 Bromodichloromethane	83	11.400	11.400	(1.083)	379895	50.6048	50.6
63 4-Methyl-2-pentanone	58	11.932	11.932	(0.871)	770939	279.044	279
62 cis-1,3-Dichloropropylene	75	11.851	11.851	(1.126)	463624	51.8993	51.9
65 Toluene	92	12.242	12.235	(0.894)	693252	45.9013	45.9
67 trans-1,3-Dichloropropylene	75	12.391	12.384	(0.905)	437734	53.0147	53.0
68 1,1,2-Trichloroethane	83	12.613	12.606	(0.921)	217605	48.8916	48.9
69 2-Hexanone	43	12.775	12.774	(0.933)	1478481	223.640	224
71 Tetrachloroethylene	164	12.842	12.842	(0.938)	216980	47.0120	47.0
72 Dibromochloromethane	129	13.078	13.078	(0.955)	284698	56.6170	56.6
73 1,2-Dibromoethane	107	13.246	13.246	(0.967)	256175	52.2181	52.2
76 Chlorobenzene	112	13.732	13.731	(1.002)	762872	47.3844	47.4
78 Ethylbenzene	91	13.785	13.785	(1.006)	1339353	47.8369	47.8
81 Styrene	104	14.331	14.331	(1.046)	840208	54.6198	54.6
82 Bromoform	173	14.601	14.601	(0.906)	185345	59.2146	59.2
87 1,1,2,2-Tetrachloroethane	83	14.958	14.958	(0.928)	355126	51.8470	51.8
107 1,2-Dibromo-3-chloropropane	157	17.471	17.471	(1.084)	52376	48.3341	48.3
M 2 Xylenes (total)	106				1528871	144.578	144
79 m,p-Xylenes	106	13.893	13.893	(1.014)	1016045	95.8400	95.8
80 o-Xylene	106	14.331	14.331	(1.046)	512826	48.7380	48.7

Data File: /chem/VOA5.i/122408v5/5q323.d
Date : 24-DEC-2008 19:12
Client ID: RWSW0049HS
Sample Info: 1120174746718287771!VOA11
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA5.i
Operator: BKK1
Column diameter: 0.25



Page 1

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	221329	**Date Collected:**	12/15/2008 08:42	**Matrix:**	WATER
Lab Sample ID:	1201747468	**Date Received:**	12/16/2008 09:55		
Client Sample:	QC for batch 828777	**Client:**	WEIS001	**Project:**	QC
Client ID:	RWSW0049|PSD	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	828777	**Inst:**	VOA5.I	**Dilution:**	1
Run Date:	12/24/2008 19:37	**Analyst:**	DXK1	**Purge Vol:**	5 mL
Prep Date:	12/24/2008 19:37				
Data File:	5q324.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
74-87-3	Chloromethane		42.2	ug/L	0.300	1.00
75-01-4	Vinyl chloride		43.5	ug/L	0.500	1.00
74-83-9	Bromomethane		47.6	ug/L	0.500	1.00
75-00-3	Chloroethane		46.0	ug/L	0.300	1.00
67-64-1	Acetone		119	ug/L	1.50	5.00
75-35-4	1,1-Dichloroethylene		45.1	ug/L	0.300	1.00
75-09-2	Methylene chloride		49.9	ug/L	2.00	5.00
75-15-0	Carbon disulfide		238	ug/L	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		45.5	ug/L	0.300	1.00
75-34-3	1,1-Dichloroethane		46.8	ug/L	0.300	1.00
78-93-3	2-Butanone		187	ug/L	1.25	5.00
156-59-2	cis-1,2-Dichloroethylene		49.4	ug/L	0.300	1.00
67-66-3	Chloroform		48.4	ug/L	0.250	1.00
71-55-6	1,1,1-Trichloroethane		48.5	ug/L	0.325	1.00
56-23-5	Carbon tetrachloride		50.6	ug/L	0.260	1.00
107-06-2	1,2-Dichloroethane		50.2	ug/L	0.250	1.00
71-43-2	Benzene		43.9	ug/L	0.300	1.00
79-01-6	Trichloroethylene		46.8	ug/L	0.250	1.00
78-87-5	1,2-Dichloropropane		48.5	ug/L	0.250	1.00
75-27-4	Bromodichloromethane		51.3	ug/L	0.250	1.00
108-10-1	4-Methyl-2-pentanone		305	ug/L	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		53.3	ug/L	0.250	1.00
108-88-3	Toluene		45.9	ug/L	0.250	1.00
10061-02-6	trans-1,3-Dichloropropylene		54.8	ug/L	0.250	1.00
79-00-5	1,1,2-Trichloroethane		51.5	ug/L	0.250	1.00
591-78-6	2-Hexanone		249	ug/L	1.25	5.00
127-18-4	Tetrachloroethylene		48.9	ug/L	0.450	1.00
124-48-1	Dibromochloromethane		57.9	ug/L	0.260	1.00
106-93-4	1,2-Dibromoethane		54.6	ug/L	0.250	1.00
108-90-7	Chlorobenzene		48.2	ug/L	0.250	1.00
100-41-4	Ethylbenzene		48.8	ug/L	0.250	1.00
100-42-5	Styrene		56.2	ug/L	0.250	1.00
75-25-2	Bromoform		62.1	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane		54.8	ug/L	0.250	1.00
541-73-1	1,3-Dichlorobenzene		49.2	ug/L	0.250	1.00
106-46-7	1,4-Dichlorobenzene		48.2	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane		53.3	ug/L	0.500	1.00
1330-20-7	Xylenes (total)		148	ug/L	0.600	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	221329	**Date Collected:**	12/15/2008 08:42	**Matrix:**	WATER
Lab Sample ID:	1201747468	**Date Received:**	12/16/2008 09:55		
Client Sample:	QC for batch 828777	**Client:**	WEIS001	**Project:**	QC
Client ID:	RWSW0049|PSD	**Method:**	SW846 8260B	**SOP Ref:**	GL-OA-E-038
Batch ID:	828777	**Inst:**	VOA5.I	**Dilution:**	1
Run Date:	12/24/2008 19:37	**Analyst:**	DXK1	**Purge Vol:**	5 mL
Prep Date:	12/24/2008 19:37				
Data File:	5q324.d	**Column:**	DB-624	**Level:**	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
95-50-1	1,2-Dichlorobenzene		49.8	ug/L	0.250	1.00

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA5.i/122408v5/5q324.d
Lab Smp Id: 1201747468 Client Smp ID: RWSW0049MSD
Inj Date : 24-DEC-2008 19:37
Operator : DXK1 Inst ID: VOA5.i
Smp Info : |1201747468|828777|1|VOA|1|
Misc Info : WEIS 5mL pH2 MSD 221329001
Comment :
Method : /chem/VOA5.i/122408v5/VOA5-8260B-121908.m
Meth Date : 24-Dec-2008 12:56 dav01267 Quant Type: ISTD
Cal Date : 20-DEC-2008 00:03 Cal File: 5p528.d
Als bottle: 24 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 221329.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

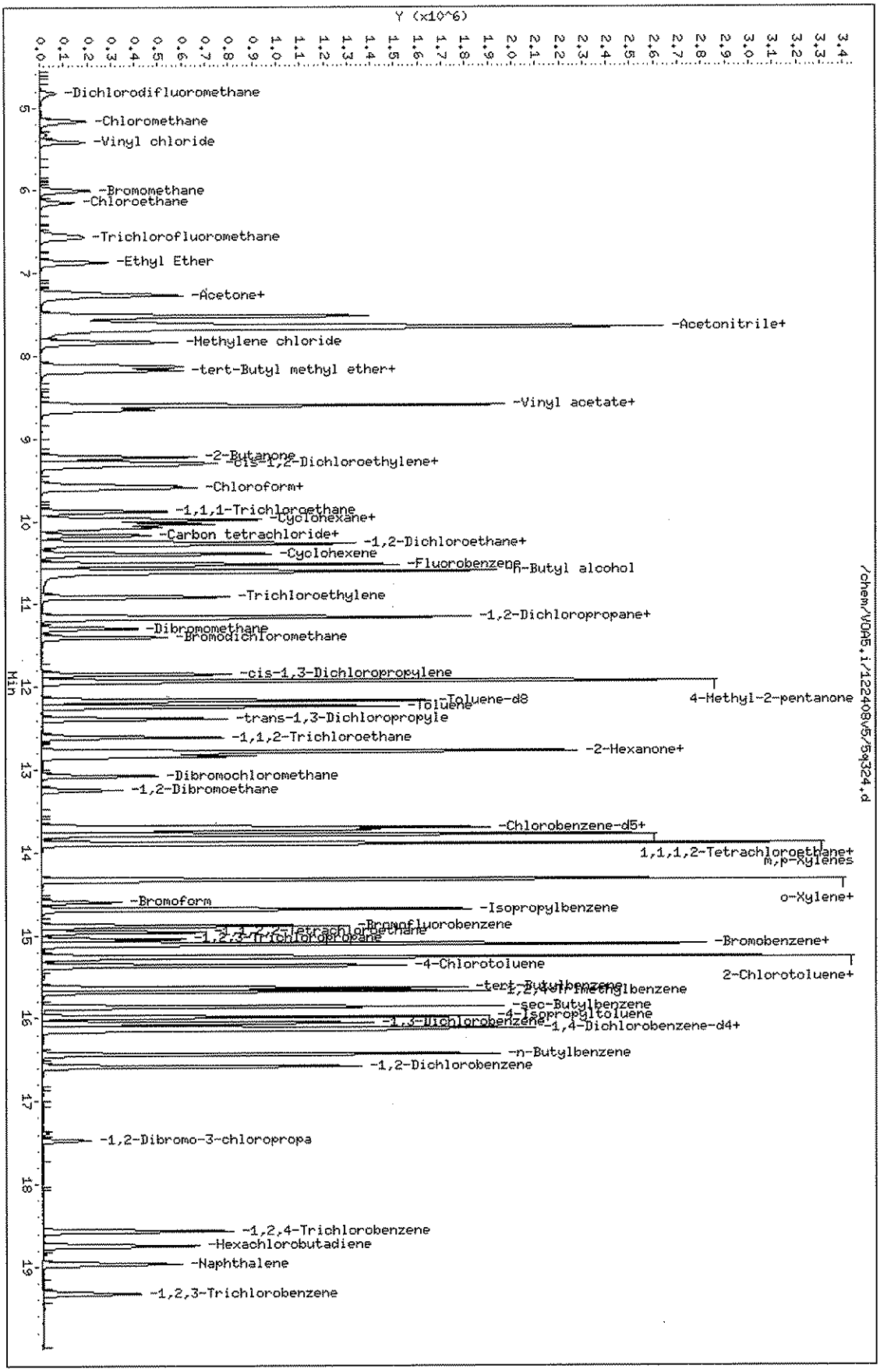
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 51 Fluorobenzene	96	10.524	10.524	(1.000)	1429401	50.0000	
* 75 Chlorobenzene-d5	117	13.698	13.698	(1.000)	1070832	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	16.117	16.117	(1.000)	563516	50.0000	
$ 47 1,2-Dichloroethane-d4	65	10.167	10.167	(0.966)	351720	47.1028	47.1
$ 64 Toluene-d8	98	12.168	12.161	(0.888)	1155764	47.8554	47.8
$ 85 Bromofluorobenzene	95	14.884	14.884	(0.923)	491893	48.7010	48.7
5 Chloromethane	50	5.167	5.160	(0.491)	383656	42.1757	42.2
6 Vinyl chloride	62	5.418	5.410	(0.515)	325432	43.4624	43.5
7 Bromomethane	94	6.003	5.995	(0.570)	216634	47.6393	47.6
8 Chloroethane	64	6.147	6.139	(0.584)	201416	46.0081	46.0
13 Acetone	43	7.242	7.235	(0.688)	624341	119.427	119
14 1,1-Dichloroethylene	61	7.269	7.269	(0.691)	419008	45.0880	45.1
102 1,4-Dichlorobenzene	146	16.144	16.144	(1.002)	656647	48.2018	48.2
20 Methylene chloride	84	7.835	7.835	(0.745)	313697	49.8751	49.9
18 Carbon disulfide	76	7.660	7.653	(0.728)	4407175	238.370	238

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
23	trans-1,2-Dichloroethylene	61	8.179	8.172	(0.777)	433263	45.5247	45.5
25	1,1-Dichloroethane	63	8.657	8.650	(0.823)	539392	46.7825	46.8
30	2-Butanone	43	9.223	9.223	(0.876)	1035095	187.215	187
31	cis-1,2-Dichloroethylene	61	9.291	9.291	(0.883)	521061	49.4013	49.4
100	1,3-Dichlorobenzene	146	16.056	16.056	(0.996)	635992	49.1500	49.1
36	Chloroform	83	9.601	9.594	(0.912)	504651	48.4030	48.4
106	1,2-Dichlorobenzene	146	16.582	16.582	(1.029)	635662	49.8221	49.8
40	1,1,1-Trichloroethane	97	9.884	9.877	(0.939)	419442	48.5077	48.5
46	Carbon tetrachloride	117	10.079	10.072	(0.958)	359475	50.5801	50.6
48	1,2-Dichloroethane	62	10.248	10.248	(0.974)	454737	50.2395	50.2
49	Benzene	78	10.275	10.274	(0.976)	1106657	43.8854	43.9
53	Trichloroethylene	95	10.915	10.915	(1.037)	279568	46.8167	46.8
55	1,2-Dichloropropane	63	11.157	11.150	(1.060)	325415	48.5100	48.5
59	Bromodichloromethane	83	11.400	11.400	(1.083)	377587	51.3364	51.3
63	4-Methyl-2-pentanone	58	11.932	11.932	(0.871)	831971	305.172	305
62	cis-1,3-Dichloropropylene	75	11.851	11.851	(1.126)	466897	53.3454	53.3
65	Toluene	92	12.242	12.235	(0.894)	683425	45.8573	45.8
67	trans-1,3-Dichloropropylene	75	12.384	12.384	(0.904)	446426	54.7923	54.8
68	1,1,2-Trichloroethane	83	12.613	12.606	(0.921)	226133	51.4889	51.5
69	2-Hexanone	43	12.774	12.774	(0.933)	1623617	248.886	249
71	Tetrachloroethylene	164	12.842	12.842	(0.938)	222424	48.8698	48.9
72	Dibromochloromethane	129	13.078	13.078	(0.955)	287332	57.9069	57.9
73	1,2-Dibromoethane	107	13.246	13.246	(0.967)	264313	54.5993	54.6
76	Chlorobenzene	112	13.731	13.731	(1.002)	766171	48.2273	48.2
78	Ethylbenzene	91	13.785	13.785	(1.006)	1348486	48.8089	48.8
81	Styrene	104	14.331	14.331	(1.046)	852570	56.1665	56.2
82	Bromoform	173	14.601	14.601	(0.906)	192958	62.0870	62.1
87	1,1,2,2-Tetrachloroethane	83	14.958	14.958	(0.928)	372962	54.8398	54.8
107	1,2-Dibromo-3-chloropropane	157	17.471	17.471	(1.084)	57567	53.3449	53.3
M 2	Xylenes (total)	106				1548231	148.368	148
79	m,p-Xylenes	106	13.893	13.893	(1.014)	1033543	98.7976	98.8
80	o-Xylene	106	14.331	14.331	(1.046)	514688	49.5708	49.6

Data File: /chem/VOA5.i/122408v5/5q324.d
Date : 24-DEC-2008 19:37
Client ID: RWSW0049WSD
Sample Info: !12017474681828777!1!VOA1!1
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA5.i
Operator: DXK1
Column diameter: 0.25



Miscellaneous Data

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA5

Date: 12/19/2008 Method 8260/624 Operator: DXK1

REVIEWED BY: [signature]
DATE: 12/21/08

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1694

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 12/19/2008

(See pg. 304 for ICAL Std. Sci. Ids)

NaHSO4 lot # n/a

Cl test lot # n/a

Sequence Number: 121908v5

Daily Standard Volume Added for Purge (ul)

	Solution ID#	Blk/ Smpl	ICV	MS/ LCS	BFB
L-ICV	W5VM081219-10		5+5		
IS	UVM081208-01	1	1		
SS	UVM081114-02	1	1		
S-ICV	W5VM081219-18		5+5		
BFB	UVM081114-02				1
	n/a	n/a		n/a	
	n/a	n/a		n/a	

Purge Amount

5	Water Purge Vol:
n/a	Soil Purge Wt.
n/a	Mid level ext. MeOH Vol:
n/a	ul
n/a	Methanol Lot #
X	Heated Purge

DMH 12/20/08

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable(O/X)	Comments
12/19/2008	16:53	5P511.D	UVM081114-02	GEL	BFB	5mL	1	N/A	11	w	DXK1	N/A	O	
12/19/2008	17:21	5P512.D	W5VM081219-01	GEL	L8	5mL	1	N/A	12	w	DXK1	N/A	O	UVM081124-01B+UVM081123-01D
12/19/2008	17:46	5P513.D	W5VM081219-02	GEL	L1	5mL	1	N/A	13	w	DXK1	N/A	O	UVM081124-02B+UVM081123-02D
12/19/2008	18:11	5P514.D	W5VM081219-03	GEL	L2	5mL	1	N/A	14	w	DXK1	N/A	O	UVM081124-03B+UVM081123-03D
12/19/2008	18:36	5P515.D	W5VM081219-04	GEL	L3	5mL	1	N/A	15	w	DXK1	N/A	O	UVM081124-04B+UVM081123-04D
12/19/2008	19:01	5P516.D	W5VM081219-05	GEL	L4	5mL	1	N/A	16	w	DXK1	N/A	O	UVM081124-05B+UVM081123-05D
12/19/2008	19:27	5P517.D	W5VM081219-06	GEL	L5	5mL	1	N/A	17	w	DXK1	N/A	O	UVM081124-06B+UVM081123-06D
12/19/2008	19:52	5P518.D	W5VM081219-07	GEL	L6	5mL	1	N/A	18	w	DXK1	N/A	O	UVM081124-07B+UVM081123-07D
12/19/2008	20:17	5P519.D	W5VM081219-08	GEL	L7	5mL	1	N/A	19	w	DXK1	N/A	O	UVM081124-08B+UVM081123-08D
12/19/2008	20:42	5P520.D	RINSE	GEL	BLANK	5mL	1	N/A	20	w	DXK1	N/A	X	rinse
12/19/2008	21:07	5P521.D	W5VM081219-09	GEL	L-ICV	5mL	1	N/A	21	w	DXK1	N/A	X	UVM081122-01E+IVM081218-01
12/19/2008	21:32	5P522.D	W5VM081219-10	GEL	L-ICV	5mL	1	N/A	22	w	DXK1	N/A	O	UVM081126-01E+IVM081218-01
12/19/2008	21:58	5P523.D	W5VM081219-11	GEL	S1	5mL	1	N/A	23	w	DXK1	N/A	O	UVM081212-01+UVM081125-01C
12/19/2008	22:23	5P524.D	W5VM081219-12	GEL	S2	5mL	1	N/A	24	w	DXK1	N/A	O	UVM081212-02+UVM081125-02C
12/19/2008	22:48	5P525.D	W5VM081219-13	GEL	S3	5mL	1	N/A	25	w	DXK1	N/A	O	UVM081212-03+UVM081125-03C
12/19/2008	23:13	5P526.D	W5VM081219-14	GEL	S4	5mL	1	N/A	26	w	DXK1	N/A	O	UVM081212-04+UVM081125-04C
12/19/2008	23:38	5P527.D	W5VM081219-15	GEL	S5	5mL	1	N/A	27	w	DXK1	N/A	O	UVM081212-05+UVM081125-05C
12/20/2008	0:03	5P528.D	W5VM081219-16	GEL	S6	5mL	1	N/A	28	w	DXK1	N/A	O	UVM081212-06+UVM081125-06C
12/20/2008	0:28	5P529.D	W5VM081219-17	GEL	S7	5mL	1	N/A	29	w	DXK1	N/A	O	UVM081212-07+UVM081125-07C
12/20/2008	0:53	5P530.D	RINSE	GEL	BLANK	5mL	1	N/A	30	w	DXK1	N/A	X	rinse
12/20/2008	1:19	5P531.D	W5VM081219-18	GEL	S-ICV	5mL	1	N/A	31	w	DXK1	N/A	O	UVM080901-08E+UVM081122-02E
12/20/2008	1:44	5P532.D	W5VM081219-19	GEL	S-ICV	5mL	1	N/A	32	w	DXK1	N/A	X	UVM081211-01A+UVM081122-02E
12/20/2008	2:09	5P533.D	RINSE	GEL	BLANK	5mL	1	N/A	33	w	DXK1	N/A	X	rinse

178

GEL Laboratories, LLC
Rev 1:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA5

Date: 12/24/2008 Method 8260/624 Operator: DXK1

REVIEWED BY: [signature]
DATE: 1/12/09

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1694

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 12/18/2008

(See pg. 301 for ICAL Std. Sci. Ids)

NaHSO4 lot # n/a

Cl test lot # 7412

Sequence Number: 122408v5

Daily Standard — Volume Added for Purge (ul)

	Solution ID#	Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	UVM081214-01A		5		
IS	UVM081208-01	1	1	1	
SS	UVM081114-02	1	1	1	
LCS/MS	UVM081214-01A			5	
BFB	UVM081114-02				1
SHORT	UVM080901-08E		5		
	n/a	n/a		n/a	

Purge Amount

5	Water Purge Vol:
varoed	Soil Purge Wt.
X	Mid level ext. MeOH Vol:
100	ul
CV646	Methanol Lot #
X	Heated Purge

DBK 01/12/09

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable(O/X)	Comments
12/24/2008	9:58	5Q301.D	UVM081114-02	GEL	BFB	5mL	1	N/A	1	w	DXK1	N/A	O	
12/24/2008	10:23	5Q302.D	UVM081214-01A	GEL	CCV/LCS	5mL	1	N/A	2	w	DXK1	N/A	O	
12/24/2008	10:48	5Q303.D	UVM081214-01A	GEL	LCS	5g	1	N/A	3	s	DXK1	N/A	O	
12/24/2008	11:14	5Q304.D	UVM080901-08E	GEL	SHORT	5mL	1	N/A	4	w	DXK1	N/A	O	
12/24/2008	11:39	5Q305.D	12017---	GEL	MB	5mL	1	N/A	5	w	DXK1	N/A	O	
12/24/2008	12:04	5Q306.D	12017---	GEL	MB	5g	1	N/A	6	s	DXK1	N/A	O	
12/24/2008	12:29	5Q307.D	1201740783	GEL	828789	500uL	10	N/A	7	w	DXK1	N/A	O	TCLPBLANK
12/24/2008	12:55	5Q308.D	1201745639	GEL	828789	500uL	10	N/A	8	w	DXK1	N/A	O	TCLPBLANK
12/24/2008	13:20	5Q309.D	221679001	HNLK	828790	5mL	1	pH2	9	w	DXK1	N/A	O	
12/24/2008	13:45	5Q310.D	1201747494	HNLK	828790	5mL	1	pH2	10	w	DXK1	N/A	O	DUP 221679001
12/24/2008	14:10	5Q311.D	12017---	GEL	HB	100uL	50	N/A	11	s	DXK1	N/A	O	HB
12/24/2008	14:35	5Q312.D	221329001	WEIS	828777	5mL	1	pH2	12	w	DXK1	N	O	
12/24/2008	15:00	5Q313.D	221329002	WEIS	828777	5mL	1	pH2	13	w	DXK1	N	O	
12/24/2008	15:25	5Q314.D	221329003	WEIS	828777	5mL	1	pH2	14	w	DXK1	N	O	
12/24/2008	15:50	5Q315.D	221397001	DSSI	828788	100uL	50	N/A	15	s	DXK1	N/A	O	
12/24/2008	16:16	5Q316.D	221263001	MECP	828789	500uL	10	N/A	16	w	DXK1	N/A	O	
12/24/2008	16:41	5Q317.D	221614001	SUNC	828789	500uL	10	N/A	17	w	DXK1	N/A	O	
12/24/2008	17:06	5Q318.D	221331001	MECP	828415	0.5uL	10000	N/A	18	w	DXK1	N/A	TBA	
12/24/2008	17:31	5Q319.D	221331001	MECP	828415	1uL	5000	N/A	19	w	DXK1	N/A	TBA	
12/24/2008	17:56	5Q320.D	221331001	MECP	828415	5uL	1000	N/A	20	w	DXK1	N/A	TBA	
12/24/2008	18:22	5Q321.D	RINSE	GEL	BLANK	5mL	1	N/A	21	w	DXK1	N/A	X	rinse
12/24/2008	18:47	5Q322.D	RINSE	GEL	BLANK	5mL	1	N/A	22	w	DXK1	N/A	X	rinse
12/24/2008	19:12	5Q323.D	1201747467	WEIS	828777	5mL	1	pH2	23	w	DXK1	N	O	MS 221329001
12/24/2008	19:37	5Q324.D	1201747468	WEIS	828777	5mL	1	pH2	24	w	DXK1	N	O	MSD 221329001
12/24/2008	20:02	5Q325.D	1201747486	DSSI	828788	100uL	50	N/A	25	s	DXK1	N/A	O	MS 221397001
12/24/2008	20:27	5Q326.D	1201747487	DSSI	828788	100uL	50	N/A	26	s	DXK1	N/A	O	MSD 221397001
12/24/2008	20:52	5Q327.D	1201747490	SUNC	828789	500uL	10	N/A	27	w	DXK1	N/A	O	MS 221614001
12/24/2008	21:18	5Q328.D	1201747491	SUNC	828789	500uL	10	N/A	28	w	DXK1	N/A	O	MSD 221614001

179

GC SEMIVOLATILE PESTICIDE ANALYSIS

Pesticide Case Narrative
Weiss Associates (WEIS)
SDG 221329

Method/Analysis Information

Procedure:	Analysis of Organochlorine Pesticides and Chlorinated Hydrocarbons by ECD
Analytical Method:	SW846 8081
Prep Method:	SW846 3510C
Analytical Batch Number:	826963
Prep Batch Number:	826961

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8081:

Sample ID	Client ID
221329001	RWSW0049
221329002	RWSW0048
1201743158	Method Blank (MB)
1201743159	Laboratory Control Sample (LCS)
1201743160	221391001(08-WS-12-067) Matrix Spike (MS)
1201743161	221391001(08-WS-12-067) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on an "as received" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-041 REV# 9.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
The calibration verification standards (CVS, ICV, or CCV) requirements have not been met for this SDG.

One of the five quantified peaks did not meet the acceptance criteria in Aroclor-1260 standard analyzed for this SDG; however the average concentration of the five peaks met the acceptance criteria.

4,4'-DDT and Methoxychlor failed to meet the acceptance criteria with positive bias in the standards bracketing the samples in this SDG. The positive bias for the analytical data is a result of instrument response increasing after the initial calibration. 4,4'-DDT and Methoxychlor were not detected in the associated samples; therefore, the non-compliance has no adverse effects on the data.

Surrogate recovery did not meet the acceptance criteria in the standards analyzed for this SDG; however this had no adverse effects on the data as all samples in this SDG met surrogate recovery acceptance criteria very well.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
A non-WEIS sample of similar matrix associated with another SDG was selected for the matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement
The MS recoveries were not within the acceptance limits due to sample matrix interference.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were not within the acceptance limits due to sample matrix interference.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the MS and MSD were not within the required acceptance limits due to relatively low spike recovery in the MS.

Technical Information:

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information:

Electronic Package Comment

This package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative.

Nonconformance (NCR) Documentation
Nonconformance report (NCR) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A NCR was not required for this SDG.

Manual Integration
Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this pesticide fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS. The data reported for the MS and MSD are from the same analytical column as the parent sample.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-Pesticide analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD5A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD5A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticide II)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Jimi Cao Date: 1/14/09

Roadmap for WEIS 221329 PEST

This roadmap was analyzed by hea01125 on 12-30-2008, 19:28.
This roadmap was reviewed by rob01090 on 12-31-2008, 11:38.
This roadmap was packaged by yml on 01-14-2009, 12:00.
This roadmap was validated by jim01140 on 01-14-2009, 14:17.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd5a.i/122208a.b/057f5701.d	221329001	sample	23-DEC-2008	00:42	221329.sub	RWSW0049	1.00000	826963	USE, uploaded both columns, reporting higher result
☐	N	/chem/ecd5a.i/122208a.b/058f5801.d	221329002	sample	23-DEC-2008	00:53	221329.sub	RWSW0048	1.00000	826963	USE, uploaded both columns, reporting higher result

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd5a.i/122208a.b/057b5701.d	221329001	sample	23-DEC-2008	00:42	221329.sub	RWSW0049	1.00000	826963	USE, uploaded both columns, reporting higher result
☐	N	/chem/ecd5a.i/122208a.b/058b5801.d	221329002	sample	23-DEC-2008	00:53	221329.sub	RWSW0048	1.00000	826963	USE, uploaded both columns, reporting higher result

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd5a.i/122208a.b/055f5501.d	1201743158	mb	23-DEC-2008	00:18	221329.sub	PBLK01	1.00000	826963	USE, uploaded both columns, reporting higher result
☐	N	/chem/ecd5a.i/122208a.b/056f5601.d	1201743159	lcs	23-DEC-2008	00:30	221329.sub	PBLK01LCS	1.00000	826963	USE, uploaded both columns, reporting higher result

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd5a.i/122208a.b/055b5501.d	1201743158	mb	23-DEC-2008	00:18	221329.sub	PBLK01	1.00000	826963	USE, uploaded both columns, reporting higher result
☐	N	/chem/ecd5a.i/122208a.b/056b5601.d	1201743159	lcs	23-DEC-2008	00:30	221329.sub	PBLK01LCS	1.00000	826963	USE, uploaded both columns, reporting higher result

SAMPLE DATA SUMMARY

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	221329	Date Collected:	12/15/2008 08:40	Matrix:	WATER
Lab Sample ID:	221329002	Date Received:	12/16/2008 09:55		
		Client:	WEIS001	Project:	WEIS00405
Client ID:	RWSW0048	Method:	SW846 8081	SOP Ref:	GL-OA-E-041
Batch ID:	826963	Inst:	ECD5A.I	Dilution:	1
Run Date:	12/23/2008 00:53	Analyst:	HXJ1	Inj. Vol:	1 uL
Prep Date:	12/19/2008 14:26	Aliquot:	1060 mL	Final Volume:	5 mL
Data File:	058f5801.d	Column:	1 CLP-1	Level:	LOW
	058b5801.d		2 CLP-2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319-84-6	alpha-BHC	U	0.0189	ug/L	0.00472	0.0189	1
58-89-9	gamma-BHC (Lindane)	U	0.0189	ug/L	0.00472	0.0189	1
319-85-7	beta-BHC	U	0.0189	ug/L	0.00797	0.0189	1
319-86-8	delta-BHC	U	0.0189	ug/L	0.00472	0.0189	1
76-44-8	Heptachlor	U	0.0189	ug/L	0.00618	0.0189	1
309-00-2	Aldrin	U	0.0189	ug/L	0.00472	0.0189	1
1024-57-3	Heptachlor epoxide	U	0.0189	ug/L	0.00472	0.0189	1
5103-74-2	gamma-Chlordane	U	0.0189	ug/L	0.00472	0.0189	1
5103-71-9	alpha-Chlordane	U	0.0189	ug/L	0.00472	0.0189	1
959-98-8	Endosulfan I	U	0.0189	ug/L	0.00472	0.0189	1
72-55-9	4,4'-DDE	U	0.0377	ug/L	0.00472	0.0377	1
60-57-1	Dieldrin	U	0.0377	ug/L	0.00472	0.0377	1
72-20-8	Endrin	U	0.0377	ug/L	0.00472	0.0377	1
72-54-8	4,4'-DDD	U	0.0377	ug/L	0.00472	0.0377	1
33213-65-9	Endosulfan II	U	0.0377	ug/L	0.00472	0.0377	1
7421-93-4	Endrin aldehyde	U	0.0377	ug/L	0.00472	0.0377	1
50-29-3	4,4'-DDT	U	0.0377	ug/L	0.00943	0.0377	1
1031-07-8	Endosulfan sulfate	U	0.0377	ug/L	0.00472	0.0377	1
72-43-5	Methoxychlor	U	0.189	ug/L	0.0472	0.189	1
53494-70-5	Endrin ketone	U	0.0377	ug/L	0.0118	0.0377	1
8001-35-2	Toxaphene	U	0.472	ug/L	0.142	0.472	1
12674-11-2	Aroclor-1016	U	0.472	ug/L	0.157	0.472	1
11104-28-2	Aroclor-1221	U	0.472	ug/L	0.157	0.472	1
11141-16-5	Aroclor-1232	U	0.472	ug/L	0.157	0.472	1
53469-21-9	Aroclor-1242	U	0.472	ug/L	0.157	0.472	1
12672-29-6	Aroclor-1248	U	0.472	ug/L	0.157	0.472	1
11097-69-1	Aroclor-1254	U	0.472	ug/L	0.157	0.472	1
11096-82-5	Aroclor-1260	U	0.472	ug/L	0.157	0.472	1

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	221329	Date Collected:	12/15/2008 08:42	Matrix:	WATER
Lab Sample ID:	221329001	Date Received:	12/16/2008 09:55		
		Client:	WEIS001	Project:	WEIS00405
Client ID:	RWSW0049	Method:	SW846 8081	SOP Ref:	GL-OA-E-041
Batch ID:	826963	Inst:	ECD5A.I	Dilution:	1
Run Date:	12/23/2008 00:42	Analyst:	HXJ1	Inj. Vol:	1 uL
Prep Date:	12/19/2008 14:26	Aliquot:	1040 mL	Final Volume:	5 mL
Data File:	057f5701.d	Column:	1 CLP-1	Level:	LOW
	057b5701.d		2 CLP-2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319-84-6	alpha-BHC	U	0.0192	ug/L	0.00481	0.0192	1
58-89-9	gamma-BHC (Lindane)	U	0.0192	ug/L	0.00481	0.0192	1
319-85-7	beta-BHC	U	0.0192	ug/L	0.00813	0.0192	1
319-86-8	delta-BHC	U	0.0192	ug/L	0.00481	0.0192	1
76-44-8	Heptachlor	U	0.0192	ug/L	0.0063	0.0192	1
309-00-2	Aldrin	U	0.0192	ug/L	0.00481	0.0192	1
1024-57-3	Heptachlor epoxide	U	0.0192	ug/L	0.00481	0.0192	1
5103-74-2	gamma-Chlordane	U	0.0192	ug/L	0.00481	0.0192	1
5103-71-9	alpha-Chlordane	U	0.0192	ug/L	0.00481	0.0192	1
959-98-8	Endosulfan I	U	0.0192	ug/L	0.00481	0.0192	1
72-55-9	4,4'-DDE	U	0.0385	ug/L	0.00481	0.0385	1
60-57-1	Dieldrin	U	0.0385	ug/L	0.00481	0.0385	1
72-20-8	Endrin	U	0.0385	ug/L	0.00481	0.0385	1
72-54-8	4,4'-DDD	U	0.0385	ug/L	0.00481	0.0385	1
33213-65-9	Endosulfan II	U	0.0385	ug/L	0.00481	0.0385	1
7421-93-4	Endrin aldehyde	U	0.0385	ug/L	0.00481	0.0385	1
50-29-3	4,4'-DDT	U	0.0385	ug/L	0.00962	0.0385	1
1031-07-8	Endosulfan sulfate	U	0.0385	ug/L	0.00481	0.0385	1
72-43-5	Methoxychlor	U	0.192	ug/L	0.0481	0.192	1
53494-70-5	Endrin ketone	U	0.0385	ug/L	0.0121	0.0385	1
8001-35-2	Toxaphene	U	0.481	ug/L	0.144	0.481	1
12674-11-2	Aroclor-1016	U	0.481	ug/L	0.160	0.481	1
11104-28-2	Aroclor-1221	U	0.481	ug/L	0.160	0.481	1
11141-16-5	Aroclor-1232	U	0.481	ug/L	0.160	0.481	1
53469-21-9	Aroclor-1242	U	0.481	ug/L	0.160	0.481	1
12672-29-6	Aroclor-1248	U	0.481	ug/L	0.160	0.481	1
11097-69-1	Aroclor-1254	U	0.481	ug/L	0.160	0.481	1
11096-82-5	Aroclor-1260	U	0.481	ug/L	0.160	0.481	1

QUALITY CONTROL SUMMARY

Pesticide

Surrogate Recovery Report

SDG Number: 221329

Matrix Type: LIQUID

CAP Column (1) : CLP-1 **CAP Column (2) : CLP-2**

Sample ID	Client ID	4CMX 1 %REC #	4CMX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #
1201743158	MB for batch 826961	78	79	69	73
1201743159	LCS for batch 826961	80	82	52	56
221329001	RWSW0049	76	63	55	61
221329002	RWSW0048	71	61	54	58

Surrogate	Acceptance Limits
4CMX = 4cmx	(24%-99%)
DCB = Decachlorobiphenyl	(38%-112%)

* Recovery outside Acceptance Limits
# Column to be used to flag recovery values
D Sample Diluted

Pesticide

Quality Control Summary
Spike Recovery Report

SDG Number: 221329
Client ID: LCS for batch 826961
Lab Sample ID: 1201743159
Instrument: ECD5A.I
Analyst: HXJ1
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: GROUND WATER
Analysis Date: 12/23/2008 00:30
Dilution: 1
Prep Batch ID: 826961
Batch ID: 826963

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L	Spike Conc. ug/L	Recovery %	Acceptance Limits
319-84-6	LCS	alpha-BHC	0.500	0.0	0.530	106	59-132
58-89-9	LCS	gamma-BHC (Lindane)	0.500	0.0	0.529	106	60-124
319-85-7	LCS	beta-BHC	0.500	0.0	0.513	103	59-123
319-86-8	LCS	delta-BHC	0.500	0.0	0.541	108	54-128
76-44-8	LCS	Heptachlor	0.500	0.0	0.494	99	56-120
309-00-2	LCS	Aldrin	0.500	0.0	0.476	95	45-125
1024-57-3	LCS	Heptachlor epoxide	0.500	0.0	0.498	100	55-128
5103-74-2	LCS	gamma-Chlordane	0.500	0.0	0.498	100	62-133
5103-71-9	LCS	alpha-Chlordane	0.500	0.0	0.495	99	59-126
959-98-8	LCS	Endosulfan I	0.500	0.0	0.469	94	59-124
72-55-9	LCS	4,4'-DDE	1.25	0.0	1.28	102	62-137
60-57-1	LCS	Dieldrin	1.25	0.0	1.23	98	62-130
72-20-8	LCS	Endrin	1.25	0.0	1.33	107	66-127
72-54-8	LCS	4,4'-DDD	1.25	0.0	1.36	109	58-147
33213-65-9	LCS	Endosulfan II	1.25	0.0	1.20	96	61-128
7421-93-4	LCS	Endrin aldehyde	1.25	0.0	1.35	108	56-133
50-29-3	LCS	4,4'-DDT	1.25	0.0	1.66	133	64-136
1031-07-8	LCS	Endosulfan sulfate	1.25	0.0	1.32	105	62-125
72-43-5	LCS	Methoxychlor	5.00	0.0	5.96	119	61-138
53494-70-5	LCS	Endrin ketone	1.25	0.0	1.29	103	63-131

Method Blank Summary

SDG Number:	221329	Client:	WEIS001	Matrix:	GROUND WATER
Client ID:	MB for batch 826961	Instrument ID:	ECD5A.I_2 ECD5A.I_1	Data File:	055b5501.d 055f5501.d
Lab Sample ID:	1201743158				
Column:	CLP-2 CLP-1	Prep Date:	12/19/2008 14:26	Analyzed:	12/23/08 00:18
		Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 826961	1201743159	056f5601.d 056b5601.d	12/23/08	0030
02 RWSW0049	221329001	057f5701.d 057b5701.d	12/23/08	0042
03 RWSW0048	221329002	058f5801.d 058b5801.d	12/23/08	0053

SAMPLE DATA

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	221329	Date Collected:	12/15/2008 08:40	Matrix:	WATER
Lab Sample ID:	221329002	Date Received:	12/16/2008 09:55		
		Client:	WEIS001	Project:	WEIS00405
Client ID:	RWSW0048	Method:	SW846 8081	SOP Ref:	GL-OA-E-041
Batch ID:	826963	Inst:	ECD5A.I	Dilution:	1
Run Date:	12/23/2008 00:53	Analyst:	HXJ1	Inj. Vol:	1 uL
Prep Date:	12/19/2008 14:26	Aliquot:	1060 mL	Final Volume:	5 mL
Data File:	058f5801.d	Column:	1 CLP-1	Level:	LOW
	058b5801.d		2 CLP-2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319-84-6	alpha-BHC	U	0.0189	ug/L	0.00472	0.0189	1
58-89-9	gamma-BHC (Lindane)	U	0.0189	ug/L	0.00472	0.0189	1
319-85-7	beta-BHC	U	0.0189	ug/L	0.00797	0.0189	1
319-86-8	delta-BHC	U	0.0189	ug/L	0.00472	0.0189	1
76-44-8	Heptachlor	U	0.0189	ug/L	0.00618	0.0189	1
309-00-2	Aldrin	U	0.0189	ug/L	0.00472	0.0189	1
1024-57-3	Heptachlor epoxide	U	0.0189	ug/L	0.00472	0.0189	1
5103-74-2	gamma-Chlordane	U	0.0189	ug/L	0.00472	0.0189	1
5103-71-9	alpha-Chlordane	U	0.0189	ug/L	0.00472	0.0189	1
959-98-8	Endosulfan I	U	0.0189	ug/L	0.00472	0.0189	1
72-55-9	4,4'-DDE	U	0.0377	ug/L	0.00472	0.0377	1
60-57-1	Dieldrin	U	0.0377	ug/L	0.00472	0.0377	1
72-20-8	Endrin	U	0.0377	ug/L	0.00472	0.0377	1
72-54-8	4,4'-DDD	U	0.0377	ug/L	0.00472	0.0377	1
33213-65-9	Endosulfan II	U	0.0377	ug/L	0.00472	0.0377	1
7421-93-4	Endrin aldehyde	U	0.0377	ug/L	0.00472	0.0377	1
50-29-3	4,4'-DDT	U	0.0377	ug/L	0.00943	0.0377	1
1031-07-8	Endosulfan sulfate	U	0.0377	ug/L	0.00472	0.0377	1
72-43-5	Methoxychlor	U	0.189	ug/L	0.0472	0.189	1
53494-70-5	Endrin ketone	U	0.0377	ug/L	0.0118	0.0377	1
8001-35-2	Toxaphene	U	0.472	ug/L	0.142	0.472	1
12674-11-2	Aroclor-1016	U	0.472	ug/L	0.157	0.472	1
11104-28-2	Aroclor-1221	U	0.472	ug/L	0.157	0.472	1
11141-16-5	Aroclor-1232	U	0.472	ug/L	0.157	0.472	1
53469-21-9	Aroclor-1242	U	0.472	ug/L	0.157	0.472	1
12672-29-6	Aroclor-1248	U	0.472	ug/L	0.157	0.472	1
11097-69-1	Aroclor-1254	U	0.472	ug/L	0.157	0.472	1
11096-82-5	Aroclor-1260	U	0.472	ug/L	0.157	0.472	1

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/122208a.b/058f5801.d
Lab Smp Id: 221329002 Client Smp ID: RWSW0048
Inj Date : 23-DEC-2008 00:53
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |221329002|1|
Misc Info : |ECD81P_1LF|826963|SVPF|WEIS|WATER|RWSW0048|||
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-F-8081-121108.m
Meth Date : 23-Dec-2008 15:03 hea01125 Quant Type: ESTD
Cal Date : 16-JUL-2008 00:40 Cal File: 034f3401.d
Als bottle: 58
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 221329.sub
Target Version: 3.50 Sample Matrix: Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vo	1060.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.337	2.337	0.000	50027540	141.557	0.668	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
5.952	5.956	-0.004	30488485	108.076	0.510	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/122208a.b/058f5801.d

Date : 23-DEC-2008 00:53

Client ID: RWSW0048

Sample Info: |221329002|1|

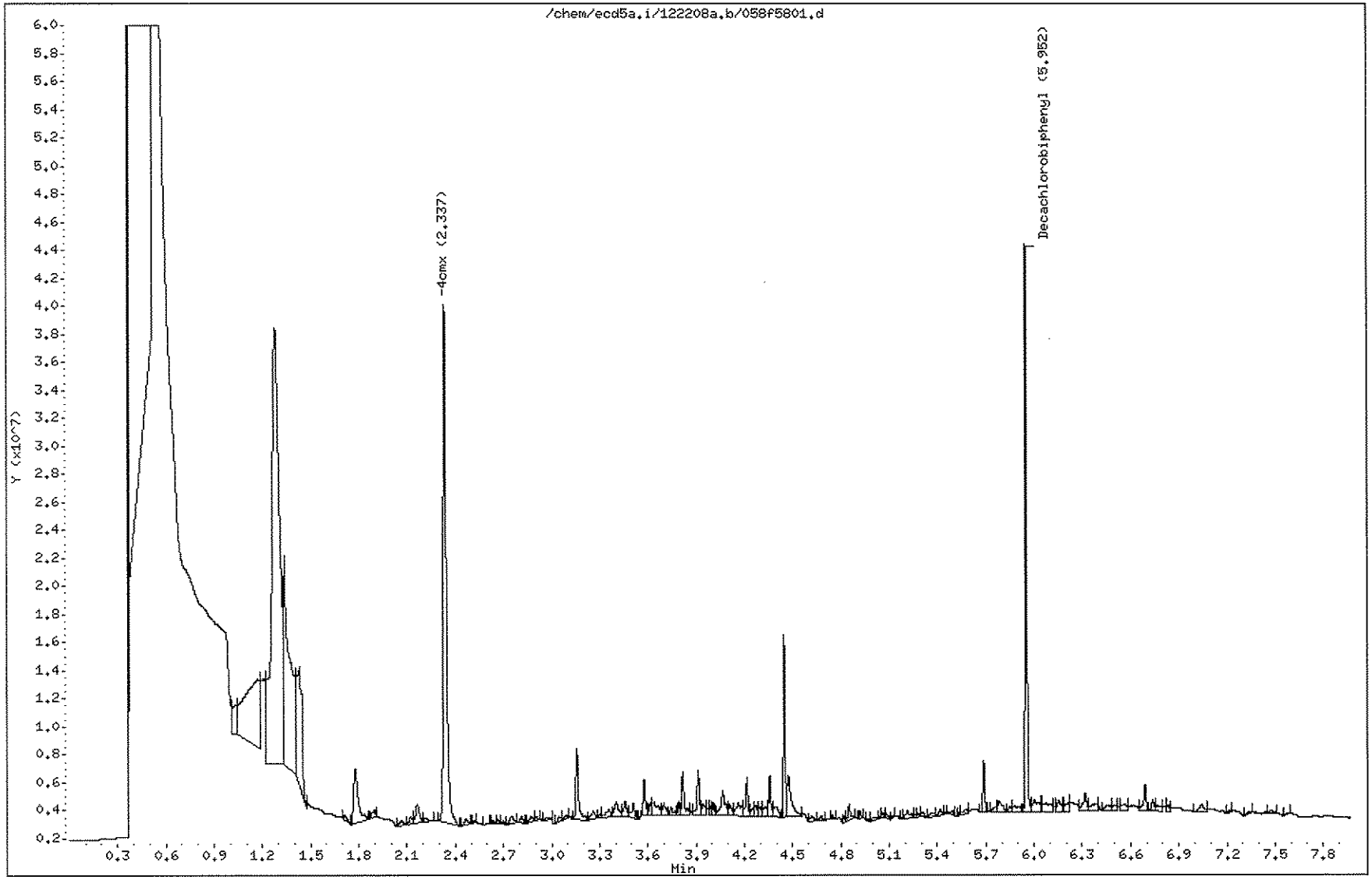
Volume Injected (uL): 1.0

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25



GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/122208a.b/058b5801.d
Lab Smp Id: 221329002 Client Smp ID: RWSW0048
Inj Date : 23-DEC-2008 00:53
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |221329002|1|
Misc Info : |ECD81P_1LF|826963|SVPF|WEIS|WATER|RWSW0048|||
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-B-8081-121108.m
Meth Date : 24-Dec-2008 16:54 hea01125 Quant Type: ESTD
Cal Date : 16-JUL-2008 00:40 Cal File: 034b3401.d
Als bottle: 58
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 221329.sub
Target Version: 3.50 Sample Matrix: Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

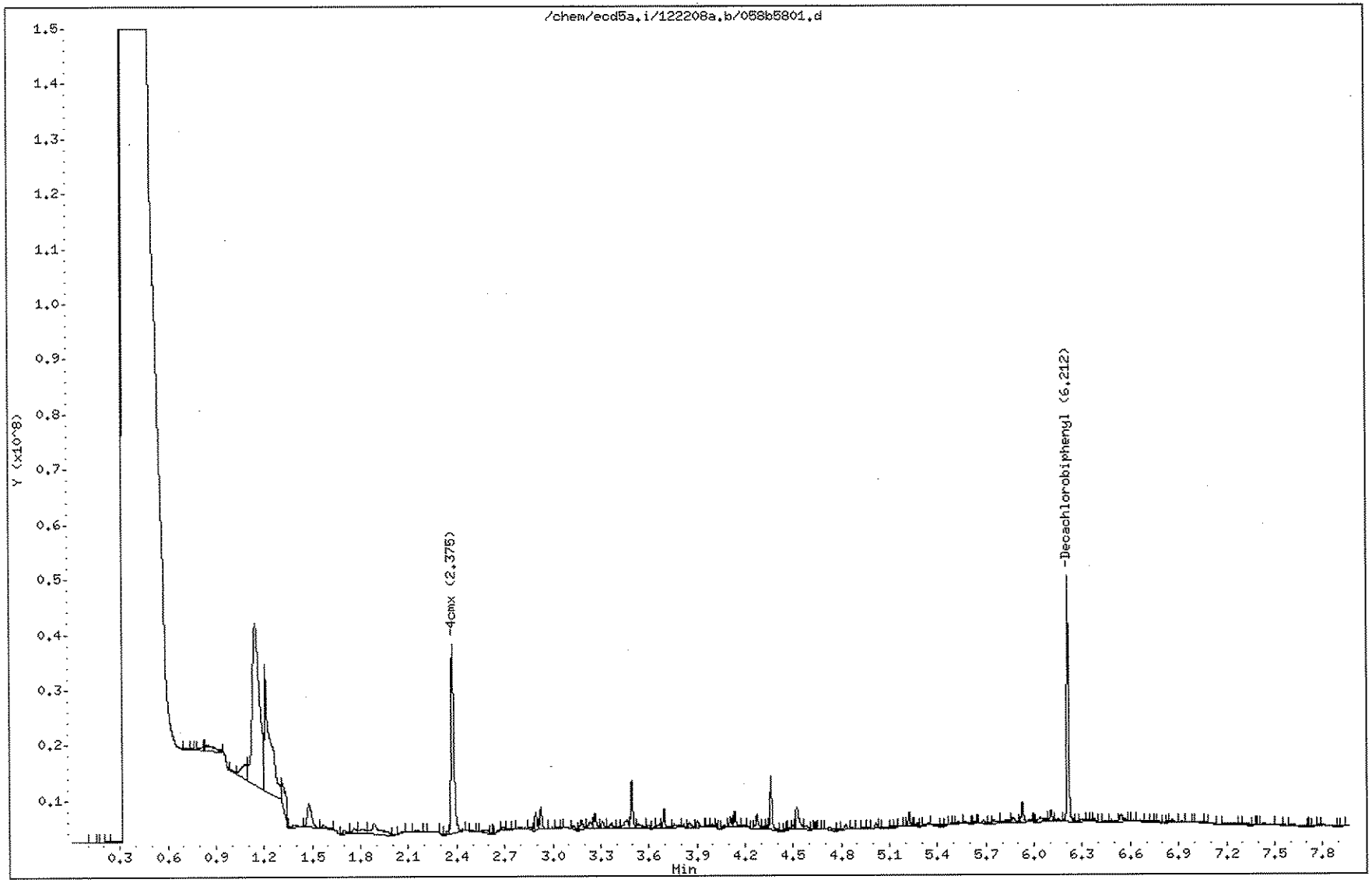
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vo	1060.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.375	2.375	0.000	41256959	121.381	0.572	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.212	6.214	-0.002	34607785	116.899	0.551	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/122208a.b/058b5801.d
Date : 23-DEC-2008 00:53
Client ID: RWSW0048
Sample Info: |22132900211|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd5a.i
Operator: HXJ1
Column diameter: 0.25



Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	221329	Date Collected:	12/15/2008 08:42	Matrix:	WATER
Lab Sample ID:	221329001	Date Received:	12/16/2008 09:55		
		Client:	WEIS001	Project:	WEIS00405
Client ID:	RWSW0049	Method:	SW846 8081	SOP Ref:	GL-OA-E-041
Batch ID:	826963	Inst:	ECD5A.I	Dilution:	1
Run Date:	12/23/2008 00:42	Analyst:	HXJ1	Inj. Vol:	1 uL
Prep Date:	12/19/2008 14:26	Aliquot:	1040 mL	Final Volume:	5 mL
Data File:	057f5701.d	Column:	1 CLP-1	Level:	LOW
	057b5701.d		2 CLP-2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319-84-6	alpha-BHC	U	0.0192	ug/L	0.00481	0.0192	1
58-89-9	gamma-BHC (Lindane)	U	0.0192	ug/L	0.00481	0.0192	1
319-85-7	beta-BHC	U	0.0192	ug/L	0.00813	0.0192	1
319-86-8	delta-BHC	U	0.0192	ug/L	0.00481	0.0192	1
76-44-8	Heptachlor	U	0.0192	ug/L	0.0063	0.0192	1
309-00-2	Aldrin	U	0.0192	ug/L	0.00481	0.0192	1
1024-57-3	Heptachlor epoxide	U	0.0192	ug/L	0.00481	0.0192	1
5103-74-2	gamma-Chlordane	U	0.0192	ug/L	0.00481	0.0192	1
5103-71-9	alpha-Chlordane	U	0.0192	ug/L	0.00481	0.0192	1
959-98-8	Endosulfan I	U	0.0192	ug/L	0.00481	0.0192	1
72-55-9	4,4'-DDE	U	0.0385	ug/L	0.00481	0.0385	1
60-57-1	Dieldrin	U	0.0385	ug/L	0.00481	0.0385	1
72-20-8	Endrin	U	0.0385	ug/L	0.00481	0.0385	1
72-54-8	4,4'-DDD	U	0.0385	ug/L	0.00481	0.0385	1
33213-65-9	Endosulfan II	U	0.0385	ug/L	0.00481	0.0385	1
7421-93-4	Endrin aldehyde	U	0.0385	ug/L	0.00481	0.0385	1
50-29-3	4,4'-DDT	U	0.0385	ug/L	0.00962	0.0385	1
1031-07-8	Endosulfan sulfate	U	0.0385	ug/L	0.00481	0.0385	1
72-43-5	Methoxychlor	U	0.192	ug/L	0.0481	0.192	1
53494-70-5	Endrin ketone	U	0.0385	ug/L	0.0121	0.0385	1
8001-35-2	Toxaphene	U	0.481	ug/L	0.144	0.481	1
12674-11-2	Aroclor-1016	U	0.481	ug/L	0.160	0.481	1
11104-28-2	Aroclor-1221	U	0.481	ug/L	0.160	0.481	1
11141-16-5	Aroclor-1232	U	0.481	ug/L	0.160	0.481	1
53469-21-9	Aroclor-1242	U	0.481	ug/L	0.160	0.481	1
12672-29-6	Aroclor-1248	U	0.481	ug/L	0.160	0.481	1
11097-69-1	Aroclor-1254	U	0.481	ug/L	0.160	0.481	1
11096-82-5	Aroclor-1260	U	0.481	ug/L	0.160	0.481	1

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CLP-1

Data file : /chem/ecd5a.i/122208a.b/057f5701.d
Lab Smp Id: 221329001 Client Smp ID: RWSW0049
Inj Date : 23-DEC-2008 00:42
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |221329001|1|
Misc Info : |ECD81P_1LF|826963|SVPF|WEIS|WATER|RWSW0049|||
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-F-8081-121108.m
Meth Date : 23-Dec-2008 15:03 hea01125 Quant Type: ESTD
Cal Date : 16-JUL-2008 00:40 Cal File: 034f3401.d
Als bottle: 57
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 221329.sub
Target Version: 3.50 Sample Matrix: Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

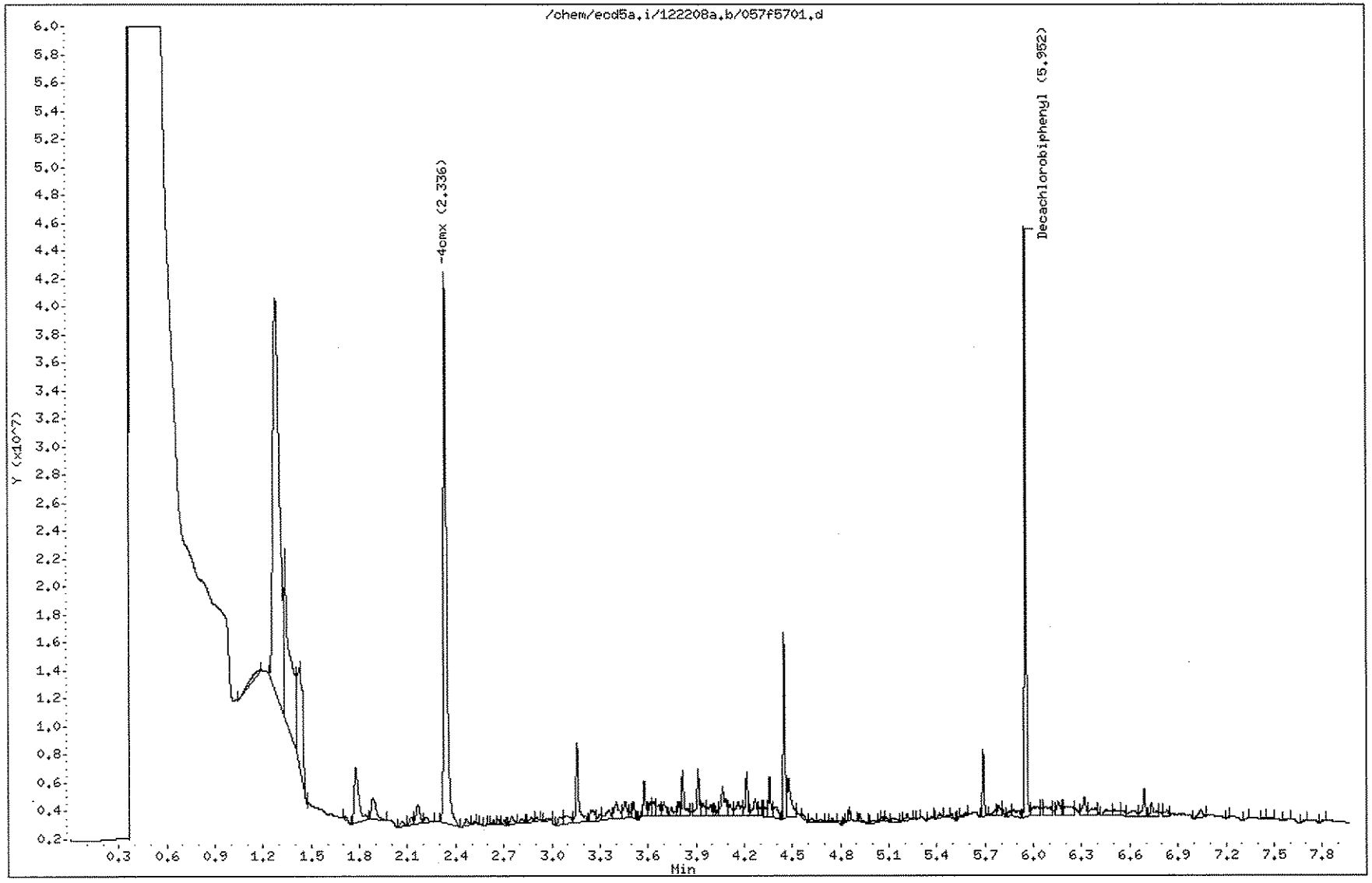
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vo	1040.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.336	2.337	-0.001	53372784	151.023	0.726	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
5.952	5.956	-0.004	31256723	110.799	0.533	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/122208a.b/057f5701.d
Date : 23-DEC-2008 00:42
Client ID: RWSW0049
Sample Info: |22132900|1|
Volume Injected (uL): 1.0
Column phase: CLP-1

Instrument: ecd5a.i
Operator: HXJ1
Column diameter: 0.25



GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/122208a.b/057b5701.d
Lab Smp Id: 221329001 Client Smp ID: RWSW0049
Inj Date : 23-DEC-2008 00:42
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |221329001|1|
Misc Info : |ECD81P_1LF|826963|SVPF|WEIS|WATER|RWSW0049|||
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-B-8081-121108.m
Meth Date : 24-Dec-2008 16:54 hea01125 Quant Type: ESTD
Cal Date : 16-JUL-2008 00:40 Cal File: 034b3401.d
Als bottle: 57
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 221329.sub
Target Version: 3.50 Sample Matrix: Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

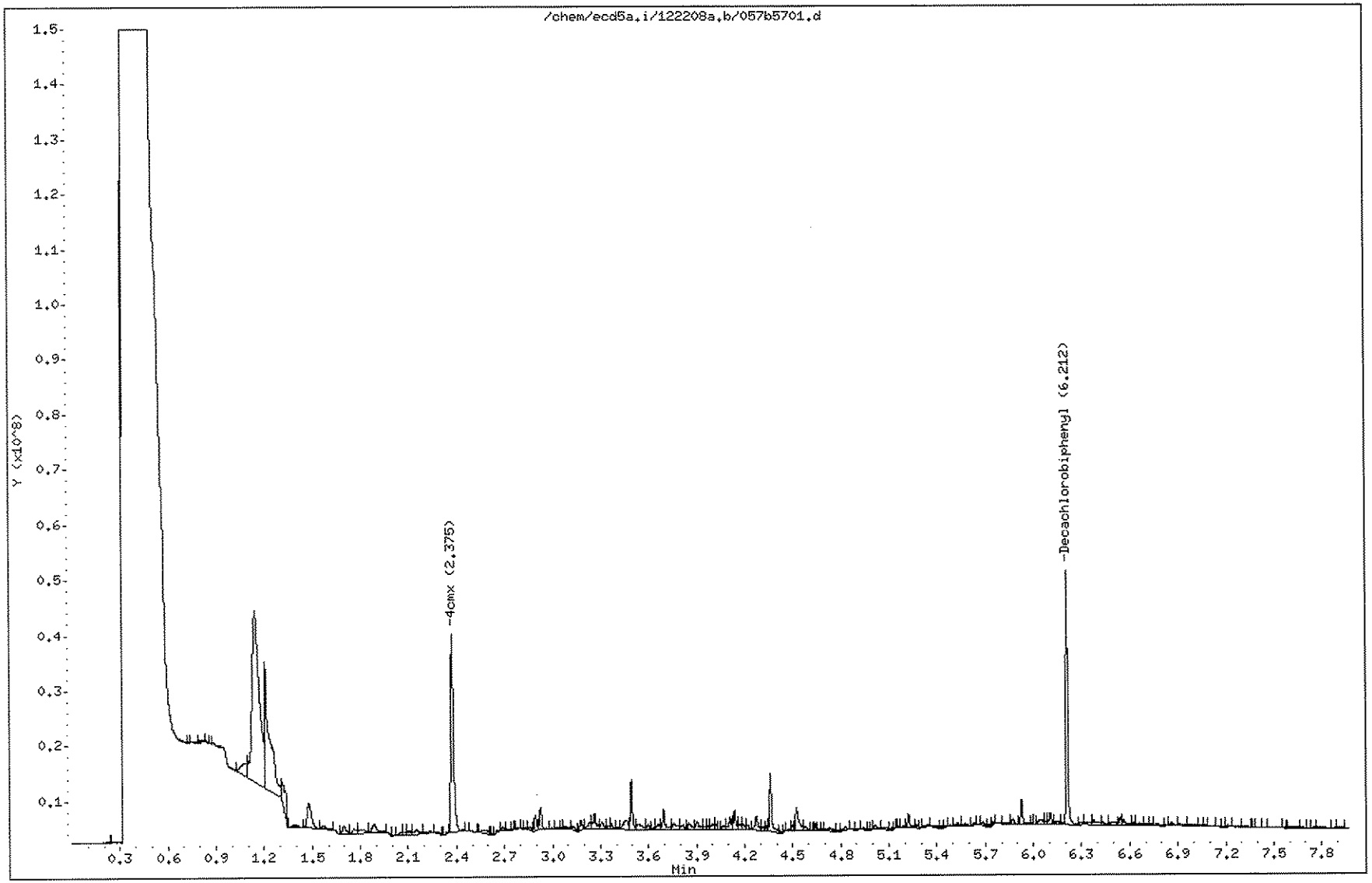
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vo	1040.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.375	2.375	0.000	43061185	126.689	0.609	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.212	6.214	-0.002	36239261	122.410	0.588	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/122208a.b/057b5701.d
Date : 23-DEC-2008 00:42
Client ID: RWSW0049
Sample Info: |22132900|1|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd5a.i
Operator: HXJ1
Column diameter: 0.25



STANDARDS DATA

Report Date: 22-Dec-2008 22:02

Calibration History

Method : /chem/ecd5a.i/122208a.b/ECD5-F-8081-121108.m
Start Cal Date: 21-MAY-2008 18:50
End Cal Date : 22-DEC-2008 17:05

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 2.00000		
17-DEC-2008 16:29	AR1254	/chem/ecd5a.i/121708b.b/010f1001.d
09-DEC-2008 19:07	AR1660	/chem/ecd5a.i/120908b.b/007f0701.d
11-DEC-2008 16:33	GAPA	/chem/ecd5a.i/121108.b/019f1901.d
11-DEC-2008 15:23	Chlor	/chem/ecd5a.i/121108.b/013f1301.d
24-NOV-2008 14:07	Tox	/chem/ecd5a.i/112408a.b/010f1001.d
22-DEC-2008 16:18	INDAB	/chem/ecd5a.i/122208a.b/014f1401.d
Cal Level: 2 , Cal Amount: 10.00000		
17-DEC-2008 16:41	AR1254	/chem/ecd5a.i/121708b.b/011f1101.d
09-DEC-2008 19:19	AR1660	/chem/ecd5a.i/120908b.b/008f0801.d
11-DEC-2008 16:45	GAPA	/chem/ecd5a.i/121108.b/020f2001.d
11-DEC-2008 15:35	Chlor	/chem/ecd5a.i/121108.b/014f1401.d
24-NOV-2008 14:19	Tox	/chem/ecd5a.i/112408a.b/011f1101.d
22-DEC-2008 16:30	INDAB	/chem/ecd5a.i/122208a.b/015f1501.d
Cal Level: 3 , Cal Amount: 50.00000		
17-DEC-2008 16:53	AR1254	/chem/ecd5a.i/121708b.b/012f1201.d
09-DEC-2008 19:31	AR1660	/chem/ecd5a.i/120908b.b/009f0901.d
11-DEC-2008 16:57	GAPA	/chem/ecd5a.i/121108.b/021f2101.d
11-DEC-2008 15:46	Chlor	/chem/ecd5a.i/121108.b/015f1501.d
24-NOV-2008 14:31	Tox	/chem/ecd5a.i/112408a.b/012f1201.d
22-DEC-2008 16:42	INDAB	/chem/ecd5a.i/122208a.b/016f1601.d
Cal Level: 4 , Cal Amount: 100.00000		
16-JUL-2008 00:40	211962	/chem/ecd5a.i/071508.b/034f3401.d
22-DEC-2008 16:07	AR1221	/chem/ecd5a.i/122208a.b/013f1301.d
22-DEC-2008 15:55	AR1232	/chem/ecd5a.i/122208a.b/012f1201.d
22-DEC-2008 15:43	AR1248	/chem/ecd5a.i/122208a.b/011f1101.d
22-DEC-2008 15:32	AR1242	/chem/ecd5a.i/122208a.b/010f1001.d
17-DEC-2008 17:04	AR1254	/chem/ecd5a.i/121708b.b/013f1301.d
09-DEC-2008 19:43	AR1660	/chem/ecd5a.i/120908b.b/010f1001.d
11-DEC-2008 17:09	GAPA	/chem/ecd5a.i/121108.b/022f2201.d
11-DEC-2008 15:58	Chlor	/chem/ecd5a.i/121108.b/016f1601.d
24-NOV-2008 14:43	Tox	/chem/ecd5a.i/112408a.b/013f1301.d
22-DEC-2008 16:53	INDAB	/chem/ecd5a.i/122208a.b/017f1701.d
Cal Level: 5 , Cal Amount: 200.00000		
17-DEC-2008 17:17	AR1254	/chem/ecd5a.i/121708b.b/014f1401.d

09-DEC-2008 19:54	AR1660	/chem/ecd5a.i/120908b.b/011f1101.d
11-DEC-2008 17:21	GAPA	/chem/ecd5a.i/121108.b/023f2301.d
11-DEC-2008 16:10	Chlor	/chem/ecd5a.i/121108.b/017f1701.d
24-NOV-2008 14:54	Tox	/chem/ecd5a.i/112408a.b/014f1401.d
22-DEC-2008 17:05	INDAB	/chem/ecd5a.i/122208a.b/018f1801.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 100		
22-DEC-2008 16:07	AR1221	/chem/ecd5a.i/122208a.b/013f1301.d
Ccal Level: 4 , Ccal Amount: 100		
22-DEC-2008 15:55	AR1232	/chem/ecd5a.i/122208a.b/012f1201.d
Ccal Level: 4 , Ccal Amount: 100		
22-DEC-2008 15:43	AR1248	/chem/ecd5a.i/122208a.b/011f1101.d
Ccal Level: 4 , Ccal Amount: 100		
22-DEC-2008 15:32	AR1242	/chem/ecd5a.i/122208a.b/010f1001.d
Ccal Level: 4 , Ccal Amount: 100		
22-DEC-2008 15:08	AR1254	/chem/ecd5a.i/122208a.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 100		
22-DEC-2008 14:56	AR1660	/chem/ecd5a.i/122208a.b/007f0701.d
Ccal Level: 4 , Ccal Amount: 100		
22-DEC-2008 14:45	GAPA	/chem/ecd5a.i/122208a.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 100		
22-DEC-2008 14:33	Chlor	/chem/ecd5a.i/122208a.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 100		
22-DEC-2008 14:21	Tox	/chem/ecd5a.i/122208a.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 100		
22-DEC-2008 17:17	INDAB	/chem/ecd5a.i/122208a.b/019f1901.d
Ccal Level: 4 , Ccal Amount: 100		
22-DEC-2008 16:53	INDAB	/chem/ecd5a.i/122208a.b/017f1701.d
Ccal Level: 4 , Ccal Amount: 100		
22-DEC-2008 15:20	INDAB	/chem/ecd5a.i/122208a.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 100		
22-DEC-2008 14:10	INDAB	/chem/ecd5a.i/122208a.b/003f0301.d

Report Date: 22-Dec-2008 22:01

Calibration History

Method : /chem/ecd5a.i/122208a.b/ECD5-B-8081-121108.m
Start Cal Date: 21-MAY-2008 18:50
End Cal Date : 22-DEC-2008 17:05

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 2.00000		
17-DEC-2008 16:29	AR1254	/chem/ecd5a.i/121708b.b/010b1001.d
09-DEC-2008 19:07	AR1660	/chem/ecd5a.i/120908b.b/007b0701.d
11-DEC-2008 16:33	GAPA	/chem/ecd5a.i/121108.b/019b1901.d
11-DEC-2008 15:23	Chlor	/chem/ecd5a.i/121108.b/013b1301.d
24-NOV-2008 14:07	Tox	/chem/ecd5a.i/112408a.b/010b1001.d
22-DEC-2008 16:18	INDAB	/chem/ecd5a.i/122208a.b/014b1401.d
Cal Level: 2 , Cal Amount: 10.00000		
17-DEC-2008 16:41	AR1254	/chem/ecd5a.i/121708b.b/011b1101.d
09-DEC-2008 19:19	AR1660	/chem/ecd5a.i/120908b.b/008b0801.d
11-DEC-2008 16:45	GAPA	/chem/ecd5a.i/121108.b/020b2001.d
11-DEC-2008 15:35	Chlor	/chem/ecd5a.i/121108.b/014b1401.d
24-NOV-2008 14:19	Tox	/chem/ecd5a.i/112408a.b/011b1101.d
22-DEC-2008 16:30	INDAB	/chem/ecd5a.i/122208a.b/015b1501.d
Cal Level: 3 , Cal Amount: 50.00000		
17-DEC-2008 16:53	AR1254	/chem/ecd5a.i/121708b.b/012b1201.d
09-DEC-2008 19:31	AR1660	/chem/ecd5a.i/120908b.b/009b0901.d
11-DEC-2008 16:57	GAPA	/chem/ecd5a.i/121108.b/021b2101.d
11-DEC-2008 15:46	Chlor	/chem/ecd5a.i/121108.b/015b1501.d
24-NOV-2008 14:31	Tox	/chem/ecd5a.i/112408a.b/012b1201.d
22-DEC-2008 16:42	INDAB	/chem/ecd5a.i/122208a.b/016b1601.d
Cal Level: 4 , Cal Amount: 100.00000		
16-JUL-2008 00:40	211962	/chem/ecd5a.i/071508.b/034b3401.d
22-DEC-2008 16:07	AR1221	/chem/ecd5a.i/122208a.b/013b1301.d
22-DEC-2008 15:55	AR1232	/chem/ecd5a.i/122208a.b/012b1201.d
22-DEC-2008 15:43	AR1248	/chem/ecd5a.i/122208a.b/011b1101.d
22-DEC-2008 15:32	AR1242	/chem/ecd5a.i/122208a.b/010b1001.d
17-DEC-2008 17:04	AR1254	/chem/ecd5a.i/121708b.b/013b1301.d
09-DEC-2008 19:43	AR1660	/chem/ecd5a.i/120908b.b/010b1001.d
11-DEC-2008 17:09	GAPA	/chem/ecd5a.i/121108.b/022b2201.d
11-DEC-2008 15:58	Chlor	/chem/ecd5a.i/121108.b/016b1601.d
24-NOV-2008 14:43	Tox	/chem/ecd5a.i/112408a.b/013b1301.d
22-DEC-2008 16:53	INDAB	/chem/ecd5a.i/122208a.b/017b1701.d
Cal Level: 5 , Cal Amount: 200.00000		
17-DEC-2008 17:17	AR1254	/chem/ecd5a.i/121708b.b/014b1401.d
09-DEC-2008 19:54	AR1660	/chem/ecd5a.i/120908b.b/011b1101.d
11-DEC-2008 17:21	GAPA	/chem/ecd5a.i/121108.b/023b2301.d
11-DEC-2008 16:10	Chlor	/chem/ecd5a.i/121108.b/017b1701.d
24-NOV-2008 14:54	Tox	/chem/ecd5a.i/112408a.b/014b1401.d
22-DEC-2008 17:05	INDAB	/chem/ecd5a.i/122208a.b/018b1801.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 100		
22-DEC-2008 16:07	AR1221	/chem/ecd5a.i/122208a.b/013b1301.d
Ccal Level: 4 , Ccal Amount: 100		
22-DEC-2008 15:55	AR1232	/chem/ecd5a.i/122208a.b/012b1201.d
Ccal Level: 4 , Ccal Amount: 100		
22-DEC-2008 15:43	AR1248	/chem/ecd5a.i/122208a.b/011b1101.d
Ccal Level: 4 , Ccal Amount: 100		
22-DEC-2008 15:32	AR1242	/chem/ecd5a.i/122208a.b/010b1001.d
Ccal Level: 4 , Ccal Amount: 100		
22-DEC-2008 15:08	AR1254	/chem/ecd5a.i/122208a.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 100		
22-DEC-2008 14:56	AR1660	/chem/ecd5a.i/122208a.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 100		
22-DEC-2008 14:45	GAPA	/chem/ecd5a.i/122208a.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 100		
22-DEC-2008 14:33	Chlor	/chem/ecd5a.i/122208a.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 100		
22-DEC-2008 14:21	Tox	/chem/ecd5a.i/122208a.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 100		
22-DEC-2008 17:17	INDAB	/chem/ecd5a.i/122208a.b/019b1901.d
Ccal Level: 4 , Ccal Amount: 100		
22-DEC-2008 16:53	INDAB	/chem/ecd5a.i/122208a.b/017b1701.d
Ccal Level: 4 , Ccal Amount: 100		
22-DEC-2008 15:20	INDAB	/chem/ecd5a.i/122208a.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 100		
22-DEC-2008 14:10	INDAB	/chem/ecd5a.i/122208a.b/003b0301.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/122208a.b/ECD5-F-8081-121108.m
Quant Method : ESTD Target Version : 3.50
Last Update : 22-Dec-2008 21:56 Number of Cpnds : 44
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	25917.000000
Initial:End Threshold	12958.500000
Initial:Area Threshold	24289.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	4.000000
Initial:Negative Peaks	OFF
Initial:Tension	1.500000

Compound	RT	RT Window	RF
$ 1 4cmx	2.337	2.307-2.367	3.534e+05
63 2,4,5-Trichlorophenol	1.281	1.181-1.381	
59 Hexachlorobenzene	2.664	2.564-2.764	3.481e+05
2 Aroclor-1221	2.495	2.465-2.525	5.688e+03
	2.618	2.588-2.648	3.226e+03
	2.651	2.621-2.681	1.382e+04
3 Aroclor-1016	2.650	2.620-2.680	6.744e+03
	3.267	3.237-3.297	1.716e+04
	3.403	3.373-3.433	7.184e+03
	3.503	3.473-3.533	6.364e+03
	3.636	3.606-3.666	8.952e+03
4 Aroclor-1232	2.651	2.621-2.681	9.741e+03
	2.927	2.897-2.957	8.415e+03
	3.268	3.238-3.298	1.131e+04
	3.360	3.330-3.390	7.506e+03
	3.637	3.607-3.667	8.058e+03
5 alpha-BHC	2.804	2.774-2.834	4.555e+05
6 Aroclor-1242	2.928	2.828-3.028	1.367e+04
	3.268	3.168-3.368	1.656e+04
	3.360	3.260-3.460	1.084e+04
	3.637	3.537-3.737	1.145e+04
	3.914	3.814-4.014	7.618e+03
7 gamma-BHC (Lindane)	3.051	3.021-3.081	4.020e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/122208a.b/ECD5-F-8081-121108.m

Compound	RT	RT Window	RF
8 Chlordane (tech.)	3.335	3.235-3.435	1.485e+04
	3.699	3.599-3.799	1.548e+04
	3.965	3.865-4.065	8.680e+03
	4.085	3.985-4.185	4.744e+04
	4.168	4.068-4.268	7.366e+04
9 Aroclor-1248	3.268	3.168-3.368	9.247e+03
	3.503	3.403-3.603	9.144e+03
	3.636	3.536-3.736	1.387e+04
	3.931	3.831-4.031	1.663e+04
	4.299	4.199-4.399	9.200e+03
10 Heptachlor	3.393	3.362-3.422	3.502e+05
11 Aldrin	3.599	3.569-3.629	3.948e+05
12 beta-BHC	3.125	3.095-3.155	1.880e+05
13 delta-BHC	3.253	3.223-3.283	4.022e+05
14 Heptachlor epoxide	4.006	3.976-4.036	3.567e+05
15 Aroclor-1254	3.884	3.854-3.914	1.271e+04
	4.050	4.020-4.080	1.724e+04
	4.300	4.270-4.330	2.206e+04
	4.471	4.441-4.501	1.700e+04
	4.750	4.720-4.780	2.311e+04
16 Endosulfan I	4.254	4.224-4.284	3.721e+05
17 gamma-Chlordane	4.087	4.057-4.117	3.552e+05
18 alpha-Chlordane	4.171	4.141-4.201	3.568e+05
19 4,4'-DDE	4.232	4.202-4.262	3.173e+05
20 Dieldrin	4.404	4.374-4.434	3.609e+05
21 Aroclor-1260	4.409	4.309-4.509	1.705e+04
	4.578	4.478-4.678	2.562e+04
	4.815	4.715-4.915	1.300e+04
	4.963	4.863-5.063	1.306e+04
	5.146	5.046-5.246	2.314e+04
22 Endrin	4.547	4.517-4.577	3.205e+05
23 Toxaphene	4.408	4.378-4.438	6.430e+03
	4.461	4.431-4.491	5.919e+03
	4.677	4.647-4.707	1.122e+04
	4.885	4.855-4.915	1.133e+04
	5.138	5.108-5.168	8.594e+03
24 Endosulfan II	4.686	4.656-4.716	3.066e+05
25 4,4'-DDD	4.600	4.570-4.630	2.806e+05
26 4,4'-DDT	4.767	4.737-4.797	1.822e+05
27 Endrin aldehyde	4.940	4.910-4.970	2.302e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/122208a.b/ECD5-F-8081-121108.m

	Compound	RT	RT Window	RF
	28 Methoxychlor	5.062	5.032-5.093	8.775e+04
	29 Endosulfan sulfate	5.199	5.169-5.229	2.592e+05
	30 Aroclor-1268	5.039	4.939-5.139	
		5.063	4.963-5.163	
		5.174	5.074-5.274	
		5.383	5.283-5.483	
		5.548	5.448-5.648	
	61 Aroclor-1262	4.121	4.021-4.221	
		4.289	4.189-4.389	
		4.525	4.425-4.625	
		4.671	4.571-4.771	
		4.854	4.754-4.954	
	31 Endrin ketone	5.367	5.337-5.397	2.743e+05
	51 Mirex	5.131	5.101-5.161	2.405e+05
	52 C-Nonachlor	4.570	4.540-4.600	3.980e+05
	53 O-Chlordane	3.938	3.908-3.968	3.048e+05
	54 T-Nonachlor	4.160	4.130-4.190	3.186e+05
	55 1,2-Dichlorobenzene	6.525	6.495-6.555	
	56 2,4-DDE	4.011	3.981-4.041	2.097e+05
	58 2,4-DDD	4.338	4.308-4.368	1.932e+05
	57 2,4-DDT	4.492	4.462-4.522	1.861e+05
$	32 Decachlorobiphenyl	5.956	5.926-5.986	2.821e+05
M	62 TTO Sum Pesticides	1.000	0.980-1.020	

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/122208a.b/ECD5-B-8081-121108.m
Quant Method : ESTD Target Version : 3.50
Last Update : 22-Dec-2008 21:56 Number of Cpnds : 43
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	15389.000000
Initial:End Threshold	7694.500000
Initial:Area Threshold	11566.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	5.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.000000

Compound	RT	RT Window	RF
$ 1 4cmx	2.375	2.345-2.405	3.399e+05
61 2,4,5-Trichlorophenol	1.391	1.291-1.491	
59 Hexachlorobenzene	2.771	2.741-2.801	3.709e+05
2 Aroclor-1221	2.625	2.595-2.655	5.416e+03
	2.736	2.706-2.766	3.432e+03
	2.784	2.754-2.814	1.331e+04
3 Aroclor-1016	3.500	3.470-3.530	1.032e+04
	3.568	3.538-3.598	6.069e+03
	3.634	3.604-3.664	6.188e+03
	3.662	3.632-3.692	6.342e+03
	3.807	3.777-3.837	8.066e+03
4 Aroclor-1232	2.783	2.753-2.813	8.839e+03
	3.087	3.057-3.117	8.400e+03
	3.501	3.471-3.531	6.538e+03
	3.808	3.778-3.838	5.190e+03
	4.052	4.022-4.082	5.583e+03
5 alpha-BHC	2.887	2.857-2.917	4.497e+05
6 Aroclor-1242	3.087	3.057-3.117	1.267e+04
	3.412	3.382-3.442	2.759e+04
	3.501	3.471-3.531	1.097e+04
	3.808	3.778-3.838	8.091e+03
	4.081	4.051-4.111	9.206e+03
7 gamma-BHC (Lindane)	3.158	3.128-3.188	3.999e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/122208a.b/ECD5-B-8081-121108.m

Compound	RT	RT Window	RF
8 Chlordane (tech.)	3.370	3.340-3.400	1.310e+04
	4.050	4.020-4.080	8.693e+03
	4.192	4.162-4.222	4.311e+04
	4.253	4.223-4.283	3.448e+04
	4.284	4.254-4.314	3.477e+04
9 Aroclor-1248	3.635	3.605-3.665	1.072e+04
	3.808	3.778-3.838	1.376e+04
	3.887	3.857-3.917	1.589e+04
	4.051	4.021-4.081	1.671e+04
	4.478	4.448-4.508	1.106e+04
10 Heptachlor	3.475	3.445-3.505	3.904e+05
11 Aldrin	3.694	3.664-3.724	3.812e+05
12 beta-BHC	3.229	3.199-3.259	1.770e+05
13 delta-BHC	3.436	3.406-3.466	3.867e+05
14 Heptachlor epoxide	4.070	4.040-4.100	3.474e+05
15 Aroclor-1254	4.075	4.045-4.105	1.501e+04
	4.196	4.166-4.226	1.632e+04
	4.478	4.448-4.508	2.507e+04
	4.618	4.588-4.648	1.797e+04
	4.937	4.907-4.967	2.417e+04
16 Endosulfan I	4.316	4.286-4.346	3.216e+05
17 gamma-Chlordane	4.193	4.163-4.223	3.499e+05
18 alpha-Chlordane	4.284	4.254-4.314	3.386e+05
19 4,4'-DDE	4.396	4.366-4.426	3.431e+05
20 Dieldrin	4.486	4.456-4.516	3.496e+05
21 Aroclor-1260	4.594	4.564-4.624	1.710e+04
	4.721	4.691-4.751	2.032e+04
	4.989	4.959-5.019	1.331e+04
	5.164	5.134-5.194	1.337e+04
	5.312	5.282-5.342	3.243e+04
22 Endrin	4.669	4.639-4.699	3.065e+05
23 Toxaphene	4.472	4.442-4.502	9.768e+03
	4.771	4.741-4.801	6.256e+03
	4.790	4.760-4.820	9.320e+03
	4.849	4.819-4.879	1.846e+04
	5.007	4.977-5.037	1.021e+04
24 Endosulfan II	4.799	4.769-4.829	3.005e+05
25 4,4'-DDD	4.747	4.717-4.777	2.879e+05
26 4,4'-DDT	4.934	4.904-4.964	2.583e+05
27 Endrin aldehyde	5.000	4.970-5.030	2.205e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd5a.i/122208a.b/ECD5-B-8081-121108.m

Compound	RT	RT Window	RF
28 Methoxychlor	5.339	5.309-5.369	9.878e+04
29 Endosulfan sulfate	5.167	5.137-5.197	2.635e+05
30 Aroclor-1268	5.224	5.194-5.254	
	5.608	5.578-5.638	
	5.632	5.602-5.662	
	5.780	5.750-5.810	
	6.136	6.106-6.166	
60 Aroclor-1262	4.689	4.589-4.789	
	4.779	4.679-4.879	
	5.074	4.974-5.174	
	5.224	5.124-5.324	
	5.396	5.296-5.496	
31 Endrin ketone	5.481	5.451-5.511	2.981e+05
51 Mirex	5.462	5.432-5.492	2.145e+05
52 C-Nonachlor	4.725	4.695-4.755	3.827e+05
53 O-Chlordane	4.014	3.984-4.044	2.913e+05
54 T-Nonachlor	4.253	4.223-4.283	3.053e+05
55 1,2-Dichlorobenzene	6.619	6.589-6.649	
56 2,4-DDE	4.199	4.169-4.229	2.076e+05
58 2,4-DDD	4.516	4.486-4.546	1.883e+05
57 2,4-DDT	4.700	4.670-4.730	1.667e+05
$ 32 Decachlorobiphenyl	6.214	6.184-6.244	2.960e+05

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 21-MAY-2008 18:50
End Cal Date : 22-DEC-2008 17:05
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/122208a.b/ECD5-F-8081-121108.m
Cal Date : 22-Dec-2008 21:56 hea01125
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd5a.i/121708b.b/010f1001.d
Level 2: /chem/ecd5a.i/121708b.b/011f1101.d
Level 3: /chem/ecd5a.i/121708b.b/012f1201.d
Level 4: /chem/ecd5a.i/071508.b/034f3401.d
Level 5: /chem/ecd5a.i/121708b.b/014f1401.d

Compound	2.000 Level 1	10.000 Level 2	50.000 Level 3	100.000 Level 4	200.000 Level 5	RRF	% RSD
63 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++
59 Hexachlorobenzene	414515	364526	328841	318006	314820	348141	12.072
2 Aroclor-1221 (1)	+++++	+++++	+++++	5688	+++++	5688	0.000
(2)	+++++	+++++	+++++	3226	+++++	3226	0.000
(3)	+++++	+++++	+++++	13822	+++++	13822	0.000
3 Aroclor-1016 (1)	7511	6925	6734	6463	6090	6744	7.875
(2)	18888	17623	16881	16271	16154	17163	6.566
(3)	7873	7565	7075	6723	6684	7184	7.281
(4)	7175	6762	6292	5875	5713	6364	9.571
(5)	9922	9307	8910	8288	8333	8952	7.684
4 Aroclor-1232 (1)	+++++	+++++	+++++	9741	+++++	9741	0.000
(2)	+++++	+++++	+++++	8415	+++++	8415	0.000
(3)	+++++	+++++	+++++	11308	+++++	11308	0.000
(4)	+++++	+++++	+++++	7506	+++++	7506	0.000
(5)	+++++	+++++	+++++	8058	+++++	8058	0.000
5 alpha-BHC	460771	446425	447047	457105	465912	455452	1.878
6 Aroclor-1242 (1)	+++++	+++++	+++++	13666	+++++	13666	0.000
(2)	+++++	+++++	+++++	16555	+++++	16555	0.000
(3)	+++++	+++++	+++++	10839	+++++	10839	0.000
(4)	+++++	+++++	+++++	11452	+++++	11452	0.000
(5)	+++++	+++++	+++++	7618	+++++	7618	0.000
7 gamma-BHC (Lindane)	416279	396918	389609	399729	407310	401969	2.539
8 Chlordane (tech.) (1)	16168	15627	14539	14308	13606	14850	6.963
(2)	17261	16662	15355	14669	13472	15484	9.833
(3)	8922	8911	8854	8607	8104	8680	3.990
(4)	49782	49052	47400	46749	44217	47440	4.588
(5)	77084	75564	74147	73012	68500	73661	4.432

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 21-MAY-2008 18:50
End Cal Date : 22-DEC-2008 17:05
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/122208a.b/ECD5-F-8081-121108.m
Cal Date : 22-Dec-2008 21:56 hea01125
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	50.000 Level 3	100.000 Level 4	200.000 Level 5	RRF	% RSD
9 Aroclor-1248(1)	+++++	+++++	+++++	9247	+++++	9247	0.000
(2)	+++++	+++++	+++++	9144	+++++	9144	0.000
(3)	+++++	+++++	+++++	13874	+++++	13874	0.000
(4)	+++++	+++++	+++++	16630	+++++	16630	0.000
(5)	+++++	+++++	+++++	9200	+++++	9200	0.000
10 Heptachlor	376089	351233	337509	341504	344778	350223	4.371
11 Aldrin	409277	392343	387688	392205	392310	394765	2.116
12 beta-BHC	215470	198021	174489	176144	175699	187964	9.699
13 delta-BHC	406414	394439	391271	408463	410542	402226	2.175
14 Heptachlor epoxide	383532	362080	347126	347297	343334	356674	4.665
15 Aroclor-1254(1)	13762	13586	12924	12206	11070	12710	8.677
(2)	19186	18260	17128	16916	14697	17237	9.801
(3)	23916	22523	22438	21568	19837	22056	6.796
(4)	18491	17963	17019	16300	15245	17003	7.623
(5)	25509	23442	23360	22327	20903	23108	7.310
16 Endosulfan I	401621	387504	365782	354052	351663	372124	5.845
17 gamma-Chlordane	368314	351573	348718	352090	355528	355244	2.166
18 alpha-Chlordane	383019	361320	344629	345985	349067	356804	4.503
19 4,4'-DDE	314578	309066	319336	324071	319239	317258	1.790
20 Dieldrin	372163	365641	361028	356860	348765	360891	2.451
21 Aroclor-1260(1)	19136	17589	16869	15982	15690	17053	8.117
(2)	28585	26045	25108	24313	24035	25617	7.159
(3)	14618	13273	12657	12164	12281	12998	7.717
(4)	13989	12985	12612	12365	13327	13056	4.880
(5)	25026	25442	21866	20922	22444	23140	8.611
22 Endrin	337226	326207	318034	313981	307023	320494	3.634
23 Toxaphene(1)	8249	6546	6071	5642	5640	6430	16.849
(2)	7761	5709	5629	5229	5265	5919	17.774
(3)	13751	10643	10618	10449	10657	11224	12.612
(4)	12892	10967	10802	10822	11145	11326	7.827
(5)	8922	8125	8492	8728	8702	8594	3.526
24 Endosulfan II	326133	315737	303439	297072	290631	306602	4.672
25 4,4'-DDD	284046	273266	281293	283175	281259	280608	1.525

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 21-MAY-2008 18:50
End Cal Date : 22-DEC-2008 17:05
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/122208a.b/ECD5-F-8081-121108.m
Cal Date : 22-Dec-2008 21:56 hea01125
Curve Type : Average

	Compound	2.000 Level 1	10.000 Level 2	50.000 Level 3	100.000 Level 4	200.000 Level 5	RRF	% RSD
	26 4,4'-DDT	151921	154190	184305	203279	217240	182187	15.951
	27 Endrin aldehyde	251416	236371	224493	222176	216612	230214	6.026
	28 Methoxychlor	87651	84850	88380	88238	89631	87750	2.022
	29 Endosulfan sulfate	270552	256016	254074	257595	257763	259200	2.515
	30 Aroclor-1268 (1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	61 Aroclor-1262 (1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	31 Endrin ketone	301763	286424	276111	258063	249386	274349	7.708
	51 Mirex	277775	249481	230199	223916	221189	240512	9.804
	52 C-Nonachlor	439899	407633	390853	377381	374318	398017	6.748
	53 O-Chlordane	352472	321082	295362	282521	272555	304798	10.584
	54 T-Nonachlor	362690	324755	310154	299893	295614	318621	8.496
	55 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	56 2,4-DDE	241986	219641	203401	194746	188760	209707	10.236
	58 2,4-DDD	223300	205084	182269	181718	173763	193227	10.595
	57 2,4-DDT	179416	185091	189073	189377	187386	186069	2.198
M	62 TTO Sum Pesticides	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	1 4cmx	385014	362768	341140	339887	338236	353409	5.747
$	32 Decachlorobiphenyl	325812	293762	269997	263556	257384	282102	9.945

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 21-MAY-2008 18:50
End Cal Date : 22-DEC-2008 17:05
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/122208a.b/ECD5-B-8081-121108.m
Cal Date : 24-Dec-2008 16:54 hea01125

Calibration File Names:
Level 1: /chem/ecd5a.i/121708b.b/010b1001.d
Level 2: /chem/ecd5a.i/121708b.b/011b1101.d
Level 3: /chem/ecd5a.i/121708b.b/012b1201.d
Level 4: /chem/ecd5a.i/071508.b/034b3401.d
Level 5: /chem/ecd5a.i/121708b.b/014b1401.d

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
61 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	AVRG	0.000e+00			0.000e+00
59 Hexachlorobenzene	416790	380642	355189	349345	352607	AVRG		370914		7.68128
2 Aroclor-1221(1)	+++++	+++++	+++++	5416	+++++	AVRG		5416		0.000e+00
(2)	+++++	+++++	+++++	3432	+++++	AVRG		3432		0.000e+00
(3)	+++++	+++++	+++++	13313	+++++	AVRG		13313		0.000e+00
3 Aroclor-1016(1)	11238	10468	9981	9837	10085	AVRG		10322		5.45357
(2)	6309	6151	6040	5735	6112	AVRG		6069		3.47781
(3)	6728	6279	6043	5854	6039	AVRG		6188		5.44644
(4)	6730	6487	6261	6015	6219	AVRG		6342		4.31728
(5)	8573	8029	7808	7773	8146	AVRG		8066		4.00441
4 Aroclor-1232(1)	+++++	+++++	+++++	8839	+++++	AVRG		8839		0.000e+00
(2)	+++++	+++++	+++++	8400	+++++	AVRG		8400		0.000e+00
(3)	+++++	+++++	+++++	6538	+++++	AVRG		6538		0.000e+00
(4)	+++++	+++++	+++++	5190	+++++	AVRG		5190		0.000e+00
(5)	+++++	+++++	+++++	5583	+++++	AVRG		5583		0.000e+00
5 alpha-BHC	445008	431830	443494	455140	472982	AVRG		449691		3.42975
6 Aroclor-1242(1)	+++++	+++++	+++++	12674	+++++	AVRG		12674		0.000e+00
(2)	+++++	+++++	+++++	27593	+++++	AVRG		27593		0.000e+00
(3)	+++++	+++++	+++++	10973	+++++	AVRG		10973		0.000e+00
(4)	+++++	+++++	+++++	8091	+++++	AVRG		8091		0.000e+00
(5)	+++++	+++++	+++++	9206	+++++	AVRG		9206		0.000e+00

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 21-MAY-2008 18:50
End Cal Date : 22-DEC-2008 17:05
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/122208a.b/ECD5-B-8081-121108.m
Cal Date : 24-Dec-2008 16:54 hea01125

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
7 gamma-BHC (Lindane)	401362	384373	396386	400674	416886	AVRG		399936		2.91771
8 Chlordane (tech.) (1)	13306	12946	13411	13013	12800	AVRG		13095		1.94746
(2)	9182	8452	9165	7864	8803	AVRG		8693		6.34997
(3)	44195	43785	43571	41623	42351	AVRG		43105		2.49679
(4)	35379	35196	34774	33097	33965	AVRG		34482		2.74546
(5)	35287	35155	35959	33046	34410	AVRG		34771		3.19269
9 Aroclor-1248 (1)	+++++	+++++	+++++	10723	+++++	AVRG		10723		0.000e+00
(2)	+++++	+++++	+++++	13762	+++++	AVRG		13762		0.000e+00
(3)	+++++	+++++	+++++	15885	+++++	AVRG		15885		0.000e+00
(4)	+++++	+++++	+++++	16708	+++++	AVRG		16708		0.000e+00
(5)	+++++	+++++	+++++	11056	+++++	AVRG		11056		0.000e+00
10 Heptachlor	402623	383745	382298	388217	394982	AVRG		390373		2.16260
11 Aldrin	381992	373230	376275	381303	393048	AVRG		381170		1.98407
12 beta-BHC	186917	183033	174145	171918	169042	AVRG		177011		4.30281
13 delta-BHC	379955	369809	380513	393332	410116	AVRG		386745		4.00862
14 Heptachlor epoxide	365302	347092	341118	340013	343352	AVRG		347375		2.98820
15 Aroclor-1254 (1)	15769	15761	15206	14485	13811	AVRG		15006		5.66675
(2)	16897	16890	16596	15874	15366	AVRG		16324		4.15652
(3)	26656	26061	25894	24855	21884	AVRG		25070		7.56076
(4)	18605	18427	18175	17463	17191	AVRG		17972		3.42867
(5)	25350	24512	24438	23550	22986	AVRG		24167		3.79608
16 Endosulfan I	329310	324893	317155	317527	319169	AVRG		321611		1.64934
17 gamma-Chlordane	351116	348506	343105	347902	358847	AVRG		349895		1.65194
18 alpha-Chlordane	346324	334164	331336	335979	345322	AVRG		338625		2.00378

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 21-MAY-2008 18:50
End Cal Date : 22-DEC-2008 17:05
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/122208a.b/ECD5-B-8081-121108.m
Cal Date : 24-Dec-2008 16:54 hea01125

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
19 4,4'-DDE	331555	339786	341375	348566	354036	AVRG		343064		2.51051
20 Dieldrin	351074	348919	348186	350122	349858	AVRG		349632		0.31883
21 Aroclor-1260 (1)	17309	17591	16653	16606	17325	AVRG		17097		2.58044
(2)	20752	20193	19730	19930	20993	AVRG		20320		2.64539
(3)	12797	13478	13112	13266	13878	AVRG		13306		3.04050
(4)	13006	13698	13028	13129	13986	AVRG		13369		3.33430
(5)	30997	31412	31540	33072	35110	AVRG		32426		5.22286
22 Endrin	308235	308901	305642	304907	304921	AVRG		306521		0.62205
23 Toxaphene (1)	8361	10509	10311	9902	9755	AVRG		9768		8.63242
(2)	7038	5909	6141	6106	6085	AVRG		6256		7.13500
(3)	10029	9055	9105	9237	9172	AVRG		9320		4.32102
(4)	20429	17451	18036	17889	18472	AVRG		18456		6.29601
(5)	11546	9652	9112	10189	10552	AVRG		10210		9.05574
24 Endosulfan II	305527	302943	297439	299165	297306	AVRG		300476		1.20671
25 4,4'-DDD	284831	282120	284899	291450	296095	AVRG		287879		1.99245
26 4,4'-DDT	1246336	3446516	21144423	46914866	101971268	LINR	10.29834	258272		0.99793
27 Endrin aldehyde	231303	223227	215167	217110	215872	AVRG		220536		3.08771
28 Methoxychlor	89842	90629	99799	104662	108988	AVRG		98784		8.56240
29 Endosulfan sulfate	273116	262916	259069	260952	261202	AVRG		263451		2.11508
30 Aroclor-1268 (1)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(2)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(3)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(4)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(5)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 21-MAY-2008 18:50
End Cal Date : 22-DEC-2008 17:05
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/122208a.b/ECD5-B-8081-121108.m
Cal Date : 24-Dec-2008 16:54 hea01125

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
60 Aroclor-1262(1)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(2)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(3)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(4)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
(5)	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
31 Endrin ketone	295113	289511	290215	303134	312670	AVRG		298129		3.27995
51 Mirex	226897	222420	209514	205776	207767	AVRG		214475		4.43982
52 C-Nonachlor	402744	392712	375137	371128	371774	AVRG		382699		3.72414
53 O-Chlordane	315246	300016	286721	277601	277027	AVRG		291322		5.59249
54 T-Nonachlor	327352	309949	299754	293598	295711	AVRG		305272		4.53768
55 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
56 2,4-DDE	234700	214031	203010	194246	191865	AVRG		207571		8.42314
58 2,4-DDD	205826	190978	185569	180028	179148	AVRG		188310		5.78047
57 2,4-DDT	131922	158481	176329	182298	184590	AVRG		166724		13.18553
$ 1 4cmx	349951	335007	334930	335953	343645	AVRG		339897		1.96963
$ 32 Decachlorobiphenyl	301405	293080	285151	294217	306390	AVRG		296048		2.75748

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 21-MAY-2008 18:50
End Cal Date : 22-DEC-2008 17:05
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd5a.i/122208a.b/ECD5-B-8081-121108.m
Cal Date : 24-Dec-2008 16:54 hea01125

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/112408a.b/010f1001.d
Lab Smp Id: WPE081124-11TX1 Client Smp ID: TOXAPH01
Inj Date : 24-NOV-2008 14:07
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE081124-11TX1
Misc Info :
Comment :
Method : /chem/ecd5a.i/112408a.b/ECD5-F-8081-112408.m
Meth Date : 25-Nov-2008 08:43 jam00798 Quant Type: ESTD
Cal Date : 17-OCT-2008 21:31 Cal File: 033f3301.d
Als bottle: 10 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Tox.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
4.424	4.425	-0.001	824856	100.000	128	80.00- 120.00	100.00(M)
4.477	4.477	0.000	776145	100.000	131	72.05- 112.05	94.09
4.696	4.694	0.002	1375148	100.000	122	166.33- 206.33	166.71
4.902	4.901	0.001	1289215	100.000	114	175.38- 215.38	156.30
5.157	5.155	0.002	892204	100.000	104	137.93- 177.93	108.16
Average of Peak Amounts =					120		
$ 1 4cmx					CAS #: 877-09-8		
2.351	2.350	0.001	4937874	8.00000	14.9	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
5.969	5.967	0.002	3861439	8.00000	14.1	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/112408a.b/010f1001.d

Date : 24-NOV-2008 14:07

Client ID: TOXAPH01

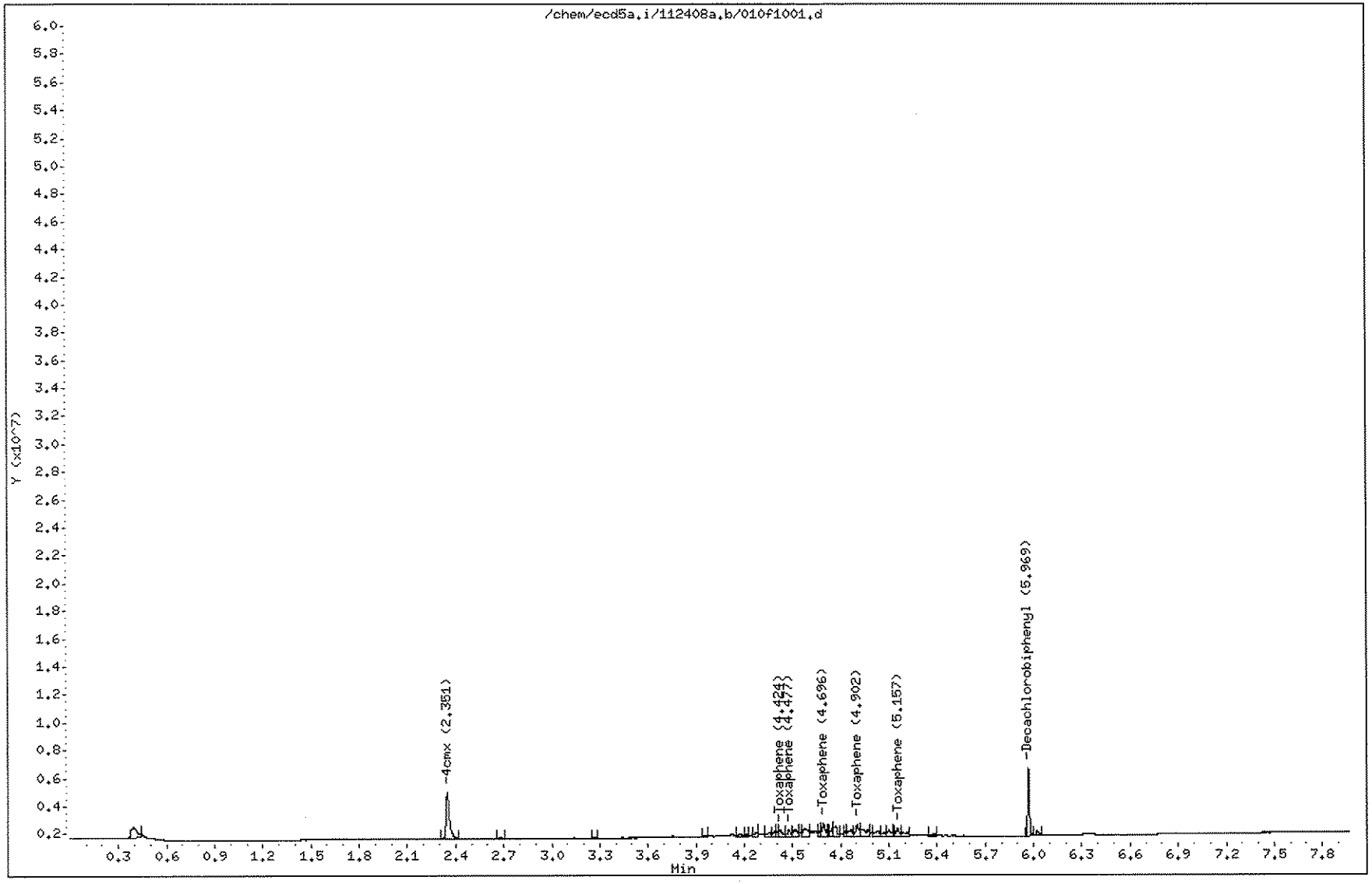
Sample Info: IWPE081124-11TX1

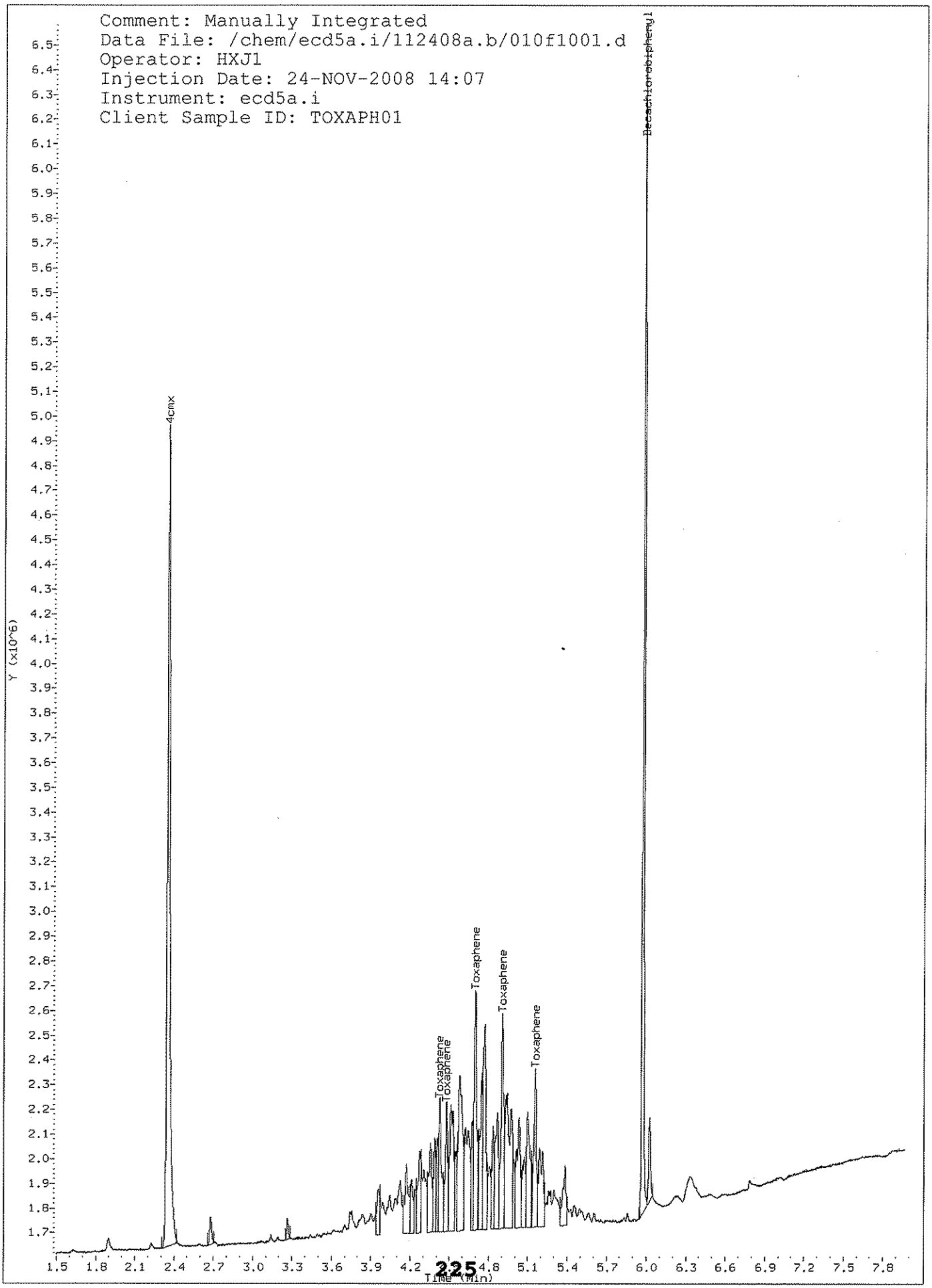
Column phase: CLP-1

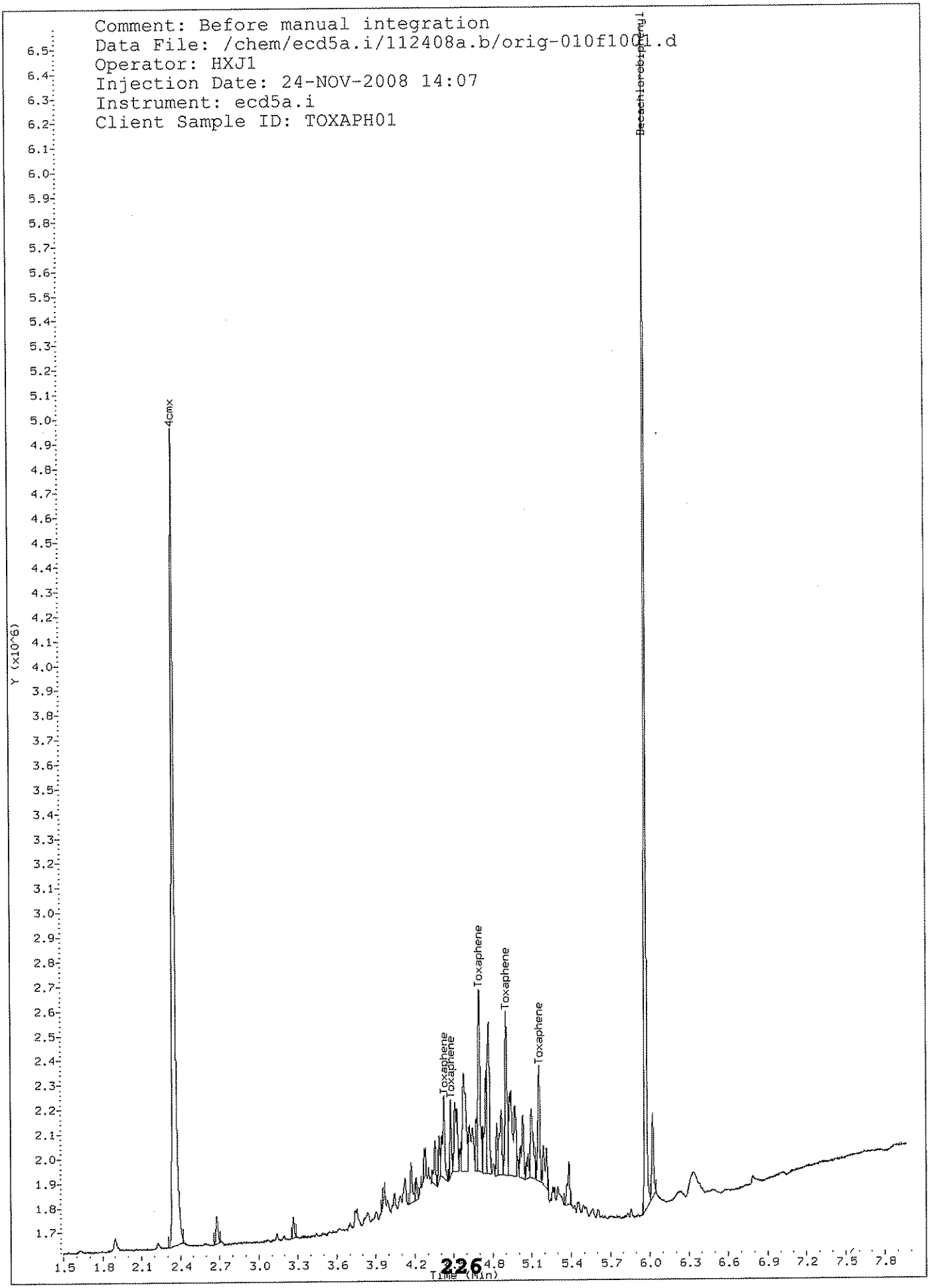
Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25




Comment: Manually Integrated
Data File: /chem/ecd5a.i/112408a.b/010f1001.d
Operator: HXJ1
Injection Date: 24-NOV-2008 14:07
Instrument: ecd5a.i
Client Sample ID: TOXAPH01
4cmx
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Decachlorobiphenyl
Y (x10^6)
Time (min)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Operator: HXJ1
Injection Date: 24-NOV-2008 14:07
Instrument: ecd5a.i
Client Sample ID: TOXAPH01
4cmx
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Decachlorobiphenyl
Y (x10^6)
Time (min)

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/112408a.b/010b1001.d
Lab Smp Id: WPE081124-11TX1 Client Smp ID: TOXAPH01
Inj Date : 24-NOV-2008 14:07
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE081124-11TX1
Misc Info :
Comment :
Method : /chem/ecd5a.i/112408a.b/ECD5-B-8081-112408.m
Meth Date : 25-Nov-2008 08:43 jam00798 Quant Type: ESTD
Cal Date : 17-OCT-2008 21:31 Cal File: 033b3301.d
Als bottle: 10 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Tox.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
4.507	4.507	0.000	836058	100.000	85.6	80.00- 120.00	100.00(M)
4.807	4.806	0.001	703807	100.000	112	40.77- 80.77	84.18
4.827	4.826	0.001	1002944	100.000	108	74.17- 114.17	119.96
4.886	4.885	0.001	2042932	100.000	111	162.40- 202.40	244.35
5.042	5.041	0.001	1154595	100.000	113	78.04- 118.04	138.10
		Average of Peak Amounts =			106		
$ 1 4cmx					CAS #: 877-09-8		
2.405	2.404	0.001	4636915	8.00000	13.9	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.248	6.247	0.001	3699593	8.00000	12.7	80.00- 120.00	100.00

QC Flag Legend

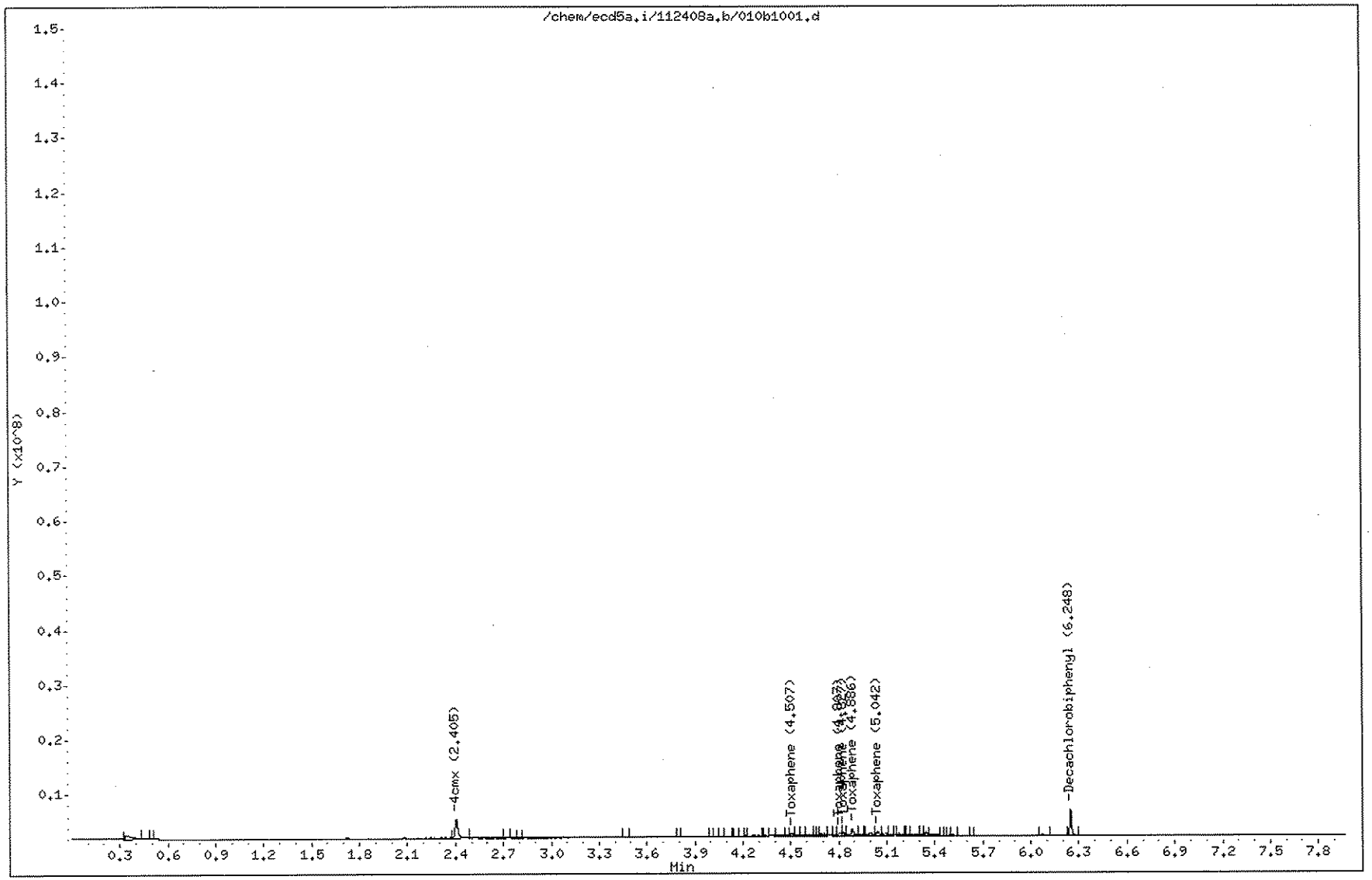
M - Compound response manually integrated.

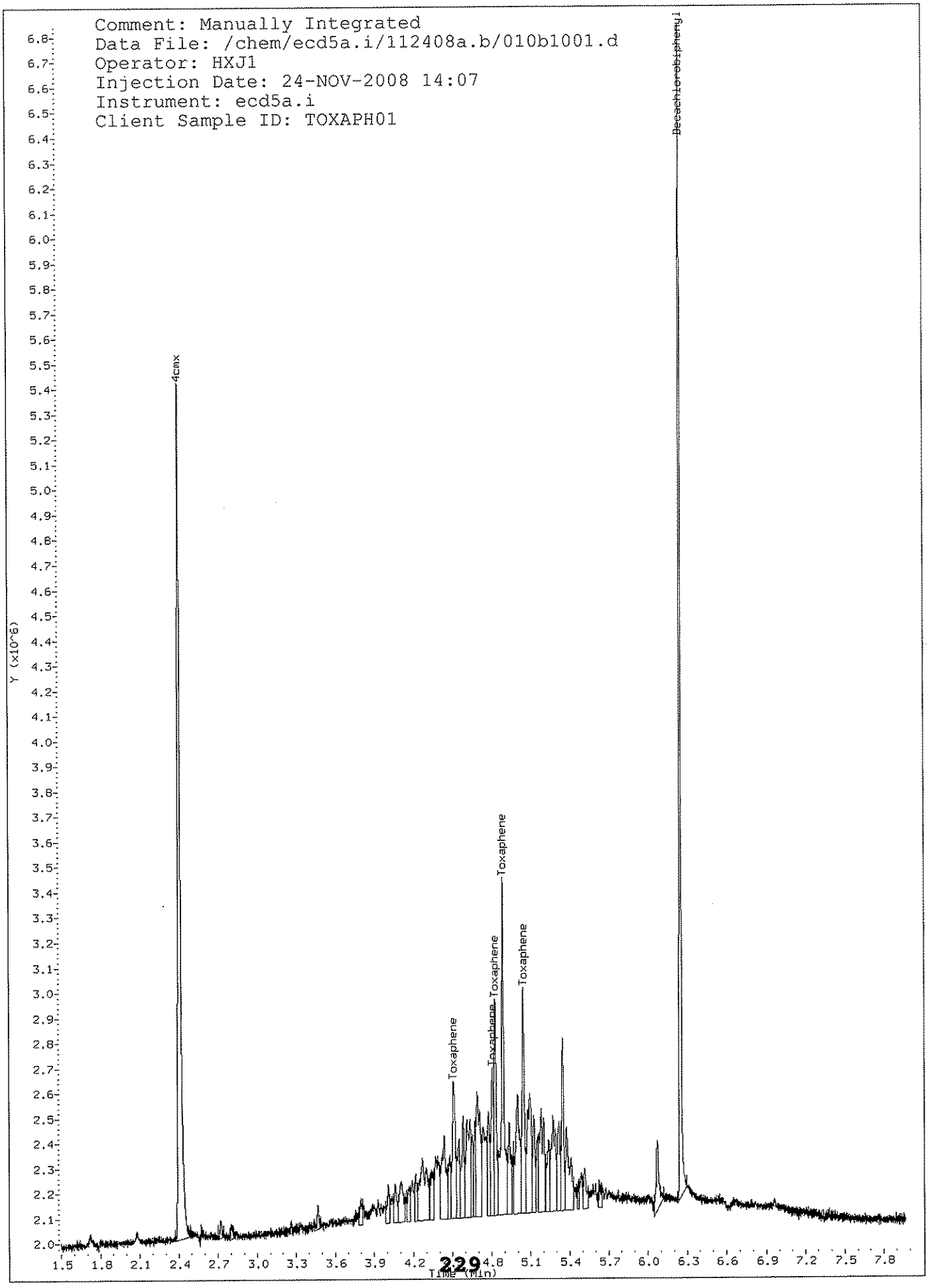
Data File: /chem/ecd5a.i/112408a.b/010b1001.d
Date : 24-NOV-2008 14:07
Client ID: TOXAPH01
Sample Info: IWPE081124-11TX1

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25

Column phase: CLP-2

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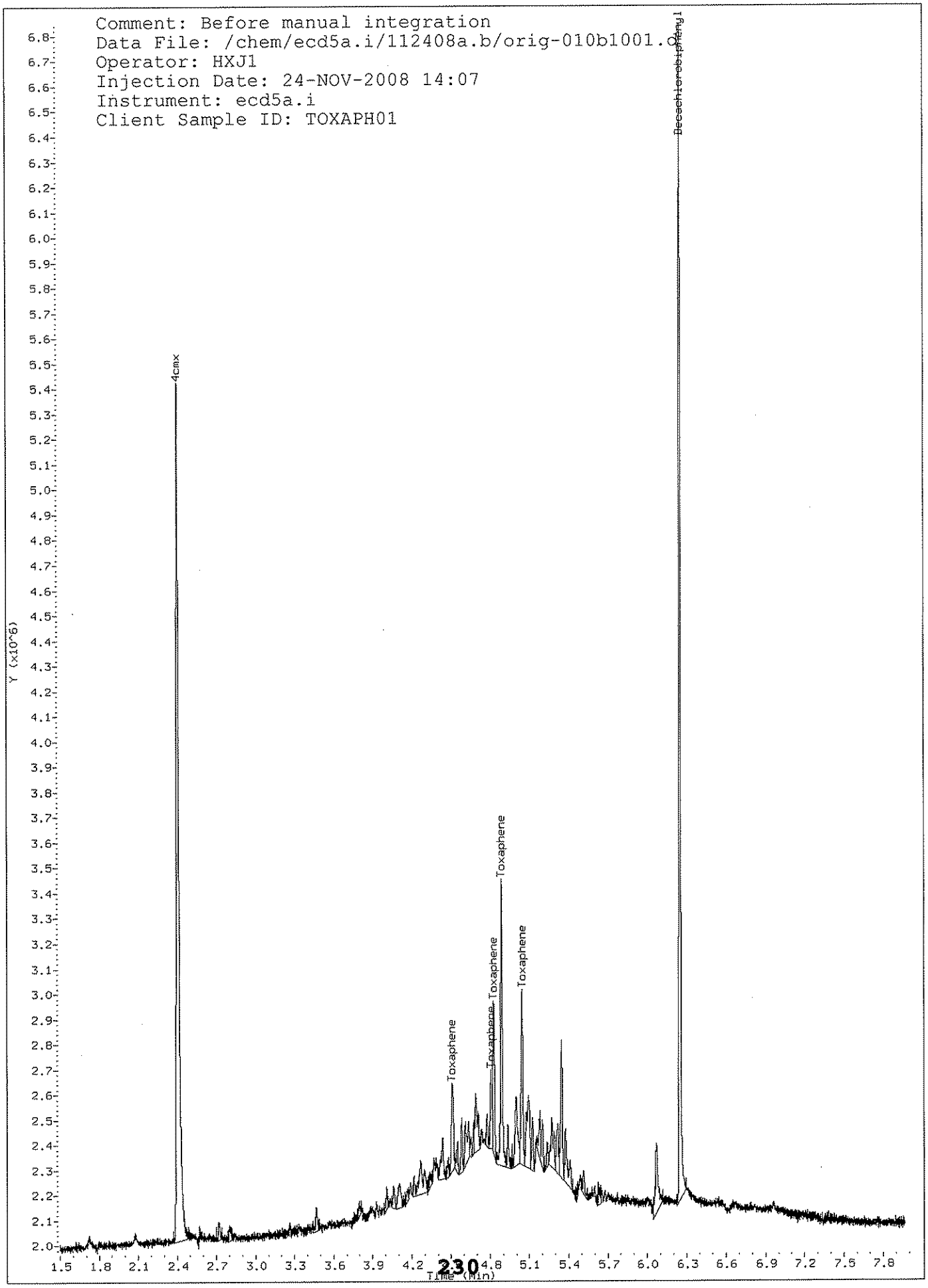
Data File: /chem/ecd5a.i/112408a.b/010b1001.d
Operator: HXJ1
Injection Date: 24-NOV-2008 14:07
Instrument: ecd5a.i
Client Sample ID: TOXAPH01
4cmx
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Decachlorobiphenyl
Y (x10^6)
Time (min)


Comment: Before manual integration
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Operator: HXJ1
Injection Date: 24-NOV-2008 14:07
Instrument: ecd5a.i
Client Sample ID: TOXAPH01
4cmx
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Decachlorobiphenyl
Y (x10^6)
TIME (Min)

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/112408a.b/011f1101.d
Lab Smp Id: WPE081124-12TX2 Client Smp ID: TOXAPH02
Inj Date : 24-NOV-2008 14:19
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE081124-12TX2
Misc Info :
Comment :
Method : /chem/ecd5a.i/112408a.b/ECD5-F-8081-112408.m
Meth Date : 25-Nov-2008 08:43 jam00798 Quant Type: ESTD
Cal Date : 17-OCT-2008 21:43 Cal File: 034f3401.d
Als bottle: 11 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Tox.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
4.425	4.425	0.000	3272853	500.000	509	80.00- 120.00	100.00(M)
4.477	4.477	0.000	2854733	500.000	482	72.05- 112.05	87.22
4.695	4.694	0.001	5321696	500.000	474	166.33- 206.33	162.60
4.902	4.901	0.001	5483371	500.000	484	175.38- 215.38	167.54
5.155	5.155	0.000	4062704	500.000	473	137.93- 177.93	124.13
Average of Peak Amounts =					484		
$ 1 4cmx					CAS #: 877-09-8		
2.350	2.350	0.000	21690295	20.0000	65.5	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
5.968	5.967	0.001	16711948	20.0000	61.1	80.00- 120.00	100.00

QC Flag Legend

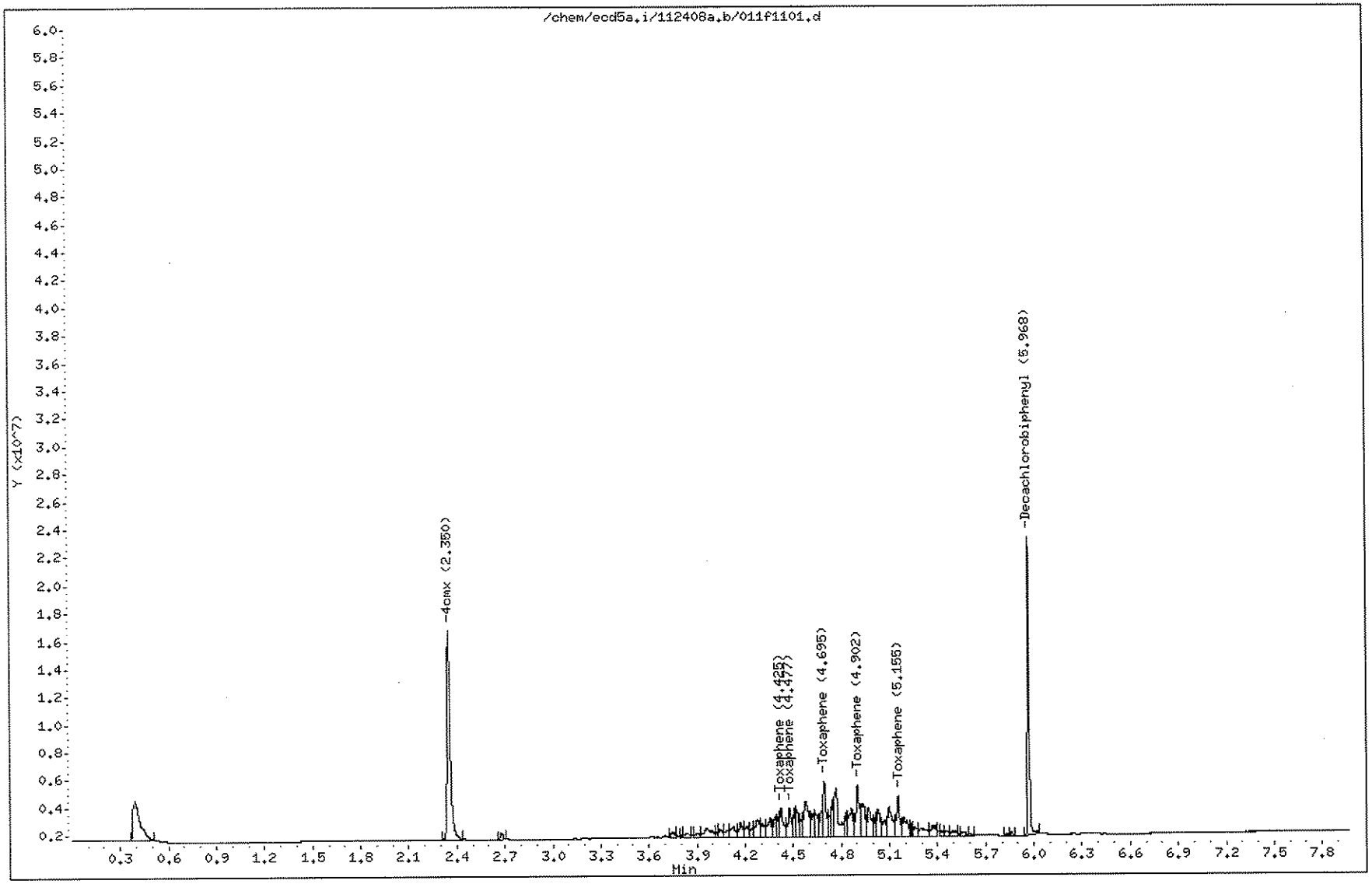
M - Compound response manually integrated.

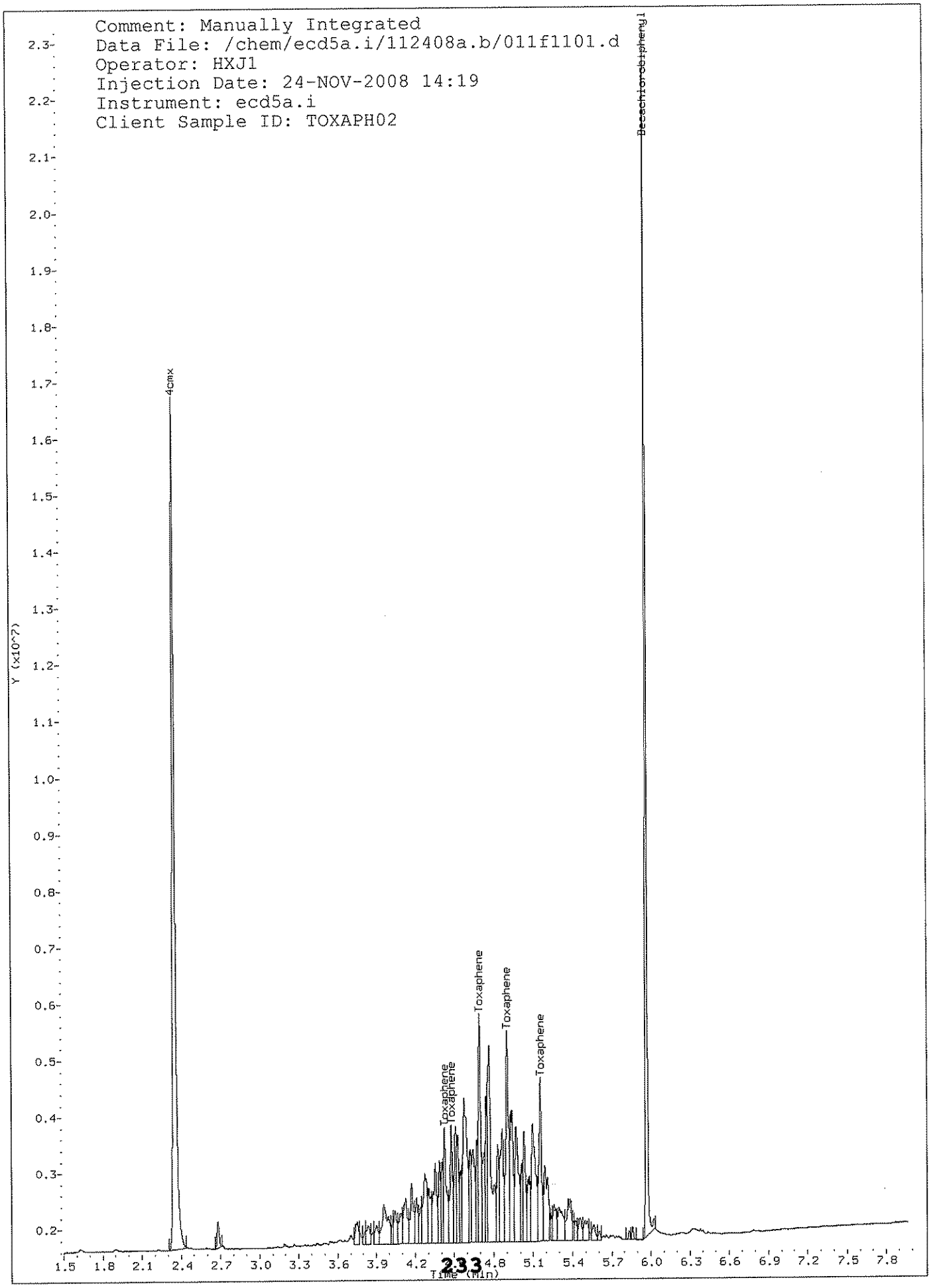
Data File: /chem/ecd5a.i/112408a.b/011f1101.d
Date : 24-NOV-2008 14:19
Client ID: TOXAPH02
Sample Info: IWPE081124-12TX2

Instrument: ecd5a.i

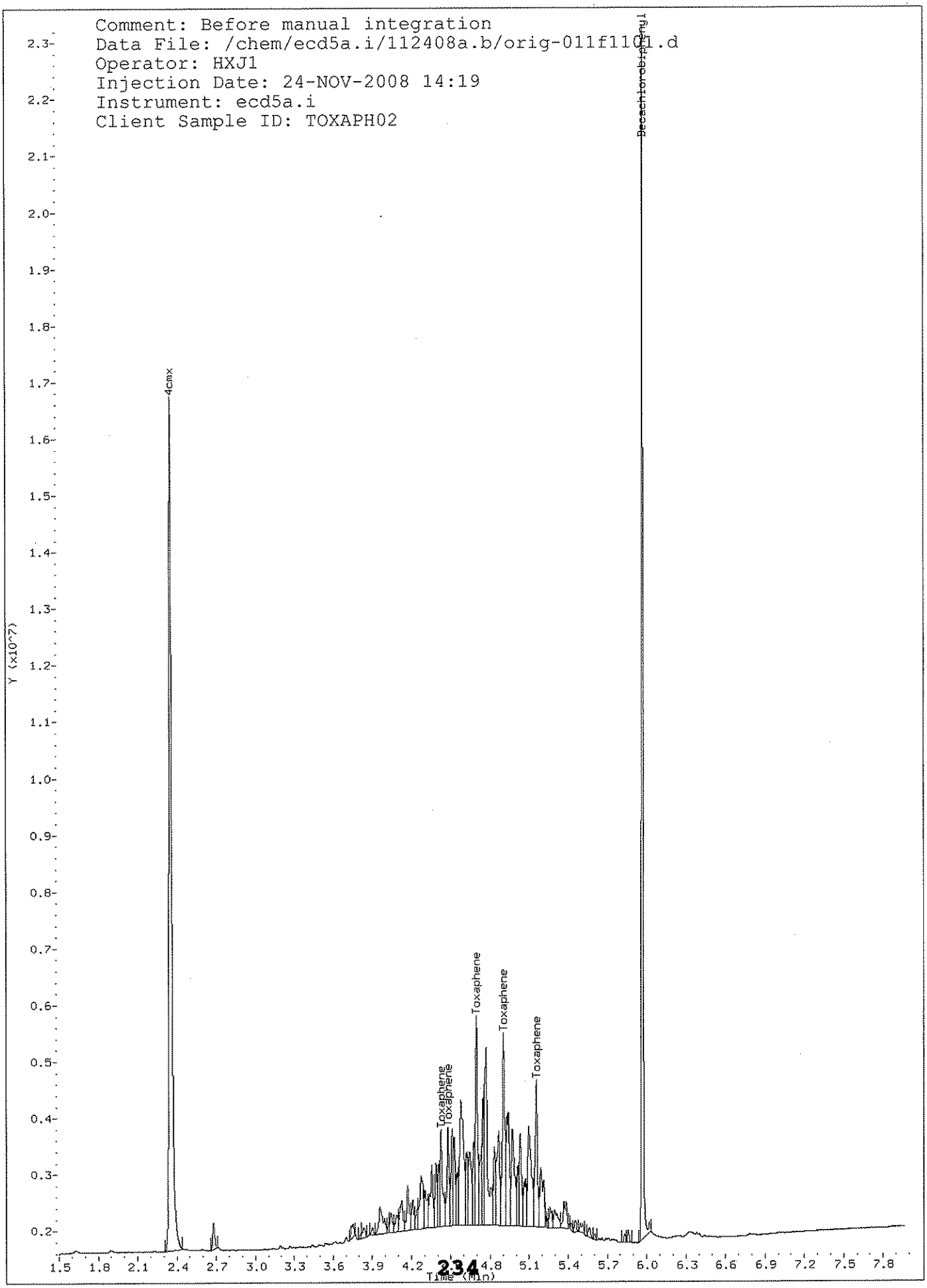
Operator: HXJ1
Column diameter: 0.25

Column phase: CLP-1




Comment: Manually Integrated
Data File: /chem/ecd5a.i/112408a.b/011f1101.d
Operator: HXJ1
Injection Date: 24-NOV-2008 14:19
Instrument: ecd5a.i
Client Sample ID: TOXAPH02
4cmx
Decachlorobiphenyl
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^7)
Time (min)

Comment: Before manual integration
Data File: /chem/ecd5a.i/112408a.b/orig-011f1101.d
Operator: HXJ1
Injection Date: 24-NOV-2008 14:19
Instrument: ecd5a.i
Client Sample ID: TOXAPH02



GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/112408a.b/011b1101.d
Lab Smp Id: WPE081124-12TX2 Client Smp ID: TOXAPH02
Inj Date : 24-NOV-2008 14:19
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE081124-12TX2
Misc Info :
Comment :
Method : /chem/ecd5a.i/112408a.b/ECD5-B-8081-112408.m
Meth Date : 25-Nov-2008 08:43 jam00798 Quant Type: ESTD
Cal Date : 17-OCT-2008 21:43 Cal File: 034b3401.d
Als bottle: 11 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Tox.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
4.509	4.507	0.002	5254741	500.000	538	80.00- 120.00	100.00(M)
4.806	4.806	0.000	2954585	500.000	472	40.77- 80.77	56.23
4.827	4.826	0.001	4527499	500.000	486	74.17- 114.17	86.16
4.886	4.885	0.001	8725624	500.000	473	162.40- 202.40	166.05
5.042	5.041	0.001	4825986	500.000	473	78.04- 118.04	91.84
Average of Peak Amounts =					488		
$ 1 4cmx					CAS #: 877-09-8		
2.405	2.404	0.001	21408515	20.0000	64.2	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.248	6.247	0.001	17222964	20.0000	59.1	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

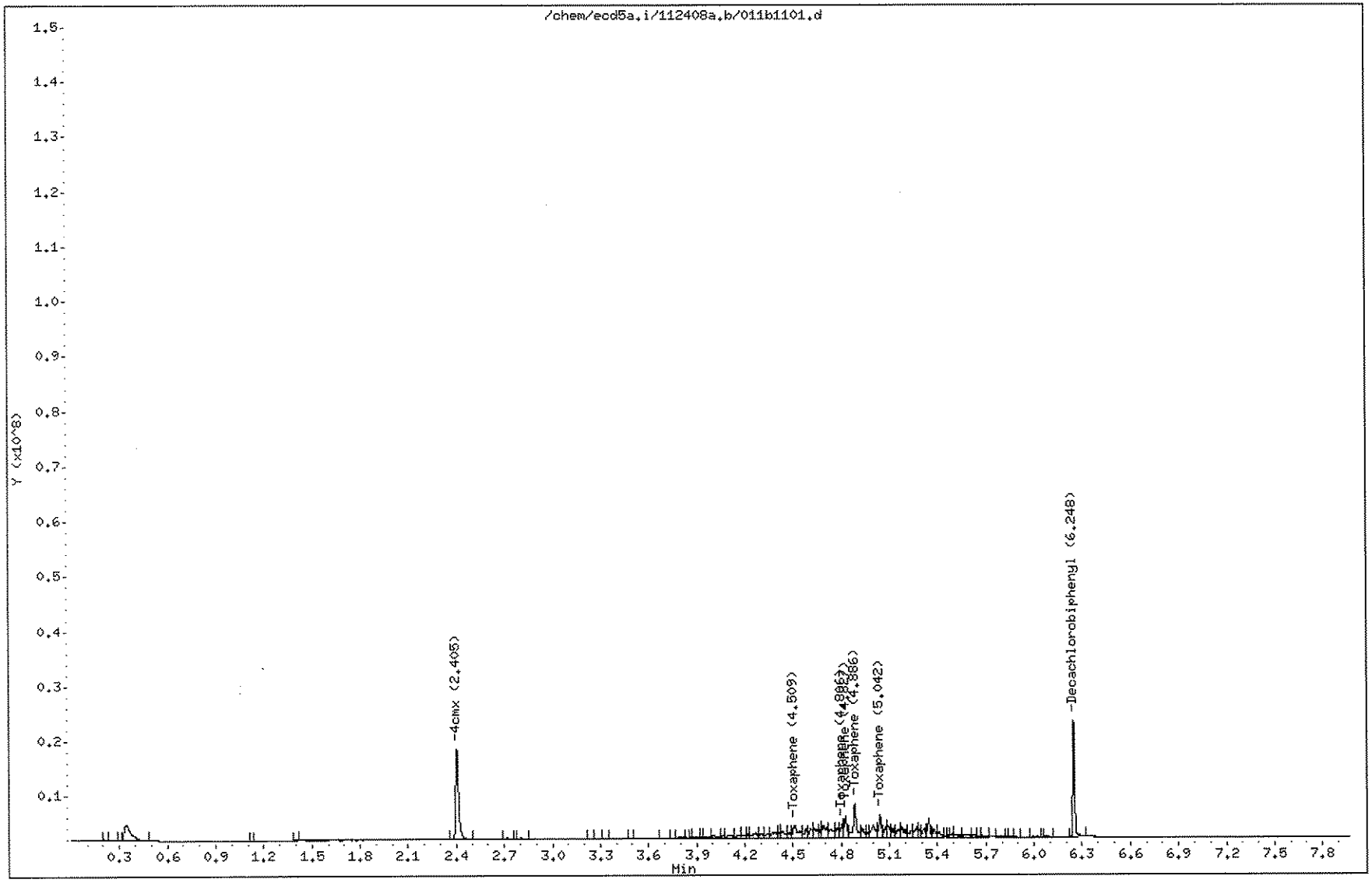
Data File: /chem/ecd5a.i/112408a.b/011b1101.d
Date : 24-NOV-2008 14:19
Client ID: TOXAPH02
Sample Info: IWPE081124-12TX2

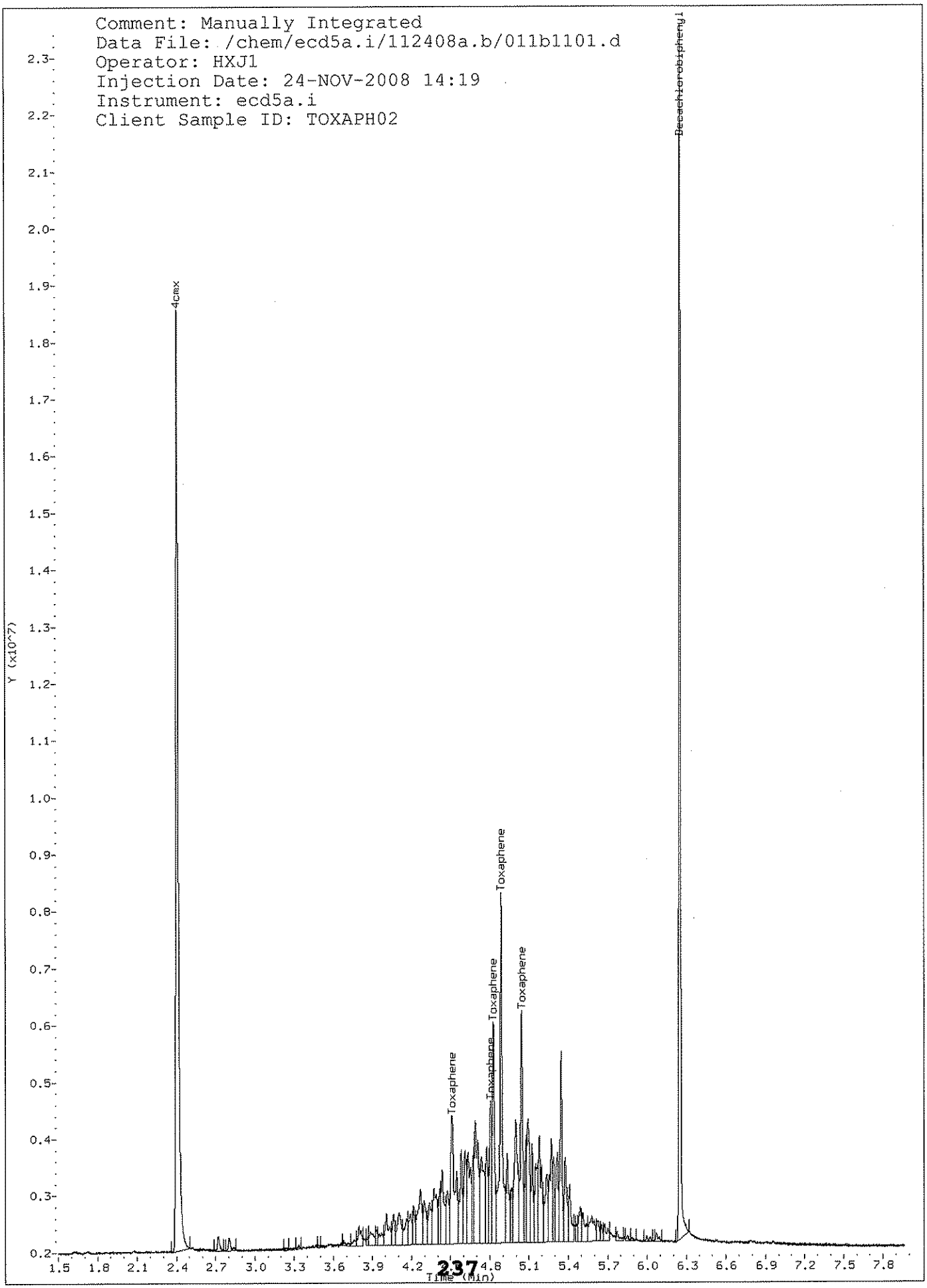
Instrument: ecd5a.i

Operator: HXJ1

Column phase: CLP-2

Column diameter: 0.25

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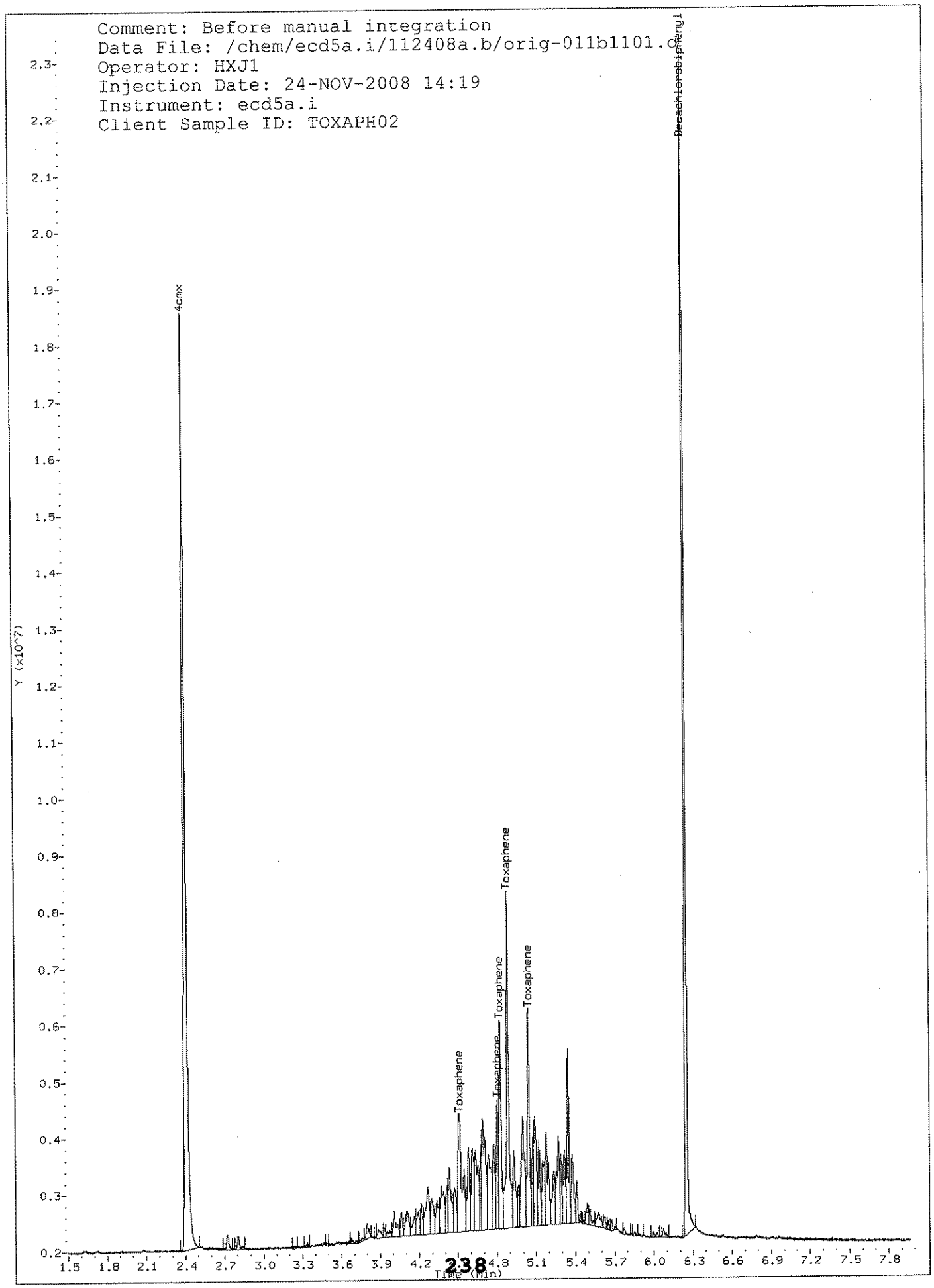
Operator: HXJ1
Injection Date: 24-NOV-2008 14:19
Instrument: ecd5a.i
Client Sample ID: TOXAPH02
4cmx
Decachlorobiphenyl
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^7)
Time (Min)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Operator: HXJ1
Injection Date: 24-NOV-2008 14:19
Instrument: ecd5a.i
Client Sample ID: TOXAPH02
4cmx
Decachlorobiphenyl
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^7)
Time (Min)

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/112408a.b/012f1201.d
Lab Smp Id: WPE081124-13TX3 Client Smp ID: TOXAPH03
Inj Date : 24-NOV-2008 14:31
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE081124-13TX3
Misc Info :
Comment :
Method : /chem/ecd5a.i/112408a.b/ECD5-F-8081-112408.m
Meth Date : 25-Nov-2008 08:43 jam00798 Quant Type: ESTD
Cal Date : 17-OCT-2008 21:55 Cal File: 035f3501.d
Als bottle: 12 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Tox.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
4.425	4.425	0.000	6071148	1000.00	944	80.00- 120.00	100.00(M)
4.478	4.477	0.001	5629479	1000.00	951	72.05- 112.05	92.73
4.695	4.694	0.001	10617623	1000.00	946	166.33- 206.33	174.89
4.901	4.901	0.000	10802033	1000.00	954	175.38- 215.38	177.92
5.155	5.155	0.000	8491826	1000.00	988	137.93- 177.93	139.87
Average of Peak Amounts =					957		
$ 1 4cmx					CAS #: 877-09-8		
2.351	2.350	0.001	43569008	100.000	132	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
5.968	5.967	0.001	32892801	100.000	120	80.00- 120.00	100.00

QC Flag Legend

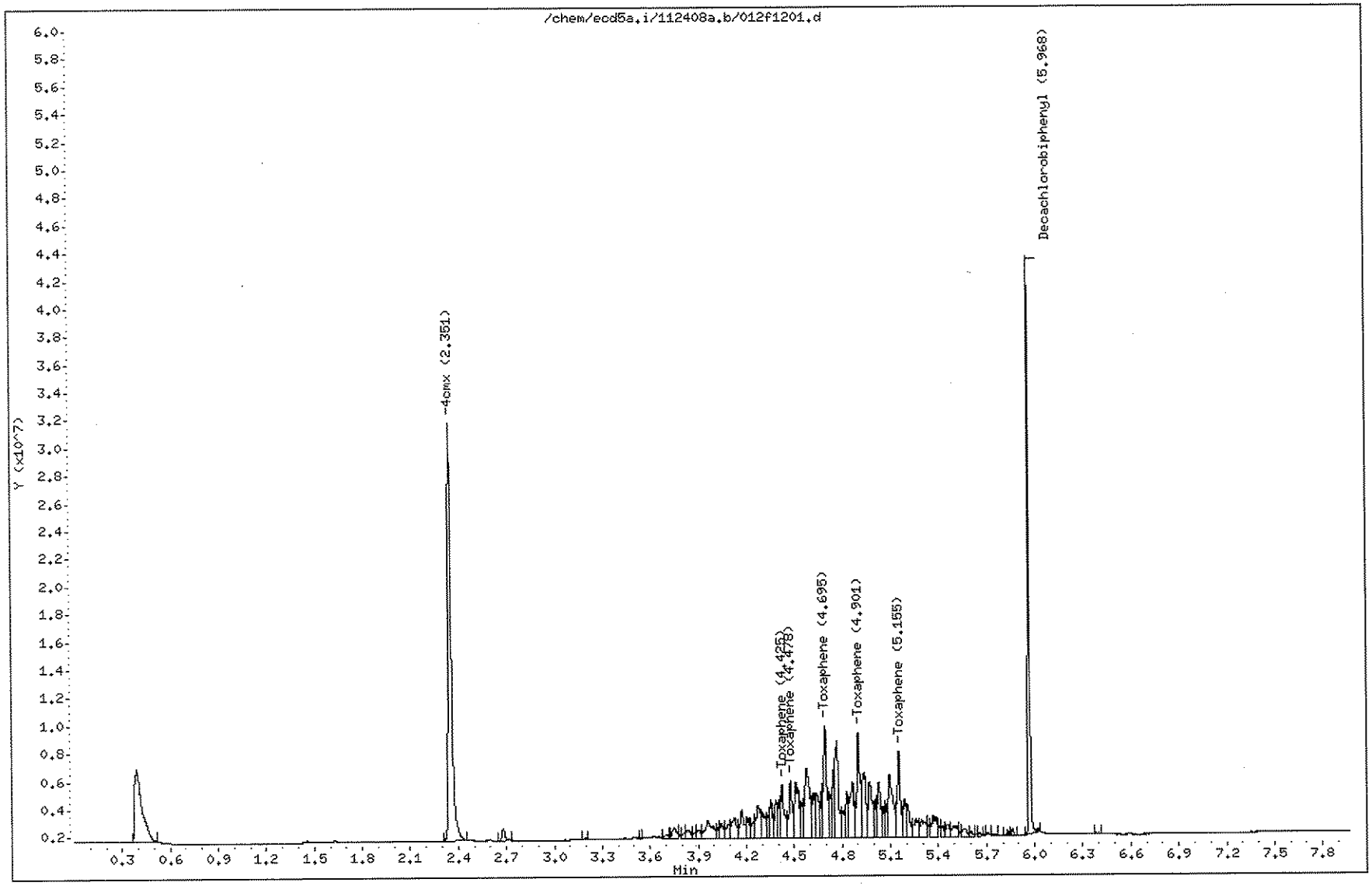
M - Compound response manually integrated.

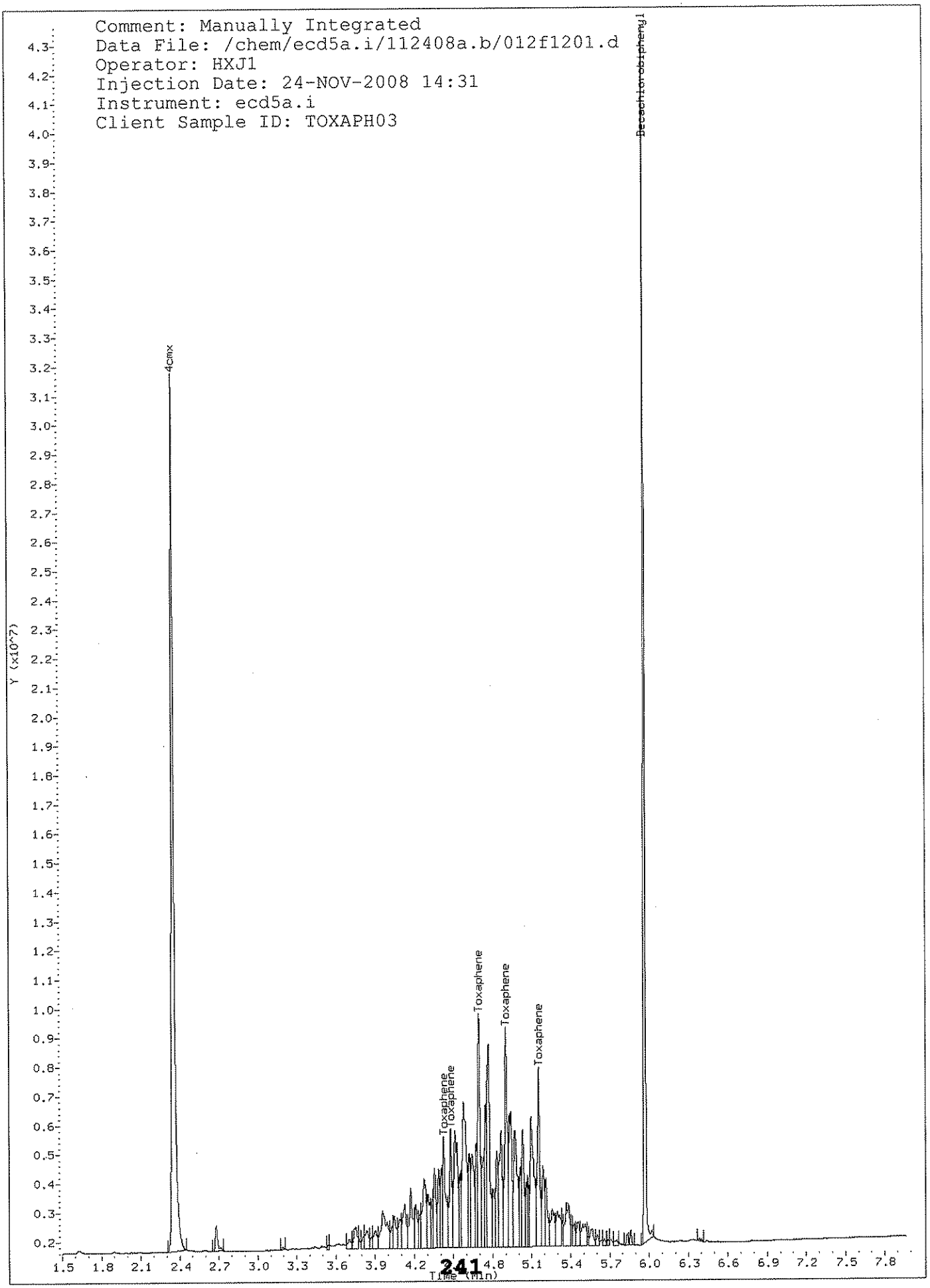
Data File: /chem/ecd5a.i/112408a.b/012f1201.d
Date : 24-NOV-2008 14:31
Client ID: TOXAPH03
Sample Info: IWPE081124-13TX3

Instrument: ecd5a.i

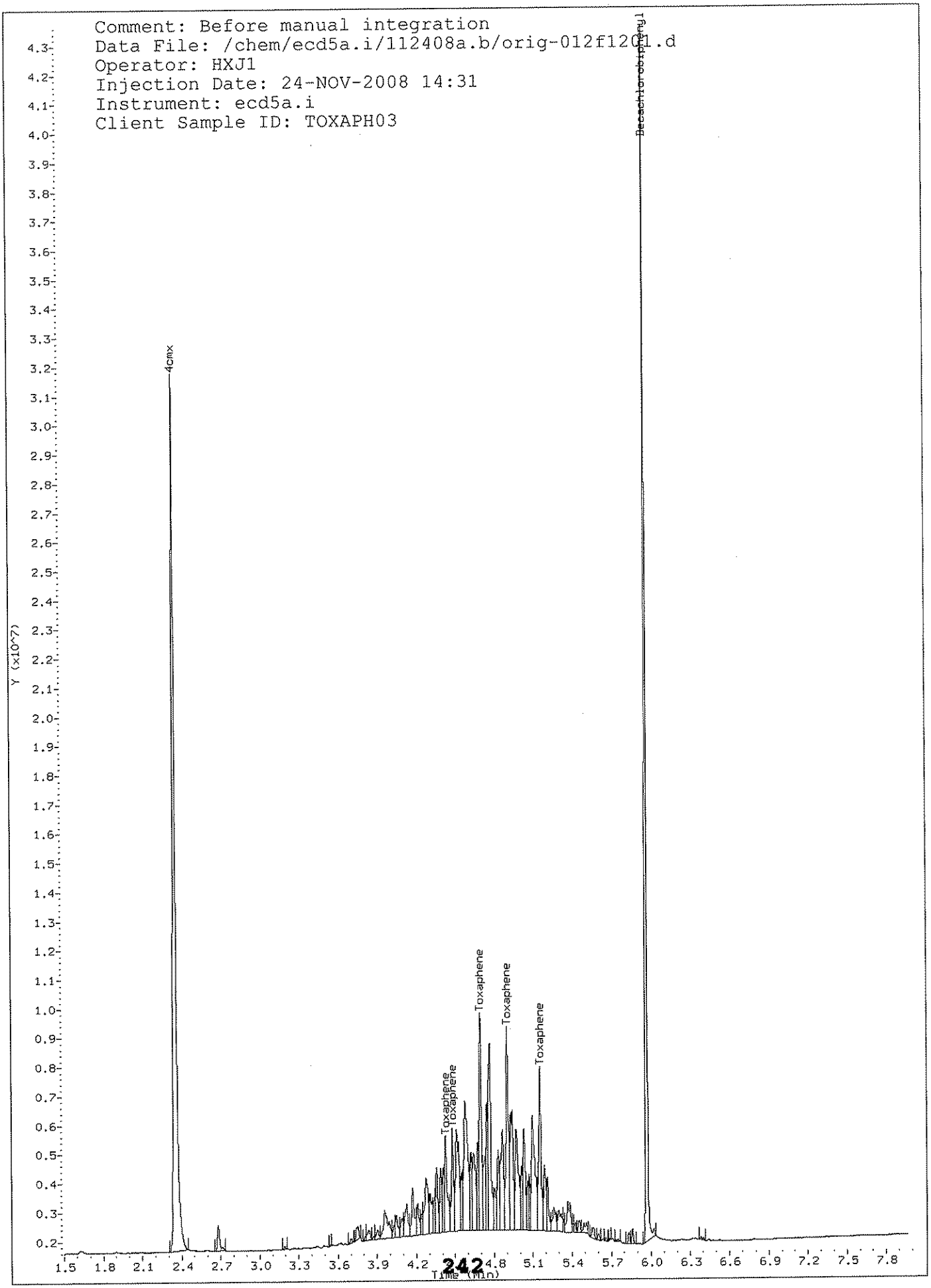
Operator: HXJ1
Column diameter: 0.25

Column phase: CLP-1




Comment: Manually Integrated
Data File: /chem/ecd5a.i/112408a.b/012f1201.d
Operator: HXJ1
Injection Date: 24-NOV-2008 14:31
Instrument: ecd5a.i
Client Sample ID: TOXAPH03
4cmx
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Decachlorobiphenyl
Y (x10^7)
Time (min)

Comment: Before manual integration
Data File: /chem/ecd5a.i/112408a.b/orig-012f1201.d
Operator: HXJ1
Injection Date: 24-NOV-2008 14:31
Instrument: ecd5a.i
Client Sample ID: TOXAPH03



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CLP-2

Data file : /chem/ecd5a.i/112408a.b/012b1201.d
Lab Smp Id: WPE081124-13TX3 Client Smp ID: TOXAPH03
Inj Date : 24-NOV-2008 14:31
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE081124-13TX3
Misc Info :
Comment :
Method : /chem/ecd5a.i/112408a.b/ECD5-B-8081-112408.m
Meth Date : 25-Nov-2008 08:43 jam00798 Quant Type: ESTD
Cal Date : 17-OCT-2008 21:55 Cal File: 035b3501.d
Als bottle: 12 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Tox.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
4.508	4.507	0.001	10311246	1000.00	1060	80.00- 120.00	100.00(M)
4.806	4.806	0.000	6141403	1000.00	982	40.77- 80.77	59.56
4.826	4.826	0.000	9104936	1000.00	977	74.17- 114.17	88.30
4.885	4.885	0.000	18036479	1000.00	977	162.40- 202.40	174.92
5.043	5.041	0.002	9111811	1000.00	892	78.04- 118.04	88.37
Average of Peak Amounts =					977		
$ 1 4cmx					CAS #: 877-09-8		
2.405	2.404	0.001	43296540	100.000	130	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.248	6.247	0.001	36843483	100.000	126	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/112408a.b/012b1201.d

Date : 24-NOV-2008 14:31

Client ID: TOXAPH03

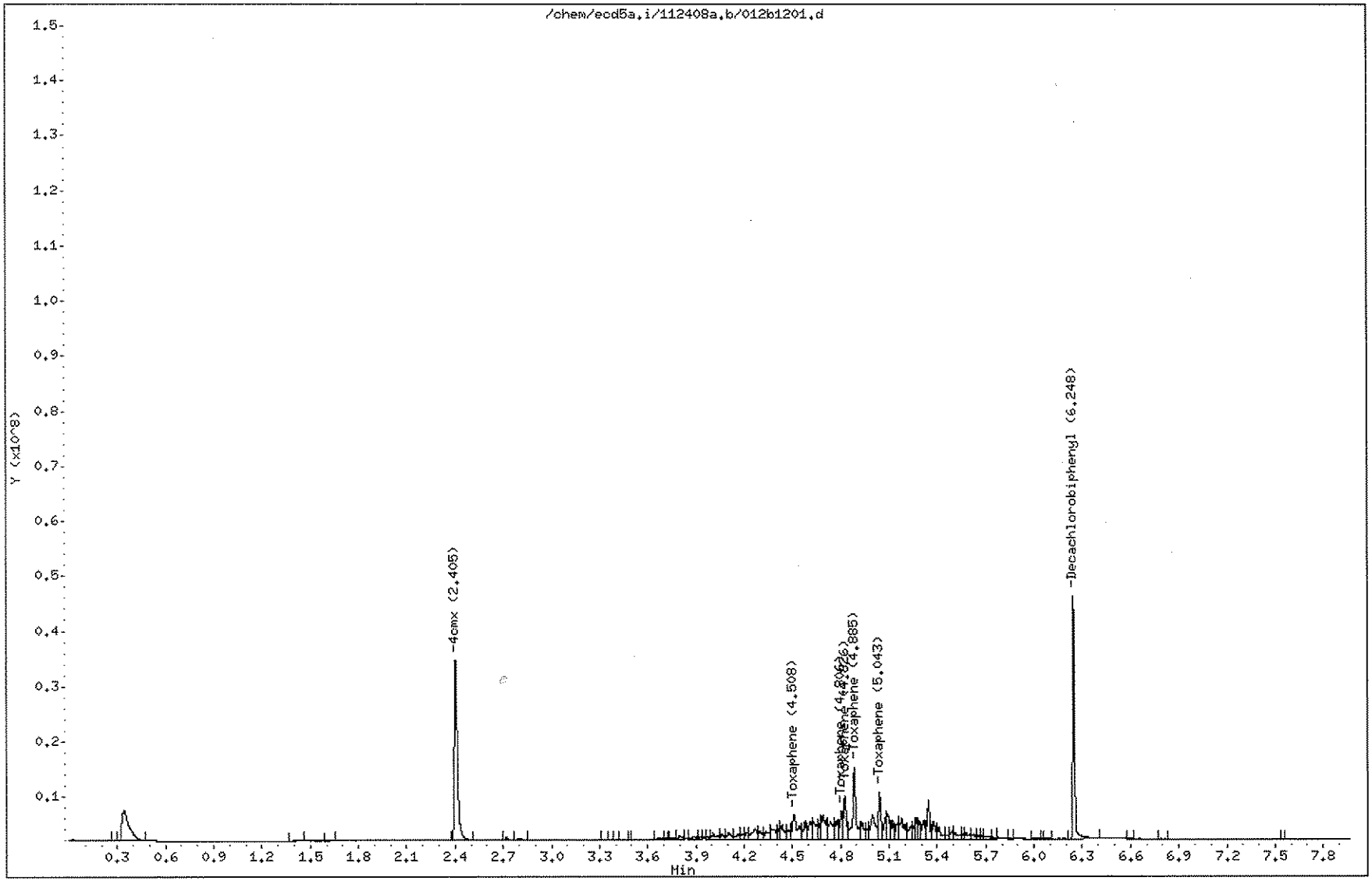
Sample Info: IWPE081124-13TX3

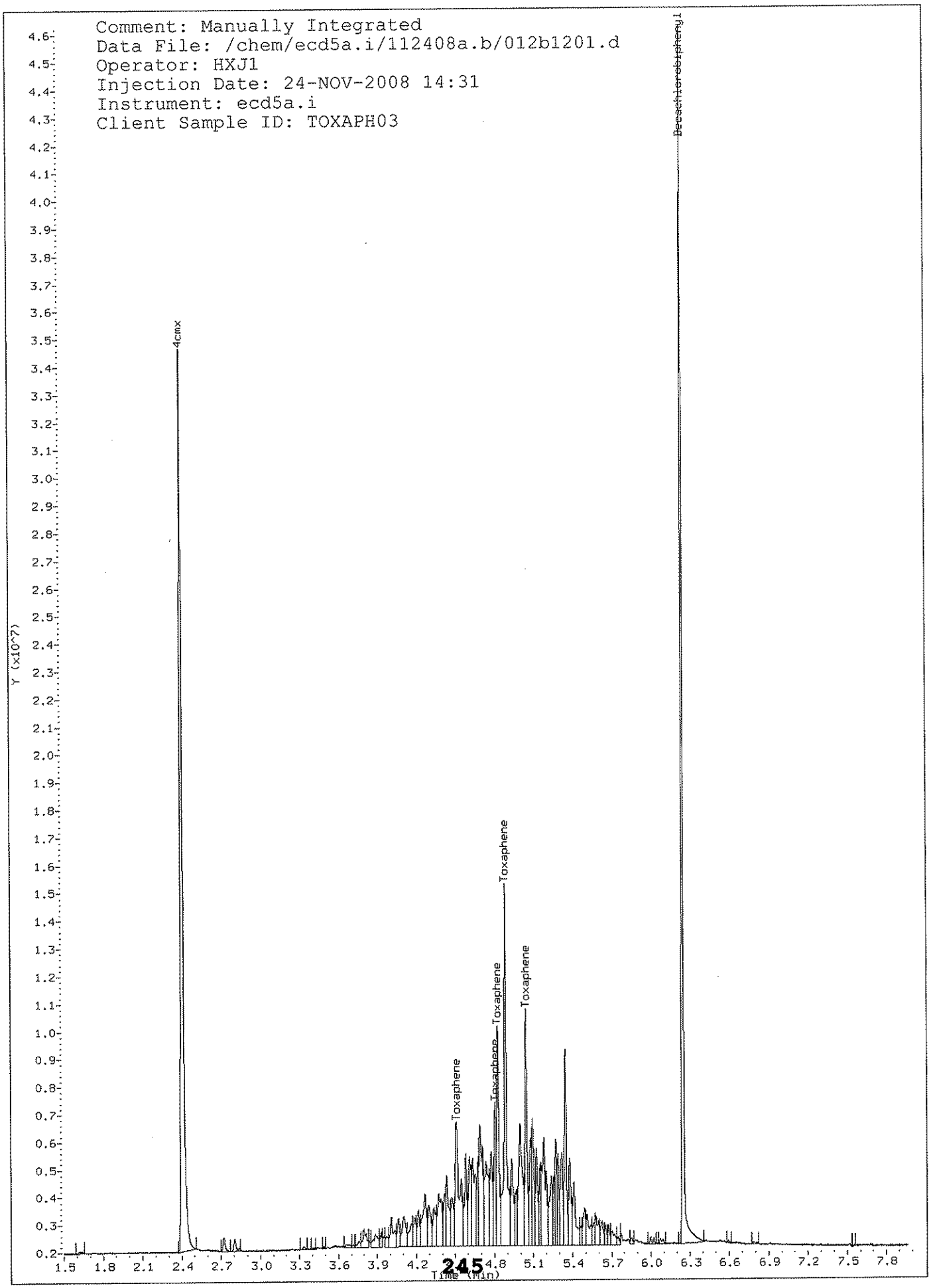
Column phase: CLP-2

Instrument: ecd5a.i

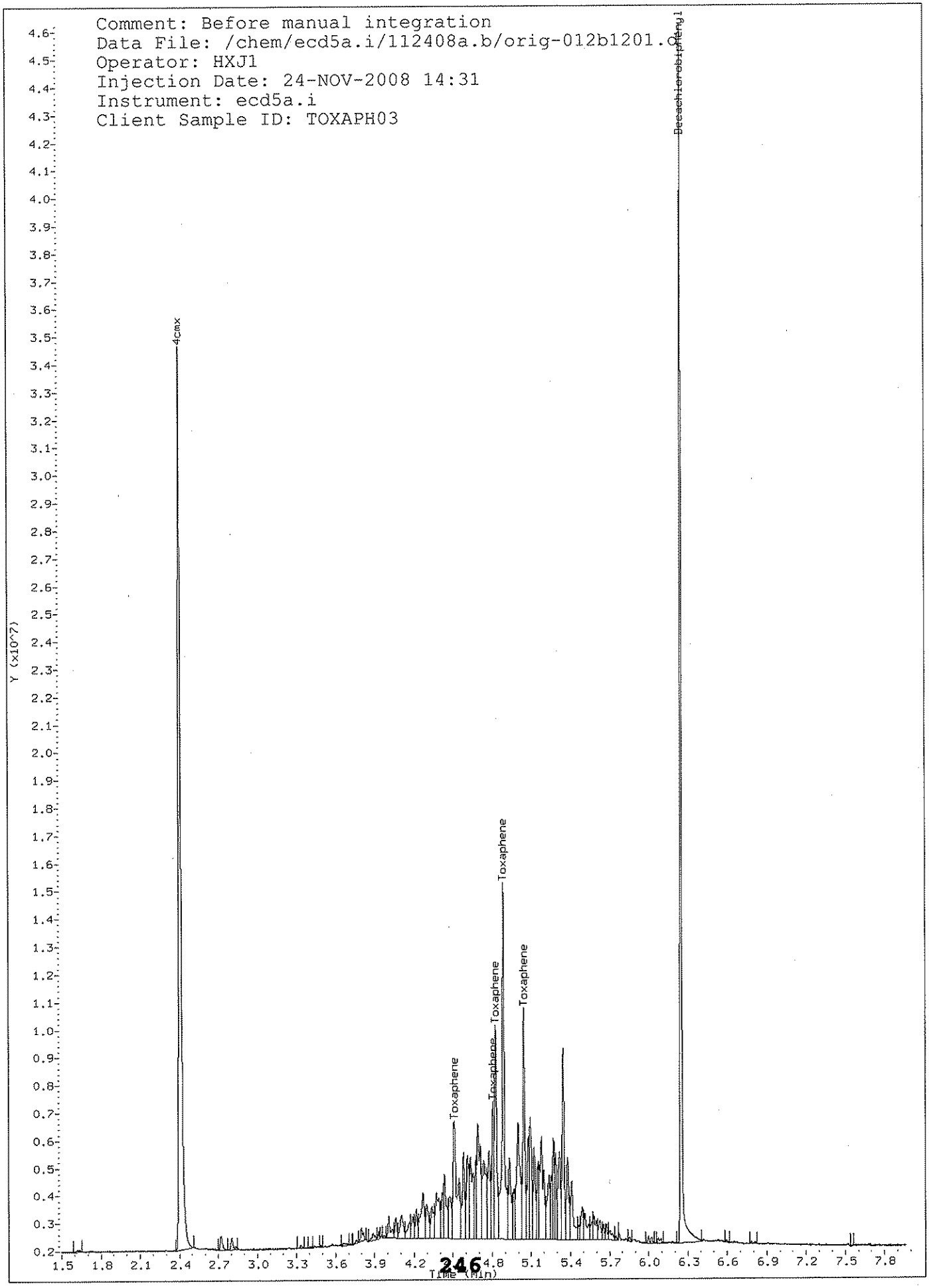
Operator: HXJ1

Column diameter: 0.25




Comment: Manually Integrated
Data File: /chem/ecd5a.i/112408a.b/012b1201.d
Operator: HXJ1
Injection Date: 24-NOV-2008 14:31
Instrument: ecd5a.i
Client Sample ID: TOXAPH03
4cmx
Decachlorobiphenyl
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^7)
Time (min)

Comment: Before manual integration
Data File: /chem/ecd5a.i/112408a.b/orig-012b1201.c
Operator: HXJ1
Injection Date: 24-NOV-2008 14:31
Instrument: ecd5a.i
Client Sample ID: TOXAPH03



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CLP-1

Data file : /chem/ecd5a.i/112408a.b/013f1301.d
Lab Smp Id: WPE081124-14TX4 Client Smp ID: TOXAPH04
Inj Date : 24-NOV-2008 14:43
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE081124-14TX4
Misc Info :
Comment :
Method : /chem/ecd5a.i/112408a.b/ECD5-F-8081-112408.m
Meth Date : 25-Nov-2008 08:43 jam00798 Quant Type: ESTD
Cal Date : 16-JUL-2008 00:40 Cal File: 034f3401.d
Als bottle: 13 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Tox.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
4.425	4.425	0.000	11283403	2000.00	1750	80.00- 120.00	100.00(M)
4.477	4.477	0.000	10457166	2000.00	1770	72.05- 112.05	92.68
4.693	4.694	-0.001	20898921	2000.00	1860	166.33- 206.33	185.22
4.901	4.901	0.000	21644785	2000.00	1910	175.38- 215.38	191.83
5.154	5.155	-0.001	17456640	2000.00	2030	137.93- 177.93	154.71
Average of Peak Amounts =					1.87e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.351	2.350	0.001	85603867	200.000	258	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
5.967	5.967	0.000	62564060	200.000	229	80.00- 120.00	100.00

QC Flag Legend

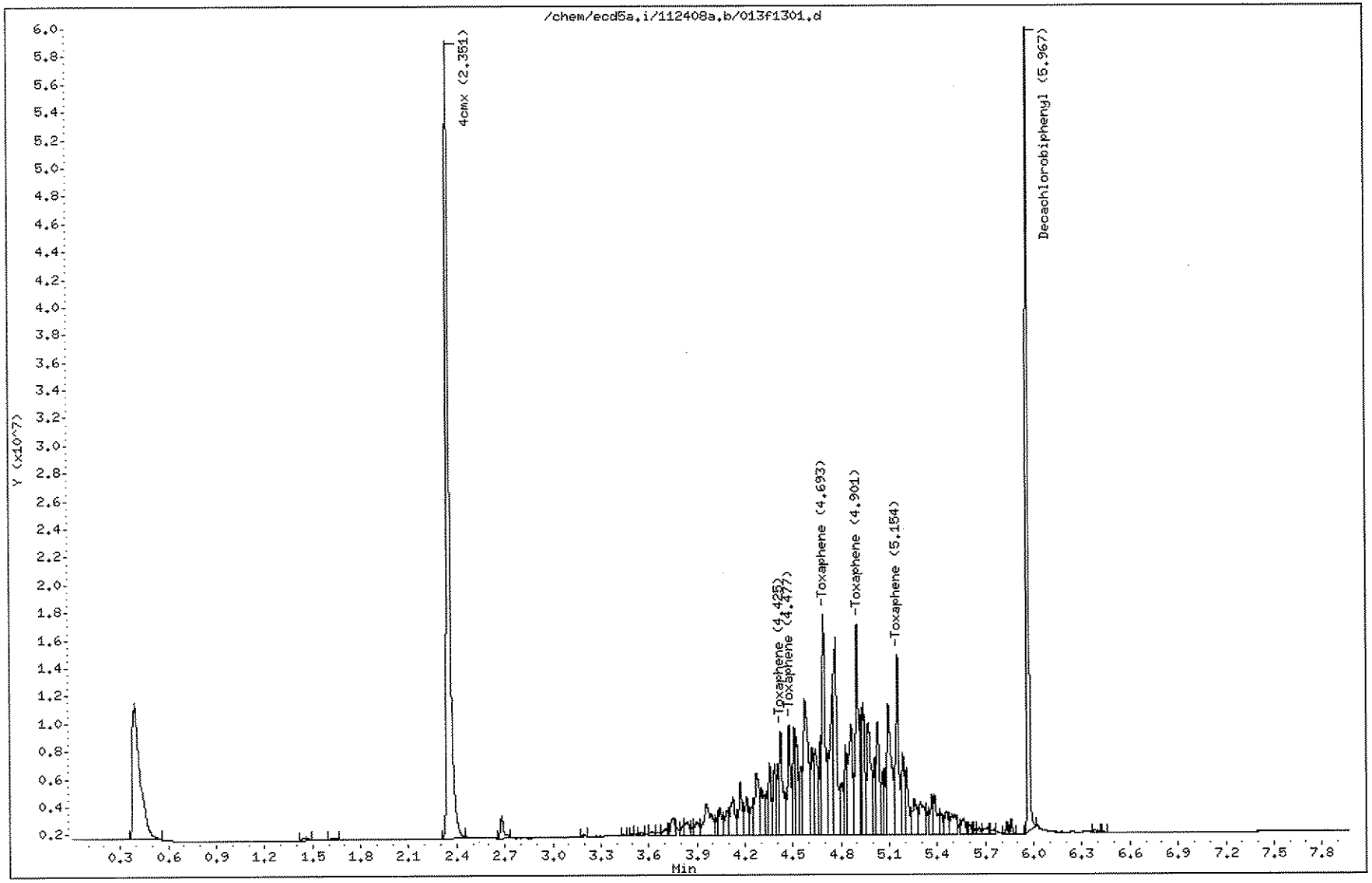
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/112408a.b/013f1301.d
Date : 24-NOV-2008 14:43
Client ID: TOXAPH04
Sample Info: IWPE081124-14TX4

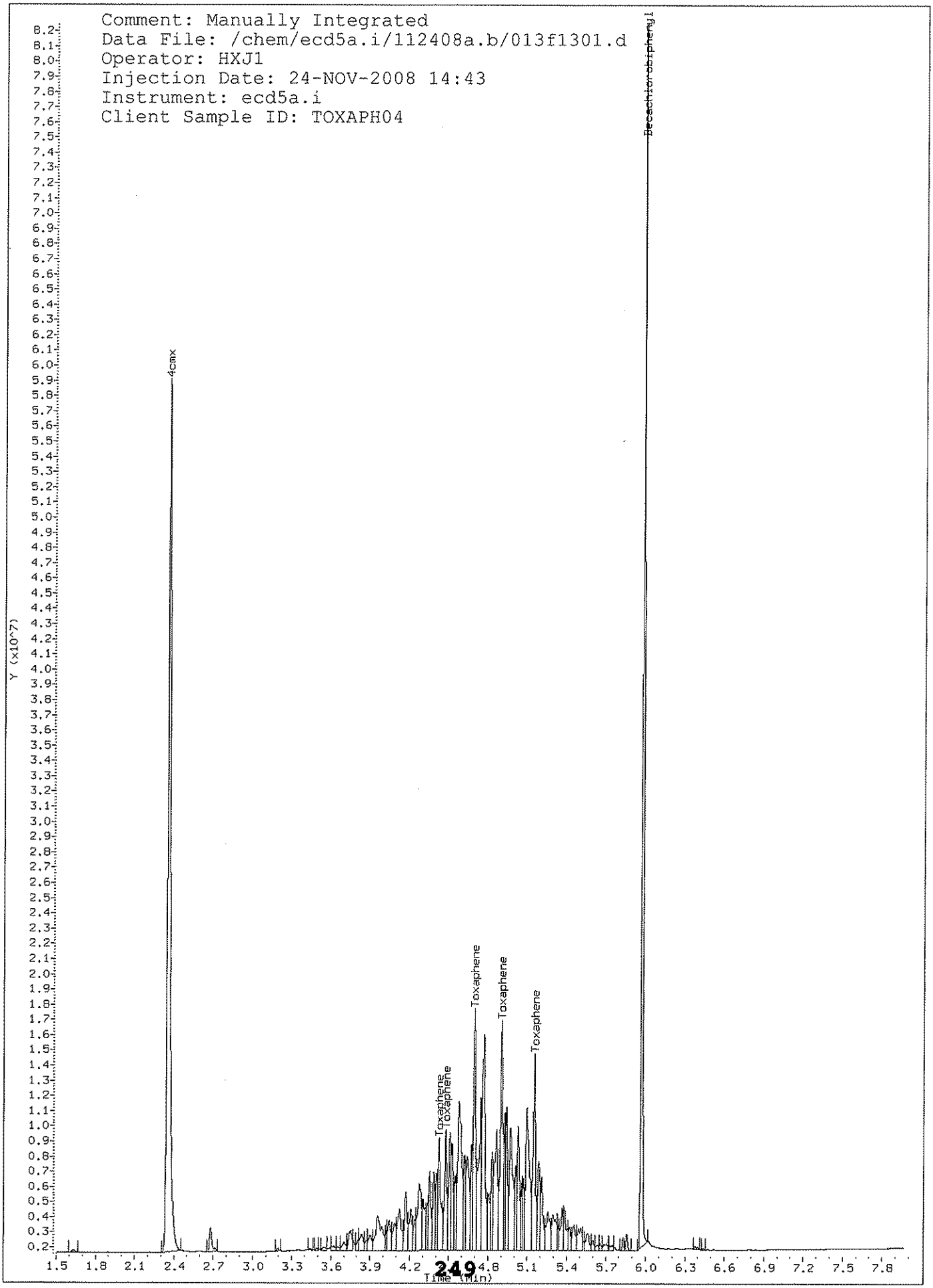
Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25

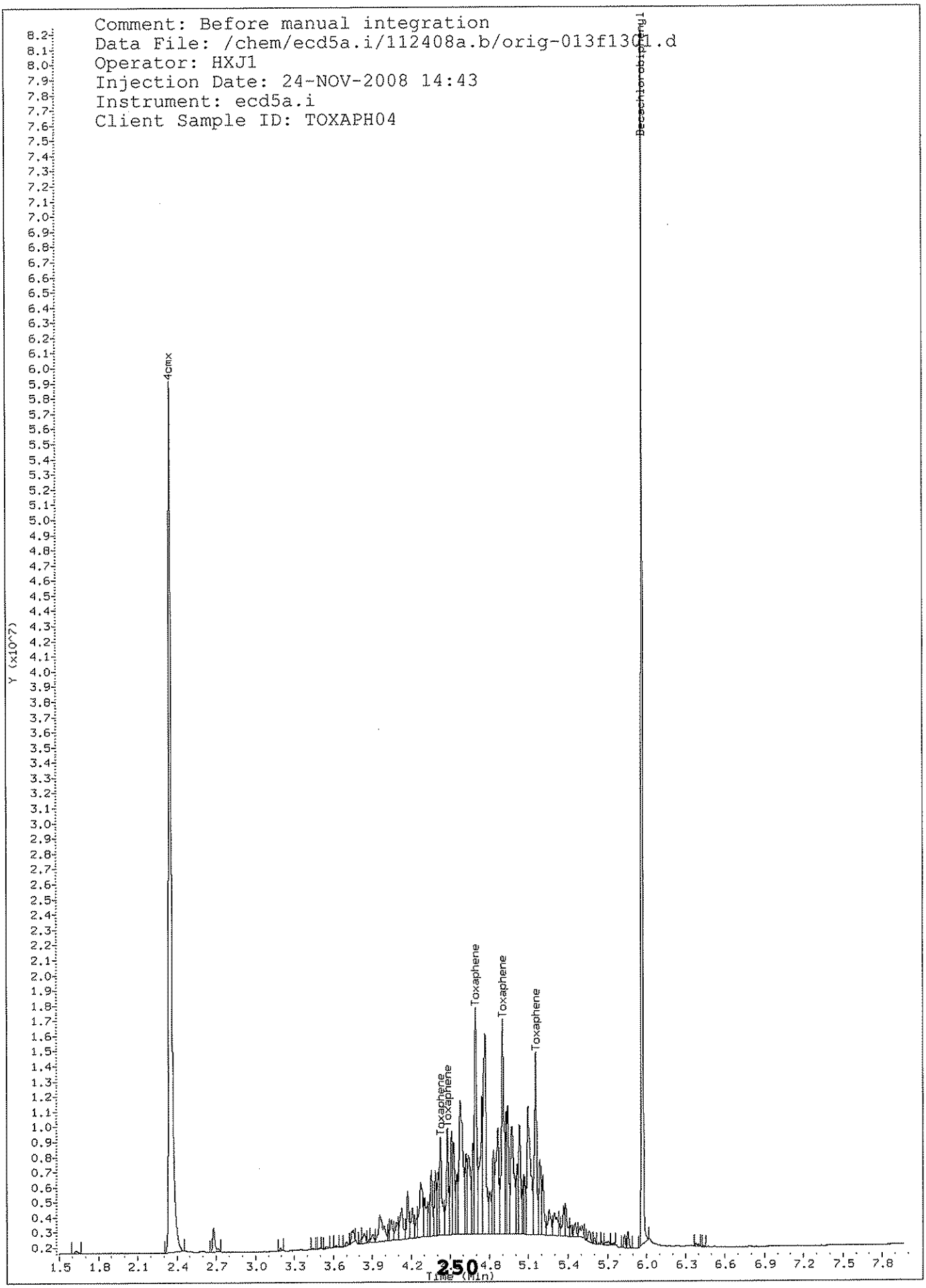
Column phase: CLP-1



Comment: Manually Integrated
Data File: /chem/ecd5a.i/112408a.b/013f1301.d
Operator: HXJ1
Injection Date: 24-NOV-2008 14:43
Instrument: ecd5a.i
Client Sample ID: TOXAPH04



Comment: Before manual integration
Data File: /chem/ecd5a.i/112408a.b/orig-013f1301.d
Operator: HXJ1
Injection Date: 24-NOV-2008 14:43
Instrument: ecd5a.i
Client Sample ID: TOXAPH04



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CLP-2

Data file : /chem/ecd5a.i/112408a.b/013b1301.d
Lab Smp Id: WPE081124-14TX4 Client Smp ID: TOXAPH04
Inj Date : 24-NOV-2008 14:43
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE081124-14TX4
Misc Info :
Comment :
Method : /chem/ecd5a.i/112408a.b/ECD5-B-8081-112408.m
Meth Date : 25-Nov-2008 08:43 jam00798 Quant Type: ESTD
Cal Date : 16-JUL-2008 00:40 Cal File: 034b3401.d
Als bottle: 13 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Tox.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
4.506	4.507	-0.001	19803738	2000.00	2030	80.00- 120.00	100.00(M)
4.806	4.806	0.000	12212177	2000.00	1950	40.77- 80.77	61.67
4.826	4.826	0.000	18473816	2000.00	1980	74.17- 114.17	93.28
4.885	4.885	0.000	35778918	2000.00	1940	162.40- 202.40	180.67
5.041	5.041	0.000	20377674	2000.00	2000	78.04- 118.04	102.90
Average of Peak Amounts =					1.98e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.406	2.404	0.002	86791084	200.000	260	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.247	6.247	0.000	74591568	200.000	256	80.00- 120.00	100.00

QC Flag Legend

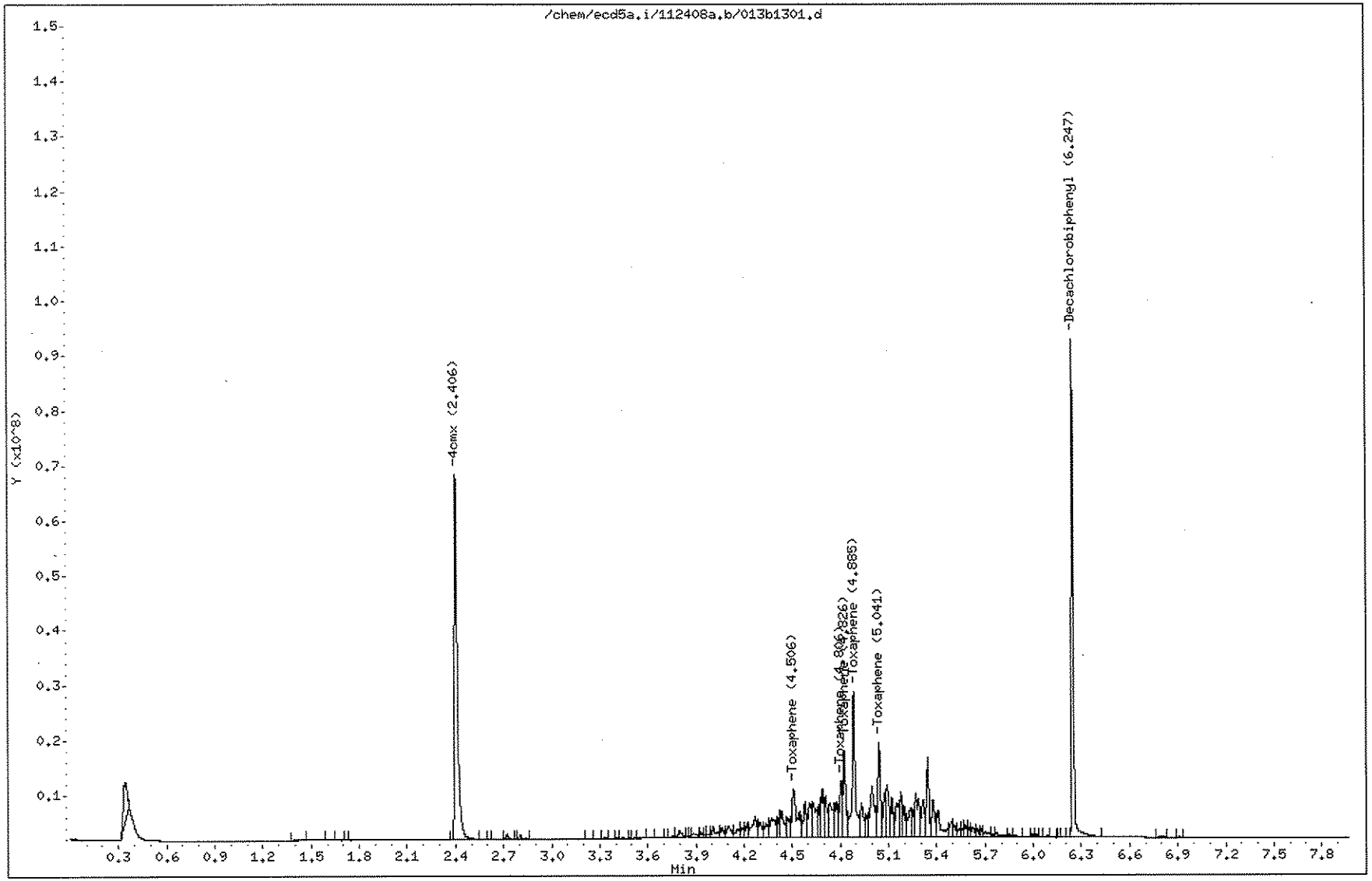
M - Compound response manually integrated.

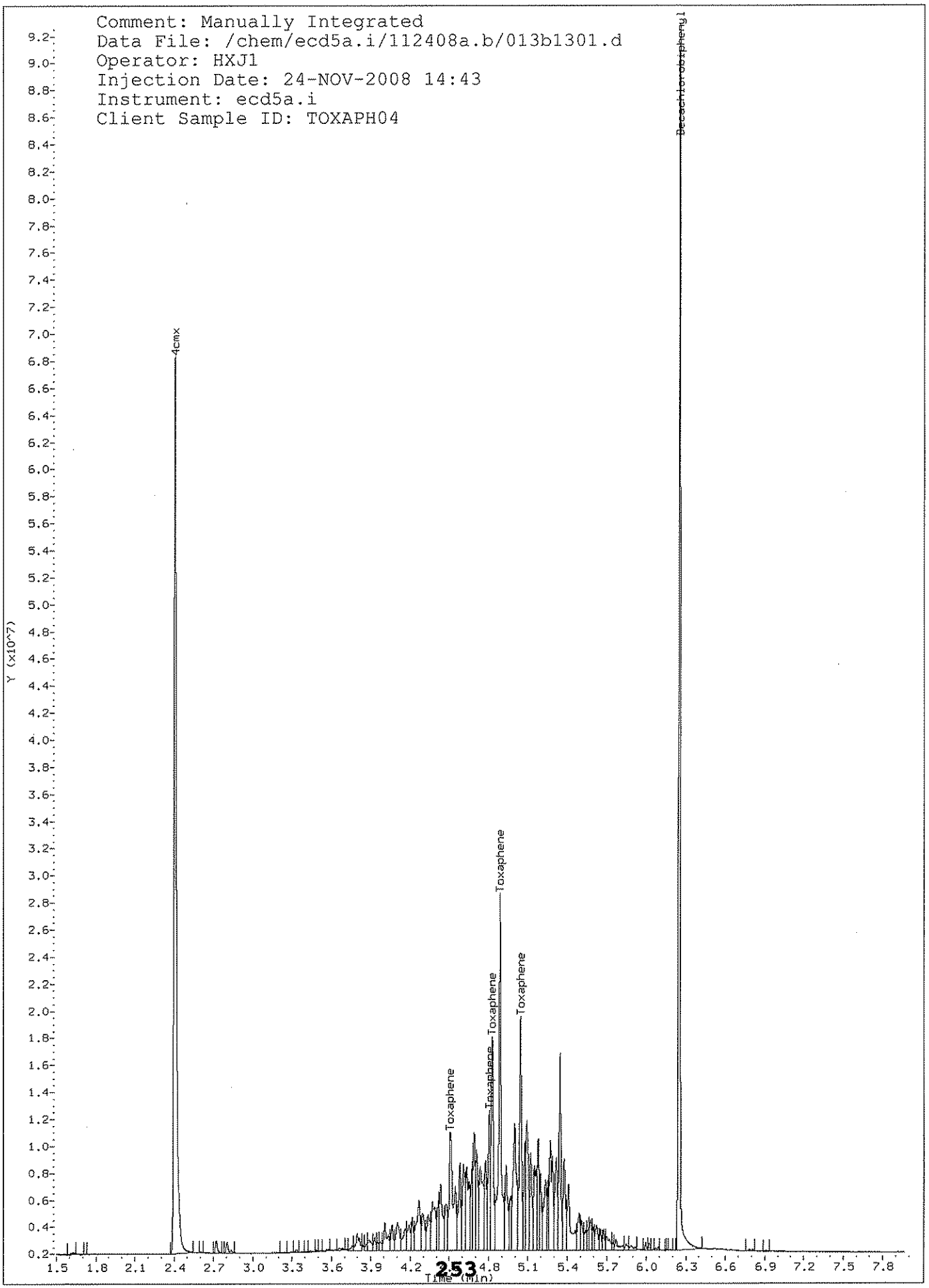
Data File: /chem/ecd5a.i/112408a.b/013b1301.d
Date : 24-NOV-2008 14:43
Client ID: TOXAPH04
Sample Info: IWPE081124-14TX4

Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25

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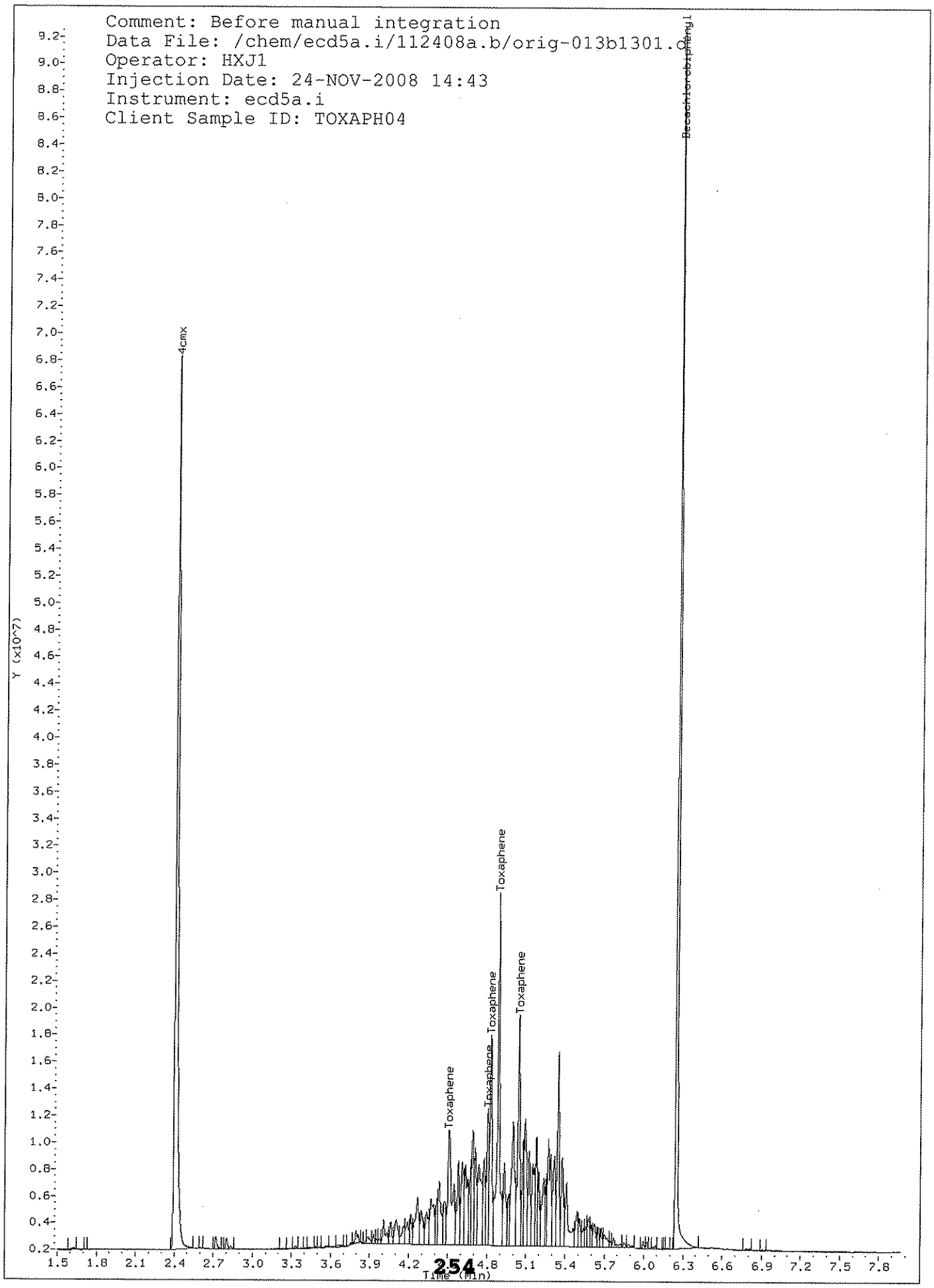
Data File: /chem/ecd5a.i/112408a.b/013b1301.d
Operator: HXJ1
Injection Date: 24-NOV-2008 14:43
Instrument: ecd5a.i
Client Sample ID: TOXAPH04
4cmx
Decachlorobiphenyl
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^7)
Time (Min)


Comment: Before manual integration
Data File: /chem/ecd5a.i/112408a.b/orig-013b1301.d
Operator: HXJ1
Injection Date: 24-NOV-2008 14:43
Instrument: ecd5a.i
Client Sample ID: TOXAPH04
4cmx
Decachlorobiphenyl
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^7)
Time (min)

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/112408a.b/014f1401.d
Lab Smp Id: IPE081017-40TX5 Client Smp ID: TOXAPH05
Inj Date : 24-NOV-2008 14:54
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |IPE081017-40TX5
Misc Info :
Comment :
Method : /chem/ecd5a.i/112408a.b/ECD5-F-8081-112408.m
Meth Date : 25-Nov-2008 08:43 jam00798 Quant Type: ESTD
Cal Date : 17-OCT-2008 22:18 Cal File: 037f3701.d
Als bottle: 14 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Tox.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
4.423	4.425	-0.002	16921346	3000.00	2630	80.00- 120.00	100.00(M)
4.477	4.477	0.000	15794640	3000.00	2670	72.05- 112.05	93.34
4.693	4.694	-0.001	31970195	3000.00	2850	166.33- 206.33	188.93
4.900	4.901	-0.001	33434381	3000.00	2950	175.38- 215.38	197.59
5.153	5.155	-0.002	26105436	3000.00	3040	137.93- 177.93	154.28
Average of Peak Amounts =					2.83e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.350	2.350	0.000	128931894	400.000	389	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
5.967	5.967	0.000	94817139	400.000	347	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/112408a.b/014f1401.d

Date : 24-NOV-2008 14:54

Client ID: TOXAPH05

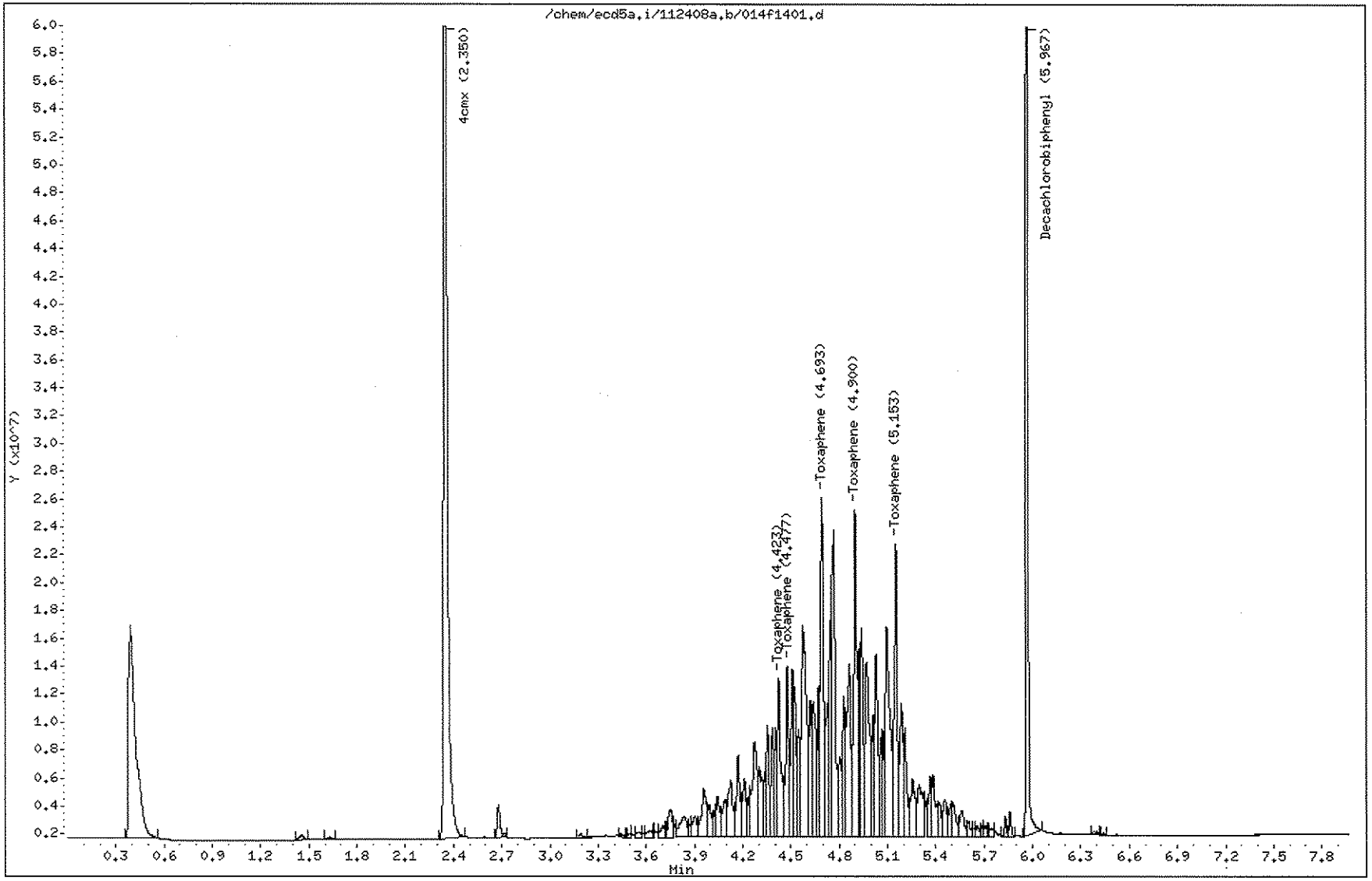
Sample Info: IIPE081017-40TX5

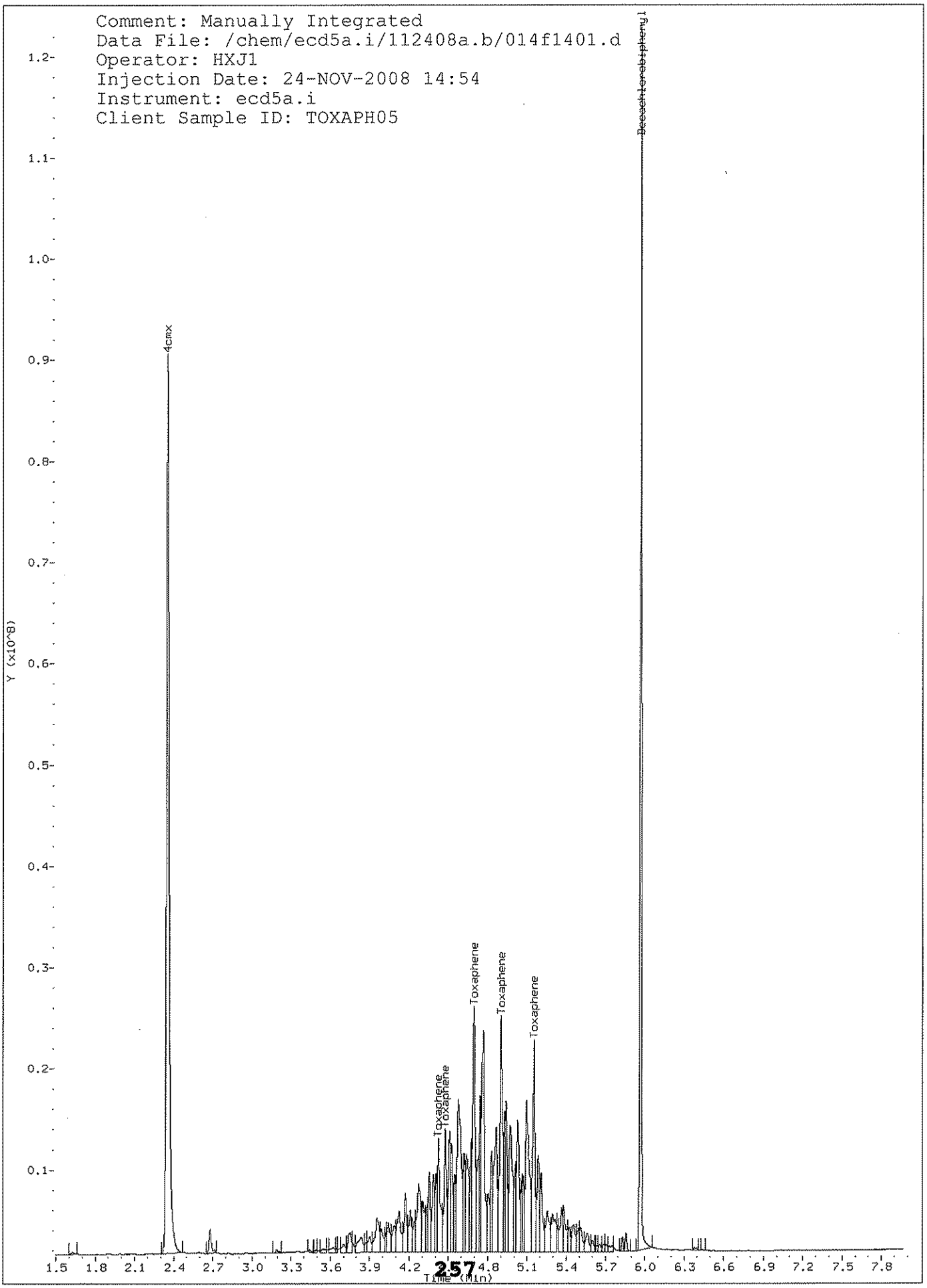
Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

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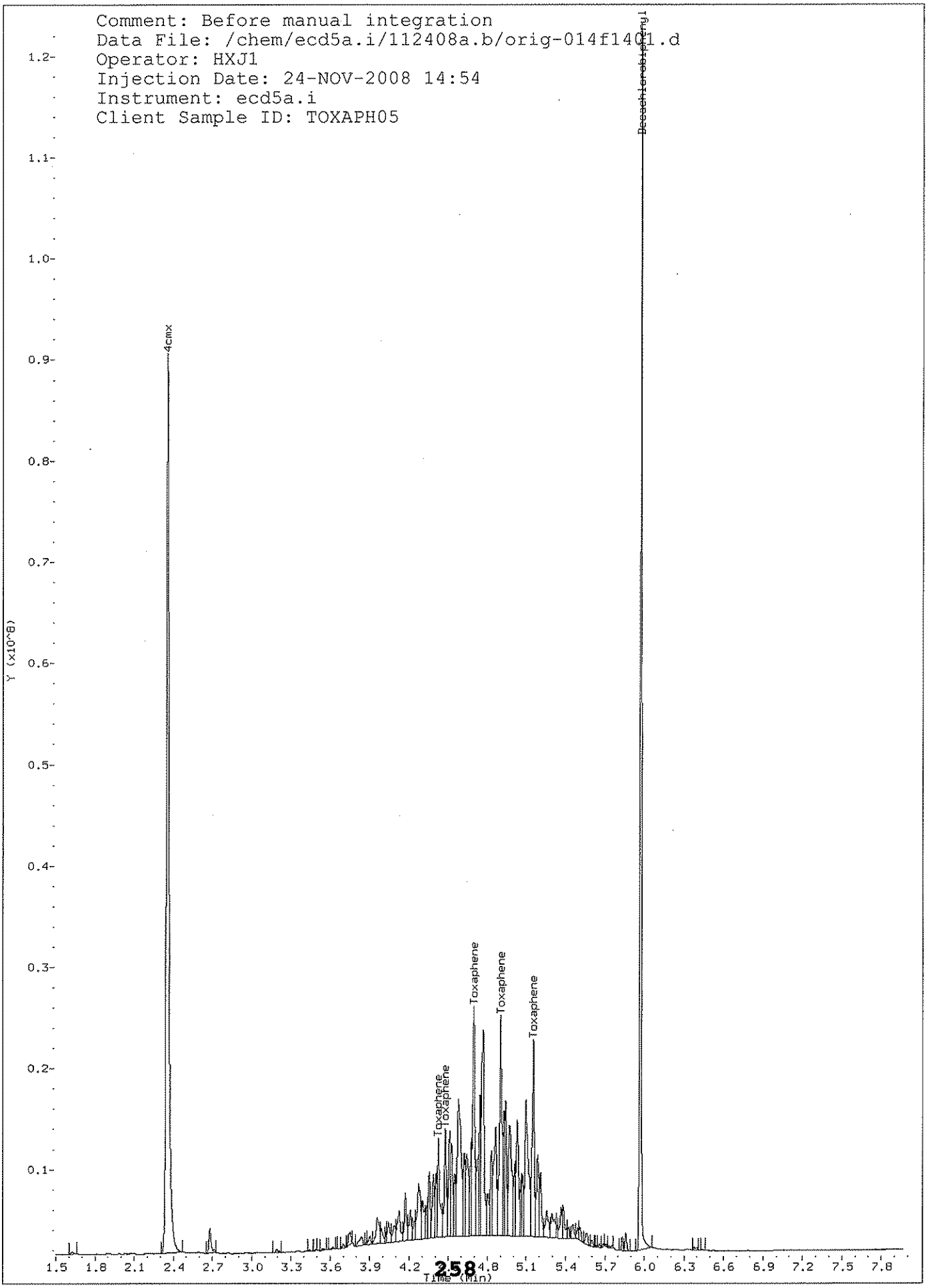
Data File: /chem/ecd5a.i/112408a.b/014f1401.d
Operator: HXJ1
Injection Date: 24-NOV-2008 14:54
Instrument: ecd5a.i
Client Sample ID: TOXAPH05
4cmx
Decachlorobiphenyl
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^8)
1.2
1.1
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
1.5 1.8 2.1 2.4 2.7 3.0 3.3 3.6 3.9 4.2 4.8 5.1 5.4 5.7 6.0 6.3 6.6 6.9 7.2 7.5 7.8
Time (min)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Operator: HXJ1
Injection Date: 24-NOV-2008 14:54
Instrument: ecd5a.i
Client Sample ID: TOXAPH05
4cmx
Decachlorobiphenyl
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^8)
Time (Min)

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/112408a.b/014b1401.d
Lab Smp Id: IPE081017-40TX5 Client Smp ID: TOXAPH05
Inj Date : 24-NOV-2008 14:54
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |IPE081017-40TX5
Misc Info :
Comment :
Method : /chem/ecd5a.i/112408a.b/ECD5-B-8081-112408.m
Meth Date : 25-Nov-2008 08:43 jam00798 Quant Type: ESTD
Cal Date : 17-OCT-2008 22:18 Cal File: 037b3701.d
Als bottle: 14 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Tox.sub
Target Version: 3.50 Sample Matrix: None

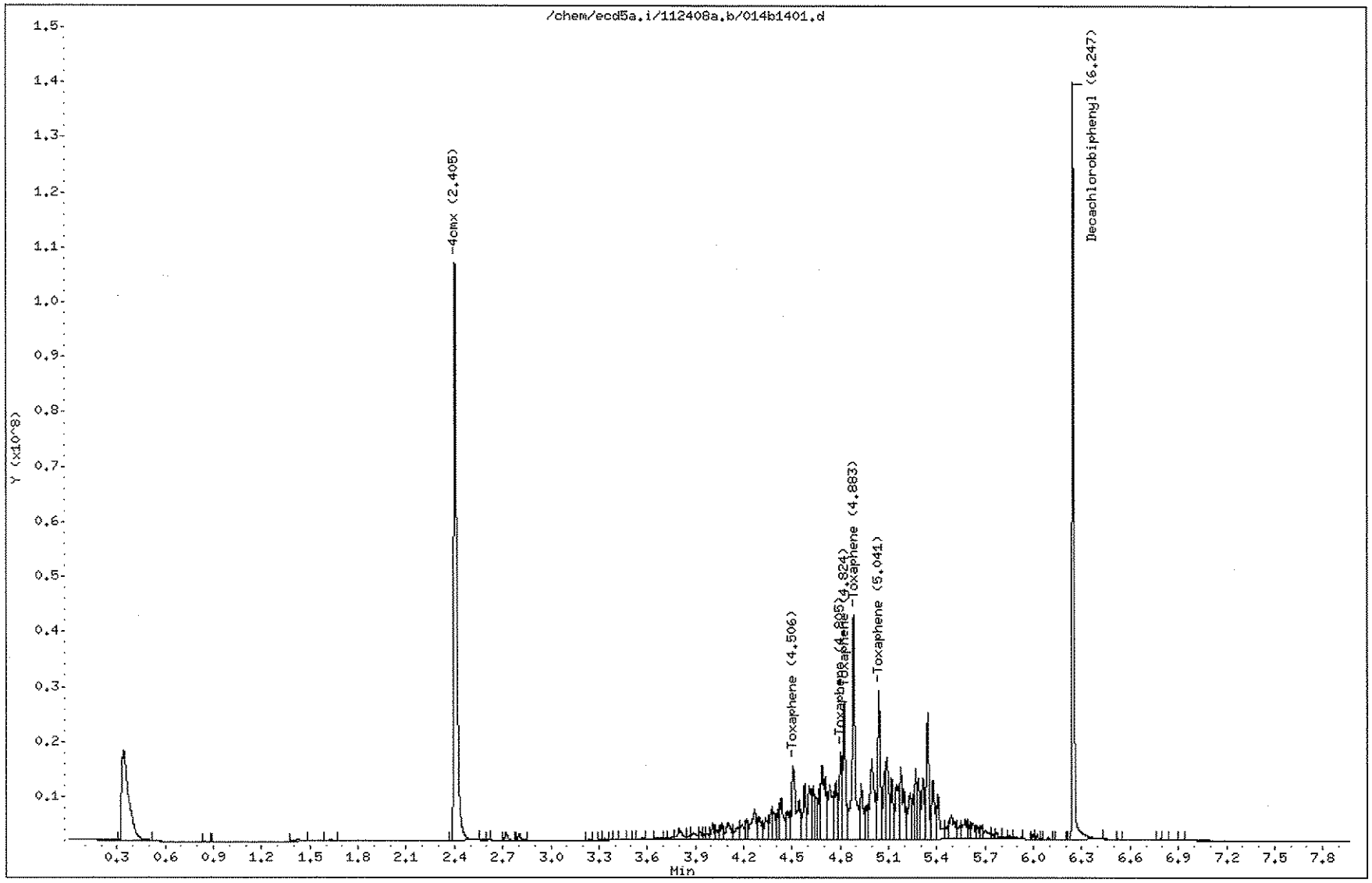
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
4.506	4.507	-0.001	29265057	3000.00	3000	80.00- 120.00	100.00
4.805	4.806	-0.001	18253597	3000.00	2920	40.77- 80.77	62.37
4.824	4.826	-0.002	27515156	3000.00	2950	74.17- 114.17	94.02
4.883	4.885	-0.002	55416360	3000.00	3000	162.40- 202.40	189.36
5.041	5.041	0.000	31655798	3000.00	3100	78.04- 118.04	108.17
Average of Peak Amounts =					2.99e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.405	2.404	0.001	132753143	400.000	398	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.247	6.247	0.000	114131760	400.000	392	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/112408a.b/014b1401.d
Date : 24-NOV-2008 14:54
Client ID: TOXAPH05
Sample Info: IIPE081017-40TX5

Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25



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CLP-1

Data file : /chem/ecd5a.i/120908b.b/007f0701.d
Lab Smp Id: WPE081209-11 60 Client Smp ID: AR166001
Inj Date : 09-DEC-2008 19:07
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE081209-11 60
Misc Info :
Comment :
Method : /chem/ecd5a.i/120908b.b/ECD5-F-8081-120908.m
Meth Date : 09-Dec-2008 23:29 hea01125 Quant Type: ESTD
Cal Date : 09-DEC-2008 19:07 Cal File: 007f0701.d
Als bottle: 7 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
3 Aroclor-1016					CAS #: 12674-11-2		
2.655	2.656	-0.001	751118	100.000	111	80.00- 120.00	100.00(M)
3.270	3.271	-0.001	1888789	100.000	110	231.46- 271.46	251.46
3.405	3.406	-0.001	787347	100.000	110	84.82- 124.82	104.82
3.489	3.489	0.000	717548	100.000	113	75.53- 115.53	95.53
3.638	3.638	0.000	992182	100.000	111	112.09- 152.09	132.09
Average of Peak Amounts =					111		
21 Aroclor-1260					CAS #: 11096-82-5		
4.410	4.411	-0.001	1913605	100.000	112	80.00- 120.00	100.00
4.578	4.578	0.000	2858477	100.000	112	129.38- 169.38	149.38
4.815	4.815	0.000	1461758	100.000	112	56.39- 96.39	76.39
4.963	4.963	0.000	1398915	100.000	107	53.10- 93.10	73.10
5.145	5.146	-0.001	2502574	100.000	108	110.78- 150.78	130.78
Average of Peak Amounts =					110		
$ 1 4cmx					CAS #: 877-09-8		
2.340	2.339	0.001	3883209	8.00000	11.0	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
5.953	5.952	0.001	3149069	8.00000	11.3	80.00- 120.00	100.00

QC Flag Legend

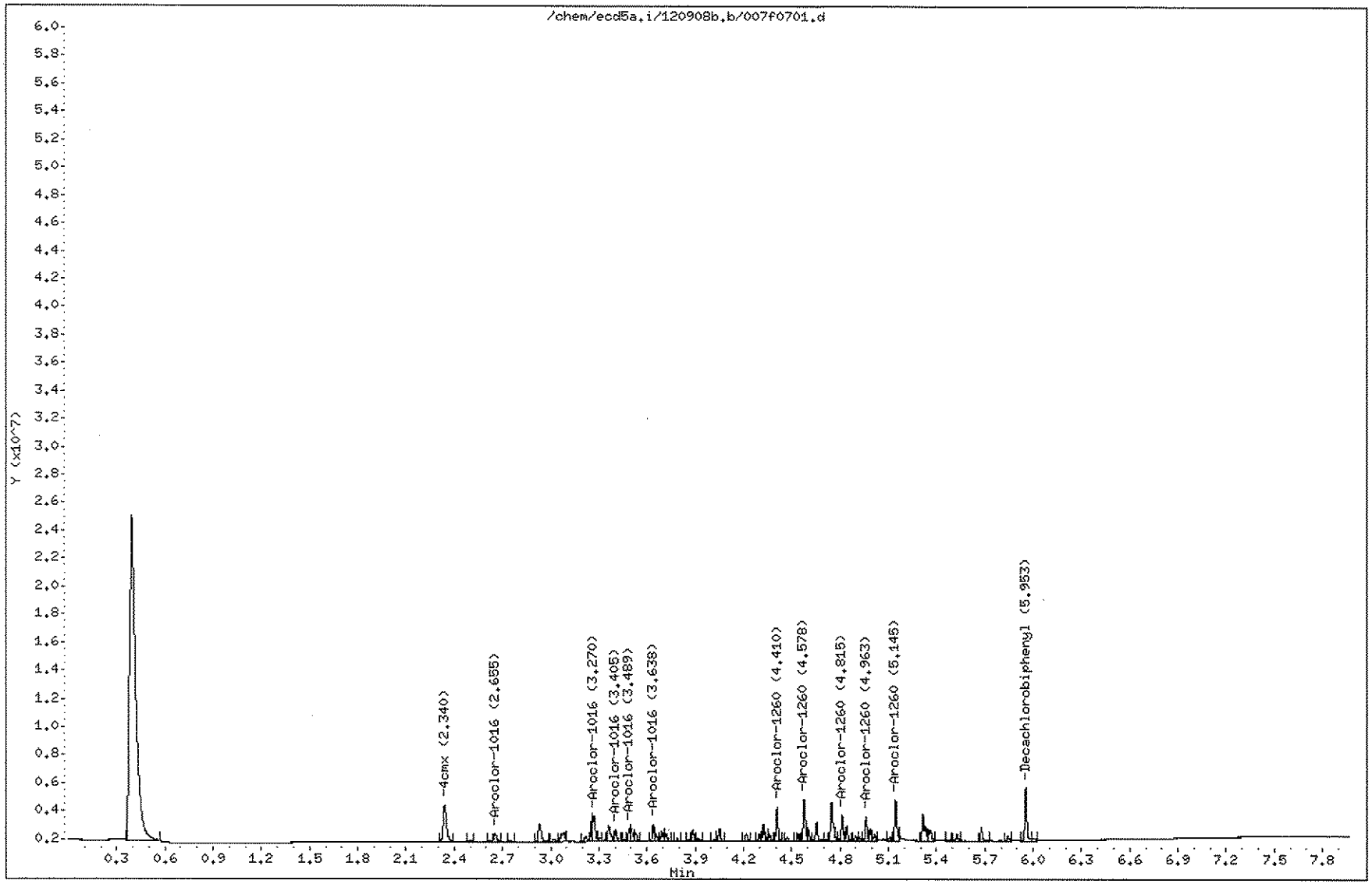
M - Compound response manually integrated.

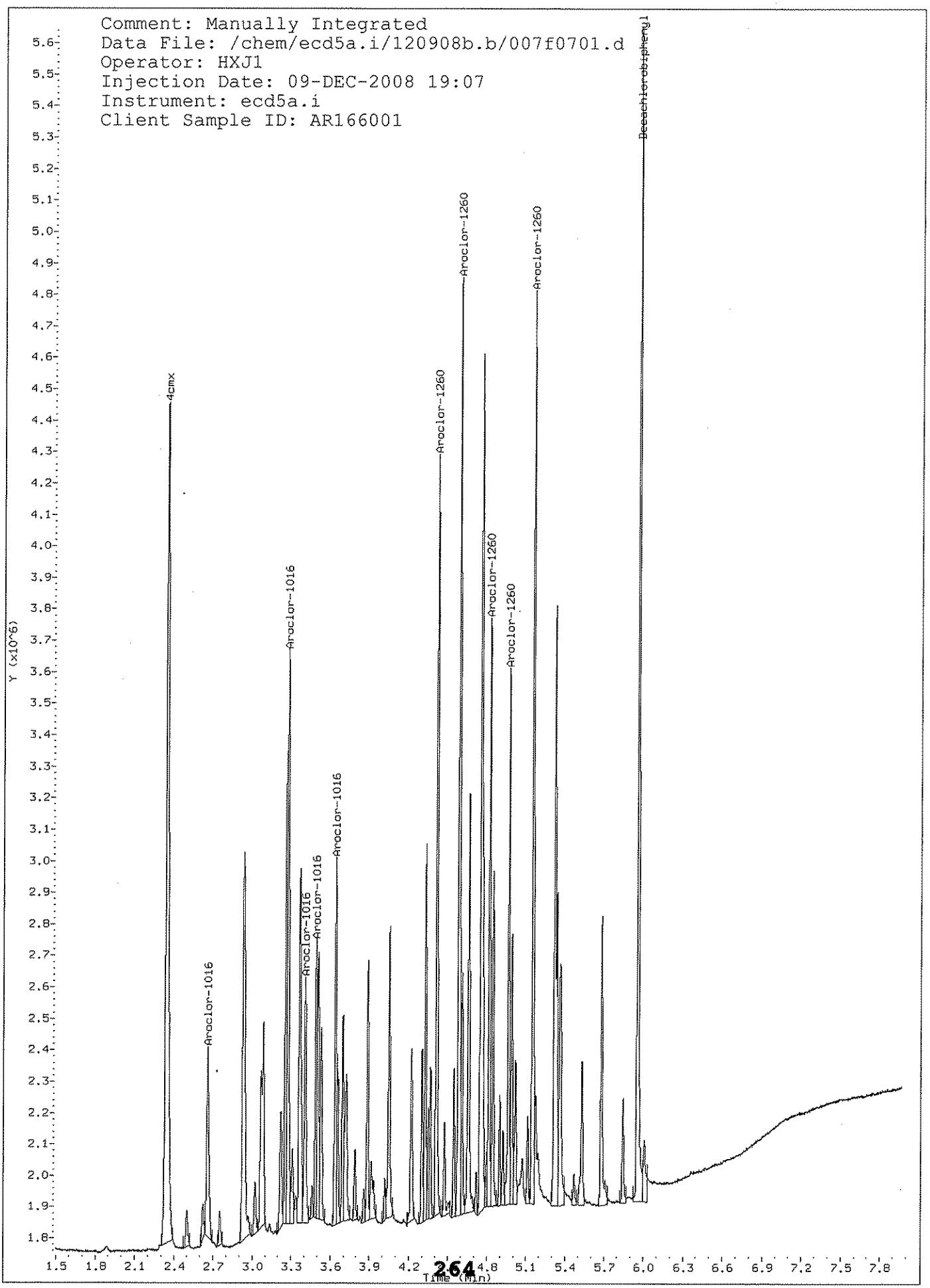
Data File: /chem/ecd5a.i/120908b.b/007f0701.d
Date : 09-DEC-2008 19:07
Client ID: AR166001
Sample Info: !WPE081209-11 60

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25

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Operator: HXJ1
Injection Date: 09-DEC-2008 19:07
Instrument: ecd5a.i
Client Sample ID: AR166001
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
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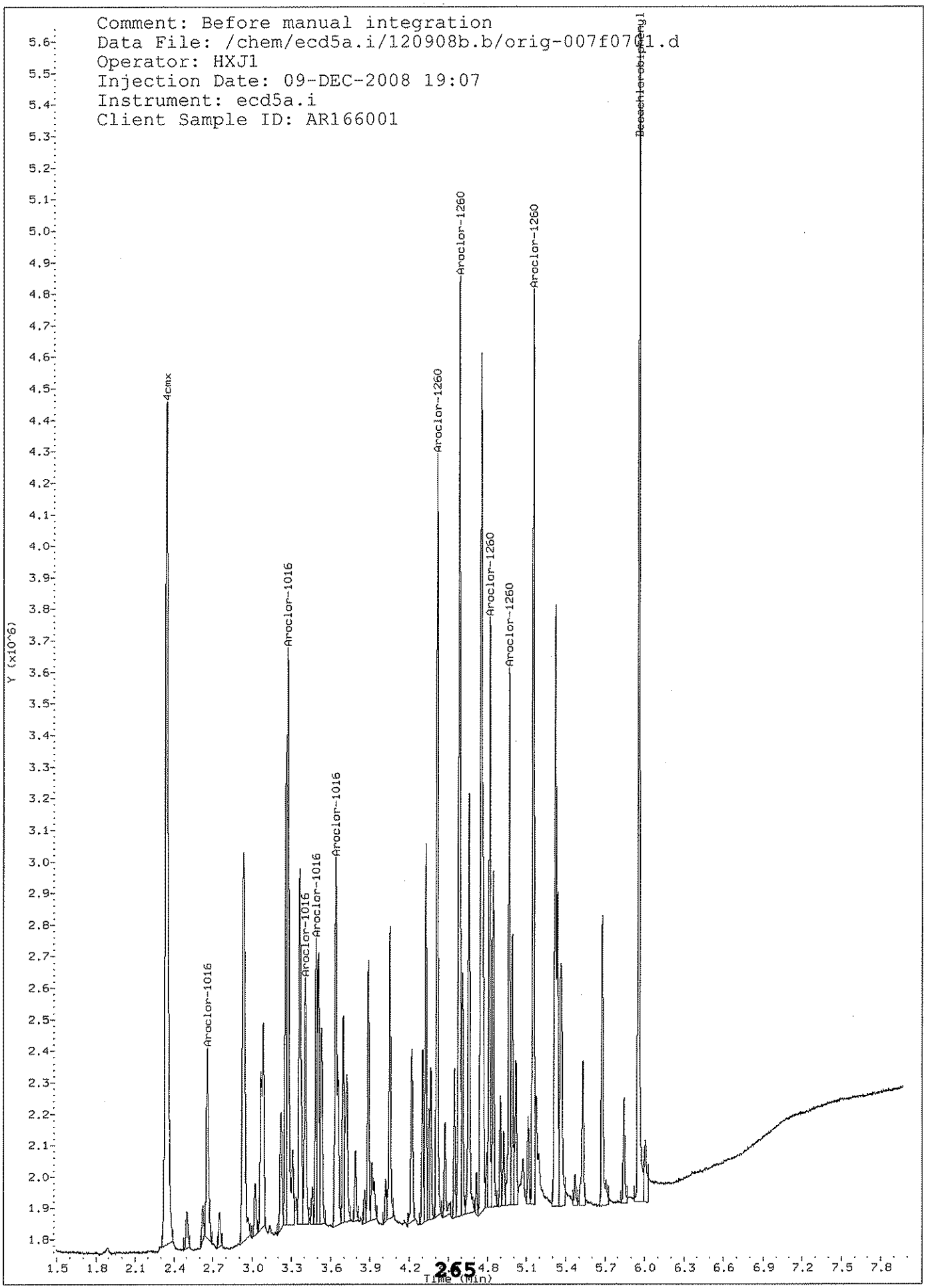
Decachlorobiphenyl
Y (x10^6)
Time (Min)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Operator: HXJ1
Injection Date: 09-DEC-2008 19:07
Instrument: ecd5a.i
Client Sample ID: AR166001
Decachlorobiphenyl
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
4cmx
Y (x10^6)
Time (Min)

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120908b.b/007b0701.d
Lab Smp Id: WPE081209-11 60 Client Smp ID: AR166001
Inj Date : 09-DEC-2008 19:07
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE081209-11 60
Misc Info :
Comment :
Method : /chem/ecd5a.i/120908b.b/ECD5-B-8081-120908.m
Meth Date : 09-Dec-2008 23:28 hea01125 Quant Type: ESTD
Cal Date : 09-DEC-2008 19:07 Cal File: 007b0701.d
Als bottle: 7 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
3 Aroclor-1016					CAS #: 12674-11-2		
3.512	3.512	0.000	1123767	100.000	109	80.00- 120.00	100.00(M)
3.580	3.581	-0.001	630858	100.000	104	36.14- 76.14	56.14
3.646	3.646	0.000	672791	100.000	109	39.87- 79.87	59.87
3.675	3.675	0.000	673008	100.000	106	39.89- 79.89	59.89
3.820	3.820	0.000	857280	100.000	106	56.29- 96.29	76.29
Average of Peak Amounts =					107		
21 Aroclor-1260					CAS #: 11096-82-5		
4.606	4.606	0.000	1730885	100.000	101	80.00- 120.00	100.00
4.734	4.733	0.001	2075153	100.000	102	99.89- 139.89	119.89
5.001	5.001	0.000	1279688	100.000	96.2	53.93- 93.93	73.93
5.176	5.176	0.000	1300579	100.000	97.3	55.14- 95.14	75.14
5.325	5.324	0.001	3099724	100.000	95.6	159.08- 199.08	179.08
Average of Peak Amounts =					98.5		
$ 1 4cmx					CAS #: 877-09-8		
2.385	2.385	0.000	3496134	8.00000	10.2	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.225	6.224	0.001	2878572	8.00000	10.3	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120908b.b/007b0701.d

Date : 09-DEC-2008 19:07

Client ID: AR166001

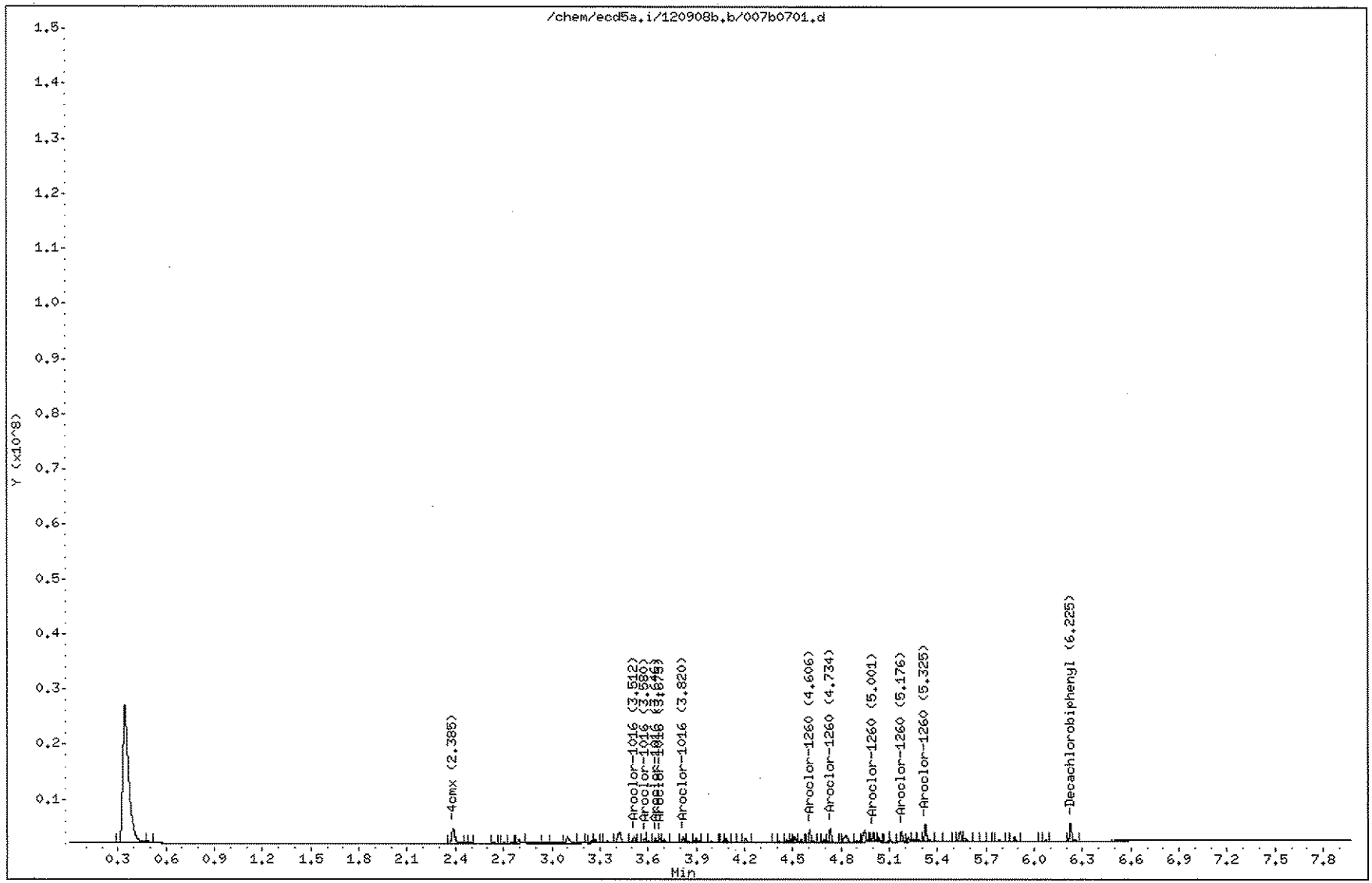
Sample Info: IWPE081209-11 60

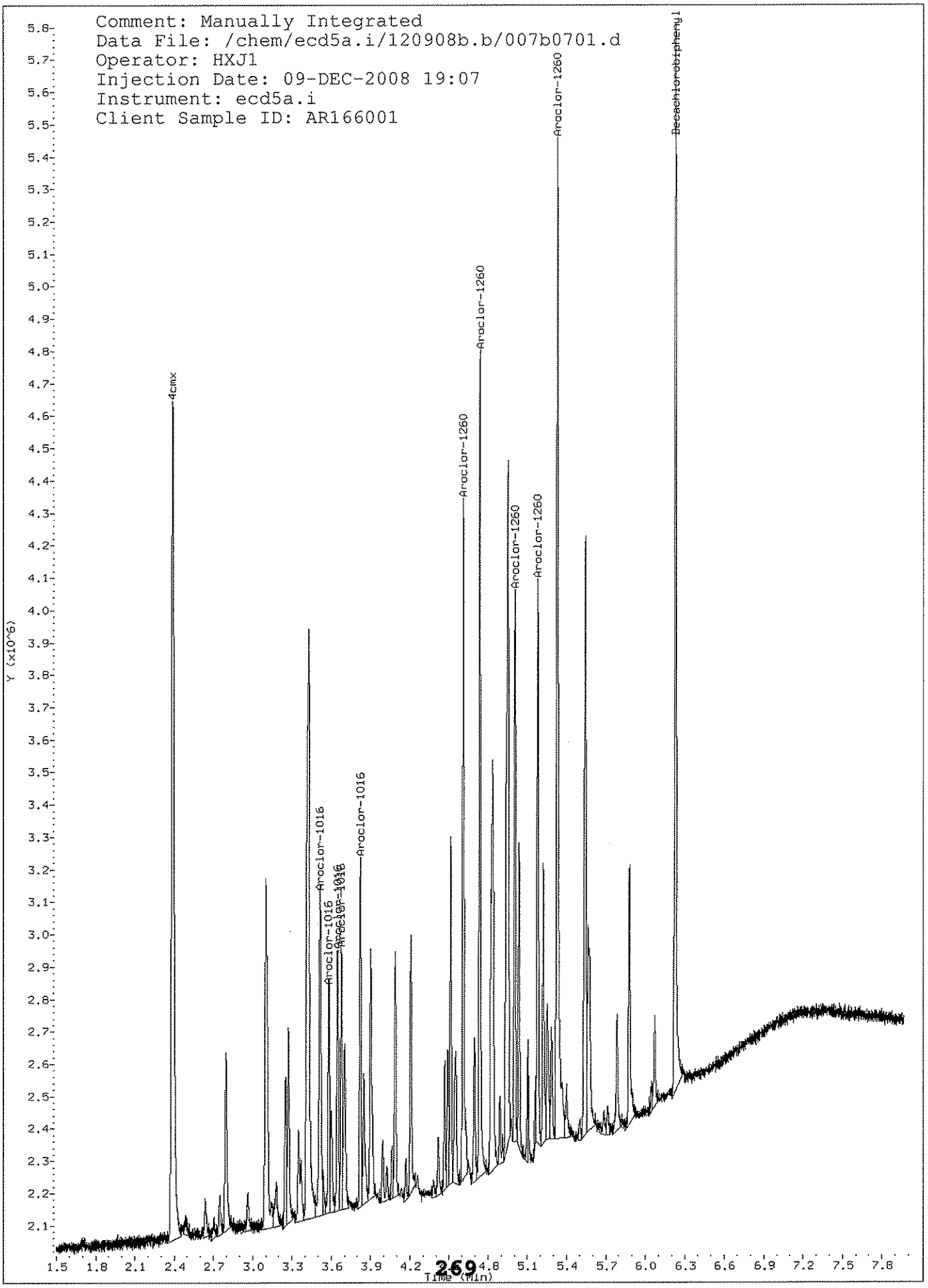
Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

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Operator: HXJ1
Injection Date: 09-DEC-2008 19:07
Instrument: ecd5a.i
Client Sample ID: AR166001
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
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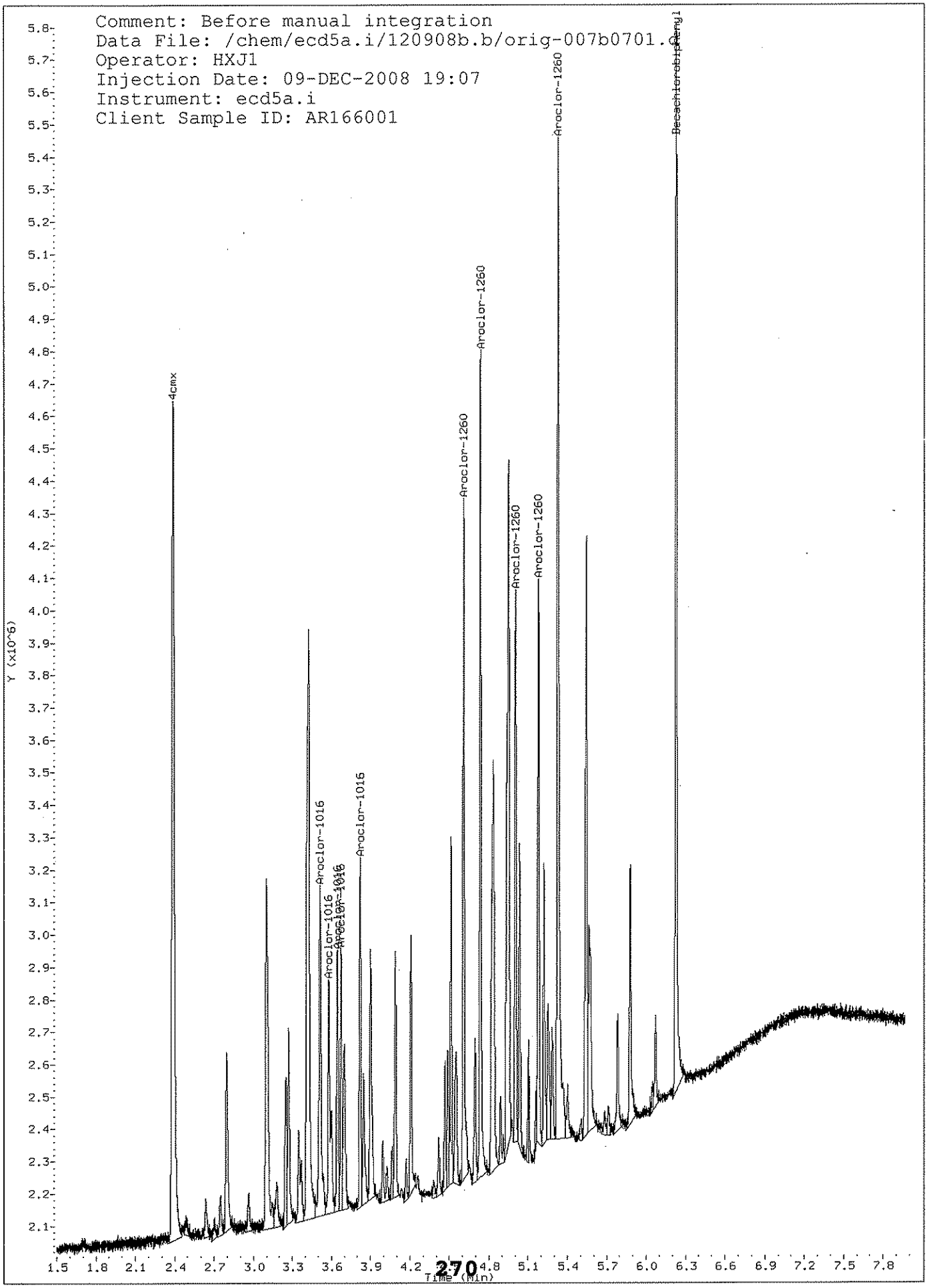
Decachlorobiphenyl
Y (x10^6)
Time (Min)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Operator: HXJ1
Injection Date: 09-DEC-2008 19:07
Instrument: ecd5a.i
Client Sample ID: AR166001
4CMX
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^6)
Time (Min)

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120908b.b/008f0801.d
Lab Smp Id: WPE081209-12 60 Client Smp ID: AR166002
Inj Date : 09-DEC-2008 19:19
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE081209-12 60
Misc Info :
Comment :
Method : /chem/ecd5a.i/120908b.b/ECD5-F-8081-120908.m
Meth Date : 09-Dec-2008 23:29 hea01125 Quant Type: ESTD
Cal Date : 09-DEC-2008 19:19 Cal File: 008f0801.d
Als bottle: 8 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
3 Aroclor-1016					CAS #: 12674-11-2		
2.655	2.656	-0.001	1731204	250.000	257	80.00- 120.00	100.00(M)
3.271	3.271	0.000	4405744	250.000	257	234.49- 274.49	254.49
3.406	3.406	0.000	1891184	250.000	263	89.24- 129.24	109.24
3.489	3.489	0.000	1690488	250.000	266	77.65- 117.65	97.65
3.638	3.638	0.000	2326690	250.000	260	114.40- 154.40	134.40
Average of Peak Amounts =					260		
21 Aroclor-1260					CAS #: 11096-82-5		
4.410	4.411	-0.001	4397362	250.000	258	80.00- 120.00	100.00
4.578	4.578	0.000	6511323	250.000	254	128.07- 168.07	148.07
4.815	4.815	0.000	3318186	250.000	255	55.46- 95.46	75.46
4.963	4.963	0.000	3246227	250.000	249	53.82- 93.82	73.82
5.146	5.146	0.000	6360448	250.000	275	124.64- 164.64	144.64
Average of Peak Amounts =					258		
$ 1 4cmx					CAS #: 877-09-8		
2.341	2.339	0.002	9235368	20.0000	26.1	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
5.953	5.952	0.001	7381857	20.0000	26.6	80.00- 120.00	100.00

QC Flag Legend

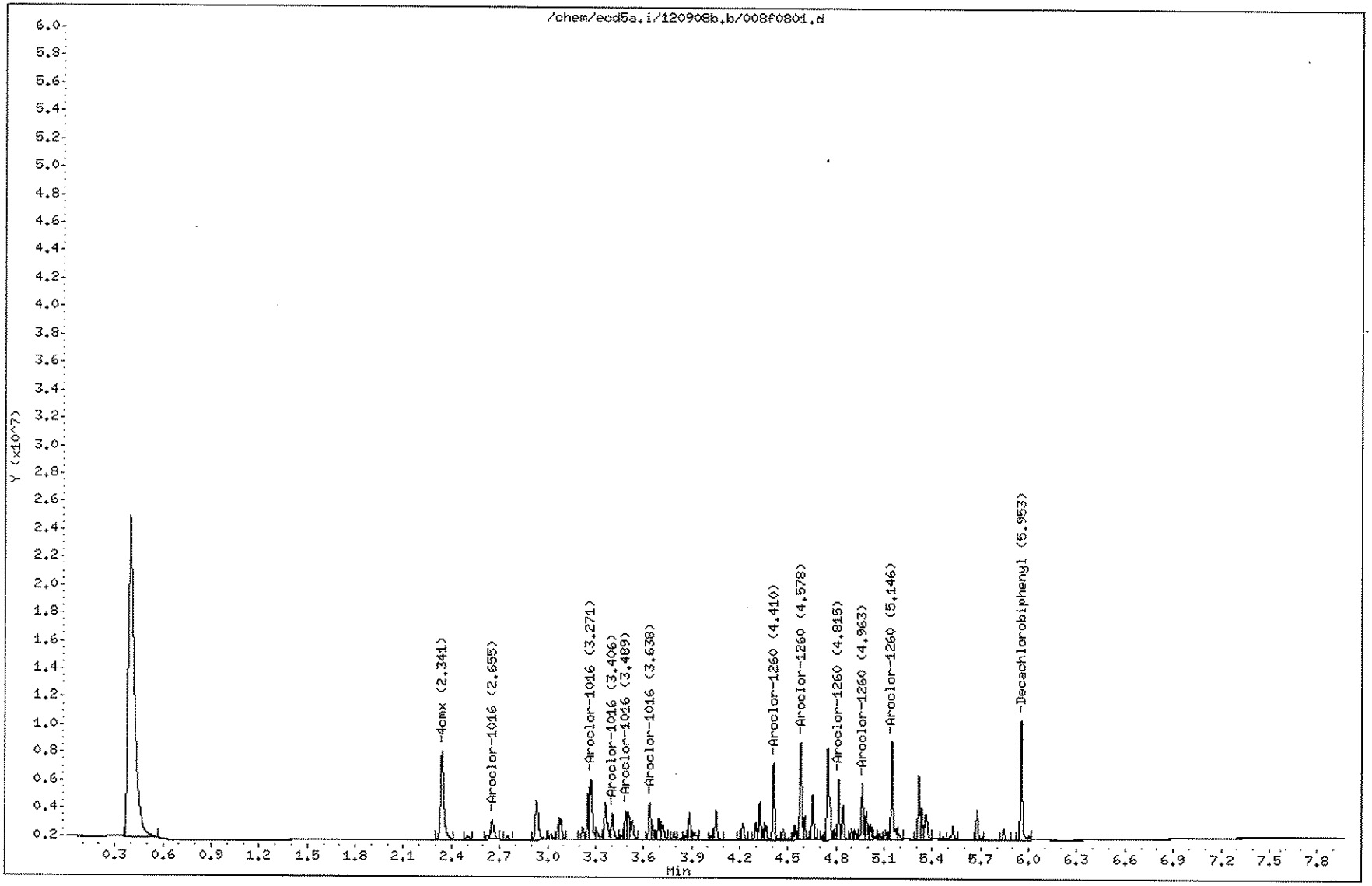
M - Compound response manually integrated.

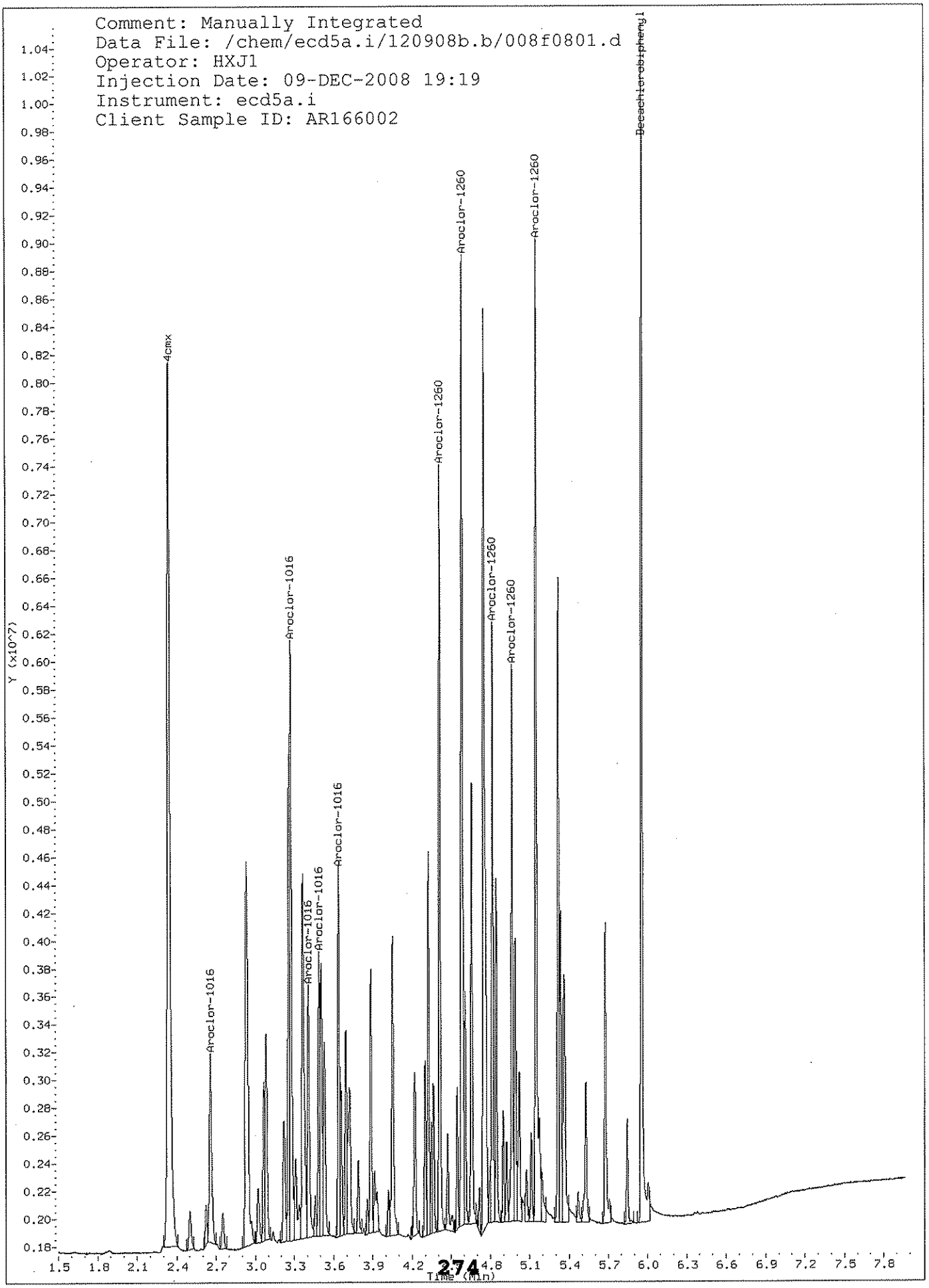
Data File: /chem/ecd5a.i/120908b.b/008f0801.d
Date : 09-DEC-2008 19:19
Client ID: AR166002
Sample Info: IWPE081209-12 60

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25

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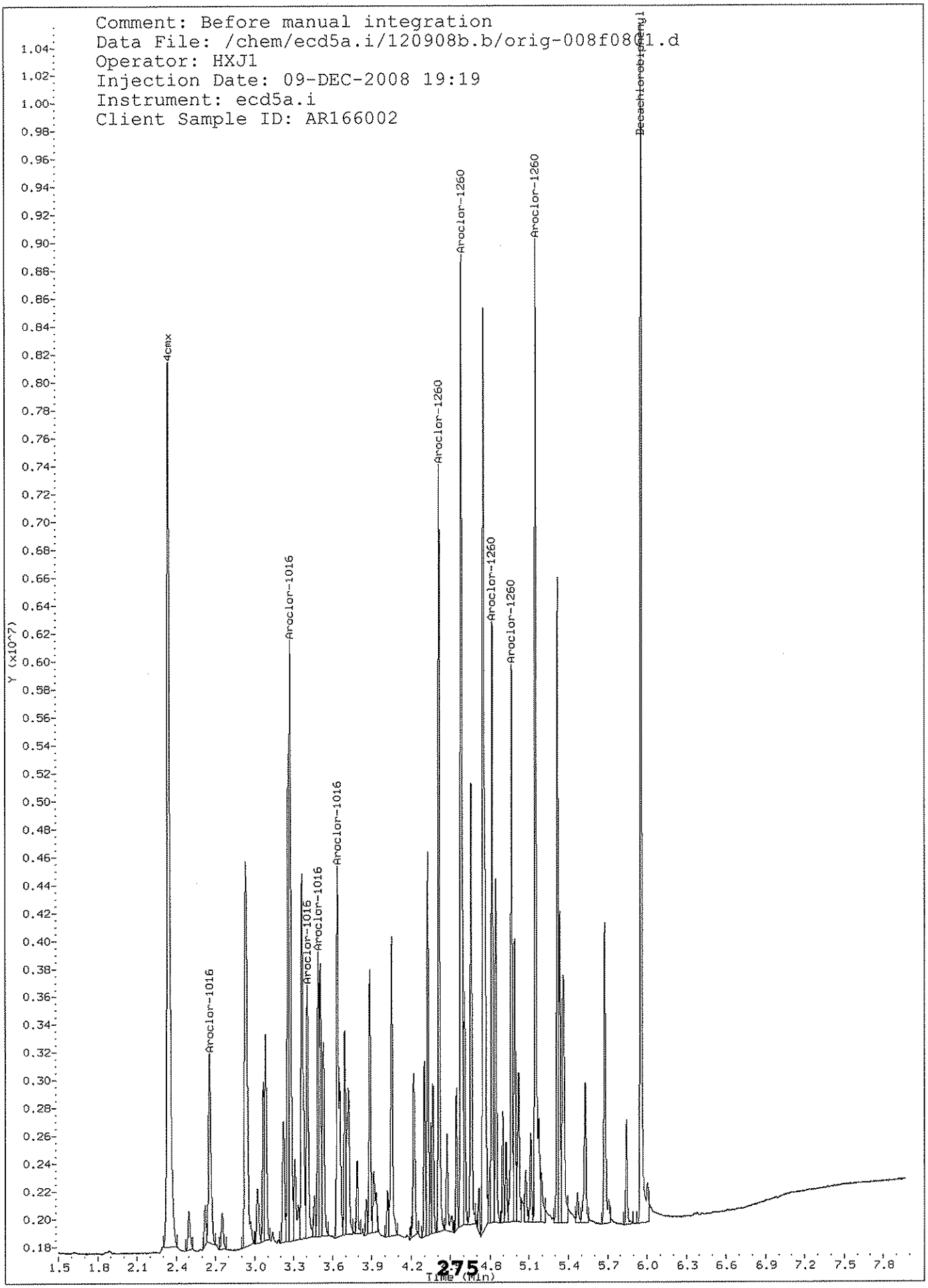
Operator: HXJ1
Injection Date: 09-DEC-2008 19:19
Instrument: ecd5a.i
Client Sample ID: AR166002
Y (x10^7)
Time (min)
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl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Operator: HXJ1
Injection Date: 09-DEC-2008 19:19
Instrument: ecd5a.i
Client Sample ID: AR166002
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120908b.b/008b0801.d
Lab Smp Id: WPE081209-12 60 Client Smp ID: AR166002
Inj Date : 09-DEC-2008 19:19
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE081209-12 60
Misc Info :
Comment :
Method : /chem/ecd5a.i/120908b.b/ECD5-B-8081-120908.m
Meth Date : 09-Dec-2008 23:28 hea01125 Quant Type: ESTD
Cal Date : 09-DEC-2008 19:19 Cal File: 008b0801.d
Als bottle: 8 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
3 Aroclor-1016					CAS #: 12674-11-2		
3.512	3.512	0.000	2617025	250.000	254	80.00- 120.00	100.00(M)
3.581	3.581	0.000	1537811	250.000	253	38.76- 78.76	58.76
3.647	3.646	0.001	1569673	250.000	254	39.98- 79.98	59.98
3.675	3.675	0.000	1621715	250.000	256	41.97- 81.97	61.97
3.820	3.820	0.000	2007356	250.000	249	56.70- 96.70	76.70
Average of Peak Amounts =					253		
21 Aroclor-1260					CAS #: 11096-82-5		
4.606	4.606	0.000	4397792	250.000	257	80.00- 120.00	100.00
4.732	4.733	-0.001	5048330	250.000	248	94.79- 134.79	114.79
5.001	5.001	0.000	3369479	250.000	253	56.62- 96.62	76.62
5.176	5.176	0.000	3424437	250.000	256	57.87- 97.87	77.87
5.324	5.324	0.000	7853005	250.000	242	158.57- 198.57	178.57
Average of Peak Amounts =					251		
$ 1 4cmx					CAS #: 877-09-8		
2.386	2.385	0.001	8445313	20.0000	24.6	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.226	6.224	0.002	7007568	20.0000	25.0	80.00- 120.00	100.00

QC Flag Legend

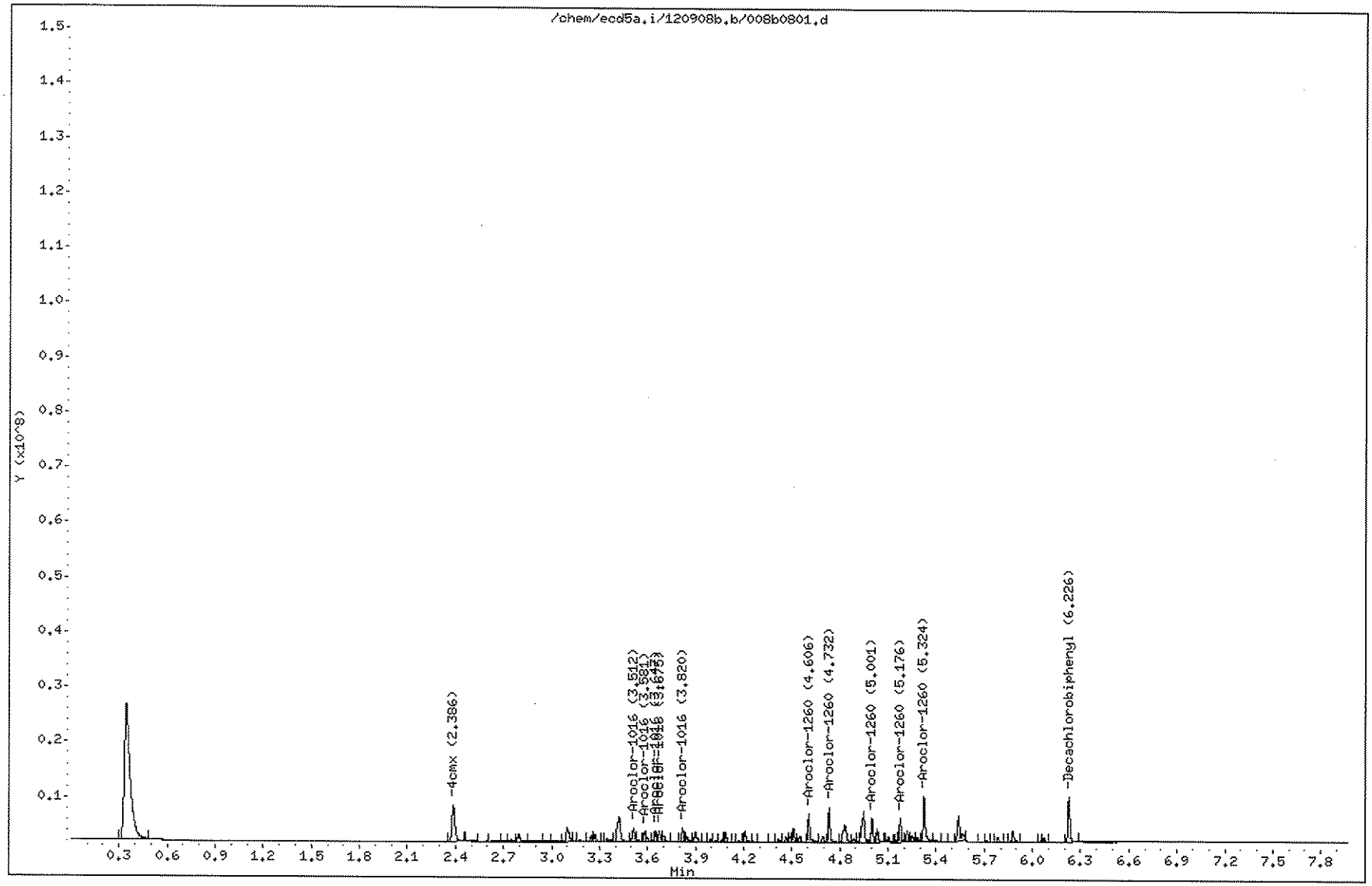
M - Compound response manually integrated.

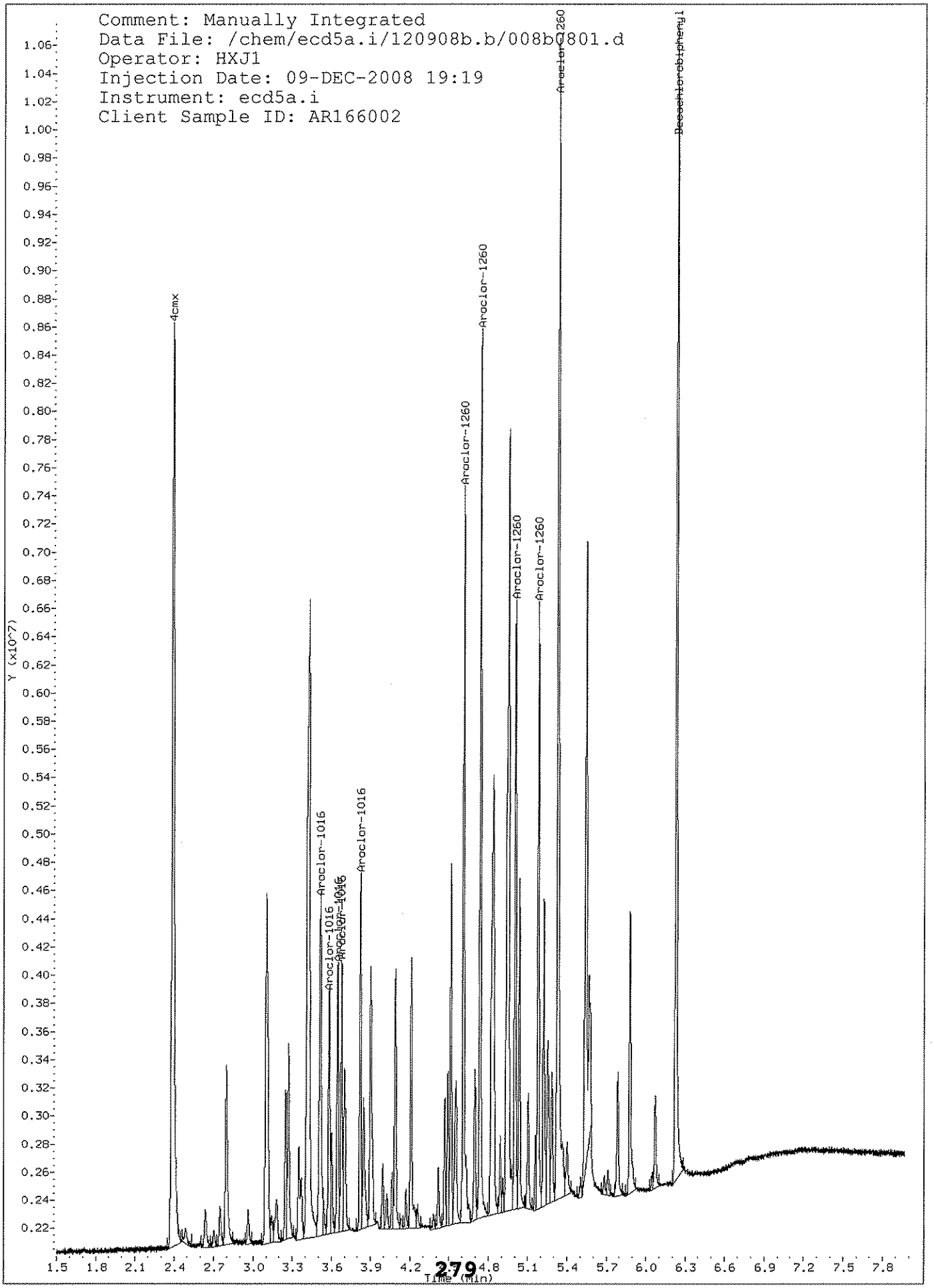
Data File: /chem/ecd5a.i/120908b.b/008b0801.d
Date : 09-DEC-2008 19:19
Client ID: AR166002
Sample Info: !WPE081209-12 60

Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25

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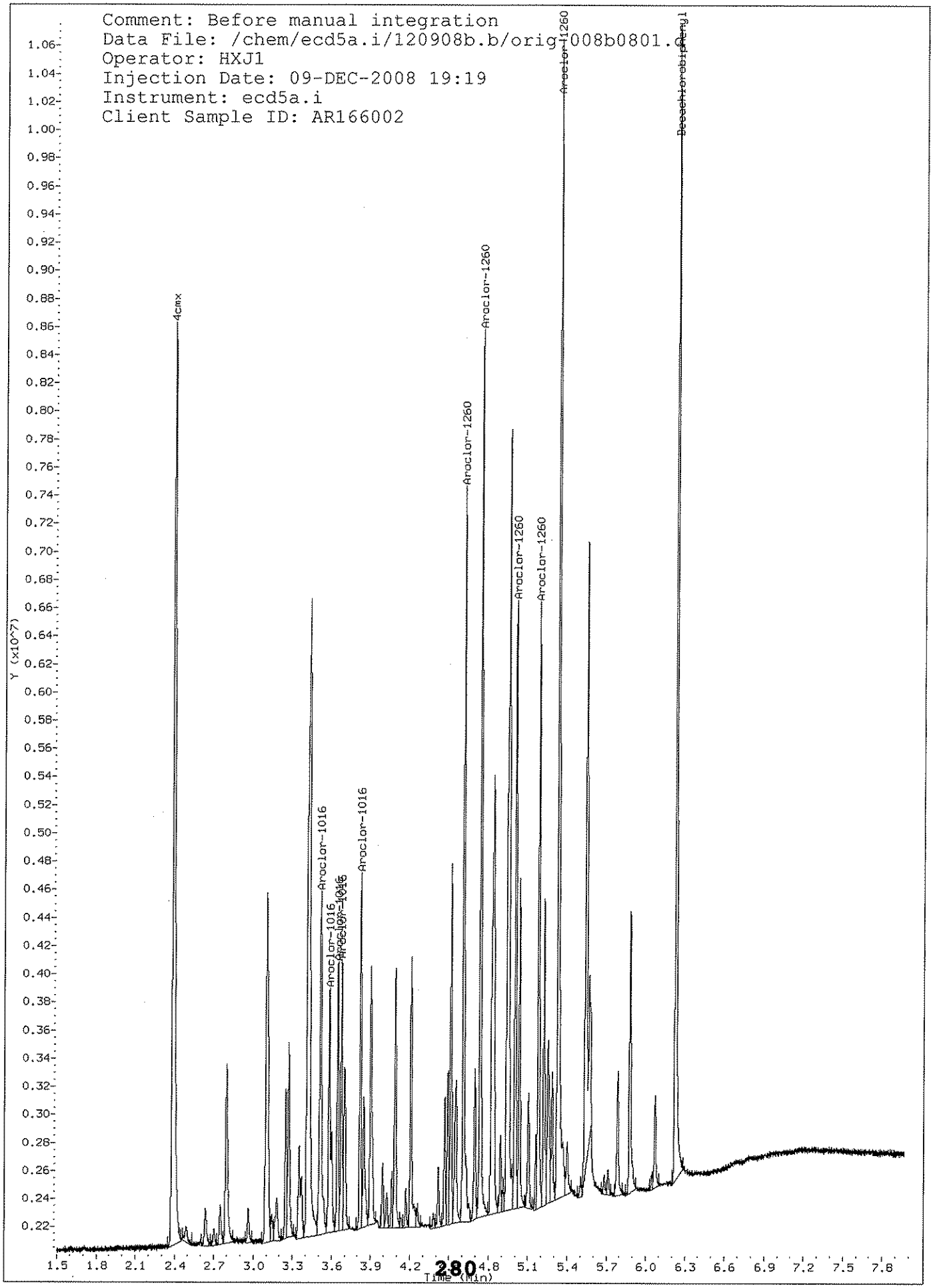
Operator: HXJ1
Injection Date: 09-DEC-2008 19:19
Instrument: ecd5a.i
Client Sample ID: AR166002
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (min)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Operator: HXJ1
Injection Date: 09-DEC-2008 19:19
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Client Sample ID: AR166002
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120908b.b/009f0901.d
Lab Smp Id: WPE081209-13 60 Client Smp ID: AR166003
Inj Date : 09-DEC-2008 19:31
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE081209-13 60
Misc Info :
Comment :
Method : /chem/ecd5a.i/120908b.b/ECD5-F-8081-120908.m
Meth Date : 09-Dec-2008 23:29 hea01125 Quant Type: ESTD
Cal Date : 09-DEC-2008 19:31 Cal File: 009f0901.d
Als bottle: 9 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
3 Aroclor-1016					CAS #: 12674-11-2		
2.654	2.656	-0.002	3366866	500.000	499	80.00- 120.00	100.00(M)
3.270	3.271	-0.001	8440625	500.000	492	230.70- 270.70	250.70
3.404	3.406	-0.002	3537356	500.000	492	85.06- 125.06	105.06
3.488	3.489	-0.001	3146088	500.000	494	73.44- 113.44	93.44
3.637	3.638	-0.001	4455140	500.000	498	112.32- 152.32	132.32
Average of Peak Amounts =					495		
21 Aroclor-1260					CAS #: 11096-82-5		
4.410	4.411	-0.001	8434629	500.000	495	80.00- 120.00	100.00
4.577	4.578	-0.001	12554093	500.000	490	128.84- 168.84	148.84
4.814	4.815	-0.001	6328510	500.000	487	55.03- 95.03	75.03
4.962	4.963	-0.001	6305973	500.000	483	54.76- 94.76	74.76
5.146	5.146	0.000	10932792	500.000	472	109.62- 149.62	129.62
Average of Peak Amounts =					485		
$ 1 4cmx					CAS #: 877-09-8		
2.340	2.339	0.001	18008300	100.000	50.8	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
5.952	5.952	0.000	13959500	100.000	50.3	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120908b.b/009f0901.d

Date : 09-DEC-2008 19:31

Client ID: AR166003

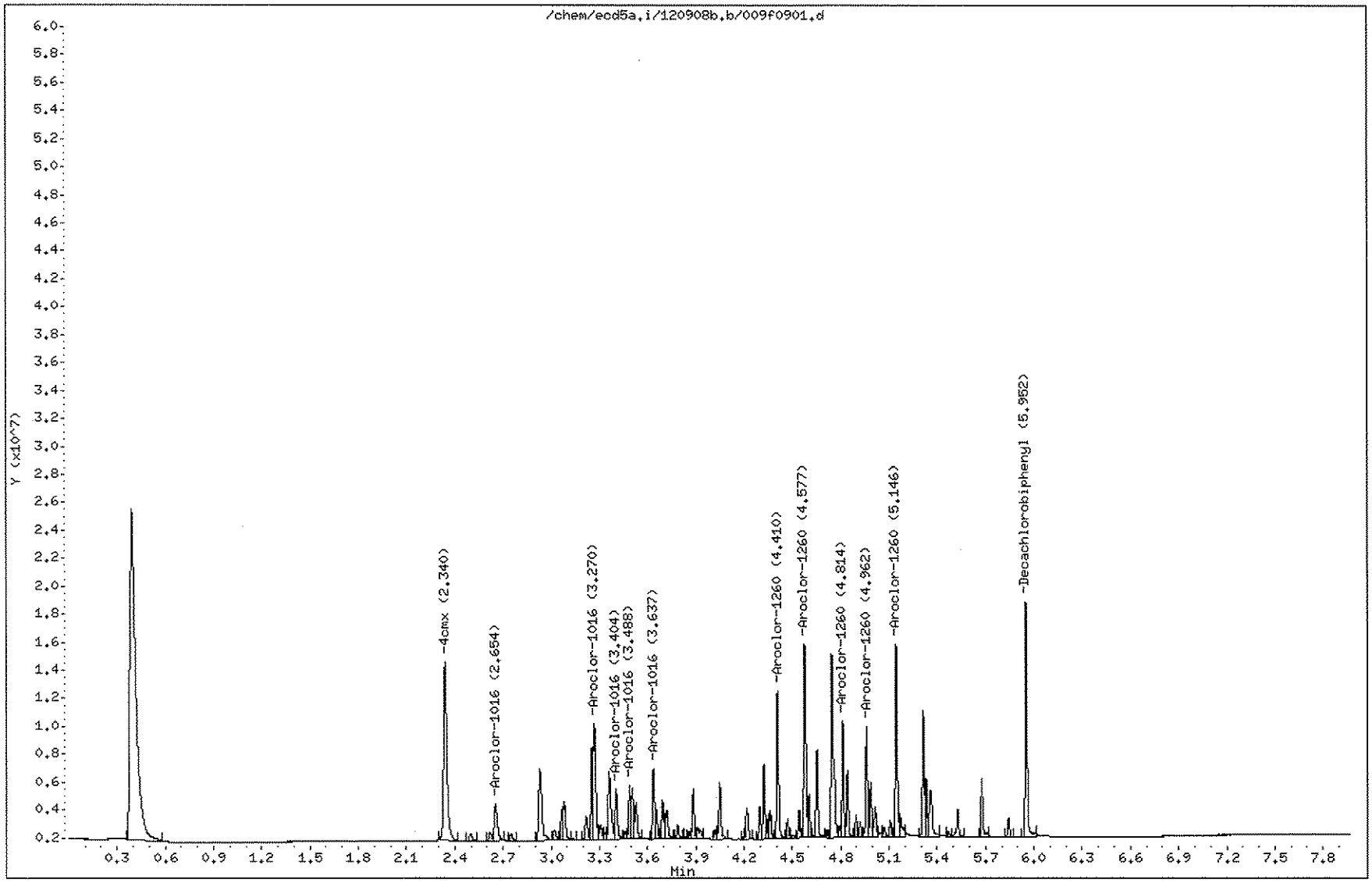
Sample Info: IWPE081209-13 60

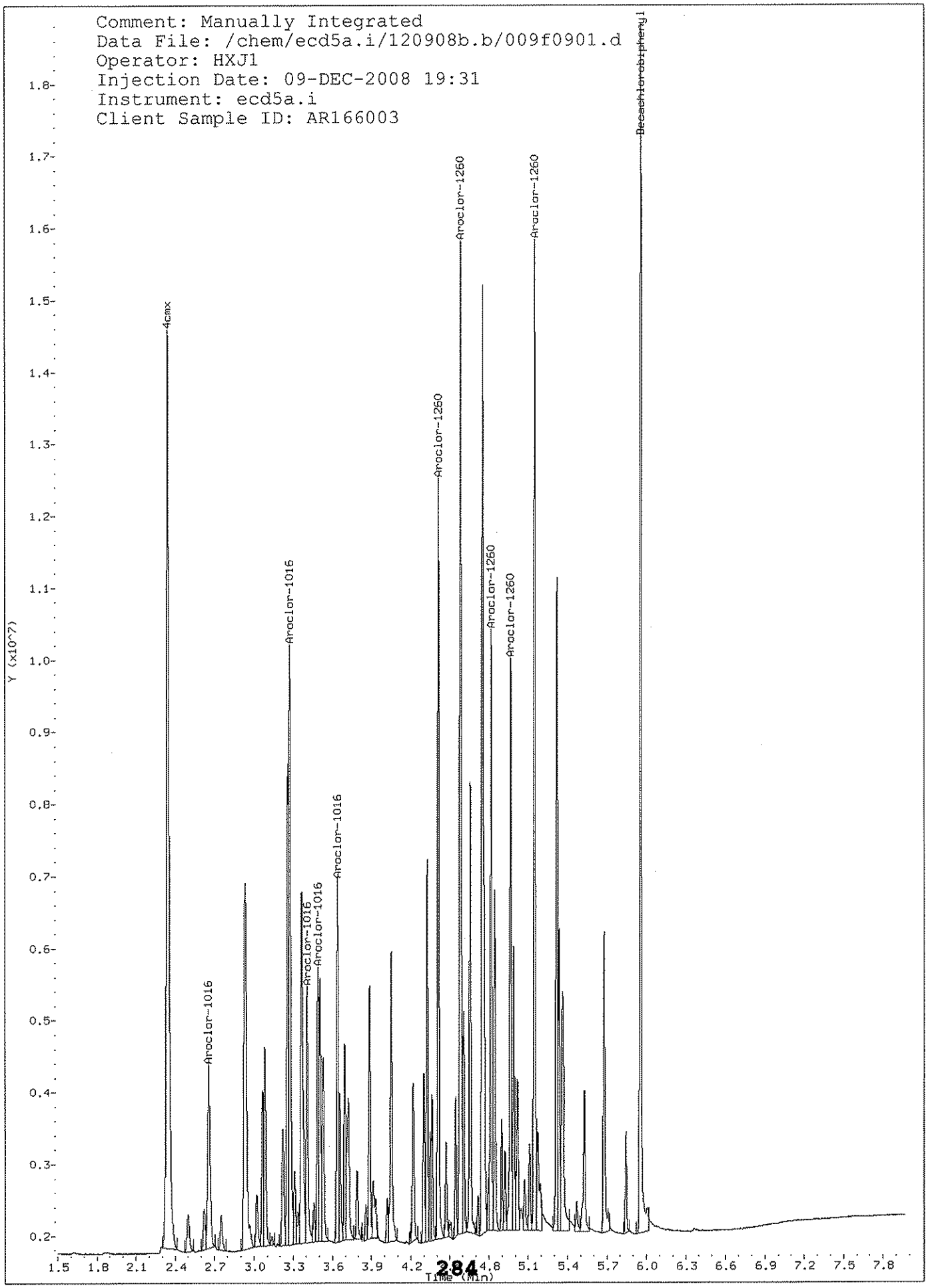
Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

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Instrument: ecd5a.i
Client Sample ID: AR166003
Decachlorobiphenyl
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1016
Aroclor-1016
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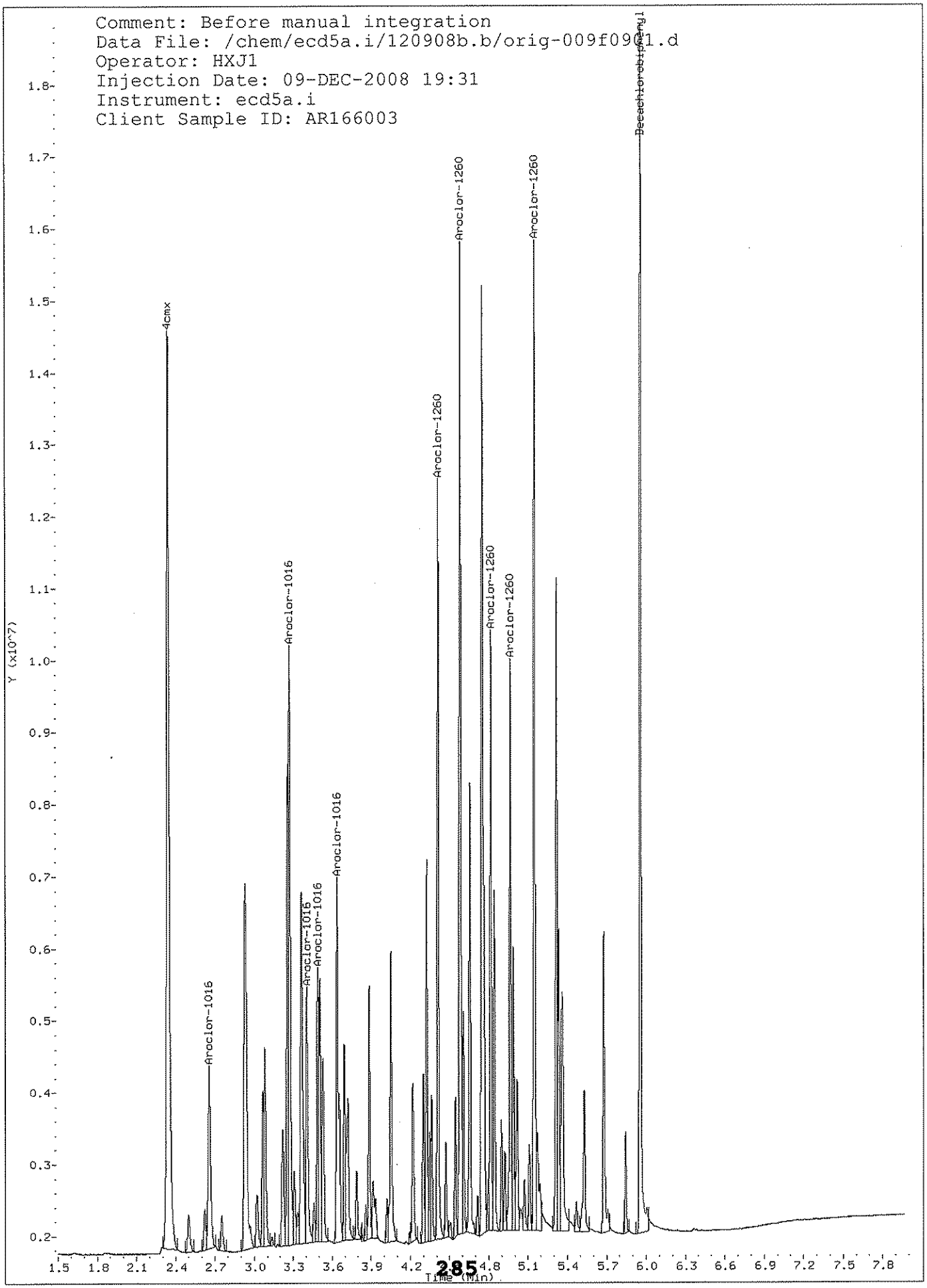
4cmx
Y (x10^7)
Time (Min)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Operator: HXJ1
Injection Date: 09-DEC-2008 19:31
Instrument: ecd5a.i
Client Sample ID: AR166003
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120908b.b/009b0901.d
Lab Smp Id: WPE081209-13 60 Client Smp ID: AR166003
Inj Date : 09-DEC-2008 19:31
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE081209-13 60
Misc Info :
Comment :
Method : /chem/ecd5a.i/120908b.b/ECD5-B-8081-120908.m
Meth Date : 09-Dec-2008 23:28 hea01125 Quant Type: ESTD
Cal Date : 09-DEC-2008 19:31 Cal File: 009b0901.d
Als bottle: 9 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
3 Aroclor-1016					CAS #: 12674-11-2		
3.512	3.512	0.000	4990280	500.000	483	80.00- 120.00	100.00(M)
3.580	3.581	-0.001	3019836	500.000	498	40.51- 80.51	60.51
3.647	3.646	0.001	3021343	500.000	488	40.54- 80.54	60.54
3.674	3.675	-0.001	3130352	500.000	494	42.73- 82.73	62.73
3.819	3.820	-0.001	3903842	500.000	484	58.23- 98.23	78.23
Average of Peak Amounts =					489		
21 Aroclor-1260					CAS #: 11096-82-5		
4.606	4.606	0.000	8326722	500.000	487	80.00- 120.00	100.00
4.732	4.733	-0.001	9864871	500.000	485	98.47- 138.47	118.47
5.001	5.001	0.000	6556186	500.000	493	58.74- 98.74	78.74
5.176	5.176	0.000	6513808	500.000	487	58.23- 98.23	78.23
5.323	5.324	-0.001	15770054	500.000	486	169.39- 209.39	189.39
Average of Peak Amounts =					488		
$ 1 4cmx					CAS #: 877-09-8		
2.386	2.385	0.001	16857579	100.000	49.1	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.226	6.224	0.002	14144555	100.000	50.5	80.00- 120.00	100.00

QC Flag Legend

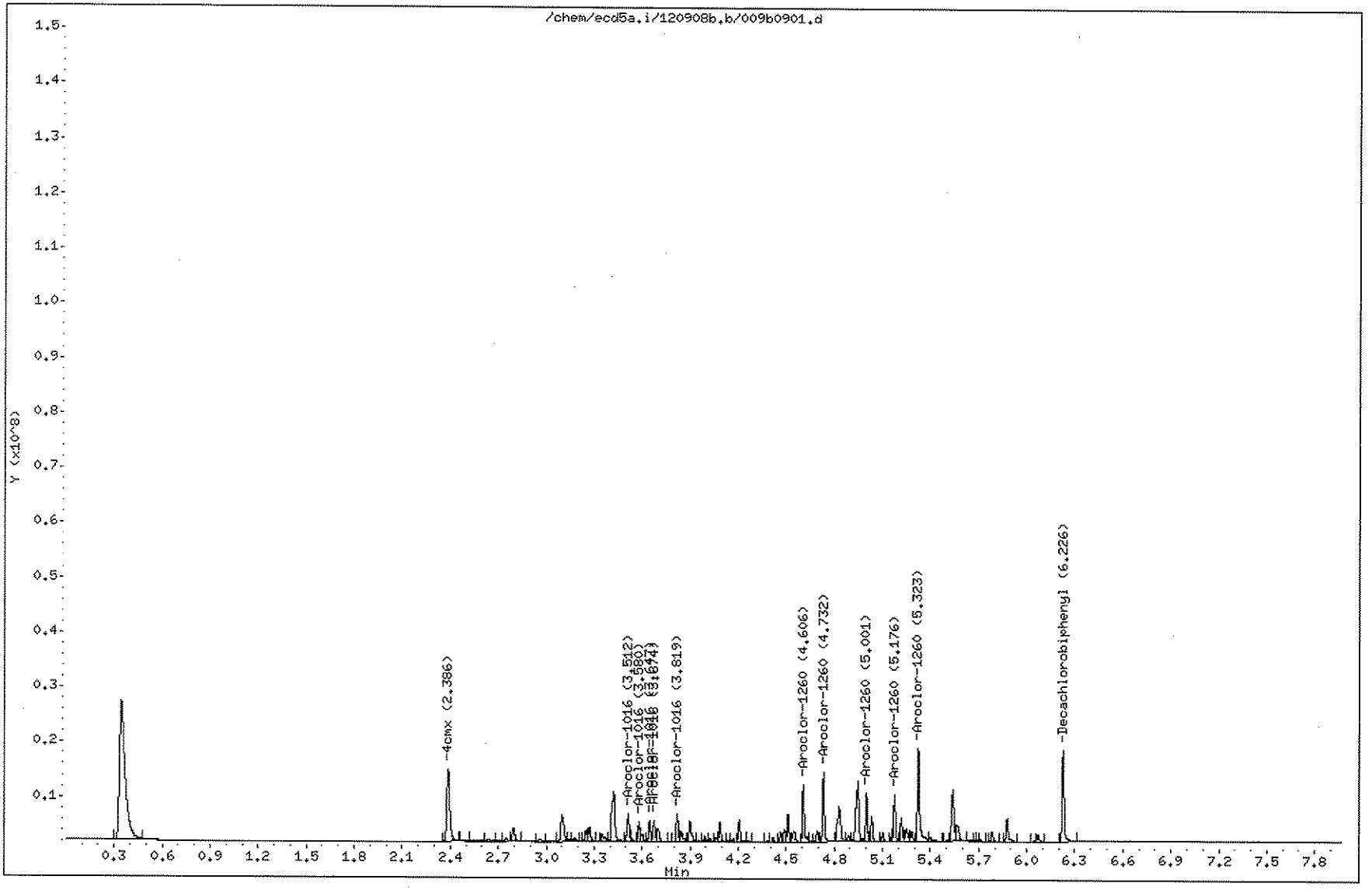
M - Compound response manually integrated.

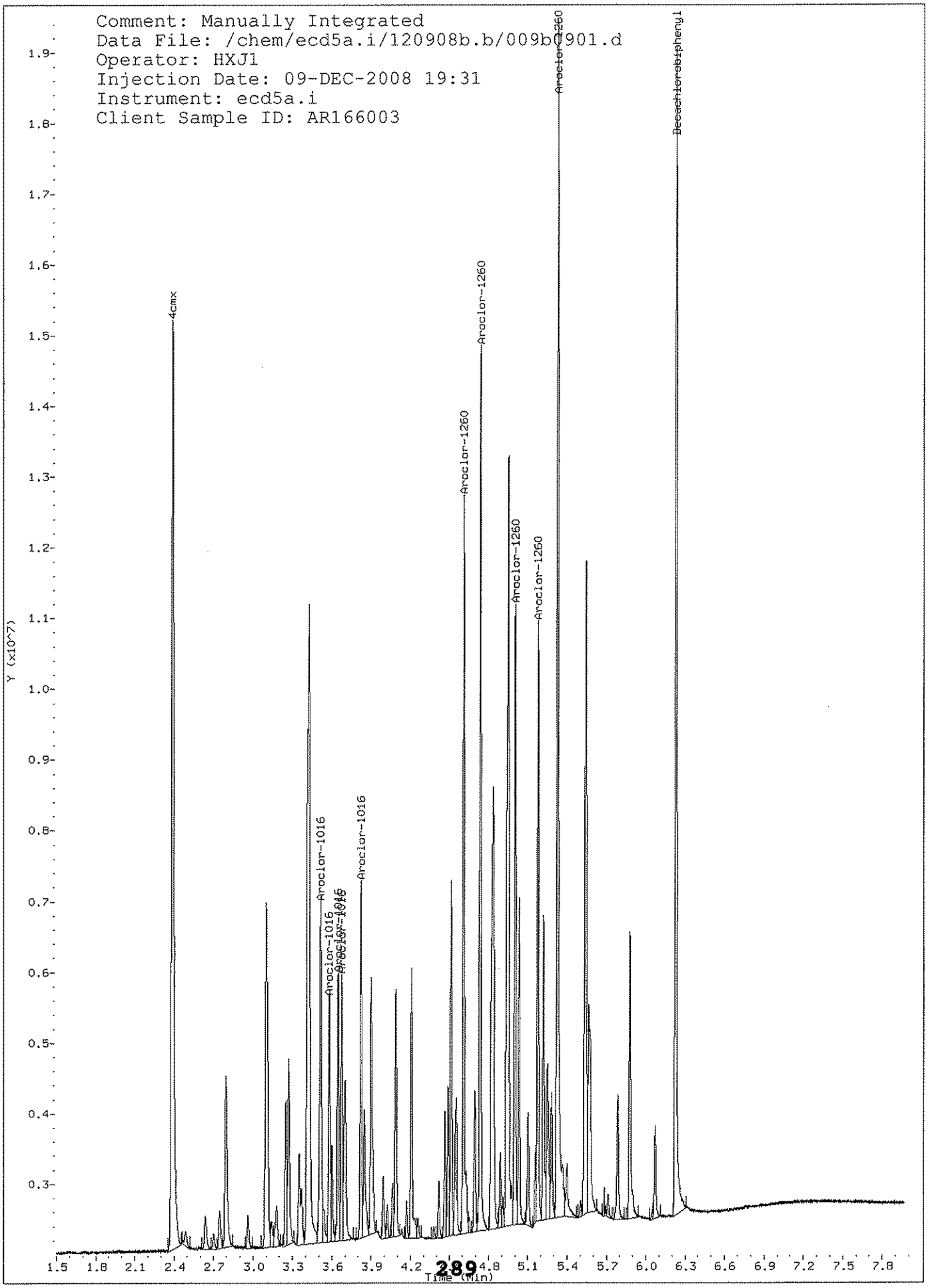
Data File: /chem/ecd5a.i/120908b.b/009b0901.d
Date : 09-DEC-2008 19:31
Client ID: AR166003
Sample Info: IWPE081209-13 60

Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25

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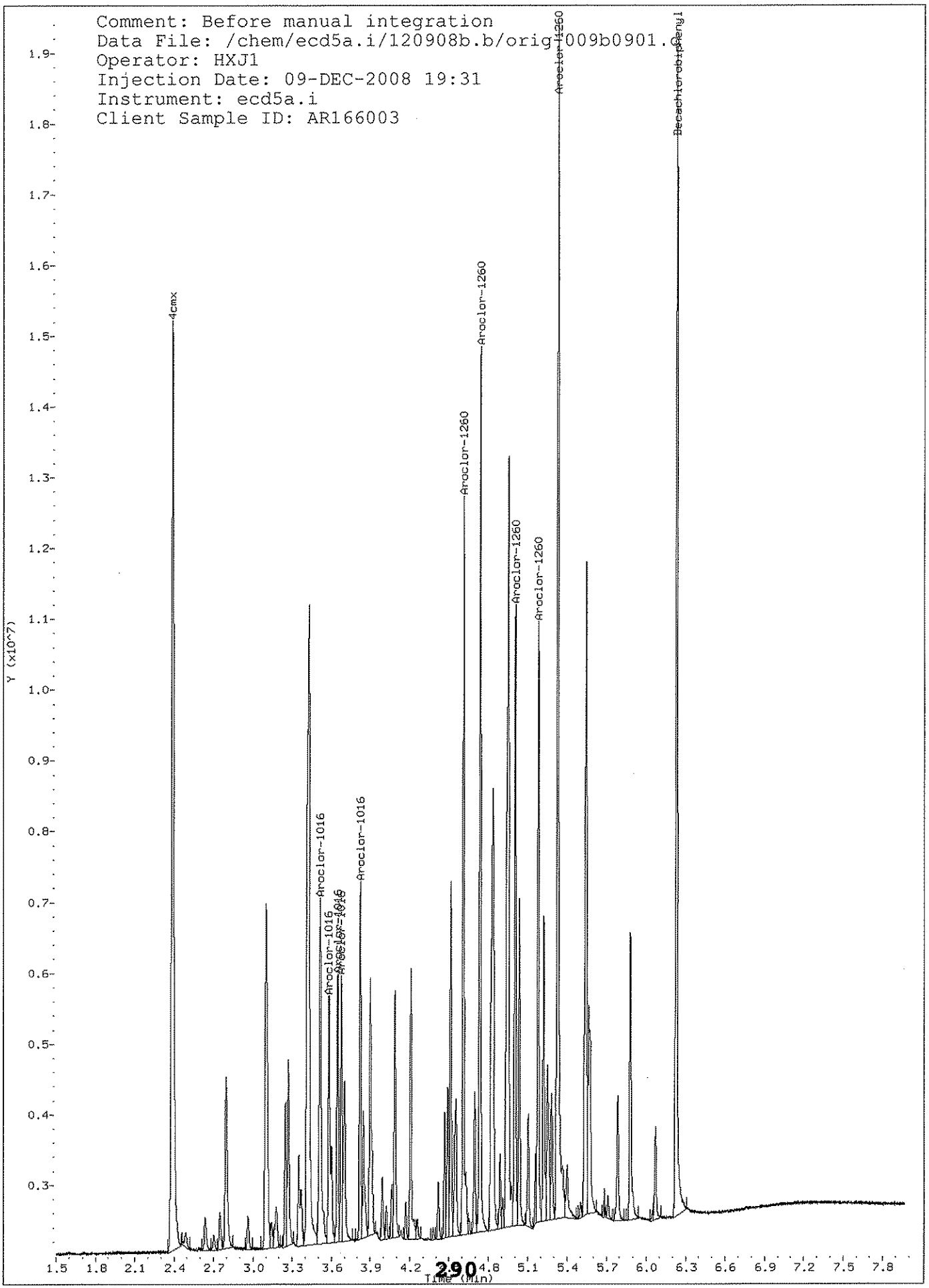
Operator: HXJ1
Injection Date: 09-DEC-2008 19:31
Instrument: ecd5a.i
Client Sample ID: AR166003
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (min)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Operator: HXJ1
Injection Date: 09-DEC-2008 19:31
Instrument: ecd5a.i
Client Sample ID: AR166003
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120908b.b/010f1001.d
Lab Smp Id: WPE081209-14 60 Client Smp ID: AR166004
Inj Date : 09-DEC-2008 19:43
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE081209-14 60
Misc Info :
Comment :
Method : /chem/ecd5a.i/120908b.b/ECD5-F-8081-120908.m
Meth Date : 09-Dec-2008 23:29 hea01125 Quant Type: ESTD
Cal Date : 16-JUL-2008 00:40 Cal File: 034f3401.d
Als bottle: 10 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
3 Aroclor-1016					CAS #: 12674-11-2		
2.654	2.656	-0.002	6462912	1000.00	958	80.00- 120.00	100.00(M)
3.270	3.271	-0.001	16271115	1000.00	948	231.76- 271.76	251.76
3.404	3.406	-0.002	6722863	1000.00	936	84.02- 124.02	104.02
3.489	3.489	0.000	5875447	1000.00	923	70.91- 110.91	90.91
3.638	3.638	0.000	8287758	1000.00	926	108.24- 148.24	128.24
Average of Peak Amounts =					938		
21 Aroclor-1260					CAS #: 11096-82-5		
4.409	4.411	-0.002	15982443	1000.00	937	80.00- 120.00	100.00
4.578	4.578	0.000	24312557	1000.00	949	132.12- 172.12	152.12
4.814	4.815	-0.001	12163734	1000.00	936	56.11- 96.11	76.11
4.963	4.963	0.000	12365387	1000.00	947	57.37- 97.37	77.37
5.145	5.146	-0.001	20921981	1000.00	904	110.91- 150.91	130.91
Average of Peak Amounts =					935		
$ 1 4cmx					CAS #: 877-09-8		
2.340	2.339	0.001	35265424	200.000	99.6	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
5.953	5.952	0.001	26681806	200.000	96.1	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120908b.b/010f1001.d

Date : 09-DEC-2008 19:43

Client ID: AR166004

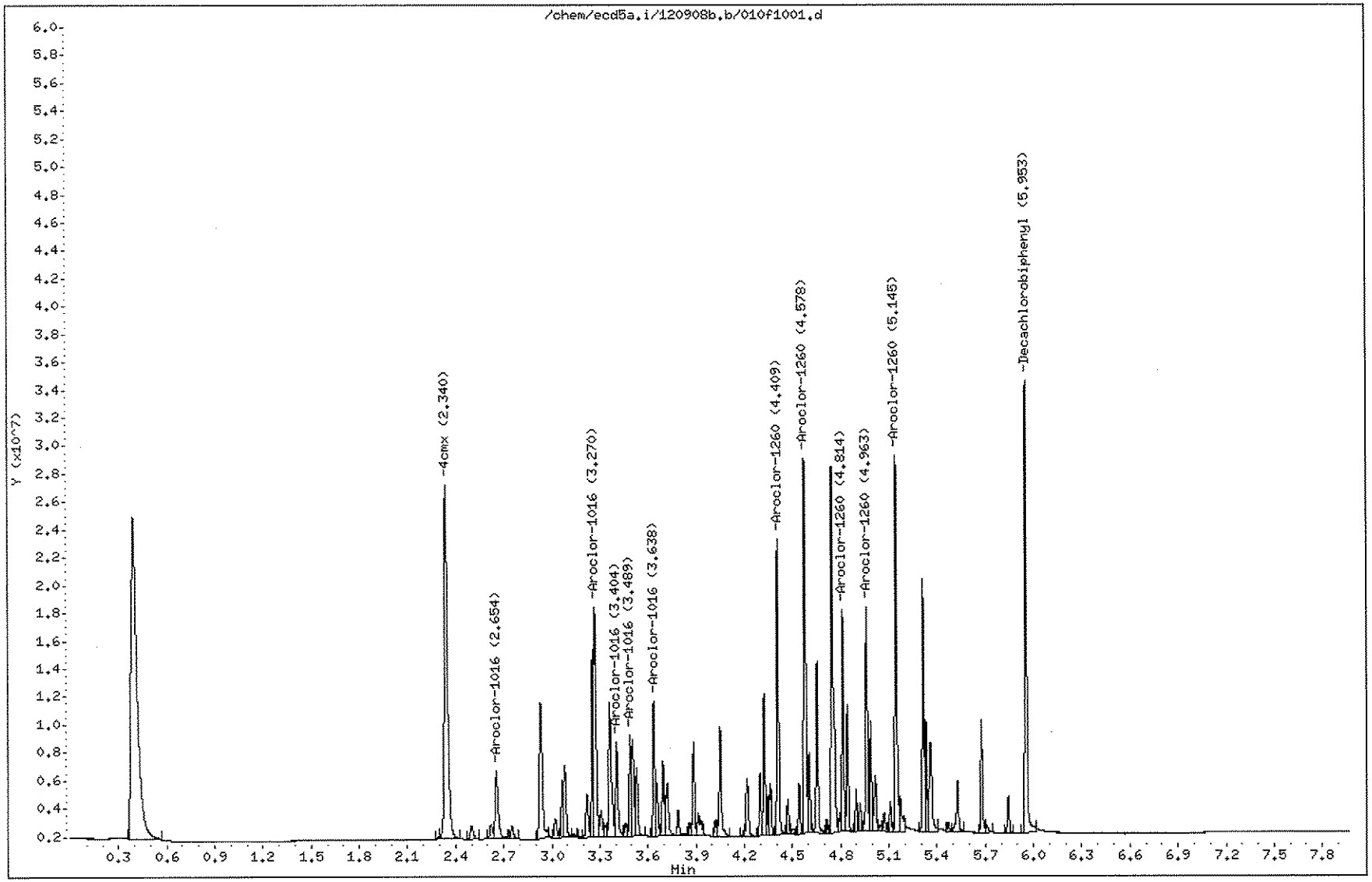
Sample Info: IWPE081209-14 60

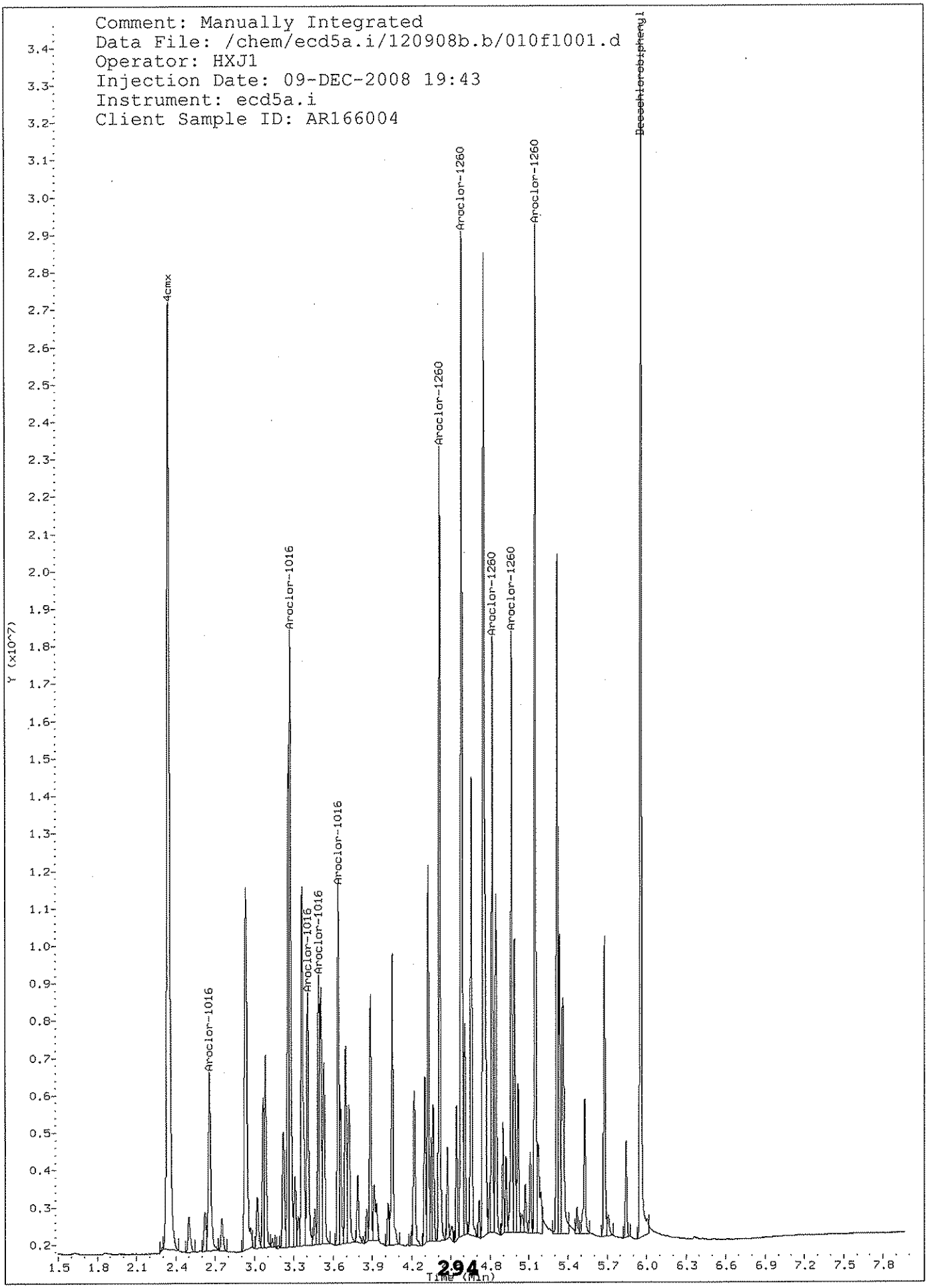
Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

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Data File: /chem/ecd5a.i/120908b.b/010f1001.d
Operator: HXJ1
Injection Date: 09-DEC-2008 19:43
Instrument: ecd5a.i
Client Sample ID: AR166004
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
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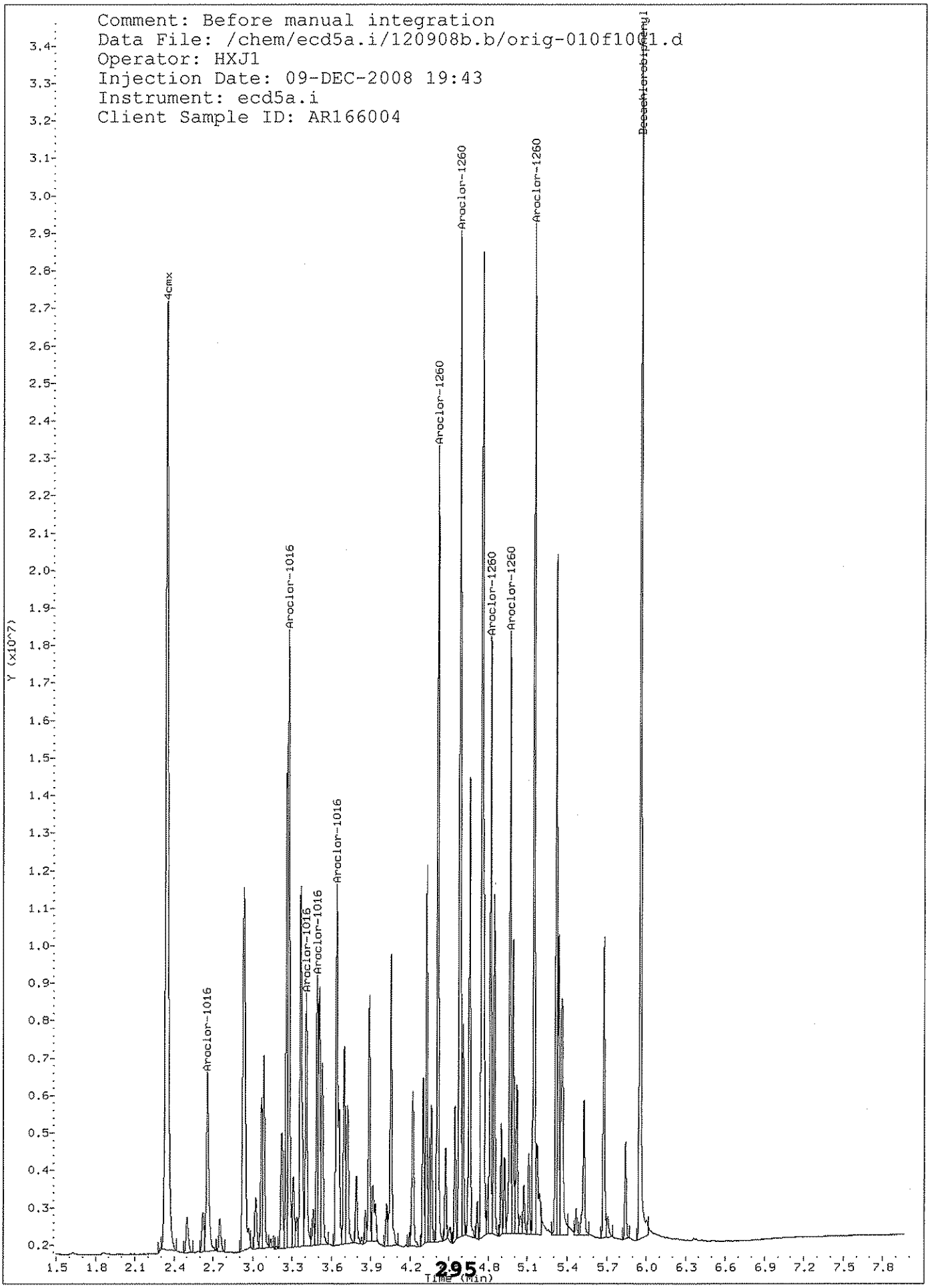
Decachlorobiphenyl
Y (x10^7)
Time (Min)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Data File: /chem/ecd5a.i/120908b.b/orig-010f10f1.d
Operator: HXJ1
Injection Date: 09-DEC-2008 19:43
Instrument: ecd5a.i
Client Sample ID: AR166004
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120908b.b/010b1001.d
Lab Smp Id: WPE081209-14 60 Client Smp ID: AR166004
Inj Date : 09-DEC-2008 19:43
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE081209-14 60
Misc Info :
Comment :
Method : /chem/ecd5a.i/120908b.b/ECD5-B-8081-120908.m
Meth Date : 09-Dec-2008 23:28 hea01125 Quant Type: ESTD
Cal Date : 16-JUL-2008 00:40 Cal File: 034b3401.d
Als bottle: 10 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
3 Aroclor-1016					CAS #: 12674-11-2		
3.512	3.512	0.000	9837362	1000.00	953	80.00- 120.00	100.00(M)
3.580	3.581	-0.001	5735268	1000.00	945	38.30- 78.30	58.30
3.646	3.646	0.000	5854333	1000.00	946	39.51- 79.51	59.51
3.674	3.675	-0.001	6015393	1000.00	948	41.15- 81.15	61.15
3.819	3.820	-0.001	7772860	1000.00	964	59.01- 99.01	79.01
Average of Peak Amounts =					951		
21 Aroclor-1260					CAS #: 11096-82-5		
4.606	4.606	0.000	16606336	1000.00	971	80.00- 120.00	100.00
4.733	4.733	0.000	19930175	1000.00	981	100.02- 140.02	120.02
5.000	5.001	-0.001	13266123	1000.00	997	59.89- 99.89	79.89
5.176	5.176	0.000	13129475	1000.00	982	59.06- 99.06	79.06
5.324	5.324	0.000	33071647	1000.00	1020	179.15- 219.15	199.15
Average of Peak Amounts =					990		
$ 1 4cmx					CAS #: 877-09-8		
2.386	2.385	0.001	33321838	200.000	97.0	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.225	6.224	0.001	28598928	200.000	102	80.00- 120.00	100.00

QC Flag Legend

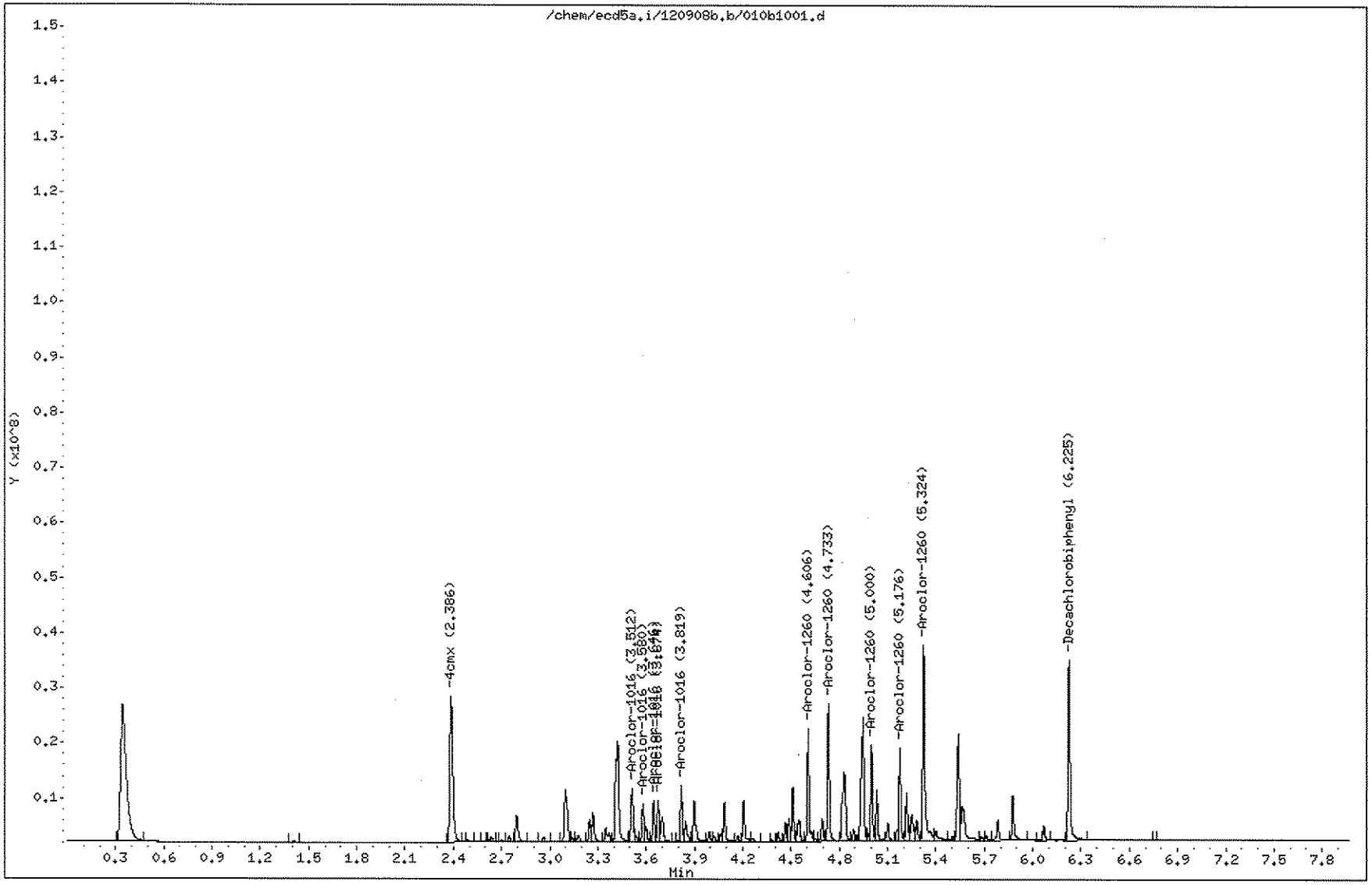
M - Compound response manually integrated.

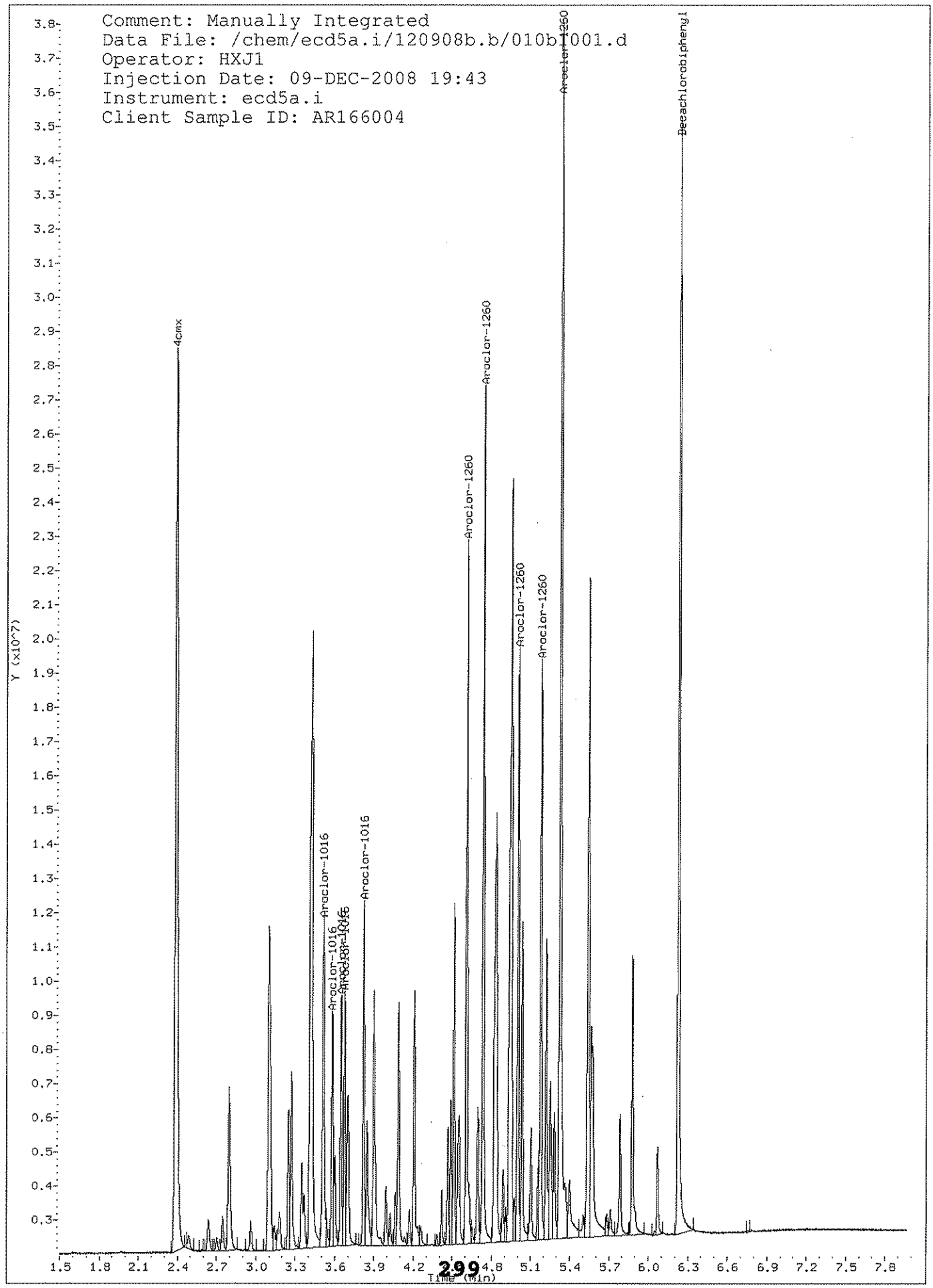
Data File: /chem/ecd5a.i/120908b.b/010b1001.d
Date : 09-DEC-2008 19:43
Client ID: AR166004
Sample Info: IWPE081209-14 60

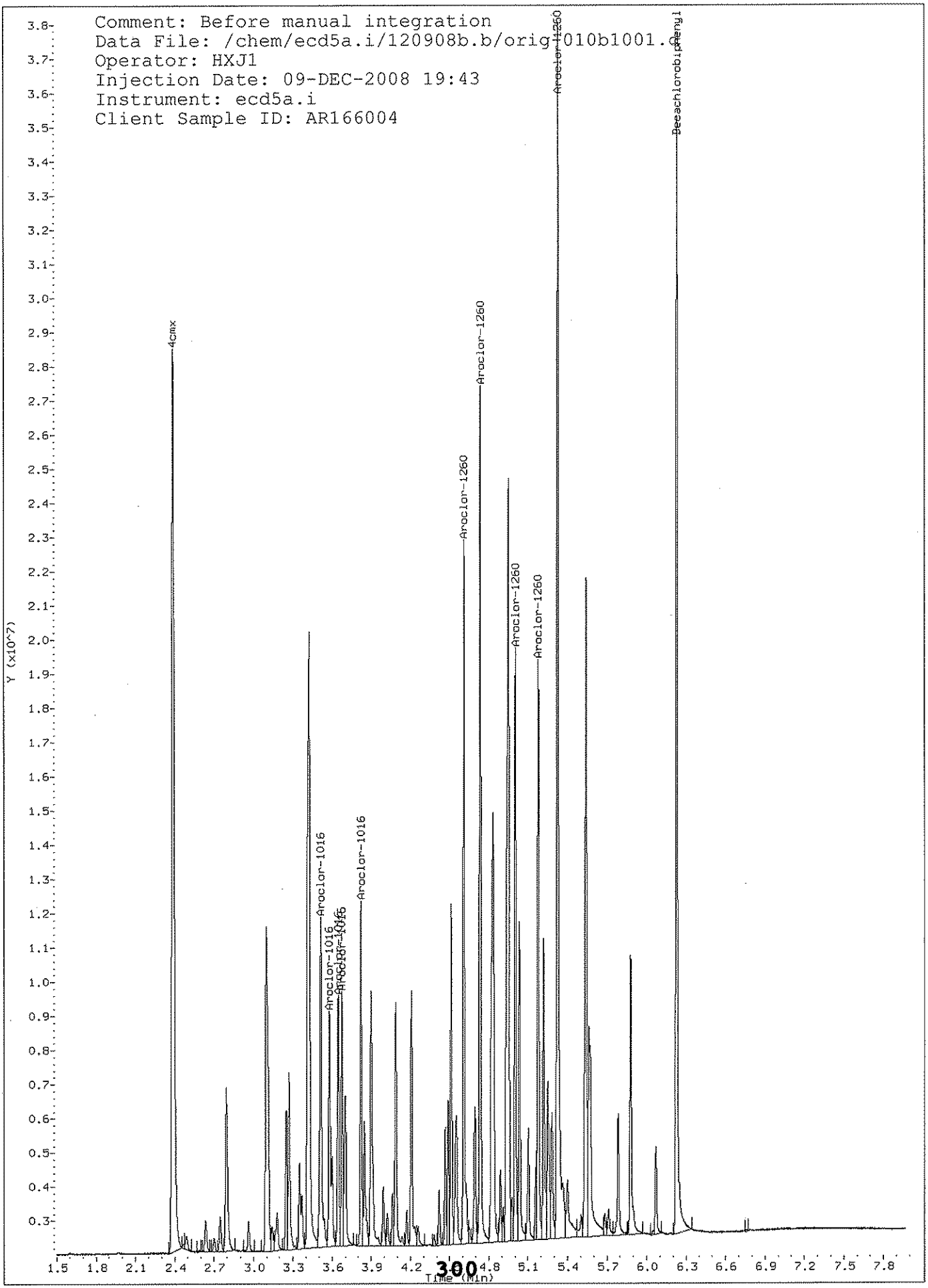
Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25




Comment: Manually Integrated
Data File: /chem/ecd5a.i/120908b.b/010b1001.d
Operator: HXJ1
Injection Date: 09-DEC-2008 19:43
Instrument: ecd5a.i
Client Sample ID: AR166004
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)


Comment: Before manual integration
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Operator: HXJ1
Injection Date: 09-DEC-2008 19:43
Instrument: ecd5a.i
Client Sample ID: AR166004
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/120908b.b/011f1101.d
Lab Smp Id: IAR081003-01 60 Client Smp ID: AR166005
Inj Date : 09-DEC-2008 19:54
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |IAR081003-01 60
Misc Info :
Comment :
Method : /chem/ecd5a.i/120908b.b/ECD5-F-8081-120908.m
Meth Date : 09-Dec-2008 23:29 hea01125 Quant Type: ESTD
Cal Date : 09-DEC-2008 19:54 Cal File: 011f1101.d
Als bottle: 11 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
3 Aroclor-1016					CAS #: 12674-11-2		
2.654	2.656	-0.002	24359182	4000.00	3610	80.00- 120.00	100.00(AM)
3.270	3.271	-0.001	64615389	4000.00	3760	245.26- 285.26	265.26
3.405	3.406	-0.001	26737915	4000.00	3720	89.77- 129.77	109.77
3.488	3.489	-0.001	22853582	4000.00	3590	73.82- 113.82	93.82
3.638	3.638	0.000	33332222	4000.00	3720	116.84- 156.84	136.84
Average of Peak Amounts =					3.68e+03		
21 Aroclor-1260					CAS #: 11096-82-5		
4.409	4.411	-0.002	62759044	4000.00	3680	80.00- 120.00	100.00
4.577	4.578	-0.001	96141038	4000.00	3750	133.19- 173.19	153.19
4.814	4.815	-0.001	49124278	4000.00	3780	58.27- 98.27	78.27
4.962	4.963	-0.001	53309454	4000.00	4080	64.94- 104.94	84.94
5.144	5.146	-0.002	89775693	4000.00	3880	123.05- 163.05	143.05
Average of Peak Amounts =					3.84e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.340	2.339	0.001	144547298	400.000	408	80.00- 120.00	100.00(A)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
5.953	5.952	0.001	106906083	400.000	385	80.00- 120.00	100.00

QC Flag Legend

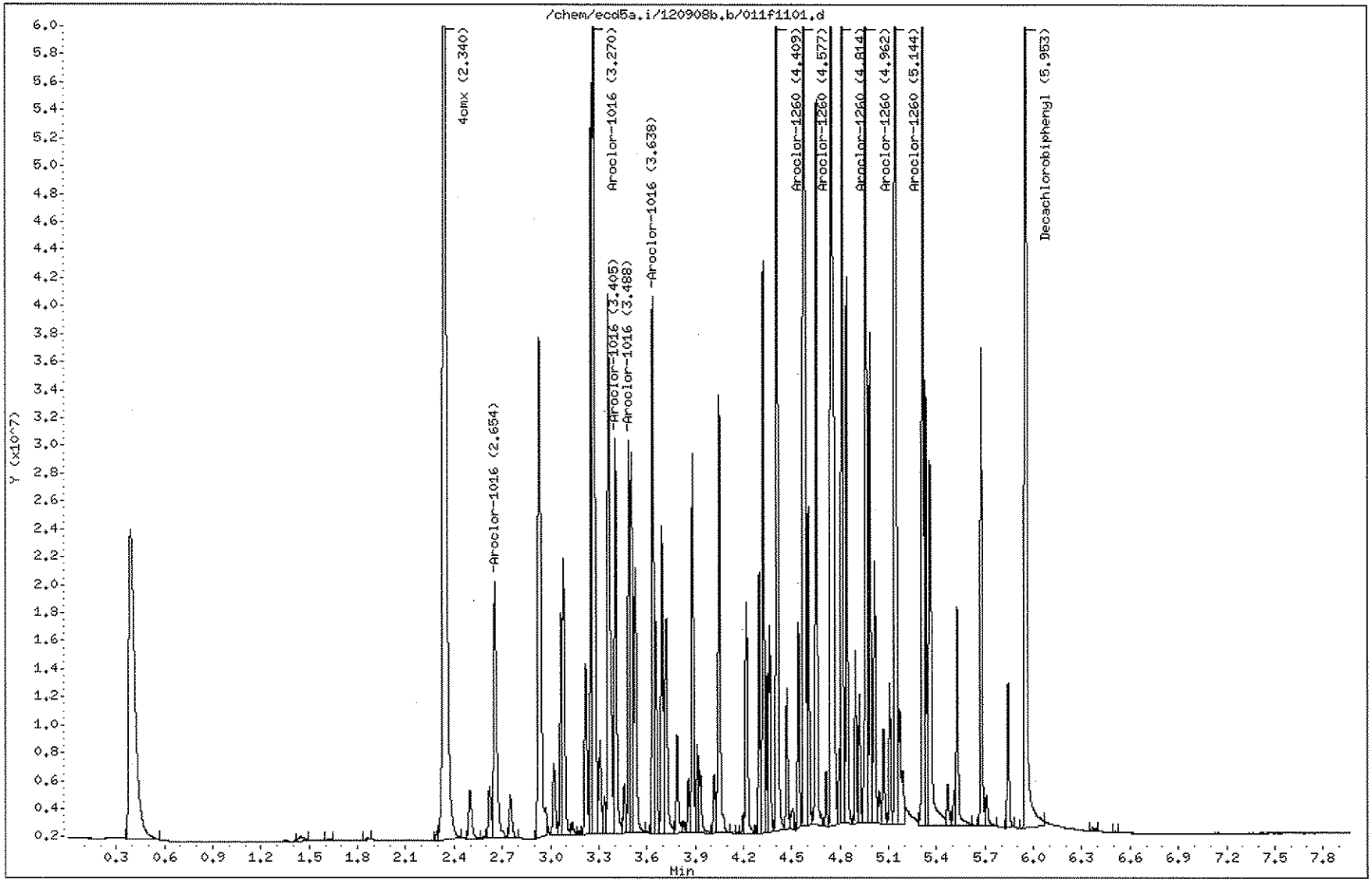
A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120908b.b/011f1101.d
Date : 09-DEC-2008 19:54
Client ID: AR166005
Sample Info: !IAR081003-01 60

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25



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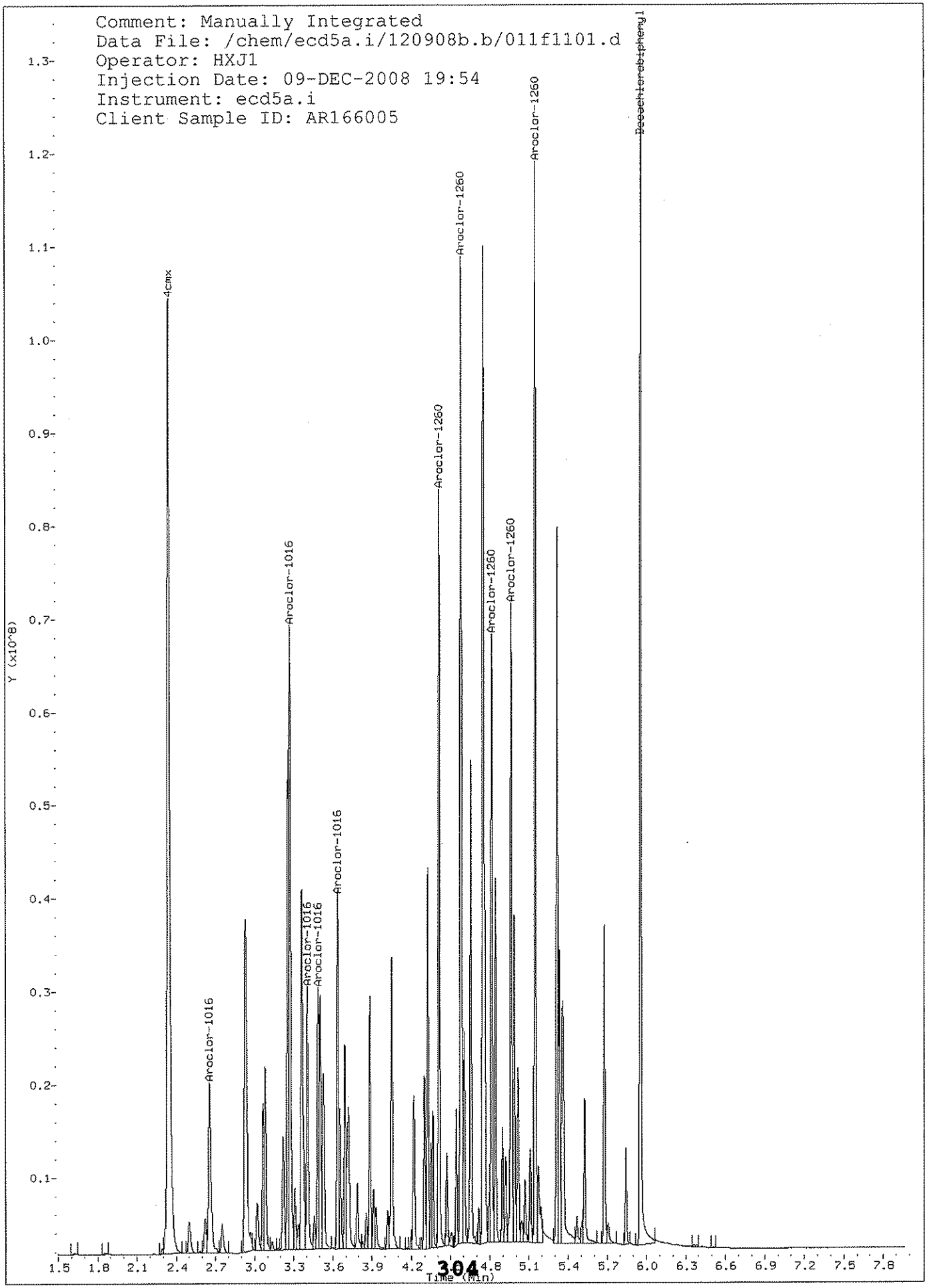
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Data File: /chem/ecd5a.i/120908b.b/011f1101.d
Operator: HXJ1
Injection Date: 09-DEC-2008 19:54
Instrument: ecd5a.i
Client Sample ID: AR166005
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
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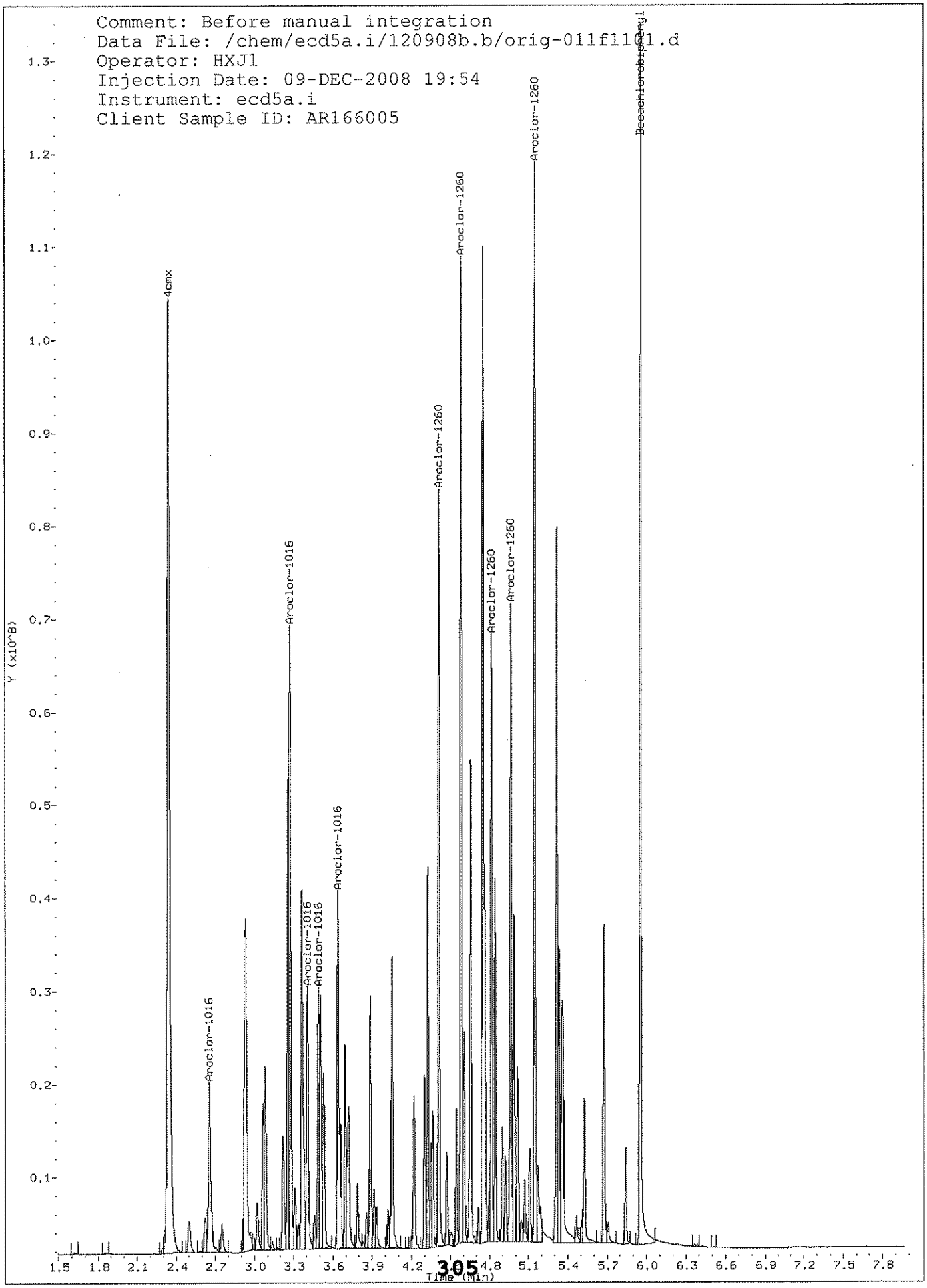
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^8)
Time (min)


Comment: Before manual integration
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Operator: HXJ1
Injection Date: 09-DEC-2008 19:54
Instrument: ecd5a.i
Client Sample ID: AR166005
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^8)
Time (min)

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/120908b.b/011b1101.d
Lab Smp Id: IAR081003-01 60 Client Smp ID: AR166005
Inj Date : 09-DEC-2008 19:54
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |IAR081003-01 60
Misc Info :
Comment :
Method : /chem/ecd5a.i/120908b.b/ECD5-B-8081-120908.m
Meth Date : 09-Dec-2008 23:28 hea01125 Quant Type: ESTD
Cal Date : 09-DEC-2008 19:54 Cal File: 011b1101.d
Als bottle: 11 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
3 Aroclor-1016					CAS #: 12674-11-2		
3.512	3.512	0.000	40339848	4000.00	3910	80.00- 120.00	100.00(AM)
3.579	3.581	-0.002	24446473	4000.00	4030	40.60- 80.60	60.60
3.646	3.646	0.000	24155447	4000.00	3900	39.88- 79.88	59.88
3.674	3.675	-0.001	24877367	4000.00	3920	41.67- 81.67	61.67
3.819	3.820	-0.001	32585093	4000.00	4040	60.78- 100.78	80.78
Average of Peak Amounts =					3.96e+03		
21 Aroclor-1260					CAS #: 11096-82-5		
4.606	4.606	0.000	69299881	4000.00	4050	80.00- 120.00	100.00(A)
4.733	4.733	0.000	83972603	4000.00	4130	101.17- 141.17	121.17
5.001	5.001	0.000	55510949	4000.00	4170	60.10- 100.10	80.10
5.175	5.176	-0.001	55944852	4000.00	4180	60.73- 100.73	80.73
5.323	5.324	-0.001	140438294	4000.00	4330	182.65- 222.65	202.65
Average of Peak Amounts =					4.17e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.386	2.385	0.001	144112908	400.000	420	80.00- 120.00	100.00(A)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.225	6.224	0.001	127779726	400.000	456	80.00- 120.00	100.00

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/120908b.b/011b1101.d

Date : 09-DEC-2008 19:54

Client ID: AR166005

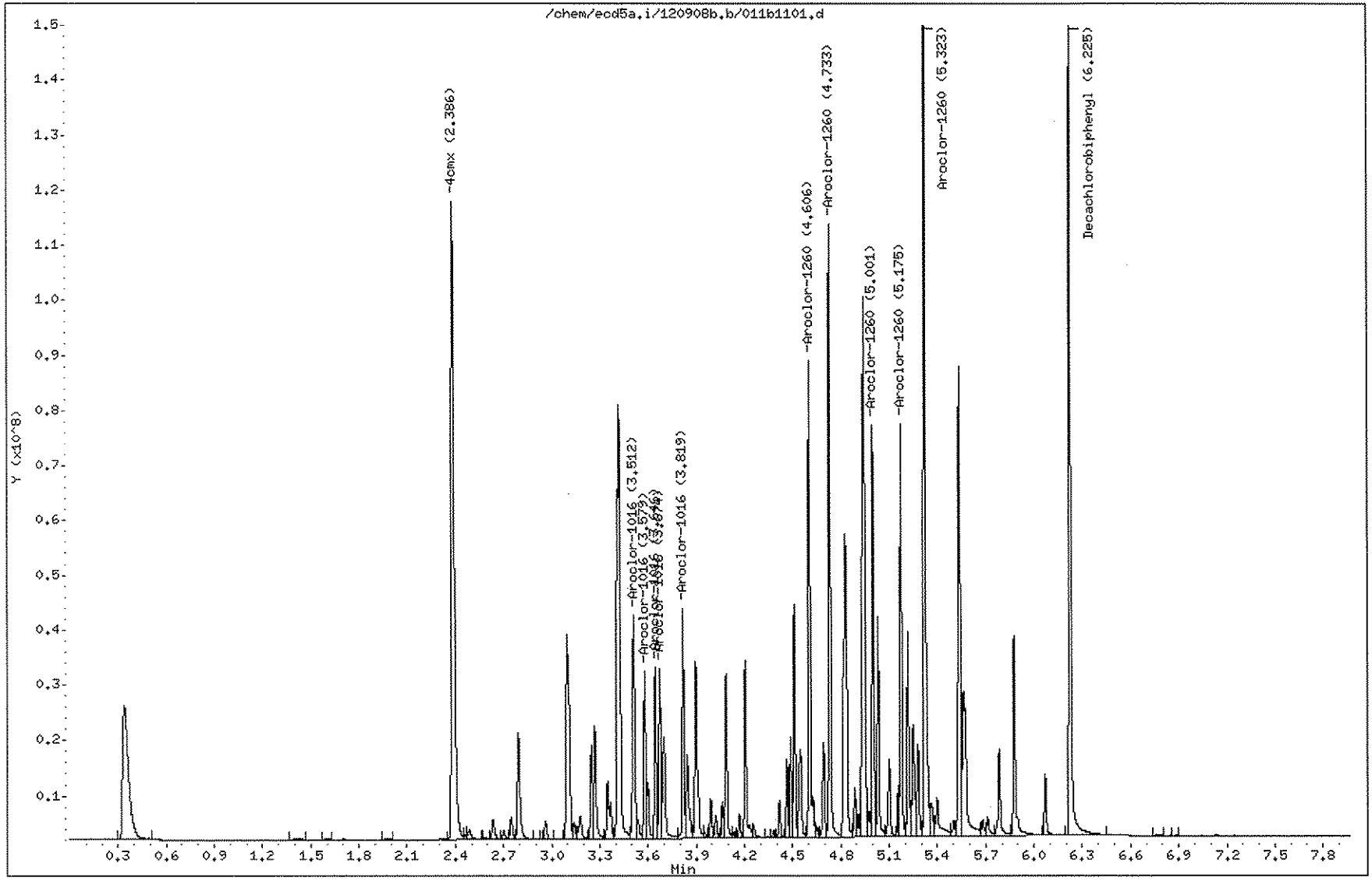
Sample Info: !IAR081003-01 60

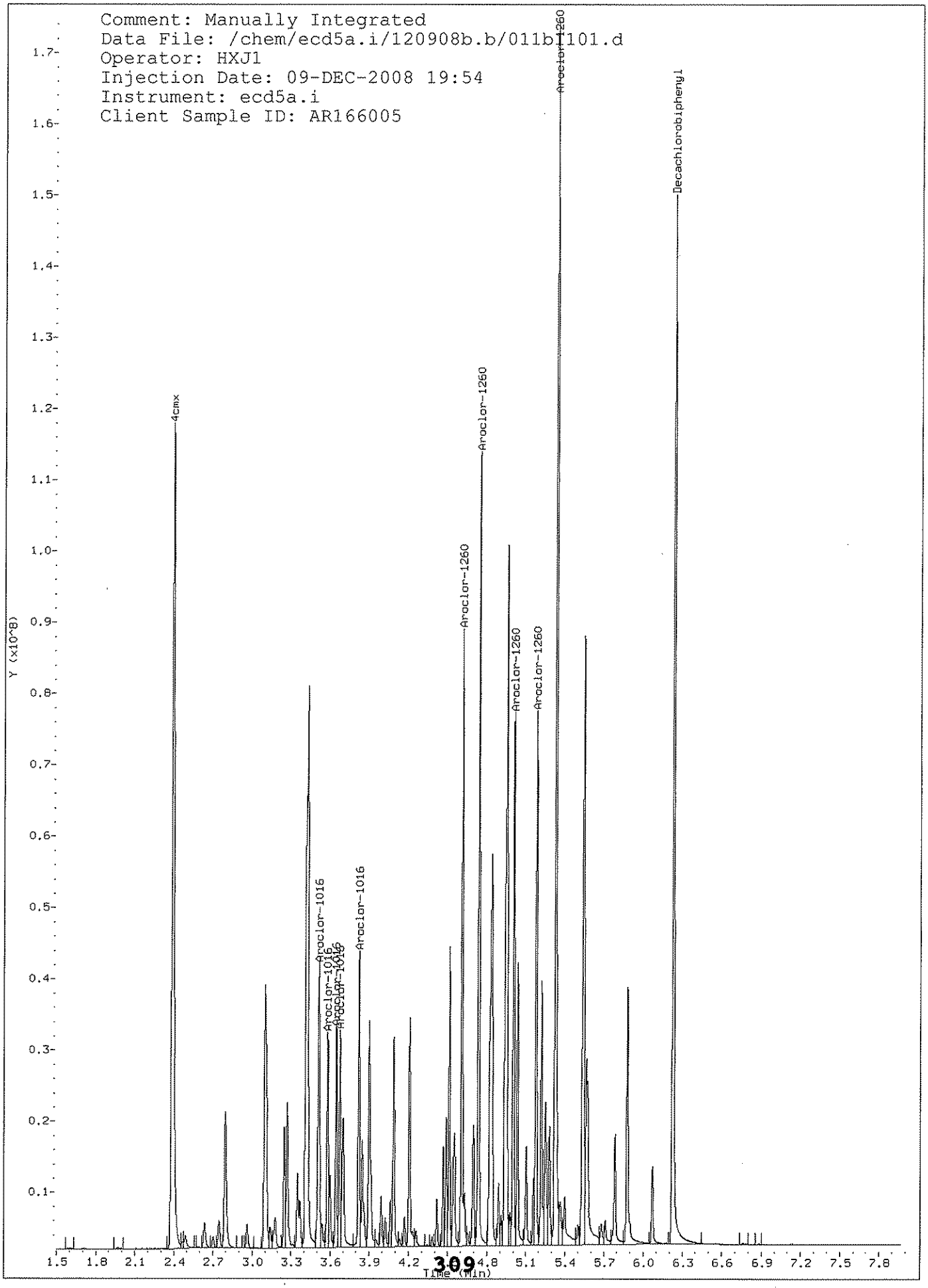
Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25

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Operator: HXJ1
Injection Date: 09-DEC-2008 19:54
Instrument: ecd5a.i
Client Sample ID: AR166005
Y (x10^8)
Time (min)
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
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Aroclor-1260
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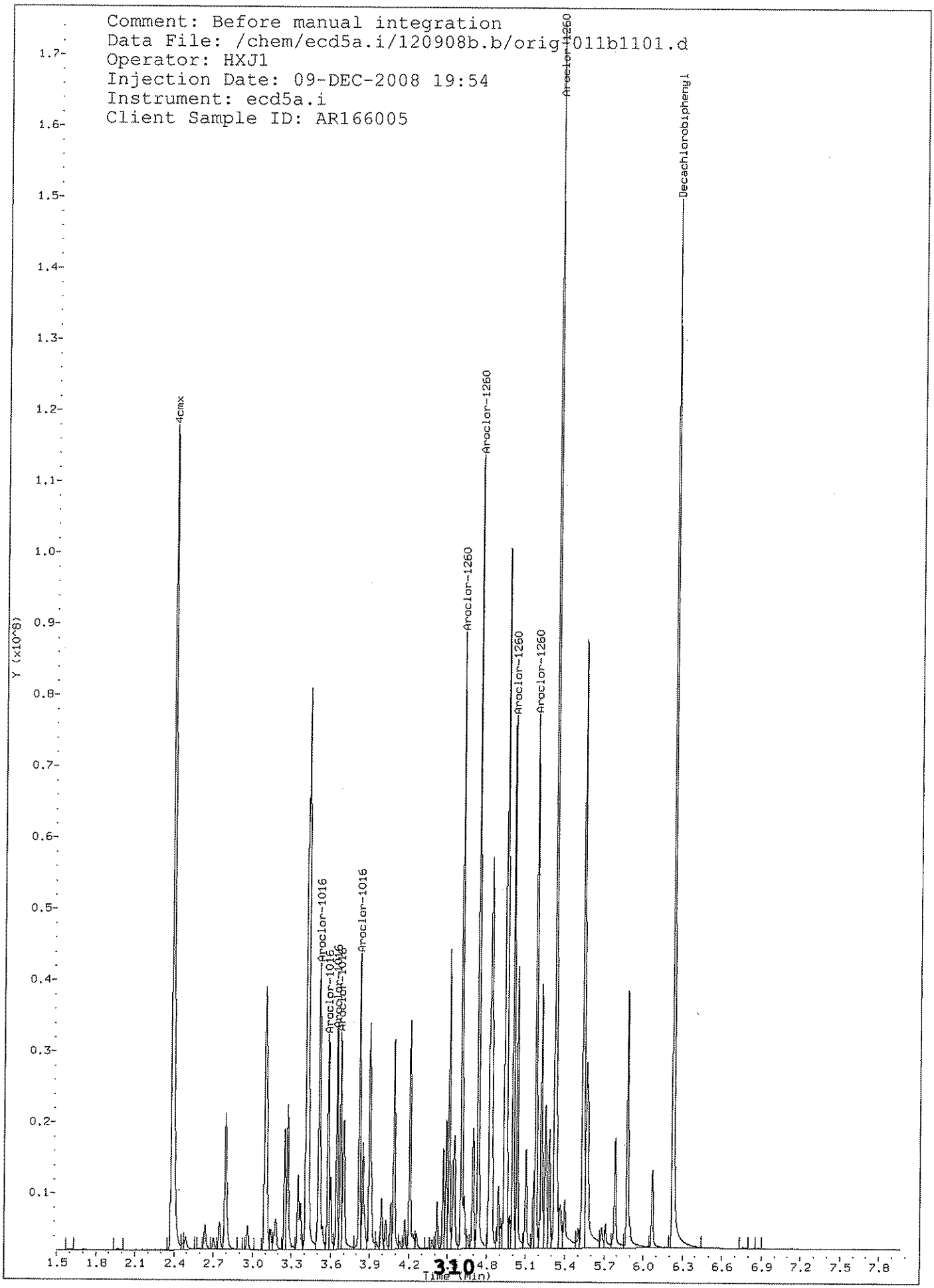
Aroclor-1260
Decachlorobiphenyl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Operator: HXJ1
Injection Date: 09-DEC-2008 19:54
Instrument: ecd5a.i
Client Sample ID: AR166005
4cmx
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Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^8)
Time (min)

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CLP-1

Data file : /chem/ecd5a.i/122208a.b/014f1401.d
Lab Smp Id: WPE081219-01AB Client Smp ID: INDAB01
Inj Date : 22-DEC-2008 16:18
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE081219-01AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-F-8081-121108.m
Meth Date : 23-Dec-2008 15:03 hea01125 Quant Type: ESTD
Cal Date : 17-DEC-2008 16:29 Cal File: 010f1001.d
Als bottle: 14 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: INDAB.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.804	2.804	0.000	1843083	4.00000	4.03	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.052	3.051	0.001	1665115	4.00000	4.15	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.126	3.125	0.001	861879	4.00000	4.57	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.393	3.393	0.000	1504357	4.00000	4.34	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.253	3.253	0.000	1625658	4.00000	4.00	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.599	3.599	0.000	1637107	4.00000	4.10	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.006	4.006	0.000	1534126	4.00000	4.28	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.087	4.087	0.000	1473256	4.00000	4.09	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.172	4.171	0.001	1532076	4.00000	4.26	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.254	4.254	0.000	1606483	4.00000	4.43	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.233	4.232	0.001	2516626	8.00000	7.65	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.405	4.404	0.001	2977303	8.00000	8.17	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.548	4.547	0.001	2697804	8.00000	8.44	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.603	4.600	0.003	2272370	8.00000	7.87	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
4.688	4.686	0.002	2609062	8.00000	8.43	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
4.942	4.940	0.002	2011332	8.00000	8.49	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.769	4.767	0.002	1215368	8.00000	7.04	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.200	5.199	0.001	2164419	8.00000	8.09	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.065	5.062	0.003	3506042	40.0000	40.9	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.369	5.367	0.002	2414107	8.00000	9.06	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.336	2.337	-0.001	3080111	8.00000	8.59	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
5.957	5.956	0.001	2606499	8.00000	9.07	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/122208a.b/014f1401.d

Date : 22-DEC-2008 16:18

Client ID: INDAB01

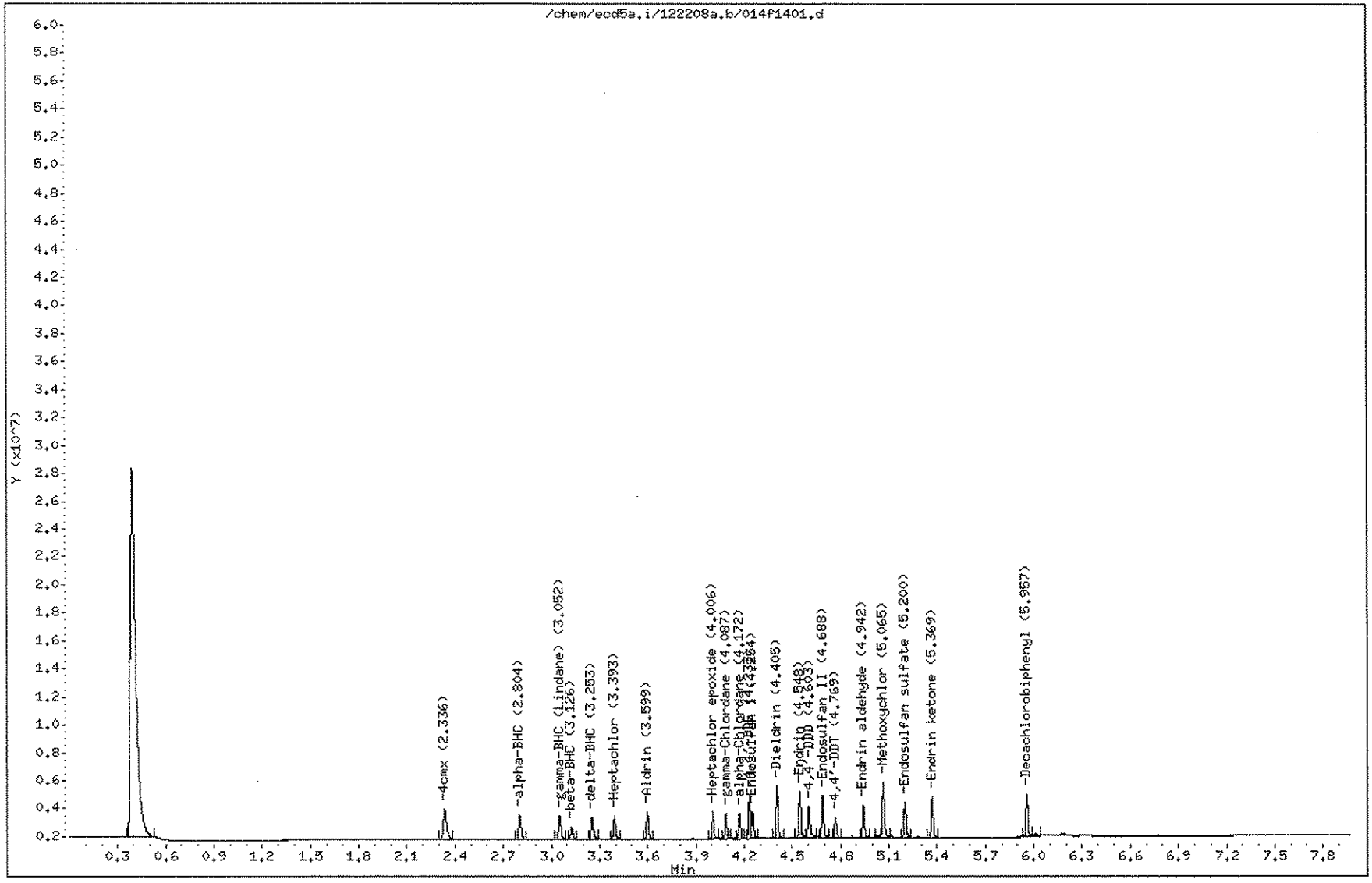
Sample Info: IWPE081219-01AB

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1

Column diameter: 0.25



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CLP-2

Data file : /chem/ecd5a.i/122208a.b/014b1401.d
Lab Smp Id: WPE081219-01AB
Client Smp ID: INDAB01
Inj Date : 22-DEC-2008 16:18
Operator : HXJ1
Inst ID: ecd5a.i
Smp Info : |WPE081219-01AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/122308.b/ECD5-B-8081-121108.m
Meth Date : 24-Dec-2008 17:07 hea01125
Quant Type: ESTD
Cal Date : 17-DEC-2008 16:29
Cal File: 010b1001.d
Als bottle: 14
Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon
Compound Sublist: INDAB.sub
Target Version: 3.50
Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.886	2.884	0.002	1780031	4.00000	3.96	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.158	3.156	0.002	1605449	4.00000	4.01	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.230	3.227	0.003	747667	4.00000	4.22	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.475	3.473	0.002	1610491	4.00000	4.12	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.437	3.434	0.003	1519819	4.00000	3.93	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.695	3.692	0.003	1527966	4.00000	4.01	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.072	4.068	0.004	1461208	4.00000	4.21	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.194	4.191	0.003	1404466	4.00000	4.01	80.00- 120.00	100.00(M)
18 alpha-Chlordane					CAS #: 5103-71-9		
4.285	4.282	0.003	1385298	4.00000	4.09	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.317	4.315	0.002	1317241	4.00000	4.10	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.398	4.394	0.004	2652440	8.00000	7.73	80.00- 120.00	100.00(M)
20 Dieldrin					CAS #: 60-57-1		
4.487	4.483	0.004	2808596	8.00000	8.03	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.671	4.667	0.004	2465880	8.00000	8.04	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.749	4.745	0.004	2278647	8.00000	7.92	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
4.801	4.796	0.005	2444216	8.00000	8.13	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.002	4.997	0.005	1850422	8.00000	8.39	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.936	4.932	0.004	1246336	8.00000	15.1	80.00- 120.00	100.00(M)
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.168	5.164	0.004	2184926	8.00000	8.29	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.341	5.336	0.005	3593681	40.0000	36.4	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.483	5.478	0.005	2360904	8.00000	7.92	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.374	2.372	0.002	2799609	8.00000	8.24	80.00- 120.00	100.00(M)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.215	6.211	0.004	2411241	8.00000	8.14	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd5a.i/122208a.b/014b1401.d
Date : 22-DEC-2008 16:18
Client ID: INDAB01
Sample Info: IWPE081219-014B

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25

Column phase: CLP-2

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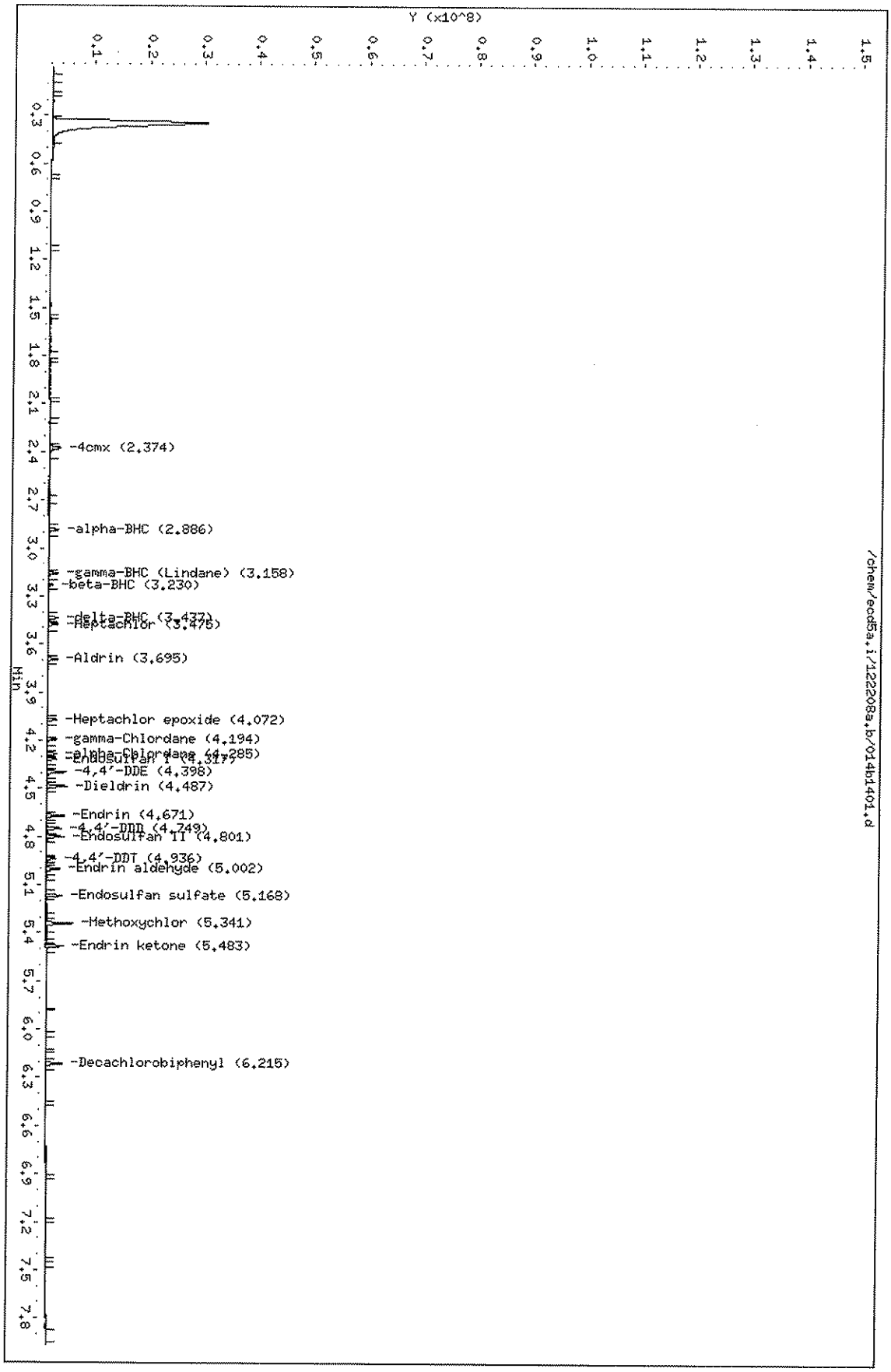
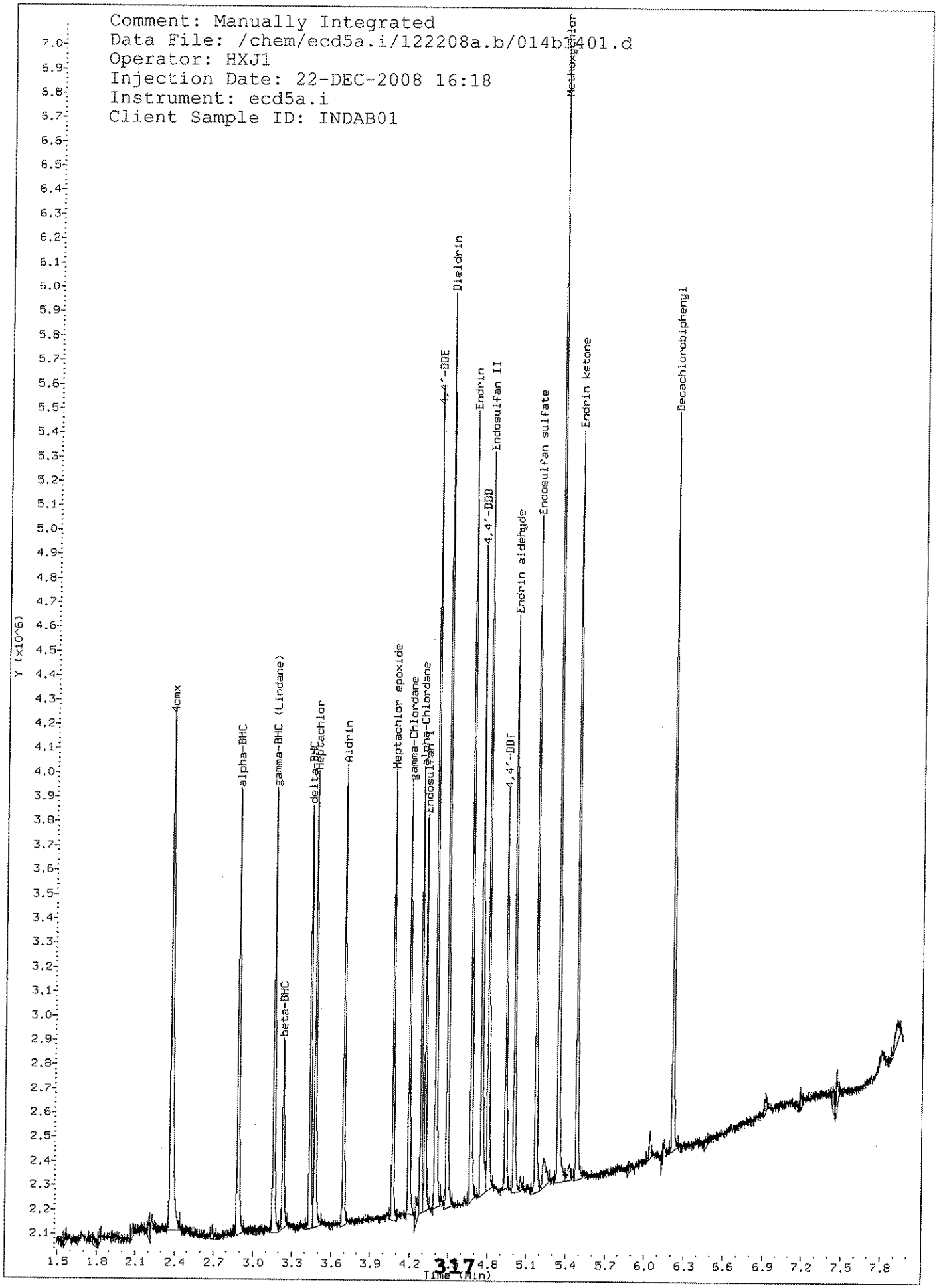
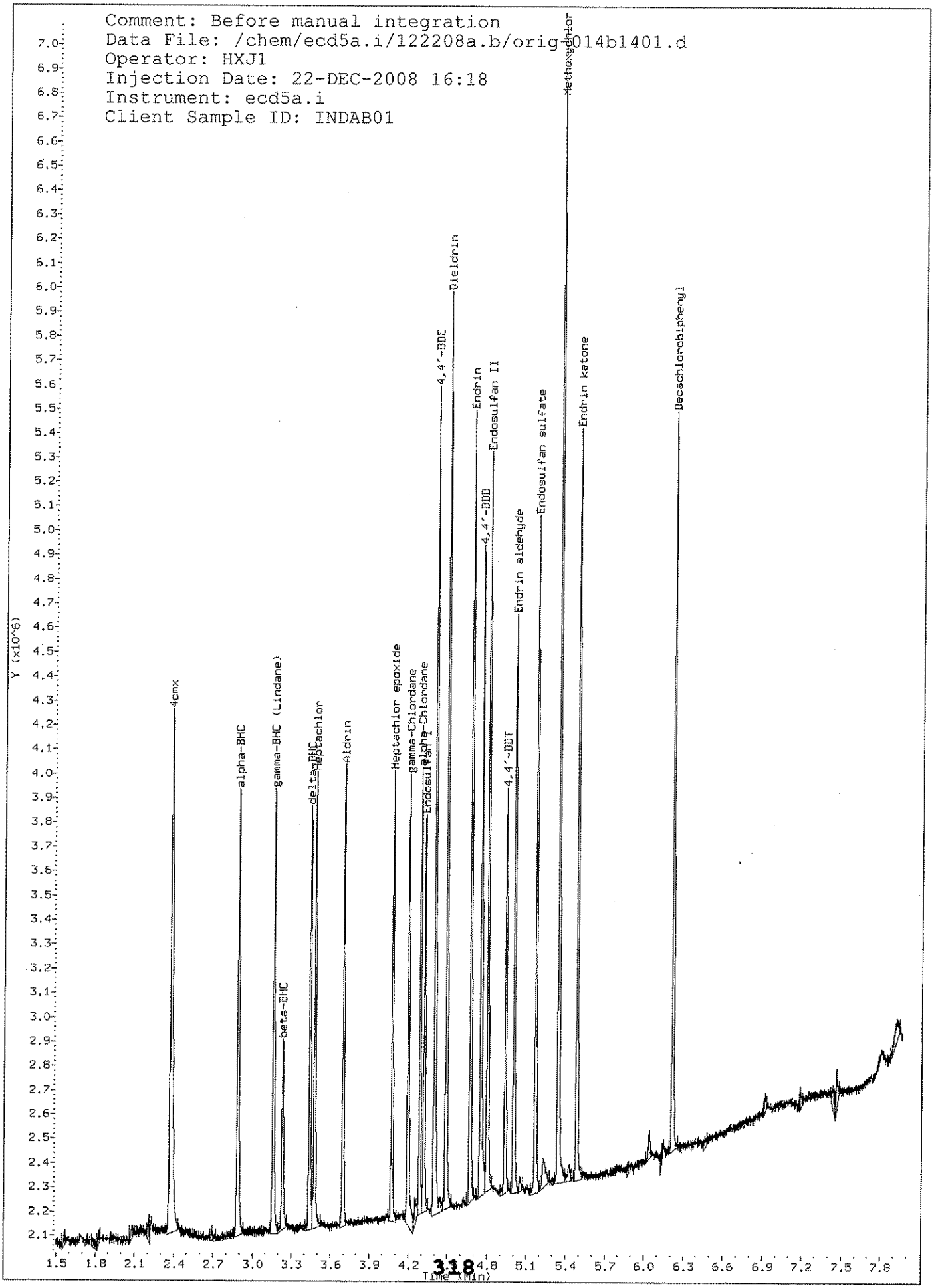


Page 1


Comment: Manually Integrated
Data File: /chem/ecd5a.i/122208a.b/014b0401.d
Operator: HXJ1
Injection Date: 22-DEC-2008 16:18
Instrument: ecd5a.i
Client Sample ID: INDAB01
Y (x10^6)
TIME (min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
Endosulfan I
alpha-Chlordane
4,4'-DDE
Dieldrin
Endrin
Endosulfan II
4,4'-DDD
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl


Comment: Before manual integration
Data File: /chem/ecd5a.i/122208a.b/orig-014b1401.d
Operator: HXJ1
Injection Date: 22-DEC-2008 16:18
Instrument: ecd5a.i
Client Sample ID: INDAB01
Y (x10^6)
Time (min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
Endosulfan II
4,4'-DDD
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

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CLP-1

Data file : /chem/ecd5a.i/122208a.b/015f1501.d
Lab Smp Id: WPE081219-02AB Client Smp ID: INDAB02
Inj Date : 22-DEC-2008 16:30
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE081219-02AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-F-8081-121108.m
Meth Date : 23-Dec-2008 15:03 hea01125 Quant Type: ESTD
Cal Date : 17-DEC-2008 16:41 Cal File: 011f1101.d
Als bottle: 15 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: INDAB.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.803	2.804	-0.001	4464252	10.0000	9.88	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.051	3.051	0.000	3969177	10.0000	10.0	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.126	3.125	0.001	1980207	10.0000	10.6	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.393	3.393	0.000	3512326	10.0000	10.2	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.253	3.253	0.000	3944388	10.0000	9.86	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.599	3.599	0.000	3923428	10.0000	9.97	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.006	4.006	0.000	3620796	10.0000	10.2	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.088	4.087	0.001	3515727	10.0000	9.93	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.171	4.171	0.000	3613195	10.0000	10.1	80.00- 120.00	100.00

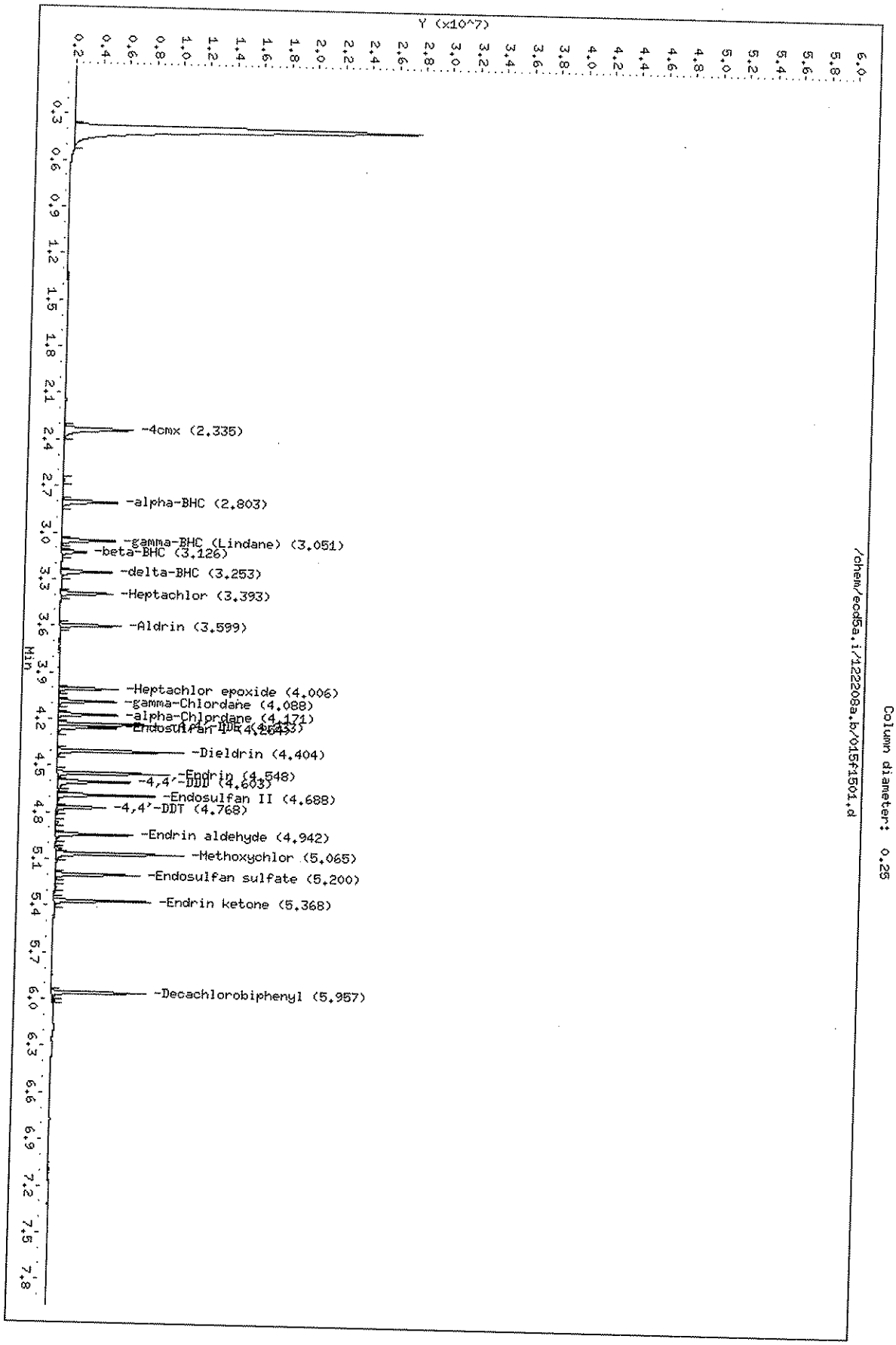
	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I						CAS #: 959-98-8		
	4.254	4.254	0.000	3875043	10.0000	10.7	80.00- 120.00	100.00
19 4,4'-DDE						CAS #: 72-55-9		
	4.233	4.232	0.001	6181323	20.0000	19.3	80.00- 120.00	100.00
20 Dieldrin						CAS #: 60-57-1		
	4.404	4.404	0.000	7312824	20.0000	20.4	80.00- 120.00	100.00
22 Endrin						CAS #: 72-20-8		
	4.548	4.547	0.001	6524144	20.0000	20.6	80.00- 120.00	100.00
25 4,4'-DDD						CAS #: 72-54-8		
	4.603	4.600	0.003	5465327	20.0000	19.6	80.00- 120.00	100.00
24 Endosulfan II						CAS #: 33213-65-9		
	4.688	4.686	0.002	6314736	20.0000	20.7	80.00- 120.00	100.00
27 Endrin aldehyde						CAS #: 7421-93-4		
	4.942	4.940	0.002	4727411	20.0000	20.4	80.00- 120.00	100.00
26 4,4'-DDT						CAS #: 50-29-3		
	4.768	4.767	0.001	3083807	20.0000	17.6	80.00- 120.00	100.00
29 Endosulfan sulfate						CAS #: 1031-07-8		
	5.200	5.199	0.001	5120323	20.0000	19.6	80.00- 120.00	100.00
28 Methoxychlor						CAS #: 72-43-5		
	5.065	5.062	0.003	8485016	100.000	98.2	80.00- 120.00	100.00
31 Endrin ketone						CAS #: 53494-70-5		
	5.368	5.367	0.001	5728481	20.0000	21.5	80.00- 120.00	100.00
$ 1 4cmx						CAS #: 877-09-8		
	2.335	2.337	-0.002	7255351	20.0000	20.5	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl						CAS #: 2051-24-3		
	5.957	5.956	0.001	5875250	20.0000	20.8	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/122208a.b/015f1501.d
Date : 22-DEC-2008 16:30
Client ID: INDAB02
Sample Info: IWPE081219-02AB

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJL
Column diameter: 0.25



Page 1

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CLP-2

Data file : /chem/ecd5a.i/122208a.b/015b1501.d
Lab Smp Id: WPE081219-02AB
Client Smp ID: INDAB02
Inj Date : 22-DEC-2008 16:30
Operator : HXJ1
Inst ID: ecd5a.i
Smp Info : |WPE081219-02AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/122308.b/ECD5-B-8081-121108.m
Meth Date : 24-Dec-2008 16:59 hea01125
Quant Type: ESTD
Cal Date : 17-DEC-2008 16:41
Cal File: 011b1101.d
Als bottle: 15
Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon
Compound Sublist: INDAB.sub
Target Version: 3.50
Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.886	2.884	0.002	4318305	10.0000	9.60	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.158	3.156	0.002	3843734	10.0000	9.61	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.230	3.227	0.003	1830328	10.0000	10.3	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.475	3.473	0.002	3837453	10.0000	9.83	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.436	3.434	0.002	3698088	10.0000	9.56	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.695	3.692	0.003	3732298	10.0000	9.79	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.071	4.068	0.003	3470915	10.0000	9.99	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.194	4.191	0.003	3485065	10.0000	9.96	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.285	4.282	0.003	3341639	10.0000	9.87	80.00- 120.00	100.00

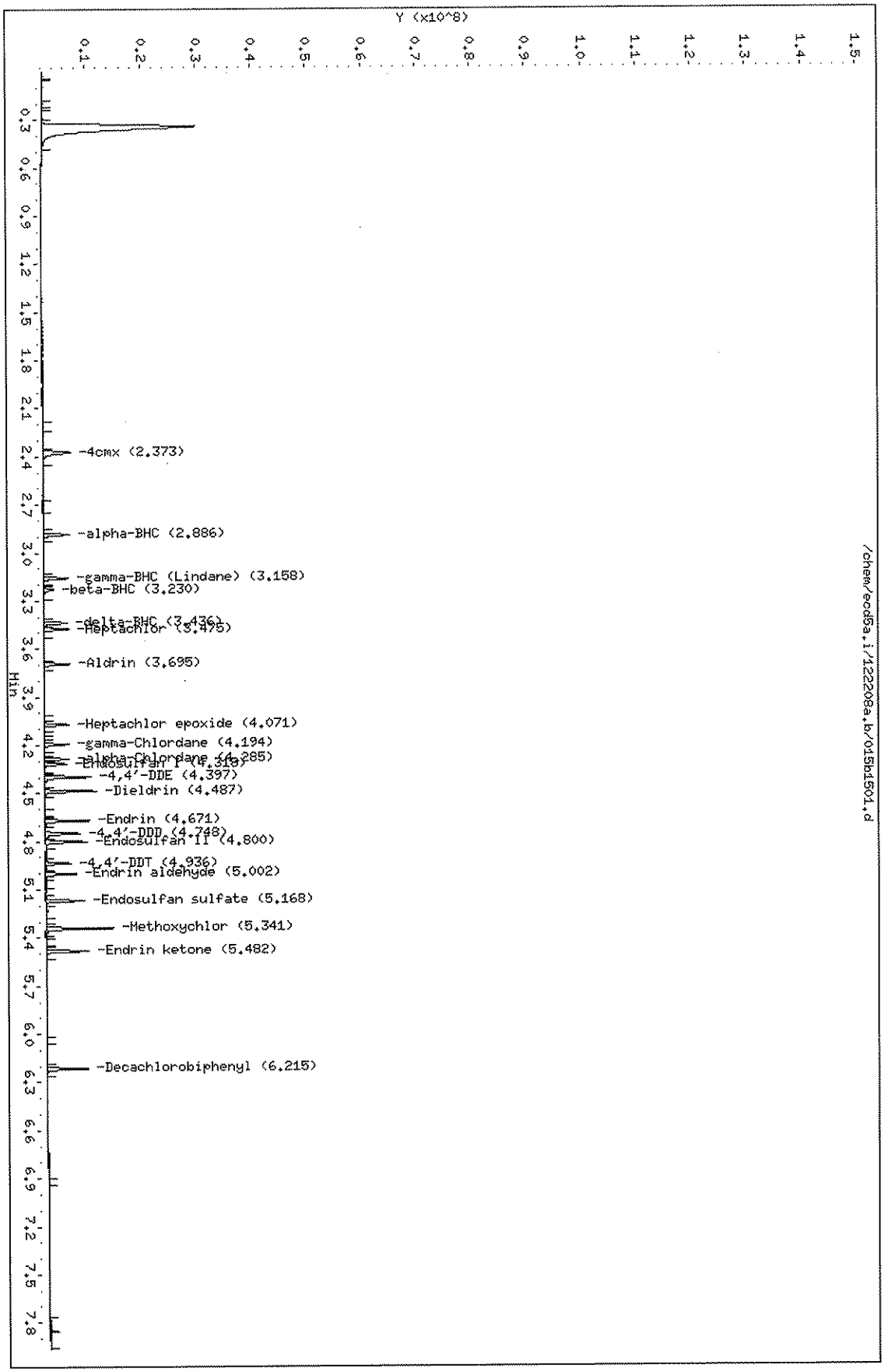
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.318	4.315	0.003	3248927	10.0000	10.1	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.397	4.394	0.003	6795720	20.0000	19.8	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.487	4.483	0.004	6978378	20.0000	20.0	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.671	4.667	0.004	6178026	20.0000	20.2	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.748	4.745	0.003	5642403	20.0000	19.6	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
4.800	4.796	0.004	6058854	20.0000	20.2	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.002	4.997	0.005	4464536	20.0000	20.2	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.936	4.932	0.004	3446516	20.0000	23.6	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.168	5.164	0.004	5258327	20.0000	20.0	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.341	5.336	0.005	9062900	100.000	91.7	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.482	5.478	0.004	5790221	20.0000	19.4	80.00- 120.00	100.00
1 4cmx					CAS #: 877-09-8		
2.373	2.372	0.001	6700131	20.0000	19.7	80.00- 120.00	100.00(M)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.215	6.211	0.004	5861594	20.0000	19.8	80.00- 120.00	100.00

QC Flag Legend

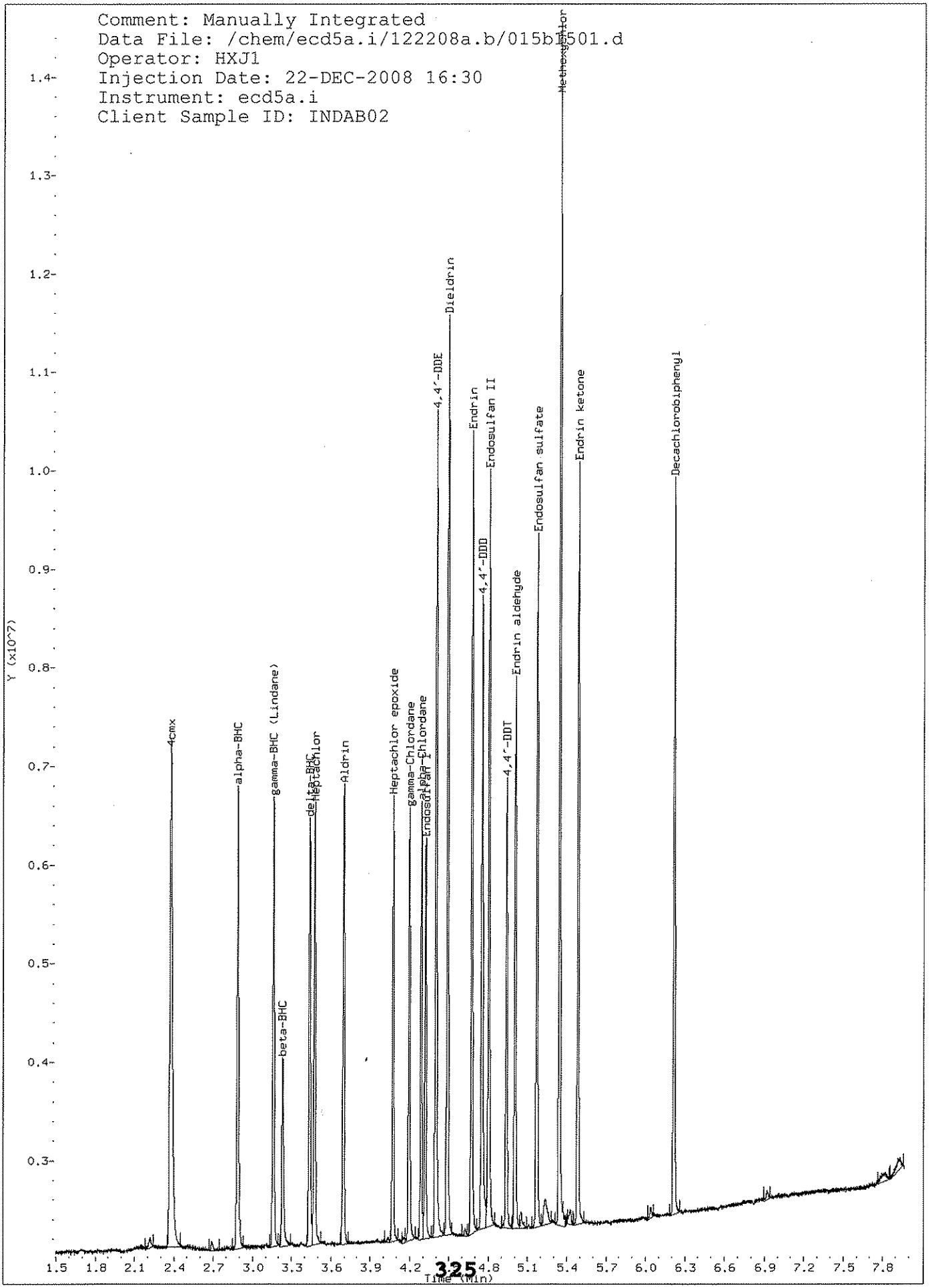
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/122208a.b/015b1501.d
Date : 22-DEC-2008 16:30
Client ID: INDAB02
Sample Info: HPE081219-02AB
Column phase: CLP-2

Instrument: ecd5a.i
Operator: HXJ1
Column diameter: 0.25



Page 1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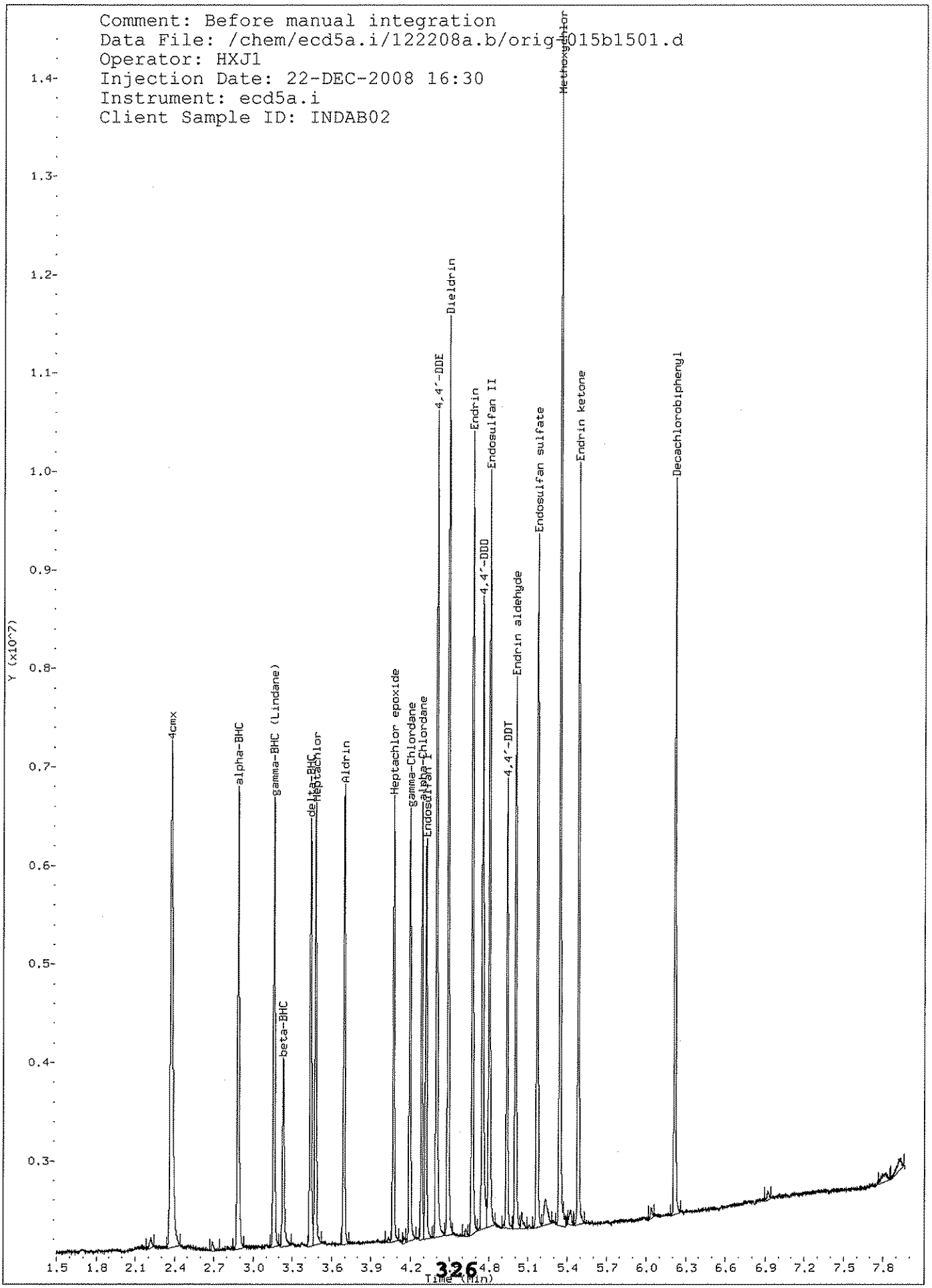
Operator: HXJ1
Injection Date: 22-DEC-2008 16:30
Instrument: ecd5a.i
Client Sample ID: INDAB02
Y (x10^7)
Time (Min)
4cmx
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
Endosulfan II
4,4'-DDD
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl

Comment: Before manual integration
Data File: /chem/ecd5a.i/122208a.b/orig8015b1501.d
Operator: HXJ1
Injection Date: 22-DEC-2008 16:30
Instrument: ecd5a.i
Client Sample ID: INDAB02



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CLP-1

Data file : /chem/ecd5a.i/122208a.b/016f1601.d
Lab Smp Id: WPE081219-03AB Client Smp ID: INDAB03
Inj Date : 22-DEC-2008 16:42
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE081219-03AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-F-8081-121108.m
Meth Date : 23-Dec-2008 15:03 hea01125 Quant Type: ESTD
Cal Date : 17-DEC-2008 16:53 Cal File: 012f1201.d
Als bottle: 16 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: INDAB.sub
Target Version: 3.50 Sample Matrix: None

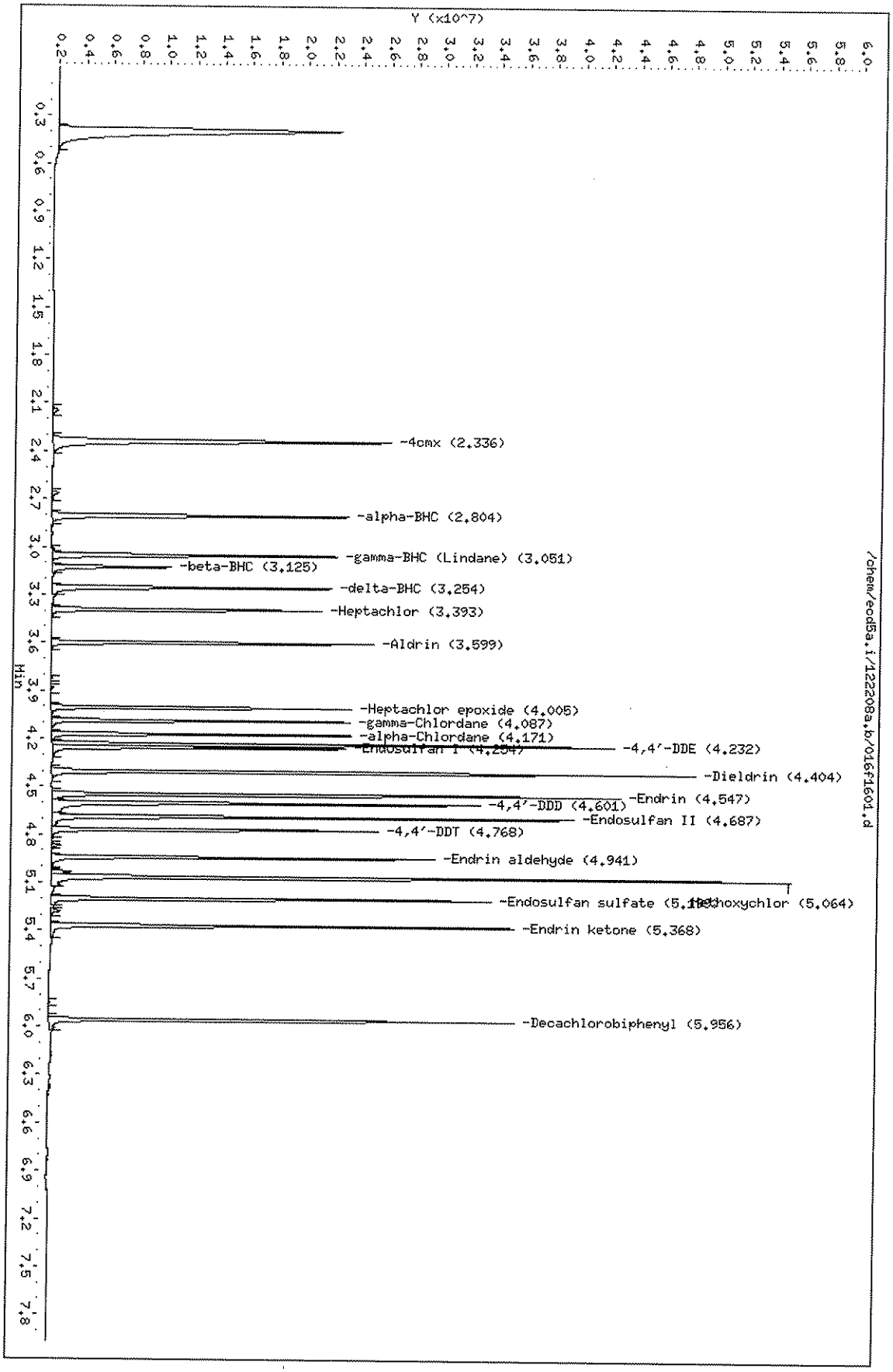
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.804	2.804	0.000	22352371	50.0000	49.6	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.051	3.051	0.000	19480428	50.0000	49.1	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.125	3.125	0.000	8724433	50.0000	47.0	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.393	3.393	0.000	16875433	50.0000	48.9	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.254	3.253	0.001	19563556	50.0000	49.1	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.599	3.599	0.000	19384409	50.0000	49.5	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.005	4.006	-0.001	17356292	50.0000	49.1	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.087	4.087	0.000	17435880	50.0000	49.4	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.171	4.171	0.000	17231441	50.0000	48.6	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.254	4.254	0.000	18289093	50.0000	50.1	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.232	4.232	0.000	31933588	100.000	101	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.404	4.404	0.000	36102793	100.000	101	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.547	4.547	0.000	31803372	100.000	101	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.601	4.600	0.001	28129264	100.000	102	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
4.687	4.686	0.001	30343875	100.000	99.8	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
4.941	4.940	0.001	22449278	100.000	97.6	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.768	4.767	0.001	18430537	100.000	104	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.199	5.199	0.000	25407383	100.000	98.1	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.064	5.062	0.002	44190201	500.000	509	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.368	5.367	0.001	27611095	100.000	103	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.336	2.337	-0.001	34114023	100.000	97.0	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
5.956	5.956	0.000	26999665	100.000	96.0	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/122208a.b/016f1601.d
Date : 22-DEC-2008 16:42
Client ID: INDAB03
Sample Info: IWPE081219-03AB

Column phase: CLP-1

Instrument: ecd5a.i
Operator: HXJ1
Column diameter: 0.25



Page 1

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CLP-2

Data file : /chem/ecd5a.i/122208a.b/016b1601.d
Lab Smp Id: WPE081219-03AB Client Smp ID: INDAB03
Inj Date : 22-DEC-2008 16:42
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE081219-03AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-B-8081-121108a.m
Meth Date : 24-Dec-2008 16:42 hea01125 Quant Type: ESTD
Cal Date : 17-DEC-2008 16:53 Cal File: 012b1201.d
Als bottle: 16 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: INDAB.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.886	2.887	-0.001	22174686	50.0000	49.3	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.159	3.158	0.001	19819323	50.0000	49.6	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.229	3.229	0.000	8707233	50.0000	49.2	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.474	3.475	-0.001	19114887	50.0000	49.0	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.436	3.436	0.000	19025634	50.0000	49.2	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.694	3.694	0.000	18813766	50.0000	49.4	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.071	4.070	0.001	17055883	50.0000	49.1	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.194	4.193	0.001	17155238	50.0000	49.0	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.284	4.284	0.000	16566819	50.0000	48.9	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.317	4.316	0.001	15857755	50.0000	49.3	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.397	4.396	0.001	34137476	100.000	99.5	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.486	4.486	0.000	34818622	100.000	99.6	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.670	4.669	0.001	30564167	100.000	99.7	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.748	4.747	0.001	28489855	100.000	99.0	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
4.799	4.799	0.000	29743854	100.000	99.0	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.001	5.000	0.001	21516740	100.000	97.6	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.934	4.934	0.000	21144423	100.000	92.2	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.167	5.167	0.000	25906934	100.000	98.3	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.339	5.339	0.000	49899459	500.000	505	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.482	5.481	0.001	29021518	100.000	97.3	80.00- 120.00	100.00
1 4cmx					CAS #: 877-09-8		
2.374	2.375	-0.001	33493018	100.000	97.2	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.215	6.214	0.001	28515083	100.000	96.3	80.00- 120.00	100.00

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CLP-1

Data file : /chem/ecd5a.i/122208a.b/017f1701.d
Lab Smp Id: WPE081219-04AB
Client Smp ID: INDAB04
Inj Date : 22-DEC-2008 16:53
Operator : HXJ1
Inst ID: ecd5a.i
Smp Info : |WPE081219-04AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-F-8081-121108.m
Meth Date : 23-Dec-2008 15:03 hea01125
Quant Type: ESTD
Cal Date : 16-JUL-2008 00:40
Cal File: 034f3401.d
Als bottle: 17
Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon
Compound Sublist: INDAB.sub
Target Version: 3.50
Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.804	2.804	0.000	45710453	100.000	101	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.051	3.051	0.000	39972948	100.000	100	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.125	3.125	0.000	17614376	100.000	94.4	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.393	3.393	0.000	34150435	100.000	98.4	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.253	3.253	0.000	40846254	100.000	102	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.599	3.599	0.000	39220524	100.000	100	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.005	4.006	-0.001	34729737	100.000	98.0	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.087	4.087	0.000	35208982	100.000	99.8	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.171	4.171	0.000	34598518	100.000	97.6	80.00- 120.00	100.00

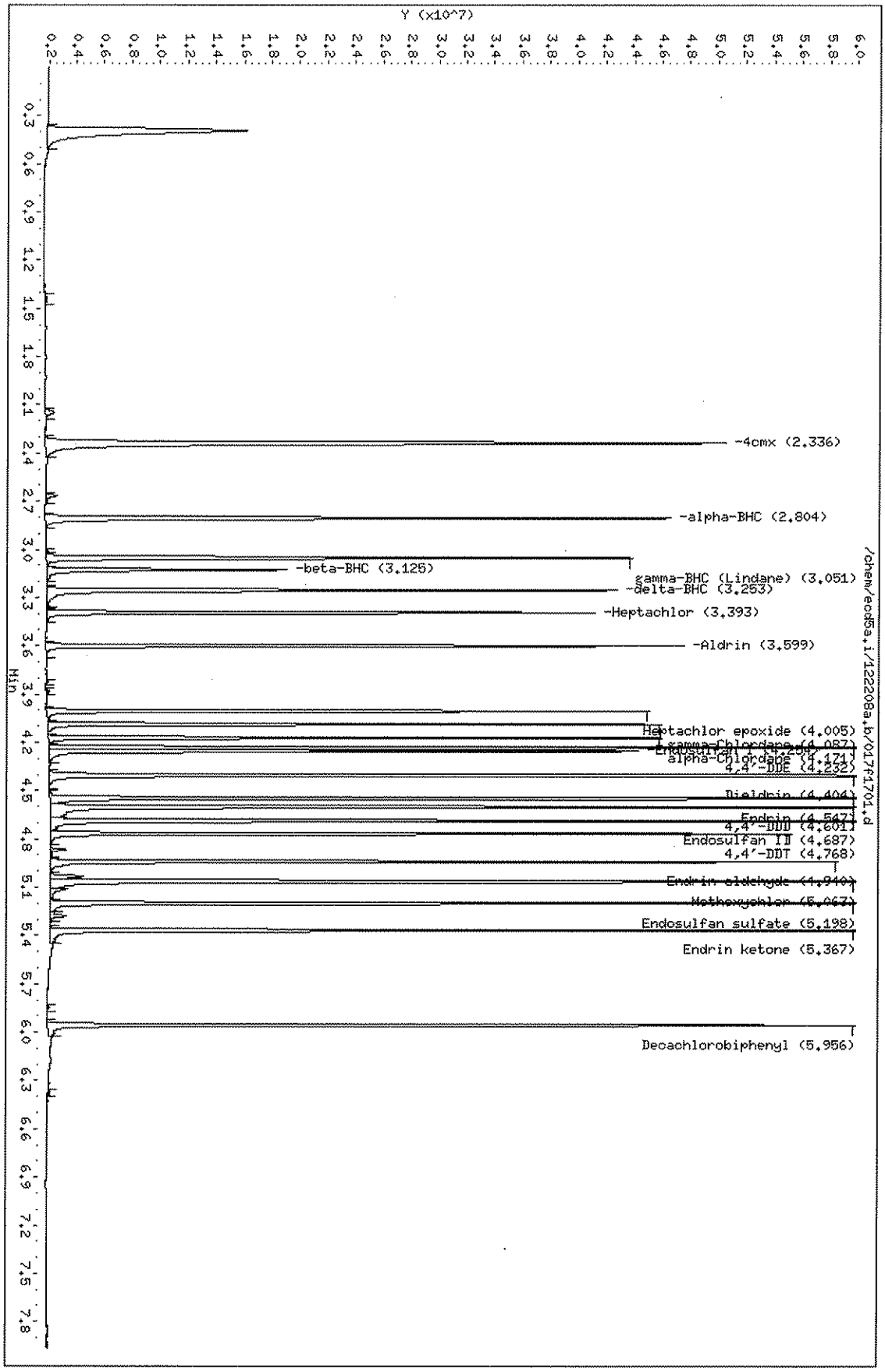
	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I						CAS #: 959-98-8		
	4.254	4.254	0.000	35405237	100.000	96.3	80.00- 120.00	100.00
19 4,4'-DDE						CAS #: 72-55-9		
	4.232	4.232	0.000	64814291	200.000	205	80.00- 120.00	100.00
20 Dieldrin						CAS #: 60-57-1		
	4.404	4.404	0.000	71371944	200.000	199	80.00- 120.00	100.00
22 Endrin						CAS #: 72-20-8		
	4.547	4.547	0.000	62796235	200.000	198	80.00- 120.00	100.00
25 4,4'-DDD						CAS #: 72-54-8		
	4.601	4.600	0.001	56635091	200.000	204	80.00- 120.00	100.00
24 Endosulfan II						CAS #: 33213-65-9		
	4.687	4.686	0.001	59414370	200.000	195	80.00- 120.00	100.00
27 Endrin aldehyde						CAS #: 7421-93-4		
	4.940	4.940	0.000	44435281	200.000	194	80.00- 120.00	100.00
26 4,4'-DDT						CAS #: 50-29-3		
	4.768	4.767	0.001	40655761	200.000	226	80.00- 120.00	100.00
29 Endosulfan sulfate						CAS #: 1031-07-8		
	5.198	5.199	-0.001	51519039	200.000	199	80.00- 120.00	100.00
28 Methoxychlor						CAS #: 72-43-5		
	5.063	5.062	0.001	88238077	1000.00	1010	80.00- 120.00	100.00
31 Endrin ketone						CAS #: 53494-70-5		
	5.367	5.367	0.000	51612685	200.000	190	80.00- 120.00	100.00
$ 1 4cmx						CAS #: 877-09-8		
	2.336	2.337	-0.001	67977355	200.000	193	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl						CAS #: 2051-24-3		
	5.956	5.956	0.000	52711161	200.000	188	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/122208a.b/017f1701.d
Date : 22-DEC-2008 16:53
Client ID: INDAB04
Sample Info: IWPE081219-04AB

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25



Page 1

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CLP-2

Data file : /chem/ecd5a.i/122208a.b/017b1701.d
Lab Smp Id: WPE081219-04AB Client Smp ID: INDAB04
Inj Date : 22-DEC-2008 16:53
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE081219-04AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-B-8081-121108a.m
Meth Date : 24-Dec-2008 16:42 hea01125 Quant Type: ESTD
Cal Date : 16-JUL-2008 00:40 Cal File: 034b3401.d
Als bottle: 17 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: INDAB.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.886	2.887	-0.001	45513956	100.000	101	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.158	3.158	0.000	40067436	100.000	100	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.229	3.229	0.000	17191838	100.000	97.1	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.475	3.475	0.000	38821695	100.000	99.4	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.436	3.436	0.000	39333172	100.000	102	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.694	3.694	0.000	38130337	100.000	100	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.070	4.070	0.000	34001280	100.000	97.9	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.193	4.193	0.000	34790224	100.000	99.4	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.284	4.284	0.000	33597856	100.000	99.2	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.316	4.316	0.000	31752663	100.000	98.7	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.397	4.396	0.001	69713284	200.000	203	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.486	4.486	0.000	70024404	200.000	200	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.669	4.669	0.000	60981353	200.000	199	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.747	4.747	0.000	58290054	200.000	202	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
4.799	4.799	0.000	59832986	200.000	199	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
4.999	5.000	-0.001	43421979	200.000	197	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.934	4.934	0.000	46914866	200.000	192	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.167	5.167	0.000	52190403	200.000	198	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.339	5.339	0.000	104661996	1000.00	1060	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.481	5.481	0.000	60626861	200.000	203	80.00- 120.00	100.00
1 4cmx					CAS #: 877-09-8		
2.374	2.375	-0.001	67190568	200.000	195	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.215	6.214	0.001	58843312	200.000	199	80.00- 120.00	100.00

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CLP-1

Data file : /chem/ecd5a.i/122208a.b/018f1801.d
Lab Smp Id: IPE081121-01AB Client Smp ID: INDAB05
Inj Date : 22-DEC-2008 17:05
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |IPE081121-01AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-F-8081-121108.m
Meth Date : 23-Dec-2008 15:03 hea01125 Quant Type: ESTD
Cal Date : 17-DEC-2008 17:17 Cal File: 014f1401.d
Als bottle: 18 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: INDAB.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.804	2.804	0.000	93182381	200.000	204	80.00- 120.00	100.00(A)
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.051	3.051	0.000	81461973	200.000	203	80.00- 120.00	100.00(A)
12 beta-BHC					CAS #: 319-85-7		
3.125	3.125	0.000	35139714	200.000	187	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.393	3.393	0.000	68955640	200.000	197	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.253	3.253	0.000	82108302	200.000	204	80.00- 120.00	100.00(A)
11 Aldrin					CAS #: 309-00-2		
3.599	3.599	0.000	78462014	200.000	199	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.005	4.006	-0.001	68666891	200.000	192	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.087	4.087	0.000	71105655	200.000	200	80.00- 120.00	100.00(A)
18 alpha-Chlordane					CAS #: 5103-71-9		
4.171	4.171	0.000	69813438	200.000	196	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.254	4.254	0.000	70332525	200.000	189	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.232	4.232	0.000	127695442	400.000	402	80.00- 120.00	100.00(A)
20 Dieldrin					CAS #: 60-57-1		
4.404	4.404	0.000	139505871	400.000	386	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.547	4.547	0.000	122809246	400.000	383	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.599	4.600	-0.001	112503407	400.000	401	80.00- 120.00	100.00(A)
24 Endosulfan II					CAS #: 33213-65-9		
4.686	4.686	0.000	116252571	400.000	379	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
4.939	4.940	-0.001	86644836	400.000	376	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.767	4.767	0.000	86895963	400.000	477	80.00- 120.00	100.00(A)
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.199	5.199	0.000	103105075	400.000	398	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.062	5.062	0.000	179261085	2000.00	2040	80.00- 120.00	100.00(A)
31 Endrin ketone					CAS #: 53494-70-5		
5.366	5.367	-0.001	99754258	400.000	364	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.336	2.337	-0.001	135294412	400.000	383	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
5.955	5.956	-0.001	102953530	400.000	365	80.00- 120.00	100.00

QC Flag Legend

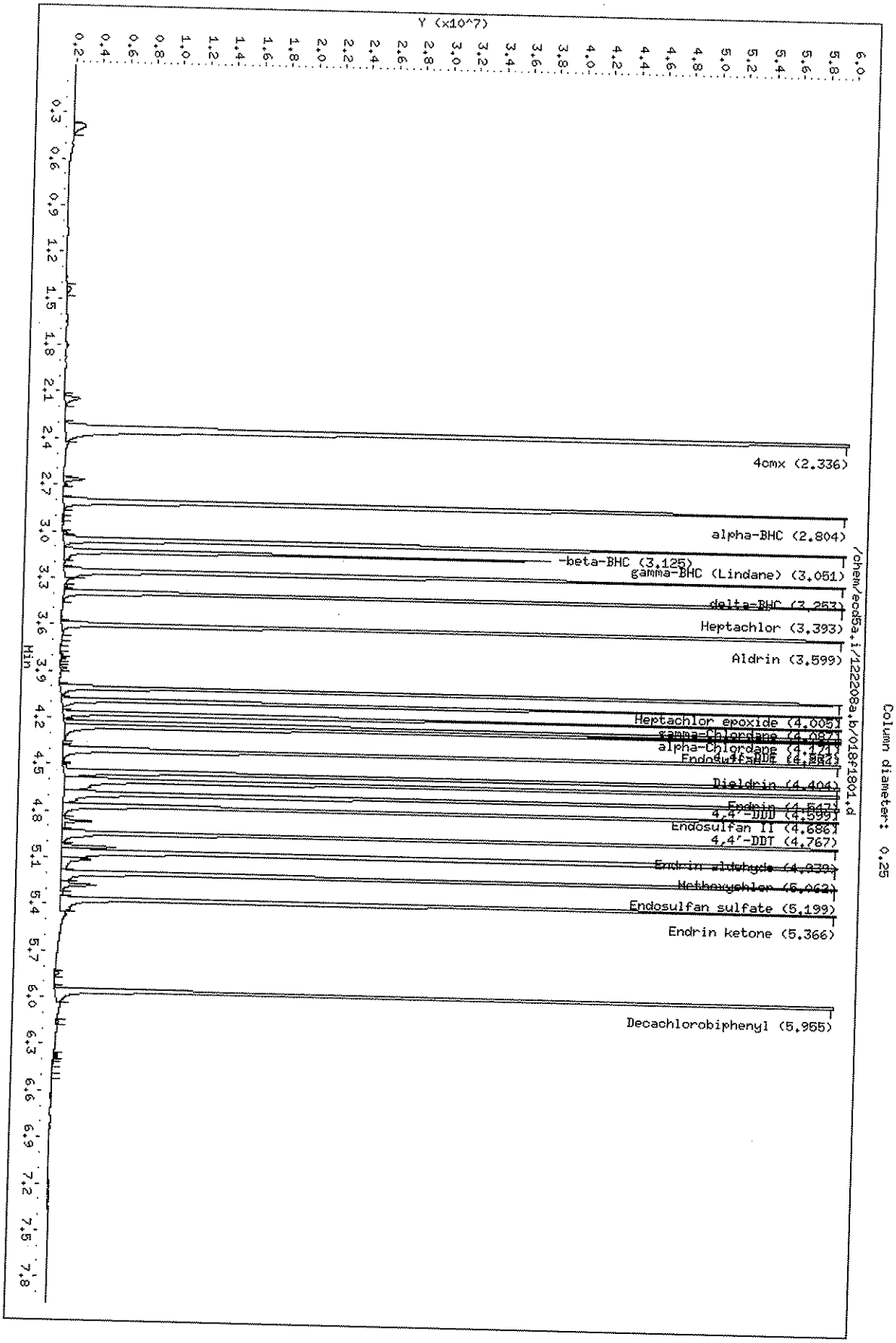
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/ecd5a.i/122208a.b/018f1801.d
Date : 22-DEC-2008 17:05
Client ID: INDAB05
Sample Info: IIPE081121-01AB

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HX31
Column diameter: 0.25



Page 1

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/122208a.b/018b1801.d
Lab Smp Id: IPE081121-01AB
Client Smp ID: INDAB05
Inj Date : 22-DEC-2008 17:05
Operator : HXJ1
Inst ID: ecd5a.i
Smp Info : |IPE081121-01AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-B-8081-121108a.m
Meth Date : 24-Dec-2008 16:42 hea01125
Quant Type: ESTD
Cal Date : 17-DEC-2008 17:17
Cal File: 014b1401.d
Als bottle: 18
Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon
Compound Sublist: INDAB.sub
Target Version: 3.50
Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.887	2.887	0.000	94596472	200.000	210	80.00- 120.00	100.00(A)
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.159	3.158	0.001	83377113	200.000	208	80.00- 120.00	100.00(A)
12 beta-BHC					CAS #: 319-85-7		
3.229	3.229	0.000	33808411	200.000	191	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.475	3.475	0.000	78996358	200.000	202	80.00- 120.00	100.00(A)
13 delta-BHC					CAS #: 319-86-8		
3.436	3.436	0.000	82023270	200.000	212	80.00- 120.00	100.00(A)
11 Aldrin					CAS #: 309-00-2		
3.694	3.694	0.000	78609537	200.000	206	80.00- 120.00	100.00(A)
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.071	4.070	0.001	68670350	200.000	198	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.194	4.193	0.001	71769395	200.000	205	80.00- 120.00	100.00(A)
18 alpha-Chlordane					CAS #: 5103-71-9		
4.285	4.284	0.001	69064402	200.000	204	80.00- 120.00	100.00(A)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.317	4.316	0.001	63833782	200.000	198	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.397	4.396	0.001	141614298	400.000	413	80.00- 120.00	100.00(A)
20 Dieldrin					CAS #: 60-57-1		
4.486	4.486	0.000	139943031	400.000	400	80.00- 120.00	100.00(A)
22 Endrin					CAS #: 72-20-8		
4.669	4.669	0.000	121968461	400.000	398	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.747	4.747	0.000	118438110	400.000	411	80.00- 120.00	100.00(A)
24 Endosulfan II					CAS #: 33213-65-9		
4.799	4.799	0.000	118922593	400.000	396	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.000	5.000	0.000	86348761	400.000	392	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.934	4.934	0.000	101971268	400.000	405	80.00- 120.00	100.00(A)
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.166	5.167	-0.001	104480604	400.000	396	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.339	5.339	0.000	217976497	2000.00	2210	80.00- 120.00	100.00(A)
31 Endrin ketone					CAS #: 53494-70-5		
5.480	5.481	-0.001	125067816	400.000	420	80.00- 120.00	100.00(A)
1 4cmx					CAS #: 877-09-8		
2.374	2.375	-0.001	137458102	400.000	399	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.214	6.214	0.000	122556019	400.000	414	80.00- 120.00	100.00

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 221329

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 11/24/08 12/22/08

EPA Sample No.(PIBLK): _____ Date Analyzed :_____

Lab Sample ID (PIBLK): _____ Time Analyzed :_____

EPA Sample No.(PEM): PEM01 Date Analyzed :12/22/08

Lab Sample ID (PEM): WPE081206-01 Time Analyzed :1358

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aldrin	3.60	3.57	3.63	114	100	14.0
4,4'-DDE						
Endrin	4.54	4.52	4.58	107	100	7.0
4,4'-DDD						
4,4'-DDT	4.76	4.74	4.80	106	100	6.0
Endrin ketone						
Endrin aldehyde						

4,4'-DDT % breakdown (1): 5.80 Endrin % breakdown (1): 2.10

Combined % breakdown (1): 7.90

FORM VII PEST-1 OLM03.0

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 221329

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 11/24/08 12/22/08

EPA Sample No.(PIBLK): _____ Date Analyzed :_____

Lab Sample ID (PIBLK): _____ Time Analyzed :_____

EPA Sample No.(PEM): PEM01 Date Analyzed :12/22/08

Lab Sample ID (PEM): WPE081206-01 Time Analyzed :1358

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aldrin	3.69	3.66	3.72	118	100	18.0
4,4'-DDE						
Endrin	4.67	4.64	4.70	115	100	15.0
4,4'-DDD						
4,4'-DDT	4.93	4.90	4.96	99.9	100	-0.1
Endrin ketone						
Endrin aldehyde						

4,4'-DDT % breakdown (1): 5.00 Endrin % breakdown (1): 2.20

Combined % breakdown (1): 7.20

FORM VII PEST-1 OLM03.0

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 221329

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 11/24/08 12/22/08

EPA Sample No.(PIBLK): _____ Date Analyzed : _____

Lab Sample ID (PIBLK): _____ Time Analyzed : _____

EPA Sample No.(PEM): PEM02 Date Analyzed :12/23/08

Lab Sample ID (PEM): WPE081206-01 Time Analyzed :0006

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aldrin	3.60	3.57	3.63	117	100	17.0
4,4'-DDE						
Endrin	4.55	4.52	4.58	116	100	16.0
4,4'-DDD						
4,4'-DDT	4.77	4.74	4.80	103	100	3.0
Endrin ketone						
Endrin aldehyde						

4,4'-DDT % breakdown (1): 7.80 Endrin % breakdown (1): 3.40

Combined % breakdown (1): 11.20

FORM VII PEST-1 OLM03.0

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 221329

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 11/24/08 12/22/08

EPA Sample No.(PIBLK): _____ Date Analyzed : _____

Lab Sample ID (PIBLK): _____ Time Analyzed : _____

EPA Sample No.(PEM): PEM02 Date Analyzed :12/23/08

Lab Sample ID (PEM): WPE081206-01 Time Analyzed :0006

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Aldrin	3.69	3.66	3.72	118	100	18.0
4,4'-DDE						
Endrin	4.67	4.64	4.70	115	100	15.0
4,4'-DDD						
4,4'-DDT	4.93	4.90	4.96	91.6	100	-8.4
Endrin ketone						
Endrin aldehyde						

4,4'-DDT % breakdown (1): 5.50 Endrin % breakdown (1): 3.20

Combined % breakdown (1): 8.70

FORM VII PEST-1 OLM03.0

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 221329

Instrument ID: ECD5A Calibration Date: 12/22/08 Time: 1421

Lab File ID: 004F0401 Init. Calib. Date(s): 11/24/08 11/24/08

Heated Purge: (Y/N) N Init. Calib. Times: 1407 1454

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	RRF	RRF100	MIN RRF	%D	MAX %D	
Toxaphene	6429.513	6419.874	0.01	-0.1	15.0	
(2)	5918.772	5605.782	0.01	-5.3	15.0	
(3)	11223.737	10082.787	0.01	-10.2	15.0	
(4)	11325.622	10301.460	0.01	-9.0	15.0	
(5)	8593.881	8188.406	0.01	-4.7	15.0	
4cmx	353408.89	466176.09	0.01	31.9	15.0	<-
Decachlorobiphenyl	282102.23	350753.97	0.01	24.3	15.0	<-

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 221329

Instrument ID: ECD5A Calibration Date: 12/22/08 Time: 1421

Lab File ID: 004B0401 Init. Calib. Date(s): 11/24/08 11/24/08

Heated Purge: (Y/N) N Init. Calib. Times: 1407 1454

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	RRF	RRF100	MIN RRF	%D	MAX %D	
Toxaphene	9767.639	10229.865	0.01	4.7	15.0	
(2)	6255.853	5661.244	0.01	-9.5	15.0	
(3)	9319.600	8946.494	0.01	-4.0	15.0	
(4)	18455.725	16886.968	0.01	-8.5	15.0	
(5)	10210.101	9611.127	0.01	-5.9	15.0	
4cmx	339897.19	459933.91	0.01	35.3	15.0	<-
Decachlorobiphenyl	296048.45	408770.32	0.01	38.1	15.0	<-

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 221329

Instrument ID: ECD5A Calibration Date: 12/22/08 Time: 1456

Lab File ID: 007F0701 Init. Calib. Date(s): 12/09/08 12/09/08

Heated Purge: (Y/N) N Init. Calib. Times: 1907 1954

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF100	MIN RRF	%D	MAX %D	
Aroclor-1016	6744.487	6335.088	0.01	-6.1	15.0	
(2)	17163.416	17005.080	0.01	-0.9	15.0	
(3)	7184.052	6731.663	0.01	-6.3	15.0	
(4)	6363.690	5989.723	0.01	-5.9	15.0	
(5)	8951.935	8032.132	0.01	-10.3	15.0	
Aroclor-1260	17053.392	16907.514	0.01	-0.8	15.0	
(2)	25617.213	25682.248	0.01	0.2	15.0	
(3)	12998.430	13723.996	0.01	5.6	15.0	
(4)	13055.751	12353.109	0.01	-5.4	15.0	
(5)	23139.804	30055.329	0.01	29.9	15.0	<-
4cmx	353408.89	346296.05	0.01	-2.0	15.0	
Decachlorobiphenyl	282102.23	266353.59	0.01	-5.6	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 221329

Instrument ID: ECD5A Calibration Date: 12/22/08 Time: 1456

Lab File ID: 007B0701 Init. Calib. Date(s): 12/09/08 12/09/08

Heated Purge: (Y/N) N Init. Calib. Times: 1907 1954

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	RRF	RRF100	MIN RRF	%D	MAX %D
Aroclor-1016	10321.731	10216.043	0.01	-1.0	15.0
(2)	6069.276	5916.085	0.01	-2.5	15.0
(3)	6188.497	6021.158	0.01	-2.7	15.0
(4)	6342.476	6238.784	0.01	-1.6	15.0
(5)	8065.808	8094.149	0.01	0.4	15.0
Aroclor-1260	17096.954	19047.360	0.01	11.4	15.0
(2)	20319.584	23130.593	0.01	13.8	15.0
(3)	13306.206	14696.733	0.01	10.4	15.0
(4)	13369.368	15114.934	0.01	13.0	15.0
(5)	32426.118	36732.470	0.01	13.3	15.0
4cmx	339897.19	340771.61	0.01	0.2	15.0
Decachlorobiphenyl	296048.45	290232.22	0.01	-2.0	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 221329

Instrument ID: ECD5A Calibration Date: 12/22/08 Time: 1717

Lab File ID: 019F1901 Init. Calib. Date(s): 12/22/08 12/22/08

Heated Purge: (Y/N) N Init. Calib. Times: 1618 1705

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	RRF	RRF100	MIN RRF	%D	MAX %D
alpha-BHC	455451.96	461271.33	0.01	1.3	15.0
beta-BHC	187964.29	175086.33	0.01	-6.8	15.0
delta-BHC	402225.69	399542.52	0.01	-0.7	15.0
gamma-BHC (Lindane)	401968.87	413607.91	0.01	2.9	15.0
Heptachlor	350222.61	335913.43	0.01	-4.1	15.0
Aldrin	394764.61	384667.39	0.01	-2.6	15.0
Heptachlor epoxide	356673.75	350774.45	0.01	-1.6	15.0
Endosulfan I	372124.38	366052.86	0.01	-1.6	15.0
Dieldrin	360891.28	354034.68	0.01	-1.9	15.0
4,4'-DDE	317258.07	326695.51	0.01	3.0	15.0
Endrin	320494.14	316454.18	0.01	-1.3	15.0
Endosulfan II	306602.32	300696.41	0.01	-1.9	15.0
4,4'-DDD	280607.84	284774.83	0.01	1.5	15.0
Endosulfan sulfate	259200.05	254662.02	0.01	-1.8	15.0
4,4'-DDT	182187.09	208579.80	0.01	14.5	15.0
Methoxychlor	87750.046	90127.199	0.01	2.7	15.0
Endrin ketone	274349.49	264175.82	0.01	-3.7	15.0
Endrin aldehyde	230213.66	242221.05	0.01	5.2	15.0
gamma-Chlordane	355244.48	364581.95	0.01	2.6	15.0
alpha-Chlordane	356803.94	333995.84	0.01	-6.4	15.0
4cmx	353408.89	404167.14	0.01	14.4	15.0
Decachlorobiphenyl	282102.23	295695.03	0.01	4.8	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 221329

Instrument ID: ECD5A Calibration Date: 12/22/08 Time: 1717

Lab File ID: 019B1901 Init. Calib. Date(s): 12/22/08 12/22/08

Heated Purge: (Y/N) N Init. Calib. Times: 1618 1705

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
alpha-BHC	102	100	AVRG	2.0	15.0
beta-BHC	97.3	100	AVRG	-2.7	15.0
delta-BHC	102	100	AVRG	2.0	15.0
gamma-BHC (Lindane)	104	100	AVRG	4.0	15.0
Heptachlor	97.9	100	AVRG	-2.1	15.0
Aldrin	99.1	100	AVRG	-0.9	15.0
Heptachlor epoxide	99.1	100	AVRG	-0.9	15.0
Endosulfan I	102	100	AVRG	2.0	15.0
Dieldrin	199	200	AVRG	-0.5	15.0
4,4'-DDE	206	200	AVRG	3.0	15.0
Endrin	201	200	AVRG	0.5	15.0
Endosulfan II	205	200	AVRG	2.5	15.0
4,4'-DDD	207	200	AVRG	3.5	15.0
Endosulfan sulfate	195	200	AVRG	-2.5	15.0
4,4'-DDT	198	200	LINR	-1.0	15.0
Methoxychlor	1060	1000	AVRG	6.0	15.0
Endrin ketone	212	200	AVRG	6.0	15.0
Endrin aldehyde	218	200	AVRG	9.0	15.0
gamma-Chlordane	104	100	AVRG	4.0	15.0
alpha-Chlordane	95.4	100	AVRG	-4.6	15.0
4cmx	230	200	AVRG	15.0	15.0
Decachlorobiphenyl	228	200	AVRG	14.0	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 221329

Instrument ID: ECD5A Calibration Date: 12/22/08 Time: 2331

Lab File ID: 051F5101 Init. Calib. Date(s): 12/22/08 12/22/08

Heated Purge: (Y/N) N Init. Calib. Times: 1618 1705

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	RRF	RRF100	MIN RRF	%D	MAX %D	
alpha-BHC	455451.96	484516.61	0.01	6.4	15.0	
beta-BHC	187964.29	184617.76	0.01	-1.8	15.0	
delta-BHC	402225.69	433207.74	0.01	7.7	15.0	
gamma-BHC (Lindane)	401968.87	438204.85	0.01	9.0	15.0	
Heptachlor	350222.61	359289.83	0.01	2.6	15.0	
Aldrin	394764.61	402696.07	0.01	2.0	15.0	
Heptachlor epoxide	356673.75	370612.79	0.01	3.9	15.0	
Endosulfan I	372124.38	384443.15	0.01	3.3	15.0	
Dieldrin	360891.28	372573.74	0.01	3.2	15.0	
4,4'-DDE	317258.07	342618.24	0.01	8.0	15.0	
Endrin	320494.14	334533.17	0.01	4.4	15.0	
Endosulfan II	306602.32	317475.52	0.01	3.5	15.0	
4,4'-DDD	280607.84	304541.72	0.01	8.5	15.0	
Endosulfan sulfate	259200.05	271868.24	0.01	4.9	15.0	
4,4'-DDT	182187.09	222269.29	0.01	22.0	15.0	<-
Methoxychlor	87750.046	98926.389	0.01	12.7	15.0	
Endrin ketone	274349.49	285372.07	0.01	4.0	15.0	
Endrin aldehyde	230213.66	254515.81	0.01	10.6	15.0	
gamma-Chlordane	355244.48	383281.74	0.01	7.9	15.0	
alpha-Chlordane	356803.94	349257.68	0.01	-2.1	15.0	
4cmx	353408.89	421926.60	0.01	19.4	15.0	<-
Decachlorobiphenyl	282102.23	310459.02	0.01	10.0	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 221329

Instrument ID: ECD5A Calibration Date: 12/22/08 Time: 2331

Lab File ID: 051B5101 Init. Calib. Date(s): 12/22/08 12/22/08

Heated Purge: (Y/N) N Init. Calib. Times: 1618 1705

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d	
alpha-BHC	107	100	AVRG	7.0	15.0	
beta-BHC	101	100	AVRG	1.0	15.0	
delta-BHC	107	100	AVRG	7.0	15.0	
gamma-BHC (Lindane)	109	100	AVRG	9.0	15.0	
Heptachlor	102	100	AVRG	2.0	15.0	
Aldrin	103	100	AVRG	3.0	15.0	
Heptachlor epoxide	104	100	AVRG	4.0	15.0	
Endosulfan I	106	100	AVRG	6.0	15.0	
Dieldrin	209	200	AVRG	4.5	15.0	
4,4'-DDE	214	200	AVRG	7.0	15.0	
Endrin	210	200	AVRG	5.0	15.0	
Endosulfan II	216	200	AVRG	8.0	15.0	
4,4'-DDD	218	200	AVRG	9.0	15.0	
Endosulfan sulfate	205	200	AVRG	2.5	15.0	
4,4'-DDT	200	200	LINR	0.0	15.0	
Methoxychlor	1100	1000	AVRG	10.0	15.0	
Endrin ketone	221	200	AVRG	10.5	15.0	
Endrin aldehyde	227	200	AVRG	13.5	15.0	
gamma-Chlordane	108	100	AVRG	8.0	15.0	
alpha-Chlordane	99.4	100	AVRG	-0.6	15.0	
4cmx	245	200	AVRG	22.5	15.0	<-
Decachlorobiphenyl	238	200	AVRG	19.0	15.0	<-

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 221329

Instrument ID: ECD5A Calibration Date: 12/23/08 Time: 0105

Lab File ID: 059F5901 Init. Calib. Date(s): 12/22/08 12/22/08

Heated Purge: (Y/N) N Init. Calib. Times: 1618 1705

GC Column: CLP-1 ID: 0.25 (mm)

COMPOUND	RRF	RRF100	MIN RRF	%D	MAX %D	
alpha-BHC	455451.96	485289.64	0.01	6.6	15.0	
beta-BHC	187964.29	176138.63	0.01	-6.3	15.0	
delta-BHC	402225.69	402321.28	0.01	0.0	15.0	
gamma-BHC (Lindane)	401968.87	424454.56	0.01	5.6	15.0	
Heptachlor	350222.61	349968.48	0.01	-0.1	15.0	
Aldrin	394764.61	383235.48	0.01	-2.9	15.0	
Heptachlor epoxide	356673.75	331132.72	0.01	-7.2	15.0	
Endosulfan I	372124.38	360264.81	0.01	-3.2	15.0	
Dieldrin	360891.28	355590.93	0.01	-1.5	15.0	
4,4'-DDE	317258.07	326824.51	0.01	3.0	15.0	
Endrin	320494.14	329551.23	0.01	2.8	15.0	
Endosulfan II	306602.32	311671.24	0.01	1.6	15.0	
4,4'-DDD	280607.84	299299.04	0.01	6.7	15.0	
Endosulfan sulfate	259200.05	272414.03	0.01	5.1	15.0	
4,4'-DDT	182187.09	228731.32	0.01	25.5	15.0	<-
Methoxychlor	87750.046	103131.84	0.01	17.5	15.0	<-
Endrin ketone	274349.49	284447.90	0.01	3.7	15.0	
Endrin aldehyde	230213.66	249726.15	0.01	8.5	15.0	
gamma-Chlordane	355244.48	335211.68	0.01	-5.6	15.0	
alpha-Chlordane	356803.94	320144.07	0.01	-10.3	15.0	
4cmx	353408.89	421381.42	0.01	19.2	15.0	<-
Decachlorobiphenyl	282102.23	298126.08	0.01	5.7	15.0	

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: Case No.: N/A SAS No.: N/A SDG No.: 221329

Instrument ID: ECD5A Calibration Date: 12/23/08 Time: 0105

Lab File ID: 059B5901 Init. Calib. Date(s): 12/22/08 12/22/08

Heated Purge: (Y/N) N Init. Calib. Times: 1618 1705

GC Column: CLP-2 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d	
alpha-BHC	107	100	AVRG	7.0	15.0	
beta-BHC	101	100	AVRG	1.0	15.0	
delta-BHC	108	100	AVRG	8.0	15.0	
gamma-BHC (Lindane)	109	100	AVRG	9.0	15.0	
Heptachlor	104	100	AVRG	4.0	15.0	
Aldrin	102	100	AVRG	2.0	15.0	
Heptachlor epoxide	102	100	AVRG	2.0	15.0	
Endosulfan I	106	100	AVRG	6.0	15.0	
Dieldrin	207	200	AVRG	3.5	15.0	
4,4'-DDE	212	200	AVRG	6.0	15.0	
Endrin	212	200	AVRG	6.0	15.0	
Endosulfan II	209	200	AVRG	4.5	15.0	
4,4'-DDD	214	200	AVRG	7.0	15.0	
Endosulfan sulfate	184	200	AVRG	-8.0	15.0	
4,4'-DDT	179	200	LINR	-10.5	15.0	
Methoxychlor	1160	1000	AVRG	16.0	15.0	<-
Endrin ketone	220	200	AVRG	10.0	15.0	
Endrin aldehyde	190	200	AVRG	-5.0	15.0	
gamma-Chlordane	107	100	AVRG	7.0	15.0	
alpha-Chlordane	98.3	100	AVRG	-1.7	15.0	
4cmx	246	200	AVRG	23.0	15.0	<-
Decachlorobiphenyl	230	200	AVRG	15.0	15.0	

FORM VII PEST

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/122208a.b/002f0201.d
Lab Smp Id: WPE081206-01DG1 Client Smp ID: PEM01
Inj Date : 22-DEC-2008 13:58
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE081206-01DG1
Misc Info :
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-F-8081-121108.m
Meth Date : 23-Dec-2008 15:03 hea01125 Quant Type: ESTD
Cal Date : 17-DEC-2008 17:17 Cal File: 014f1401.d
Als bottle: 2 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PEM.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
11 Aldrin					CAS #: 309-00-2		
3.596	3.599	-0.003	45156655	114.389	114	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.230	4.232	-0.002	203217	0.64054	0.640	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.545	4.547	-0.002	34362828	107.218	107	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.600	4.600	0.000	983012	3.50315	3.50	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
4.940	4.940	0.000	210164	0.91291	0.913	80.00- 120.00	100.00(M)
26 4,4'-DDT					CAS #: 50-29-3		
4.765	4.767	-0.002	19241291	105.613	106	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.366	5.367	-0.001	530741	1.93454	1.93	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.332	2.337	-0.005	86932488	245.983	246	80.00- 120.00	100.00(R)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
5.956	5.956	0.000	67513493	239.323	239	80.00- 120.00	100.00(R)

QC Flag Legend

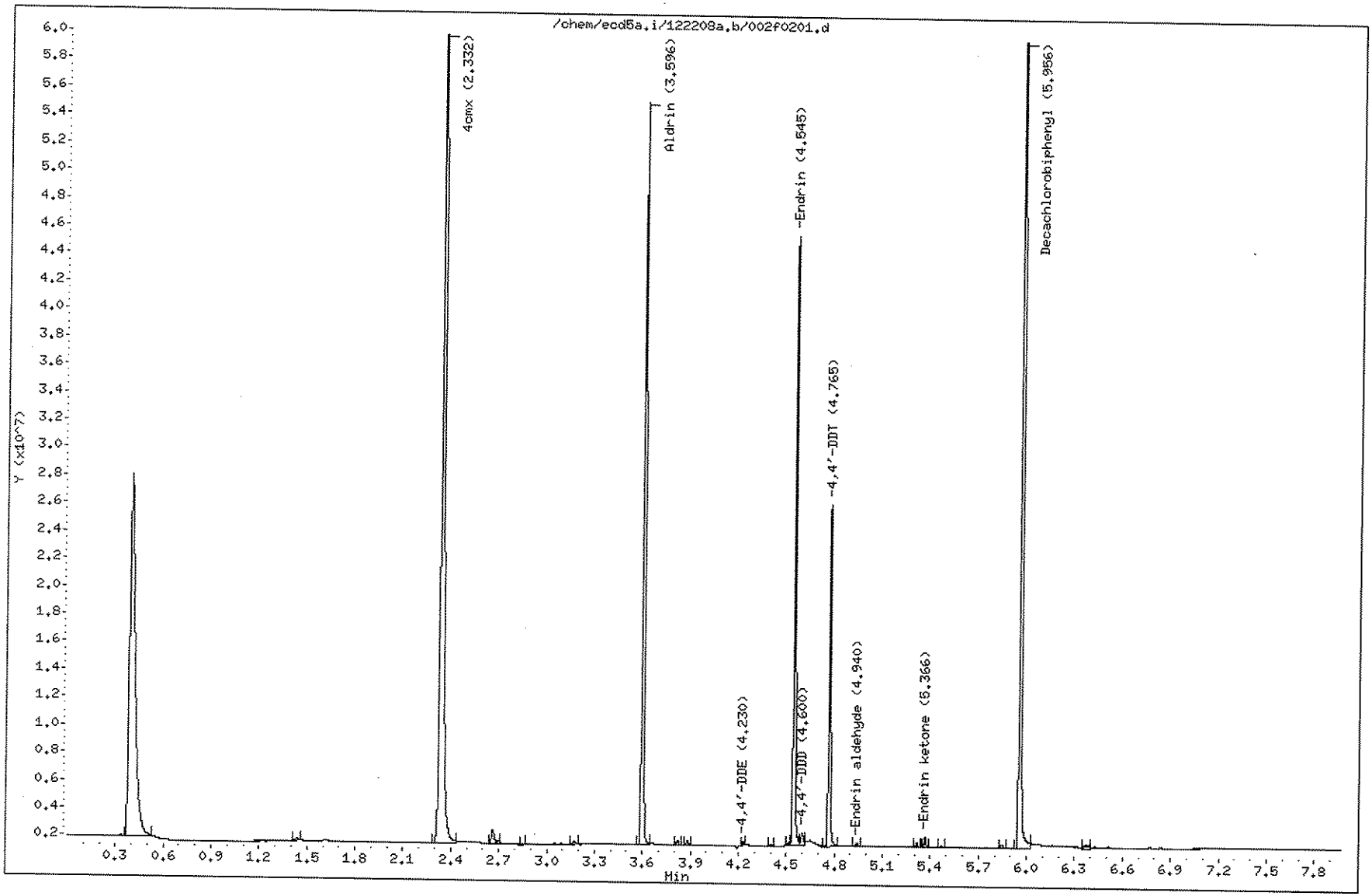
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/122208a.b/002f0201.d
Date : 22-DEC-2008 13:58
Client ID: PEM01
Sample Info: IWPE081206-01DG1

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25



GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/122208a.b/002b0201.d
Lab Smp Id: WPE081206-01DG1 Client Smp ID: PEM01
Inj Date : 22-DEC-2008 13:58
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE081206-01DG1
Misc Info :
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-B-8081-121108.m
Meth Date : 23-Dec-2008 14:51 hea01125 Quant Type: ESTD
Cal Date : 17-DEC-2008 17:17 Cal File: 014b1401.d
Als bottle: 2 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PEM.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
11 Aldrin					CAS #: 309-00-2		
3.690	3.694	-0.004	44929604	117.873	118	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.395	4.396	-0.001	246098	0.71736	0.717	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.666	4.669	-0.003	35394802	115.473	115	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.745	4.747	-0.002	966758	3.35821	3.36	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
4.999	5.000	-0.001	192422	0.87252	0.872	80.00- 120.00	100.00(M)
26 4,4'-DDT					CAS #: 50-29-3		
4.931	4.934	-0.003	23142419	99.9030	99.9	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.479	5.481	-0.002	595762	1.99834	2.00	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.370	2.375	-0.005	86646304	254.915	255	80.00- 120.00	100.00(R)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.215	6.214	0.001	76766551	259.304	259	80.00- 120.00	100.00(R)

QC Flag Legend

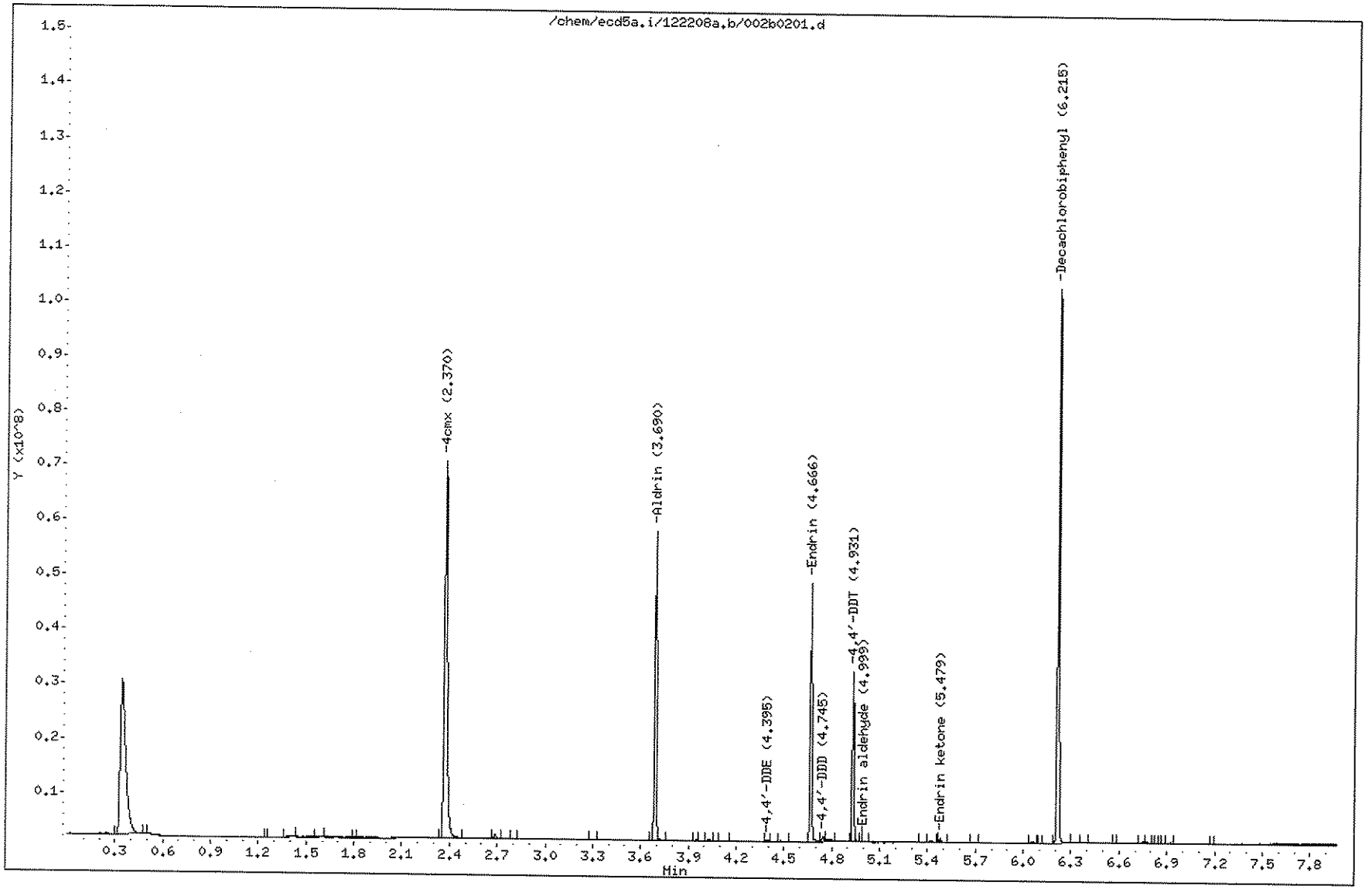
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/122208a.b/002b0201.d
Date : 22-DEC-2008 13:58
Client ID: PEM01
Sample Info: IWPE081206-01DG1

Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25



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CLP-1

Data file : /chem/ecd5a.i/122208a.b/054f5401.d
Lab Smp Id: WPE081206-01DG Client Smp ID: PEM02
Inj Date : 23-DEC-2008 00:06
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE081206-01DG
Misc Info :
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-F-8081-121108.m
Meth Date : 23-Dec-2008 15:03 hea01125 Quant Type: ESTD
Cal Date : 16-JUL-2008 00:40 Cal File: 034f3401.d
Als bottle: 54 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PEM.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
11 Aldrin					CAS #: 309-00-2		
3.598	3.599	-0.001	46310074	117.311	117	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.233	4.232	0.001	199631	0.62924	0.629	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.547	4.547	0.000	37327435	116.468	116	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.603	4.600	0.003	1393559	4.96622	4.97	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
4.942	4.940	0.002	418067	1.81600	1.82	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.768	4.767	0.001	18821531	103.309	103	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.368	5.367	0.001	879550	3.20595	3.20	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.335	2.337	-0.002	89090838	252.090	252	80.00- 120.00	100.00(R)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
5.955	5.956	-0.001	69141545	245.094	245	80.00- 120.00	100.00(R)

QC Flag Legend

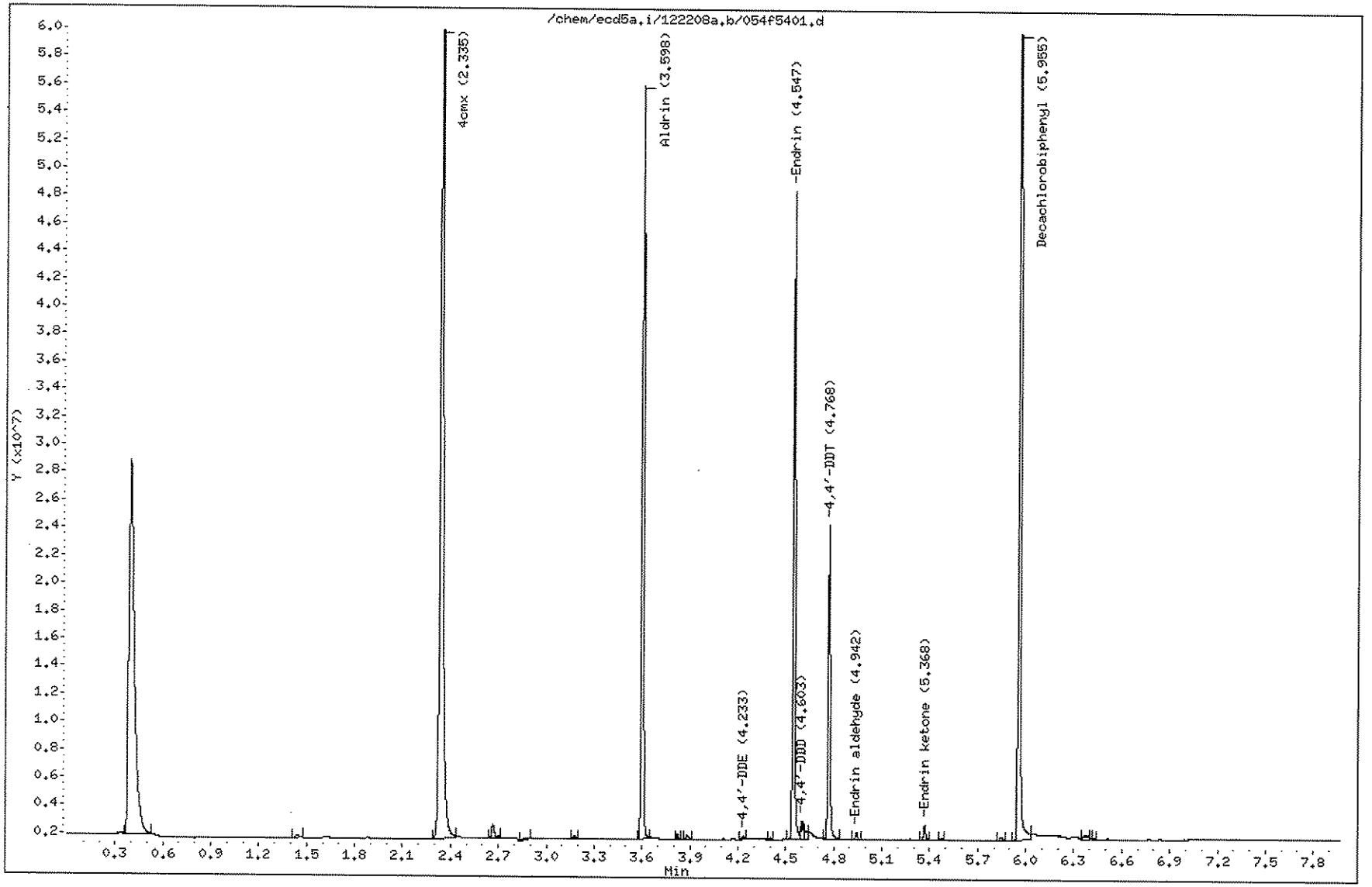
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/122208a.b/054f5401.d
Date : 23-DEC-2008 00:06
Client ID: PEM02
Sample Info: IWPE081206-01DG

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25



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CLP-2

Data file : /chem/ecd5a.i/122208a.b/054b5401.d
Lab Smp Id: WPE081206-01DG Client Smp ID: PEM02
Inj Date : 23-DEC-2008 00:06
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE081206-01DG
Misc Info :
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-B-8081-121108.m
Meth Date : 23-Dec-2008 14:51 hea01125 Quant Type: ESTD
Cal Date : 16-JUL-2008 00:40 Cal File: 034b3401.d
Als bottle: 54 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PEM.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
11 Aldrin					CAS #: 309-00-2		
3.693	3.694	-0.001	45187461	118.550	118	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.398	4.396	0.002	224927	0.65565	0.656	80.00- 120.00	100.00(M)
22 Endrin					CAS #: 72-20-8		
4.669	4.669	0.000	35323471	115.240	115	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.748	4.747	0.001	999814	3.47304	3.47	80.00- 120.00	100.00(M)
27 Endrin aldehyde					CAS #: 7421-93-4		
5.001	5.000	0.001	402982	1.82729	1.83	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.934	4.934	0.000	20994784	91.5877	91.6	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.482	5.481	0.001	776482	2.60452	2.60	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.373	2.375	-0.002	88019032	258.954	259	80.00- 120.00	100.00(R)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.213	6.214	-0.001	78224412	264.228	264	80.00- 120.00	100.00(R)

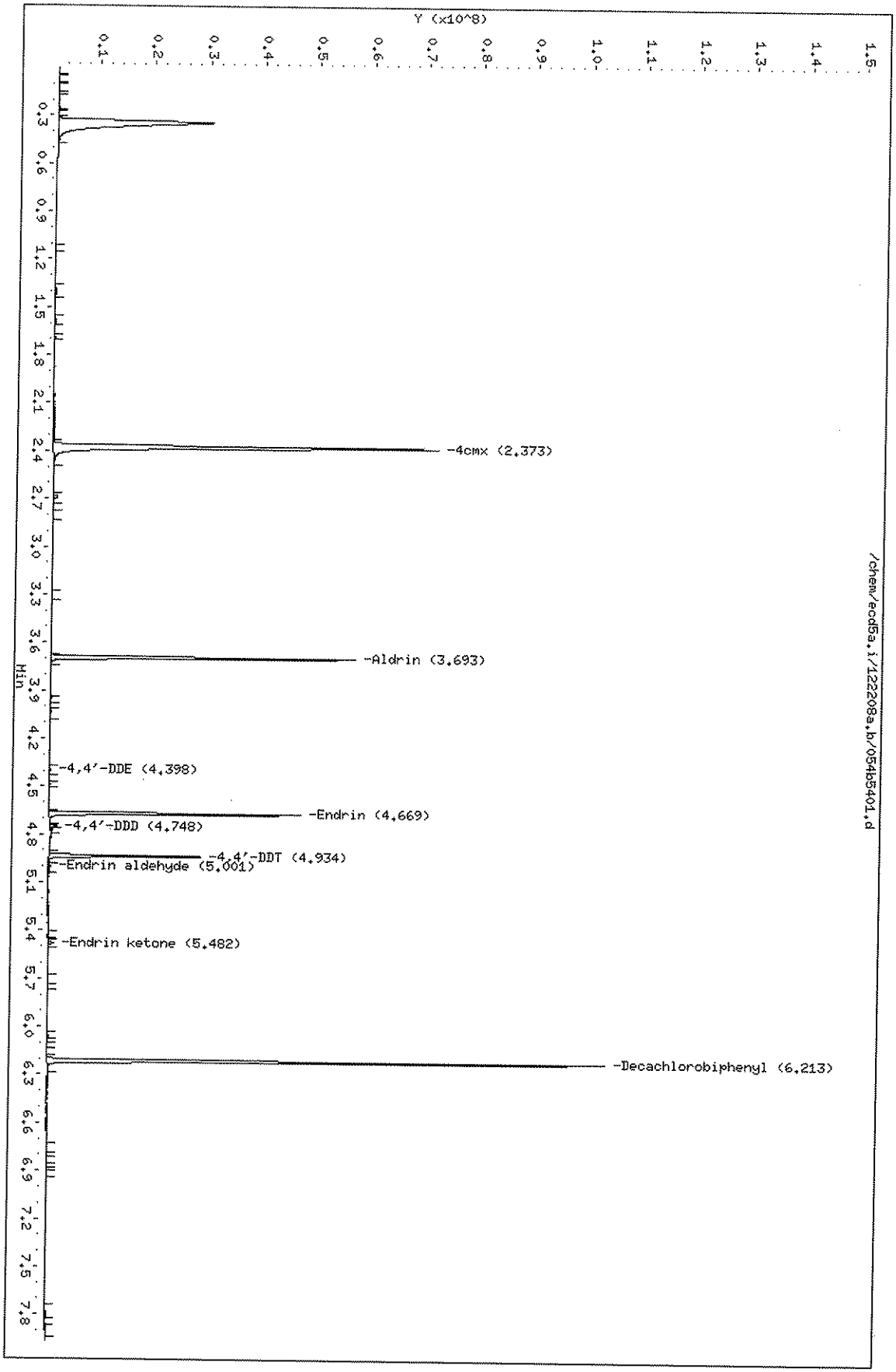
QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/122208a.b/054b5401.d
Date : 23-DEC-2008 00:06
Client ID: PEM02
Sample Info: IWPE081206-01DG

Column phase: CLP-2

Instrument: ecd5a.i
Operator: HXJI
Column diameter: 0.25



Page 1

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CLP-1

Data file : /chem/ecd5a.i/122208a.b/004f0401.d
Lab Smp Id: WPE081211-52TX
Inj Date : 22-DEC-2008 14:21
Operator : HXJ1
Smp Info : |WPE081211-52TX
Misc Info :
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-F-8081-121108.m
Meth Date : 14-Jan-2009 09:02 yml
Cal Date : 16-JUL-2008 00:40
Als bottle: 4
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 3.50
Processing Host: kilroy

Client Smp ID: TOXPAH01
Inst ID: ecd5a.i
Quant Type: ESTD
Cal File: 034f3401.d
Continuing Calibration Sample
Compound Sublist: Tox.sub
Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
4.408	4.408	0.000	12839748	2000.00	2000	80.00- 120.00	100.00(M)
4.461	4.461	0.000	11211565	2000.00	1890	67.32- 107.32	87.32
4.677	4.677	0.000	20165574	2000.00	1800	137.06- 177.06	157.06
4.885	4.885	0.000	20602921	2000.00	1820	140.46- 180.46	160.46
5.138	5.138	0.000	16376811	2000.00	1900	107.55- 147.55	127.55
Average of Peak Amounts =					1.88e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.334	2.337	-0.003	93235217	0.00000	264	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
5.954	5.956	-0.002	70150794	0.00000	249	80.00- 120.00	100.00

QC Flag Legend

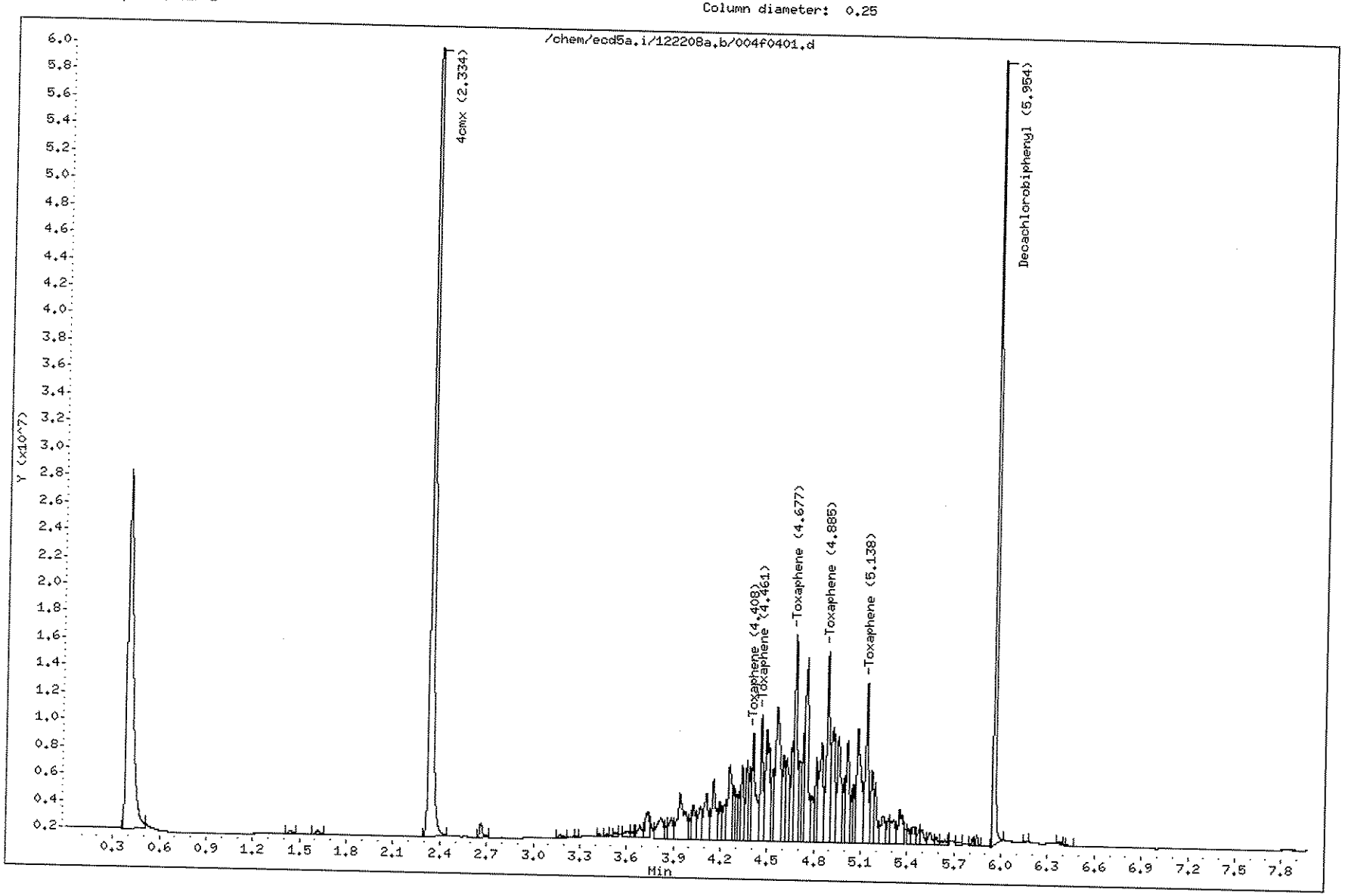
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/122208a.b/004f0401.d
Date : 22-DEC-2008 14:21
Client ID: TOXPAH01
Sample Info: IWPE081211-52TX

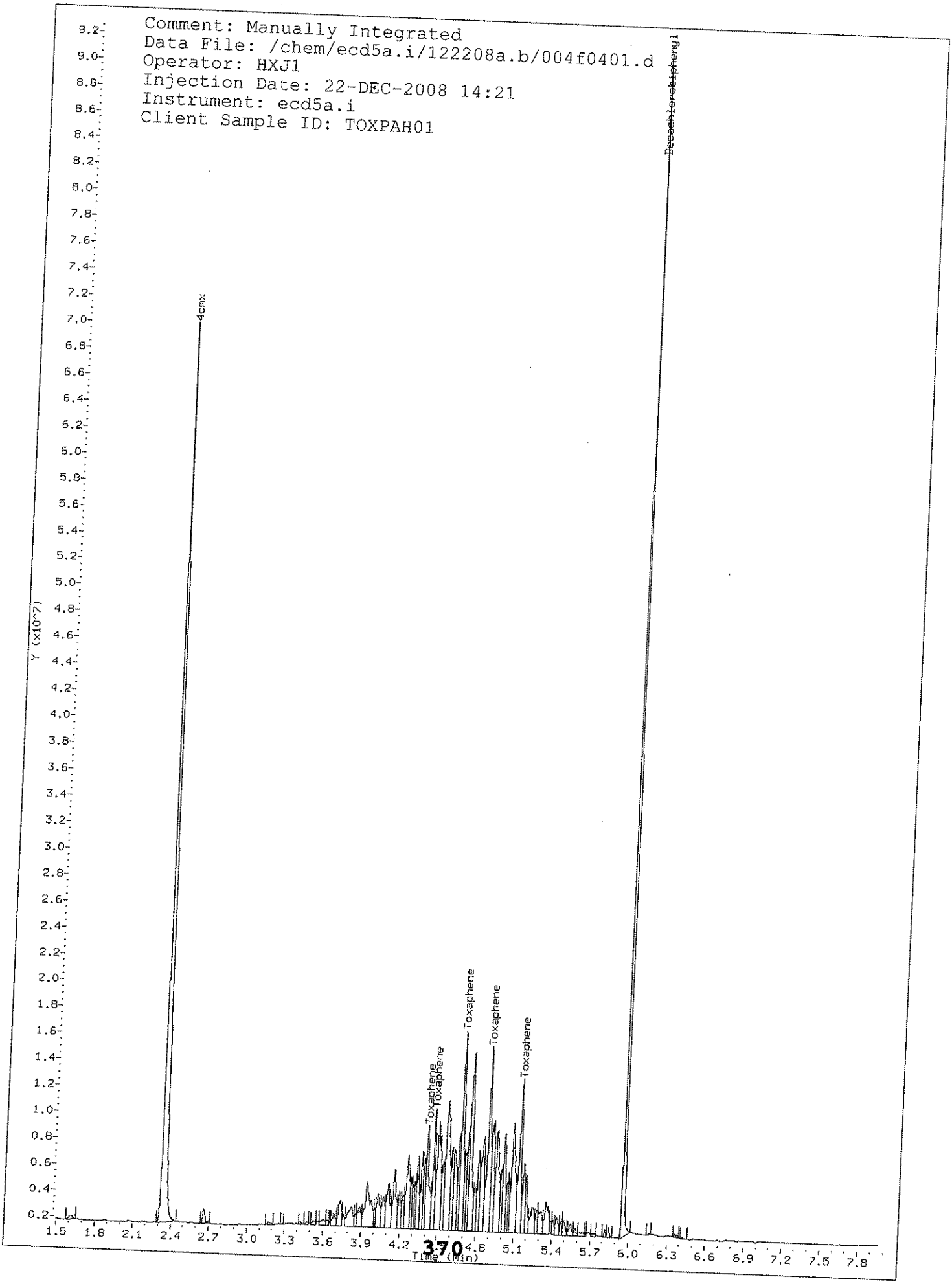
Column phase: CLP-1

Instrument: ecd5a.i

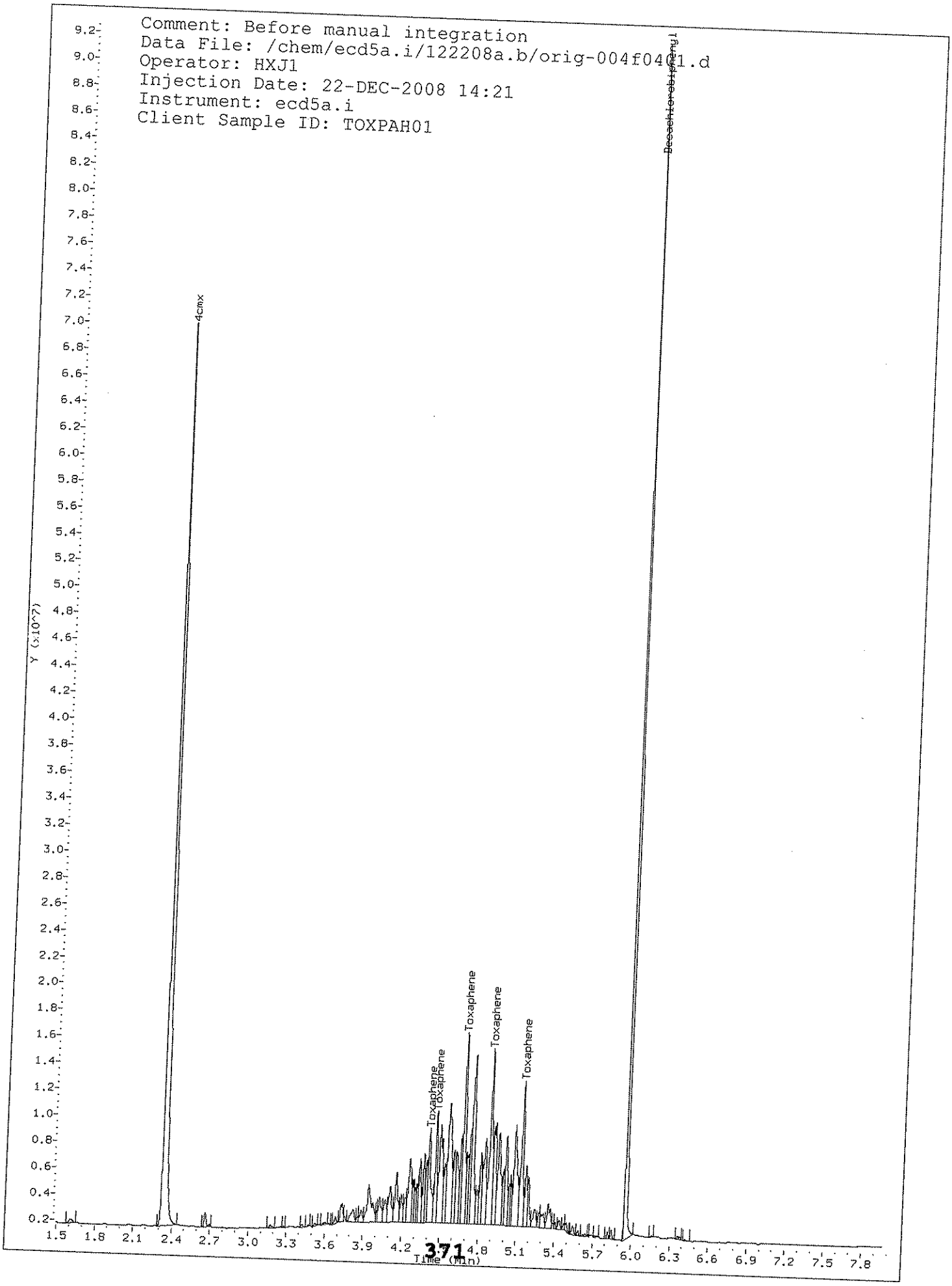
Operator: HXJ1
Column diameter: 0.25



Comment: Manually Integrated
Data File: /chem/ecd5a.i/122208a.b/004f0401.d
Operator: HXJ1
Injection Date: 22-DEC-2008 14:21
Instrument: ecd5a.i
Client Sample ID: TOXPAH01



Comment: Before manual integration
Data File: /chem/ecd5a.i/122208a.b/orig-004f04[illegible]1.d
Operator: HXJ1
Injection Date: 22-DEC-2008 14:21
Instrument: ecd5a.i
Client Sample ID: TOXPAH01



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CLP-2

Data file : /chem/ecd5a.i/122208a.b/004b0401.d
Lab Smp Id: WPE081211-52TX Client Smp ID: TOXAPH01
Inj Date : 22-DEC-2008 14:21
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE081211-52TX
Misc Info :
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-B-8081-121108.m
Meth Date : 23-Dec-2008 14:51 hea01125 Quant Type: ESTD
Cal Date : 17-DEC-2008 17:17 Cal File: 014b1401.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Tox.sub
Target Version: 3.50 Sample Matrix: None

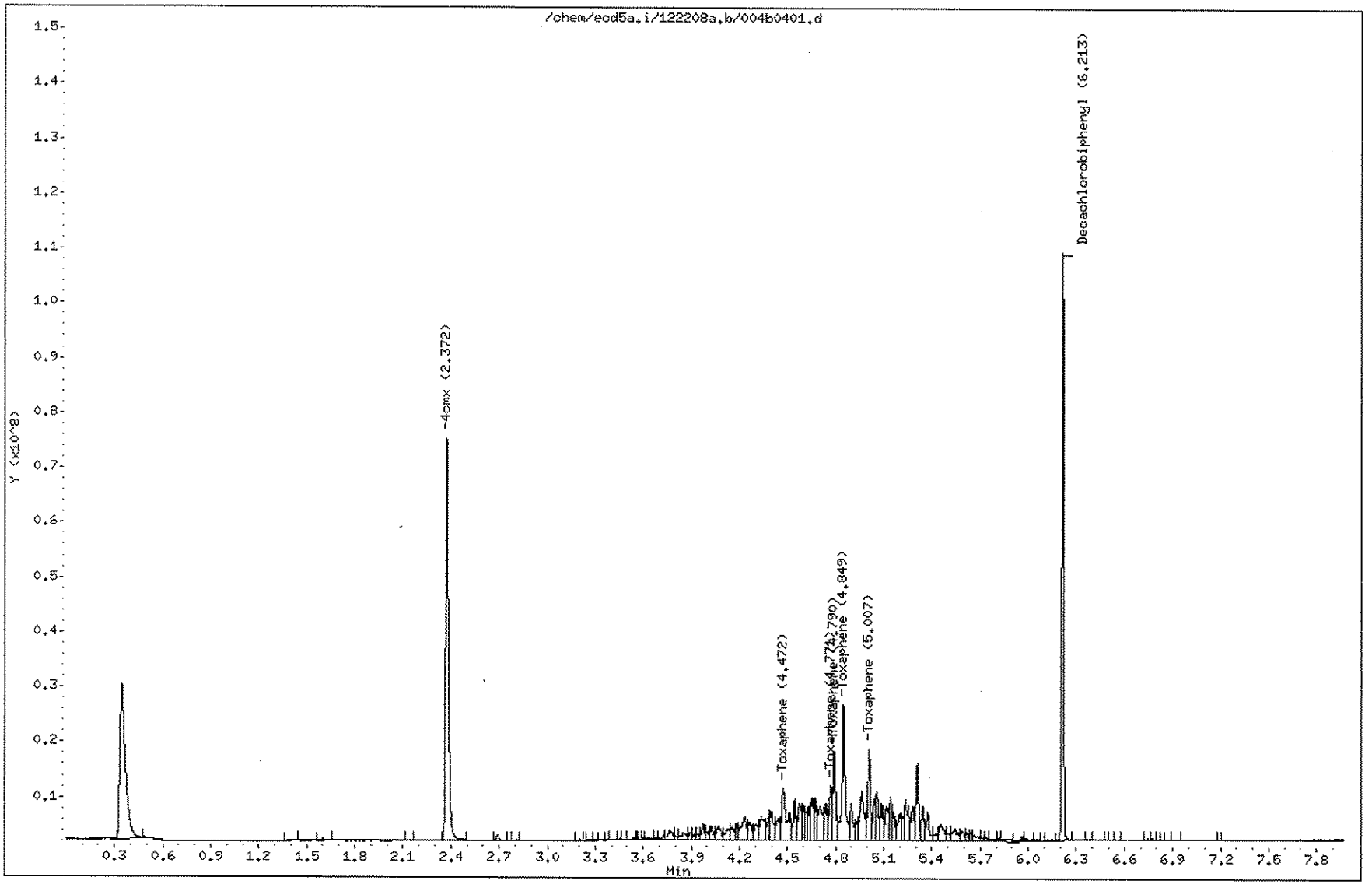
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
4.472	4.472	0.000	20459730	2000.00	2090	80.00- 120.00	100.00
4.771	4.771	0.000	11322487	2000.00	1810	35.34- 75.34	55.34
4.790	4.790	0.000	17892988	2000.00	1920	67.45- 107.45	87.45
4.849	4.849	0.000	33773935	2000.00	1830	145.08- 185.08	165.08
5.007	5.007	0.000	19222254	2000.00	1880	73.95- 113.95	93.95
Average of Peak Amounts =					1.91e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.372	2.375	-0.003	91986782	200.000	271	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.213	6.214	-0.001	81754063	200.000	276	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/122208a.b/004b0401.d
Date : 22-DEC-2008 14:21
Client ID: TOXAPH01
Sample Info: IWPE081211-52TX

Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25



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CLP-1

Data file : /chem/ecd5a.i/122208a.b/007f0701.d
Lab Smp Id: WPE080829-60 60 Client Smp ID: AR166001
Inj Date : 22-DEC-2008 14:56
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE080829-60 60
Misc Info :
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-F-8081-121108.m
Meth Date : 23-Dec-2008 15:03 hea01125 Quant Type: ESTD
Cal Date : 17-DEC-2008 17:17 Cal File: 014f1401.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
3 Aroclor-1016					CAS #: 12674-11-2		
2.650	2.650	0.000	6414000	1000.00	951	80.00- 120.00	100.00(M)
3.267	3.267	0.000	17159392	1000.00	1000	248.43- 288.43	267.53
3.403	3.403	0.000	6941201	1000.00	966	86.26- 126.26	108.22
3.503	3.503	0.000	6161632	1000.00	968	74.55- 114.55	96.07
3.636	3.636	0.000	8241622	1000.00	921	106.79- 146.79	128.49
Average of Peak Amounts =					961		
21 Aroclor-1260					CAS #: 11096-82-5		
4.409	4.409	0.000	18090336	1000.00	1060	80.00- 120.00	100.00(M)
4.578	4.578	0.000	27566925	1000.00	1080	131.90- 171.90	152.38
4.815	4.815	0.000	13930349	1000.00	1070	61.17- 101.17	77.00
4.963	4.963	0.000	14013441	1000.00	1070	53.06- 93.06	77.46
5.146	5.146	0.000	28221592	1000.00	1220	157.76- 197.76	156.00
Average of Peak Amounts =					1.1e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.335	2.337	-0.002	69259210	0.00000	196	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
5.954	5.956	-0.002	53270719	0.00000	189	80.00- 120.00	100.00

QC Flag Legend

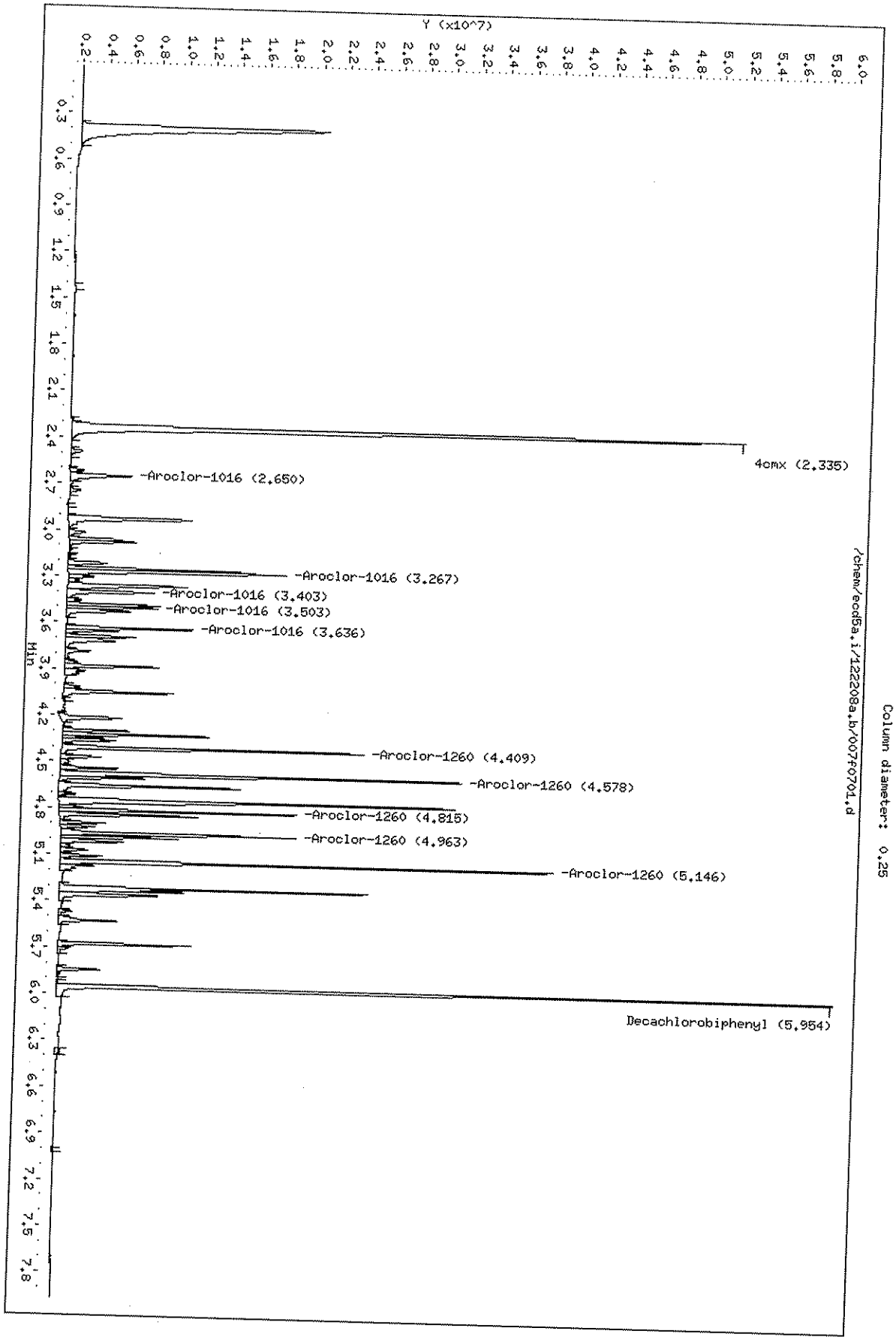
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/122208a.b/007f0701.d
Date : 22-DEC-2008 14:56
Client ID: AR166001
Sample Info: IWPE080829-60 60

Column phase: CLP-1

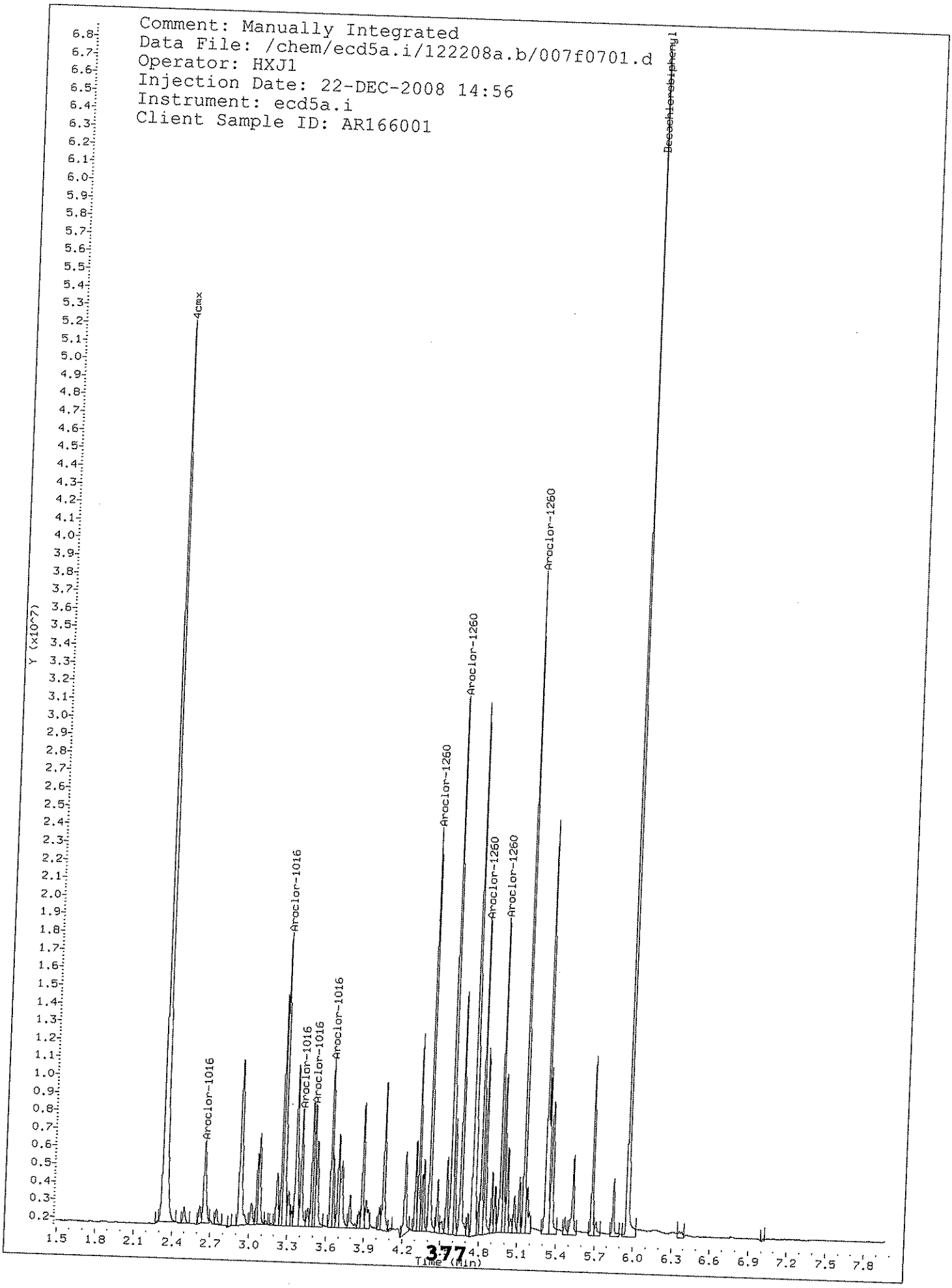
Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25

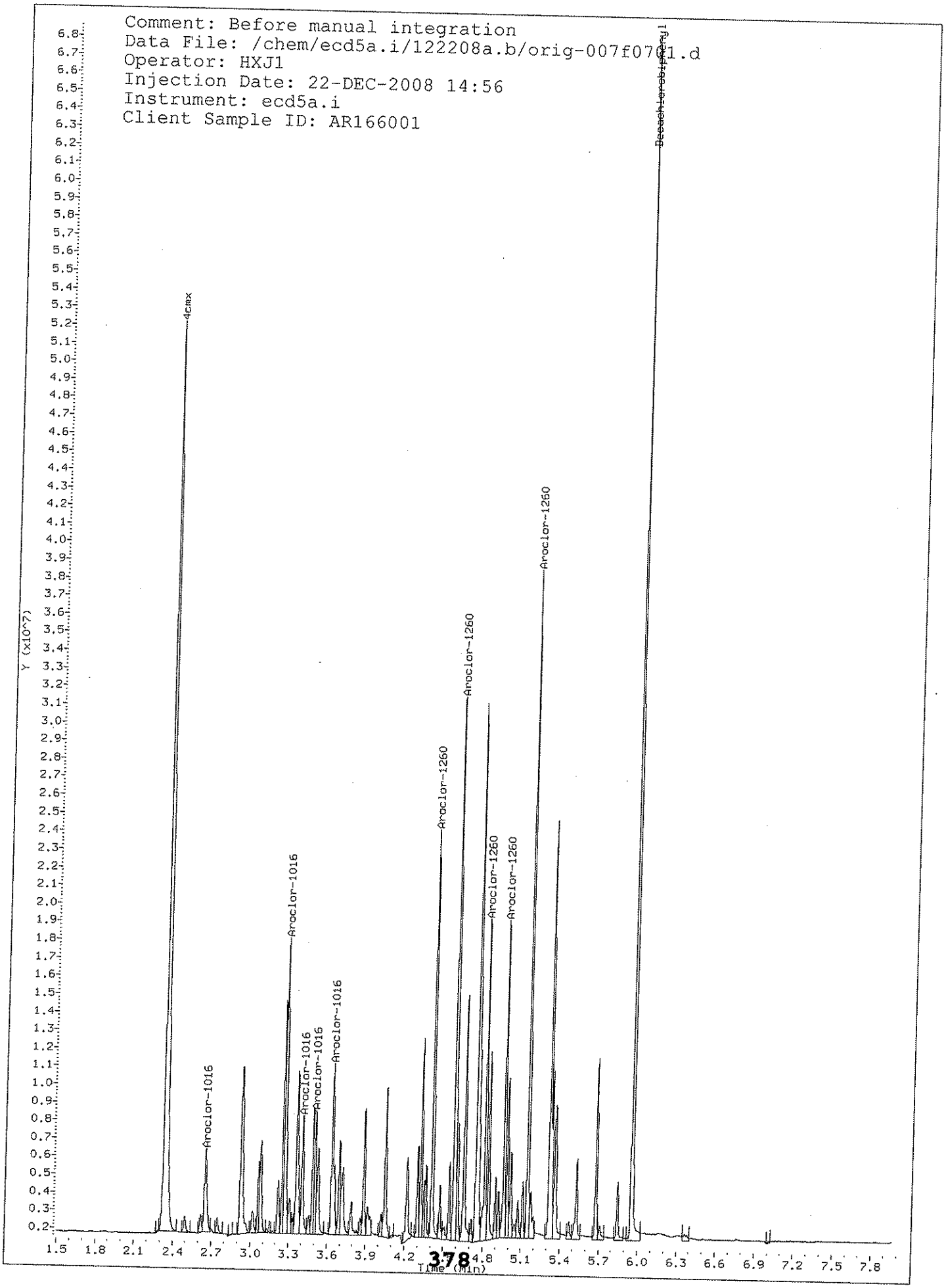


Page 1

Comment: Manually Integrated
Data File: /chem/ecd5a.i/122208a.b/007f0701.d
Operator: HXJ1
Injection Date: 22-DEC-2008 14:56
Instrument: ecd5a.i
Client Sample ID: AR166001



Comment: Before manual integration
Data File: /chem/ecd5a.i/122208a.b/orig-007f07[illegible]1.d
Operator: HXJ1
Injection Date: 22-DEC-2008 14:56
Instrument: ecd5a.i
Client Sample ID: AR166001



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CLP-2

Data file : /chem/ecd5a.i/122208a.b/007b0701.d
Lab Smp Id: WPE080829-60 60 Client Smp ID: AR166001
Inj Date : 22-DEC-2008 14:56
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WPE080829-60 60
Misc Info :
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-B-8081-121108.m
Meth Date : 23-Dec-2008 14:51 hea01125 Quant Type: ESTD
Cal Date : 17-DEC-2008 17:17 Cal File: 014b1401.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
3 Aroclor-1016					CAS #: 12674-11-2		
3.500	3.500	0.000	10216043	1000.00	990	80.00- 120.00	100.00(M)
3.568	3.568	0.000	5916085	1000.00	975	38.64- 78.64	57.91
3.634	3.634	0.000	6021158	1000.00	973	38.87- 78.87	58.94
3.662	3.662	0.000	6238784	1000.00	984	40.19- 80.19	61.07
3.807	3.807	0.000	8094149	1000.00	1000	58.38- 98.38	79.23
Average of Peak Amounts =					985		
21 Aroclor-1260					CAS #: 11096-82-5		
4.594	4.594	0.000	19047360	1000.00	1110	80.00- 120.00	100.00
4.721	4.721	0.000	23130593	1000.00	1140	100.18- 140.18	121.44
4.989	4.989	0.000	14696733	1000.00	1100	60.10- 100.10	77.16
5.164	5.164	0.000	15114934	1000.00	1130	63.01- 103.01	79.35
5.312	5.312	0.000	36732470	1000.00	1130	171.35- 211.35	192.85
Average of Peak Amounts =					1.12e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.373	2.375	-0.002	68154323	200.000	200	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.214	6.214	0.000	58046445	200.000	196	80.00- 120.00	100.00

QC Flag Legend

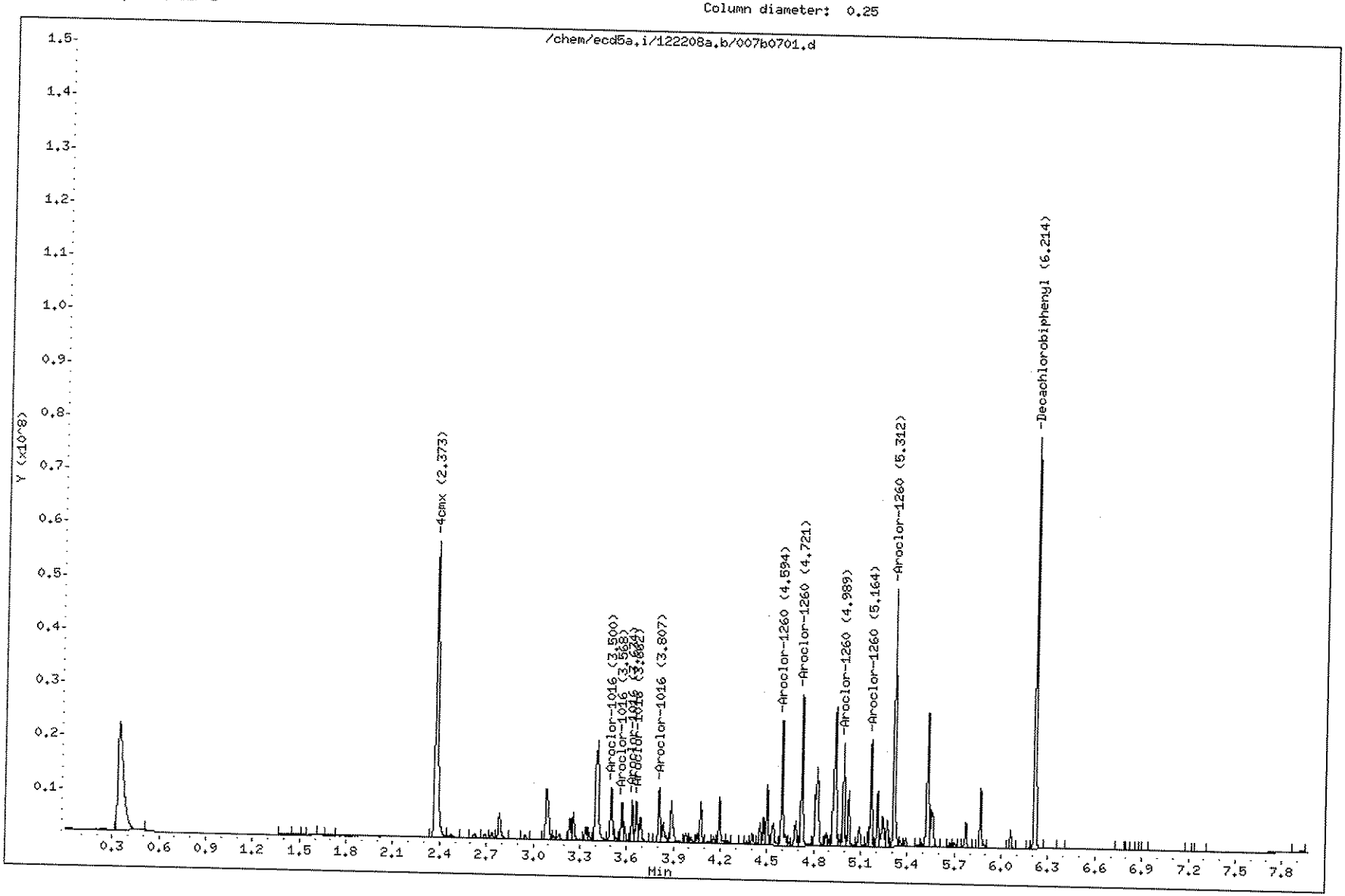
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/122208a.b/007b0701.d
Date : 22-DEC-2008 14:56
Client ID: AR166001
Sample Info: IWPE080829-60 60

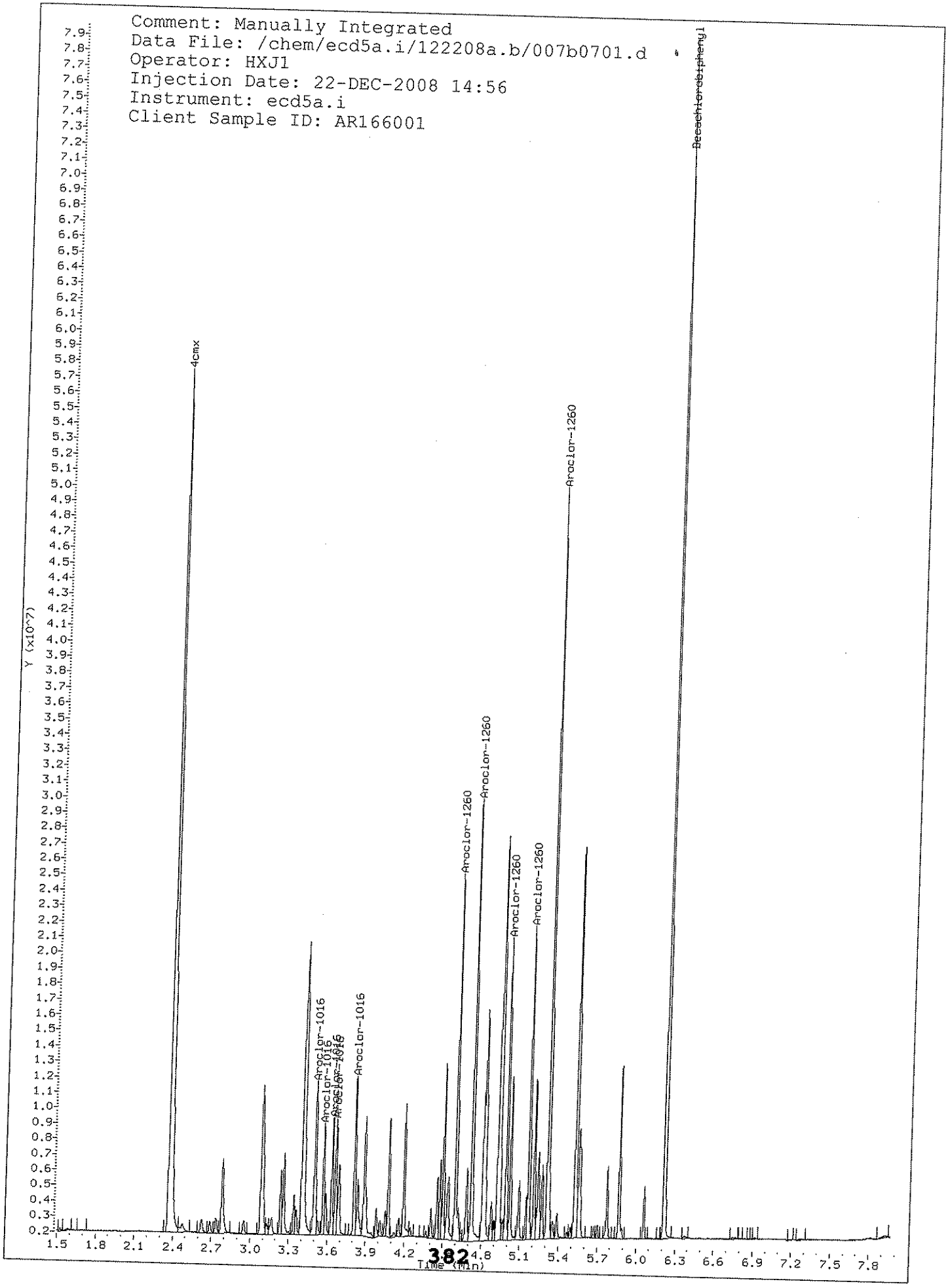
Column phase: CLP-2

Instrument: ecd5a.i

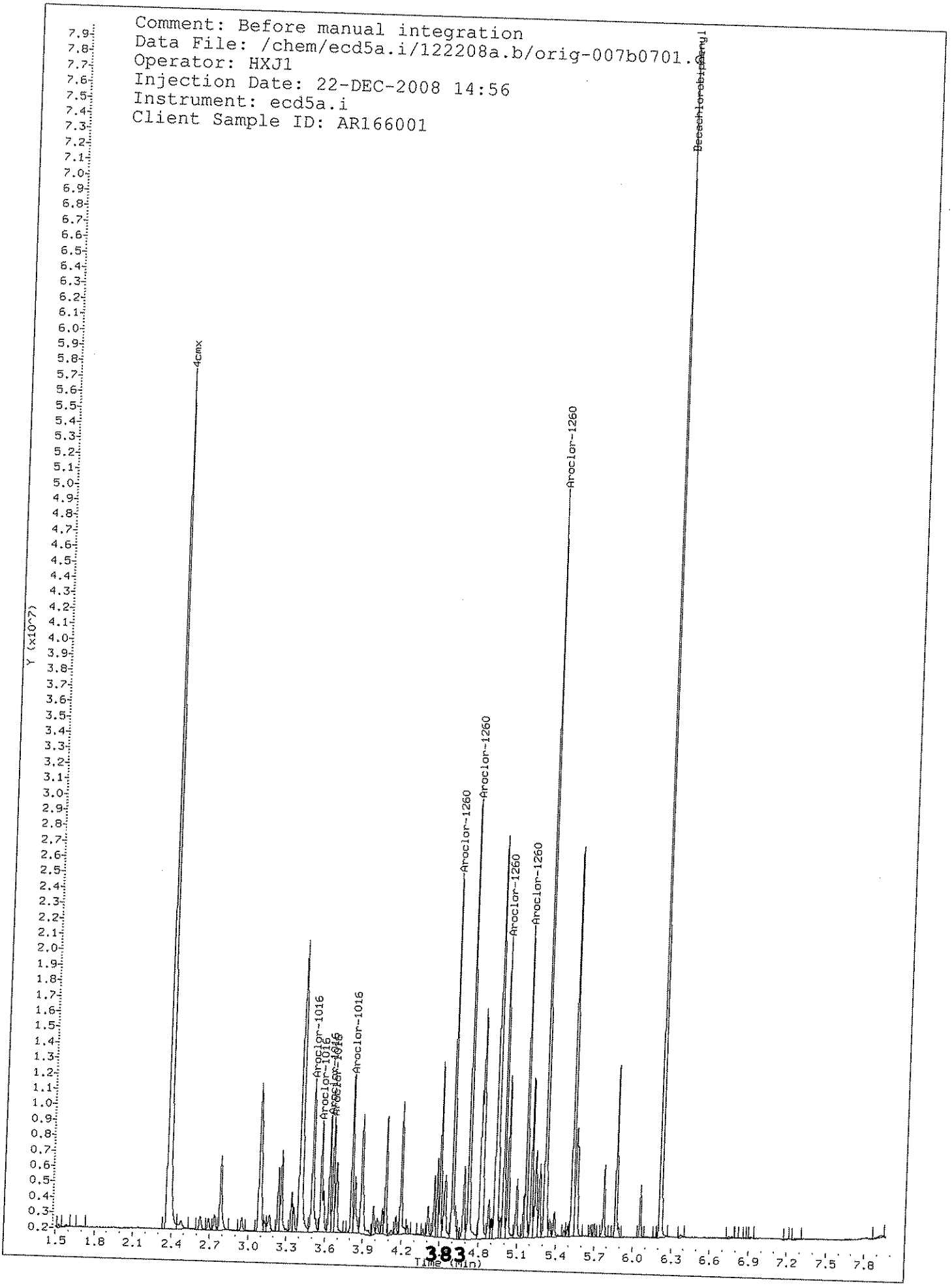
Operator: HXJ1
Column diameter: 0.25



Comment: Manually Integrated
Data File: /chem/ecd5a.i/122208a.b/007b0701.d
Operator: HXJ1
Injection Date: 22-DEC-2008 14:56
Instrument: ecd5a.i
Client Sample ID: AR166001



Comment: Before manual integration
Data File: /chem/ecd5a.i/122208a.b/orig-007b0701.
Operator: HXJ1
Injection Date: 22-DEC-2008 14:56
Instrument: ecd5a.i
Client Sample ID: AR166001



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CLP-1

Data file : /chem/ecd5a.i/122208a.b/008f0801.d
Lab Smp Id: WAR081119-54 54 — Client Smp ID: AR125401
Inj Date : 22-DEC-2008 15:08
Operator : HXJ1 — Inst ID: ecd5a.i
Smp Info : |WAR081119-54 54
Misc Info :
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-F-8081-121108.m
Meth Date : 23-Dec-2008 15:03 hea01125 — Quant Type: ESTD
Cal Date : 17-DEC-2008 17:17 — Cal File: 014f1401.d
Als bottle: 8 — Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon — Compound Sublist: AR1254.sub
Target Version: 3.50 — Sample Matrix: None

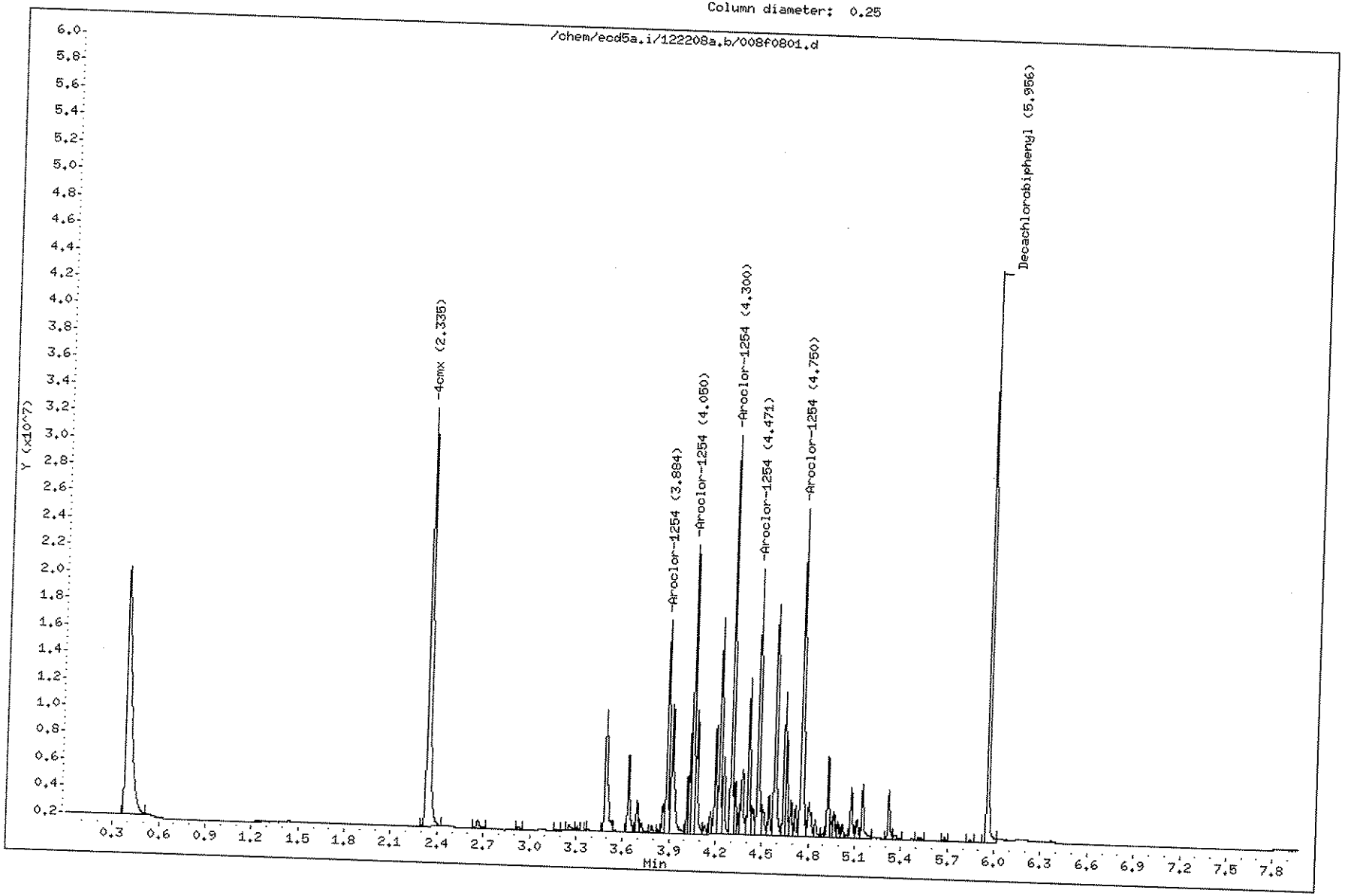
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
15 Aroclor-1254					CAS #: 11097-69-1		
3.884	3.884	0.000	13884986	0.00000	1090	80.00- 120.00	100.00
4.050	4.050	0.000	19456885	0.00000	1130	120.13- 160.13	140.13
4.300	4.300	0.000	23965649	0.00000	1090	152.60- 192.60	172.60
4.471	4.471	0.000	18323181	0.00000	1080	111.96- 151.96	131.96
4.750	4.750	0.000	25438155	0.00000	1100	163.21- 203.21	183.21
Average of Peak Amounts =					1.1e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.335	2.337	-0.002	43021709	0.00000	122	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
5.956	5.956	0.000	33786035	0.00000	120	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/122208a.b/008f0801.d
Date : 22-DEC-2008 15:08
Client ID: AR125401
Sample Info: !WAR081119-54 54

Instrument: ecd5a.i

Column phase: CLP-1

Operator: HXJ1
Column diameter: 0.25



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CLP-2

Data file : /chem/ecd5a.i/122208a.b/008b0801.d
Lab Smp Id: WAR081119-54 54 Client Smp ID: AR125401
Inj Date : 22-DEC-2008 15:08
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WAR081119-54 54
Misc Info :
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-B-8081-121108.m
Meth Date : 23-Dec-2008 14:51 hea01125 Quant Type: ESTD
Cal Date : 17-DEC-2008 17:17 Cal File: 014b1401.d
Als bottle: 8 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None

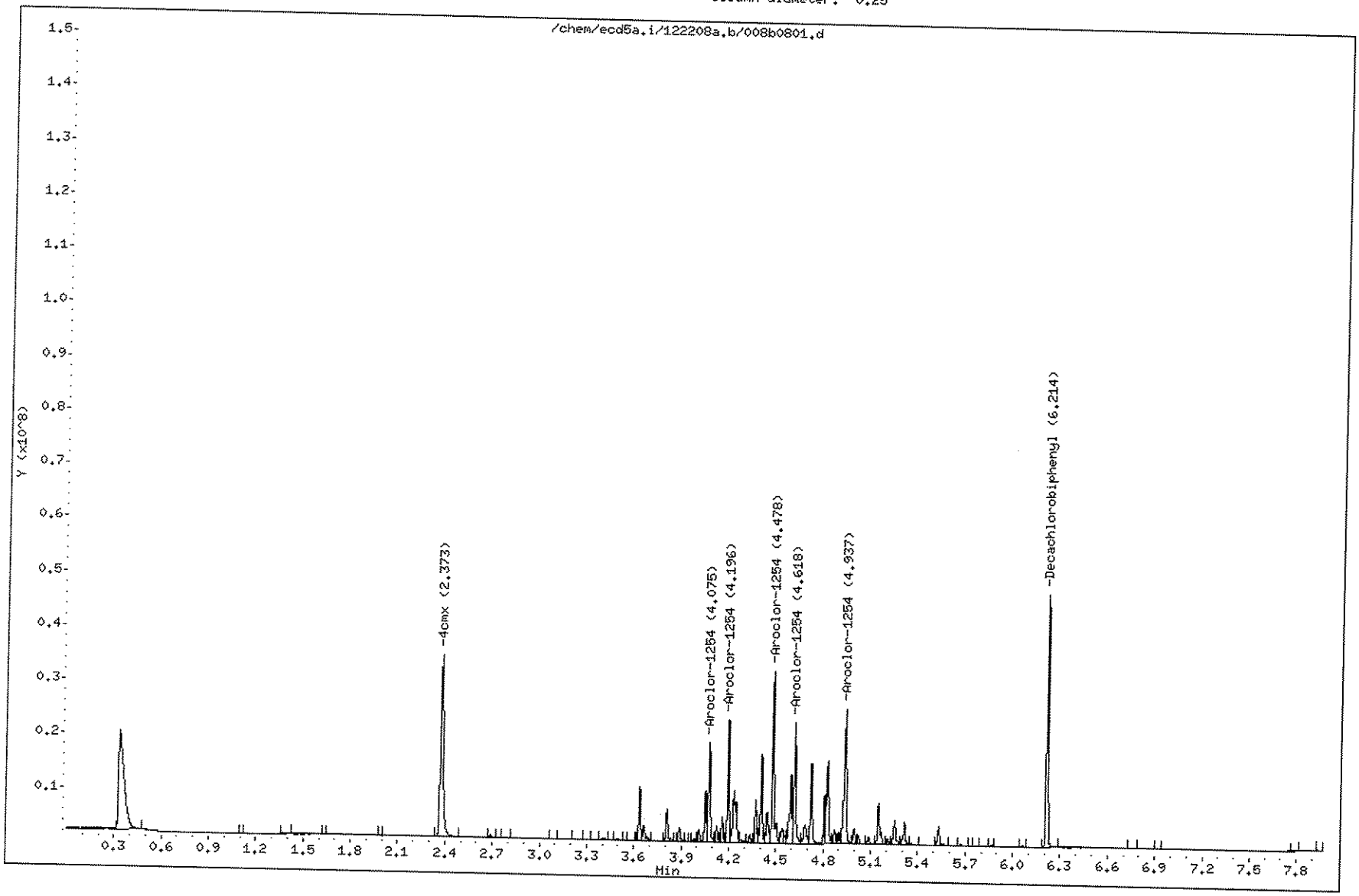
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
15 Aroclor-1254					CAS #: 11097-69-1		
4.075	4.075	0.000	16268417	1000.00	1080	80.00- 120.00	100.00
4.196	4.196	0.000	17149841	1000.00	1050	85.42- 125.42	105.42
4.478	4.478	0.000	26629126	1000.00	1060	143.69- 183.69	163.69
4.618	4.618	0.000	18612751	1000.00	1040	94.41- 134.41	114.41
4.937	4.937	0.000	26203067	1000.00	1080	141.07- 181.07	161.07
Average of Peak Amounts =					1.06e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.373	2.375	-0.002	41761371	200.000	123	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.214	6.214	0.000	35814286	200.000	121	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/122208a.b/008b0801.d
Date : 22-DEC-2008 15:08
Client ID: AR125401
Sample Info: IWAR081119-54 54

Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25



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CLP-1

Data file : /chem/ecd5a.i/122208a.b/010f1001.d
Lab Smp Id: WAR081119-42 42
Inj Date : 22-DEC-2008 15:32
Operator : HXJ1
Smp Info : |WAR081119-42 42
Misc Info :
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-F-8081-121108.m
Meth Date : 23-Dec-2008 15:03 hea01125
Cal Date : 16-JUL-2008 00:40
Als bottle: 10
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 3.50

Client Smp ID: AR124201
Inst ID: ecd5a.i
Quant Type: ESTD
Cal File: 034f3401.d
Continuing Calibration Sample
Compound Sublist: AR1242.sub
Sample Matrix: None

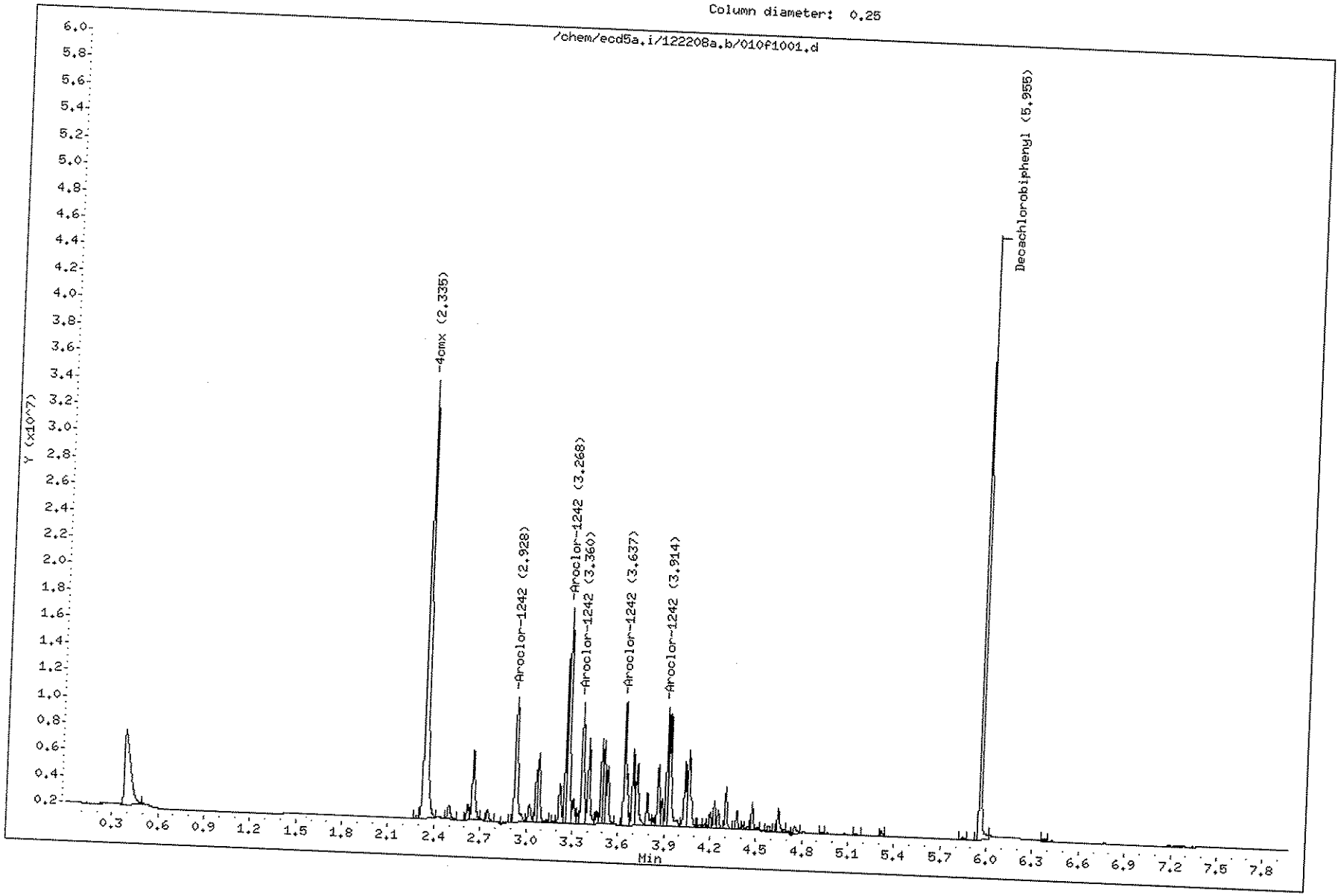
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
6 Aroclor-1242					CAS #: 53469-21-9		
2.928	2.928	0.000	13666139	0.00000	1000	80.00- 120.00	100.00
3.268	3.268	0.000	16555462	0.00000	1000	101.14- 141.14	121.14
3.360	3.360	0.000	10838730	0.00000	1000	59.31- 99.31	79.31
3.637	3.637	0.000	11452240	0.00000	1000	63.80- 103.80	83.80
3.914	3.914	0.000	7617658	0.00000	1000	35.74- 75.74	55.74
Average of Peak Amounts =					1e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.335	2.337	-0.002	45544438	0.00000	129	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
5.955	5.956	-0.001	35511641	0.00000	126	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/122208a.b/010f1001.d
Date : 22-DEC-2008 15:32
Client ID: AR124201
Sample Info: IWAR081119-42 42

Instrument: ecd5a.i

Column phase: CLP-1

Operator: HXJ1
Column diameter: 0.25



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CLP-2

Data file : /chem/ecd5a.i/122208a.b/010b1001.d
Lab Smp Id: WAR081119-42 42 Client Smp ID: AR124201
Inj Date : 22-DEC-2008 15:32
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WAR081119-42 42
Misc Info :
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-B-8081-121108.m
Meth Date : 23-Dec-2008 14:51 hea01125 Quant Type: ESTD
Cal Date : 16-JUL-2008 00:40 Cal File: 034b3401.d
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None

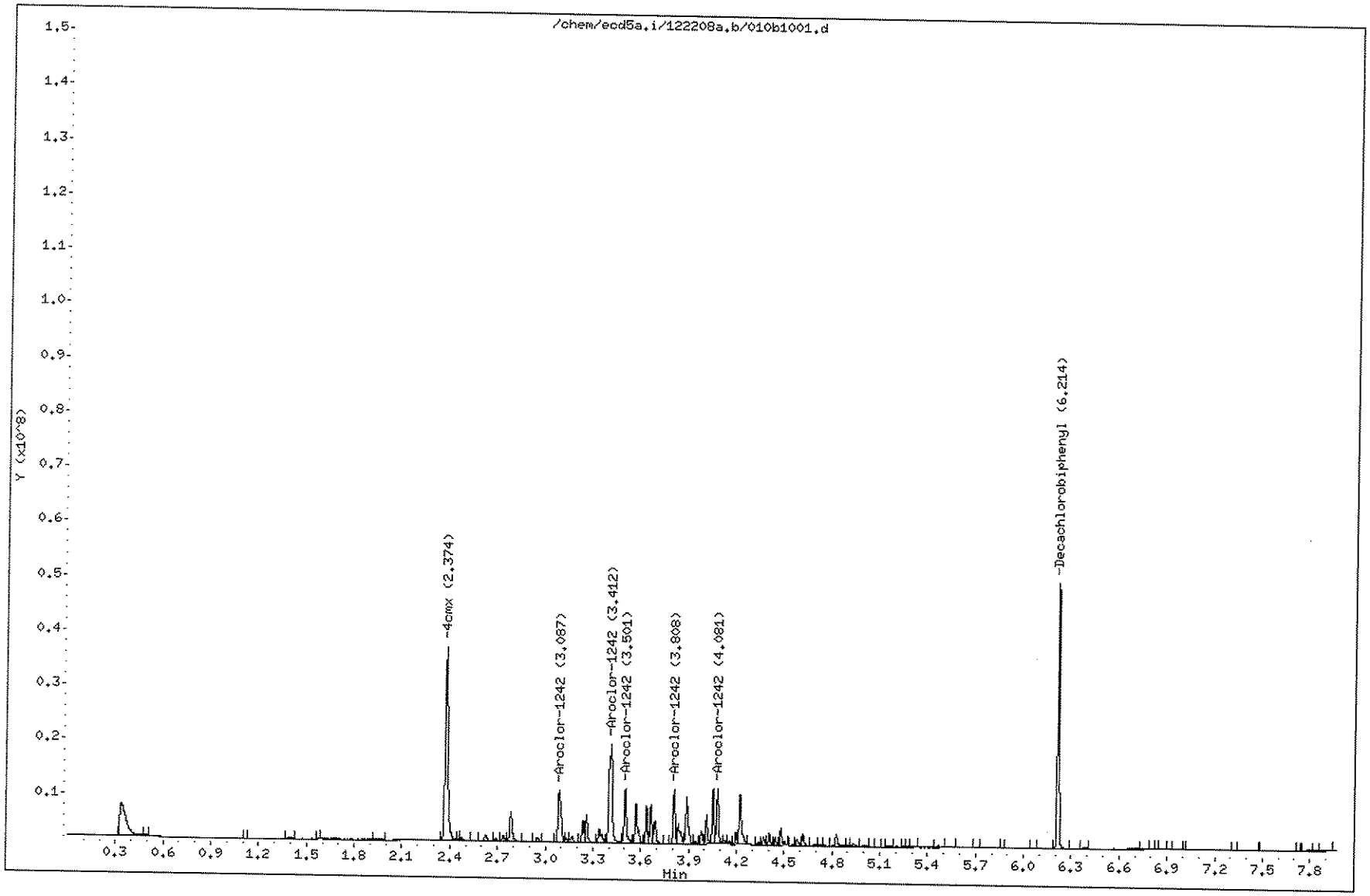
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
6 Aroclor-1242					CAS #: 53469-21-9		
3.087	3.087	0.000	12673874	1000.00	1000	80.00- 120.00	100.00
3.412	3.412	0.000	27593137	1000.00	1000	197.72- 237.72	217.72
3.501	3.501	0.000	10972992	1000.00	1000	66.58- 106.58	86.58
3.808	3.808	0.000	8091091	1000.00	1000	43.84- 83.84	63.84
4.081	4.081	0.000	9206321	1000.00	1000	52.64- 92.64	72.64
Average of Peak Amounts =					1e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.374	2.375	-0.001	44397658	200.000	131	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.214	6.214	0.000	38262803	200.000	129	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/122208a.b/010b1001.d
Date : 22-DEC-2008 15:32
Client ID: AR124201
Sample Info: IWAR081119-42 42

Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25



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CLP-1

Data file : /chem/ecd5a.i/122208a.b/011f1101.d
Lab Smp Id: WAR080811-48 48 Client Smp ID: AR124801
Inj Date : 22-DEC-2008 15:43
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WAR080811-48 48
Misc Info :
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-F-8081-121108.m
Meth Date : 23-Dec-2008 15:03 hea01125 Quant Type: ESTD
Cal Date : 16-JUL-2008 00:40 Cal File: 034f3401.d
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

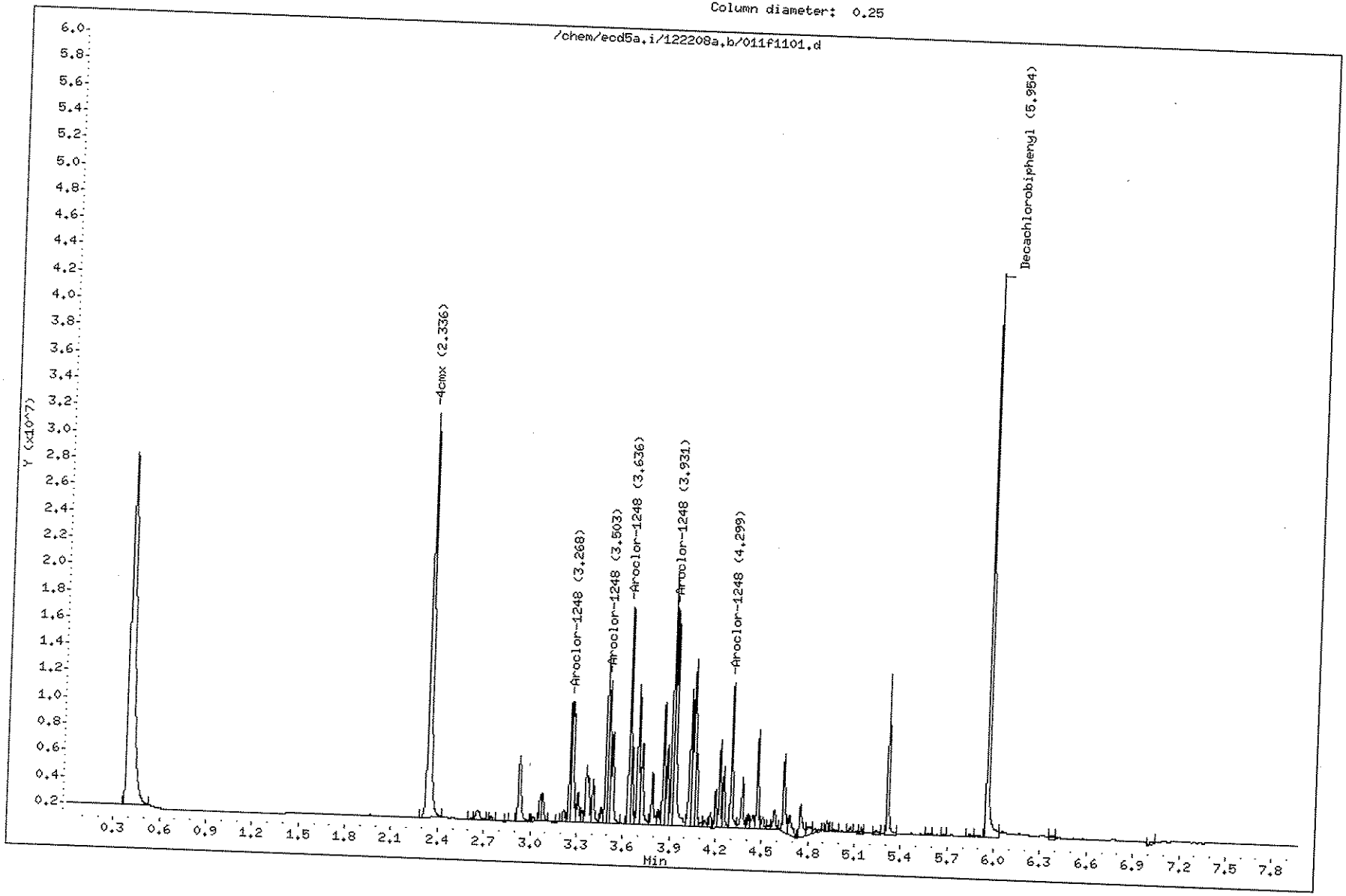
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
9 Aroclor-1248					CAS #: 12672-29-6		
3.268	3.268	0.000	9246924	0.00000	1000	80.00- 120.00	100.00
3.503	3.503	0.000	9143682	0.00000	1000	78.88- 118.88	98.88
3.636	3.636	0.000	13874445	0.00000	1000	130.04- 170.04	150.04
3.931	3.931	0.000	16629839	0.00000	1000	159.84- 199.84	179.84
4.299	4.299	0.000	9200210	0.00000	1000	79.49- 119.49	99.49
Average of Peak Amounts =					1e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.336	2.337	-0.001	42312955	0.00000	120	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
5.954	5.956	-0.002	35466382	0.00000	126	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/122208a.b/011f1101.d
Date : 22-DEC-2008 15:43
Client ID: AR124801
Sample Info: !WAR080811-48 48

Instrument: ecd5a.i

Column phase: CLP-1

Operator: HXJ1
Column diameter: 0.25



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CLP-2

Data file : /chem/ecd5a.i/122208a.b/011b1101.d
Lab Smp Id: WAR080811-48 48 Client Smp ID: AR124801
Inj Date : 22-DEC-2008 15:43
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WAR080811-48 48
Misc Info :
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-B-8081-121108.m
Meth Date : 23-Dec-2008 14:51 hea01125 Quant Type: ESTD
Cal Date : 16-JUL-2008 00:40 Cal File: 034b3401.d
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

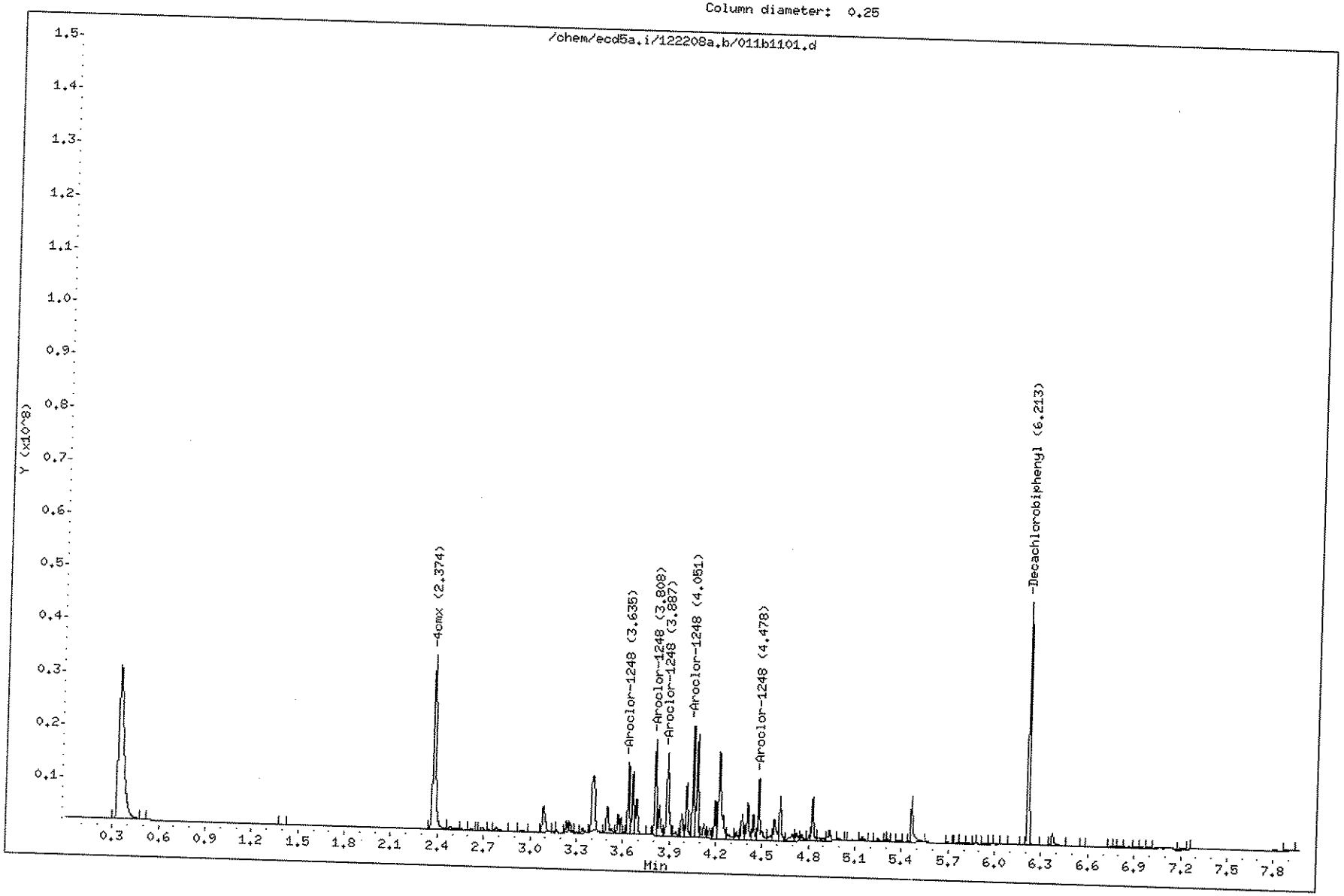
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
9 Aroclor-1248					CAS #: 12672-29-6		
3.635	3.635	0.000	10722964	1000.00	1000	80.00- 120.00	100.00
3.808	3.808	0.000	13761640	1000.00	1000	108.34- 148.34	128.34
3.887	3.887	0.000	15885041	1000.00	1000	128.14- 168.14	148.14
4.051	4.051	0.000	16708268	1000.00	1000	135.82- 175.82	155.82
4.478	4.478	0.000	11055959	1000.00	1000	83.11- 123.11	103.11
Average of Peak Amounts =					1e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.374	2.375	-0.001	41020667	200.000	121	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.213	6.214	-0.001	35211152	200.000	119	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/122208a.b/011b1101.d
Date : 22-DEC-2008 15:43
Client ID: AR124801
Sample Info: IWAR080811-48 48

Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25



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CLP-1

Data file : /chem/ecd5a.i/122208a.b/012f1201.d
Lab Smp Id: WAR081014-32 32 Client Smp ID: AR123201
Inj Date : 22-DEC-2008 15:55
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WAR081014-32 32
Misc Info :
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-F-8081-121108.m
Meth Date : 23-Dec-2008 15:03 hea01125 Quant Type: ESTD
Cal Date : 16-JUL-2008 00:40 Cal File: 034f3401.d
Als bottle: 12 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

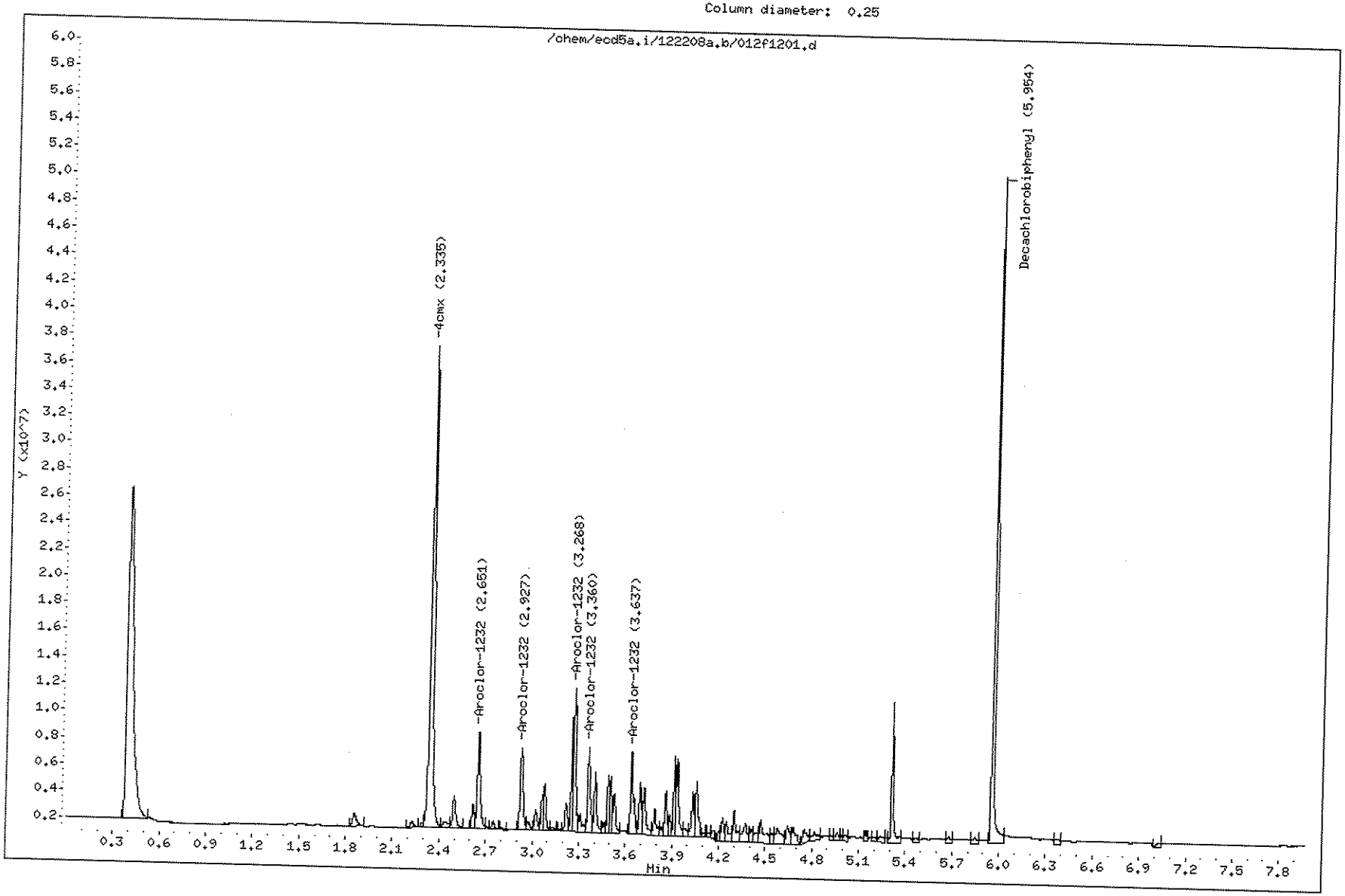
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
4 Aroclor-1232					CAS #: 11141-16-5		
2.651	2.651	0.000	9741383	0.00000	1000	80.00- 120.00	100.00
2.927	2.927	0.000	8414798	0.00000	1000	66.38- 106.38	86.38
3.268	3.268	0.000	11307683	0.00000	1000	96.08- 136.08	116.08
3.360	3.360	0.000	7505867	0.00000	1000	57.05- 97.05	77.05
3.637	3.637	0.000	8057545	0.00000	1000	62.71- 102.71	82.71
Average of Peak Amounts =					1e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.335	2.337	-0.002	49912179	0.00000	141	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
5.954	5.956	-0.002	41689277	0.00000	148	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/122208a.b/012f1201.d
Date : 22-DEC-2008 15:55
Client ID: AR123201
Sample Info: IWAR081014-32 32

Instrument: ecd5a.i

Column phase: CLP-1

Operator: HXJ1
Column diameter: 0.25



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CLP-2

Data file : /chem/ecd5a.i/122208a.b/012b1201.d
Lab Smp Id: WAR081014-32 32 Client Smp ID: AR123201
Inj Date : 22-DEC-2008 15:55
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WAR081014-32 32
Misc Info :
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-B-8081-121108.m
Meth Date : 23-Dec-2008 14:51 hea01125 Quant Type: ESTD
Cal Date : 16-JUL-2008 00:40 Cal File: 034b3401.d
Als bottle: 12 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

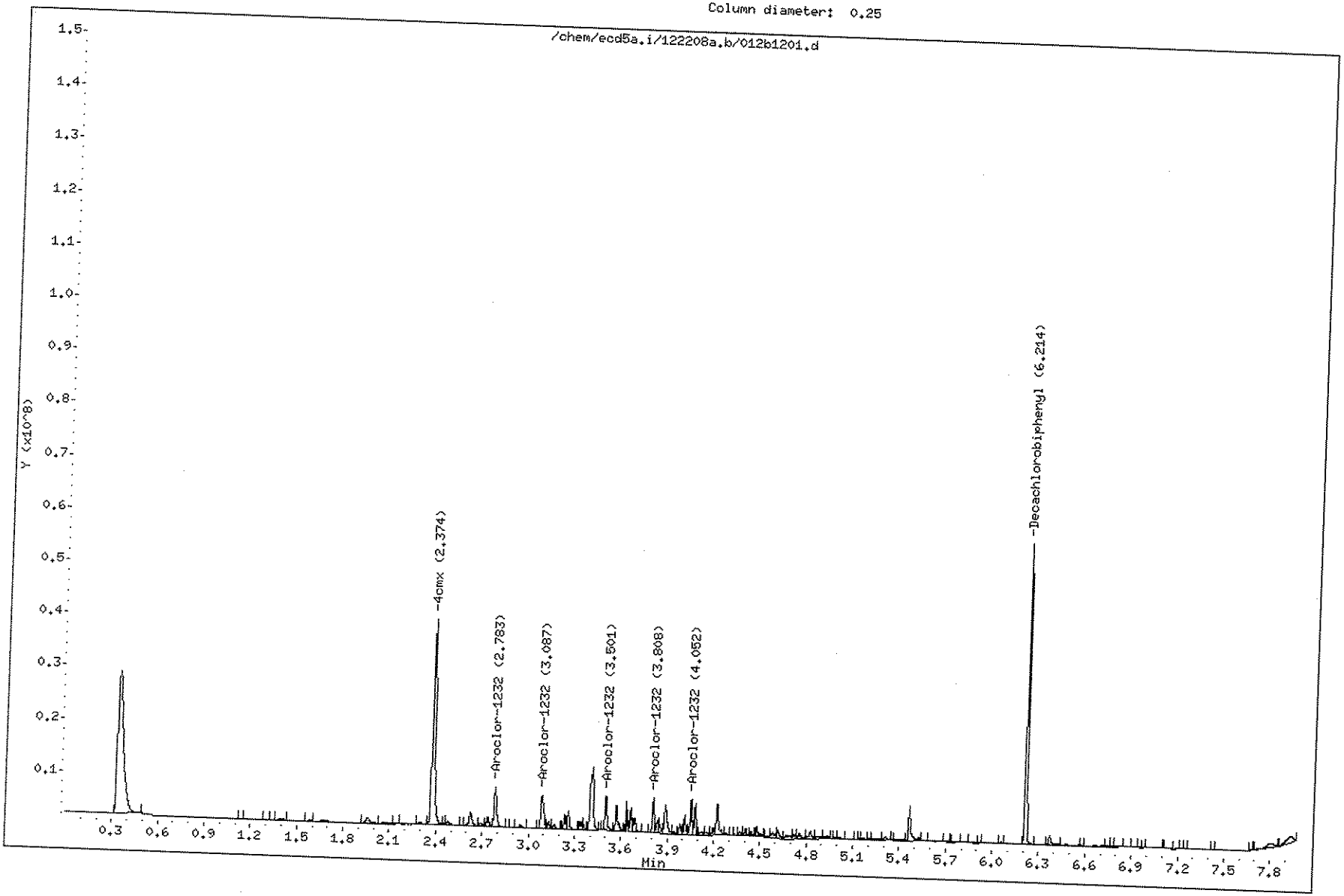
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
4 Aroclor-1232					CAS #: 11141-16-5		
2.783	2.783	0.000	8838539	1000.00	1000	80.00- 120.00	100.00
3.087	3.087	0.000	8400442	1000.00	1000	75.04- 115.04	95.04
3.501	3.501	0.000	6538275	1000.00	1000	53.97- 93.97	73.97
3.808	3.808	0.000	5189687	1000.00	1000	38.72- 78.72	58.72
4.052	4.052	0.000	5583205	1000.00	1000	43.17- 83.17	63.17
Average of Peak Amounts =					1e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.374	2.375	-0.001	48491699	200.000	143	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.214	6.214	0.000	42256223	200.000	143	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/122208a.b/012b1201.d
Date : 22-DEC-2008 15:55
Client ID: AR123201
Sample Info: IWAR081014-32 32

Instrument: ecd5a.i

Column phase: CLP-2

Operator: HXJ1
Column diameter: 0.25



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CLP-1

Data file : /chem/ecd5a.i/122208a.b/013f1301.d
Lab Smp Id: WAR081120-21 21 Client Smp ID: AR122101
Inj Date : 22-DEC-2008 16:07
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WAR081120-21 21
Misc Info :
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-F-8081-121108.m
Meth Date : 23-Dec-2008 15:03 hea01125 Quant Type: ESTD
Cal Date : 16-JUL-2008 00:40 Cal File: 034f3401.d
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

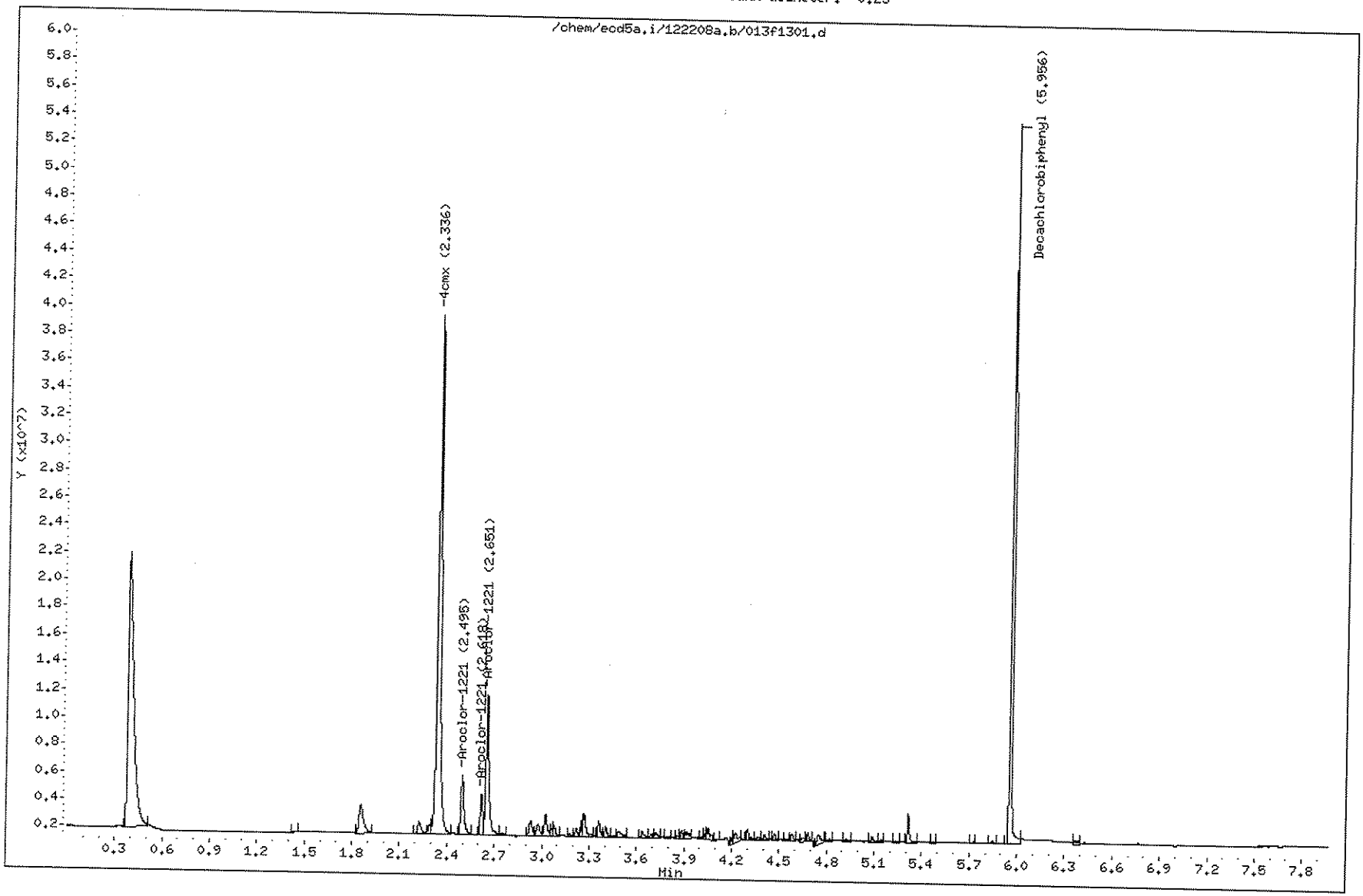
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
2 Aroclor-1221					CAS #: 11104-28-2		
2.495	2.495	0.000	5688364	0.00000	1000	80.00- 120.00	100.00
2.618	2.618	0.000	3225729	0.00000	1000	36.71- 76.71	56.71
2.651	2.651	0.000	13822089	0.00000	1000	222.99- 262.99	242.99
Average of Peak Amounts =					1e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.336	2.337	-0.001	53186817	0.00000	150	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
5.956	5.956	0.000	41968509	0.00000	149	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/122208a.b/013f1301.d
Date : 22-DEC-2008 16:07
Client ID: AR122101
Sample Info: IWAR081120-21 21

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25



401

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/122208a.b/013b1301.d
Lab Smp Id: WAR081120-21 21 Client Smp ID: AR122101
Inj Date : 22-DEC-2008 16:07
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |WAR081120-21 21
Misc Info :
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-B-8081-121108.m
Meth Date : 23-Dec-2008 14:51 hea01125 Quant Type: ESTD
Cal Date : 16-JUL-2008 00:40 Cal File: 034b3401.d
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

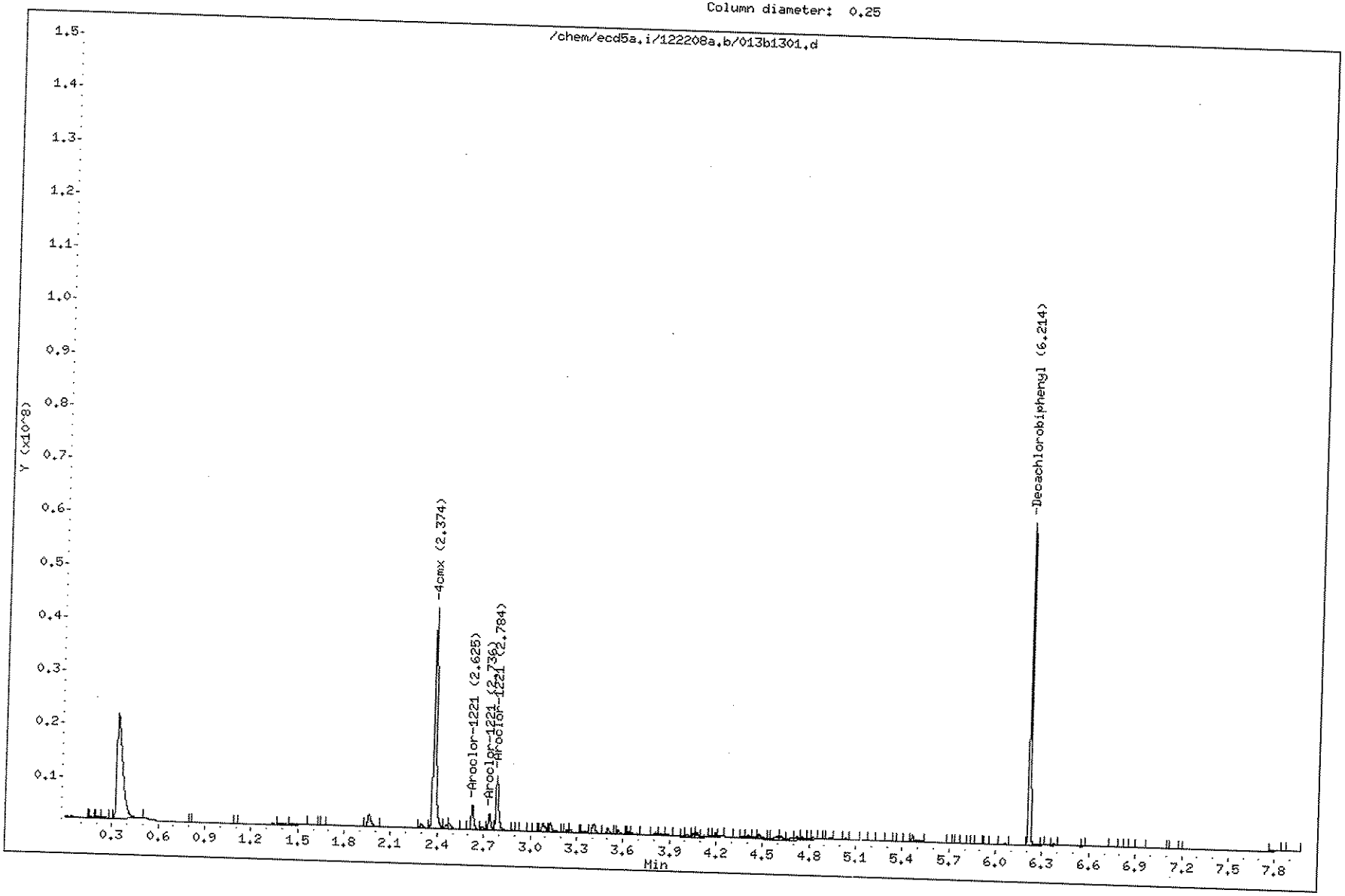
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
2 Aroclor-1221					CAS #: 11104-28-2		
2.625	2.625	0.000	5416030	1000.00	1000	80.00- 120.00	100.00
2.736	2.736	0.000	3431590	1000.00	1000	43.36- 83.36	63.36
2.784	2.784	0.000	13313330	1000.00	1000	225.81- 265.81	245.81
Average of Peak Amounts =					1e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.374	2.375	-0.001	51483202	200.000	151	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.214	6.214	0.000	45777788	200.000	155	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/122208a.b/013b1301.d
Date : 22-DEC-2008 16:07
Client ID: AR122101
Sample Info: IWAR081120-21 21

Instrument: ecd5a.i

Column phase: CLP-2

Operator: HXJ1
Column diameter: 0.25



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CLP-1

Data file : /chem/ecd5a.i/122208a.b/019f1901.d
Lab Smp Id: WPE081222-10AB
Inj Date : 22-DEC-2008 17:17
Operator : HXJ1
Smp Info : |WPE081222-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-F-8081-121108.m
Meth Date : 14-Jan-2009 09:09 yml
Cal Date : 16-JUL-2008 00:40
Als bottle: 19
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 3.50
Processing Host: kilroy

Client Smp ID: INDAB01
Inst ID: ecd5a.i
Quant Type: ESTD
Cal File: 034f3401.d
Continuing Calibration Sample
Compound Sublist: INDAB.sub
Sample Matrix: None

?

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.804	2.804	0.000	46127133	100.000	101	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.051	3.051	0.000	41360791	100.000	103	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.125	3.125	0.000	17508633	100.000	93.1	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.393	3.393	0.000	33591343	100.000	95.9	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.253	3.253	0.000	39954252	100.000	99.3	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.599	3.599	0.000	38466739	100.000	97.4	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.006	4.006	0.000	35077445	100.000	98.3	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.087	4.087	0.000	36458195	100.000	103	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.171	4.171	0.000	33399584	100.000	93.6	80.00- 120.00	100.00

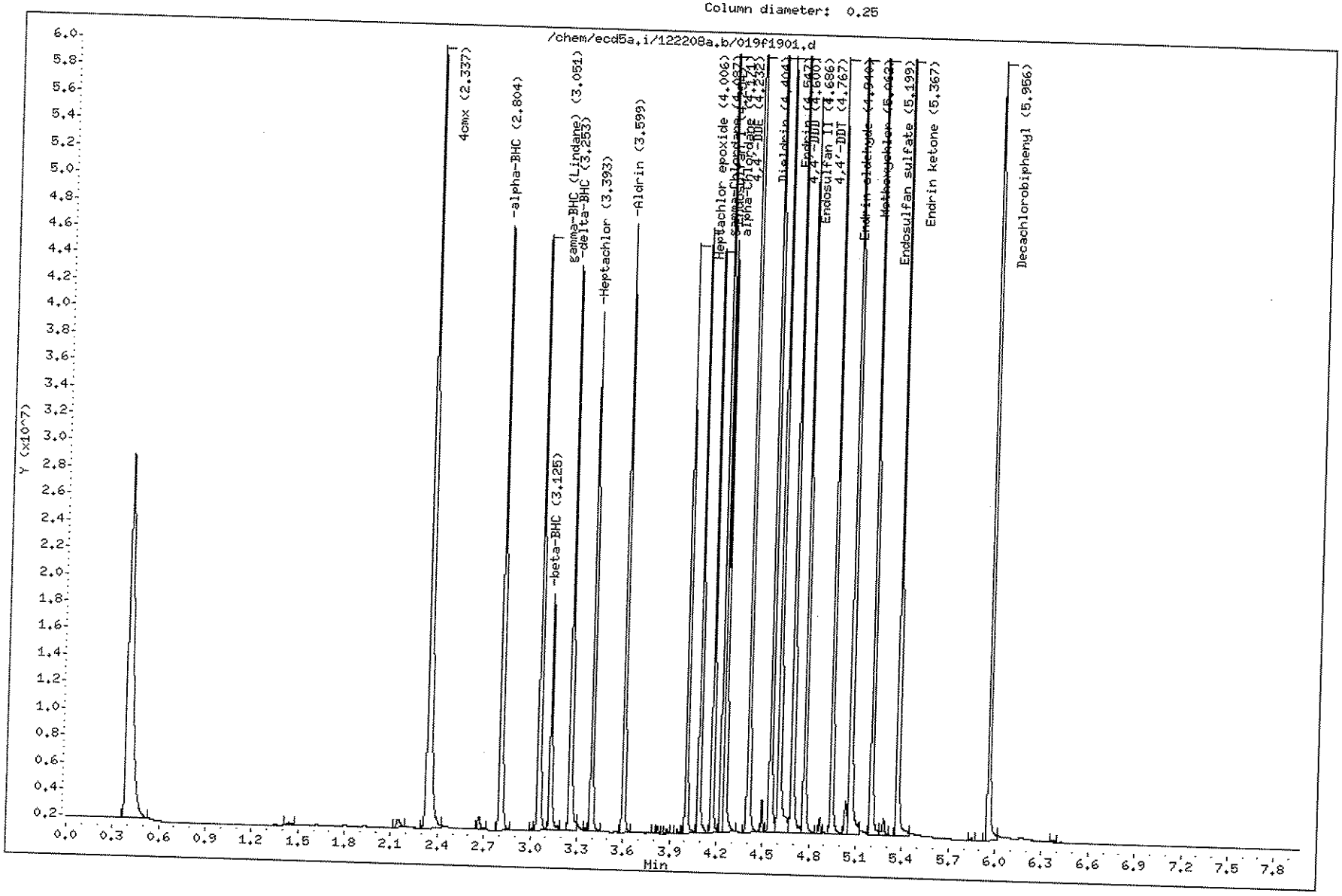
	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I						CAS #: 959-98-8		
	4.254	4.254	0.000	36605286	100.000	98.4	80.00- 120.00	100.00
19 4,4'-DDE						CAS #: 72-55-9		
	4.232	4.232	0.000	65339101	200.000	206	80.00- 120.00	100.00
20 Dieldrin						CAS #: 60-57-1		
	4.404	4.404	0.000	70806937	200.000	196	80.00- 120.00	100.00
22 Endrin						CAS #: 72-20-8		
	4.547	4.547	0.000	63290836	200.000	197	80.00- 120.00	100.00
25 4,4'-DDD						CAS #: 72-54-8		
	4.600	4.600	0.000	56954966	200.000	203	80.00- 120.00	100.00
24 Endosulfan II						CAS #: 33213-65-9		
	4.686	4.686	0.000	60139282	200.000	196	80.00- 120.00	100.00
27 Endrin aldehyde						CAS #: 7421-93-4		
	4.940	4.940	0.000	48444211	200.000	210	80.00- 120.00	100.00
26 4,4'-DDT						CAS #: 50-29-3		
	4.767	4.767	0.000	41715959	200.000	229	80.00- 120.00	100.00
29 Endosulfan sulfate						CAS #: 1031-07-8		
	5.199	5.199	0.000	50932404	200.000	196	80.00- 120.00	100.00
28 Methoxychlor						CAS #: 72-43-5		
	5.062	5.062	0.000	90127199	1000.00	1030	80.00- 120.00	100.00
31 Endrin ketone						CAS #: 53494-70-5		
	5.367	5.367	0.000	52835164	200.000	192	80.00- 120.00	100.00
$ 1 4cmx						CAS #: 877-09-8		
	2.337	2.337	0.000	80833428	0.00000	229	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl						CAS #: 2051-24-3		
	5.956	5.956	0.000	59139007	0.00000	210	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/122208a.b/019f1901.d
Date : 22-DEC-2008 17:17
Client ID: INDAB01
Sample Info: IWPE081222-10AB

Instrument: ecd5a.i

Column phase: CLP-1

Operator: HXJ1
Column diameter: 0.25



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CLP-2

Data file : /chem/ecd5a.i/122208a.b/019b1901.d
Lab Smp Id: WPE081222-10AB
Client Smp ID: INDAB01
Inj Date : 22-DEC-2008 17:17
Operator : HXJ1
Inst ID: ecd5a.i
Smp Info : |WPE081222-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-B-8081-121108.m
Meth Date : 24-Dec-2008 16:52 hea01125
Quant Type: ESTD
Cal Date : 17-DEC-2008 16:41
Cal File: 011b1101.d
Als bottle: 19
Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon
Compound Sublist: INDAB.sub
Target Version: 3.50
Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.887	2.887	0.000	45822979	100.000	102	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.158	3.158	0.000	41711796	100.000	104	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.229	3.229	0.000	17218195	100.000	97.3	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.475	3.475	0.000	38206019	100.000	97.9	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.436	3.436	0.000	39276913	100.000	102	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.694	3.694	0.000	37769945	100.000	99.1	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.070	4.070	0.000	34411805	100.000	99.1	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.193	4.193	0.000	36312857	100.000	104	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.284	4.284	0.000	32302901	100.000	95.4	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.316	4.316	0.000	32678630	100.000	102	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.396	4.396	0.000	70505411	200.000	206	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.486	4.486	0.000	69627430	200.000	199	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.669	4.669	0.000	61701159	200.000	201	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.747	4.747	0.000	59482400	200.000	207	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
4.799	4.799	0.000	61509218	200.000	205	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.000	5.000	0.000	48051254	200.000	218	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.934	4.934	0.000	48592430	200.000	198	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.167	5.167	0.000	51491539	200.000	195	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.339	5.339	0.000	104722820	1000.00	1060	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.481	5.481	0.000	63259179	200.000	212	80.00- 120.00	100.00
1 4cmx					CAS #: 877-09-8		
2.375	2.375	0.000	78081628	200.000	230	80.00- 120.00	100.00(M)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.214	6.214	0.000	67520168	200.000	228	80.00- 120.00	100.00

QC Flag Legend

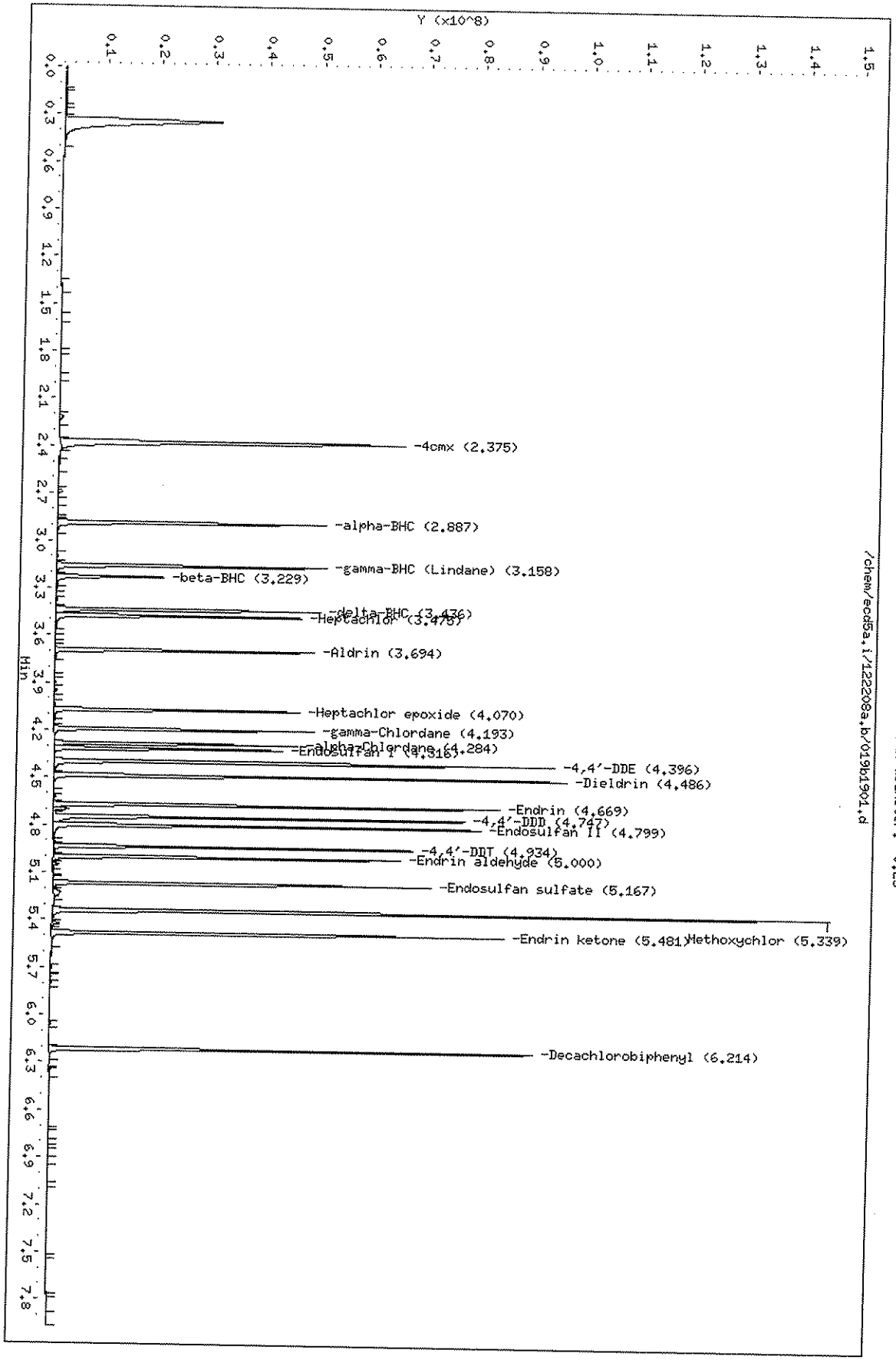
M - Compound response manually integrated.

Data File: /chem/ecd5a.i/122208a.b/019b1901.d
Date : 22-DEC-2008 17:17
Client ID: INDAB01
Sample Info: INPE081222-10AB

Column phase: CLP-2

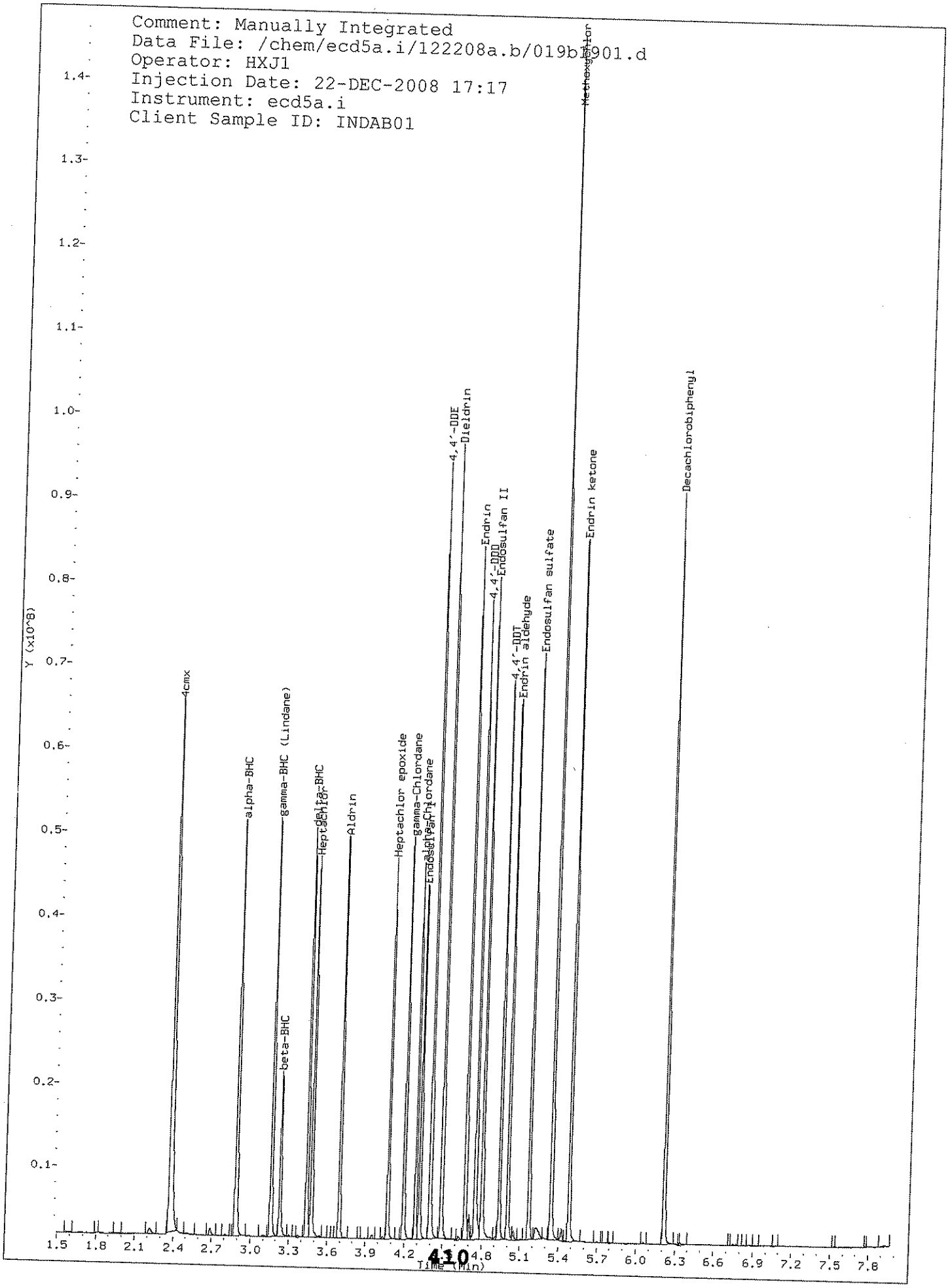
Instrument: ecd5a.i

Operator: HXJ4
Column diameter: 0.25

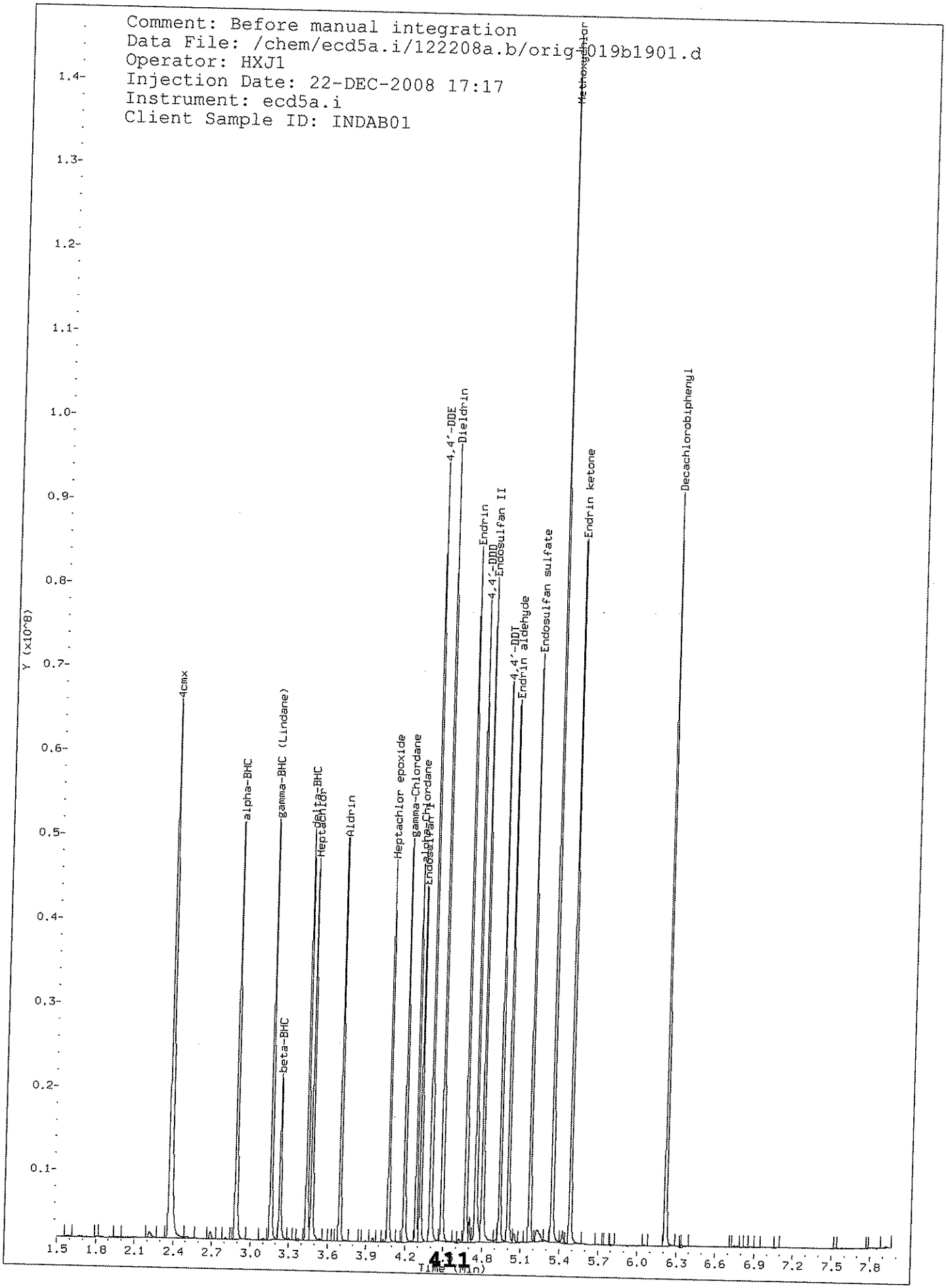


Page 1

Comment: Manually Integrated
Data File: /chem/ecd5a.i/122208a.b/019b1901.d
Operator: HXJ1
Injection Date: 22-DEC-2008 17:17
Instrument: ecd5a.i
Client Sample ID: INDAB01



Comment: Before manual integration
Data File: /chem/ecd5a.i/122208a.b/orig-019b1901.d
Operator: HXJ1
Injection Date: 22-DEC-2008 17:17
Instrument: ecd5a.i
Client Sample ID: INDAB01



GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/122208a.b/051f5101.d
Lab Smp Id: WPE081124-10AB
Client Smp ID: INDAB05
Inj Date : 22-DEC-2008 23:31
Operator : HXJ1
Inst ID: ecd5a.i
Smp Info : |WPE081124-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-F-8081-121108.m
Meth Date : 14-Jan-2009 09:09 yml
Quant Type: ESTD
Cal Date : 16-JUL-2008 00:40
Cal File: 034f3401.d
Als bottle: 51
Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon
Compound Sublist: INDAB.sub
Target Version: 3.50
Sample Matrix: None
Processing Host: kilroy

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.804	2.804	0.000	48451661	100.000	106	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.050	3.051	-0.001	43820485	100.000	109	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.126	3.125	0.001	18461776	100.000	98.2	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.393	3.393	0.000	35928983	100.000	102	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.253	3.253	0.000	43320774	100.000	108	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.599	3.599	0.000	40269607	100.000	102	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.005	4.006	-0.001	37061279	100.000	104	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.086	4.087	-0.001	38328174	100.000	108	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.171	4.171	0.000	34925768	100.000	97.9	80.00- 120.00	100.00

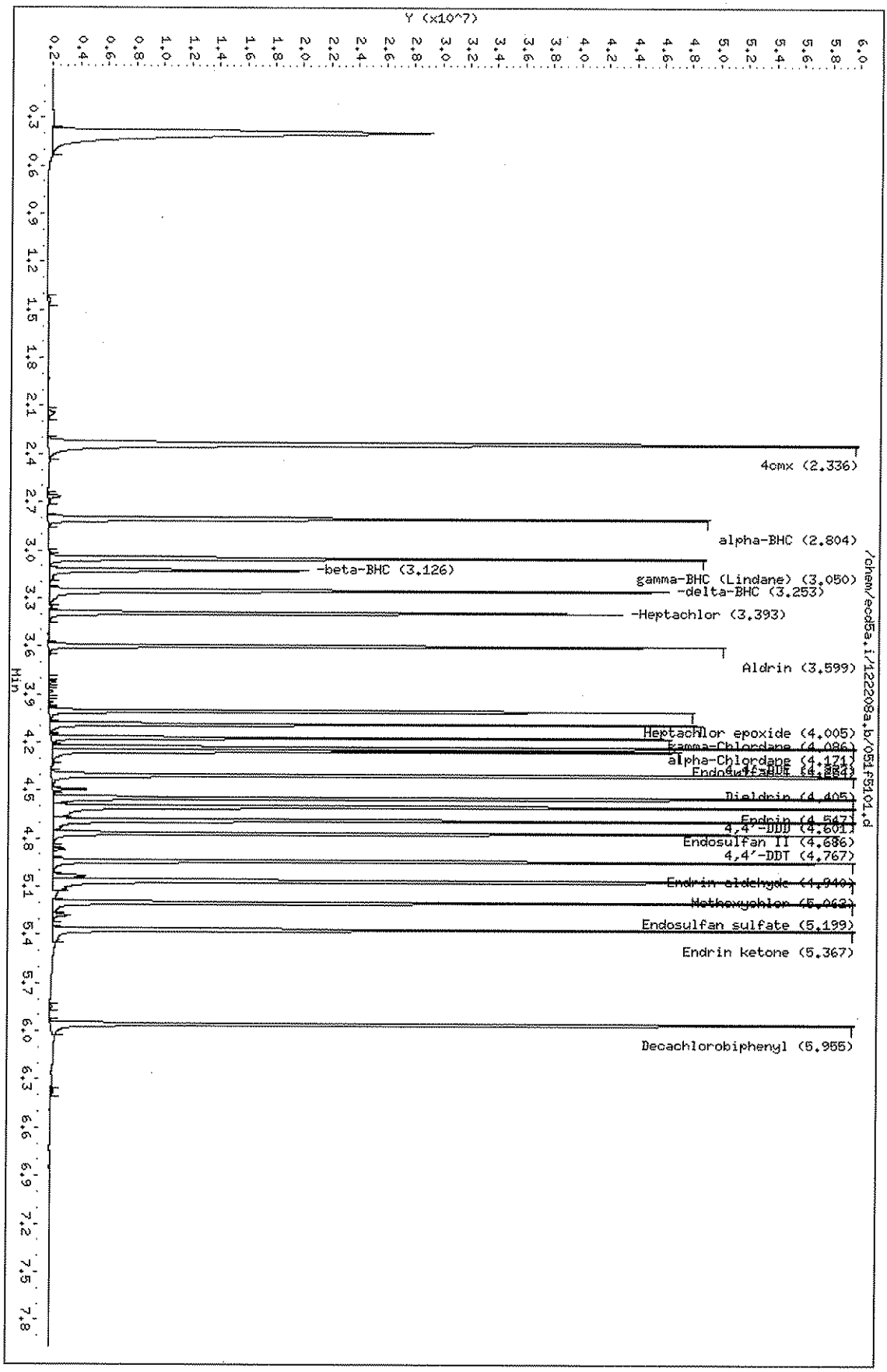
	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I						CAS #: 959-98-8		
	4.254	4.254	0.000	38444315	100.000	103	80.00- 120.00	100.00
19 4,4'-DDE						CAS #: 72-55-9		
	4.232	4.232	0.000	68523648	200.000	216	80.00- 120.00	100.00
20 Dieldrin						CAS #: 60-57-1		
	4.405	4.404	0.001	74514749	200.000	206	80.00- 120.00	100.00
22 Endrin						CAS #: 72-20-8		
	4.547	4.547	0.000	66906635	200.000	209	80.00- 120.00	100.00
25 4,4'-DDD						CAS #: 72-54-8		
	4.601	4.600	0.001	60908344	200.000	217	80.00- 120.00	100.00
24 Endosulfan II						CAS #: 33213-65-9		
	4.686	4.686	0.000	63495104	200.000	207	80.00- 120.00	100.00
27 Endrin aldehyde						CAS #: 7421-93-4		
	4.940	4.940	0.000	50903162	200.000	221	80.00- 120.00	100.00
26 4,4'-DDT						CAS #: 50-29-3		
	4.767	4.767	0.000	44453857	200.000	244	80.00- 120.00	100.00
29 Endosulfan sulfate						CAS #: 1031-07-8		
	5.199	5.199	0.000	54373648	200.000	210	80.00- 120.00	100.00
28 Methoxychlor						CAS #: 72-43-5		
	5.062	5.062	0.000	98926389	1000.00	1130	80.00- 120.00	100.00
31 Endrin ketone						CAS #: 53494-70-5		
	5.367	5.367	0.000	57074413	200.000	208	80.00- 120.00	100.00
$ 1 4cmx						CAS #: 877-09-8		
	2.336	2.337	-0.001	84385321	0.00000	239	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl						CAS #: 2051-24-3		
	5.955	5.956	-0.001	62091804	0.00000	220	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/122208a.b/051f5101.d
Date : 22-DEC-2008 23:31
Client ID: INDAB05
Sample Info: IWPE081124-10AB

Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25



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CLP-2

Data file : /chem/ecd5a.i/122208a.b/051b5101.d
Lab Smp Id: WPE081124-10AB
Client Smp ID: INDAB05
Inj Date : 22-DEC-2008 23:31
Operator : HXJ1
Inst ID: ecd5a.i
Smp Info : |WPE081124-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-B-8081-121108.m
Meth Date : 23-Dec-2008 14:51 hea01125
Quant Type: ESTD
Cal Date : 16-JUL-2008 00:40
Cal File: 034b3401.d
Als bottle: 51
Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon
Compound Sublist: INDAB.sub
Target Version: 3.50
Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.886	2.887	-0.001	48067172	100.000	107	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.158	3.158	0.000	43537846	100.000	109	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.229	3.229	0.000	17917877	100.000	101	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.475	3.475	0.000	39892904	100.000	102	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.436	3.436	0.000	41359253	100.000	107	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.694	3.694	0.000	39392666	100.000	103	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.070	4.070	0.000	36067840	100.000	104	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.193	4.193	0.000	37809435	100.000	108	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.285	4.284	0.001	33678015	100.000	99.4	80.00- 120.00	100.00

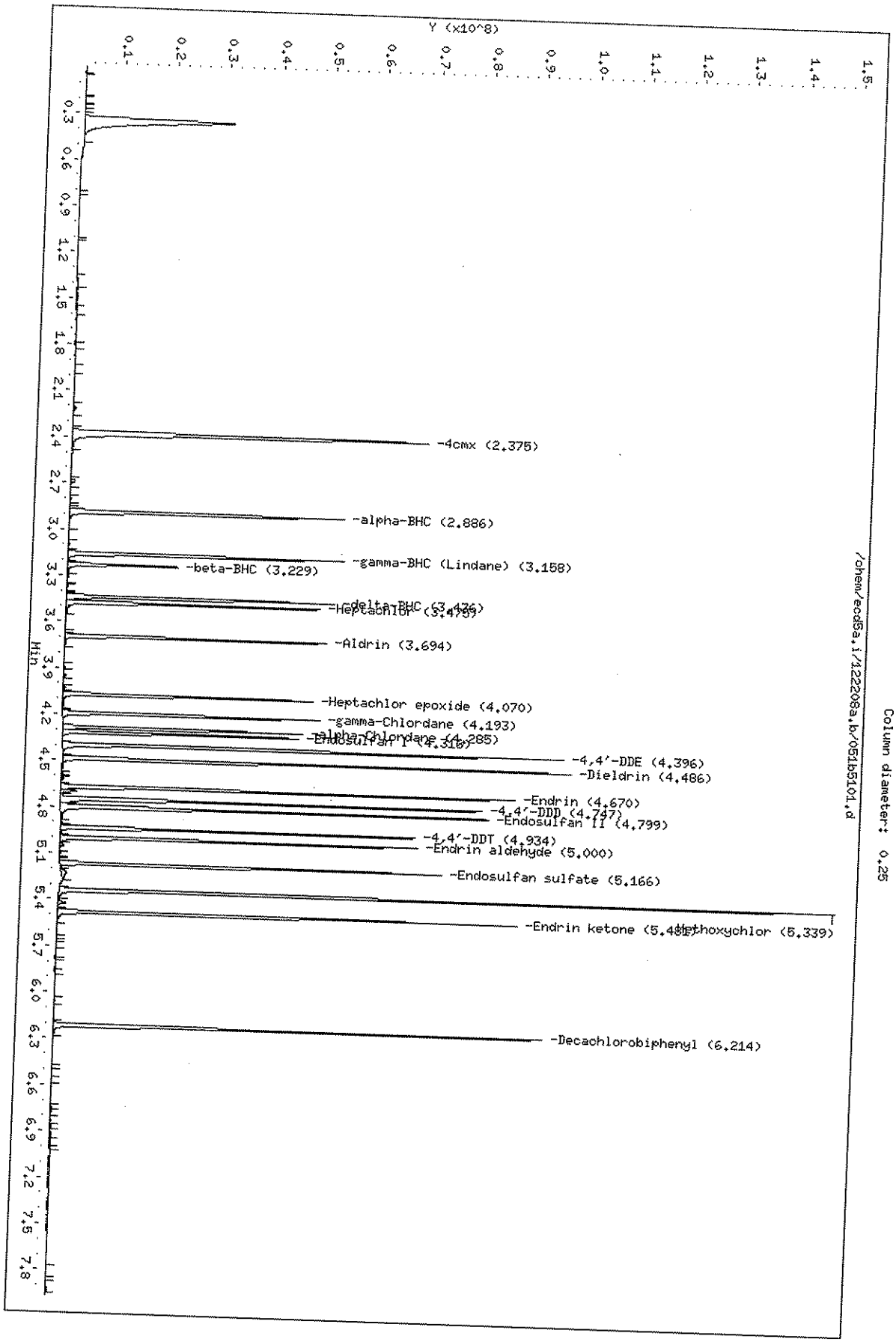
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.316	4.316	0.000	34119289	100.000	106	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.396	4.396	0.000	73514324	200.000	214	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.486	4.486	0.000	73066001	200.000	209	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.670	4.669	0.001	64238455	200.000	210	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.747	4.747	0.000	62748062	200.000	218	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
4.799	4.799	0.000	64833567	200.000	216	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.000	5.000	0.000	50077038	200.000	227	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.934	4.934	0.000	48936382	200.000	200	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.166	5.167	-0.001	53998659	200.000	205	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.339	5.339	0.000	108477491	1000.00	1100	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.481	5.481	0.000	65878750	200.000	221	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.375	2.375	0.000	83163853	200.000	245	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.214	6.214	0.000	70405124	200.000	238	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/122208a.b/051b5101.d
Date : 22-DEC-2008 23:31
Client ID: INDAB05
Sample Info: WPE081124-10AB

Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25



Page 1

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CLP-1

Data file : /chem/ecd5a.i/122208a.b/059f5901.d
Lab Smp Id: WPE081124-10AB
Inj Date : 23-DEC-2008 01:05
Operator : HXJ1
Smp Info : |WPE081124-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-F-8081-121108.m
Meth Date : 14-Jan-2009 09:09 yml
Cal Date : 16-JUL-2008 00:40
Als bottle: 59
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 3.50
Processing Host: kilroy

Client Smp ID: INDAB06

Inst ID: ecd5a.i

Quant Type: ESTD
Cal File: 034f3401.d
Continuing Calibration Sample

Compound Sublist: INDAB.sub
Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.804	2.804	0.000	48528964	100.000	106	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.050	3.051	-0.001	42445456	100.000	106	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.124	3.125	-0.001	17613863	100.000	93.7	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.392	3.393	-0.001	34996848	100.000	99.9	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.252	3.253	-0.001	40232128	100.000	100	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.599	3.599	0.000	38323548	100.000	97.1	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.004	4.006	-0.002	33113272	100.000	92.8	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.086	4.087	-0.001	33521168	100.000	94.4	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.170	4.171	-0.001	32014407	100.000	89.7	80.00- 120.00	100.00

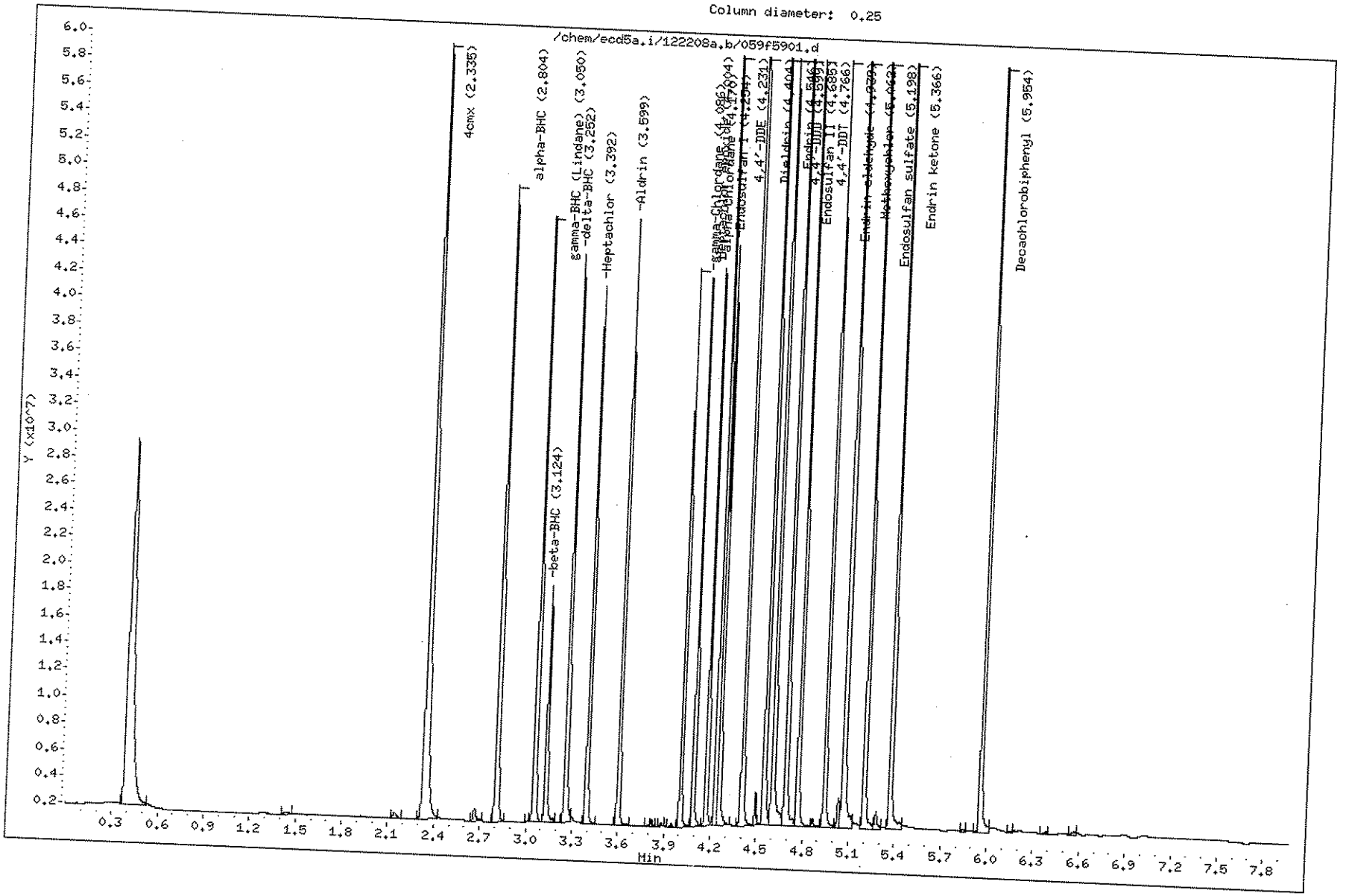
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.254	4.254	0.000	36026481	100.000	96.8	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.231	4.232	-0.001	65364902	200.000	206	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.404	4.404	0.000	71118186	200.000	197	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.546	4.547	-0.001	65910246	200.000	206	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.599	4.600	-0.001	59859809	200.000	213	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
4.685	4.686	-0.001	62334248	200.000	203	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
4.939	4.940	-0.001	49945231	200.000	217	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.766	4.767	-0.001	45746263	200.000	251	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.198	5.199	-0.001	54482806	200.000	210	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.062	5.062	0.000	103131837	1000.00	1180	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.366	5.367	-0.001	56889580	200.000	207	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.335	2.337	-0.002	84276285	0.00000	238	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
5.954	5.956	-0.002	59625215	0.00000	211	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/122208a.b/059f5901.d
Date : 23-DEC-2008 01:05
Client ID: INDAB06
Sample Info: IWPE081124-10AB

Instrument: ecd5a.i

Column phase: CLP-1

Operator: HXJ1
Column diameter: 0.25



420

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/122208a.b/059b5901.d
Lab Smp Id: WPE081124-10AB
Inj Date : 23-DEC-2008 01:05
Operator : HXJ1
Smp Info : |WPE081124-10AB
Misc Info :
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-B-8081-121108.m
Meth Date : 23-Dec-2008 14:51 hea01125
Cal Date : 16-JUL-2008 00:40
Als bottle: 59
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 3.50

Client Smp ID: INDAB06
Inst ID: ecd5a.i
Quant Type: ESTD
Cal File: 034b3401.d
Continuing Calibration Sample
Compound Sublist: INDAB.sub
Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.885	2.887	-0.002	48097397	100.000	107	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.157	3.158	-0.001	43712657	100.000	109	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.229	3.229	0.000	17935387	100.000	101	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.474	3.475	-0.001	40514729	100.000	104	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.435	3.436	-0.001	41779691	100.000	108	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.693	3.694	-0.001	38810987	100.000	102	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.069	4.070	-0.001	35587445	100.000	102	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.193	4.193	0.000	37449696	100.000	107	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.284	4.284	0.000	33302497	100.000	98.3	80.00- 120.00	100.00

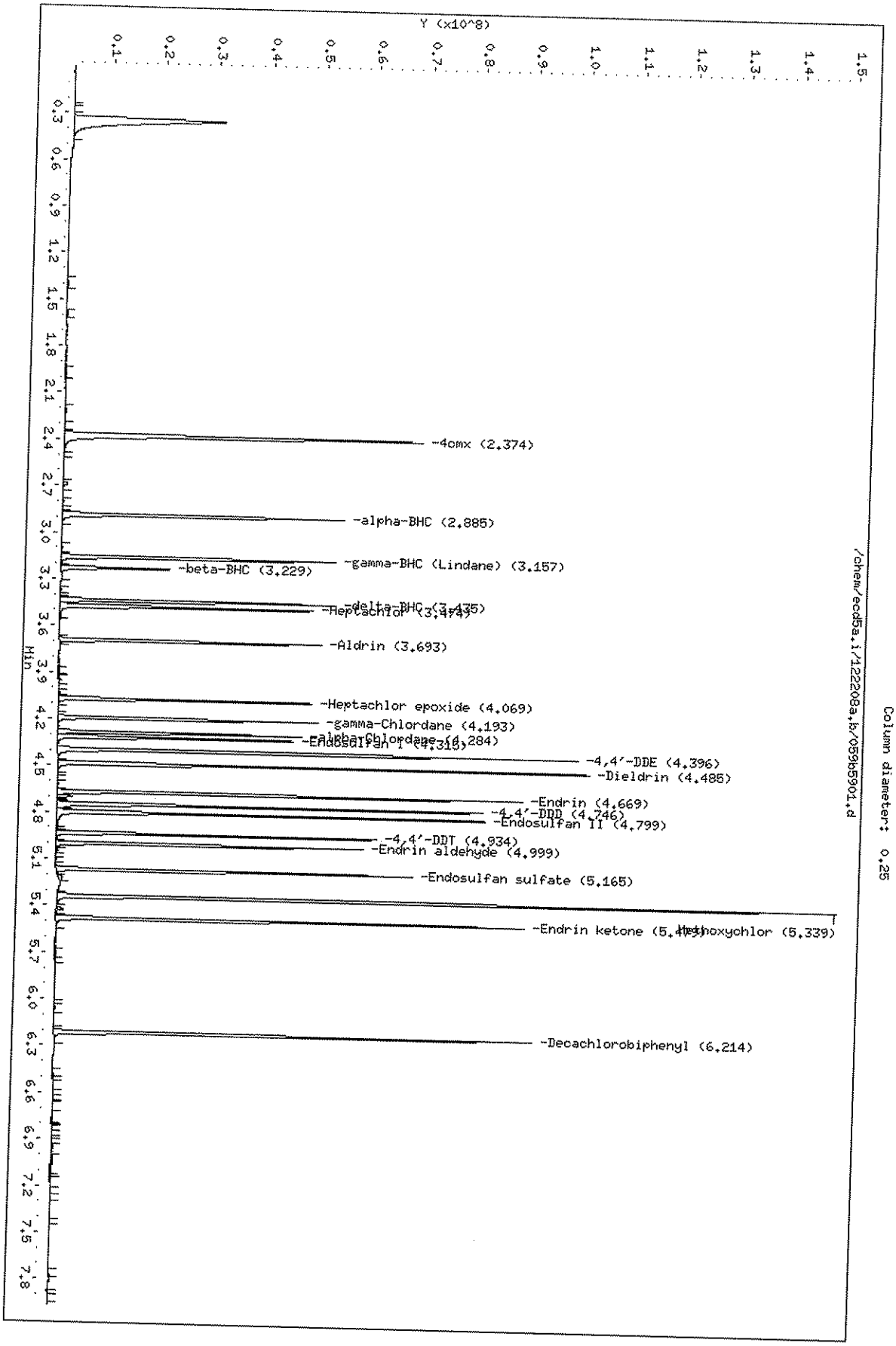
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
4.315	4.316	-0.001	33940363	100.000	106	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.396	4.396	0.000	72726544	200.000	212	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.485	4.486	-0.001	72442260	200.000	207	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.669	4.669	0.000	64876751	200.000	212	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.746	4.747	-0.001	61496351	200.000	214	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
4.799	4.799	0.000	62699685	200.000	209	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
4.999	5.000	-0.001	41939222	200.000	190	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.934	4.934	0.000	43518098	200.000	179	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.165	5.167	-0.002	48574447	200.000	184	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.339	5.339	0.000	114909246	1000.00	1160	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
5.479	5.481	-0.002	65550536	200.000	220	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.374	2.375	-0.001	83768240	200.000	246	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.214	6.214	0.000	68146690	200.000	230	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/122208a.b/059b5901.d
Date : 23-DEC-2008 01:05
Client ID: INDAB06
Sample Info: IWPE081124-10AB

Column phase: CLP-2

Operator: HXJL
Column diameter: 0.25

Instrument: ecd5a.i



Page 1

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 221329

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 11/24/08 11/24/08

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.35 DCB: 5.97

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR080930-99	11/24/08	1220	2.35	5.97
02	PEM01	WPE081017-01	11/24/08	1232	2.35	5.97
03	ZZZZZ	ZZZZZ	11/24/08	1244	2.35	5.97
04	ZZZZZ	ZZZZZ	11/24/08	1256	2.35	5.97
05	ZZZZZ	ZZZZZ	11/24/08	1308	2.35	5.97
06	ZZZZZ	ZZZZZ	11/24/08	1320	2.35	5.97
07	ZZZZZ	ZZZZZ	11/24/08	1331	2.35	5.97
08	ZZZZZ	ZZZZZ	11/24/08	1343	2.35	5.97
09	ZZZZZ	ZZZZZ	11/24/08	1355	2.35	5.97
10	TOXAPH01	WPE081124-11	11/24/08	1407	2.35	5.97
11	TOXAPH02	WPE081124-12	11/24/08	1419	2.35	5.97
12	TOXAPH03	WPE081124-13	11/24/08	1431	2.35	5.97
13	TOXAPH04	WPE081124-14	11/24/08	1443	2.35	5.97
14	TOXAPH05	IPE081017-40	11/24/08	1454	2.35	5.97
15	TOXAPH01	WPE081010-02	11/24/08	1506	2.35	5.97
16	INDAB01	WPE081124-21	11/24/08	1610	2.35	5.98
17	INDAB02	WPE081124-22	11/24/08	1622	2.35	5.97
18	INDAB03	WPE081124-23	11/24/08	1634	2.35	5.97
19	INDAB04	WPE081124-24	11/24/08	1646	2.35	5.97
20	INDAB05	IPE081124-01	11/24/08	1658	2.35	5.97
21	INDAB01	WPE081124-10	11/24/08	1709	2.35	5.97
22	PEM02	WPE081017-01	11/24/08	1721	2.35	5.97
23	PIBLK02	WAR080930-99	11/24/08	1733	2.35	5.97
24	ZZZZZ	ZZZZZ	11/24/08	1745	2.35	5.97
25	ZZZZZ	ZZZZZ	11/24/08	1757	2.35	5.97
26	ZZZZZ	ZZZZZ	11/24/08	1809	2.35	5.97
27	ZZZZZ	ZZZZZ	11/24/08	1821	2.35	5.97
28	ZZZZZ	ZZZZZ	11/24/08	1832	2.35	5.97
29	ZZZZZ	ZZZZZ	11/24/08	1844	2.35	5.97
30	ZZZZZ	ZZZZZ	11/24/08	1856	2.35	5.97
31	INDAB02	WPE081124-10	11/24/08	1908	2.35	5.97
32	PIBLK03	WAR080930-99	11/24/08	1920	2.35	5.97

S1 = 4cmx QC LIMITS (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV

OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 221329

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 11/24/08 11/24/08

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.40 DCB: 6.25

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR080930-99	11/24/08	1220	2.40	6.25
02	PEM01	WPE081017-01	11/24/08	1232	2.40	6.25
03	ZZZZZ	ZZZZZ	11/24/08	1244	2.40	6.25
04	ZZZZZ	ZZZZZ	11/24/08	1256	2.40	6.25
05	ZZZZZ	ZZZZZ	11/24/08	1308	2.40	6.25
06	ZZZZZ	ZZZZZ	11/24/08	1320	2.40	6.25
07	ZZZZZ	ZZZZZ	11/24/08	1331	2.40	6.25
08	ZZZZZ	ZZZZZ	11/24/08	1343	2.40	6.25
09	ZZZZZ	ZZZZZ	11/24/08	1355	2.40	6.25
10	TOXAPH01	WPE081124-11	11/24/08	1407	2.40	6.25
11	TOXAPH02	WPE081124-12	11/24/08	1419	2.40	6.25
12	TOXAPH03	WPE081124-13	11/24/08	1431	2.41	6.25
13	TOXAPH04	WPE081124-14	11/24/08	1443	2.41	6.25
14	TOXAPH05	IPE081017-40	11/24/08	1454	2.41	6.25
15	TOXAPH01	WPE081010-02	11/24/08	1506	2.40	6.25
16	INDAB01	WPE081124-21	11/24/08	1610	2.40	6.26
17	INDAB02	WPE081124-22	11/24/08	1622	2.40	6.25
18	INDAB03	WPE081124-23	11/24/08	1634	2.40	6.25
19	INDAB04	WPE081124-24	11/24/08	1646	2.40	6.25
20	INDAB05	IPE081124-01	11/24/08	1658	2.40	6.25
21	INDAB01	WPE081124-10	11/24/08	1709	2.40	6.25
22	PEM02	WPE081017-01	11/24/08	1721	2.40	6.25
23	PIBLK02	WAR080930-99	11/24/08	1733	2.41	6.25
24	ZZZZZ	ZZZZZ	11/24/08	1745	2.40	6.25
25	ZZZZZ	ZZZZZ	11/24/08	1757	2.40	6.25
26	ZZZZZ	ZZZZZ	11/24/08	1809	2.40	6.25
27	ZZZZZ	ZZZZZ	11/24/08	1821	2.41	6.25
28	ZZZZZ	ZZZZZ	11/24/08	1832	2.40	6.25
29	ZZZZZ	ZZZZZ	11/24/08	1844	2.41	6.25
30	ZZZZZ	ZZZZZ	11/24/08	1856	2.40	6.25
31	INDAB02	WPE081124-10	11/24/08	1908	2.41	6.25
32	PIBLK03	WAR080930-99	11/24/08	1920	2.41	6.25

S1 = 4cmx QC LIMITS
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)
(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV

OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 221329

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 12/09/08 12/09/08

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.34 DCB: 5.95

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR081112-99	12/09/08	1751	2.33	5.95
02	PEM01	WPE081206-01	12/09/08	1808	2.34	5.95
03	INDAB01	WPE081124-10	12/09/08	1820	2.34	5.95
04	TOXAPH01	WPE081010-02	12/09/08	1832	2.34	5.95
05	CHLOR01	WPE081002-01	12/09/08	1844	2.34	5.95
06	GAPA01	WPE081107-02	12/09/08	1855	2.34	5.95
07	AR166001	WPE081209-11	12/09/08	1907	2.34	5.95
08	AR166002	WPE081209-12	12/09/08	1919	2.34	5.95
09	AR166003	WPE081209-13	12/09/08	1931	2.34	5.95
10	AR166004	WPE081209-14	12/09/08	1943	2.34	5.95
11	AR166005	IAR081003-01	12/09/08	1954	2.34	5.95
12	AR166001	WPE080829-60	12/09/08	2006	2.34	5.95
13	ZZZZZ	ZZZZZ	12/09/08	2018	2.34	5.95
14	ZZZZZ	ZZZZZ	12/09/08	2030	2.34	5.95
15	ZZZZZ	ZZZZZ	12/09/08	2042	2.34	5.95
16	ZZZZZ	ZZZZZ	12/09/08	2054	2.34	5.95
17	ZZZZZ	ZZZZZ	12/09/08	2105	2.34	5.95
18	PIBLK02	WAR081112-99	12/09/08	2117	2.34	5.95
19	ZZZZZ	ZZZZZ	12/09/08	2129	2.34	5.95
20	ZZZZZ	ZZZZZ	12/09/08	2141	2.34	5.95
21	ZZZZZ	ZZZZZ	12/09/08	2204	2.34	5.95
22	ZZZZZ	ZZZZZ	12/09/08	2216	2.34	5.95
23	ZZZZZ	ZZZZZ	12/09/08	2228	2.34	5.95
24	ZZZZZ	ZZZZZ	12/09/08	2240	2.34	5.95
25	INDAB02	WPE081124-10	12/09/08	2252	2.34	5.95
26	PIBLK03	WAR081112-99	12/09/08	2304	2.34	5.95
27	PEM02	WPE081206-01	12/09/08	2315	2.34	5.95
28	ZZZZZ	ZZZZZ	12/09/08	2327	2.34	5.95
29	ZZZZZ	ZZZZZ	12/09/08	2339	2.34	5.95
30	ZZZZZ	ZZZZZ	12/09/08	2351	2.34	5.95
31	ZZZZZ	ZZZZZ	12/10/08	0003	2.34	5.95
32	ZZZZZ	ZZZZZ	12/10/08	0014	2.34	5.95

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

page 1 of 1

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 221329

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 12/09/08 12/09/08

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.38 DCB: 6.22

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR081112-99	12/09/08	1751	2.38	6.22
02	PEM01	WPE081206-01	12/09/08	1808	2.38	6.23
03	INDAB01	WPE081124-10	12/09/08	1820	2.39	6.22
04	TOXAPH01	WPE081010-02	12/09/08	1832	2.38	6.23
05	CHLOR01	WPE081002-01	12/09/08	1844	2.39	6.23
06	GAPA01	WPE081107-02	12/09/08	1855	2.39	6.23
07	AR166001	WPE081209-11	12/09/08	1907	2.39	6.23
08	AR166002	WPE081209-12	12/09/08	1919	2.39	6.23
09	AR166003	WPE081209-13	12/09/08	1931	2.39	6.23
10	AR166004	WPE081209-14	12/09/08	1943	2.39	6.23
11	AR166005	IAR081003-01	12/09/08	1954	2.39	6.23
12	AR166001	WPE080829-60	12/09/08	2006	2.39	6.23
13	ZZZZZ	ZZZZZ	12/09/08	2018	2.39	6.23
14	ZZZZZ	ZZZZZ	12/09/08	2030	2.39	6.23
15	ZZZZZ	ZZZZZ	12/09/08	2042	2.39	6.23
16	ZZZZZ	ZZZZZ	12/09/08	2054	2.39	6.23
17	ZZZZZ	ZZZZZ	12/09/08	2105	2.39	6.23
18	PIBLK02	WAR081112-99	12/09/08	2117	2.39	6.23
19	ZZZZZ	ZZZZZ	12/09/08	2129	2.39	6.23
20	ZZZZZ	ZZZZZ	12/09/08	2141	2.39	6.23
21	ZZZZZ	ZZZZZ	12/09/08	2153	2.39	6.23
22	ZZZZZ	ZZZZZ	12/09/08	2204	2.39	6.23
23	ZZZZZ	ZZZZZ	12/09/08	2216	2.39	6.22
24	ZZZZZ	ZZZZZ	12/09/08	2228	2.39	6.23
25	ZZZZZ	ZZZZZ	12/09/08	2240	2.39	6.23
26	INDAB02	WPE081124-10	12/09/08	2252	2.39	6.23
27	PIBLK03	WAR081112-99	12/09/08	2304	2.39	6.23
28	PEM02	WPE081206-01	12/09/08	2315	2.39	6.23
29	ZZZZZ	ZZZZZ	12/09/08	2327	2.39	6.22
30	ZZZZZ	ZZZZZ	12/09/08	2339	2.39	6.23
31	ZZZZZ	ZZZZZ	12/09/08	2351	2.39	6.22
32	ZZZZZ	ZZZZZ	12/10/08	0003	2.39	6.23

	QC LIMITS
S1 = 4cmx	(+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 221329

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 11/24/08 12/22/08

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.34 DCB: 5.96

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR081112-99	12/22/08	1346	2.34	5.97
02	PEM01	WPE081206-01	12/22/08	1358	2.33	5.96
03	ZZZZZ	ZZZZZ	12/22/08	1410	2.33	5.95
04	TOXPAH01	WPE081211-52	12/22/08	1421	2.33	5.95
05	CHLOR01	WPE081002-01	12/22/08	1433	2.33	5.95
06	GAPA01	WPE081107-02	12/22/08	1445	2.33	5.95
07	AR166001	WPE080829-60	12/22/08	1456	2.34	5.95
08	AR125401	WAR081119-54	12/22/08	1508	2.34	5.96
09	ZZZZZ	ZZZZZ	12/22/08	1520	2.34	5.96
10	AR124201	WAR081119-42	12/22/08	1532	2.34	5.96
11	AR124801	WAR080811-48	12/22/08	1543	2.34	5.95
12	AR123201	WAR081014-32	12/22/08	1555	2.34	5.95
13	AR122101	WAR081120-21	12/22/08	1607	2.34	5.96
14	INDAB01	WPE081219-01	12/22/08	1618	2.34	5.96
15	INDAB02	WPE081219-02	12/22/08	1630	2.34	5.96
16	INDAB03	WPE081219-03	12/22/08	1642	2.34	5.96
17	INDAB04	WPE081219-04	12/22/08	1653	2.34	5.96
18	INDAB05	IPE081121-01	12/22/08	1705	2.34	5.96
19	INDAB01	WPE081222-10	12/22/08	1717	2.34	5.96
20	PIBLK02	WAR081112-99	12/22/08	1729	2.34	5.96
21	ZZZZZ	ZZZZZ	12/22/08	1740	2.34	5.96
22	ZZZZZ	ZZZZZ	12/22/08	1752	2.34	5.95
23	ZZZZZ	ZZZZZ	12/22/08	1804	2.34	5.95
24	ZZZZZ	ZZZZZ	12/22/08	1815	2.34	5.95
25	ZZZZZ	ZZZZZ	12/22/08	1827	2.34	5.95
26	ZZZZZ	ZZZZZ	12/22/08	1839	2.34	5.95
27	PIBLK03	WAR081112-99	12/22/08	1850	2.34	5.96
28	INDAB02	WPE081124-10	12/22/08	1902	2.34	5.96
29	PIBLK04	WAR081112-99	12/22/08	1914	2.34	5.96
30	ZZZZZ	ZZZZZ	12/22/08	1926	2.34	5.95
31	ZZZZZ	ZZZZZ	12/22/08	1937	2.34	5.96
32	INDAB03	WPE081124-10	12/22/08	1949	2.34	5.96

S1 = 4cmx QC LIMITS
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)
(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV

OLM03.0

PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 221329

GC Column: CLP-1 ID: 0.25 (mm) Init. Calib. Date(s): 11/24/08 12/22/08

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.34 DCB: 5.96

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK05	WAR081112-99	12/22/08	2001	2.34	5.96
02	ZZZZZ	ZZZZZ	12/22/08	2012	2.34	5.95
03	ZZZZZ	ZZZZZ	12/22/08	2024	2.34	5.95
04	ZZZZZ	ZZZZZ	12/22/08	2036	2.34	5.95
05	ZZZZZ	ZZZZZ	12/22/08	2047	2.34	5.95
06	ZZZZZ	ZZZZZ	12/22/08	2059	2.34	5.95
07	ZZZZZ	ZZZZZ	12/22/08	2111	2.34	5.95
08	ZZZZZ	ZZZZZ	12/22/08	2123	2.34	5.95
09	ZZZZZ	ZZZZZ	12/22/08	2134	2.34	5.95
10	ZZZZZ	ZZZZZ	12/22/08	2146	2.34	5.95
11	INDAB04	WPE081124-10	12/22/08	2158	2.33	5.95
12	PIBLK06	WAR081112-99	12/22/08	2209	2.34	5.96
13	AR166002	WPE080829-60	12/22/08	2221	2.34	5.96
14	ZZZZZ	ZZZZZ	12/22/08	2233	2.34	5.95
15	ZZZZZ	ZZZZZ	12/22/08	2245	2.34	5.95
16	ZZZZZ	ZZZZZ	12/22/08	2256	2.34	5.95
17	ZZZZZ	ZZZZZ	12/22/08	2308	2.34	5.95
18	ZZZZZ	ZZZZZ	12/22/08	2320	2.34	5.95
19	INDAB05	WPE081124-10	12/22/08	2331	2.34	5.96
20	AR166003	WPE080829-60	12/22/08	2343	2.34	5.95
21	PIBLK07	WAR081112-99	12/22/08	2355	2.34	5.96
22	PEM02	WPE081206-01	12/23/08	0006	2.34	5.96
23	PBLK01	1201743158	12/23/08	0018	2.34	5.96
24	PBLK01LCS	1201743159	12/23/08	0030	2.34	5.95
25	RWSW0049	221329001	12/23/08	0042	2.34	5.95
26	RWSW0048	221329002	12/23/08	0053	2.34	5.95
27	INDAB06	WPE081124-10	12/23/08	0105	2.34	5.95
28	PIBLK08	WAR081112-99	12/23/08	0117	2.33	5.96
29	ZZZZZ	ZZZZZ	12/23/08	0128	2.34	5.95
30	PIBLK09	WAR081112-99	12/23/08	0140	2.33	5.95
31	INDAB07	WPE081124-10	12/23/08	0152	2.34	5.95
32	PIBLK10	WAR081112-99	12/23/08	0203	2.33	5.95

S1 = 4cmx QC LIMITS
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)
(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

page 2 of 2

FORM VIII SV

OLM03.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 221329

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 11/24/08 12/22/08

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.38 DCB: 6.21

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR081112-99	12/22/08	1346	2.37	6.23
02	PEM01	WPE081206-01	12/22/08	1358	2.37	6.21
03	ZZZZZ	ZZZZZ	12/22/08	1410	2.37	6.21
04	TOXAPH01	WPE081211-52	12/22/08	1421	2.37	6.21
05	CHLOR01	WPE081002-01	12/22/08	1433	2.37	6.21
06	GAPA01	WPE081107-02	12/22/08	1445	2.37	6.21
07	AR166001	WPE080829-60	12/22/08	1456	2.37	6.21
08	AR125401	WAR081119-54	12/22/08	1508	2.37	6.21
09	ZZZZZ	ZZZZZ	12/22/08	1520	2.37	6.21
10	AR124201	WAR081119-42	12/22/08	1532	2.37	6.21
11	AR124801	WAR080811-48	12/22/08	1543	2.37	6.21
12	AR123201	WAR081014-32	12/22/08	1555	2.37	6.21
13	AR122101	WAR081120-21	12/22/08	1607	2.37	6.21
14	INDAB01	WPE081219-01	12/22/08	1618	2.37	6.22
15	INDAB02	WPE081219-02	12/22/08	1630	2.37	6.22
16	INDAB03	WPE081219-03	12/22/08	1642		
17	INDAB04	WPE081219-04	12/22/08	1653		
18	INDAB05	IPE081121-01	12/22/08	1705		
19	INDAB01	WPE081222-10	12/22/08	1717	2.38	6.21
20	PIBLK02	WAR081112-99	12/22/08	1729	2.37	6.21
21	ZZZZZ	ZZZZZ	12/22/08	1740	2.38	6.21
22	ZZZZZ	ZZZZZ	12/22/08	1752	2.38	6.21
23	ZZZZZ	ZZZZZ	12/22/08	1804	2.38	6.21
24	ZZZZZ	ZZZZZ	12/22/08	1815	2.38	6.21
25	ZZZZZ	ZZZZZ	12/22/08	1827	2.37	6.21
26	ZZZZZ	ZZZZZ	12/22/08	1839	2.38	6.21
27	PIBLK03	WAR081112-99	12/22/08	1850	2.37	6.21
28	INDAB02	WPE081124-10	12/22/08	1902	2.37	6.21
29	PIBLK04	WAR081112-99	12/22/08	1914	2.37	6.21
30	ZZZZZ	ZZZZZ	12/22/08	1926	2.38	6.21
31	ZZZZZ	ZZZZZ	12/22/08	1937	2.38	6.21
32	INDAB03	WPE081124-10	12/22/08	1949	2.37	6.21

S1 = 4cmx QC LIMITS (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV

OLM03.0

PESTICIDE ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 221329

GC Column: CLP-2 ID: 0.25 (mm) Init. Calib. Date(s): 11/24/08 12/22/08

Instrument ID: ECD5A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.38 DCB: 6.21

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK05	WAR081112-99	12/22/08	2001	2.37	6.21
02	ZZZZZ	ZZZZZ	12/22/08	2012	2.37	6.21
03	ZZZZZ	ZZZZZ	12/22/08	2024	2.37	6.21
04	ZZZZZ	ZZZZZ	12/22/08	2036	2.37	6.21
05	ZZZZZ	ZZZZZ	12/22/08	2047	2.37	6.21
06	ZZZZZ	ZZZZZ	12/22/08	2059	2.37	6.21
07	ZZZZZ	ZZZZZ	12/22/08	2111	2.37	6.21
08	ZZZZZ	ZZZZZ	12/22/08	2123	2.37	6.21
09	ZZZZZ	ZZZZZ	12/22/08	2134	2.37	6.21
10	ZZZZZ	ZZZZZ	12/22/08	2146	2.37	6.21
11	INDAB04	WPE081124-10	12/22/08	2158	2.37	6.21
12	PIBLK06	WAR081112-99	12/22/08	2209	2.37	6.21
13	AR166002	WPE080829-60	12/22/08	2221	2.37	6.21
14	ZZZZZ	ZZZZZ	12/22/08	2233	2.37	6.21
15	ZZZZZ	ZZZZZ	12/22/08	2245	2.38	6.21
16	ZZZZZ	ZZZZZ	12/22/08	2256	2.37	6.21
17	ZZZZZ	ZZZZZ	12/22/08	2308	2.37	6.21
18	ZZZZZ	ZZZZZ	12/22/08	2320	2.37	6.21
19	INDAB05	WPE081124-10	12/22/08	2331	2.37	6.21
20	AR166003	WPE080829-60	12/22/08	2343	2.37	6.21
21	PIBLK07	WAR081112-99	12/22/08	2355	2.37	6.21
22	PEM02	WPE081206-01	12/23/08	0006	2.37	6.21
23	PBLK01	1201743158	12/23/08	0018	2.38	6.21
24	PBLK01LCS	1201743159	12/23/08	0030	2.38	6.21
25	RWSW0049	221329001	12/23/08	0042	2.37	6.21
26	RWSW0048	221329002	12/23/08	0053	2.37	6.21
27	INDAB06	WPE081124-10	12/23/08	0105	2.37	6.21
28	PIBLK08	WAR081112-99	12/23/08	0117	2.37	6.21
29	ZZZZZ	ZZZZZ	12/23/08	0128	2.38	6.21
30	PIBLK09	WAR081112-99	12/23/08	0140	2.37	6.21
31	INDAB07	WPE081124-10	12/23/08	0152	2.37	6.21
32	PIBLK10	WAR081112-99	12/23/08	0203	2.37	6.21

S1 = 4cmx QC LIMITS
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)
(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII SV

OLM03.0

Identification Summary

SDG Number: 221329

Lab Sample ID: 1201743159

Client ID: LCS for batch 826961

Data File:	056f5601.d	**Data File:**	056b5601.d
Inst:	ECD5A.I_1	**Inst:**	ECD5A.I_2
Column:	CLP-1	**Column:**	CLP-2
Analyzed:	23-DEC-08 00:30	**Analyzed:**	23-DEC-08 00:30

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
alpha-BHC							.266
Column 1	1	2.81	2.77 – 2.83	.529		ug/L	
Column 2	1	2.89	2.86 – 2.92	.53		ug/L	
gamma-BHC (Lindane)							.624
Column 1	1	3.05	3.02 – 3.08	.529		ug/L	
Column 2	1	3.16	3.13 – 3.19	.525		ug/L	
beta-BHC							4.35
Column 1	1	3.13	3.1 – 3.16	.491		ug/L	
Column 2	1	3.23	3.2 – 3.26	.513		ug/L	
delta-BHC							2.89
Column 1	1	3.25	3.22 – 3.28	.541		ug/L	
Column 2	1	3.44	3.41 – 3.47	.526		ug/L	
Heptachlor							1.74
Column 1	1	3.39	3.36 – 3.42	.494		ug/L	
Column 2	1	3.47	3.45 – 3.51	.486		ug/L	

Identification Summary

SDG Number: 221329

Lab Sample ID: 1201743159

Client ID: LCS for batch 826961

Data File: 056f5601.d
Inst: ECD5A.I_1
Column: CLP-1
Analyzed: 23-DEC-08 00:30

Data File: 056b5601.d
Inst: ECD5A.I_2
Column: CLP-2
Analyzed: 23-DEC-08 00:30

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aldrin							1.78
Column 1	1	3.6	3.57 – 3.63	.468		ug/L	
Column 2	1	3.69	3.66 – 3.72	.476		ug/L	
Heptachlor epoxide							.245
Column 1	1	4.01	3.98 – 4.04	.497		ug/L	
Column 2	1	4.07	4.04 – 4.1	.498		ug/L	
gamma-Chlordane							1.02
Column 1	1	4.09	4.06 – 4.12	.493		ug/L	
Column 2	1	4.19	4.16 – 4.22	.498		ug/L	
alpha-Chlordane							1.4
Column 1	1	4.17	4.14 – 4.2	.489		ug/L	
Column 2	1	4.28	4.25 – 4.31	.495		ug/L	
Endosulfan I							.12
Column 1	1	4.25	4.22 – 4.28	.469		ug/L	
Column 2	1	4.32	4.29 – 4.35	.469		ug/L	

Identification Summary

SDG Number: 221329

Lab Sample ID: 1201743159

Client ID: LCS for batch 826961

Data File:	056f5601.d	Data File:	056b5601.d
Inst:	ECD5A.I_1	Inst:	ECD5A.I_2
Column:	CLP-1	Column:	CLP-2
Analyzed:	23-DEC-08 00:30	Analyzed:	23-DEC-08 00:30

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
4,4'-DDE							1.45
Column 1	1	4.23	4.2 – 4.26	1.28		ug/L	
Column 2	1	4.4	4.37 – 4.43	1.26		ug/L	
Dieldrin							2.41
Column 1	1	4.4	4.37 – 4.43	1.2		ug/L	
Column 2	1	4.49	4.46 – 4.52	1.23		ug/L	
Endrin							.315
Column 1	1	4.55	4.52 – 4.58	1.33		ug/L	
Column 2	1	4.67	4.64 – 4.7	1.33		ug/L	
4,4'-DDD							3.31
Column 1	1	4.6	4.57 – 4.63	1.32		ug/L	
Column 2	1	4.75	4.72 – 4.78	1.36		ug/L	
Endosulfan II							3.14
Column 1	1	4.69	4.66 – 4.72	1.16		ug/L	
Column 2	1	4.8	4.77 – 4.83	1.2		ug/L	

Identification Summary

SDG Number: 221329

Lab Sample ID: 1201743159

Client ID: LCS for batch 826961

Data File: 056f5601.d
Inst: ECD5A.I_1
Column: CLP-1
Analyzed: 23-DEC-08 00:30

Data File: 056b5601.d
Inst: ECD5A.I_2
Column: CLP-2
Analyzed: 23-DEC-08 00:30

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Endrin aldehyde							
Column 1	1	4.94	4.91 – 4.97	1.31		ug/L	2.31
Column 2	1	5	4.97 – 5.03	1.35		ug/L	
4,4'-DDT							
Column 1	1	4.77	4.74 – 4.8	1.66		ug/L	23.6
Column 2	1	4.93	4.9 – 4.96	1.31		ug/L	
Endosulfan sulfate							
Column 1	1	5.2	5.17 – 5.23	1.32		ug/L	1.14
Column 2	1	5.17	5.14 – 5.2	1.3		ug/L	
Methoxychlor							
Column 1	1	5.06	5.03 – 5.09	5.9		ug/L	.937
Column 2	1	5.34	5.31 – 5.37	5.96		ug/L	
Endrin ketone							
Column 1	1	5.37	5.34 – 5.4	1.18		ug/L	8.68
Column 2	1	5.48	5.45 – 5.51	1.29		ug/L	

QUALITY CONTROL DATA

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	221329			Matrix:	GROUND WATER
Lab Sample ID:	1201743158				
Client Sample:	QC for batch 826961	Client:	WEIS001	Project:	QC
Client ID:	MB for batch 826961	Method:	SW846 8081	SOP Ref:	GL-OA-E-041
Batch ID:	826963	Inst:	ECD5A.I	Dilution:	1
Run Date:	12/23/2008 00:18	Analyst:	HXJ1	Inj. Vol:	1 uL
Prep Date:	12/19/2008 14:26	Aliquot:	1000 mL	Final Volume:	5 mL
Data File:	055f5501.d	Column:	1 CLP-1	Level:	LOW
	055b5501.d		2 CLP-2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319-84-6	alpha-BHC	U	0.020	ug/L	0.005	0.020	1
58-89-9	gamma-BHC (Lindane)	U	0.020	ug/L	0.005	0.020	1
319-85-7	beta-BHC	U	0.020	ug/L	0.00845	0.020	1
319-86-8	delta-BHC	U	0.020	ug/L	0.005	0.020	1
76-44-8	Heptachlor	U	0.020	ug/L	0.00655	0.020	1
309-00-2	Aldrin	U	0.020	ug/L	0.005	0.020	1
1024-57-3	Heptachlor epoxide	U	0.020	ug/L	0.005	0.020	1
5103-74-2	gamma-Chlordane	U	0.020	ug/L	0.005	0.020	1
5103-71-9	alpha-Chlordane	U	0.020	ug/L	0.005	0.020	1
959-98-8	Endosulfan I	U	0.020	ug/L	0.005	0.020	1
72-55-9	4,4'-DDE	U	0.040	ug/L	0.005	0.040	1
60-57-1	Dieldrin	U	0.040	ug/L	0.005	0.040	1
72-20-8	Endrin	U	0.040	ug/L	0.005	0.040	1
72-54-8	4,4'-DDD	U	0.040	ug/L	0.005	0.040	1
33213-65-9	Endosulfan II	U	0.040	ug/L	0.005	0.040	1
7421-93-4	Endrin aldehyde	U	0.040	ug/L	0.005	0.040	1
50-29-3	4,4'-DDT	U	0.040	ug/L	0.010	0.040	1
1031-07-8	Endosulfan sulfate	U	0.040	ug/L	0.005	0.040	1
72-43-5	Methoxychlor	U	0.200	ug/L	0.050	0.200	1
53494-70-5	Endrin ketone	U	0.040	ug/L	0.0126	0.040	1
8001-35-2	Toxaphene	U	0.500	ug/L	0.150	0.500	1
12674-11-2	Aroclor-1016	U	0.500	ug/L	0.167	0.500	1
11104-28-2	Aroclor-1221	U	0.500	ug/L	0.167	0.500	1
11141-16-5	Aroclor-1232	U	0.500	ug/L	0.167	0.500	1
53469-21-9	Aroclor-1242	U	0.500	ug/L	0.167	0.500	1
12672-29-6	Aroclor-1248	U	0.500	ug/L	0.167	0.500	1
11097-69-1	Aroclor-1254	U	0.500	ug/L	0.167	0.500	1
11096-82-5	Aroclor-1260	U	0.500	ug/L	0.167	0.500	1

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/122208a.b/055f5501.d
Lab Smp Id: 1201743158 Client Smp ID: PBLK01
Inj Date : 23-DEC-2008 00:18
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201743158|1|
Misc Info : |ECD81A_1L|826963|SVP|MB|GROUND WATER|MB|||
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-F-8081-121108.m
Meth Date : 23-Dec-2008 15:03 hea01125 Quant Type: ESTD
Cal Date : 16-JUL-2008 00:40 Cal File: 034f3401.d
Als bottle: 55 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 221329.sub
Target Version: 3.50 Sample Matrix: Ground Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

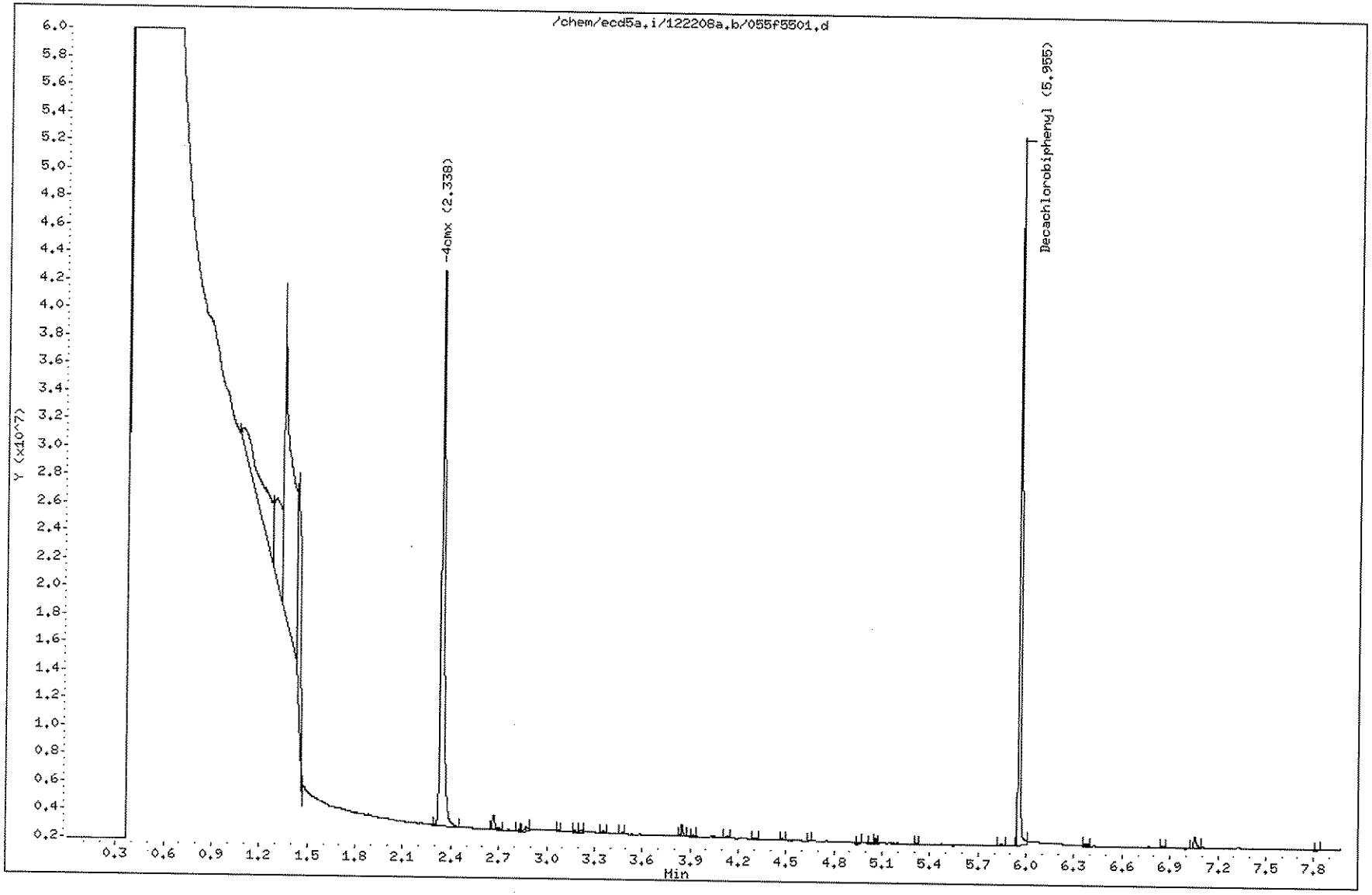
Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.338	2.337	0.001	55357897	156.640	0.783	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
5.955	5.956	-0.001	38856036	137.737	0.689	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/122208a.b/055f5501.d
Date : 23-DEC-2008 00:18
Client ID: PBLK01
Sample Info: |1201743158|1|
Volume Injected (uL): 1.0
Column phase: CLP-1

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25



GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/122208a.b/055b5501.d
Lab Smp Id: 1201743158 Client Smp ID: PBLK01
Inj Date : 23-DEC-2008 00:18
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201743158|1|
Misc Info : |ECD81A_1L|826963|SVP|MB|GROUND WATER|MB|||
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-B-8081-121108.m
Meth Date : 24-Dec-2008 16:54 hea01125 Quant Type: ESTD
Cal Date : 16-JUL-2008 00:40 Cal File: 034b3401.d
Als bottle: 55 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 221329.sub
Target Version: 3.50 Sample Matrix: Ground Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

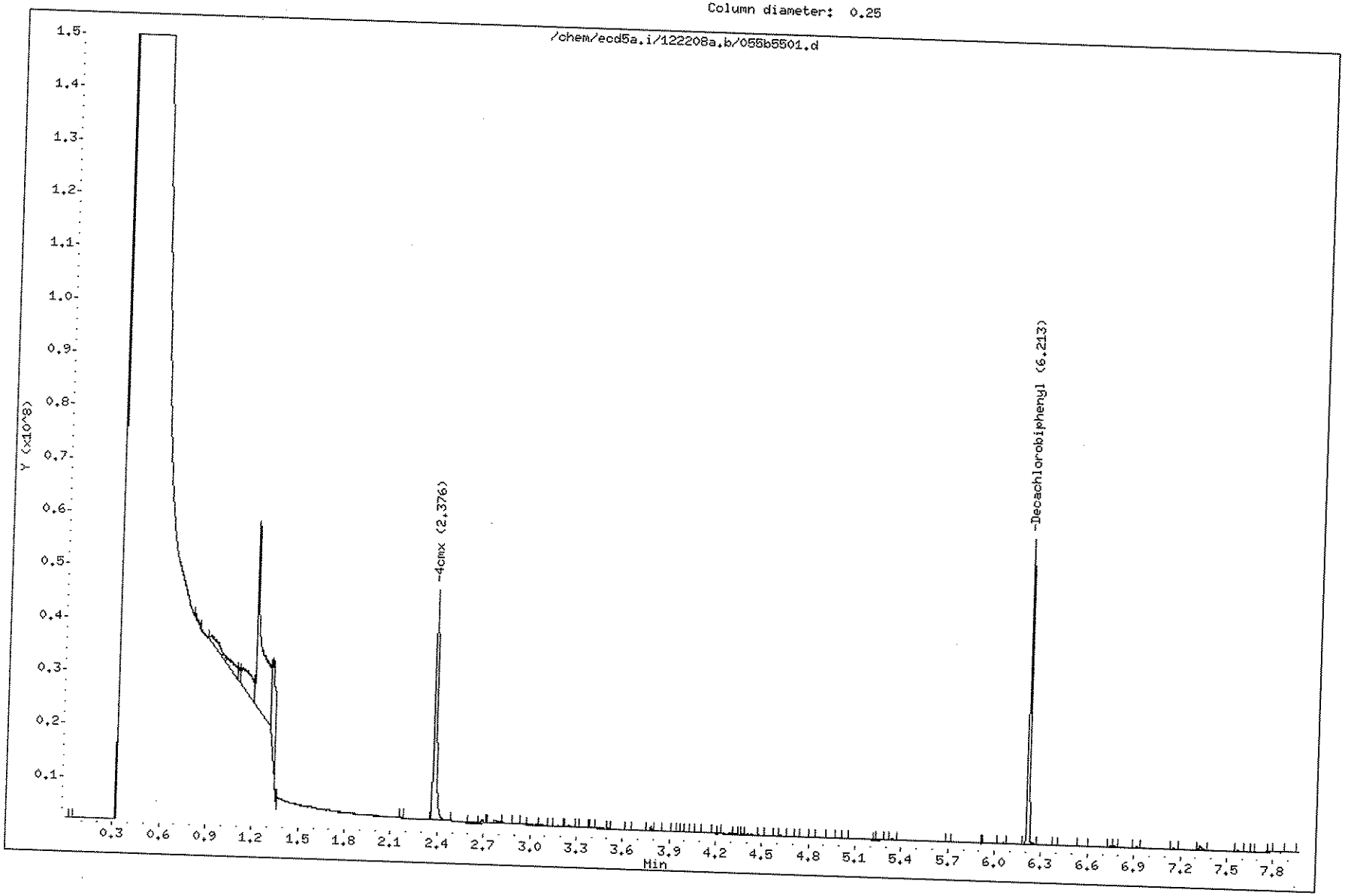
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.376	2.375	0.001	53716886	158.039	0.790	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.213	6.214	-0.001	43407415	146.623	0.733	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/122208a.b/055b5501.d
Date : 23-DEC-2008 00:18
Client ID: PBLK01
Sample Info: |120174315811|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd5a.i

Operator: HXJ1
Column diameter: 0.25



Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	221329			Matrix:	GROUND WATER
Lab Sample ID:	1201743159				
Client Sample:	QC for batch 826961	Client:	WEIS001	Project:	QC
Client ID:	LCS for batch 826961	Method:	SW846 8081	SOP Ref:	GL-OA-E-041
Batch ID:	826963	Inst:	ECD5A.I	Dilution:	1
Run Date:	12/23/2008 00:30	Analyst:	HXJ1	Inj. Vol:	1 uL
Prep Date:	12/19/2008 14:26	Aliquot:	1000 mL	Final Volume:	5 mL
Data File:	056f5601.d	Column:	1 CLP-1	Level:	LOW
	056b5601.d		2 CLP-2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319-84-6	alpha-BHC		0.530	ug/L	0.005	0.020	2
58-89-9	gamma-BHC (Lindane)		0.529	ug/L	0.005	0.020	1
319-85-7	beta-BHC		0.513	ug/L	0.00845	0.020	2
319-86-8	delta-BHC		0.541	ug/L	0.005	0.020	1
76-44-8	Heptachlor		0.494	ug/L	0.00655	0.020	1
309-00-2	Aldrin		0.476	ug/L	0.005	0.020	2
1024-57-3	Heptachlor epoxide		0.498	ug/L	0.005	0.020	2
5103-74-2	gamma-Chlordane		0.498	ug/L	0.005	0.020	2
5103-71-9	alpha-Chlordane		0.495	ug/L	0.005	0.020	2
959-98-8	Endosulfan I		0.469	ug/L	0.005	0.020	2
72-55-9	4,4'-DDE		1.28	ug/L	0.005	0.040	1
60-57-1	Dieldrin		1.23	ug/L	0.005	0.040	2
72-20-8	Endrin		1.33	ug/L	0.005	0.040	1
72-54-8	4,4'-DDD		1.36	ug/L	0.005	0.040	2
33213-65-9	Endosulfan II		1.20	ug/L	0.005	0.040	2
7421-93-4	Endrin aldehyde		1.35	ug/L	0.005	0.040	2
50-29-3	4,4'-DDT		1.66	ug/L	0.010	0.040	1
1031-07-8	Endosulfan sulfate		1.32	ug/L	0.005	0.040	1
72-43-5	Methoxychlor		5.96	ug/L	0.050	0.200	2
53494-70-5	Endrin ketone		1.29	ug/L	0.0126	0.040	2
8001-35-2	Toxaphene	U	0.500	ug/L	0.150	0.500	1
12674-11-2	Aroclor-1016	U	0.500	ug/L	0.167	0.500	1
11104-28-2	Aroclor-1221	U	0.500	ug/L	0.167	0.500	1
11141-16-5	Aroclor-1232	U	0.500	ug/L	0.167	0.500	1
53469-21-9	Aroclor-1242	U	0.500	ug/L	0.167	0.500	1
12672-29-6	Aroclor-1248	U	0.500	ug/L	0.167	0.500	1
11097-69-1	Aroclor-1254	U	0.500	ug/L	0.167	0.500	1
11096-82-5	Aroclor-1260	U	0.500	ug/L	0.167	0.500	1

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd5a.i/122208a.b/056f5601.d
Lab Smp Id: 1201743159 Client Smp ID: PBLK01LCS
Inj Date : 23-DEC-2008 00:30
Operator : HXJ1 Inst ID: ecd5a.i
Smp Info : |1201743159|1|
Misc Info : |ECD81A_1L|826963|SVP|LCS|GROUND WATER|LCS|||
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-F-8081-121108.m
Meth Date : 23-Dec-2008 15:03 hea01125 Quant Type: ESTD
Cal Date : 16-JUL-2008 00:40 Cal File: 034f3401.d
Als bottle: 56 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 221329.sub
Target Version: 3.50 Sample Matrix: Ground Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.338	2.337	0.001	56673160	160.361	0.802	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
5.954	5.956	-0.002	29362299	104.084	0.520	80.00- 120.00	100.00
5 alpha-BHC					CAS #: 319-84-6		
2.805	2.804	0.001	48147736	105.714	0.528	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.052	3.051	0.001	42498992	105.727	0.529	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.126	3.125	0.001	18459418	98.2070	0.491	80.00- 120.00	100.00

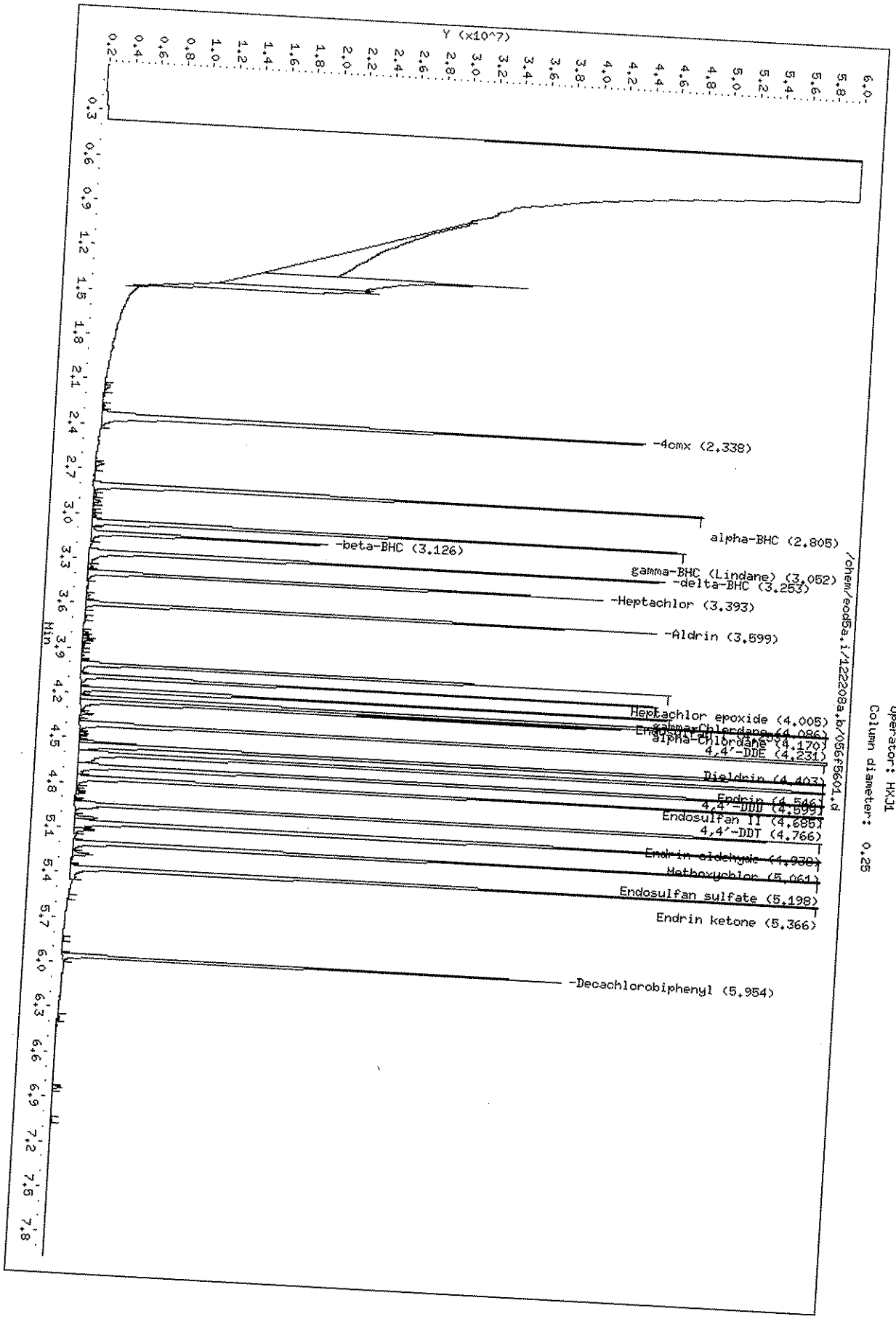
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
13 delta-BHC					CAS #: 319-86-8		
3.253	3.253	0.000	43519527	108.197	0.541	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.393	3.393	0.000	34622936	98.8598	0.494	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.599	3.599	0.000	36936856	93.5668	0.468	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.005	4.006	-0.001	35456056	99.4075	0.497	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.086	4.087	-0.001	34995290	98.5104	0.492	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.170	4.171	-0.001	34864112	97.7122	0.488	80.00- 120.00	100.00
16 Endosulfan I					CAS #: 959-98-8		
4.253	4.254	-0.001	34899273	93.7839	0.469	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.231	4.232	-0.001	80924165	255.074	1.28	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.403	4.404	-0.001	86748043	240.372	1.20	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.546	4.547	-0.001	85546092	266.919	1.33	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.599	4.600	-0.001	73804036	263.015	1.32	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
4.685	4.686	-0.001	71142645	232.036	1.16	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
4.938	4.940	-0.002	60526752	262.916	1.31	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.766	4.767	-0.001	60534007	332.263	1.66	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.198	5.199	-0.001	68349544	263.694	1.32	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.061	5.062	-0.001	103544018	1179.99	5.90	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
31 Endrin ketone					CAS #: 53494-70-5		
5.366	5.367	-0.001	64940935	236.709	1.18	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/122208a.b/056f5601.d
Date : 23-DEC-2008 00:30
Client ID: PBLK01LCS
Sample Info: 1120174315911
Volume Injected (uL): 1.0
Column phase: CLP-1

Operator: HXJ1
Column diameter: 0.25

Instrument: ecd5a.i



Page 1

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd5a.i/122208a.b/056b5601.d
Lab Smp Id: 1201743159
Inj Date : 23-DEC-2008 00:30
Operator : HXJ1
Smp Info : |1201743159|1|
Misc Info : |ECD81A_1L|826963|SVP|LCS|GROUND WATER|LCS|||
Comment :
Method : /chem/ecd5a.i/122208a.b/ECD5-B-8081-121108.m
Meth Date : 24-Dec-2008 16:54 hea01125
Cal Date : 16-JUL-2008 00:40
Als bottle: 56
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 3.50

Client Smp ID: PBLK01LCS
Inst ID: ecd5a.i
Quant Type: ESTD
Cal File: 034b3401.d
QC Sample: LCS
Compound Sublist: 221329.sub
Sample Matrix: Ground Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable — Local Compound Variable

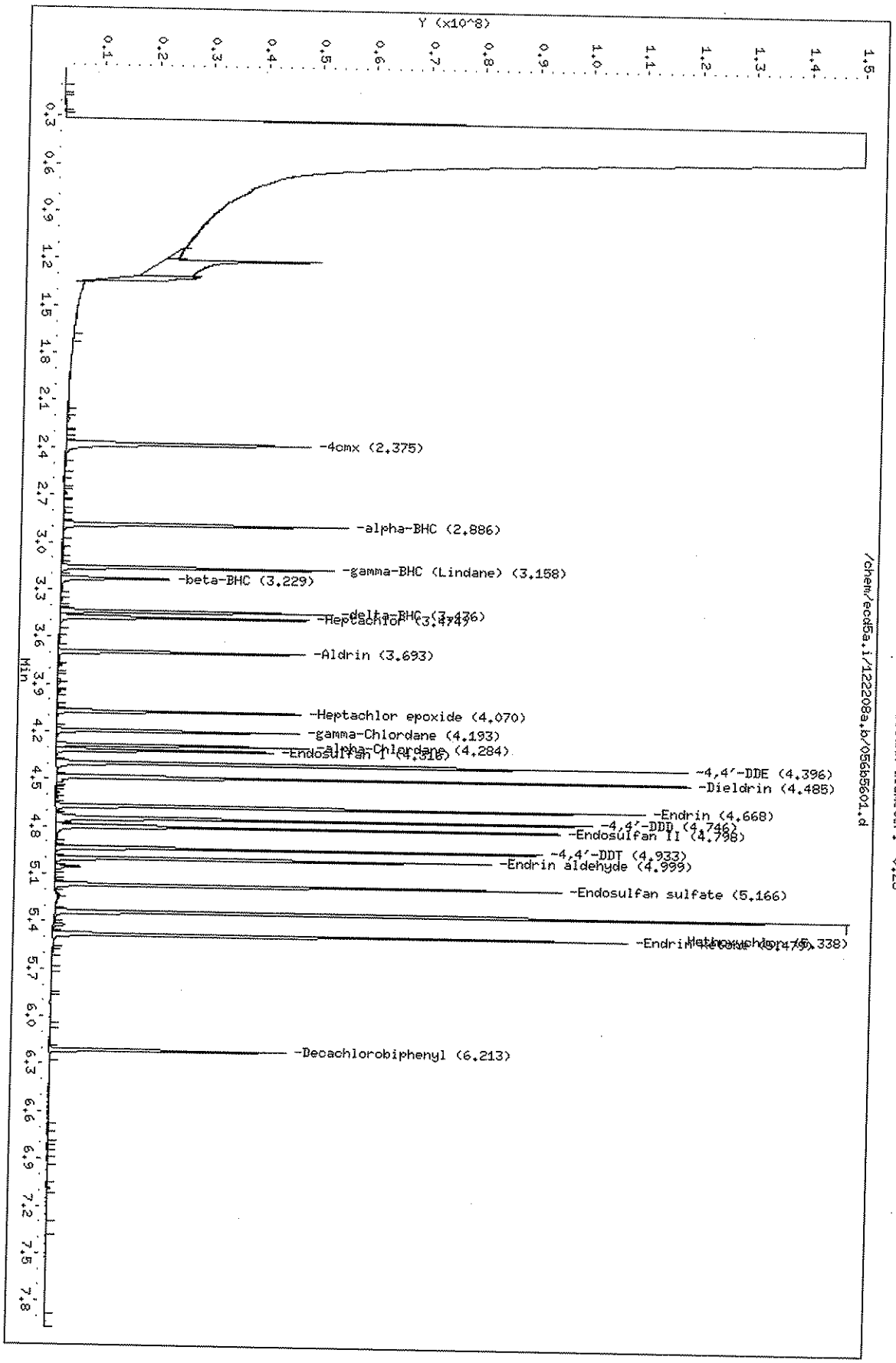
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.375	2.375	0.000	55910839	164.493	0.822	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
6.213	6.214	-0.001	32932611	111.241	0.556	80.00- 120.00	100.00
5 alpha-BHC					CAS #: 319-84-6		
2.886	2.887	-0.001	47665328	105.996	0.530	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.158	3.158	0.000	42020872	105.069	0.525	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.229	3.229	0.000	18156529	102.573	0.513	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
13 delta-BHC					CAS #: 319-86-8		
3.436	3.436	0.000	40652481	105.114	0.526	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.474	3.475	-0.001	37927737	97.1577	0.486	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.693	3.694	-0.001	36304278	95.2444	0.476	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.070	4.070	0.000	34616327	99.6511	0.498	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.193	4.193	0.000	34821750	99.5205	0.498	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.284	4.284	0.000	33553755	99.0882	0.495	80.00- 120.00	100.00
16 Endosulfan I					CAS #: 959-98-8		
4.316	4.316	0.000	30198003	93.8961	0.469	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.396	4.396	0.000	86249325	251.409	1.26	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.485	4.486	-0.001	86094364	246.243	1.23	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.668	4.669	-0.001	81558819	266.079	1.33	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
4.746	4.747	-0.001	78264280	271.865	1.36	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
4.798	4.799	-0.001	71945539	239.439	1.20	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
4.999	5.000	-0.001	59338675	269.066	1.34	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
4.933	4.934	-0.001	65042985	262.137	1.31	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
5.166	5.167	-0.001	68681478	260.699	1.30	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.338	5.339	-0.001	117660836	1191.09	5.96	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
31 Endrin ketone					CAS #: 53494-70-5		
5.479	5.481	-0.002	76975497	258.196	1.29	80.00- 120.00	100.00

Data File: /chem/ecd5a.i/122208a.b/0566b5601.d
Date : 23-DEC-2008 00:30
Client ID: PBLK01LCS
Sample Info: 1120174331591|1
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd5a.i
Operator: HXJ1
Column diameter: 0.25



MISCELLANEOUS DATA

GEL ORGANIC RUN LOG

DATE: 11/24/2008 METHOD: ECD5-B-8081-112408.m INSTRUMENT ID: ECD5

OPERATOR:HXJ1 REVIEWED BY:_____

DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1

SOLVENT LOT CX111

MERCURY LOT A07T019

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-011 Analysis of Chlorophenyoxy Acids by ECD : 8151A
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak, and
DNC-Do Not Call, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecd5a.i/112408a.b

Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001b0101.d	WAR080930-99IB1	HXJ1	24-NOV-2008 12:20		112408a	1.0		CLEAN
002b0201.d	WPE081017-01DG1	HXJ1	24-NOV-2008 12:32		112408a	1.0		(F) 3.6%, 5.9% (B) 5.6%, 5.6%
003b0301.d	WPE081010-02TX1	HXJ1	24-NOV-2008 12:44		112408a	1.0		DUSE
004b0401.d	WPE081124-01AB	HXJ1	24-NOV-2008 12:56		112408a	1.0		DUSE
005b0501.d	WPE081124-02AB	HXJ1	24-NOV-2008 13:08		112408a	1.0		DUSE
006b0601.d	WPE081124-03AB	HXJ1	24-NOV-2008 13:20		112408a	1.0		DUSE
007b0701.d	WPE081124-04AB	HXJ1	24-NOV-2008 13:31		112408a	1.0		DUSE
008b0801.d	IPE081025-01AB	HXJ1	24-NOV-2008 13:43		112408a	1.0		DUSE
009b0901.d	WPE081117-02AB	HXJ1	24-NOV-2008 13:55		112408a	1.0		DUSE
010b1001.d	WPE081124-11TX1	HXJ1	24-NOV-2008 14:07		112408a	1.0		DUSE
011b1101.d	WPE081124-12TX2	HXJ1	24-NOV-2008 14:19		112408a	1.0		TOXAPHENE LEVEL 1
012b1201.d	WPE081124-13TX3	HXJ1	24-NOV-2008 14:31		112408a	1.0		TOXAPHENE LEVEL 2
013b1301.d	WPE081124-14TX4	HXJ1	24-NOV-2008 14:43		112408a	1.0		TOXAPHENE LEVEL 3
014b1401.d	IPE081017-40TX5	HXJ1	24-NOV-2008 14:54		112408a	1.0		TOXAPHENE LEVEL 4
015b1501.d	WPE081010-02TX	HXJ1	24-NOV-2008 15:06		112408a	1.0		TOXAPHENE LEVEL 5
								PASSES BOTH COLUMNS

Instrument Batch: /chem/ecd5a.i/112408a.b

Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016b1601.d	WPE081124-21AB	HXJ1	24-NOV-2008 16:10		112408a	1.0		INDAB LEVEL 1

017b1701.d	WPE081124-22AB	HXJ1	24-NOV-2008 16:22			112408a	1.0		INDAB LEVEL 2
018b1801.d	WPE081124-23AB	HXJ1	24-NOV-2008 16:34			112408a	1.0		INDAB LEVEL 3
019b1901.d	WPE081124-24AB	HXJ1	24-NOV-2008 16:46			112408a	1.0		INDAB LEVEL 4
020b2001.d	IPE081124-01AB	HXJ1	24-NOV-2008 16:58			112408a	1.0		INDAB LEVEL 5
021b2101.d	WPE081124-10AB	HXJ1	24-NOV-2008 17:09			112408a	1.0		PASSES BOTH COLUMNS
022b2201.d	WPE081017-01DG2	HXJ1	24-NOV-2008 17:21			112408a	1.0		(F) 5.4%, 8.1% (B) 4.9%, 7.6%
023b2301.d	WAR080930-99IB	HXJ1	24-NOV-2008 17:33			112408a	1.0		CLEAN
024b2401.d	1201722653	HXJ1	24-NOV-2008 17:45	818023	09-269-1		1.0	MB	USE: LOWER
025b2501.d	1201722654	HXJ1	24-NOV-2008 17:57	818023	09-269-1		1.0	LCS	USE: LOWER
026b2601.d	1201722657	HXJ1	24-NOV-2008 18:09	818023	09-269-1		1.0	TLCS	USE: LOWER
027b2701.d	219367001	HXJ1	24-NOV-2008 18:21	818023	09-269-1		1.0	LANL	USE: LOWER
028b2801.d	219367002	HXJ1	24-NOV-2008 18:32	818023	09-269-1		1.0	LANL	USE: LOWER
029b2901.d	1201722655	HXJ1	24-NOV-2008 18:44	818023	09-269-1		1.0	MS	USE: LOWER
030b3001.d	1201722656	HXJ1	24-NOV-2008 18:56	818023	09-269-1		1.0	MSD	USE: LOWER
031b3101.d	WPE081124-10AB	HXJ1	24-NOV-2008 19:08			112408a	1.0		PASSES BOTH COLUMNS
032b3201.d	WAR080930-99IB	HXJ1	24-NOV-2008 19:20			112408a	1.0		CLEAN
033b3301.d	1201722658	HXJ1	24-NOV-2008 19:32	818026	09-289		1.0	MB	USE, uploaded both columns, reporting lower result
034b3401.d	1201722659	HXJ1	24-NOV-2008 19:44	818026	09-289		1.0	LCS	USE, uploaded both columns, reporting lower result
035b3501.d	1201722662	HXJ1	24-NOV-2008 19:56	818026	09-289		1.0	TLCS	USE, uploaded both columns, reporting lower result

Instrument Batch: /chem/ecd5a.i/112408a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036b3601.d	219460001	HXJ1	24-NOV-2008 20:07	818026	09-289	1.0	LANL	USE, uploaded both columns, reporting lower result
037b3701.d	219460002	HXJ1	24-NOV-2008 20:19	818026	09-289	1.0	LANL	USE, uploaded both columns, reporting lower result
038b3801.d	219460003	HXJ1	24-NOV-2008 20:31	818026	09-289	1.0	LANL	USE, uploaded both columns, reporting lower result
039b3901.d	219460004	HXJ1	24-NOV-2008 20:43	818026	09-289	1.0	LANL	USE, uploaded both columns, reporting lower result
040b4001.d	219460005	HXJ1	24-NOV-2008 20:55	818026	09-289	1.0	LANL	USE, uploaded both columns, reporting lower result

041b4101.d	219460006	HXJ1	24-NOV-2008 21:07	818026	09-289		1.0	LANL	USE, uploaded both columns, reporting lower result
042b4201.d	WPE081124-10AB	HXJ1	24-NOV-2008 21:19		112408a		1.0		FAILS ALPHA-CHLORDANE, AND DDT LOW ON BOTH COLUMNS
043b4301.d	WAR080930-99IB	HXJ1	24-NOV-2008 21:31		112408a		1.0		MATRIX CARRYOVER
044b4401.d	219460007	HXJ1	24-NOV-2008 21:42	818026	09-289		1.0	LANL	USE, uploaded both columns, reporting lower result
045b4501.d	219460008	HXJ1	24-NOV-2008 21:54	818026	09-289		1.0	LANL	USE, uploaded both columns, reporting lower result
046b4601.d	1201722660	HXJ1	24-NOV-2008 22:06	818026	09-289		1.0	MS	USE, uploaded both columns, reporting lower result
047b4701.d	1201722661	HXJ1	24-NOV-2008 22:18	818026	09-289		1.0	MSD	USE, uploaded both columns, reporting lower result
048b4801.d	219460009	HXJ1	24-NOV-2008 22:30	818026	09-289		1.0	LANL	USE, uploaded both columns, reporting lower result
049b4901.d	219460010	HXJ1	24-NOV-2008 22:42	818026	09-289		1.0	LANL	USE, uploaded both columns, reporting lower result
050b5001.d	219460011	HXJ1	24-NOV-2008 22:54	818026	09-289		1.0	LANL	USE, uploaded both columns, reporting lower result
051b5101.d	219460012	HXJ1	24-NOV-2008 23:06	818026	09-289		1.0	LANL	DUSE - see re-extraction batch 819364 seq. 120308a.b
052b5201.d	219460013	HXJ1	24-NOV-2008 23:17	818026	09-289		1.0	LANL	USE, uploaded both columns, reporting lower result
053b5301.d	WPE081124-10AB	HXJ1	24-NOV-2008 23:29		112408a		1.0		USE, uploaded both columns, reporting lower result
054b5401.d	WAR080930-99IB	HXJ1	24-NOV-2008 23:41		112408a		1.0		DDT, METHOXYCHLOR AND ENDRIN KETONE FAIL LOW ON BOTH COLUMNS
055b5501.d	219460014	HXJ1	24-NOV-2008 23:53	818026	09-289		1.0	LANL	MATRIX CARRYOVER
									USE, uploaded both columns, reporting lower result

Instrument Batch: /chem/ecd5a.i/112408a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056b5601.d	219460015	HXJ1	25-NOV-2008 00:05	818026	09-289	1.0	LANL	USE, uploaded both columns, reporting lower result
057b5701.d	219460016	HXJ1	25-NOV-2008 00:17	818026	09-289	1.0	LANL	USE, uploaded both columns, reporting lower result
058b5801.d	219460017	HXJ1	25-NOV-2008 00:29	818026	09-289	1.0	LANL	USE, uploaded both columns, reporting lower result
059b5901.d	219460018	HXJ1	25-NOV-2008 00:40	818026	09-289	1.0	LANL	USE, uploaded both columns, reporting lower result
060b6001.d	219460019	HXJ1	25-NOV-2008 00:52	818026	09-289	1.0	LANL	USE, uploaded both columns, reporting lower result
061b6101.d	219460020	HXJ1	25-NOV-2008 01:04	818026	09-289	1.0	LANL	USE, uploaded both columns, reporting lower result
062b6201.d	WPE081124-10AB	HXJ1	25-NOV-2008 01:16		112408a	1.0		USE, uploaded both columns, reporting lower result
063b6301.d	WAR080930-99IB	HXJ1	25-NOV-2008 01:28		112408a	1.0		HEPTACHLOR, DDT, METHOXYCHLOR AND KETONE FAIL LOW ON BOTH COLUMNS
								MATRIX CARRYOVER

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD5

DATE: 12/09/2008 METHOD: ECD5-B-608-120908.m OPERATOR:HXJ1 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT CX947
MERCURY LOT C16S048

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-011 Analysis of Chlorophenyoxy Acids by ECD : 8151A
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak, and
DNC-Do Not Call, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecd5a.i/120908b.b Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001b0101.d	WAR081112-99IB	HXJ1	09-DEC-2008 17:51		120908a	1.0		Clean
002b0201.d	WPE081206-01DG1	HXJ1	09-DEC-2008 18:08		120908a	1.0		(b) DDT 6.1%, Endrin 4.2%; (f) DDT 8.0%, Endrin 4.0%
003b0301.d	WPE081124-10AB	HXJ1	09-DEC-2008 18:20		120908a	1.0		All okay
004b0401.d	WPE081010-02TX	HXJ1	09-DEC-2008 18:32		120908a	1.0		All okay
005b0501.d	WPE081002-01CHL	HXJ1	09-DEC-2008 18:44		120908a	1.0		Passes on average
006b0601.d	WPE081107-02GA	HXJ1	09-DEC-2008 18:55		120908a	1.0		DUSE - not target analytes
007b0701.d	WPE081209-11 60	HXJ1	09-DEC-2008 19:07		120908a	1.0		AR1660 ICAL level 1 - USE for 608 & 8081 methods - all %RSD<10%
008b0801.d	WPE081209-12 60	HXJ1	09-DEC-2008 19:19		120908a	1.0		AR1660 ICAL level 2 - USE for 608 & 8081 methods - all %RSD<10%
009b0901.d	WPE081209-13 60	HXJ1	09-DEC-2008 19:31		120908a	1.0		AR1660 ICAL level 3 - USE for 608 & 8081 methods - all %RSD<10%
010b1001.d	WPE081209-14 60	HXJ1	09-DEC-2008 19:43		120908a	1.0		AR1660 ICAL level 4 - USE for 608 & 8081 methods - all %RSD<10%
011b1101.d	IAR081003-01 60	HXJ1	09-DEC-2008 19:54		120908a	1.0		AR1660 ICAL level 5 - USE for 608 & 8081 methods - all %RSD<10%
012b1201.d	WPE080829-60 60	HXJ1	09-DEC-2008 20:06		120908a	1.0		All okay
013b1301.d	WAR081119-54 54	HXJ1	09-DEC-2008 20:18		120908a	1.0		DUSE - see seq. 120908a.b for 608 method
014b1401.d	WAR081119-42 42	HXJ1	09-DEC-2008 20:30		120908a	1.0		DUSE - see seq. 120908a.b for 608 method
015b1501.d	WAR080811-48 48	HXJ1	09-DEC-2008 20:42		120908a	1.0		DUSE - see seq. 120908a.b for 608 method

Instrument Batch: /chem/ecd5a.i/120908b.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016b1601.d	WAR081014-32 32	HXJ1	09-DEC-2008 20:54		120908a	1.0		DUSE - see seq. 120908a.b for 608 method

017b1701.d	WAR081120-21 21	HXJ1	09-DEC-2008 21:05		120908a		1.0		DUSE - see seq. 120908a.b for 608 method
018b1801.d	WAR081112-99IB	HXJ1	09-DEC-2008 21:17		120908a		1.0		Clean
019b1901.d	1201730978	HXJ1	09-DEC-2008 21:29	821698	220288		1.0	MB	DUSE - see seq. 120908a.b for 608 method
020b2001.d	1201730981	HXJ1	09-DEC-2008 21:41	821698	220288		1.0	LCS	DUSE - see seq. 120908a.b for 608 method
021b2101.d	1201732444	HXJ1	09-DEC-2008 21:53	821698	220288		1.0	TLCS	DUSE - see seq. 120908a.b for 608 method
022b2201.d	1201732445	HXJ1	09-DEC-2008 22:04	821698	220288		1.0	LCSD	DUSE - see seq. 120908a.b for 608 method
023b2301.d	220288002	HXJ1	09-DEC-2008 22:16	821698	220288		1.0	BRKL	DUSE - see seq. 120908a.b for 608 method
024b2401.d	1201730979	HXJ1	09-DEC-2008 22:28	821698	220288		1.0	MS	DUSE - see seq. 120908a.b for 608 method
025b2501.d	220498002	HXJ1	09-DEC-2008 22:40	821698	220498		1.0	BRKL	DUSE - see seq. 120908a.b for 608 method
026b2601.d	WPE081124-10AB	HXJ1	09-DEC-2008 22:52		120908a		1.0		All okay
027b2701.d	WAR081112-99IB	HXJ1	09-DEC-2008 23:04		120908b		1.0		Clean
028b2801.d	WPE081206-01DG	HXJ1	09-DEC-2008 23:15		120908b		1.0		(b) DDT 8.0%, Endrin 3.2%; (f) DDT 9.3%, Endrin 3.8%
029b2901.d	1201732446	HXJ1	09-DEC-2008 23:27	823081	220690		1.0	TB	USE, uploaded both columns, reporting higher result
030b3001.d	1201734307	HXJ1	09-DEC-2008 23:39	823081	220690		1.0	MB	USE, uploaded both columns, reporting higher result
031b3101.d	1201734314	HXJ1	09-DEC-2008 23:51	823081	220690		1.0	LCS	USE, uploaded both columns, reporting higher result
032b3201.d	1201734315	HXJ1	10-DEC-2008 00:03	823081	220690		1.0	TLCS	USE, uploaded both columns, reporting higher result
033b3301.d	1201734316	HXJ1	10-DEC-2008 00:14	823081	220690		1.0	CLCS	USE, uploaded both columns, reporting higher result
034b3401.d	WPE081124-10AB	HXJ1	10-DEC-2008 00:26		120908b		1.0		(b) DDT low; (f) All okay
035b3501.d	WAR081112-99IB	HXJ1	10-DEC-2008 00:38		120908b		1.0		Clean

10H

Instrument Batch: /chem/ecd5a.i/120908b.b

10H16.6H

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036b3601.d	220690001	HXJ1	10-DEC-2008 00:50	823081	220690	1.0	WASP	USE, uploaded both columns, reporting higher result
037b3701.d	220690002	HXJ1	10-DEC-2008 01:02	823081	220690	1.0	WASP	USE, uploaded both columns, reporting higher result
038b3801.d	1201734308	HXJ1	10-DEC-2008 01:13	823081	220690	1.0	MS	USE, uploaded both columns, reporting higher result
039b3901.d	1201734311	HXJ1	10-DEC-2008 01:25	823081	220690	1.0	MSD	USE, uploaded both columns, reporting higher result
040b4001.d	1201734309	HXJ1	10-DEC-2008 01:37	823081	220690	1.0	TMS	USE, uploaded both columns, reporting higher result

041b4101.d	1201734312	HXJ1	10-DEC-2008 01:49	823081	220690		1.0	TMSD	USE, uploaded both columns, reporting higher result
042b4201.d	1201734310	HXJ1	10-DEC-2008 02:01	823081	220690		1.0	CMS	USE, uploaded both columns, reporting higher result
043b4301.d	1201734313	HXJ1	10-DEC-2008 02:13	823081	220690		1.0	CMSD	USE, uploaded both columns, reporting higher result
044b4401.d	WPE081124-10AB	HXJ1	10-DEC-2008 02:24		120908b		1.0		(b) All okay; (f) DDT elevated
045b4501.d	WAR081112-99IB	HXJ1	10-DEC-2008 02:36		120908b		1.0		Clean
046b4601.d	1201734471	HXJ1	10-DEC-2008 02:48	823153	220519		1.0	MB	USE, uploaded both columns, reporting front column
047b4701.d	1201734472	HXJ1	10-DEC-2008 03:00	823153	220519		1.0	LCS	USE, uploaded both columns, reporting front column
048b4801.d	220519002	HXJ1	10-DEC-2008 03:12	823153	220519		1.0	PERM	USE, uploaded both columns, reporting front column
049b4901.d	1201734473	HXJ1	10-DEC-2008 03:23	823153	220519		1.0	MS	USE, uploaded both columns, reporting front column
050b5001.d	1201734474	HXJ1	10-DEC-2008 03:35	823153	220519		1.0	MSD	USE, uploaded both columns, reporting front column
051b5101.d	220519004	HXJ1	10-DEC-2008 03:47	823153	220519		1.0	PERM	USE, uploaded both columns, reporting front column
052b5201.d	220519006	HXJ1	10-DEC-2008 03:59	823153	220519		1.0	PERM	USE, uploaded both columns, reporting front column
053b5301.d	220519008	HXJ1	10-DEC-2008 04:11	823153	220519		1.0	PERM	USE, uploaded both columns, reporting front column
054b5401.d	WPE081124-10AB	HXJ1	10-DEC-2008 04:22		120908b		1.0		(b) DDT low; (f) All okay
055b5501.d	WAR081112-99IB	HXJ1	10-DEC-2008 04:34		120908b		1.0		Clean

10H

Instrument Batch: /chem/ecd5a.i/120908b.b

10H16.6H

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056b5601.d	1201734317	HXJ1	10-DEC-2008 04:46	823083	09-353-1	1.0	MB	USE, uploaded both columns, reporting lower result
057b5701.d	1201734318	HXJ1	10-DEC-2008 04:58	823083	09-353-1	1.0	LCS	USE, uploaded both columns, reporting lower result
058b5801.d	1201734321	HXJ1	10-DEC-2008 05:10	823083	09-353-1	1.0	TLCS	USE, uploaded both columns, reporting lower result
059b5901.d	219908001	HXJ1	10-DEC-2008 05:21	823083	09-353-1	1.0	LANL	USE, uploaded both columns, reporting lower result
060b6001.d	1201734319	HXJ1	10-DEC-2008 05:33	823083	09-353-1	1.0	MS	USE, uploaded both columns, reporting lower result
061b6101.d	1201734320	NHXJ1	10-DEC-2008 05:45	823083	09-353-1	1.0	MSD	USE, uploaded both columns, reporting lower result
062b6201.d	219908002	HXJ1	10-DEC-2008 05:57	823083	09-353-1	1.0	LANL	USE, uploaded both columns, reporting lower result
063b6301.d	WPE081124-10AB	HXJ1	10-DEC-2008 06:09		120908b	1.0		(b) DDT low; (f) All okay
064b6401.d	WAR081112-99IB	HXJ1	10-DEC-2008 06:20		120908b	1.0		Clean
065b6501.d	PEST LCSOIL	HXJ1	10-DEC-2008 13:37		120908b	1.0		

066b6601.d	PEST LCS OIL2	HXJ1	10-DEC-2008 13:49		120908b	1.0	

GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD5

DATE: 12/22/2008 METHOD: ECD5-B-8081-121108.m OPERATOR:HXJ1 REVIEWED BY:_____

DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1

SOLVENT LOT CX947
MERCURY LOT C16S048

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-011 Analysis of Chlorophenyoxy Acids by ECD : 8151A
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak, and DNC-Do Not Call, NC-Not Confirmed, RT-Retention Time, BF-Before, AF-After.

Sequence Number: /chem/ecd5a.i/122208a.b

Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001b0101.d	WAR081112-99IB	HXJ1	22-DEC-2008 13:46		122208a	1.0		Clean
002b0201.d	WPE081206-01DG1	HXJ1	22-DEC-2008 13:58		122208a	1.0		(b) DDT 5.0%, Endrin 2.2%; (f) DDT 5.8%, Endrin 2.1%
003b0301.d	WPE081124-10AB	HXJ1	22-DEC-2008 14:10		122208a	1.0		DUSE
004b0401.d	WPE081211-52TX	HXJ1	22-DEC-2008 14:21		122208a	1.0		All okay
005b0501.d	WPE081002-01CHL	HXJ1	22-DEC-2008 14:33		122208a	1.0		All okay
006b0601.d	WPE081107-02GA	HXJ1	22-DEC-2008 14:45		122208a	1.0		(b) 2,4'-DDT elevated - NCR - no hits; (f) All okay
007b0701.d	WPE080829-60 60	HXJ1	22-DEC-2008 14:56		122208a	1.0		(b) All okay; (f) AR1016 okay, AR1260 passes on average
008b0801.d	WAR081119-54 54	HXJ1	22-DEC-2008 15:08		122208a	1.0		All okay
009b0901.d	WPE081124-10AB	HXJ1	22-DEC-2008 15:20		122208a	1.0		DUSE
010b1001.d	WAR081119-42 42	HXJ1	22-DEC-2008 15:32		122208a	1.0		USE - Pattern only
011b1101.d	WAR080811-48 48	HXJ1	22-DEC-2008 15:43		122208a	1.0		USE - Pattern only
012b1201.d	WAR081014-32 32	HXJ1	22-DEC-2008 15:55		122208a	1.0		USE - Pattern only
013b1301.d	WAR081120-21 21	HXJ1	22-DEC-2008 16:07		122208a	1.0		USE - Pattern only
014b1401.d	WPE081219-01AB	HXJ1	22-DEC-2008 16:18		122208a	1.0		INDAB ICAL level 1
015b1501.d	WPE081219-02AB	HXJ1	22-DEC-2008 16:30		122208a	1.0		INDAB ICAL level 2

Instrument Batch: /chem/ecd5a.i/122208a.b

Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016b1601.d	WPE081219-03AB	HXJ1	22-DEC-2008 16:42		122208a	1.0		INDAB ICAL level 3

017b1701.d	WPE081219-04AB	HXJ1	22-DEC-2008 16:53			122208a		1.0	INDAB ICAL level 4
018b1801.d	IPE081121-01AB	HXJ1	22-DEC-2008 17:05			122208a		1.0	INDAB ICAL level 5
019b1901.d	WPE081222-10AB	HXJ1	22-DEC-2008 17:17			122208a		1.0	All okay
020b2001.d	WAR081112-99IB	HXJ1	22-DEC-2008 17:29			122208a		1.0	Clean
021b2101.d	1201744143	HXJ1	22-DEC-2008 17:40	827455	221394			1.0	MB DUSE - MS/MSD not spiked - see re-extraction batch
022b2201.d	1201744144	HXJ1	22-DEC-2008 17:52	827455	221394			1.0	LCS DUSE - MS/MSD not spiked - see re-extraction batch
023b2301.d	221523001	HXJ1	22-DEC-2008 18:04	827455	221523			1.0	LAID DUSE - MS/MSD not spiked - see re-extraction batch
024b2401.d	1201744145	HXJ1	22-DEC-2008 18:15	827455	221523			1.0	MS DUSE - MS/MSD not spiked - see re-extraction batch
025b2501.d	1201744146	HXJ1	22-DEC-2008 18:27	827455	221523			1.0	MSD DUSE - MS/MSD not spiked - see re-extraction batch
026b2601.d	221523002	HXJ1	22-DEC-2008 18:39	827455	221523			1.0	LAID DUSE - MS/MSD not spiked - see re-extraction batch
027b2701.d	WAR081112-99IB	HXJ1	22-DEC-2008 18:50			122208a		1.0	Clean
028b2801.d	WPE081124-10AB	HXJ1	22-DEC-2008 19:02			122208a		1.0	(b) All okay; (f) DDT elevated
029b2901.d	WAR081112-99IB	HXJ1	22-DEC-2008 19:14			122208a		1.0	Clean
030b3001.d	221394020	HXJ1	22-DEC-2008 19:26	827455	221394			1.0	SSFL DUSE - MS/MSD not spiked - see re-extraction batch
031b3101.d	221597018	HXJ1	22-DEC-2008 19:37	827455	221597			1.0	SSFL DUSE - MS/MSD not spiked - see re-extraction batch
032b3201.d	WPE081124-10AB	HXJ1	22-DEC-2008 19:49			122208a		1.0	All okay
033b3301.d	WAR081112-99IB	HXJ1	22-DEC-2008 20:01			122208a		1.0	Clean
034b3401.d	1201742507	HXJ1	22-DEC-2008 20:12	826673	221145			1.0	MB
035b3501.d	1201742508	HXJ1	22-DEC-2008 20:24	826673	221145			1.0	LCS

Instrument Batch: /chem/ecd5a.i/122208a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036b3601.d	221145002	HXJ1	22-DEC-2008 20:36	826673	221145	1.0	BRKL	
037b3701.d	221145003	HXJ1	22-DEC-2008 20:47	826673	221145	1.0	BRKL	
038b3801.d	221145004	HXJ1	22-DEC-2008 20:59	826673	221145	1.0	BRKL	
039b3901.d	221145005	HXJ1	22-DEC-2008 21:11	826673	221145	1.0	BRKL	
040b4001.d	221145006	HXJ1	22-DEC-2008 21:23	826673	221145	1.0	BRKL	

041b4101.d	221145007	HXJ1	22-DEC-2008 21:34	826673	221145	1.0	BRKL	
042b4201.d	221145008	HXJ1	22-DEC-2008 21:46	826673	221145	1.0	BRKL	
043b4301.d	WPE081124-10AB	HXJ1	22-DEC-2008 21:58		122208a	1.0		(b) All okay; (f) DDT elevated
044b4401.d	WAR081112-99IB	HXJ1	22-DEC-2008 22:09		122208a	1.0		(b) All okay; (f) AR1016 okay, AR1260 passes on average
045b4501.d	WPE080829-60 60	HXJ1	22-DEC-2008 22:21		122208a	1.0		Clean
046b4601.d	221145009	HXJ1	22-DEC-2008 22:33	826673	221145	1.0	BRKL	
047b4701.d	1201742509	HXJ1	22-DEC-2008 22:45	826673	221145	1.0	MS	
048b4801.d	1201742510	HXJ1	22-DEC-2008 22:56	826673	221145	1.0	MSD	
049b4901.d	221145010	HXJ1	22-DEC-2008 23:08	826673	221145	1.0	BRKL	
050b5001.d	221145011	HXJ1	22-DEC-2008 23:20	826673	221145	1.0	BRKL	
051b5101.d	WPE081124-10AB	HXJ1	22-DEC-2008 23:31		122208a	1.0		(b) All okay; (f) DDT elevated
052b5201.d	WPE080829-60 60	HXJ1	22-DEC-2008 23:43		122208a	1.0		(b) All okay; (f) AR1016 okay, AR1260 passes on average
053b5301.d	WAR081112-99IB	HXJ1	22-DEC-2008 23:55		122208a	1.0		Clean
054b5401.d	WPE081206-01DG	HXJ1	23-DEC-2008 00:06		122208a	1.0		(b) DDT 5.5%, Endrin 3.2%; (f) DDT 7.8%, Endrin 3.4%
055b5501.d	1201743158	HXJ1	23-DEC-2008 00:18	826963	221329	1.0	MB	USE, uploaded both columns, reporting higher result

Instrument Batch: /chem/ecd5a.i/122208a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056b5601.d	1201743159	HXJ1	23-DEC-2008 00:30	826963	221329	1.0	LCS	USE, uploaded both columns, reporting higher result
057b5701.d	221329001	HXJ1	23-DEC-2008 00:42	826963	221329	1.0	WEIS	USE, uploaded both columns, reporting higher result
058b5801.d	221329002	HXJ1	23-DEC-2008 00:53	826963	221329	1.0	WEIS	USE, uploaded both columns, reporting higher result
059b5901.d	WPE081124-10AB	HXJ1	23-DEC-2008 01:05		122208a	1.0		(b) Methoxychlor elevated; (f) DDT, Methoxychlor elevated
060b6001.d	WAR081112-99IB	HXJ1	23-DEC-2008 01:17		122208a	1.0		Clean
061b6101.d	221366001	HXJ1	23-DEC-2008 01:28	826963	EUI-6078	10.0	CARE	USE, uploaded both columns, reporting higher result NCR - 4cmx elevated - no hits in samples
062b6201.d	WAR081112-99IB	HXJ1	23-DEC-2008 01:40		122208a	1.0		Clean
063b6301.d	WPE081124-10AB	HXJ1	23-DEC-2008 01:52		122208a	1.0		(b) All okay; (f) DDT, Methoxychlor elevated
064b6401.d	WAR081112-99IB	HXJ1	23-DEC-2008 02:03		122208a	1.0		Clean

065b6501.d	221391001	HXJ1	23-DEC-2008 02:15	826963	221391	1.0	WASP	USE, uploaded both columns, reporting higher result
066b6601.d	1201743160	HXJ1	23-DEC-2008 02:27	826963	221391	1.0	MS	USE, uploaded both columns, reporting higher result NCR - spikes low - matrix interference
067b6701.d	1201743161	HXJ1	23-DEC-2008 02:38	826963	221391	1.0	MSD	USE, uploaded both columns, reporting higher result NCR - spikes low - RPD fails - matrix interference
068b6801.d	221391002	HXJ1	23-DEC-2008 02:50	826963	221391	1.0	WASP	USE, uploaded both columns, reporting higher result
069b6901.d	221391003	HXJ1	23-DEC-2008 03:02	826963	221391	1.0	WASP	USE, uploaded both columns, reporting higher result
070b7001.d	221391004	HXJ1	23-DEC-2008 03:13	826963	221391	1.0	WASP	USE, uploaded both columns, reporting higher result
071b7101.d	221391005	HXJ1	23-DEC-2008 03:25	826963	221391	1.0	WASP	USE, uploaded both columns, reporting higher result
072b7201.d	221391006	HXJ1	23-DEC-2008 03:37	826963	221391	1.0	WASP	USE, uploaded both columns, reporting higher result NCR - DCB low - confirmed in re-extraction 829198 seq. 122908a.b
073b7301.d	221391007	HXJ1	23-DEC-2008 03:49	826963	221391	1.0	WASP	USE, uploaded both columns, reporting higher result
074b7401.d	WPE081124-10AB	HXJ1	23-DEC-2008 04:00		122208a	1.0		(b) Methoxychlor elevated; (f) DDT, Methoxychlor elevated
075b7501.d	WAR081112-99IB	HXJ1	23-DEC-2008 04:12		122208a	1.0		Clean

Instrument Batch: /chem/ecd5a.i/122208a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076b7601.d	1201744138	HXJ1	23-DEC-2008 04:24	827452	09-533	1.0	MB	USE, uploaded both columns, reporting lower result NCR - MB contaminated - no hits in samples
077b7701.d	1201744139	HXJ1	23-DEC-2008 04:35	827452	09-533	1.0	LCS	USE, uploaded both columns, reporting lower result NCR - spikes elevated - no hits in samples
078b7801.d	1201744142	HXJ1	23-DEC-2008 04:47	827452	09-533	1.0	TLCS	USE, uploaded both columns, reporting lower result
079b7901.d	1201745256	HXJ1	23-DEC-2008 04:59	827452	09-533	1.0	LCSD	USE, uploaded both columns, reporting lower result
080b8001.d	221442006	HXJ1	23-DEC-2008 05:11	827452	09-533	1.0	LANL	USE, uploaded both columns, reporting lower result
081b8101.d	1201744140	HXJ1	23-DEC-2008 05:22	827452	09-533	1.0	MS	USE, uploaded both columns, reporting lower result
082b8201.d	WPE081124-10AB	HXJ1	23-DEC-2008 05:34		122208a	1.0		(b) All okay; (f) DDT elevated
083b8301.d	WAR081112-99IB	HXJ1	23-DEC-2008 05:46		122208a	1.0		Clean

Instrument Batch: /chem/ecd5a.i/122208a.b

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Groundwater, Wastewater and Other Aqueous Samples

Batch ID: 826961
Analyst: Sophia Cox
Method: SW846 3510C

Verified by: _____

Lab SOP: GL-OA-E-013 REV# 19
Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Initial Volume (mL)	Initial pH	Int Ext pH	Final Volume (mL)	Prepped Factor (mL/mL)
1201743158 MB	19-DEC-2008 14:26:57	1000	5	6	5	0.005
1201743159 LCS	19-DEC-2008 14:26:57	1000	5	6	5	0.005
221329001	19-DEC-2008 14:26:57	1040	5	6	5	0.00481
221329002	19-DEC-2008 14:26:57	1060	5	6	5	0.00472
221366001	19-DEC-2008 14:26:57	100	1	6	5	0.05
221391001	19-DEC-2008 14:26:57	1000	6	6	5	0.005
1201743160 MS (221391001)	19-DEC-2008 14:26:57	500	6	6	2.5	0.005
1201743161 MSD (221391001)	19-DEC-2008 14:26:57	500	6	6	2.5	0.005
221391002	19-DEC-2008 14:26:57	1060	6	6	5	0.00472
221391003	19-DEC-2008 14:26:57	1060	6	6	5	0.00472
221391004	19-DEC-2008 14:26:57	1060	6	6	5	0.00472
221391005	19-DEC-2008 14:26:57	1060	11	6	5	0.00472
221391006	19-DEC-2008 14:26:57	1060	6	6	5	0.00472
221391007	19-DEC-2008 14:26:57	1060	6	6	5	0.00472

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201743159	PESTSPIKE	WE081028-01.1	1	mL
MS	1201743160	PESTSPIKE	WE081028-01.1	.5	mL
MSD	1201743161	PESTSPIKE	WE081028-01.1	.5	mL
SURR	All	PEST SURROGATE 1000 UG/L	UE081124-05	.5	mL
SURR	All	PEST SURROGATE 1000 UG/L	UE081124-05	1	mL
REGNT	All	Hexane	1056120-B2	5	mL
REGNT	All	Methylene Chloride	1061014-D	180	mL
SOURC	All	SODIUM SULFATE	1059802	30	g

Comments:

Final Solvent: Hexane
Verified By: SJW

Metals Analysis

Case Narrative

Metals Fractional Narrative
Weiss Associates (WEIS)
SDG 221329

Sample Analysis

Sample ID	Client ID
221329001	RWSW0049
221329002	RWSW0048
1201742786	Method Blank (MB) **ICP-MS**
1201742787	Laboratory Control Sample (LCS)
1201742790	221329001(RWSW0049L) Serial Dilution (SD)
1201742788	221329001(RWSW0049D) Sample Duplicate (DUP)
1201742789	221329001(RWSW0049S) Matrix Spike (MS)

The samples in this SDG were analyzed on an "as received" basis.

Method/Analysis Information

Analytical Batch:	826788
Prep Batch :	826787
Standard Operating Procedures:	GL-MA-E-014 REV# 16 and GL-MA-E-006 REV# 9
Analytical Method:	SW846 3005/6020
Prep Method :	SW846 3005A

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass

spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits.

ICSA/ICSAB Statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Sample Statement
The following sample was selected as the quality control (QC) sample for this SDG: 221329001 (RWSW0049).

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. All applicable elements met the acceptance criteria.

Duplicate Relative Percent Difference (RPD) Statement
The RPD obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL for CVAA, 50X the IDL for ICP, and 100X the IDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The sample 221329001 required dilution in order to bring over range zinc concentrations within the linear calibration range of the instrument.

Preparation Information
The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Nonconformance Documentation
Nonconformance reports (NCRs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Nik-Cole A Elmore Date: 1.13.09

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 221329

METHOD TYPE: SW846

SAMPLE ID: 221329001

CLIENT ID: RWSW0049

CONTRACT: WEIS00405

MATRIX: W

DATE RECEIVED 16-DEC-08

LEVEL: Low

%SOLIDS:

CAS No	Analyte	Result	Units	C	Qual	M	MDL	DF	Instrument ID	Analytical Run
7440-36-0	Antimony	0.0061	mg/L			MS	0.0005	1	ICPMS5	090108-1
7440-38-2	Arsenic	0.0021	mg/L	B		MS	0.0015	1	ICPMS5	090108-1
7440-39-3	Barium	0.023	mg/L			MS	0.0005	1	ICPMS5	090108-1
7440-41-7	Beryllium	0.0001	mg/L	U		MS	0.0001	1	ICPMS5	090108-1
7440-43-9	Cadmium	0.00021	mg/L	B		MS	0.00011	1	ICPMS5	090108-1
7440-47-3	Chromium	0.0073	mg/L			MS	0.0015	1	ICPMS5	090108-1
7440-48-4	Cobalt	0.0013	mg/L			MS	0.0001	1	ICPMS5	090108-1
7440-50-8	Copper	0.0082	mg/L			MS	0.0003	1	ICPMS5	090108-1
7439-89-6	Iron	1.7	mg/L			MS	0.01	1	ICPMS5	090108-1
7439-92-1	Lead	0.0043	mg/L			MS	0.0005	1	ICPMS5	090108-1
7439-96-5	Manganese	0.040	mg/L			MS	0.001	1	ICPMS5	090108-1
7439-98-7	Molybdenum	0.00041	mg/L	B		MS	0.0001	1	ICPMS5	090109-2
7440-02-0	Nickel	0.0096	mg/L			MS	0.0005	1	ICPMS5	090108-1
7782-49-2	Selenium	0.001	mg/L	U		MS	0.001	1	ICPMS5	090108-1
7440-22-4	Silver	0.0002	mg/L	U		MS	0.0002	1	ICPMS5	090108-1
7440-28-0	Thallium	0.00046	mg/L	B		MS	0.0003	1	ICPMS5	090108-1
7440-62-2	Vanadium	0.0055	mg/L	B		MS	0.003	1	ICPMS5	090108-1
7440-66-6	Zinc	0.120	mg/L			MS	0.013	5	ICPMS5	090109-2

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 221329

METHOD TYPE: SW846

SAMPLE ID: 221329002

CLIENT ID: RWSW0048

CONTRACT: WEIS00405

MATRIX: W

DATE RECEIVED 16-DEC-08

LEVEL: Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	DF	Instrument ID	Analytical Run
7440-36-0	Antimony	0.0046	mg/L			MS	0.0005	1	ICPMS5	090108-1
7440-38-2	Arsenic	0.0015	mg/L	U		MS	0.0015	1	ICPMS5	090108-1
7440-39-3	Barium	0.016	mg/L			MS	0.0005	1	ICPMS5	090108-1
7440-41-7	Beryllium	0.0001	mg/L	U		MS	0.0001	1	ICPMS5	090108-1
7440-43-9	Cadmium	0.00012	mg/L	B		MS	0.00011	1	ICPMS5	090108-1
7440-47-3	Chromium	0.0043	mg/L			MS	0.0015	1	ICPMS5	090108-1
7440-48-4	Cobalt	0.00072	mg/L	B		MS	0.0001	1	ICPMS5	090108-1
7440-50-8	Copper	0.0054	mg/L			MS	0.0003	1	ICPMS5	090108-1
7439-89-6	Iron	0.760	mg/L			MS	0.01	1	ICPMS5	090108-1
7439-92-1	Lead	0.0022	mg/L			MS	0.0005	1	ICPMS5	090108-1
7439-96-5	Manganese	0.025	mg/L			MS	0.001	1	ICPMS5	090108-1
7439-98-7	Molybdenum	0.00029	mg/L	B		MS	0.0001	1	ICPMS5	090109-2
7440-02-0	Nickel	0.0053	mg/L			MS	0.0005	1	ICPMS5	090108-1
7782-49-2	Selenium	0.001	mg/L	U		MS	0.001	1	ICPMS5	090108-1
7440-22-4	Silver	0.0002	mg/L	U		MS	0.0002	1	ICPMS5	090108-1
7440-28-0	Thallium	0.0003	mg/L	U		MS	0.0003	1	ICPMS5	090108-1
7440-62-2	Vanadium	0.0035	mg/L	B		MS	0.003	1	ICPMS5	090108-1
7440-66-6	Zinc	0.084	mg/L			MS	0.0026	1	ICPMS5	090109-2

Quality Control Summary

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 221329

Contract: WEIS00405 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Antimony	49.5	ug/L	50	ug/L	99	90.0 – 110.0	MS	08–JAN–09 20:46	090108–1
	Arsenic	48.3	ug/L	50	ug/L	96.5	90.0 – 110.0	MS	08–JAN–09 20:46	090108–1
	Barium	50.7	ug/L	50	ug/L	101.4	90.0 – 110.0	MS	08–JAN–09 20:46	090108–1
	Beryllium	51.8	ug/L	50	ug/L	103.5	90.0 – 110.0	MS	08–JAN–09 20:46	090108–1
	Cadmium	50.7	ug/L	50	ug/L	101.3	90.0 – 110.0	MS	08–JAN–09 20:46	090108–1
	Chromium	50.4	ug/L	50	ug/L	100.8	90.0 – 110.0	MS	08–JAN–09 20:46	090108–1
	Cobalt	50.6	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	08–JAN–09 20:46	090108–1
	Copper	52.2	ug/L	50	ug/L	104.4	90.0 – 110.0	MS	08–JAN–09 20:46	090108–1
	Iron	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	MS	08–JAN–09 20:46	090108–1
	Lead	51.8	ug/L	50	ug/L	103.6	90.0 – 110.0	MS	08–JAN–09 20:46	090108–1
	Manganese	51.2	ug/L	50	ug/L	102.4	90.0 – 110.0	MS	08–JAN–09 20:46	090108–1
	Nickel	49.6	ug/L	50	ug/L	99.3	90.0 – 110.0	MS	08–JAN–09 20:46	090108–1
	Selenium	51.4	ug/L	50	ug/L	102.9	90.0 – 110.0	MS	08–JAN–09 20:46	090108–1
	Silver	51.1	ug/L	50	ug/L	102.2	90.0 – 110.0	MS	08–JAN–09 20:46	090108–1
	Thallium	49.3	ug/L	50	ug/L	98.7	90.0 – 110.0	MS	08–JAN–09 20:46	090108–1
	Vanadium	51.3	ug/L	50	ug/L	102.6	90.0 – 110.0	MS	08–JAN–09 20:46	090108–1
	Molybdenum	48.2	ug/L	50	ug/L	96.4	90.0 – 110.0	MS	09–JAN–09 20:27	090109–2
	Zinc	50.3	ug/L	50	ug/L	100.7	90.0 – 110.0	MS	09–JAN–09 20:27	090109–2
CCV01										
	Antimony	48.6	ug/L	50	ug/L	97.2	90.0 – 110.0	MS	08–JAN–09 21:16	090108–1
	Arsenic	48.7	ug/L	50	ug/L	97.4	90.0 – 110.0	MS	08–JAN–09 21:16	090108–1
	Barium	49.2	ug/L	50	ug/L	98.3	90.0 – 110.0	MS	08–JAN–09 21:16	090108–1
	Beryllium	54.2	ug/L	50	ug/L	108.4	90.0 – 110.0	MS	08–JAN–09 21:16	090108–1
	Cadmium	51.3	ug/L	50	ug/L	102.6	90.0 – 110.0	MS	08–JAN–09 21:16	090108–1
	Chromium	50.1	ug/L	50	ug/L	100.2	90.0 – 110.0	MS	08–JAN–09 21:16	090108–1
	Cobalt	49.9	ug/L	50	ug/L	99.7	90.0 – 110.0	MS	08–JAN–09 21:16	090108–1
	Copper	51.2	ug/L	50	ug/L	102.4	90.0 – 110.0	MS	08–JAN–09 21:16	090108–1
	Iron	5000	ug/L	5000	ug/L	99.9	90.0 – 110.0	MS	08–JAN–09 21:16	090108–1
	Lead	50.6	ug/L	50	ug/L	101.3	90.0 – 110.0	MS	08–JAN–09 21:16	090108–1
	Manganese	50.7	ug/L	50	ug/L	101.3	90.0 – 110.0	MS	08–JAN–09 21:16	090108–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 221329

Contract: WEIS00405 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Nickel	48.5	ug/L	50	ug/L	96.9	90.0 – 110.0	MS	08–JAN–09 21:16	090108–1
	Selenium	51.9	ug/L	50	ug/L	103.8	90.0 – 110.0	MS	08–JAN–09 21:16	090108–1
	Silver	51.2	ug/L	50	ug/L	102.3	90.0 – 110.0	MS	08–JAN–09 21:16	090108–1
	Thallium	48.1	ug/L	50	ug/L	96.1	90.0 – 110.0	MS	08–JAN–09 21:16	090108–1
	Vanadium	50.1	ug/L	50	ug/L	100.2	90.0 – 110.0	MS	08–JAN–09 21:16	090108–1
	Molybdenum	49.3	ug/L	50	ug/L	98.6	90.0 – 110.0	MS	09–JAN–09 20:55	090109–2
	Zinc	50	ug/L	50	ug/L	100	90.0 – 110.0	MS	09–JAN–09 20:55	090109–2
CCV02										
	Antimony	50.4	ug/L	50	ug/L	100.8	90.0 – 110.0	MS	08–JAN–09 21:35	090108–1
	Arsenic	49.8	ug/L	50	ug/L	99.5	90.0 – 110.0	MS	08–JAN–09 21:35	090108–1
	Barium	49.1	ug/L	50	ug/L	98.1	90.0 – 110.0	MS	08–JAN–09 21:35	090108–1
	Beryllium	51.3	ug/L	50	ug/L	102.6	90.0 – 110.0	MS	08–JAN–09 21:35	090108–1
	Cadmium	51	ug/L	50	ug/L	102	90.0 – 110.0	MS	08–JAN–09 21:35	090108–1
	Chromium	48.7	ug/L	50	ug/L	97.3	90.0 – 110.0	MS	08–JAN–09 21:35	090108–1
	Cobalt	48.6	ug/L	50	ug/L	97.2	90.0 – 110.0	MS	08–JAN–09 21:35	090108–1
	Copper	49.4	ug/L	50	ug/L	98.9	90.0 – 110.0	MS	08–JAN–09 21:35	090108–1
	Iron	4890	ug/L	5000	ug/L	97.8	90.0 – 110.0	MS	08–JAN–09 21:35	090108–1
	Lead	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	08–JAN–09 21:35	090108–1
	Manganese	49.1	ug/L	50	ug/L	98.3	90.0 – 110.0	MS	08–JAN–09 21:35	090108–1
	Nickel	47.4	ug/L	50	ug/L	94.9	90.0 – 110.0	MS	08–JAN–09 21:35	090108–1
	Selenium	50.1	ug/L	50	ug/L	100.1	90.0 – 110.0	MS	08–JAN–09 21:35	090108–1
	Silver	51.2	ug/L	50	ug/L	102.4	90.0 – 110.0	MS	08–JAN–09 21:35	090108–1
	Thallium	49.4	ug/L	50	ug/L	98.7	90.0 – 110.0	MS	08–JAN–09 21:35	090108–1
	Vanadium	48.9	ug/L	50	ug/L	97.9	90.0 – 110.0	MS	08–JAN–09 21:35	090108–1
	Molybdenum	48.9	ug/L	50	ug/L	97.8	90.0 – 110.0	MS	09–JAN–09 21:39	090109–2
	Zinc	49.7	ug/L	50	ug/L	99.5	90.0 – 110.0	MS	09–JAN–09 21:39	090109–2
CCV03										
	Antimony	50.3	ug/L	50	ug/L	100.6	90.0 – 110.0	MS	08–JAN–09 22:30	090108–1
	Arsenic	49.3	ug/L	50	ug/L	98.5	90.0 – 110.0	MS	08–JAN–09 22:30	090108–1
	Barium	50	ug/L	50	ug/L	99.9	90.0 – 110.0	MS	08–JAN–09 22:30	090108–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 221329

Contract: WEIS00405 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Beryllium	53	ug/L	50	ug/L	106.1	90.0 – 110.0	MS	08-JAN-09 22:30	090108-1
	Cadmium	51.6	ug/L	50	ug/L	103.1	90.0 – 110.0	MS	08-JAN-09 22:30	090108-1
	Chromium	49.8	ug/L	50	ug/L	99.7	90.0 – 110.0	MS	08-JAN-09 22:30	090108-1
	Cobalt	49.8	ug/L	50	ug/L	99.5	90.0 – 110.0	MS	08-JAN-09 22:30	090108-1
	Copper	50.5	ug/L	50	ug/L	100.9	90.0 – 110.0	MS	08-JAN-09 22:30	090108-1
	Iron	4950	ug/L	5000	ug/L	99.1	90.0 – 110.0	MS	08-JAN-09 22:30	090108-1
	Lead	51.3	ug/L	50	ug/L	102.6	90.0 – 110.0	MS	08-JAN-09 22:30	090108-1
	Manganese	50.5	ug/L	50	ug/L	101	90.0 – 110.0	MS	08-JAN-09 22:30	090108-1
	Nickel	48.5	ug/L	50	ug/L	96.9	90.0 – 110.0	MS	08-JAN-09 22:30	090108-1
	Selenium	51.8	ug/L	50	ug/L	103.5	90.0 – 110.0	MS	08-JAN-09 22:30	090108-1
	Silver	51.6	ug/L	50	ug/L	103.3	90.0 – 110.0	MS	08-JAN-09 22:30	090108-1
	Thallium	49.8	ug/L	50	ug/L	99.6	90.0 – 110.0	MS	08-JAN-09 22:30	090108-1
	Vanadium	49.5	ug/L	50	ug/L	98.9	90.0 – 110.0	MS	08-JAN-09 22:30	090108-1
	Molybdenum	49.2	ug/L	50	ug/L	98.4	90.0 – 110.0	MS	09-JAN-09 22:17	090109-2
	Zinc	50.6	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	09-JAN-09 22:17	090109-2

METALS
–2b–
CRDL Standard for AA & ICP

SDG No: 221329

Contract: WEIS00405 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Antimony	1.77	ug/L	2	ug/L	88.65	70.0 – 130.0	MS	08–JAN–09 20:58	090108–1
	Arsenic	4.94	ug/L	5	ug/L	98.82	70.0 – 130.0	MS	08–JAN–09 20:58	090108–1
	Barium	2.06	ug/L	2	ug/L	103.05	70.0 – 130.0	MS	08–JAN–09 20:58	090108–1
	Beryllium	.524	ug/L	.5	ug/L	104.8	70.0 – 130.0	MS	08–JAN–09 20:58	090108–1
	Cadmium	1.13	ug/L	1	ug/L	113.4	70.0 – 130.0	MS	08–JAN–09 20:58	090108–1
	Chromium	2.88	ug/L	3	ug/L	95.87	70.0 – 130.0	MS	08–JAN–09 20:58	090108–1
	Cobalt	1.1	ug/L	1	ug/L	110.1	70.0 – 130.0	MS	08–JAN–09 20:58	090108–1
	Copper	1.12	ug/L	1	ug/L	112	70.0 – 130.0	MS	08–JAN–09 20:58	090108–1
	Iron	19.4	ug/L	25	ug/L	77.74	70.0 – 130.0	MS	08–JAN–09 20:58	090108–1
	Lead	2.19	ug/L	2	ug/L	109.6	70.0 – 130.0	MS	08–JAN–09 20:58	090108–1
	Manganese	5.15	ug/L	5	ug/L	103	70.0 – 130.0	MS	08–JAN–09 20:58	090108–1
	Nickel	2.16	ug/L	2	ug/L	107.9	70.0 – 130.0	MS	08–JAN–09 20:58	090108–1
	Selenium	4.63	ug/L	5	ug/L	92.52	70.0 – 130.0	MS	08–JAN–09 20:58	090108–1
	Silver	1.06	ug/L	1	ug/L	105.5	70.0 – 130.0	MS	08–JAN–09 20:58	090108–1
	Thallium	1.08	ug/L	1	ug/L	107.7	70.0 – 130.0	MS	08–JAN–09 20:58	090108–1
	Vanadium	9.82	ug/L	10	ug/L	98.24	70.0 – 130.0	MS	08–JAN–09 20:58	090108–1
	Molybdenum	.519	ug/L	.5	ug/L	103.8	70.0 – 130.0	MS	09–JAN–09 20:38	090109–2
	Zinc	10.7	ug/L	10	ug/L	107.11	70.0 – 130.0	MS	09–JAN–09 20:38	090109–2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 221329

Contract: WEIS00405

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Antimony	0.699	+/–2	B	0.5	2.0	LIQ	MS	08–JAN–09 20:52	090108–1
	Arsenic	1.5	+/–5	U	1.5	5.0	LIQ	MS	08–JAN–09 20:52	090108–1
	Barium	0.5	+/–2	U	0.5	2.0	LIQ	MS	08–JAN–09 20:52	090108–1
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	08–JAN–09 20:52	090108–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	08–JAN–09 20:52	090108–1
	Chromium	1.5	+/–3	U	1.5	3.0	LIQ	MS	08–JAN–09 20:52	090108–1
	Cobalt	0.1	+/–1	U	0.1	1.0	LIQ	MS	08–JAN–09 20:52	090108–1
	Copper	0.3	+/–1	U	0.3	1.0	LIQ	MS	08–JAN–09 20:52	090108–1
	Iron	10.0	+/–25	U	10.0	25.0	LIQ	MS	08–JAN–09 20:52	090108–1
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	08–JAN–09 20:52	090108–1
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	08–JAN–09 20:52	090108–1
	Nickel	0.5	+/–2	U	0.5	2.0	LIQ	MS	08–JAN–09 20:52	090108–1
	Selenium	1.0	+/–5	U	1.0	5.0	LIQ	MS	08–JAN–09 20:52	090108–1
	Silver	0.2	+/–1	U	0.2	1.0	LIQ	MS	08–JAN–09 20:52	090108–1
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	08–JAN–09 20:52	090108–1
	Vanadium	3.0	+/–10	U	3.0	10.0	LIQ	MS	08–JAN–09 20:52	090108–1
	Molybdenum	0.1	+/–.5	U	0.1	0.5	LIQ	MS	09–JAN–09 20:33	090109–2
	Zinc	2.6	+/–10	U	2.6	10.0	LIQ	MS	09–JAN–09 20:33	090109–2
CCB01										
	Antimony	0.5	+/–2	U	0.5	2.0	LIQ	MS	08–JAN–09 21:22	090108–1
	Arsenic	1.5	+/–5	U	1.5	5.0	LIQ	MS	08–JAN–09 21:22	090108–1
	Barium	0.5	+/–2	U	0.5	2.0	LIQ	MS	08–JAN–09 21:22	090108–1
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	08–JAN–09 21:22	090108–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	08–JAN–09 21:22	090108–1
	Chromium	1.5	+/–3	U	1.5	3.0	LIQ	MS	08–JAN–09 21:22	090108–1
	Cobalt	0.1	+/–1	U	0.1	1.0	LIQ	MS	08–JAN–09 21:22	090108–1
	Copper	0.3	+/–1	U	0.3	1.0	LIQ	MS	08–JAN–09 21:22	090108–1
	Iron	10.0	+/–25	U	10.0	25.0	LIQ	MS	08–JAN–09 21:22	090108–1
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	08–JAN–09 21:22	090108–1
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	08–JAN–09 21:22	090108–1
	Nickel	0.5	+/–2	U	0.5	2.0	LIQ	MS	08–JAN–09 21:22	090108–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 221329

Contract: WEIS00405

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Selenium	1.0	+/–5	U	1.0	5.0	LIQ	MS	08–JAN–09 21:22	090108–1
	Silver	0.2	+/–1	U	0.2	1.0	LIQ	MS	08–JAN–09 21:22	090108–1
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	08–JAN–09 21:22	090108–1
	Vanadium	3.0	+/–10	U	3.0	10.0	LIQ	MS	08–JAN–09 21:22	090108–1
	Molybdenum	0.264	+/–.5	B	0.1	0.5	LIQ	MS	09–JAN–09 21:00	090109–2
	Zinc	2.6	+/–10	U	2.6	10.0	LIQ	MS	09–JAN–09 21:00	090109–2
CCB02										
	Antimony	1.73	+/–2	B	0.5	2.0	LIQ	MS	08–JAN–09 21:41	090108–1
	Arsenic	1.5	+/–5	U	1.5	5.0	LIQ	MS	08–JAN–09 21:41	090108–1
	Barium	0.5	+/–2	U	0.5	2.0	LIQ	MS	08–JAN–09 21:41	090108–1
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	08–JAN–09 21:41	090108–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	08–JAN–09 21:41	090108–1
	Chromium	1.5	+/–3	U	1.5	3.0	LIQ	MS	08–JAN–09 21:41	090108–1
	Cobalt	0.103	+/–1	B	0.1	1.0	LIQ	MS	08–JAN–09 21:41	090108–1
	Copper	0.3	+/–1	U	0.3	1.0	LIQ	MS	08–JAN–09 21:41	090108–1
	Iron	10.0	+/–25	U	10.0	25.0	LIQ	MS	08–JAN–09 21:41	090108–1
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	08–JAN–09 21:41	090108–1
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	08–JAN–09 21:41	090108–1
	Nickel	0.5	+/–2	U	0.5	2.0	LIQ	MS	08–JAN–09 21:41	090108–1
	Selenium	1.0	+/–5	U	1.0	5.0	LIQ	MS	08–JAN–09 21:41	090108–1
	Silver	0.2	+/–1	U	0.2	1.0	LIQ	MS	08–JAN–09 21:41	090108–1
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	08–JAN–09 21:41	090108–1
	Vanadium	3.0	+/–10	U	3.0	10.0	LIQ	MS	08–JAN–09 21:41	090108–1
	Molybdenum	0.1	+/–.5	U	0.1	0.5	LIQ	MS	09–JAN–09 21:44	090109–2
	Zinc	2.6	+/–10	U	2.6	10.0	LIQ	MS	09–JAN–09 21:44	090109–2
CCB03										
	Antimony	0.5	+/–2	U	0.5	2.0	LIQ	MS	08–JAN–09 22:36	090108–1
	Arsenic	1.5	+/–5	U	1.5	5.0	LIQ	MS	08–JAN–09 22:36	090108–1
	Barium	0.5	+/–2	U	0.5	2.0	LIQ	MS	08–JAN–09 22:36	090108–1
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	08–JAN–09 22:36	090108–1
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	08–JAN–09 22:36	090108–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 221329

Contract: WEIS00405

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Chromium	1.5	+/–3	U	1.5	3.0	LIQ	MS	08–JAN–09 22:36	090108–1
	Cobalt	0.1	+/–1	U	0.1	1.0	LIQ	MS	08–JAN–09 22:36	090108–1
	Copper	0.3	+/–1	U	0.3	1.0	LIQ	MS	08–JAN–09 22:36	090108–1
	Iron	10.0	+/–25	U	10.0	25.0	LIQ	MS	08–JAN–09 22:36	090108–1
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	08–JAN–09 22:36	090108–1
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	08–JAN–09 22:36	090108–1
	Nickel	0.5	+/–2	U	0.5	2.0	LIQ	MS	08–JAN–09 22:36	090108–1
	Selenium	1.0	+/–5	U	1.0	5.0	LIQ	MS	08–JAN–09 22:36	090108–1
	Silver	0.2	+/–1	U	0.2	1.0	LIQ	MS	08–JAN–09 22:36	090108–1
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	08–JAN–09 22:36	090108–1
	Vanadium	3.0	+/–10	U	3.0	10.0	LIQ	MS	08–JAN–09 22:36	090108–1
	Molybdenum	0.1	+/–.5	U	0.1	0.5	LIQ	MS	09–JAN–09 22:23	090109–2
	Zinc	2.6	+/–10	U	2.6	10.0	LIQ	MS	09–JAN–09 22:23	090109–2

METALS
-3b-
PREPARATION BLANK SUMMARY

SDG NO. 221329

Contract: WEIS00405

Matrix: WATER

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1201742786								
	Antimony	0.00105	mg/L	+/-0.002	B	MS	0.0005	0.002
	Arsenic	0.00163	mg/L	+/-0.005	B	MS	0.0015	0.005
	Barium	0.0005	mg/L	+/-0.002	U	MS	0.0005	0.002
	Beryllium	0.0001	mg/L	+/-0.0005	U	MS	0.0001	0.0005
	Cadmium	0.00011	mg/L	+/-0.001	U	MS	0.00011	0.001
	Chromium	0.0015	mg/L	+/-0.003	U	MS	0.0015	0.003
	Cobalt	0.0001	mg/L	+/-0.001	U	MS	0.0001	0.001
	Copper	0.0003	mg/L	+/-0.001	U	MS	0.0003	0.001
	Iron	0.01	mg/L	+/-0.025	U	MS	0.01	0.025
	Lead	0.0005	mg/L	+/-0.002	U	MS	0.0005	0.002
	Manganese	0.001	mg/L	+/-0.005	U	MS	0.001	0.005
	Molybdenum	0.0002	mg/L	+/-0.0005	B	MS	0.0001	0.0005
	Nickel	0.0005	mg/L	+/-0.002	U	MS	0.0005	0.002
	Selenium	0.001	mg/L	+/-0.005	U	MS	0.001	0.005
	Silver	0.0002	mg/L	+/-0.001	U	MS	0.0002	0.001
	Thallium	0.0003	mg/L	+/-0.001	U	MS	0.0003	0.001
	Vanadium	0.003	mg/L	+/-0.01	U	MS	0.003	0.01
	Zinc	0.0026	mg/L	+/-0.01	U	MS	0.0026	0.01

METALS
-4-
Interference Check Sample

SDG No: 221329

Contract: WEIS00405 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Antimony	-0.087	ug/L					08-JAN-09 21:04	090108-1
	Arsenic	-0.015	ug/L					08-JAN-09 21:04	090108-1
	Barium	0.581	ug/L					08-JAN-09 21:04	090108-1
	Beryllium	-0.014	ug/L					08-JAN-09 21:04	090108-1
	Cadmium	0.51	ug/L					08-JAN-09 21:04	090108-1
	Chromium	1.55	ug/L					08-JAN-09 21:04	090108-1
	Cobalt	0.321	ug/L					08-JAN-09 21:04	090108-1
	Copper	3.31	ug/L					08-JAN-09 21:04	090108-1
	Iron	90000	ug/L	100000	ug/L	90	80.0 - 120.0	08-JAN-09 21:04	090108-1
	Lead	0.524	ug/L					08-JAN-09 21:04	090108-1
	Manganese	2.41	ug/L					08-JAN-09 21:04	090108-1
	Nickel	2.27	ug/L					08-JAN-09 21:04	090108-1
	Selenium	-2.62	ug/L					08-JAN-09 21:04	090108-1
	Silver	0.143	ug/L					08-JAN-09 21:04	090108-1
	Thallium	0.013	ug/L					08-JAN-09 21:04	090108-1
	Vanadium	0.211	ug/L					08-JAN-09 21:04	090108-1
ICSAB01									
	Antimony	20.8	ug/L	20.2	ug/L	103	80.0 - 120.0	08-JAN-09 21:10	090108-1
	Arsenic	21.1	ug/L	20	ug/L	105	80.0 - 120.0	08-JAN-09 21:10	090108-1
	Barium	20.3	ug/L	20.7	ug/L	98.1	80.0 - 120.0	08-JAN-09 21:10	090108-1
	Beryllium	21.0	ug/L	20	ug/L	105	80.0 - 120.0	08-JAN-09 21:10	090108-1
	Cadmium	20.7	ug/L	20.3	ug/L	102	80.0 - 120.0	08-JAN-09 21:10	090108-1
	Chromium	21.4	ug/L	23.1	ug/L	92.6	80.0 - 120.0	08-JAN-09 21:10	090108-1
	Cobalt	20.0	ug/L	20.3	ug/L	98.4	80.0 - 120.0	08-JAN-09 21:10	090108-1
	Copper	21.3	ug/L	23	ug/L	92.5	80.0 - 120.0	08-JAN-09 21:10	090108-1
	Iron	88400	ug/L	100000	ug/L	88.4	80.0 - 120.0	08-JAN-09 21:10	090108-1
	Lead	20.7	ug/L	20.5	ug/L	101	80.0 - 120.0	08-JAN-09 21:10	090108-1
	Manganese	22.4	ug/L	22.6	ug/L	99.2	80.0 - 120.0	08-JAN-09 21:10	090108-1
	Nickel	20.4	ug/L	22.1	ug/L	92.2	80.0 - 120.0	08-JAN-09 21:10	090108-1

METALS
-4-
Interference Check Sample

SDG No: 221329

Contract: WEIS00405

Lab Code: GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Selenium	20.6	ug/L	20	ug/L	103	80.0 – 120.0	08-JAN-09 21:10	090108-1
	Silver	19.8	ug/L	20	ug/L	98.8	80.0 – 120.0	08-JAN-09 21:10	090108-1
	Thallium	19.1	ug/L	20	ug/L	95.7	80.0 – 120.0	08-JAN-09 21:10	090108-1
	Vanadium	20.5	ug/L	20	ug/L	103	80.0 – 120.0	08-JAN-09 21:10	090108-1

METALS
–4–
Interference Check Sample

SDG No: 221329

Contract: WEIS00405 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Molybdenum	2060	ug/L	2000	ug/L	103	80.0 – 120.0	09–JAN–09 20:44	090109–2
	Zinc	6.85	ug/L					09–JAN–09 20:44	090109–2
ICSAB01									
	Molybdenum	2050	ug/L	2000	ug/L	103	80.0 – 120.0	09–JAN–09 20:49	090109–2
	Zinc	25.9	ug/L	26.4	ug/L	98.1	80.0 – 120.0	09–JAN–09 20:49	090109–2

METALS
–5a–
Matrix Spike Summary

SDG NO. 221329 **Client ID:** RWSW0049S

Contract: WEIS00405 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 221329001 **Spike ID:** 1201742789

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	mg/L	75–125	.0612		0.00609		.05	110		MS
Arsenic	mg/L	75–125	.0521		0.00212	B	.05	100		MS
Barium	mg/L	75–125	.0741		0.023		.05	102		MS
Beryllium	mg/L	75–125	.0582		0.0001	U	.05	116		MS
Cadmium	mg/L	75–125	.0544		0.00021	B	.05	108		MS
Chromium	mg/L	75–125	.0574		0.00727		.05	100		MS
Cobalt	mg/L	75–125	.0518		0.00125		.05	101		MS
Copper	mg/L	75–125	.0571		0.00822		.05	97.8		MS
Iron	mg/L	75–125	3.74		1.71		2	102		MS
Lead	mg/L	75–125	.0559		0.00432		.05	103		MS
Manganese	mg/L	75–125	.0894		0.0401		.05	98.6		MS
Molybdenum	mg/L	75–125	.0553		0.000408	B	.05	110		MS
Nickel	mg/L	75–125	.0589		0.00956		.05	98.6		MS
Selenium	mg/L	75–125	.0533		0.001	U	.05	107		MS
Silver	mg/L	75–125	.0542		0.0002	U	.05	108		MS
Thallium	mg/L	75–125	.048		0.000462	B	.05	95.1		MS
Vanadium	mg/L	75–125	.054		0.00554	B	.05	96.9		MS
Zinc	mg/L	75–125	.17		0.116		.05	109		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 221329

Contract: WEIS00405 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RWSW0049D

Sample ID: 221329001 **Duplicate ID:** 1201742788 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	mg/L	+/–.002	0.00609		0.00594		2.55		MS
Arsenic	mg/L	+/–.005	0.00212	B	0.0015	B	33.8		MS
Barium	mg/L	+/–20%	0.023		0.0222		3.53		MS
Beryllium	mg/L		0.0001	U	0.0001	U			MS
Cadmium	mg/L	+/–.001	0.00021	B	0.000143	B	38		MS
Chromium	mg/L	+/–.003	0.00727		0.00783		7.42		MS
Cobalt	mg/L	+/–.001	0.00125		0.00124		.725		MS
Copper	mg/L	+/–20%	0.00822		0.00808		1.74		MS
Iron	mg/L	+/–20%	1.71		1.81		5.3		MS
Lead	mg/L	+/–.002	0.00432		0.0042		2.91		MS
Manganese	mg/L	+/–20%	0.0401		0.0397		.842		MS
Molybdenum	mg/L	+/–.0005	0.000408	B	0.000384	B	6.06		MS
Nickel	mg/L	+/–.002	0.00956		0.00979		2.38		MS
Selenium	mg/L		0.001	U	0.001	U			MS
Silver	mg/L		0.0002	U	0.000206	B	200		MS
Thallium	mg/L		0.000462	B	0.0003	U	200		MS
Vanadium	mg/L	+/–.01	0.00554	B	0.00582	B	5.04		MS
Zinc	mg/L	+/–.05	0.116		0.111		4.54		MS

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 221329

Contract: WEIS00405

Aqueous LCS Source: 02SI

Solid LCS Source:

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201742787								
	Antimony	mg/L	.05	.0542		108	80–120	MS
	Arsenic	mg/L	.05	.0522		104	80–120	MS
	Barium	mg/L	.05	.0508		102	80–120	MS
	Beryllium	mg/L	.05	.0561		112	80–120	MS
	Cadmium	mg/L	.05	.0525		105	80–120	MS
	Chromium	mg/L	.05	.05		100	80–120	MS
	Cobalt	mg/L	.05	.0503		101	80–120	MS
	Copper	mg/L	.05	.0499		99.8	80–120	MS
	Iron	mg/L	2	2.01		100	80–120	MS
	Lead	mg/L	.05	.051		102	80–120	MS
	Manganese	mg/L	.05	.0503		101	80–120	MS
	Molybdenum	mg/L	.05	.0543		109	80–120	MS
	Nickel	mg/L	.05	.0497		99.5	80–120	MS
	Selenium	mg/L	.05	.0529		106	80–120	MS
	Silver	mg/L	.05	.0524		105	80–120	MS
	Thallium	mg/L	.05	.047		94.1	80–120	MS
	Vanadium	mg/L	.05	.0473		94.7	80–120	MS
	Zinc	mg/L	.05	.0545		109	80–120	MS

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 221329 **Client ID:** RWSW0049L

Contract: WEIS00405

Matrix: LIQUID **Level:** Low

Sample ID: 221329001 **Serial Dilution ID:** 1201742790

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Antimony	6.09		5.05	B	17.1			MS
Arsenic	2.12	B	7.5	U	100			MS
Barium	23		21.25		7.61			MS
Beryllium	.1	U	.5	U				MS
Cadmium	.21	B	.55	U	100			MS
Chromium	7.27		7.5	U	100			MS
Cobalt	1.25		1.22	B	2.4			MS
Copper	8.22		8.2		.243			MS
Iron	1710		1650		3.51		10	MS
Lead	4.32		4.06	B	6.02			MS
Manganese	40.1		38.55		3.87			MS
Molybdenum	.408	B	.515	B	26.2			MS
Nickel	9.56		9.35	B	2.2			MS
Selenium	1	U	5	U				MS
Silver	.2	U	1	U				MS
Thallium	.462	B	2.545	B	451			MS
Vanadium	5.54	B	15	U	100			MS
Zinc	23.1		23.2	B	.433			MS

METALS
–13–
SAMPLE PREPARATION SUMMARY

SDG No: 221329

Method Type: MS

Contract: WEIS00405

Lab Code: GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	826787						
1201742786	MB for batch 826787	MB	WATER	21–DEC–08	50mL	50mL	
1201742787	LCS for batch 826787	LCS	WATER	21–DEC–08	50mL	50mL	
1201742789	RWSW0049S	MS	WATER	21–DEC–08	50mL	50mL	
1201742788	RWSW0049D	DUP	WATER	21–DEC–08	50mL	50mL	
221329001	RWSW0049	SAMPLE	WATER	21–DEC–08	50mL	50mL	
221329002	RWSW0048	SAMPLE	WATER	21–DEC–08	50mL	50mL	

Metals
-14-
Analysis Run Log

Contract: WEIS00405
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 08-JAN-09 **End Date:** 08-JAN-09

Client Sdg: 221329
Method MS
Data File: 090108-1

Samp No.	D/F	Run Time	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Fe	Pb	Mn	Mo	Ni	Se	Ag	Tl	V	Zn
S0.0	1	20:28	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
S10	1	20:34	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
S100	1	20:40	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
ICV01	1	20:46	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
ICB01	1	20:52	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
CRDL01	1	20:58	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
ICSA01	1	21:04	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
ICSAB01	1	21:10	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
CCV01	1	21:16	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
CCB01	1	21:22	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
LR01	1	21:29	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
CCV02	1	21:35	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
CCB02	1	21:41	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
1201742786	1	21:47	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
1201742787	1	21:53	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
221329001	1	21:59	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
1201742788	1	22:06	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
1201742789	1	22:12	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
1201742790	5	22:18	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
221329002	1	22:24	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
CCV03	1	22:30	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
CCB03	1	22:36	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	

Metals
–14–
Analysis Run Log

Contract: WEIS00405
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 09–JAN–09 **End Date:** 09–JAN–09

Client Sdg: 221329
Method MS
Data File: 090109–2

Samp No.	D/F	Run Time	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Fe	Pb	Mn	Mo	Ni	Se	Ag	Tl	V	Zn
S0.0	1	20:11												X						X
S10	1	20:17												X						X
S100	1	20:22												X						X
ICV01	1	20:27												X						X
ICB01	1	20:33												X						X
CRDL01	1	20:38												X						X
ICSA01	1	20:44												X						X
ICSAB01	1	20:49												X						X
CCV01	1	20:55												X						X
CCB01	1	21:00												X						X
1201742786	1	21:06												X						X
1201742787	1	21:11												X						X
221329001	1	21:17												X						X
1201742788	1	21:22												X						
1201742789	1	21:28												X						
1201742790	5	21:33												X						
CCV02	1	21:39												X						
CCB02	1	21:44												X						X
221329002	1	21:50												X						X
221329001	5	21:55												X						X
1201742788	5	22:01																		X
1201742789	5	22:06																		X
1201742790	25	22:12																		X
CCV03	1	22:17												X						X
CCB03	1	22:23												X						X

Standards

METALS
–10–
Instrument Detection Limits

SDG NO. 221329

Contract: WEIS00405 **Lab Code: GEL** **MDL Effective Date:** 01–AUG–08

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
LIQUID	Antimony		0.5	2
	Arsenic		1.5	5
	Barium		0.5	2
	Beryllium		0.1	.5
	Cadmium		0.11	1
	Chromium		1.5	3
	Cobalt		0.1	1
	Copper		0.3	1
	Iron		10.0	25
	Lead		0.5	2
	Manganese		1.0	5
	Molybdenum		0.1	.5
	Nickel		0.5	2
	Selenium		1.0	5
	Silver		0.2	1
	Thallium		0.3	1
	Vanadium		3.0	10
	Zinc		2.6	10

METALS
–12–
Linear Ranges

SDG NO. 221329

Contract: WEIS00405 **Lab Code: GEL**

Instrument ID ICPMS5

Analyte	Integration Time	LDR	Units	Effective Date
Antimony		250	ug/L	01–NOV–08
Arsenic		1000	ug/L	01–NOV–08
Barium		2500	ug/L	01–NOV–08
Beryllium		1000	ug/L	01–NOV–08
Cadmium		1000	ug/L	01–NOV–08
Chromium		1000	ug/L	01–NOV–08
Cobalt		1000	ug/L	01–NOV–08
Copper		1000	ug/L	01–NOV–08
Iron		50000	ug/L	01–NOV–08
Lead		5000	ug/L	01–NOV–08
Manganese		1000	ug/L	01–NOV–08
Molybdenum		1000	ug/L	01–NOV–08
Nickel		1000	ug/L	01–NOV–08
Selenium		500	ug/L	01–NOV–08
Silver		250	ug/L	01–NOV–08
Thallium		500	ug/L	01–NOV–08
Vanadium		100	ug/L	01–NOV–08
Zinc		2500	ug/L	01–NOV–08

Raw Data

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Thursday, January 08, 2009 11:17:42
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.097
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse
Acq. Dead Time(ns): 35
Current Dead Time (ns): 35
Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	5005.7	5005.677	48.242	1.0
	Mg	24.0	35591.3	35591.284	340.431	1.0
	Co	58.9	64815.1	64815.104	270.640	0.4
	Rh	102.9	119429.8	119429.774	1046.387	0.9
	In	114.9	164502.1	164502.124	685.786	0.4
	Pb	208.0	188500.0	188499.952	1649.184	0.9
⌈>	Ba	137.9	170254.5	170254.517	942.365	0.6
⌊	Ba++	69.0	2818.2	0.017	0.000	1.6
⌈>	Ce	139.9	212709.4	212709.368	1770.353	0.8
⌊	CeO	155.9	6209.7	0.029	0.001	3.3
	Bkgd	220.0	8.0	8.000	2.121	26.5

Current Optimization File Data

Current Value	Description
0.87	Nebulizer Gas Flow
9.00	Lens Voltage
1450.00	ICP RF Power
-1915.63	Analog Stage Voltage
1300.00	Pulse Stage Voltage
200.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	13	9.0	5841.5
Co	59	13	9.5	64103.8
In	115	13	10.8	159959.9

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	603	2040	0.672
Be	9.0	9.0	2062	2055	0.677
Mg	24.0	24.0	5691	2060	0.647
Mg	25.0	25.0	5957	2050	0.698
Mg	26.0	26.0	6162	2055	0.678
Co	58.9	58.9	14185	2080	0.695
Rh	102.9	102.9	24882	2135	0.693
In	114.9	114.9	27798	2160	0.679
Ce	139.9	139.9	33868	2175	0.689
Pb	206.0	206.0	49948	2300	0.581
Pb	207.0	206.9	50147	2235	0.615
Pb	208.0	208.0	50463	2250	0.704
U	238.1	238.0	57728	2270	0.730

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Thursday, January 08, 2009 20:28:04
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\081231\Blank.1907

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		98	
	Be	9		ug/L		13	
	B	11		ug/L		1195	
	Na	23		ug/L		19680	
	Mg	24		ug/L		4668	
	Al	27		ug/L		16009	
	P	31		ug/L		7833	
	K	39		ug/L		382395	
	Ca	43		ug/L		242	
>	Sc	45		ug/L		588275	
	Ti	47		ug/L		289	
	V	51		ug/L		-975	
	Cr	52		ug/L		1787	
	Cr	53		ug/L		49039	
	Mn	55		ug/L		2124	
	Fe	57		ug/L		4914	
	Co	59		ug/L		201	
	Ni	60		ug/L		155	
	Cu	63		ug/L		285	
	Cu	65		ug/L		142	
	Zn	66		ug/L		319	
	Zn	67		ug/L		7783	
	Zn	68		ug/L		956	
>	Ge	74		ug/L		255184	
	As	75		ug/L		1314	
	Se	77		ug/L		3119	
	Se	82		ug/L		10	
	Kr	83		ug/L		479	
	Sr	88		ug/L		239	
	Y	89		ug/L		88	
	Mo	98		ug/L		157	
	Ag	107		ug/L		69	
	Cd	111		ug/L		31	
	Cd	114		ug/L		71	
>	In	115		ug/L		152841	
	Sn	120		ug/L		192	
	Sb	121		ug/L		1515	
	Sb	123		ug/L		1201	
	Ba	135		ug/L		141	
	Ba	137		ug/L		229	
	Ho	165		ug/L		21	
>	Lu	175		ug/L		252369	
	Tl	205		ug/L		285	
	Pb	208		ug/L		778	
	Bi	209		ug/L		61	
	Th	232		ug/L		3533	
	U	238		ug/L		635	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Simple Linear	
Be	9	Simple Linear	
B	11	Simple Linear	
Na	23	Simple Linear	
Mg	24	Linear Thru Zero	
Al	27	Simple Linear	1.0000
P	31	Simple Linear	
K	39	Simple Linear	
Ca	43	Simple Linear	
Sc	45	Linear Thru Zero	
Ti	47	Simple Linear	
V	51	Simple Linear	
Cr	52	Simple Linear	
Cr	53	Simple Linear	
Mn	55	Simple Linear	
Fe	57	Simple Linear	
Co	59	Simple Linear	
Ni	60	Simple Linear	
Cu	63	Simple Linear	
Cu	65	Simple Linear	
Zn	66	Simple Linear	
Zn	67	Simple Linear	
Zn	68	Simple Linear	
Ge	74	Simple Linear	
As	75	Simple Linear	
Se	77	Simple Linear	
Se	82	Simple Linear	
Kr	83	Simple Linear	
Sr	88	Simple Linear	
Y	89	Simple Linear	
Mo	98	Simple Linear	
Ag	107	Simple Linear	
Cd	111	Simple Linear	
Cd	114	Simple Linear	
In	115	Simple Linear	
Sn	120	Simple Linear	
Sb	121	Simple Linear	
Sb	123	Simple Linear	
Ba	135	Simple Linear	
Ba	137	Simple Linear	
Ho	165	Simple Linear	
Lu	175	Simple Linear	
Tl	205	Simple Linear	
Pb	208	Simple Linear	
Bi	209	Simple Linear	
Th	232	Simple Linear	
U	238	Simple Linear	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45					
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74					
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115					
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175					
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Thursday, January 08, 2009 20:34:10
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\081231\Standard 1.1908

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	1.828	12342	0.021
	Be	9	10.000	ug/L	2.736	3542	0.006
	B	11	20.000	ug/L	1.712	7758	0.011
	Na	23	1000.000	ug/L	7.340	2911114	5.032
	Mg	24	1000.000	ug/L	3.888	2222359	3.859
	Al	27	1000.000	ug/L	5.635	3136029	5.428
	P	31	1000.000	ug/L	2.200	175760	0.293
	K	39	1000.000	ug/L	5.211	3262185	5.024
	Ca	43	1000.000	ug/L	3.240	6852	0.012
>	Sc	45		ug/L		574750	574749.994
	Ti	47	10.000	ug/L	2.259	3876	0.006
	V	51	10.000	ug/L	1.670	37469	0.067
	Cr	52	10.000	ug/L	0.757	31982	0.053
	Cr	53		ug/L		41256	-0.012
	Mn	55	10.000	ug/L	0.690	49097	0.082
	Fe	57	1000.000	ug/L	0.781	109184	0.182
	Co	59	10.000	ug/L	0.253	40689	0.070
	Ni	60	10.000	ug/L	1.901	8962	0.015
	Cu	63		ug/L		22199	0.038
	Cu	65	10.000	ug/L	2.877	10928	0.019
	Zn	66	10.000	ug/L	2.193	7756	0.029
	Zn	67		ug/L		6833	-0.004
	Zn	68		ug/L		6218	0.021
>	Ge	74		ug/L		253355	253355.061
	As	75	10.000	ug/L	2.890	8504	0.028
	Se	77		ug/L		2675	-0.002
	Se	82	10.000	ug/L	1.908	668	0.003
	Kr	83		ug/L		499	0.000
	Sr	88	10.000	ug/L	0.241	75720	0.491
	Y	89		ug/L		93	0.000
	Mo	98	10.000	ug/L	1.899	19265	0.124
	Ag	107	10.000	ug/L	0.491	35373	0.230
	Cd	111	10.000	ug/L	1.522	8546	0.055
	Cd	114		ug/L		20919	0.136
>	In	115		ug/L		153696	153695.694
	Sn	120	10.000	ug/L	1.372	38375	0.248
	Sb	121	10.000	ug/L	2.901	32179	0.199
	Sb	123		ug/L		25249	0.156
	Ba	135		ug/L		9541	0.037
	Ba	137	10.000	ug/L	0.810	16601	0.065
	Ho	165		ug/L		21	-0.000
>	Lu	175		ug/L		251116	251116.266
	Tl	205	10.000	ug/L	2.637	101126	0.402
	Pb	208	10.000	ug/L	1.334	184427	0.731
	Bi	209		ug/L		109	0.000
	Th	232	10.000	ug/L	1.961	239679	0.941
	U	238	10.000	ug/L	1.740	257614	1.024

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	1.0000
Ti	47	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	1.0000
Mn	55	Linear Thru Zero	
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	1.0000
Cu	65	Linear Thru Zero	
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	1.0000
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	
Se	77	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	1.0000
Sr	88	Linear Thru Zero	
Y	89	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	1.0000
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	
Ho	165	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000
			1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Thursday, January 08, 2009 20:40:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\081231\Standard 2.1909

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	100.006	ug/L	0.517	120550	0.214
	Be	9	99.992	ug/L	3.016	34246	0.061
	B	11	200.075	ug/L	2.937	68120	0.119
	Na	23	10005.723	ug/L	8.032	30021729	53.409
	Mg	24	9999.220	ug/L	2.530	21520731	38.284
	Al	27	9991.841	ug/L	5.704	28202630	50.142
	P	31	9996.618	ug/L	0.565	1597445	2.829
	K	39	10002.620	ug/L	2.363	29371359	51.609
	Ca	43	10001.575	ug/L	1.858	65989	0.117
>	Sc	45		ug/L		562139	562138.552
	Ti	47	100.015	ug/L	3.499	35967	0.064
	V	51	99.987	ug/L	2.424	369868	0.660
	Cr	52	100.016	ug/L	2.082	302389	0.535
	Cr	53		ug/L		71212	0.043
	Mn	55	99.993	ug/L	2.164	458575	0.812
	Fe	57	9994.354	ug/L	1.237	970480	1.718
	Co	59	99.978	ug/L	0.751	387688	0.689
	Ni	60	99.992	ug/L	1.642	85664	0.152
	Cu	63		ug/L		210543	0.374
	Cu	65	99.989	ug/L	1.744	104508	0.186
	Zn	66	99.968	ug/L	2.880	70349	0.284
	Zn	67		ug/L		16937	0.038
	Zn	68		ug/L		52455	0.209
>	Ge	74		ug/L		246325	246324.639
	As	75	100.014	ug/L	2.027	72214	0.288
	Se	77		ug/L		7330	0.018
	Se	82	100.005	ug/L	1.446	6441	0.026
	Kr	83		ug/L		545	0.000
	Sr	88	99.984	ug/L	0.938	715933	4.831
	Y	89		ug/L		136	0.000
	Mo	98	100.024	ug/L	1.421	188850	1.274
	Ag	107	99.971	ug/L	0.144	330549	2.231
	Cd	111	100.013	ug/L	2.519	83204	0.562
	Cd	114		ug/L		201094	1.357
>	In	115		ug/L		148158	148157.814
	Sn	120	99.996	ug/L	1.856	366759	2.475
	Sb	121	100.054	ug/L	1.404	314048	2.110
	Sb	123		ug/L		247384	1.662
	Ba	135		ug/L		91148	0.371
	Ba	137	99.999	ug/L	1.049	160222	0.652
	Ho	165		ug/L		21	-0.000
>	Lu	175		ug/L		245538	245537.945
	Tl	205	99.954	ug/L	0.709	943098	3.840
	Pb	208	99.966	ug/L	0.537	1737425	7.073
	Bi	209		ug/L		600	0.002
	Th	232	99.931	ug/L	1.090	2161861	8.790
	U	238	99.868	ug/L	0.566	2216847	9.026

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	1.0000
Ti	47	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	1.0000
Mn	55	Linear Thru Zero	
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	1.0000
Cu	65	Linear Thru Zero	
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	1.0000
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	
Se	77	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	1.0000
Sr	88	Linear Thru Zero	
Y	89	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	1.0000
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	
Ho	165	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000
			0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Thursday, January 08, 2009 20:46:19
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\081231\QC Std 1.1910

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.419**	**ug/L**	2.284	61593	0.108
	Be	9	**51.757**	**ug/L**	3.699	17954	0.032
	B	11	**104.161**	**ug/L**	3.261	36476	0.062
	Na	23	**4692.917**	**ug/L**	4.253	14272738	25.050
	Mg	24	**4847.581**	**ug/L**	3.916	10565688	18.560
	Al	27	**5262.497**	**ug/L**	6.738	15039420	26.409
	P	31	**5072.163**	**ug/L**	2.763	824352	1.435
	K	39	**4847.001**	**ug/L**	2.858	14606756	25.009
	Ca	43	**4915.905**	**ug/L**	0.397	32965	0.057
>	Sc	45		**ug/L**		569319	569319.303
	Ti	47	**49.469**	**ug/L**	2.308	18158	0.031
	V	51	**51.307**	**ug/L**	2.613	191736	0.339
	Cr	52	**50.420**	**ug/L**	1.482	155237	0.270
	Cr	53		**ug/L**		52694	0.009
	Mn	55	**51.188**	**ug/L**	2.369	238720	0.416
	Fe	57	**5068.239**	**ug/L**	2.406	500639	0.871
	Co	59	**50.549**	**ug/L**	2.475	198564	0.349
	Ni	60	**49.628**	**ug/L**	2.143	43129	0.076
	Cu	63		**ug/L**		110336	0.193
	Cu	65	**52.188**	**ug/L**	2.443	55300	0.097
	Zn	66	**50.642**	**ug/L**	1.494	36600	0.144
	Zn	67		**ug/L**		11044	0.013
	Zn	68		**ug/L**		27662	0.106
>	Ge	74		**ug/L**		251843	251842.539
	As	75	**48.247**	**ug/L**	2.068	36291	0.139
	Se	77		**ug/L**		4694	0.006
	Se	82	**51.435**	**ug/L**	4.559	3391	0.013
	Kr	83		**ug/L**		488	0.000
	Sr	88	**51.110**	**ug/L**	1.918	375644	2.470
	Y	89		**ug/L**		81	-0.000
	Mo	98	**48.457**	**ug/L**	2.106	93960	0.617
	Ag	107	**51.111**	**ug/L**	1.655	173432	1.140
	Cd	111	**50.646**	**ug/L**	1.037	43259	0.284
	Cd	114		**ug/L**		105219	0.692
>	In	115		**ug/L**		152029	152029.054
	Sn	120	**49.850**	**ug/L**	1.583	187730	1.234
	Sb	121	**49.499**	**ug/L**	0.378	160206	1.044
	Sb	123		**ug/L**		125611	0.818
	Ba	135		**ug/L**		47223	0.187
	Ba	137	**50.696**	**ug/L**	1.124	83525	0.330
	Ho	165		**ug/L**		134	0.000
>	Lu	175		**ug/L**		252132	252131.696
	Tl	205	**49.340**	**ug/L**	0.584	478196	1.895
	Pb	208	**51.774**	**ug/L**	0.896	924370	3.663
	Bi	209		**ug/L**		254	0.001
	Th	232	**53.567**	**ug/L**	0.247	1191567	4.712
	U	238	**55.568**	**ug/L**	0.978	1266900	5.022

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	1.0000
Ti	47	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	1.0000
Mn	55	Linear Thru Zero	
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	1.0000
Cu	65	Linear Thru Zero	
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	1.0000
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7	100.838				
	Be	9	103.514				
	B	11	104.161				
	Na	23	93.858				
	Mg	24	96.952				
	Al	27	104.208				
	P	31	101.443				
	K	39	96.940				
	Ca	43	98.318				
>	Sc	45		96.8			
	Ti	47	98.938				
	V	51	102.614				
	Cr	52	100.840				
	Cr	53					
	Mn	55	102.376				
	Fe	57	101.365				
	Co	59	101.098				
	Ni	60	99.256				
	Cu	63					
	Cu	65	104.375				
	Zn	66	101.283				
	Zn	67					
	Zn	68					
>	Ge	74		98.7			
	As	75	96.495				
	Se	77					
	Se	82	102.870				
	Kr	83					
	Sr	88	102.220				
	Y	89					
	Mo	98	96.913				
	Ag	107	102.223				
	Cd	111	101.292				
	Cd	114					
>	In	115		99.5			
	Sn	120	99.701				
	Sb	121	98.997				
	Sb	123					
	Ba	135					
	Ba	137	101.392				
	Ho	165					
>	Lu	175		99.9			
	Tl	205	98.680				
	Pb	208	103.548				
	Bi	209					
	Th	232	107.134				
	U	238	111.135				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	U	238	ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Thursday, January 08, 2009 20:52:26
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\081231\QC Std 2.1911

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.004	ug/L	150.773	103	0.000
	Be	9	-0.003	ug/L	70.097	12	-0.000
	B	11	1.477	ug/L	23.220	1705	0.001
	Na	23	0.350	ug/L	216.071	20682	0.002
	Mg	24	0.153	ug/L	492.731	5001	0.001
	Al	27	-1.330	ug/L	96.774	12005	-0.007
	P	31	0.612	ug/L	397.668	7904	0.000
	K	39	1.269	ug/L	556.067	384791	0.007
	Ca	43	0.523	ug/L	445.194	245	0.000
>	Sc	45		ug/L		586065	586065.289
	Ti	47	-0.046	ug/L	48.939	271	-0.000
	V	51	-0.402	ug/L	110.464	-2535	-0.003
	Cr	52	-0.021	ug/L	89.376	1714	-0.000
	Cr	53		ug/L		48417	-0.001
	Mn	55	-0.099	ug/L	16.895	1645	-0.001
	Fe	57	-2.204	ug/L	64.036	4673	-0.000
	Co	59	0.014	ug/L	31.102	258	0.000
	Ni	60	0.007	ug/L	334.188	161	0.000
	Cu	63		ug/L		326	0.000
	Cu	65	0.015	ug/L	84.277	157	0.000
	Zn	66	0.020	ug/L	77.372	335	0.000
	Zn	67		ug/L		7781	-0.000
	Zn	68		ug/L		968	0.000
>	Ge	74		ug/L		255850	255849.723
	As	75	0.053	ug/L	555.168	1356	0.000
	Se	77		ug/L		3118	-0.000
	Se	82	-0.278	ug/L	149.311	-9	-0.000
	Kr	83		ug/L		501	0.000
	Sr	88	0.005	ug/L	101.658	277	0.000
	Y	89		ug/L		73	-0.000
	Mo	98	0.230	ug/L	43.202	604	0.003
	Ag	107	0.010	ug/L	66.412	103	0.000
	Cd	111	0.030	ug/L	17.169	57	0.000
	Cd	114		ug/L		69	-0.000
>	In	115		ug/L		152640	152640.032
	Sn	120	0.038	ug/L	22.660	335	0.001
	Sb	121	0.699	ug/L	22.424	3761	0.015
	Sb	123		ug/L		3118	0.013
	Ba	135		ug/L		127	-0.000
	Ba	137	-0.014	ug/L	42.971	208	-0.000
	Ho	165		ug/L		23	0.000
>	Lu	175		ug/L		255554	255553.671
	Tl	205	0.064	ug/L	37.509	913	0.002
	Pb	208	0.005	ug/L	79.721	875	0.000
	Bi	209		ug/L		46	-0.000
	Th	232	0.839	ug/L	55.000	22353	0.074
	U	238	0.036	ug/L	44.795	1463	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	1.0000
Ti	47	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	1.0000
Mn	55	Linear Thru Zero	
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	1.0000
Cu	65	Linear Thru Zero	
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	1.0000
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	
Se	77	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	1.0000
Sr	88	Linear Thru Zero	
Y	89	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	1.0000
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	
Ho	165	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000
			0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		99.6			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		100.3			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		99.9			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		101.3			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Thursday, January 08, 2009 20:58:34
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\081231\QC Std 3.1912

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**10.548**	**ug/L**	1.410	13065	0.023
	Be	9	**0.524**	**ug/L**	4.192	195	0.000
	B	11	**15.381**	**ug/L**	0.528	6424	0.009
	Na	23	**260.259**	**ug/L**	1.757	816344	1.389
	Mg	24	**15.090**	**ug/L**	3.334	37716	0.058
	Al	27	**17.245**	**ug/L**	23.551	65151	0.087
	P	31	**34.330**	**ug/L**	9.080	13216	0.010
	K	39	**309.829**	**ug/L**	6.434	1290124	1.599
	Ca	43	**101.135**	**ug/L**	2.924	915	0.001
>	Sc	45		**ug/L**		573910	573909.870
	Ti	47	**7.723**	**ug/L**	2.778	3096	0.005
	V	51	**9.824**	**ug/L**	6.682	36236	0.065
	Cr	52	**2.876**	**ug/L**	4.508	10569	0.015
	Cr	53		**ug/L**		37708	-0.018
	Mn	55	**5.150**	**ug/L**	1.099	26078	0.042
	Fe	57	**19.435**	**ug/L**	6.079	6710	0.003
	Co	59	**1.101**	**ug/L**	2.621	4553	0.008
	Ni	60	**2.158**	**ug/L**	3.105	2035	0.003
	Cu	63		**ug/L**		2560	0.004
	Cu	65	**1.120**	**ug/L**	4.633	1332	0.002
	Zn	66	**10.671**	**ug/L**	1.119	7992	0.030
	Zn	67		**ug/L**		6672	-0.004
	Zn	68		**ug/L**		6339	0.021
>	Ge	74		**ug/L**		252817	252817.019
	As	75	**4.941**	**ug/L**	1.932	4900	0.014
	Se	77		**ug/L**		2371	-0.003
	Se	82	**4.626**	**ug/L**	5.171	315	0.001
	Kr	83		**ug/L**		486	0.000
	Sr	88	**10.760**	**ug/L**	2.517	80146	0.520
	Y	89		**ug/L**		55	-0.000
	Mo	98	**0.476**	**ug/L**	6.324	1090	0.006
	Ag	107	**1.055**	**ug/L**	3.841	3688	0.024
	Cd	111	**1.134**	**ug/L**	0.240	1010	0.006
	Cd	114		**ug/L**		2207	0.014
>	In	115		**ug/L**		153746	153745.930
	Sn	120	**5.209**	**ug/L**	1.284	20009	0.129
	Sb	121	**1.773**	**ug/L**	3.808	7272	0.037
	Sb	123		**ug/L**		5770	0.030
	Ba	135		**ug/L**		2020	0.007
	Ba	137	**2.061**	**ug/L**	1.057	3617	0.013
	Ho	165		**ug/L**		26	0.000
>	Lu	175		**ug/L**		252283	252283.012
	Tl	205	**1.077**	**ug/L**	1.300	10726	0.041
	Pb	208	**2.192**	**ug/L**	1.306	39898	0.155
	Bi	209		**ug/L**		58	-0.000
	Th	232	**1.071**	**ug/L**	1.165	27306	0.094
	U	238	**0.244**	**ug/L**	1.600	6206	0.022

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	1.0000
Ti	47	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	1.0000
Mn	55	Linear Thru Zero	
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	1.0000
Cu	65	Linear Thru Zero	
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	1.0000
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	
Se	77	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	1.0000
Sr	88	Linear Thru Zero	
Y	89	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	1.0000
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	
Ho	165	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000
			0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7	105.483				
	Be	9	104.701				
	B	11	102.539				
	Na	23	104.104				
	Mg	24	100.597				
	Al	27	114.965				
	P	31	68.660				
	K	39	103.276				
	Ca	43	101.135				
>	Sc	45		97.6			
	Ti	47	77.233				
	V	51	98.238				
	Cr	52	95.874				
	Cr	53					
	Mn	55	102.991				
	Fe	57	77.739				
	Co	59	110.130				
	Ni	60	107.913				
	Cu	63					
	Cu	65	112.038				
	Zn	66	106.713				
	Zn	67					
	Zn	68					
>	Ge	74		99.1			
	As	75	98.814				
	Se	77					
	Se	82	92.511				
	Kr	83					
	Sr	88	107.599				
	Y	89					
	Mo	98	95.280				
	Ag	107	105.542				
	Cd	111	113.418				
	Cd	114					
>	In	115		100.6			
	Sn	120	104.174				
	Sb	121	88.647				
	Sb	123					
	Ba	135					
	Ba	137	103.038				
	Ho	165					
>	Lu	175		100.0			
	Tl	205	107.726				
	Pb	208	109.584				
	Bi	209					
	Th	232	107.131				
	U	238	122.174				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	P	31	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Thursday, January 08, 2009 21:04:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\081231\QC Std 4.1913

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.078**	**ug/L**	22.371	181	0.000
	Be	9	**-0.014**	**ug/L**	36.623	7	-0.000
	B	11	**3.450**	**ug/L**	1.846	2213	0.002
	Na	23	**96849.119**	**ug/L**	0.152	280055635	516.966
	Mg	24	**97830.617**	**ug/L**	2.504	202909751	374.562
	Al	27	**101837.693**	**ug/L**	0.929	276835629	511.047
	P	31	**92619.164**	**ug/L**	0.860	14203352	26.206
	K	39	**97666.342**	**ug/L**	1.547	273322009	503.918
	Ca	43	**94515.528**	**ug/L**	1.166	598956	1.105
>	Sc	45		**ug/L**		541701	541701.476
	Ti	47	**1592.582**	**ug/L**	1.044	548025	1.011
	V	51	**0.211**	**ug/L**	98.848	-147	0.001
	Cr	52	**1.545**	**ug/L**	0.521	6122	0.008
	Cr	53		**ug/L**		32381	-0.024
	Mn	55	**2.408**	**ug/L**	2.155	12550	0.020
	Fe	57	**90034.494**	**ug/L**	1.242	8388748	15.477
	Co	59	**0.321**	**ug/L**	7.486	1385	0.002
	Ni	60	**2.265**	**ug/L**	1.232	2009	0.003
	Cu	63		**ug/L**		3026	0.005
	Cu	65	**3.313**	**ug/L**	2.749	3463	0.006
	Zn	66	**7.491**	**ug/L**	3.817	5169	0.021
	Zn	67		**ug/L**		6196	-0.003
	Zn	68		**ug/L**		2658	0.008
>	Ge	74		**ug/L**		229156	229156.345
	As	75	**-0.015**	**ug/L**	4845.681	1166	-0.000
	Se	77		**ug/L**		3436	0.003
	Se	82	**-2.617**	**ug/L**	16.093	-148	-0.001
	Kr	83		**ug/L**		624	0.001
	Sr	88	**3.633**	**ug/L**	1.371	24733	0.176
	Y	89		**ug/L**		581	0.004
	Mo	98	**1932.887**	**ug/L**	1.281	3437882	24.615
	Ag	107	**0.143**	**ug/L**	28.291	508	0.003
	Cd	111	**0.510**	**ug/L**	16.943	428	0.003
	Cd	114		**ug/L**		5463	0.039
>	In	115		**ug/L**		139659	139658.562
	Sn	120	**0.071**	**ug/L**	9.944	422	0.002
	Sb	121	**-0.087**	**ug/L**	38.535	1126	-0.002
	Sb	123		**ug/L**		882	-0.002
	Ba	135		**ug/L**		630	0.002
	Ba	137	**0.581**	**ug/L**	1.333	1088	0.004
	Ho	165		**ug/L**		993	0.004
>	Lu	175		**ug/L**		231854	231853.749
	Tl	205	**0.013**	**ug/L**	9.250	381	0.001
	Pb	208	**0.524**	**ug/L**	1.457	9313	0.037
	Bi	209		**ug/L**		5099	0.022
	Th	232	**-0.022**	**ug/L**	82.779	2795	-0.002
	U	238	**-0.018**	**ug/L**	3.097	196	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	1.0000
Ti	47	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	1.0000
Mn	55	Linear Thru Zero	
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	1.0000
Cu	65	Linear Thru Zero	
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	1.0000
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	
Se	77	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	1.0000
Sr	88	Linear Thru Zero	
Y	89	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	1.0000
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	
Ho	165	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000
			0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11	68.992				
Na	23	96.849				
Mg	24	97.831				
Al	27	101.838				
P	31	92.619				
K	39	97.666				
Ca	43	94.516				
> Sc	45		92.1			
Ti	47	79.629				
V	51					
Cr	52	49.847				
Cr	53					
Mn	55	92.615				
Fe	57	90.034				
Co	59	107.103				
Ni	60	107.847				
Cu	63					
Cu	65	110.440				
Zn	66	117.045				
Zn	67					
Zn	68					
> Ge	74		89.8			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88	121.110				
Y	89					
Mo	98	96.644				
Ag	107					
Cd	111	170.100				
Cd	114					
> In	115		91.4			
Sn	120					
Sb	121	-43.620				
Sb	123					
Ba	135					
Ba	137	82.933				
Ho	165					
> Lu	175		91.9			
Tl	205					
Pb	208	104.846				
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Ti	47	ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Thursday, January 08, 2009 21:10:46
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\081231\QC Std 5.1914

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	21.612	ug/L	0.408	25302	0.046
	Be	9	21.027	ug/L	1.817	6984	0.013
	B	11	22.374	ug/L	4.135	8359	0.013
	Na	23	92233.175	ug/L	4.134	267988078	492.327
	Mg	24	88840.961	ug/L	3.462	185110650	340.143
	Al	27	99313.479	ug/L	6.666	271125895	498.380
	P	31	91269.762	ug/L	1.824	14063676	25.825
	K	39	96713.791	ug/L	1.073	272012458	499.004
	Ca	43	93363.824	ug/L	1.266	594597	1.092
>	Sc	45		ug/L		544436	544436.032
	Ti	47	1576.178	ug/L	1.834	545047	1.001
	V	51	20.537	ug/L	3.769	72858	0.136
	Cr	52	21.398	ug/L	2.157	63948	0.114
	Cr	53		ug/L		38458	-0.013
	Mn	55	22.421	ug/L	2.934	101090	0.182
	Fe	57	88371.882	ug/L	2.343	8273303	15.192
	Co	59	19.970	ug/L	2.357	75129	0.138
	Ni	60	20.374	ug/L	3.563	17013	0.031
	Cu	63		ug/L		40434	0.074
	Cu	65	21.279	ug/L	1.246	21644	0.040
	Zn	66	26.540	ug/L	0.945	17614	0.076
	Zn	67		ug/L		8423	0.006
	Zn	68		ug/L		12117	0.049
>	Ge	74		ug/L		229468	229468.397
	As	75	21.054	ug/L	1.010	15098	0.061
	Se	77		ug/L		4270	0.006
	Se	82	20.625	ug/L	5.076	1244	0.005
	Kr	83		ug/L		599	0.001
	Sr	88	26.077	ug/L	1.306	174583	1.260
	Y	89		ug/L		567	0.004
	Mo	98	1970.008	ug/L	1.228	3471675	25.088
	Ag	107	19.751	ug/L	1.797	61044	0.441
	Cd	111	20.728	ug/L	1.543	16131	0.116
	Cd	114		ug/L		43273	0.312
>	In	115		ug/L		138392	138391.802
	Sn	120	20.266	ug/L	1.960	69570	0.502
	Sb	121	20.781	ug/L	1.159	62017	0.438
	Sb	123		ug/L		48519	0.343
	Ba	135		ug/L		17936	0.076
	Ba	137	20.305	ug/L	0.394	31144	0.132
	Ho	165		ug/L		992	0.004
>	Lu	175		ug/L		233766	233766.150
	Tl	205	19.132	ug/L	2.315	172044	0.735
	Pb	208	20.647	ug/L	1.324	342171	1.461
	Bi	209		ug/L		5158	0.022
	Th	232	22.262	ug/L	2.041	460990	1.958
	U	238	23.041	ug/L	2.374	487280	2.082

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	1.0000
Ti	47	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	1.0000
Mn	55	Linear Thru Zero	
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	1.0000
Cu	65	Linear Thru Zero	
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	1.0000
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	
Se	77	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	1.0000
Sr	88	Linear Thru Zero	
Y	89	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	1.0000
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	
Ho	165	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000
			0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7	108.060				
	Be	9	105.134				
	B	11	89.495				
	Na	23	92.233				
	Mg	24	88.841				
	Al	27	99.313				
	P	31	91.270				
	K	39	96.714				
	Ca	43	93.364				
>	Sc	45		92.5			
	Ti	47	78.809				
	V	51	102.686				
	Cr	52	92.633				
	Cr	53					
	Mn	55	99.210				
	Fe	57	88.372				
	Co	59	98.373				
	Ni	60	92.191				
	Cu	63					
	Cu	65	92.519				
	Zn	66	100.530				
	Zn	67					
	Zn	68					
>	Ge	74		89.9			
	As	75	105.270				
	Se	77					
	Se	82	103.127				
	Kr	83					
	Sr	88	113.378				
	Y	89					
	Mo	98	98.500				
	Ag	107	98.757				
	Cd	111	102.108				
	Cd	114					
>	In	115		90.5			
	Sn	120	101.329				
	Sb	121	102.878				
	Sb	123					
	Ba	135					
	Ba	137	98.094				
	Ho	165					
>	Lu	175		92.6			
	Tl	205	95.658				
	Pb	208	100.718				
	Bi	209					
	Th	232	111.311				
	U	238	115.205				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Ti	47	ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, January 08, 2009 21:16:52
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\081231\QC Std 6.1915

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**53.818**	**ug/L**	1.957	64679	0.115
	Be	9	**54.178**	**ug/L**	2.901	18494	0.033
	B	11	**103.071**	**ug/L**	1.661	35534	0.061
	Na	23	**4856.321**	**ug/L**	3.884	14537176	25.922
	Mg	24	**4671.211**	**ug/L**	5.578	10022107	17.885
	Al	27	**4968.000**	**ug/L**	3.264	13979659	24.931
	P	31	**4912.947**	**ug/L**	0.393	786113	1.390
	K	39	**4918.374**	**ug/L**	2.975	14583371	25.377
	Ca	43	**4828.158**	**ug/L**	0.585	31862	0.056
>	Sc	45		**ug/L**		560162	560161.610
	Ti	47	**48.324**	**ug/L**	1.594	17461	0.031
	V	51	**50.082**	**ug/L**	1.098	184204	0.330
	Cr	52	**50.081**	**ug/L**	1.490	151729	0.268
	Cr	53		**ug/L**		50603	0.007
	Mn	55	**50.646**	**ug/L**	1.878	232438	0.411
	Fe	57	**4995.374**	**ug/L**	1.224	485698	0.859
	Co	59	**49.868**	**ug/L**	0.999	192789	0.344
	Ni	60	**48.461**	**ug/L**	0.710	41449	0.074
	Cu	63		**ug/L**		107356	0.191
	Cu	65	**51.206**	**ug/L**	1.727	53396	0.095
	Zn	66	**50.355**	**ug/L**	1.696	35819	0.143
	Zn	67		**ug/L**		11026	0.014
	Zn	68		**ug/L**		27091	0.106
>	Ge	74		**ug/L**		247864	247864.389
	As	75	**48.697**	**ug/L**	1.399	36041	0.140
	Se	77		**ug/L**		4540	0.006
	Se	82	**51.877**	**ug/L**	1.232	3367	0.014
	Kr	83		**ug/L**		520	0.000
	Sr	88	**50.925**	**ug/L**	0.757	371626	2.461
	Y	89		**ug/L**		71	-0.000
	Mo	98	**50.905**	**ug/L**	0.531	98002	0.648
	Ag	107	**51.163**	**ug/L**	0.827	172370	1.142
	Cd	111	**51.280**	**ug/L**	2.538	43480	0.288
	Cd	114		**ug/L**		104313	0.691
>	In	115		**ug/L**		150936	150936.406
	Sn	120	**50.076**	**ug/L**	2.052	187222	1.239
	Sb	121	**48.619**	**ug/L**	1.994	156240	1.025
	Sb	123		**ug/L**		123606	0.811
	Ba	135		**ug/L**		47059	0.181
	Ba	137	**49.152**	**ug/L**	0.691	83450	0.320
	Ho	165		**ug/L**		132	0.000
>	Lu	175		**ug/L**		259798	259797.710
	Tl	205	**48.048**	**ug/L**	0.365	479824	1.846
	Pb	208	**50.633**	**ug/L**	0.403	931534	3.582
	Bi	209		**ug/L**		258	0.001
	Th	232	**51.435**	**ug/L**	0.706	1179015	4.524
	U	238	**54.801**	**ug/L**	0.812	1287372	4.953

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	1.0000
Ti	47	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	1.0000
Mn	55	Linear Thru Zero	
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	1.0000
Cu	65	Linear Thru Zero	
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	1.0000
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	
Se	77	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	1.0000
Sr	88	Linear Thru Zero	
Y	89	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	1.0000
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	
Ho	165	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000
			0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7	107.636				
	Be	9	108.357				
	B	11	103.071				
	Na	23	97.126				
	Mg	24	93.424				
	Al	27	98.376				
	P	31	98.259				
	K	39	98.367				
	Ca	43	96.563				
>	Sc	45		95.2			
	Ti	47	96.648				
	V	51	100.164				
	Cr	52	100.161				
	Cr	53					
	Mn	55	101.292				
	Fe	57	99.907				
	Co	59	99.736				
	Ni	60	96.922				
	Cu	63					
	Cu	65	102.412				
	Zn	66	100.710				
	Zn	67					
	Zn	68					
>	Ge	74		97.1			
	As	75	97.394				
	Se	77					
	Se	82	103.755				
	Kr	83					
	Sr	88	101.850				
	Y	89					
	Mo	98	101.811				
	Ag	107	102.327				
	Cd	111	102.560				
	Cd	114					
>	In	115		98.8			
	Sn	120	100.152				
	Sb	121	97.238				
	Sb	123					
	Ba	135					
	Ba	137	98.304				
	Ho	165					
>	Lu	175		102.9			
	Tl	205	96.095				
	Pb	208	101.266				
	Bi	209					
	Th	232	102.869				
	U	238	109.602				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, January 08, 2009 21:22:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\081231\QC Std 7.1916

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.009	ug/L	120.645	108	0.000
	Be	9	0.007	ug/L	69.228	15	0.000
	B	11	0.624	ug/L	27.409	1381	0.000
	Na	23	4.932	ug/L	44.483	34376	0.026
	Mg	24	2.173	ug/L	85.229	9337	0.008
	Al	27	0.939	ug/L	88.722	18345	0.005
	P	31	-3.892	ug/L	49.837	7022	-0.001
	K	39	-10.421	ug/L	49.373	342733	-0.054
	Ca	43	1.902	ug/L	215.267	249	0.000
>	Sc	45		ug/L		574884	574884.422
	Ti	47	-0.039	ug/L	130.756	268	-0.000
	V	51	-0.050	ug/L	2225.853	-1154	-0.000
	Cr	52	-0.063	ug/L	74.551	1551	-0.000
	Cr	53		ug/L		46595	-0.002
	Mn	55	-0.176	ug/L	7.337	1253	-0.001
	Fe	57	-3.661	ug/L	42.906	4440	-0.001
	Co	59	0.006	ug/L	137.638	221	0.000
	Ni	60	-0.020	ug/L	91.384	134	-0.000
	Cu	63		ug/L		312	0.000
	Cu	65	0.023	ug/L	26.243	163	0.000
	Zn	66	0.018	ug/L	59.851	326	0.000
	Zn	67		ug/L		8056	0.002
	Zn	68		ug/L		965	0.000
>	Ge	74		ug/L		249910	249910.119
	As	75	-0.197	ug/L	75.349	1144	-0.001
	Se	77		ug/L		2856	-0.001
	Se	82	-0.032	ug/L	958.821	8	-0.000
	Kr	83		ug/L		438	-0.000
	Sr	88	-0.001	ug/L	723.405	231	-0.000
	Y	89		ug/L		44	-0.000
	Mo	98	0.978	ug/L	20.649	2024	0.012
	Ag	107	0.004	ug/L	65.060	79	0.000
	Cd	111	0.023	ug/L	10.525	50	0.000
	Cd	114		ug/L		72	0.000
>	In	115		ug/L		150386	150386.469
	Sn	120	0.029	ug/L	28.702	297	0.001
	Sb	121	0.293	ug/L	28.723	2418	0.006
	Sb	123		ug/L		1959	0.005
	Ba	135		ug/L		118	-0.000
	Ba	137	-0.008	ug/L	115.344	221	-0.000
	Ho	165		ug/L		18	-0.000
>	Lu	175		ug/L		258362	258361.951
	Tl	205	0.080	ug/L	18.727	1090	0.003
	Pb	208	0.000	ug/L	2281.187	798	0.000
	Bi	209		ug/L		41	-0.000
	Th	232	1.549	ug/L	54.452	38745	0.136
	U	238	0.026	ug/L	42.256	1264	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	1.0000
Ti	47	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	1.0000
Mn	55	Linear Thru Zero	
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	1.0000
Cu	65	Linear Thru Zero	
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	1.0000
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	
Se	77	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	1.0000
Sr	88	Linear Thru Zero	
Y	89	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	1.0000
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	
Ho	165	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000
			0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		97.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		97.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		102.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 7	Mo	98	CCB is out of limits (+-/ PQL)
QC Std 7	Th	232	CCB is out of limits (+-/ PQL)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Thursday, January 08, 2009 21:29:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\081231\QC Std 10.1917

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**1017.821**	**ug/L**	2.490	1143753	2.181
	Be	9	**1022.875**	**ug/L**	0.523	326791	0.623
	B	11	**-0.138**	**ug/L**	128.426	1021	-0.000
	Na	23	**49536.271**	**ug/L**	4.956	138629747	264.417
	Mg	24	**49717.597**	**ug/L**	5.774	99836775	190.352
	Al	27	**50366.028**	**ug/L**	3.014	132535058	252.749
	P	31	**23540.178**	**ug/L**	2.431	3499305	6.661
	K	39	**47809.682**	**ug/L**	5.503	129645553	246.678
	Ca	43	**47504.779**	**ug/L**	0.508	291569	0.556
>	Sc	45		**ug/L**		524441	524440.797
	Ti	47	**50.370**	**ug/L**	1.409	17034	0.032
	V	51	**909.644**	**ug/L**	2.386	3146733	6.002
	Cr	52	**928.645**	**ug/L**	1.241	2606257	4.967
	Cr	53		**ug/L**		360664	0.604
	Mn	55	**918.203**	**ug/L**	1.704	3913052	7.459
	Fe	57	**45735.208**	**ug/L**	1.514	4127024	7.862
	Co	59	**937.911**	**ug/L**	2.091	3391111	6.467
	Ni	60	**917.188**	**ug/L**	0.833	731980	1.396
	Cu	63		**ug/L**		1647266	3.141
	Cu	65	**882.079**	**ug/L**	1.138	859157	1.638
	Zn	66	**2213.062**	**ug/L**	0.890	1404928	6.297
	Zn	67		**ug/L**		250602	1.093
	Zn	68		**ug/L**		1080062	4.838
>	Ge	74		**ug/L**		223090	223089.737
	As	75	**950.261**	**ug/L**	1.008	611740	2.737
	Se	77		**ug/L**		23815	0.095
	Se	82	**480.246**	**ug/L**	0.947	27985	0.125
	Kr	83		**ug/L**		504	0.000
	Sr	88	**999.679**	**ug/L**	1.669	6282760	48.304
	Y	89		**ug/L**		269	0.001
	Mo	98	**978.046**	**ug/L**	1.100	1620187	12.455
	Ag	107	**254.199**	**ug/L**	2.047	737757	5.672
	Cd	111	**997.998**	**ug/L**	1.459	728813	5.603
	Cd	114		**ug/L**		1650558	12.689
>	In	115		**ug/L**		130074	130073.826
	Sn	120	**974.834**	**ug/L**	1.849	3137926	24.125
	Sb	121	**241.627**	**ug/L**	1.471	664097	5.096
	Sb	123		**ug/L**		523475	4.017
	Ba	135		**ug/L**		1829106	7.997
	Ba	137	**2306.249**	**ug/L**	0.282	3437258	15.029
	Ho	165		**ug/L**		3650	0.016
>	Lu	175		**ug/L**		228699	228699.389
	Tl	205	**444.871**	**ug/L**	1.523	3908571	17.090
	Pb	208	**4606.525**	**ug/L**	0.472	74540234	325.931
	Bi	209		**ug/L**		12606	0.055
	Th	232	**2487.480**	**ug/L**	1.046	50043272	218.807
	U	238	**5121.031**	**ug/L**	0.768	105849993	462.841

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	1.0000
Ti	47	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	1.0000
Mn	55	Linear Thru Zero	
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	1.0000
Cu	65	Linear Thru Zero	
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	1.0000
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	
Se	77	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	1.0000
Sr	88	Linear Thru Zero	
Y	89	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	1.0000
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	
Ho	165	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000
			0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7	101.782				
	Be	9	102.287				
	B	11					
	Na	23	99.073				
	Mg	24	99.435				
	Al	27	100.732				
	P	31	94.161				
	K	39	95.619				
	Ca	43	95.010				
>	Sc	45					
	Ti	47		89.1			
	V	51	90.964				
	Cr	52	92.864				
	Cr	53					
	Mn	55	91.820				
	Fe	57	91.470				
	Co	59	93.791				
	Ni	60	91.719				
	Cu	63					
	Cu	65	88.208				
	Zn	66	88.522				
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75	95.026	87.4			
	Se	77					
	Se	82	96.049				
	Kr	83					
	Sr	88	99.968				
	Y	89					
	Mo	98	97.805				
	Ag	107	101.680				
	Cd	111	99.800				
	Cd	114					
>	In	115					
	Sn	120	97.483	85.1			
	Sb	121	96.651				
	Sb	123					
	Ba	135					
	Ba	137	92.250				
	Ho	165					
>	Lu	175					
	Tl	205	88.974	90.6			
	Pb	208	92.131				
	Bi	209					
	Th	232	99.499				
	U	238	102.421				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	Cu	65	LRS is out of limits (+/- 10%)
QC Std 10	Zn	66	LRS is out of limits (+/- 10%)
QC Std 10	Tl	205	LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Thursday, January 08, 2009 21:35:11
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\081231\QC Std 11.1918

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.548**	**ug/L**	2.768	60179	0.108
	Be	9	**51.318**	**ug/L**	2.026	17358	0.031
	B	11	**99.450**	**ug/L**	2.323	33994	0.059
	Na	23	**4984.814**	**ug/L**	2.122	14785517	26.608
	Mg	24	**4960.455**	**ug/L**	1.689	10542933	18.992
	Al	27	**5003.921**	**ug/L**	2.279	13958031	25.111
	P	31	**4851.942**	**ug/L**	1.966	769152	1.373
	K	39	**4738.086**	**ug/L**	2.301	13937365	24.447
	Ca	43	**4690.039**	**ug/L**	1.841	30666	0.055
>	Sc	45		**ug/L**		555104	555104.458
	Ti	47	**46.600**	**ug/L**	2.654	16689	0.030
	V	51	**48.944**	**ug/L**	4.602	178165	0.323
	Cr	52	**48.655**	**ug/L**	3.016	146049	0.260
	Cr	53		**ug/L**		48603	0.004
	Mn	55	**49.144**	**ug/L**	1.134	223554	0.399
	Fe	57	**4889.543**	**ug/L**	1.017	471132	0.841
	Co	59	**48.604**	**ug/L**	2.894	186101	0.335
	Ni	60	**47.426**	**ug/L**	3.528	40172	0.072
	Cu	63		**ug/L**		102880	0.185
	Cu	65	**49.429**	**ug/L**	2.186	51066	0.092
	Zn	66	**51.202**	**ug/L**	0.870	34810	0.146
	Zn	67		**ug/L**		10680	0.015
	Zn	68		**ug/L**		26093	0.106
>	Ge	74		**ug/L**		236913	236912.662
	As	75	**49.770**	**ug/L**	2.535	35183	0.143
	Se	77		**ug/L**		4336	0.006
	Se	82	**50.052**	**ug/L**	2.407	3106	0.013
	Kr	83		**ug/L**		480	0.000
	Sr	88	**50.574**	**ug/L**	0.842	351908	2.444
	Y	89		**ug/L**		62	-0.000
	Mo	98	**49.947**	**ug/L**	0.616	91685	0.636
	Ag	107	**51.212**	**ug/L**	0.704	164510	1.143
	Cd	111	**51.014**	**ug/L**	2.025	41244	0.286
	Cd	114		**ug/L**		100022	0.695
>	In	115		**ug/L**		143914	143914.384
	Sn	120	**49.687**	**ug/L**	0.751	177137	1.230
	Sb	121	**50.387**	**ug/L**	0.974	154361	1.063
	Sb	123		**ug/L**		121421	0.836
	Ba	135		**ug/L**		44555	0.181
	Ba	137	**49.054**	**ug/L**	1.307	78655	0.320
	Ho	165		**ug/L**		133	0.000
>	Lu	175		**ug/L**		245375	245374.900
	Tl	205	**49.363**	**ug/L**	1.297	465558	1.896
	Pb	208	**51.473**	**ug/L**	0.062	894403	3.642
	Bi	209		**ug/L**		240	0.001
	Th	232	**56.462**	**ug/L**	2.473	1221976	4.967
	U	238	**56.017**	**ug/L**	1.544	1242847	5.063

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7	101.096				
Be	9	102.636				
B	11	99.450				
Na	23	99.696				
Mg	24	99.209				
Al	27	99.088				
P	31	97.039				
K	39	94.762				
Ca	43	93.801				
> Sc	45		94.4			
Ti	47	93.199				
V	51	97.888				
Cr	52	97.310				
Cr	53					
Mn	55	98.287				
Fe	57	97.791				
Co	59	97.208				
Ni	60	94.853				
Cu	63					
Cu	65	98.857				
Zn	66	102.404				
Zn	67					
Zn	68					
> Ge	74		92.8			
As	75	99.540				
Se	77					
Se	82	100.104				
Kr	83					
Sr	88	101.148				
Y	89					
Mo	98	99.894				
Ag	107	102.424				
Cd	111	102.027				
Cd	114					
> In	115		94.2			
Sn	120	99.374				
Sb	121	100.775				
Sb	123					
Ba	135					
Ba	137	98.108				
Ho	165					
> Lu	175		97.2			
Tl	205	98.725				
Pb	208	102.947				
Bi	209					
Th	232	112.925				
U	238	112.034				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	Th	232	CCV is out of limits (+/- 10%)
QC Std 11	U	238	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Thursday, January 08, 2009 21:41:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\081231\QC Std 12.1919

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.069**	**ug/L**	15.866	176	0.000
	Be	9	**0.068**	**ug/L**	47.594	35	0.000
	B	11	**0.496**	**ug/L**	82.666	1305	0.000
	Na	23	**2.410**	**ug/L**	44.020	26024	0.013
	Mg	24	**3.980**	**ug/L**	12.141	13006	0.015
	Al	27	**1.091**	**ug/L**	106.560	18345	0.005
	P	31	**-6.722**	**ug/L**	35.970	6405	-0.002
	K	39	**-13.749**	**ug/L**	39.073	324992	-0.071
	Ca	43	**0.809**	**ug/L**	702.791	236	0.000
>	Sc	45		**ug/L**		561395	561395.151
	Ti	47	**-0.159**	**ug/L**	22.274	219	-0.000
	V	51	**-0.390**	**ug/L**	57.159	-2374	-0.003
	Cr	52	**-0.064**	**ug/L**	23.666	1514	-0.000
	Cr	53		**ug/L**		45038	-0.003
	Mn	55	**-0.126**	**ug/L**	13.216	1453	-0.001
	Fe	57	**-3.137**	**ug/L**	43.217	4386	-0.001
	Co	59	**0.103**	**ug/L**	8.803	590	0.001
	Ni	60	**0.054**	**ug/L**	29.523	194	0.000
	Cu	63		**ug/L**		380	0.000
	Cu	65	**0.069**	**ug/L**	27.798	208	0.000
	Zn	66	**0.070**	**ug/L**	46.908	350	0.000
	Zn	67		**ug/L**		7562	0.001
	Zn	68		**ug/L**		950	0.000
>	Ge	74		**ug/L**		241356	241356.051
	As	75	**0.987**	**ug/L**	52.542	1930	0.003
	Se	77		**ug/L**		2803	-0.001
	Se	82	**-0.173**	**ug/L**	9.174	-2	-0.000
	Kr	83		**ug/L**		453	0.000
	Sr	88	**0.030**	**ug/L**	33.161	430	0.001
	Y	89		**ug/L**		43	-0.000
	Mo	98	**0.857**	**ug/L**	19.196	1713	0.011
	Ag	107	**0.021**	**ug/L**	41.613	130	0.000
	Cd	111	**0.067**	**ug/L**	26.679	83	0.000
	Cd	114		**ug/L**		104	0.000
>	In	115		**ug/L**		143742	143741.915
	Sn	120	**0.144**	**ug/L**	23.233	691	0.004
	Sb	121	**1.734**	**ug/L**	15.701	6671	0.037
	Sb	123		**ug/L**		5394	0.030
	Ba	135		**ug/L**		203	0.000
	Ba	137	**0.065**	**ug/L**	43.068	330	0.000
	Ho	165		**ug/L**		18	-0.000
>	Lu	175		**ug/L**		247437	247436.617
	Tl	205	**0.128**	**ug/L**	22.491	1498	0.005
	Pb	208	**0.141**	**ug/L**	26.855	3233	0.010
	Bi	209		**ug/L**		50	-0.000
	Th	232	**3.031**	**ug/L**	35.978	69432	0.267
	U	238	**0.496**	**ug/L**	25.384	11721	0.045

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		95.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		94.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		94.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 12	Mo	98	CCB is out of limits (+/- PQL)
QC Std 12	Th	232	CCB is out of limits (+/- PQL)
QC Std 12	U	238	CCB is out of limits (+/- PQL)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1201742786
Sample Date/Time: Thursday, January 08, 2009 21:47:29
Sample Type:
Sample Description: WEIS 6020 MB
Number of Replicates: 3
Batch ID: 826788|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\081231\1201742786.1920

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.109	ug/L	11.936	249	0.000
	Be	9	0.002	ug/L	847.108	14	0.000
	B	11	-0.394	ug/L	16.677	1117	-0.000
	Na	23	2.582	ug/L	29.590	29364	0.014
	Mg	24	-0.252	ug/L	94.622	4334	-0.001
	Al	27	-1.469	ug/L	119.820	12339	-0.007
	P	31	-20.566	ug/L	10.949	4660	-0.006
	K	39	5.851	ug/L	106.536	422841	0.030
	Ca	43	23.051	ug/L	13.525	423	0.000
>	Sc	45		ug/L		621666	621665.848
	Ti	47	0.072	ug/L	62.638	334	0.000
	V	51	-1.555	ug/L	51.742	-7404	-0.010
	Cr	52	0.503	ug/L	8.683	3561	0.003
	Cr	53		ug/L		102275	0.081
	Mn	55	-0.097	ug/L	4.929	1753	-0.001
	Fe	57	-4.624	ug/L	23.482	4699	-0.001
	Co	59	0.078	ug/L	3.801	546	0.001
	Ni	60	0.097	ug/L	30.872	256	0.000
	Cu	63		ug/L		466	0.000
	Cu	65	0.077	ug/L	8.519	239	0.000
	Zn	66	1.082	ug/L	6.114	1158	0.003
	Zn	67		ug/L		21834	0.051
	Zn	68		ug/L		2184	0.004
>	Ge	74		ug/L		267500	267500.320
	As	75	1.629	ug/L	28.728	2634	0.005
	Se	77		ug/L		7543	0.016
	Se	82	0.167	ug/L	173.361	22	0.000
	Kr	83		ug/L		496	-0.000
	Sr	88	0.029	ug/L	2.880	454	0.001
	Y	89		ug/L		70	-0.000
	Mo	98	0.180	ug/L	11.239	511	0.002
	Ag	107	0.000	ug/L	2729.867	70	0.000
	Cd	111	0.014	ug/L	108.171	43	0.000
	Cd	114		ug/L		48	-0.000
>	In	115		ug/L		153836	153836.466
	Sn	120	0.081	ug/L	17.503	504	0.002
	Sb	121	1.045	ug/L	14.311	4916	0.022
	Sb	123		ug/L		3810	0.017
	Ba	135		ug/L		173	0.000
	Ba	137	0.038	ug/L	35.921	293	0.000
	Ho	165		ug/L		21	-0.000
>	Lu	175		ug/L		253871	253871.125
	Tl	205	0.027	ug/L	10.804	547	0.001
	Pb	208	-0.008	ug/L	50.011	634	-0.001
	Bi	209		ug/L		64	0.000
	Th	232	0.299	ug/L	11.483	10236	0.026
	U	238	0.047	ug/L	14.330	1707	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		105.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		104.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201742787
Sample Date/Time: Thursday, January 08, 2009 21:53:42
Sample Type:
Sample Description: WEIS 6020 LCS
Number of Replicates: 3
Batch ID: 826788|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\081231\1201742787.1921

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	56.436	ug/L	2.271	76613	0.121
	Be	9	56.130	ug/L	2.474	21643	0.034
	B	11	114.175	ug/L	2.241	44313	0.068
	Na	23	1945.078	ug/L	3.451	6590248	10.383
	Mg	24	2040.185	ug/L	1.127	4947847	7.811
	Al	27	2220.505	ug/L	8.244	7061471	11.143
	P	31	2075.156	ug/L	1.928	379864	0.587
	K	39	2130.564	ug/L	12.478	7360378	10.993
	Ca	43	2068.398	ug/L	2.951	15561	0.024
>	Sc	45		ug/L		632712	632712.338
	Ti	47	43.305	ug/L	2.595	17707	0.027
	V	51	47.349	ug/L	0.200	196634	0.312
	Cr	52	50.030	ug/L	1.281	171211	0.268
	Cr	53		ug/L		120361	0.107
	Mn	55	50.268	ug/L	0.794	260631	0.408
	Fe	57	2007.197	ug/L	1.853	223573	0.345
	Co	59	50.286	ug/L	1.791	219581	0.347
	Ni	60	49.740	ug/L	3.602	48032	0.076
	Cu	63		ug/L		117978	0.186
	Cu	65	49.876	ug/L	1.106	58754	0.093
	Zn	66	53.253	ug/L	0.723	41178	0.152
	Zn	67		ug/L		29107	0.077
	Zn	68		ug/L		31428	0.113
>	Ge	74		ug/L		269558	269557.880
	As	75	52.151	ug/L	1.165	41883	0.150
	Se	77		ug/L		10547	0.027
	Se	82	52.909	ug/L	3.637	3734	0.014
	Kr	83		ug/L		522	0.000
	Sr	88	54.403	ug/L	2.164	404733	2.629
	Y	89		ug/L		88	-0.000
	Mo	98	50.018	ug/L	1.097	98176	0.637
	Ag	107	52.374	ug/L	0.829	179895	1.169
	Cd	111	52.480	ug/L	1.760	45368	0.295
	Cd	114		ug/L		110322	0.717
>	In	115		ug/L		153889	153888.506
	Sn	120	51.312	ug/L	2.510	195575	1.270
	Sb	121	54.189	ug/L	1.253	177377	1.143
	Sb	123		ug/L		141064	0.909
	Ba	135		ug/L		48351	0.187
	Ba	137	50.785	ug/L	2.593	85690	0.331
	Ho	165		ug/L		23	0.000
>	Lu	175		ug/L		258221	258221.069
	Tl	205	47.044	ug/L	4.250	466930	1.807
	Pb	208	51.030	ug/L	0.467	933131	3.611
	Bi	209		ug/L		831413	3.220
	Th	232	53.531	ug/L	1.676	1219491	4.709
	U	238	55.362	ug/L	0.582	1292696	5.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		107.6			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		105.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		102.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 221329001
Sample Date/Time: Thursday, January 08, 2009 21:59:56
Sample Type:
Sample Description: WEIS 6020
Number of Replicates: 3
Batch ID: 826788|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\081231\221329001.1922

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**4.871**	ug/L	2.741	6781	0.010
	Be	9	**0.023**	ug/L	18.693	23	0.000
	B	11	**94.899**	ug/L	2.871	37448	0.057
	Na	23	**7494.876**	ug/L	1.102	25606769	40.007
	Mg	24	**3313.962**	ug/L	5.801	8118312	12.688
	Al	27	**1312.510**	ug/L	6.706	4228232	6.587
	P	31	**221.368**	ug/L	0.711	48570	0.063
	K	39	**2251.532**	ug/L	8.871	7845614	11.617
	Ca	43	**4014.716**	ug/L	1.623	30291	0.047
>	Sc	45		ug/L		639503	639503.067
	Ti	47	**25.184**	ug/L	1.823	10540	0.016
	V	51	**5.536**	ug/L	36.108	22333	0.037
	Cr	52	**7.267**	ug/L	0.603	26801	0.039
	Cr	53		ug/L		104937	0.081
	Mn	55	**40.079**	ug/L	1.232	210510	0.326
	Fe	57	**1712.167**	ug/L	1.707	193570	0.294
	Co	59	**1.246**	ug/L	0.519	5714	0.009
	Ni	60	**9.561**	ug/L	1.322	9472	0.015
	Cu	63		ug/L		19972	0.031
	Cu	65	**8.222**	ug/L	1.213	9919	0.015
	Zn	66	**109.358**	ug/L	1.150	83490	0.311
	Zn	67		ug/L		35952	0.104
	Zn	68		ug/L		62653	0.231
>	Ge	74		ug/L		267265	267264.911
	As	75	**2.115**	ug/L	11.538	3005	0.006
	Se	77		ug/L		7876	0.017
	Se	82	**-0.140**	ug/L	377.506	0	-0.000
	Kr	83		ug/L		525	0.000
	Sr	88	**45.695**	ug/L	2.048	333877	2.208
	Y	89		ug/L		5876	0.038
	Mo	98	**0.435**	ug/L	7.093	994	0.006
	Ag	107	**0.197**	ug/L	4.346	734	0.004
	Cd	111	**0.210**	ug/L	4.165	209	0.001
	Cd	114		ug/L		360	0.002
>	In	115		ug/L		151140	151139.745
	Sn	120	**0.400**	ug/L	6.707	1687	0.010
	Sb	121	**6.088**	ug/L	1.959	20901	0.128
	Sb	123		ug/L		16474	0.101
	Ba	135		ug/L		21565	0.085
	Ba	137	**23.012**	ug/L	1.820	38146	0.150
	Ho	165		ug/L		428	0.002
>	Lu	175		ug/L		252868	252867.618
	Tl	205	**0.462**	ug/L	24.972	4768	0.018
	Pb	208	**4.324**	ug/L	0.441	78147	0.306
	Bi	209		ug/L		428	0.001
	Th	232	**0.393**	ug/L	34.917	12281	0.035
	U	238	**0.128**	ug/L	2.475	3563	0.012

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	1.0000
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	1.0000
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	1.0000
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	1.0000
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		108.7			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		104.7			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		98.9			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		100.2			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201742788
Sample Date/Time: Thursday, January 08, 2009 22:06:05
Sample Type:
Sample Description: WEIS 6020 DUP
Number of Replicates: 3
Batch ID: 826788|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\081231\1201742788.1923

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	4.880	ug/L	1.518	6785	0.010
	Be	9	0.022	ug/L	70.604	22	0.000
	B	11	95.083	ug/L	2.594	37480	0.057
	Na	23	7461.239	ug/L	6.154	25459603	39.827
	Mg	24	3308.703	ug/L	3.524	8098085	12.668
	Al	27	1422.216	ug/L	5.185	4576980	7.137
	P	31	219.563	ug/L	1.270	48189	0.062
	K	39	2127.635	ug/L	5.747	7427610	10.978
	Ca	43	3841.186	ug/L	1.772	28957	0.045
>	Sc	45		ug/L		638767	638766.739
	Ti	47	26.138	ug/L	2.331	10914	0.017
	V	51	5.822	ug/L	14.777	23505	0.038
	Cr	52	7.827	ug/L	1.528	28683	0.042
	Cr	53		ug/L		104118	0.080
	Mn	55	39.743	ug/L	2.238	208501	0.323
	Fe	57	1805.471	ug/L	1.307	203584	0.310
	Co	59	1.237	ug/L	2.707	5664	0.009
	Ni	60	9.791	ug/L	3.331	9684	0.015
	Cu	63		ug/L		19709	0.030
	Cu	65	8.080	ug/L	2.345	9738	0.015
	Zn	66	107.039	ug/L	0.791	81641	0.305
	Zn	67		ug/L		35705	0.103
	Zn	68		ug/L		60802	0.224
>	Ge	74		ug/L		266973	266972.502
	As	75	1.504	ug/L	30.576	2532	0.004
	Se	77		ug/L		7918	0.017
	Se	82	-0.322	ug/L	32.875	-12	-0.000
	Kr	83		ug/L		520	0.000
	Sr	88	44.219	ug/L	1.582	326020	2.137
	Y	89		ug/L		5922	0.038
	Mo	98	0.358	ug/L	3.274	852	0.005
	Ag	107	0.206	ug/L	3.545	769	0.005
	Cd	111	0.143	ug/L	5.193	153	0.001
	Cd	114		ug/L		324	0.002
>	In	115		ug/L		152493	152493.039
	Sn	120	0.391	ug/L	2.680	1667	0.010
	Sb	121	5.935	ug/L	0.853	20597	0.125
	Sb	123		ug/L		16314	0.099
	Ba	135		ug/L		21467	0.083
	Ba	137	22.213	ug/L	0.863	37323	0.145
	Ho	165		ug/L		436	0.002
>	Lu	175		ug/L		256231	256230.688
	Tl	205	0.143	ug/L	4.924	1691	0.005
	Pb	208	4.200	ug/L	0.685	76932	0.297
	Bi	209		ug/L		302	0.001
	Th	232	0.129	ug/L	8.799	6487	0.011
	U	238	0.113	ug/L	3.198	3263	0.010

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	1.0000
Ti	47	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	1.0000
Mn	55	Linear Thru Zero	
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	1.0000
Cu	65	Linear Thru Zero	
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	1.0000
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	
Se	77	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	1.0000
Sr	88	Linear Thru Zero	
Y	89	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	1.0000
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	
Ho	165	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000
			0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		108.6			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		104.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		99.8			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		101.5			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201742789
Sample Date/Time: Thursday, January 08, 2009 22:12:11
Sample Type:
Sample Description: WEIS 6020 MS
Number of Replicates: 3
Batch ID: 826788|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\081231\1201742789.1924

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	63.945	ug/L	2.371	87142	0.137
	Be	9	58.241	ug/L	0.352	22553	0.035
	B	11	217.289	ug/L	1.015	83508	0.129
	Na	23	10023.426	ug/L	5.820	33995193	53.504
	Mg	24	5529.217	ug/L	0.649	13452985	21.170
	Al	27	3419.080	ug/L	4.704	10913920	17.158
	P	31	2271.701	ug/L	2.134	416748	0.643
	K	39	4171.913	ug/L	1.518	14086443	21.525
	Ca	43	5993.838	ug/L	0.970	44790	0.070
>	Sc	45		ug/L		635290	635290.132
	Ti	47	68.825	ug/L	1.052	28074	0.044
	V	51	53.977	ug/L	3.986	225124	0.356
	Cr	52	57.377	ug/L	2.056	196860	0.307
	Cr	53		ug/L		124308	0.112
	Mn	55	89.385	ug/L	0.818	463545	0.726
	Fe	57	3743.683	ug/L	1.098	414136	0.644
	Co	59	51.775	ug/L	1.740	226972	0.357
	Ni	60	58.852	ug/L	2.321	57043	0.090
	Cu	63		ug/L		136243	0.214
	Cu	65	57.140	ug/L	1.046	67563	0.106
	Zn	66	161.622	ug/L	2.167	122719	0.460
	Zn	67		ug/L		43066	0.131
	Zn	68		ug/L		91318	0.339
>	Ge	74		ug/L		266217	266217.166
	As	75	52.131	ug/L	1.656	41339	0.150
	Se	77		ug/L		11043	0.029
	Se	82	53.325	ug/L	1.927	3717	0.014
	Kr	83		ug/L		542	0.000
	Sr	88	100.422	ug/L	2.728	730008	4.852
	Y	89		ug/L		5981	0.039
	Mo	98	51.681	ug/L	1.697	99157	0.658
	Ag	107	54.187	ug/L	2.556	181910	1.209
	Cd	111	54.418	ug/L	1.922	45988	0.306
	Cd	114		ug/L		111145	0.738
>	In	115		ug/L		150453	150452.639
	Sn	120	53.680	ug/L	2.507	199996	1.328
	Sb	121	61.165	ug/L	1.596	195532	1.290
	Sb	123		ug/L		154110	1.017
	Ba	135		ug/L		69960	0.274
	Ba	137	74.108	ug/L	1.164	123120	0.483
	Ho	165		ug/L		457	0.002
>	Lu	175		ug/L		254475	254474.876
	Tl	205	48.001	ug/L	2.023	469600	1.844
	Pb	208	55.914	ug/L	1.564	1007464	3.956
	Bi	209		ug/L		827628	3.252
	Th	232	52.318	ug/L	0.454	1174650	4.602
	U	238	57.463	ug/L	1.681	1322105	5.194

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		108.0			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		104.3			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		98.4			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		100.8			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	B	11	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201742790
Sample Date/Time: Thursday, January 08, 2009 22:18:17
Sample Type:
Sample Description: WEIS 6020 SDILT
Number of Replicates: 3
Batch ID: 826788|5|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\081231\1201742790.1925

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**0.907**	**ug/L**	1.567	1220	0.002
|	Be	9	**0.011**	**ug/L**	73.661	16	0.000
|	B	11	**19.780**	**ug/L**	3.376	7984	0.012
|	Na	23	**1433.884**	**ug/L**	4.761	4442554	7.654
|	Mg	24	**574.793**	**ug/L**	4.212	1277442	2.201
|	Al	27	**265.954**	**ug/L**	3.775	787111	1.335
|	P	31	**29.776**	**ug/L**	6.483	12567	0.008
|	K	39	**400.129**	**ug/L**	4.113	1569033	2.065
|	Ca	43	**759.136**	**ug/L**	1.681	5371	0.009
|>	Sc	45		**ug/L**		578164	578164.336
|	Ti	47	**4.579**	**ug/L**	4.366	1965	0.003
|	V	51	**0.620**	**ug/L**	93.547	1429	0.004
|	Cr	52	**1.289**	**ug/L**	7.825	5739	0.007
|	Cr	53		**ug/L**		53003	0.008
|	Mn	55	**7.707**	**ug/L**	0.686	38280	0.063
|	Fe	57	**330.075**	**ug/L**	0.362	37637	0.057
|	Co	59	**0.244**	**ug/L**	2.447	1171	0.002
|	Ni	60	**1.867**	**ug/L**	2.153	1794	0.003
|	Cu	63		**ug/L**		3841	0.006
⌊	Cu	65	**1.639**	**ug/L**	1.732	1900	0.003
⌈	Zn	66	**21.037**	**ug/L**	1.097	15061	0.060
|	Zn	67		**ug/L**		11749	0.017
|	Zn	68		**ug/L**		11982	0.045
|>	Ge	74		**ug/L**		246471	246470.783
|	As	75	**0.114**	**ug/L**	287.779	1350	0.000
|	Se	77		**ug/L**		3561	0.002
|	Se	82	**-0.202**	**ug/L**	157.558	-4	-0.000
⌊	Kr	83		**ug/L**		483	0.000
⌈	Sr	88	**8.515**	**ug/L**	0.426	60396	0.411
|	Y	89		**ug/L**		1067	0.007
|	Mo	98	**0.081**	**ug/L**	20.188	301	0.001
|	Ag	107	**0.031**	**ug/L**	11.052	166	0.001
|	Cd	111	**0.033**	**ug/L**	5.681	57	0.000
|	Cd	114		**ug/L**		104	0.000
|>	In	115		**ug/L**		146242	146241.842
|	Sn	120	**0.077**	**ug/L**	18.223	461	0.002
|	Sb	121	**1.012**	**ug/L**	3.755	4571	0.021
⌊	Sb	123		**ug/L**		3614	0.017
⌈	Ba	135		**ug/L**		4079	0.016
|	Ba	137	**4.249**	**ug/L**	0.319	7146	0.028
|	Ho	165		**ug/L**		105	0.000
|>	Lu	175		**ug/L**		249911	249910.806
|	Tl	205	**0.509**	**ug/L**	25.230	5166	0.020
|	Pb	208	**0.812**	**ug/L**	0.609	15133	0.057
|	Bi	209		**ug/L**		201	0.001
|	Th	232	**0.248**	**ug/L**	41.067	8963	0.022
⌊	U	238	**0.019**	**ug/L**	4.961	1048	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	1.0000
Ti	47	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	1.0000
Mn	55	Linear Thru Zero	
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	1.0000
Cu	65	Linear Thru Zero	
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	1.0000
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	
Se	77	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	1.0000
Sr	88	Linear Thru Zero	
Y	89	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	1.0000
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	
Ho	165	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000
			0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		98.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		96.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		95.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		99.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 221329002
Sample Date/Time: Thursday, January 08, 2009 22:24:23
Sample Type:
Sample Description: WEIS 6020
Number of Replicates: 3
Batch ID: 826788|1|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\081231\221329002.1926

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**3.955**	**ug/L**	5.060	5505	0.008
	Be	9	**0.013**	**ug/L**	63.636	19	0.000
	B	11	**93.010**	**ug/L**	1.526	36616	0.055
	Na	23	**6918.058**	**ug/L**	7.053	23546454	36.928
	Mg	24	**2629.064**	**ug/L**	0.155	6421835	10.066
	Al	27	**599.074**	**ug/L**	15.150	1930346	3.006
	P	31	**152.211**	**ug/L**	2.825	35934	0.043
	K	39	**2020.968**	**ug/L**	6.854	7065145	10.427
	Ca	43	**3643.502**	**ug/L**	1.293	27426	0.043
>	Sc	45		**ug/L**		637481	637481.090
	Ti	47	**9.966**	**ug/L**	4.715	4346	0.006
	V	51	**3.476**	**ug/L**	30.873	13618	0.023
	Cr	52	**4.261**	**ug/L**	2.716	16464	0.023
	Cr	53		**ug/L**		101261	0.075
	Mn	55	**25.250**	**ug/L**	2.936	133013	0.205
	Fe	57	**760.443**	**ug/L**	1.531	88644	0.131
	Co	59	**0.720**	**ug/L**	2.530	3381	0.005
	Ni	60	**5.273**	**ug/L**	2.439	5281	0.008
	Cu	63		**ug/L**		13447	0.021
	Cu	65	**5.414**	**ug/L**	3.408	6561	0.010
	Zn	66	**83.276**	**ug/L**	2.229	63475	0.237
	Zn	67		**ug/L**		32159	0.090
	Zn	68		**ug/L**		47061	0.173
>	Ge	74		**ug/L**		266540	266539.592
	As	75	**0.985**	**ug/L**	52.803	2126	0.003
	Se	77		**ug/L**		7910	0.017
	Se	82	**-0.384**	**ug/L**	157.173	-16	-0.000
	Kr	83		**ug/L**		539	0.000
	Sr	88	**41.870**	**ug/L**	0.830	306963	2.023
	Y	89		**ug/L**		3108	0.020
	Mo	98	**0.237**	**ug/L**	1.339	614	0.003
	Ag	107	**0.044**	**ug/L**	6.103	217	0.001
	Cd	111	**0.124**	**ug/L**	13.474	137	0.001
	Cd	114		**ug/L**		251	0.001
>	In	115		**ug/L**		151611	151611.185
	Sn	120	**0.244**	**ug/L**	3.468	1106	0.006
	Sb	121	**4.644**	**ug/L**	1.364	16351	0.098
	Sb	123		**ug/L**		12853	0.077
	Ba	135		**ug/L**		15737	0.060
	Ba	137	**16.271**	**ug/L**	0.964	27598	0.106
	Ho	165		**ug/L**		244	0.001
>	Lu	175		**ug/L**		258075	258074.924
	Tl	205	**0.179**	**ug/L**	7.032	2068	0.007
	Pb	208	**2.154**	**ug/L**	0.714	40122	0.152
	Bi	209		**ug/L**		208	0.001
	Th	232	**0.089**	**ug/L**	35.192	5639	0.008
	U	238	**0.073**	**ug/L**	1.948	2343	0.007

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		108.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		104.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		102.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Thursday, January 08, 2009 22:30:30
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\081231\QC Std 8.1927

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.372**	**ug/L**	1.729	62314	0.112
	Be	9	**53.033**	**ug/L**	2.263	17924	0.032
	B	11	**105.537**	**ug/L**	2.509	35986	0.063
	Na	23	**4682.510**	**ug/L**	3.189	13877231	24.995
	Mg	24	**5126.143**	**ug/L**	5.258	10886780	19.626
	Al	27	**5145.139**	**ug/L**	2.819	14331110	25.820
	P	31	**4927.964**	**ug/L**	1.018	780558	1.394
	K	39	**4864.111**	**ug/L**	1.568	14276445	25.097
	Ca	43	**4771.965**	**ug/L**	0.607	31174	0.056
>	Sc	45		**ug/L**		554490	554489.739
	Ti	47	**48.133**	**ug/L**	2.181	17220	0.031
	V	51	**49.457**	**ug/L**	1.251	180036	0.326
	Cr	52	**49.838**	**ug/L**	0.585	149497	0.267
	Cr	53		**ug/L**		52367	0.011
	Mn	55	**50.479**	**ug/L**	1.869	229368	0.410
	Fe	57	**4952.479**	**ug/L**	0.729	476693	0.851
	Co	59	**49.759**	**ug/L**	0.437	190433	0.343
	Ni	60	**48.470**	**ug/L**	0.357	41038	0.074
	Cu	63		**ug/L**		105007	0.189
	Cu	65	**50.469**	**ug/L**	2.331	52106	0.094
	Zn	66	**50.786**	**ug/L**	1.630	34895	0.144
	Zn	67		**ug/L**		11420	0.017
	Zn	68		**ug/L**		26368	0.106
>	Ge	74		**ug/L**		239426	239425.760
	As	75	**49.259**	**ug/L**	1.528	35204	0.142
	Se	77		**ug/L**		4598	0.007
	Se	82	**51.759**	**ug/L**	2.784	3245	0.014
	Kr	83		**ug/L**		438	-0.000
	Sr	88	**51.867**	**ug/L**	0.826	359100	2.506
	Y	89		**ug/L**		69	-0.000
	Mo	98	**49.216**	**ug/L**	1.811	89902	0.627
	Ag	107	**51.623**	**ug/L**	1.368	165019	1.152
	Cd	111	**51.558**	**ug/L**	1.223	41479	0.289
	Cd	114		**ug/L**		99644	0.695
>	In	115		**ug/L**		143201	143200.984
	Sn	120	**50.710**	**ug/L**	0.862	179896	1.255
	Sb	121	**50.282**	**ug/L**	1.181	153271	1.060
	Sb	123		**ug/L**		120174	0.831
	Ba	135		**ug/L**		45146	0.184
	Ba	137	**49.967**	**ug/L**	1.464	80034	0.326
	Ho	165		**ug/L**		138	0.000
>	Lu	175		**ug/L**		245116	245115.841
	Tl	205	**49.820**	**ug/L**	1.143	469433	1.914
	Pb	208	**51.281**	**ug/L**	0.649	890083	3.628
	Bi	209		**ug/L**		258	0.001
	Th	232	**52.507**	**ug/L**	1.626	1135647	4.619
	U	238	**54.989**	**ug/L**	1.619	1218717	4.970

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	1.0000
Ti	47	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	1.0000
Mn	55	Linear Thru Zero	
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	1.0000
Cu	65	Linear Thru Zero	
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	1.0000
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	
Se	77	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	1.0000
Sr	88	Linear Thru Zero	
Y	89	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	1.0000
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	
Ho	165	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000
			0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7	104.744				
	Be	9	106.066				
	B	11	105.537				
	Na	23	93.650				
	Mg	24	102.523				
	Al	27	101.884				
	P	31	98.559				
	K	39	97.282				
	Ca	43	95.439				
>	Sc	45		94.3			
	Ti	47	96.266				
	V	51	98.914				
	Cr	52	99.676				
	Cr	53					
	Mn	55	100.958				
	Fe	57	99.050				
	Co	59	99.518				
	Ni	60	96.939				
	Cu	63					
	Cu	65	100.938				
	Zn	66	101.573				
	Zn	67					
	Zn	68					
>	Ge	74		93.8			
	As	75	98.517				
	Se	77					
	Se	82	103.518				
	Kr	83					
	Sr	88	103.734				
	Y	89					
	Mo	98	98.433				
	Ag	107	103.247				
	Cd	111	103.116				
	Cd	114					
>	In	115		93.7			
	Sn	120	101.420				
	Sb	121	100.565				
	Sb	123					
	Ba	135					
	Ba	137	99.933				
	Ho	165					
>	Lu	175		97.1			
	Tl	205	99.640				
	Pb	208	102.561				
	Bi	209					
	Th	232	105.014				
	U	238	109.978				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Thursday, January 08, 2009 22:36:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\081231\QC Std 9.1928

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.002**	**ug/L**	156.715	97	0.000
	Be	9	**0.001**	**ug/L**	754.156	13	0.000
	B	11	**1.295**	**ug/L**	33.100	1588	0.001
	Na	23	**1.897**	**ug/L**	162.739	24690	0.010
	Mg	24	**0.233**	**ug/L**	3.640	5001	0.001
	Al	27	**-1.554**	**ug/L**	59.647	11004	-0.008
	P	31	**-4.446**	**ug/L**	18.248	6832	-0.001
	K	39	**-8.364**	**ug/L**	154.924	343785	-0.043
	Ca	43	**2.550**	**ug/L**	58.779	250	0.000
>	Sc	45		**ug/L**		566611	566610.820
	Ti	47	**-0.134**	**ug/L**	47.050	230	-0.000
	V	51	**-0.471**	**ug/L**	113.673	-2704	-0.003
	Cr	52	**-0.007**	**ug/L**	490.639	1700	-0.000
	Cr	53		**ug/L**		44844	-0.004
	Mn	55	**-0.162**	**ug/L**	1.969	1300	-0.001
	Fe	57	**-4.905**	**ug/L**	27.000	4255	-0.001
	Co	59	**0.020**	**ug/L**	11.335	274	0.000
	Ni	60	**0.008**	**ug/L**	70.063	157	0.000
	Cu	63		**ug/L**		291	0.000
	Cu	65	**0.005**	**ug/L**	403.661	142	0.000
	Zn	66	**-0.030**	**ug/L**	94.742	281	-0.000
	Zn	67		**ug/L**		7840	0.002
	Zn	68		**ug/L**		893	-0.000
>	Ge	74		**ug/L**		240782	240782.271
	As	75	**-0.182**	**ug/L**	82.226	1114	-0.001
	Se	77		**ug/L**		2880	-0.000
	Se	82	**-0.376**	**ug/L**	144.822	-14	-0.000
	Kr	83		**ug/L**		466	0.000
	Sr	88	**0.008**	**ug/L**	46.906	287	0.000
	Y	89		**ug/L**		53	-0.000
	Mo	98	**0.188**	**ug/L**	34.905	496	0.002
	Ag	107	**0.007**	**ug/L**	73.572	86	0.000
	Cd	111	**0.021**	**ug/L**	48.601	47	0.000
	Cd	114		**ug/L**		72	0.000
>	In	115		**ug/L**		145071	145070.703
	Sn	120	**0.020**	**ug/L**	44.658	255	0.000
	Sb	121	**0.344**	**ug/L**	34.049	2490	0.007
	Sb	123		**ug/L**		1938	0.006
	Ba	135		**ug/L**		103	-0.000
	Ba	137	**-0.015**	**ug/L**	29.946	201	-0.000
	Ho	165		**ug/L**		18	-0.000
>	Lu	175		**ug/L**		248232	248231.723
	Tl	205	**0.150**	**ug/L**	16.519	1710	0.006
	Pb	208	**0.003**	**ug/L**	10.659	826	0.000
	Bi	209		**ug/L**		47	-0.000
	Th	232	**0.917**	**ug/L**	60.310	23557	0.081
	U	238	**0.036**	**ug/L**	22.040	1421	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		96.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		94.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		94.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Friday, January 09, 2009 12:45:45
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.100
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse
Acq. Dead Time(ns): 35
Current Dead Time (ns): 35
Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	4826.0	4826.016	171.740	3.6
	Mg	24.0	39885.0	39885.005	370.771	0.9
	Co	58.9	81276.0	81275.957	600.064	0.7
	Rh	102.9	157823.9	157823.875	1603.604	1.0
	In	114.9	190109.3	190109.265	1626.175	0.9
	Pb	208.0	205808.8	205808.789	1788.124	0.9
⌈>	Ba	137.9	193322.2	193322.167	1244.132	0.6
⌊	Ba++	69.0	5060.6	0.026	0.000	1.4
⌈>	Ce	139.9	249617.8	249617.765	1167.177	0.5
⌊	CeO	155.9	5267.5	0.021	0.000	0.9
	Bkgd	220.0	19.3	19.300	2.465	12.8

Current Optimization File Data

Current Value	Description
0.87	Nebulizer Gas Flow
9.00	Lens Voltage
1450.00	ICP RF Power
-1915.63	Analog Stage Voltage
1300.00	Pulse Stage Voltage
200.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	17	10.8	6008.6
Co	59	17	11.3	81768.7
In	115	17	13.3	202608.6

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	596	2040	0.664
Be	9.0	9.0	2045	2055	0.668
Mg	24.0	24.0	5675	2060	0.612
Mg	25.0	25.0	5965	2050	0.684
Mg	26.0	26.0	6136	2055	0.671
Co	58.9	59.0	14193	2080	0.689
Rh	102.9	102.9	24880	2135	0.690
In	114.9	114.9	27784	2160	0.679
Ce	139.9	139.9	33866	2175	0.689
Pb	206.0	206.0	49948	2300	0.596
Pb	207.0	207.0	50159	2235	0.618
Pb	208.0	208.0	50463	2250	0.707
U	238.1	238.0	57728	2270	0.744

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Friday, January 09, 2009 20:11:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\zn and mo.mth
Dataset File: C:\elandata\Dataset\090109\Blank.108

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Zn	66		ug/L		442	
|	Zn	67		ug/L		15355	
|	Zn	68		ug/L		1634	
⌊>	Ge	74		ug/L		370106	
⌈	Mo	98		ug/L		96	
⌊>	In	115		ug/L		213927	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Zn	66	Simple Linear	
Zn	67	Simple Linear	
Zn	68	Simple Linear	
Ge	74	Simple Linear	
Mo	98	Linear Thru Zero	
In	115	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Zn	66					
Zn	67					
Zn	68					
Ge	74					
Mo	98					
In	115					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Friday, January 09, 2009 20:17:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\zn and mo.mth
Dataset File: C:\elandata\Dataset\090109\Standard 1.109

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Zn	66	**10.000**	**ug/L**	1.616	11561	0.030
	Zn	67		**ug/L**		15711	0.000
	Zn	68		**ug/L**		9819	0.022
>	Ge	74		**ug/L**		374302	374301.938
	Mo	98	**10.000**	**ug/L**	2.426	30148	0.141
>	In	115		**ug/L**		213862	213861.889

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
Mo	98	Linear Thru Zero	
In	115	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Zn	66					
Zn	67					
Zn	68					
Ge	74					
Mo	98					
In	115					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Friday, January 09, 2009 20:22:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\zn and mo.mth
Dataset File: C:\elandata\Dataset\090109\Standard 2.110

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Zn	66	99.951	ug/L	2.892	109381	0.283
Zn	67		ug/L		32041	0.042
Zn	68		ug/L		82399	0.210
Ge	74		ug/L		384948	384947.833
Mo	98	99.985	ug/L	1.240	302044	1.384
In	115		ug/L		218183	218182.740

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
Mo	98	Linear Thru Zero	
In	115	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Zn	66					
Zn	67					
Zn	68					
Ge	74					
Mo	98					
In	115					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Friday, January 09, 2009 20:27:54
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\zn and mo.mth
Dataset File: C:\elandata\Dataset\090109\QC Std 1.111

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Zn	66	**50.340**	**ug/L**	1.687	52417	0.143
|	Zn	67		**ug/L**		22069	0.019
|	Zn	68		**ug/L**		39637	0.104
⌊>	Ge	74		**ug/L**		364721	364721.236
⌈	Mo	98	**48.179**	**ug/L**	3.547	140122	0.667
⌊>	In	115		**ug/L**		210043	210042.569

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
Mo	98	Linear Thru Zero	
In	115	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Zn	66	100.679				
Zn	67					
Zn	68					
Ge	74		98.5			
Mo	98	96.359				
In	115		98.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Friday, January 09, 2009 20:33:23
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\zn and mo.mth
Dataset File: C:\elandata\Dataset\090109\QC Std 2.112

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Zn	66	**0.006**	**ug/L**	329.750	439	0.000
|	Zn	67		**ug/L**		14783	-0.001
|	Zn	68		**ug/L**		1717	0.000
⌊>	Ge	74		**ug/L**		362954	362953.958
⌈	Mo	98	**0.064**	**ug/L**	25.344	277	0.001
⌊>	In	115		**ug/L**		207256	207255.531

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Zn	66					
Zn	67					
Zn	68					
Ge	74		98.1			
Mo	98					
In	115		96.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Friday, January 09, 2009 20:38:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\zn and mo.mth
Dataset File: C:\elandata\Dataset\090109\QC Std 3.113

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Zn	66	**10.711**	**ug/L**	3.753	11399	0.030
|	Zn	67		**ug/L**		16034	0.003
|	Zn	68		**ug/L**		9600	0.022
⌊>	Ge	74		**ug/L**		361744	361743.598
⌈	Mo	98	**0.519**	**ug/L**	6.317	1581	0.007
⌊>	In	115		**ug/L**		207325	207325.336

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
Mo	98	Linear Thru Zero	
In	115	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Zn	66	107.114				
Zn	67					
Zn	68					
Ge	74		97.7			
Mo	98	103.757				
In	115		96.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Friday, January 09, 2009 20:44:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\zn and mo.mth
Dataset File: C:\elandata\Dataset\090109\QC Std 4.114

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Zn	66	**6.853**	**ug/L**	2.382	7177	0.019
|	Zn	67		**ug/L**		13495	-0.003
|	Zn	68		**ug/L**		4343	0.008
⌊>	Ge	74		**ug/L**		348403	348402.946
⌈	Mo	98	**2064.989**	**ug/L**	0.392	5527307	28.584
⌊>	In	115		**ug/L**		193363	193363.258

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Zn	66	107.073				
Zn	67					
Zn	68					
Ge	74			94.1		
Mo	98	103.249				
In	115			90.4		

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Friday, January 09, 2009 20:49:46
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\zn and mo.mth
Dataset File: C:\elandata\Dataset\090109\QC Std 5.115

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Zn	66	**25.906**	**ug/L**	1.588	26674	0.073
|	Zn	67		**ug/L**		17204	0.007
|	Zn	68		**ug/L**		18458	0.047
⌊>	Ge	74		**ug/L**		357772	357772.144
⌈	Mo	98	**2054.981**	**ug/L**	2.780	5699718	28.446
⌊>	In	115		**ug/L**		200437	200437.341

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
Mo	98	Linear Thru Zero	
In	115	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Zn	66	98.131				
Zn	67					
Zn	68					
Ge	74					
Mo	98	102.749	96.7			
In	115		93.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, January 09, 2009 20:55:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\zn and mo.mth
Dataset File: C:\elandata\Dataset\090109\QC Std 6.116

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
┌	Zn	66	49.986	ug/L	2.476	52776	0.142
│	Zn	67		ug/L		22727	0.020
│	Zn	68		ug/L		40564	0.105
└>	Ge	74		ug/L		369837	369837.127
┌	Mo	98	49.317	ug/L	0.323	143805	0.683
└>	In	115		ug/L		210508	210507.928

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Zn	66	99.972				
Zn	67					
Zn	68					
Ge	74		99.9			
Mo	98	98.635				
In	115		98.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, January 09, 2009 21:00:42
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\zn and mo.mth
Dataset File: C:\elandata\Dataset\090109\QC Std 7.117

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Zn	66	**0.002**	**ug/L**	354.007	433	0.000
|	Zn	67		**ug/L**		15040	0.000
|	Zn	68		**ug/L**		1742	0.000
⌊>	Ge	74		**ug/L**		361177	361176.796
⌈	Mo	98	**0.264**	**ug/L**	12.222	839	0.004
⌊>	In	115		**ug/L**		204192	204192.085

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, January 09, 2009 21:00:42
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\zn and mo.mth
Dataset File: C:\elandata\Dataset\090109\QC Std 7.117

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Zn	66	**0.002**	**ug/L**	354.007	433	0.000
|	Zn	67		**ug/L**		15040	0.000
|	Zn	68		**ug/L**		1742	0.000
⌊>	Ge	74		**ug/L**		361177	361176.796
⌈	Mo	98	**0.264**	**ug/L**	12.222	839	0.004
⌊>	In	115		**ug/L**		204192	204192.085

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Zn	66					
Zn	67					
Zn	68					
Ge	74		97.6			
Mo	98					
In	115		95.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201742786
Sample Date/Time: Friday, January 09, 2009 21:06:14
Sample Type:
Sample Description: WEIS 6020 MB
Number of Replicates: 3
Batch ID: 826788|1|baj
Method File: c:\elandata\Method\zn and mo.mth
Dataset File: C:\elandata\Dataset\090109\1201742786.118

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Zn	66	**1.344**	ug/L	1.423	1746	0.004
|	Zn	67		ug/L		53016	0.110
|	Zn	68		ug/L		4405	0.008
⌊>	Ge	74		ug/L		349428	349428.348
⌈	Mo	98	**0.199**	ug/L	14.003	627	0.003
⌊>	In	115		ug/L		195660	195659.565

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Zn	66					
Zn	67					
Zn	68					
Ge	74		94.4			
Mo	98					
In	115		91.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201742787
Sample Date/Time: Friday, January 09, 2009 21:11:49
Sample Type:
Sample Description: WEIS 6020 LCS
Number of Replicates: 3
Batch ID: 826788|1|baj
Method File: c:\elandata\Method\zn and mo.mth
Dataset File: C:\elandata\Dataset\090109\1201742787.119

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Zn	66	**54.549**	**ug/L**	2.592	55926	0.154
|	Zn	67		**ug/L**		64671	0.138
|	Zn	68		**ug/L**		44563	0.120
⌊>	Ge	74		**ug/L**		359332	359332.117
⌈	Mo	98	**54.316**	**ug/L**	1.333	148598	0.752
⌊>	In	115		**ug/L**		197518	197517.682

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
Mo	98	Linear Thru Zero	
In	115	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Zn	66					
Zn	67					
Zn	68					
Ge	74		97.1			
Mo	98					
In	115		92.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 221329001
Sample Date/Time: Friday, January 09, 2009 21:17:24
Sample Type:
Sample Description: WEIS 6020
Number of Replicates: 3
Batch ID: 826788|1|baj
Method File: c:\elandata\Method\zn and mo.mth
Dataset File: C:\elandata\Dataset\090109\221329001.120

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Zn	66	**109.714**	ug/L	1.217	108031	0.311
|	Zn	67		ug/L		68901	0.157
|	Zn	68		ug/L		81576	0.231
⌊>	Ge	74		ug/L		346402	346402.056
⌈	Mo	98	**0.408**	ug/L	5.686	1174	0.006
⌊>	In	115		ug/L		192518	192518.337

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
⌊>	Ge	74		93.6			
⌈	Mo	98					
⌊>	In	115		90.0			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201742788
Sample Date/Time: Friday, January 09, 2009 21:22:54
Sample Type:
Sample Description: WEIS 6020 DUP
Number of Replicates: 3
Batch ID: 826788|1|baj
Method File: c:\elandata\Method\zn and mo.mth
Dataset File: C:\elandata\Dataset\090109\1201742788.121

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Zn	66	**107.956**	ug/L	1.964	106851	0.306
|	Zn	67		ug/L		70915	0.162
|	Zn	68		ug/L		80900	0.228
⌊>	Ge	74		ug/L		348161	348160.960
⌈	Mo	98	**0.384**	ug/L	2.647	1130	0.005
⌊>	In	115		ug/L		195915	195914.959

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
Mo	98	Linear Thru Zero	
In	115	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
⌊>	Ge	74		94.1			
⌈	Mo	98					
⌊>	In	115		91.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201742789
Sample Date/Time: Friday, January 09, 2009 21:28:21
Sample Type:
Sample Description: WEIS 6020 MS
Number of Replicates: 3
Batch ID: 826788|1|baj
Method File: c:\elandata\Method\zn and mo.mth
Dataset File: C:\elandata\Dataset\090109\1201742789.122

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Zn	66	**162.832**	**ug/L**	2.414	158437	0.461
|	Zn	67		**ug/L**		78479	0.187
|	Zn	68		**ug/L**		117192	0.337
⌊>	Ge	74		**ug/L**		342771	342770.993
⌈	Mo	98	**55.327**	**ug/L**	1.392	144730	0.766
⌊>	In	115		**ug/L**		188895	188894.770

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
⌊>	Ge	74		92.6			
⌈	Mo	98					
⌊>	In	115		88.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201742790
Sample Date/Time: Friday, January 09, 2009 21:33:48
Sample Type:
Sample Description: WEIS 6020 SDILT
Number of Replicates: 3
Batch ID: 826788|5|baj
Method File: c:\elandata\Method\zn and mo.mth
Dataset File: C:\elandata\Dataset\090109\1201742790.123

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Zn	66	**21.616**	**ug/L**	2.106	21944	0.061
|	Zn	67		**ug/L**		26098	0.033
|	Zn	68		**ug/L**		17693	0.046
⌊>	Ge	74		**ug/L**		351687	351686.694
⌈	Mo	98	**0.103**	**ug/L**	14.196	375	0.001
⌊>	In	115		**ug/L**		200542	200542.051

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
Mo	98	Linear Thru Zero	
In	115	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
⌊>	Ge	74		95.0			
⌈	Mo	98					
⌊>	In	115		93.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Friday, January 09, 2009 21:39:16
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\zn and mo.mth
Dataset File: C:\elandata\Dataset\090109\QC Std 8.124

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Zn	66	**49.725**	**ug/L**	3.845	52668	0.141
|	Zn	67		**ug/L**		22697	0.020
|	Zn	68		**ug/L**		40234	0.104
⌊>	Ge	74		**ug/L**		370896	370895.713
⌈	Mo	98	**48.913**	**ug/L**	0.571	141091	0.677
⌊>	In	115		**ug/L**		208249	208248.685

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Zn	66	99.449				
Zn	67					
Zn	68					
Ge	74		100.2			
Mo	98	97.825				
In	115		97.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Friday, January 09, 2009 21:44:46
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\zn and mo.mth
Dataset File: C:\elandata\Dataset\090109\QC Std 9.125

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Zn	66	**-0.013**	**ug/L**	314.404	414	-0.000
|	Zn	67		**ug/L**		15246	0.001
|	Zn	68		**ug/L**		1808	0.001
⌊>	Ge	74		**ug/L**		357919	357919.134
⌈	Mo	98	**0.057**	**ug/L**	12.854	249	0.001
⌊>	In	115		**ug/L**		201524	201524.419

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
Mo	98	Linear Thru Zero	
In	115	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Zn	66					
Zn	67					
Zn	68					
Ge	74		96.7			
Mo	98					
In	115		94.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 221329002
Sample Date/Time: Friday, January 09, 2009 21:50:15
Sample Type:
Sample Description: WEIS 6020
Number of Replicates: 3
Batch ID: 826788|1|baj
Method File: c:\elandata\Method\zn and mo.mth
Dataset File: C:\elandata\Dataset\090109\221329002.126

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Zn	66	**83.967**	**ug/L**	3.162	80298	0.238
|	Zn	67		**ug/L**		62155	0.143
|	Zn	68		**ug/L**		60070	0.174
⌊>	Ge	74		**ug/L**		336072	336071.860
⌈	Mo	98	**0.288**	**ug/L**	4.383	841	0.004
⌊>	In	115		**ug/L**		189688	189688.197

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
⌊>	Ge	74		90.8			
⌈	Mo	98					
⌊>	In	115		88.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 221329001
Sample Date/Time: Friday, January 09, 2009 21:55:43
Sample Type:
Sample Description: WEIS 6020
Number of Replicates: 3
Batch ID: 826788|5|baj
Method File: c:\elandata\Method\zn and mo.mth
Dataset File: C:\elandata\Dataset\090109\221329001.127

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Zn	66	**23.131**	**ug/L**	0.867	24035	0.066
|	Zn	67		**ug/L**		23571	0.024
|	Zn	68		**ug/L**		19030	0.048
⌊>	Ge	74		**ug/L**		360369	360368.829
⌈	Mo	98	**0.067**	**ug/L**	3.662	283	0.001
⌊>	In	115		**ug/L**		204757	204756.984

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Zn	66					
Zn	67					
Zn	68					
Ge	74		97.4			
Mo	98					
In	115		95.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201742788
Sample Date/Time: Friday, January 09, 2009 22:01:12
Sample Type:
Sample Description: WEIS 6020 DUP
Number of Replicates: 3
Batch ID: 826788|5|baj
Method File: c:\elandata\Method\zn and mo.mth
Dataset File: C:\elandata\Dataset\090109\1201742788.128

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Zn	66	**22.105**	ug/L	2.708	22628	0.063
|	Zn	67		ug/L		23027	0.023
|	Zn	68		ug/L		18148	0.047
⌊>	Ge	74		ug/L		354810	354810.290
⌈	Mo	98	**0.062**	ug/L	14.776	265	0.001
⌊>	In	115		ug/L		203055	203055.487

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Zn	66					
Zn	67					
Zn	68					
Ge	74		95.9			
Mo	98					
In	115		94.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201742789
Sample Date/Time: Friday, January 09, 2009 22:06:41
Sample Type:
Sample Description: WEIS 6020 MS
Number of Replicates: 3
Batch ID: 826788|5|baj
Method File: c:\elandata\Method\zn and mo.mth
Dataset File: C:\elandata\Dataset\090109\1201742789.129

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Zn	66	**34.051**	**ug/L**	0.294	34210	0.096
|	Zn	67		**ug/L**		24425	0.028
|	Zn	68		**ug/L**		26255	0.071
⌊>	Ge	74		**ug/L**		350441	350440.703
⌈	Mo	98	**10.515**	**ug/L**	1.814	28819	0.146
⌊>	In	115		**ug/L**		197392	197391.727

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
Mo	98	Linear Thru Zero	
In	115	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Zn	66					
Zn	67					
Zn	68					
Ge	74		94.7			
Mo	98					
In	115		92.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201742790
Sample Date/Time: Friday, January 09, 2009 22:12:11
Sample Type:
Sample Description: WEIS 6020 SDILT
Number of Replicates: 3
Batch ID: 826788|25|baj
Method File: c:\elandata\Method\zn and mo.mth
Dataset File: C:\elandata\Dataset\090109\1201742790.130

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Zn	66	**4.637**	**ug/L**	3.775	5114	0.013
|	Zn	67		**ug/L**		16176	0.004
|	Zn	68		**ug/L**		5176	0.010
⌊>	Ge	74		**ug/L**		356997	356996.868
⌈	Mo	98	**0.010**	**ug/L**	38.582	119	0.000
⌊>	In	115		**ug/L**		203963	203962.865

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Zn	66					
Zn	67					
Zn	68					
Ge	74		96.5			
Mo	98					
In	115		95.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, January 09, 2009 22:17:39
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\zn and mo.mth
Dataset File: C:\elandata\Dataset\090109\QC Std 6.131

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Zn	66	**50.551**	ug/L	1.935	52417	0.143
|	Zn	67		ug/L		22753	0.021
|	Zn	68		ug/L		40138	0.106
⌊>	Ge	74		ug/L		363140	363140.192
⌈	Mo	98	**49.187**	ug/L	3.779	138311	0.681
⌊>	In	115		ug/L		203078	203077.567

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Zn	66	101.101				
Zn	67					
Zn	68					
Ge	74			98.1		
Mo	98	98.375				
In	115			94.9		

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, January 09, 2009 22:23:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\zn and mo.mth
Dataset File: C:\elandata\Dataset\090109\QC Std 7.132

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Zn	66	**-0.029**	**ug/L**	35.274	393	-0.000
|	Zn	67		**ug/L**		14330	-0.001
|	Zn	68		**ug/L**		1756	0.001
⌊>	Ge	74		**ug/L**		353255	353255.065
⌈	Mo	98	**0.033**	**ug/L**	9.192	180	0.000
⌊>	In	115		**ug/L**		199637	199637.139

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
⌊>	Ge	74		95.4			
⌈	Mo	98					
⌊>	In	115		93.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Miscellaneous

Prep LogBook

Analyst: AXG2 Verified by:_____

Batch: 826787

Lab SOP: GL-MA-E-006 REV# 9

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201742787	UI1052207-A	.5	mL
LCS	1201742787	UI1052214-B	.5	mL
MS	1201742789	UI1052207-A	.5	mL
MS	1201742789	UI1052214-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201742786		SW846 3005A	21-DEC-2008 08:45	50 mL	50 mL	1	WATER
LCS	1201742787		SW846 3005A	21-DEC-2008 08:45	50 mL	50 mL	1	WATER
SAMPLE	221329001		SW846 3005A	21-DEC-2008 08:45	50 mL	50 mL	1	WATER
DUP	1201742788	221329001	SW846 3005A	21-DEC-2008 08:45	50 mL	50 mL	1	WATER
MS	1201742789	221329001	SW846 3005A	21-DEC-2008 08:45	50 mL	50 mL	1	WATER
SDILT	1201742790	221329001	SW846 3005A	21-DEC-2008 08:45	50 mL	50 mL	1	WATER
SAMPLE	221329002		SW846 3005A	21-DEC-2008 08:45	50 mL	50 mL	1	WATER

Reagent/Solvent Lot ID	Amount	Description
913410	2.5 mL	HYDROCHLORIC ACID
1056573	1 mL	Nitric Acid CONC.

Comments

Standard Logbook

Serial ID: UI080602-01
Name: ICPMS Tungsten - 10mg/L S
Type: Source Material
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Opened: 02-JUN-08
Received: 02-JUN-08
Expires: 02-JUN-09

Catalog Number : 060074-06-01
Lot Number : 1012251
Solvent : 2% HNO3

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Serial ID: UI080818-09
Name: ICP-MS CRDL Master #1
Type: Source Material
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS CRDL Master Soln #1
Comments: None

Opened: 18-AUG-08
Received: 18-AUG-08
Expires: 18-AUG-09

Amount : 250 mL
Catalog Number : 160044-09-02
Lot Number : 1010290
Solvent : +/- 0.5% IN 2% HNO3

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI080818-10
Name: ICP-MS CRDL Master #2
Type: Source Material
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS CRDL Soln #2
Comments: None

Opened: 18-AUG-08
Received: 18-AUG-08
Expires: 18-AUG-09

Amount : 250 mL
Catalog Number : 160044-08-02
Lot Number : 1010289
Solvent : +/- 0.5% IN 2% HNO3

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Zirconium	2 mg/L		

Serial ID: UI081020-12
Name: ICP-MS ICSAB Master B
Type: Source Material
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Opened: 20-OCT-08
Received: 20-OCT-08
Expires: 20-OCT-09

Amount : 250 mL
Catalog Number : 160033-02
Lot Number : 1013686
Solvent : +/- 0.5% in 2% HNO3

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI081020-13
Name: ICP-MS ICSAB Master C
Type: Source Material
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS ICSAB Master C
Comments: None

Opened: 20-OCT-08
Received: 20-OCT-08
Expires: 20-OCT-09

Amount : 250 mL
Catalog Number : 160033-03
Lot Number : 1013684
Solvent : +/- 0.5% in 2% HNO3

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID: UI081219-06
Name: ICP-MS ICV/CCV Master A
Type: Source Material
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Opened: 19-DEC-08
Received: 19-DEC-08
Expires: 19-DEC-09

Amount : 250 mL
Catalog Number : 160055-01
Lot Number : 1014286
Solvent : +/- 0.5% in 5% HNO3 100 cm2

Analyte	Concentration	Analyte	Concentration

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI081219-07 **Opened:** 19-DEC-08 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 19-DEC-08 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 19-DEC-09 **Lot Number :** 1014252
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Serial ID: UI081219-08 **Opened:** 19-DEC-08 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 19-DEC-08 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 19-DEC-09 **Lot Number :** 1014253
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID: UI081219-11 **Opened:** 19-DEC-08 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 19-DEC-08 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 03-NOV-09 **Lot Number :** 1010773
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI

Standard Logbook

Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI081219-60
Name: ICPMS High Range Standar
Type: Source Material
Employee: Paul Boyd
Supplier: O2SI
Description: Linear Range Standard A
Comments: None

Opened: 19-DEC-08
Received: 19-DEC-08
Expires: 19-DEC-09

Amount : .5 mL
Catalog Number : 160212-02-01
Lot Number : 1014250
Solvent : 2%HNO3 + Tr HF

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI081219-61
Name: ICPMS High Range Standar
Type: Source Material
Employee: Paul Boyd
Supplier: O2SI
Description: Linear Range Standard B
Comments: None

Opened: 19-DEC-08
Received: 19-DEC-08
Expires: 19-DEC-09

Amount : .5 mL
Catalog Number : 160212-02-01
Lot Number : 1014250
Solvent : 2%HNO3 + Tr HF

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Standard Logbook

Serial ID: UI1052207-A **Opened:** 21-NOV-08 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 21-NOV-08 **Lot Number :** 1014057
Type: Source Material **Expires:** 21-NOV-09
Employee: Bryan Davis
Supplier: 02SI
Description: ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	5 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Bismuth	5 mg/L	Boron	10 mg/L
Cadmium	5 mg/L	Calcium	200 mg/L
Cesium	5 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	5 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorous	200 mg/L	Potassium	200 mg/L
Selenium	5 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	5 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: UI1052214-B **Opened:** 21-NOV-08 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 21-NOV-08 **Lot Number :** 1014057
Type: Source Material **Expires:** 21-NOV-09
Employee: Bryan Davis
Supplier: 02SI
Description: MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	5 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: UMS081124-01 **Opened:** 24-NOV-08 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 24-NOV-08 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 24-NOV-09 **Lot Number :** 14-81JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS081124-02 **Opened:** 24-NOV-08 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 24-NOV-08 **Lot Number :** 14-83JB
Type: Source Material **Expires:** 24-NOV-09
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS081124-03 **Opened:** 24-NOV-08 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 24-NOV-08 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 24-NOV-09 **Lot Number :** 14-82JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: WMS090108-04 **Opened:** 08-JAN-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 08-JAN-09 **Solvent :** 2%HNO3/1%HCl-1066943
Type: Working **Expires:** 09-JAN-09
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)

Standard Logbook

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI080602-01	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS081124-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS081124-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS081124-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS081124-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS081124-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS081124-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS081124-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS081124-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS081124-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS090108-04A **Opened:** 08-JAN-09 **Solvent :** 2%HNO3/1%HCl - 1066943
Name: ICPMS Cal Standard 10 **Received:** 08-JAN-09
Type: Working **Expires:** 09-JAN-09
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS090108-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS090108-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS090108-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS090108-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS090108-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS090108-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS090108-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS090108-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS090108-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS090108-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS090108-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS090108-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS090108-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS090108-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS090108-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS090108-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS090108-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS090108-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS090108-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS090108-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS090108-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS090108-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS090108-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS090108-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS090108-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS090108-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS090108-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS090108-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS090108-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS090108-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS090108-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS090108-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS090108-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS090108-05
Name: ICPMS ICV
Type: Working
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS ICV
Comments: None

Opened: 08-JAN-09
Received: 08-JAN-09
Expires: 09-JAN-09

Solvent : 2%HNO3/1%HCl - 1066943

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI081219-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI081219-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI081219-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI081219-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI081219-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI081219-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI081219-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI081219-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI081219-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS090108-06
Name: ICPMS CRDL
Type: Working
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Opened: 08-JAN-09
Received: 08-JAN-09
Expires: 09-JAN-09

Solvent : 2%HNO3/1%HCl - 1066943

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI080818-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI080818-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI080818-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI080818-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI080818-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI080818-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI080818-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI080818-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI080818-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI080818-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI080818-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI080818-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI080818-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI080818-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI080818-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI080818-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI080818-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI080818-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI080818-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI080818-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI080818-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI080818-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI080818-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI080818-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI080818-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI080818-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI080818-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI080818-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI080818-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI080818-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI080818-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI080818-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI080818-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS090108-07 **Opened:** 08-JAN-09 **Lot Number :** 1010773
Name: ICPMS ICSA **Received:** 08-JAN-09 **Solvent :** 2%HNO3/1%HCl - 1066943
Type: Working **Expires:** 09-JAN-09
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI081219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI081219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI081219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI081219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI081219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI081219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI081219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI081219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI081219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI081219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI081219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS090108-08
Name: ICPMS ICSAB
Type: Working
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Opened: 08-JAN-09
Received: 08-JAN-09
Expires: 09-JAN-09

Solvent : 2%HNO3/1%HCl - 1066943

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI081020-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI081020-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI081020-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI081020-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI081020-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI081020-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI081020-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI081020-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI081020-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI081020-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI081020-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI081020-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI081020-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI081020-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI081020-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI081020-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI081020-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI081020-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI081020-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI081020-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI081020-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI081020-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI081020-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI081020-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI081219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI081219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI081219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI081219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI081219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI081219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI081219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI081219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI081219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI081219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI081219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS090108-70 **Opened:** 08-JAN-09 **Solvent :** 2%HNO3/1%HCl - 1066943
Name: ICPMS LINEAR RANGE ST **Received:** 08-JAN-09
Type: Working **Expires:** 09-JAN-09
Employee: Elizabeth Janssen
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI081219-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI081219-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI081219-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI081219-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI081219-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI081219-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI081219-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI081219-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI081219-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI081219-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI081219-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI081219-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI081219-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI081219-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI081219-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI081219-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI081219-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI081219-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI081219-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI081219-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI081219-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI081219-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI081219-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI081219-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI081219-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI081219-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI081219-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI081219-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI081219-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI081219-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI081219-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Standard Logbook

Serial ID: WMS090109-04 **Opened:** 09-JAN-09 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 09-JAN-09 **Solvent :** 2%HNO3/1%HCl-1066943
Type: Working **Expires:** 10-JAN-09
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI080602-01	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS081124-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS081124-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS081124-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS081124-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS081124-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS081124-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS081124-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS081124-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS081124-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS081124-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Serial ID: WMS090109-04A
Name: ICPMS Cal Standard 10
Type: Working
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Opened: 09-JAN-09
Received: 09-JAN-09
Expires: 10-JAN-09

Solvent : 2%HNO3/1%HCl - 1066943

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS090109-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS090109-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS090109-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS090109-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS090109-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS090109-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS090109-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS090109-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS090109-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS090109-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS090109-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS090109-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS090109-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS090109-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS090109-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS090109-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS090109-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS090109-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS090109-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS090109-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS090109-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS090109-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS090109-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS090109-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS090109-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS090109-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS090109-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS090109-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS090109-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS090109-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS090109-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS090109-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS090109-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Serial ID: WMS090109-05
Name: ICPMS ICV
Type: Working
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS ICV
Comments: None

Opened: 09-JAN-09
Received: 09-JAN-09
Expires: 10-JAN-09

Solvent : 2%HNO3/1%HCl - 1066943

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI081219-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI081219-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI081219-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI081219-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI081219-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI081219-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI081219-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI081219-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI081219-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI081219-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Serial ID: WMS090109-06 **Opened:** 09-JAN-09 **Solvent :** 2%HNO3/1%HCl - 1066943
Name: ICPMS CRDL **Received:** 09-JAN-09
Type: Working **Expires:** 10-JAN-09
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI080818-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI080818-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI080818-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI080818-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI080818-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI080818-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI080818-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI080818-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI080818-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI080818-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI080818-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI080818-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI080818-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI080818-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI080818-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI080818-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI080818-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI080818-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI080818-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI080818-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI080818-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI080818-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI080818-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI080818-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI080818-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI080818-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI080818-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI080818-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI080818-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI080818-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI080818-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI080818-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI080818-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Serial ID: WMS090109-07
Name: ICPMS ICSA
Type: Working
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Opened: 09-JAN-09
Received: 09-JAN-09
Expires: 10-JAN-09

Lot Number : 1010773
Solvent : 2%HNO3/1%HCl - 1066943

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI081219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI081219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI081219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI081219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI081219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI081219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI081219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI081219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI081219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI081219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI081219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS090109-08
Name: ICPMS ICSAB
Type: Working
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Opened: 09-JAN-09
Received: 09-JAN-09
Expires: 10-JAN-09

Solvent : 2%HNO3/1%HCl - 1066943

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI081020-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI081020-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI081020-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI081020-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI081020-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI081020-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI081020-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI081020-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI081020-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI081020-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI081020-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI081020-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI081020-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI081020-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI081020-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI081020-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI081020-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI081020-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI081020-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI081020-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI081020-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI081020-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI081020-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI081020-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI081219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI081219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI081219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI081219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI081219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI081219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI081219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI081219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI081219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI081219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI081219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: 1056573
Name: I-HNO3
Type: Reagent/Solvent
Employee: Anthony Green
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Opened: 04-DEC-08
Received: 04-DEC-08
Expires: 04-DEC-09
Lot Number : G44029 L

Serial ID: 1063398
Name: I-HCL
Type: Reagent/Solvent
Employee: Anthony Green
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Opened: 22-DEC-08
Received: 22-DEC-08
Expires: 22-DEC-09
Lot Number : G45023
Preservative_Id : 5 none

Serial ID: 1066943
Name: B-2%HNO3/1%HCl-ICPMS
Type: Reagent/Solvent
Employee: Elizabeth Janssen
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Opened: 05-JAN-09
Received: 05-JAN-09
Expires: 12-JAN-09
Solvent : Type I Water

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1056573	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1063398	I-HCL	36.5-38.0	90 mL	9 l	N/A

Serial ID: 913410
Name: I-HCL
Type: Reagent/Solvent
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Opened: 10-SEP-08
Received: 10-SEP-08
Expires: 10-SEP-09

Lot Number : G26054
Preservative_Id : 5 none

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Weiss Associates (WEIS)
SDG 221329

Method/Analysis Information

Product: **Carbon, Total Organic**

Analytical Batch: 826596 **Method:** SM 5310 D

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SM 5310 D:

Sample ID	Client ID
221329001	RWSW0049
221329002	RWSW0048
1201742320	Method Blank (MB)
1201742321	221329001(RWSW0049) Sample Duplicate (DUP)
1201742323	221329001(RWSW0049) Post Spike (PS)
1201742325	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-093 REV# 8.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Carbon analysis was performed on a O-I Analytical Model 1010 Total Organic Carbon Analyzer.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule

The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
The following sample was selected for QC analysis: 221329001 (RWSW0049).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recovery for this sample set was within the required acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 641281 1201742320 (MB), 1201742321 (RWSW0049), 1201742323 (RWSW0049), 1201742325 (LCS), 221329001 (RWSW0049) and 221329002 (RWSW0048).

Additional Comments
A 15 mg/L Total Inorganic Carbon check standard is analyzed with each analytical run to prove that the instrument is effectively sparging away the inorganic carbon.

Method/Analysis Information

Product: **Ion Chromatography**

Analytical Batch: 826043 **Method:** EPA 300.0

Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA 300.0:

Sample ID	Client ID
221329001	RWSW0049
221329002	RWSW0048
1201741109	Method Blank (MB)
1201741110	221329001(RWSW0049) Sample Duplicate (DUP)
1201741111	221329001(RWSW0049) Post Spike (PS)
1201741112	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-086 REV# 17.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Ion Chromatography analysis was performed on a Dionex ICS-3000 Ion Chromatograph.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule

The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
The following sample was selected for QC analysis: 221329001 (RWSW0049).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recovery for this sample set was within the required acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
An NCR was not required for this SDG.

Manual Integrations
Manual integrations were not required for the samples in this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product: **Solids, Total Dissolved**

Analytical Batch: 826227 **Method:** SM 2540C

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SM 2540C:

Sample ID	Client ID
221329001	RWSW0049
221329002	RWSW0048
1201741484	Method Blank (MB)
1201741485	221209002(CAPA-09-1109) Sample Duplicate (DUP)
1201741486	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-001 REV# 9.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Solids analysis was performed on a Sartorius Balance BAL216. Solids lab

Initial Calibration

All initial calibration requirements have been met for this SDG.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation

The following sample was selected for QC analysis: 221209002 (CAPA-09-1109).

Duplicate Relative Percent Difference (RPD) Statement

The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Sample Aliquot
A sufficient amount of sample was provided by the client for analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
An NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product: **Solids, Total Suspended**

Analytical Batch: 826230 **Method:** SM 2540D

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SM 2540D:

Sample ID	Client ID
221329001	RWSW0049
221329002	RWSW0048
1201741487	Method Blank (MB)
1201741488	221297001(JH- Country Discharge) Sample Duplicate (DUP)
1201741489	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-012 REV# 9.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Solids analysis was performed on a Sartorius Balance BAL216. Solids lab

Initial Calibration

All initial calibration requirements have been met for this SDG.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation

The following sample was selected for QC analysis: 221297001 (JH- Country Discharge).

Duplicate Relative Percent Difference (RPD) Statement

The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Sample Aliquot
A sufficient amount of sample was provided by the client for analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
An NCR was not required for this SDG.

Additional Comments
Due to sample matrix, a smaller aliquot was used for analysis. 1201741488 (JH- Country Discharge), 221329001 (RWSW0049) and 221329002 (RWSW0048).

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Tom Lewis, Jr. **Date:** 12Jan09

Sample Data Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

WEIS001 Weiss Associates (128-4108-124-2)

Client SDG: 221329 GEL Work Order: 221329

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

J Value is estimated

P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Edith Kent.

Reviewed by

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Weiss Associates
Address : 5801 Christie Ave
Suite 600
Emeryville, California 94608
Contact: Mr. Tim Utterback
Project: **LEHR PO# 130-4110-05-P-C074**

Report Date: January 8, 2009

Client Sample ID: RWSW0049
Sample ID: 221329001
Matrix: Water
Collect Date: 15-DEC-08 08:42
Receive Date: 16-DEC-08
Collector: Client

Project: WEIS00405
Client ID: WEIS001

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis											
SM 5310 D Total Organic Carbon "As Received"											
Total Organic Carbon Average		8.60	0.330	1.00	mg/L	1	TSM	12/20/08	1339	826596	1
Ion Chromatography Federal											
EPA 300.0 Nitrate in Liquid "As Received"											
Nitrate-N		0.675	0.033	0.100	mg/L	1	VH1	12/16/08	2001	826043	2
Solids Analysis Federal											
SM 2540D Total Suspended Liq "As Received"											
Total Suspended Solids		21.2	1.37	6.02	mg/L		NXM 1	12/17/08	1111	826230	3
SM2540C Solids, Dissolved-FED "As Received"											
Total Dissolved Solids		53.0	2.38	10.0	mg/L		NXM 1	12/17/08	1117	826227	4

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SM 5310 D	
2	EPA 300.0	
3	SM 2540D	
4	SM 2540C	

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Weiss Associates
Address : 5801 Christie Ave
Suite 600
Emeryville, California 94608
Contact: Mr. Tim Utterback
Project: **LEHR PO# 130-4110-05-P-C074**

Report Date: January 8, 2009

Client Sample ID: RWSW0048
Sample ID: 221329002
Matrix: Water
Collect Date: 15-DEC-08 08:40
Receive Date: 16-DEC-08
Collector: Client

Project: WEIS00405
Client ID: WEIS001

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis											
SM 5310 D Total Organic Carbon "As Received"											
Total Organic Carbon Average		8.44	0.330	1.00	mg/L	1	TSM	12/20/08	1425	826596	1
Ion Chromatography Federal											
EPA 300.0 Nitrate in Liquid "As Received"											
Nitrate-N		0.691	0.033	0.100	mg/L	1	VH1	12/16/08	2101	826043	2
Solids Analysis Federal											
SM 2540D Total Suspended Liq "As Received"											
Total Suspended Solids		22.3	1.43	6.25	mg/L	1	NXM	12/17/08	1111	826230	3
SM2540C Solids, Dissolved-FED "As Received"											
Total Dissolved Solids		48.0	2.38	10.0	mg/L	1	NXM	12/17/08	1117	826227	4

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SM 5310 D	
2	EPA 300.0	
3	SM 2540D	
4	SM 2540C	

Quality Control Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Weiss Associates
5801 Christie Ave
Suite 600
Emeryville, California

Contact: Mr. Tim Utterback

Workorder: 221329

Report Date: January 8, 2009

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Carbon Analysis										
Batch 826596										
QC1201742321 221329001 DUP										
Total Organic Carbon Average		8.60		8.57	mg/L	0		(0%-20%)	TSM	12/20/08 13:57
QC1201742325 LCS										
Total Organic Carbon Average	10.0			10.8	mg/L		108	(85%-115%)		12/20/08 13:31
QC1201742320 MB										
Total Organic Carbon Average			U	0.123	mg/L					12/20/08 13:22
QC1201742323 221329001 PS										
Total Organic Carbon Average	10.0	8.60		18.3	mg/L		97	(65%-121%)		12/20/08 14:17
Ion Chromatography										
Batch 826043										
QC1201741110 221329001 DUP										
Nitrate-N		0.675		0.670	mg/L	1		(0%-20%)	VH1	12/16/08 20:21
QC1201741112 LCS										
Nitrate-N	5.00			4.90	mg/L		98	(90%-110%)		12/16/08 19:41
QC1201741109 MB										
Nitrate-N			U	0.00	mg/L					12/16/08 19:21
QC1201741111 221329001 PS										
Nitrate-N	5.00	0.675		5.55	mg/L		97	(90%-110%)		12/16/08 20:41
Solids Analysis										
Batch 826227										
QC1201741485 221209002 DUP										
Total Dissolved Solids		272		276	mg/L	1		(0%-10%)	NXM1	12/17/08 11:17
QC1201741486 LCS										
Total Dissolved Solids	300			295	mg/L		98	(95%-105%)		12/17/08 11:17
QC1201741484 MB										
Total Dissolved Solids			U	-2.0	mg/L					12/17/08 11:17
Batch 826230										
QC1201741488 221297001 DUP										
Total Suspended Solids		63.3		61.7	mg/L	3 ^		(+/-13.9)	NXM1	12/17/08 11:11
QC1201741489 LCS										
Total Suspended Solids	500			496	mg/L		99	(95%-105%)		12/17/08 11:11
QC1201741487 MB										
Total Suspended Solids			U	-0.20	mg/L					12/17/08 11:11

Notes:
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product

QC Summary

Workorder: 221329

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

B	For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
E	Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
E	Organics--Concentration of the target analyte exceeds the instrument calibration range
F	Estimated Value
H	Analytical holding time was exceeded
J	Value is estimated
M	M if above MDC and less than LLD
M	Matrix Related Failure
N	Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	RPD or %Recovery limits do not apply.
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI	Gamma Spectroscopy--Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
h	Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Carbon, Total Organic

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
ICAL-01		1	TSM	20-Dec-08 10:34	XX234.rlt
ICAL-02		1	TSM	20-Dec-08 10:43	XX235.rlt
ICAL-03		1	TSM	20-Dec-08 10:52	XX236.rlt
ICAL-04		1	TSM	20-Dec-08 11:01	XX237.rlt
ICAL-05		1	TSM	20-Dec-08 11:10	XX238.rlt
ICV		1	TSM	20-Dec-08 11:19	XX239.rlt
ICB		1	TSM	20-Dec-08 11:28	XX240.rlt
TIC	826596	1	TSM	20-Dec-08 11:38	XX241.rlt
CCV		1	TSM	20-Dec-08 13:04	XX242.rlt
CCB		1	TSM	20-Dec-08 13:13	XX243.rlt
1201742320	826596	1	TSM	20-Dec-08 13:22	XX244.rlt
1201742325	826596	1	TSM	20-Dec-08 13:31	XX245.rlt
221329001	826596	1	TSM	20-Dec-08 13:39	XX246.rlt
1201742321	826596	1	TSM	20-Dec-08 13:57	XX247.rlt
1201742323	826596	1	TSM	20-Dec-08 14:17	XX248.rlt
221329002	826596	1	TSM	20-Dec-08 14:25	XX249.rlt
221365001	826596	1	TSM	20-Dec-08 14:43	XX250.rlt
221365002	826596	1	TSM	20-Dec-08 15:01	XX251.rlt
221408002	826596	1	TSM	20-Dec-08 15:19	XX252.rlt
221408003	826596	1	TSM	20-Dec-08 15:53	XX253.rlt
221419001	826596	1	TSM	20-Dec-08 16:27	XX254.rlt
CCV		1	TSM	20-Dec-08 16:45	XX255.rlt
CCB		1	TSM	20-Dec-08 16:54	XX256.rlt
221408001	826596	1	TSM	20-Dec-08 17:02	XX257.rlt
1201742322	826596	1	TSM	20-Dec-08 17:36	XX258.rlt
1201742324	826596	1	TSM	20-Dec-08 17:56	XX259.rlt
CCV		1	TSM	20-Dec-08 18:05	XX260.rlt
CCB		1	TSM	20-Dec-08 18:14	XX261.rlt
1201743560	827153	1	TSM	20-Dec-08 18:23	XX262.rlt
1201743563	827153	1	TSM	20-Dec-08 18:32	XX263.rlt
221387003	827153	1	TSM	20-Dec-08 18:40	XX264.rlt
1201743561	827153	1	TSM	20-Dec-08 19:13	XX265.rlt
1201743562	827153	1	TSM	20-Dec-08 19:33	XX266.rlt
221439001	827153	1	TSM	20-Dec-08 19:41	XX267.rlt
221439004	827153	1	TSM	20-Dec-08 20:15	XX268.rlt
221442001	827153	1	TSM	20-Dec-08 20:49	XX269.rlt
221510001	827153	1	TSM	20-Dec-08 21:22	XX270.rlt
221510002	827153	1	TSM	20-Dec-08 21:40	XX271.rlt
CCV		1	TSM	20-Dec-08 21:59	XX272.rlt
CCB		1	TSM	20-Dec-08 22:08	XX273.rlt
221510004	827153	5	TSM	20-Dec-08 22:16	XX274.rlt
221510005	827153	1	TSM	20-Dec-08 22:34	XX275.rlt
221563001	827153	1	TSM	20-Dec-08 22:52	XX276.rlt
221563003	827153	1	TSM	20-Dec-08 23:26	XX277.rlt
1201744412	827153	1	TSM	20-Dec-08 23:59	XX278.rlt
1201744413	827153	1	TSM	21-Dec-08 0:19	XX279.rlt
CCV		1	TSM	21-Dec-08 0:28	XX280.rlt
CCB		1	TSM	21-Dec-08 0:37	XX281.rlt

```
*********************************************************************
**                          CONFIGURATION                          **
*********************************************************************
```

Analysis Mode: TOC Spl Intro: Autosampler 53
Remote Start : OFF

Loop Size: 5 mL

Actual Volume	1mL	5mL	10mL	25mL
Loop A (uL):	1000	4900	10000	25000
Loop B (uL):	1000	4900	10000	25000

Tray Type:	53 Vial	Vial Option:	Neither
Needle Depth:	97 %	Preacid Volume (uL):	200
Wash Needle Depth:	94 %	Preacid Purge Time (min:sec):	0:30

	TIC	TOC	TC
Blank Average:	254	623	511

Linearization Coeff: 53000

Sample Transfer Times (sec)

	Initial Fill			Loop Fill			Sample Inject
	Non-AS	AS	AS w/Sep	Non-AS	AS	AS w/Sep	(all)
1mL:	6.0	4.5	3.5	1.2	1.2	1.0	4.5
5mL:	8.1	7.0	8.0	5.1	3.0	5.5	10.3
10mL:	14.2	12.2	11.0	10.5	10.5	11.0	16.5
25mL:	35.0	35.0	32.0	n/a	n/a	n/a	38.0

Analog Concentration Signal indicates TOC
Analog Conc. Signal Timer is OFF, Timer duration (h:m:s): 00:00:00
Min Signal Range: 0.000 ppmC, Max Signal Range: 0.000 ppmC

Alarms DISABLED
Alarm Relay Timer is OFF, Timer duration (h:m:s): 00:00:00

Conc. Alarm Setpoints (ppm C)

	Low	High
TIC:	0.000	0.000
TOC:	0.000	0.000
TC:	0.000	0.000

```
*********************************************************************
**                          CALIBRATION                            **
*********************************************************************
```

12/20/08B Sat Dec 20 11:10:16 2008

Std. #	Used	Conc. (ppm)	Volume (mL)
1	Yes	20.000	5.000
2	Yes	10.000	5.000
3	Yes	1.000	5.000
4	Yes	0.200	5.000
5	Yes	0.000	5.000

RF (ugC/k-cts):	1.244
R-Squared:	0.9999
Offset (cts):	851
Offset (ugC):	-1.059
Calibration Mode:	TOC
Allow Editing:	No

Rep	Std. 1	Std. 2	Std. 3	Std. 4	Std. 5
1	79923	39586	4842	1806	965
2	-	-	-	-	-
3	-	-	-	-	-
4	-	-	-	-	-
5	-	-	-	-	-
6	-	-	-	-	-
7	-	-	-	-	-
8	-	-	-	-	-
9	-	-	-	-	-
10	-	-	-	-	-

(* = unused)

Pos/ Vial	Run Type	Rep #	Run Date	Run Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (ppm)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (ppm)	TC Area (cts)	TC Mass (ugC)	TC Conc (ppm)
1	Blk	1	20Dec2008	10:03	-	-	-	642	-	-	-	-	-
1	Blk	2	20Dec2008	10:10	-	-	-	440	-	-	-	-	-
1	Blk	3	20Dec2008	10:16	-	-	-	357	-	-	-	-	-
1	Blk	4	20Dec2008	10:25	-	-	-	296	-	-	-	-	-

** Std1 Name: ICAL-01 Data File: XX234
Remarks: 826596|1|1|WTC081220-01 ID:TOC267

1	Std1	1	20Dec2008	10:34	-	-	-	79923	98.000	20.000	-	-	-

** Calibration:
RF (ugC/k-cts): 1.232
R-Squared: 1.0000
Offset (cts): 0
Offset (ugC): 0.000

** Std2 Name: ICAL-02 Data File: XX235
Remarks: 826596|1|1|WTC081220-02 ID:TOC267

2	Std2	1	20Dec2008	10:43	-	-	-	39586	49.000	10.000	-	-	-

** Calibration:
RF (ugC/k-cts): 1.215
R-Squared: 1.0000
Offset (cts): -750
Offset (ugC): 0.912

** Std3 Name: ICAL-03 Data File: XX236
Remarks: 826596|1|1|WTC081220-03 ID:TOC267

3	Std3	1	20Dec2008	10:52	-	-	-	4842	4.900	1.000	-	-	-

** Calibration:
RF (ugC/k-cts): 1.239
R-Squared: 0.9998
Offset (cts): 594
Offset (ugC): -0.737

** Std4 Name: ICAL-04 Data File: XX237
Remarks: 826596|1|1|WTC081220-04 ID:TOC267

4	Std4	1	20Dec2008	11:01	-	-	-	1806	0.980	0.200	-	-	-

** Calibration:
RF (ugC/k-cts): 1.243
R-Squared: 0.9999
Offset (cts): 795
Offset (ugC): -0.989

** Std5 Name: ICAL-05 Data File: XX238
Remarks: 826596|1|1| ID:TOC267

5	Std5	1	20Dec2008	11:10	-	-	-	965	0.000	0.000	-	-	-

** Calibration:
RF (ugC/k-cts): 1.244
R-Squared: 0.9999
Offset (cts): 851
Offset (ugC): -1.059

```
** Chk2      Name:     ICV                          Data File: XX239
             Remarks: 826596|1|1|WTC081220-05 ID:TOC267

6    Chk2    1 20Dec2008 11:19      -       -          -     41733  50.868     10.381      -       -          -

** Chk5      Name:     ICB                          Data File: XX240
             Remarks: 826596|1|1| ID:TOC267

7    Chk5    1 20Dec2008 11:28      -       -          -      1053   0.251      0.051      -       -          -

** Spl       Name:     TIC                          Data File: XX241
             Remarks: 826596|1|1|WIC081220-01 ID:TOC267

8    Spl     1 20Dec2008 11:38      -       -          -      1869   1.873      0.382      -       -          -
```

Pos/ Vial	Run Type	Rep #	Run Date	Run Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (ppm)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (ppm)	TC Area (cts)	TC Mass (ugC)	TC Conc (ppm)
** Chk2	Name: CCV						Data File: XX242						
	Remarks: 826596|1|1|WTC081220-02 ID:TOC267												
9	Chk2	1	20Dec2008	13:04	-	-	-	40278	49.058	10.012	-	-	-
** Chk5	Name: CCB						Data File: XX243						
	Remarks: 826596|1|1| ID:TOC267												
10	Chk5	1	20Dec2008	13:13	-	-	-	1060	0.260	0.053	-	-	-
** Chk5	Name: 1201742320						Data File: XX244						
	Remarks: 826596|1|1|MB ID:TOC267												
11	Chk5	1	20Dec2008	13:22	-	-	-	1335	0.602	0.123	-	-	-
** Chk2	Name: 1201742325						Data File: XX245						
	Remarks: 826596|1|1|WTC081220-05:LCS ID:TOC267												
12	Chk2	1	20Dec2008	13:31	-	-	-	43447	53.001	10.817	-	-	-
** Spl	Name: 221329001						Data File: XX246						
	Remarks: 826596|1|1| ID:TOC267												
13	Spl	1	20Dec2008	13:39	-	-	-	32192	39.603	8.082	-	-	-
13	Spl	2	20Dec2008	13:49	-	-	-	36237	44.636	9.109	-	-	-
13	Spl	Avg						34214	42.119	8.596			
13	Spl	SDev						2860.247					
13	Spl	%RSD						8.36					
** Spl	Name: 1201742321						Data File: XX247						
	Remarks: 826596|1|1|221329001:DUP ID:TOC267												
14	Spl	1	20Dec2008	13:57	-	-	-	31909	39.251	8.010	-	-	-
14	Spl	2	20Dec2008	14:07	-	-	-	36302	44.717	9.126	-	-	-
14	Spl	Avg						34105	41.984	8.568			
14	Spl	SDev						3106.320					
14	Spl	%RSD						9.11					
** Spl	Name: 1201742323						Data File: XX248						
	Remarks: 826596|1|1|221329001:PS ID:TOC267												
15	Spl	1	20Dec2008	14:17	-	-	-	72524	89.787	18.324	-	-	-
** Spl	Name: 221329002						Data File: XX249						
	Remarks: 826596|1|1| ID:TOC267												
16	Spl	1	20Dec2008	14:25	-	-	-	31314	38.510	7.859	-	-	-
16	Spl	2	20Dec2008	14:35	-	-	-	35890	44.204	9.021	-	-	-
16	Spl	Avg						33602	41.357	8.440			
16	Spl	SDev						3235.721					
16	Spl	%RSD						9.63					

** Spl Name: 221365001 Data File: XX250
Remarks: 826596|1|1| ID:TOC267

17	Spl	1 20Dec2008 14:43	-	-	-	1892	1.901	0.388	-	-	-
17	Spl	2 20Dec2008 14:53	-	-	-	1501	1.415	0.289	-	-	-
17	Spl	Avg				1696	1.658	0.338			
17	Spl	SDev				276.479					
17	Spl	%RSD				16.30					

** Spl Name: 221365002 Data File: XX251
Remarks: 826596|1|1| ID:TOC267

18	Spl	1 20Dec2008 15:01	-	-	-	2014	2.053	0.419	-	-	-
18	Spl	2 20Dec2008 15:11	-	-	-	1914	1.929	0.394	-	-	-
18	Spl	Avg				1964	1.991	0.406			
18	Spl	SDev				70.711					
18	Spl	%RSD				3.60					

** Spl Name: 221408002 Data File: XX252
Remarks: 826596|1|1| ID:TOC267

19	Spl	1 20Dec2008 15:19	-	-	-	14031	17.006	3.470	-	-	-
19	Spl	2 20Dec2008 15:27	-	-	-	16843	20.504	4.185	-	-	-
19	Spl	3 20Dec2008 15:35	-	-	-	16103	19.584	3.997	-	-	-
19	Spl	4 20Dec2008 15:45	-	-	-	15846	19.264	3.931	-	-	-
19	Spl	Avg				15705	19.089	3.896			
19	Spl	SDev				1193.818					
19	Spl	%RSD				7.60					

** Spl Name: 221408003 Data File: XX253
Remarks: 826596|1|1| ID:TOC267

20	Spl	1 20Dec2008 15:53	-	-	-	1582	1.516	0.309	-	-	-
20	Spl	2 20Dec2008 16:01	-	-	-	1410	1.302	0.266	-	-	-
20	Spl	3 20Dec2008 16:09	-	-	-	1215	1.059	0.216	-	-	-
20	Spl	4 20Dec2008 16:18	-	-	-	1251	1.104	0.225	-	-	-
20	Spl	Avg				1364	1.245	0.254			
20	Spl	SDev				167.937					
20	Spl	%RSD				12.31					

** Spl Name: 221419001 Data File: XX254
Remarks: 826596|1|1| ID:TOC267

21	Spl	1 20Dec2008 16:27	-	-	-	24330	29.820	6.086	-	-	-
21	Spl	2 20Dec2008 16:36	-	-	-	27955	34.331	7.006	-	-	-
21	Spl	Avg				26142	32.076	6.546			
21	Spl	SDev				2563.262					
21	Spl	%RSD				9.81					

** Chk2 Name: CCV Data File: XX255
Remarks: 826596|1|1|WTC081220-02 ID:TOC267

22	Chk2	1 20Dec2008 16:45	-	-	-	41096	50.076	10.220	-	-	-

** Chk5 Name: CCB Data File: XX256
Remarks: 826596|1|1| ID:TOC267

23	Chk5	1 20Dec2008 16:54	-	-	-	1198	0.432	0.088	-	-	-

```
** Spl      Name:    221408001                    Data File: XX257
            Remarks: 826596|1|1| ID:TOC267

24   Spl    1 20Dec2008 17:02      -       -          -     8943  10.675      2.178      -       -          -
24   Spl    2 20Dec2008 17:10      -       -          -    11621  14.007      2.859      -       -          -
24   Spl    3 20Dec2008 17:18      -       -          -    11463  13.810      2.818      -       -          -
24   Spl    4 20Dec2008 17:28      -       -          -    11322  13.635      2.783      -       -          -
24   Spl  Avg                                           10837  13.032      2.659
24   Spl  SDev                                        1268.725
24   Spl  %RSD                                           11.71


** Spl      Name:    1201742322                   Data File: XX258
            Remarks: 826596|1|1|221408001:DUP ID:TOC267

25   Spl    1 20Dec2008 17:36      -       -          -     9070  10.833      2.211      -       -          -
25   Spl    2 20Dec2008 17:46      -       -          -    11859  14.303      2.919      -       -          -
25   Spl  Avg                                           10464  12.568      2.565
25   Spl  SDev                                        1972.121
25   Spl  %RSD                                           18.85


** Spl      Name:    1201742324                   Data File: XX259
            Remarks: 826596|1|1|221408001:PS ID:TOC267

26   Spl    1 20Dec2008 17:56      -       -          -    51599  63.751     13.010      -       -          -


** Chk2     Name:    CCV                          Data File: XX260
            Remarks: 826596|1|1|WTC081220-02 ID:TOC267

27   Chk2   1 20Dec2008 18:05      -       -          -    39888  48.573      9.913      -       -          -


** Chk5     Name:    CCB                          Data File: XX261
            Remarks: 826596|1|1| ID:TOC267

28   Chk5   1 20Dec2008 18:14      -       -          -     1070   0.272      0.056      -       -          -


** Chk5     Name:    1201743560                   Data File: XX262
            Remarks: 827153|1|1|MB ID:TOC267

29   Chk5   1 20Dec2008 18:23      -       -          -     1008   0.195      0.040      -       -          -


** Chk2     Name:    1201743563                   Data File: XX263
            Remarks: 827153|1|1|WTC081220-05:LCS ID:TOC267

30   Chk2   1 20Dec2008 18:32      -       -          -    43708  53.326     10.883      -       -          -


** Spl      Name:    221387003                    Data File: XX264
            Remarks: 827153|1|1| ID:TOC267

31   Spl    1 20Dec2008 18:40      -       -          -     4377   4.993      1.019      -       -          -
31   Spl    2 20Dec2008 18:48      -       -          -     4839   5.568      1.136      -       -          -
31   Spl    3 20Dec2008 18:55      -       -          -     4564   5.226      1.066      -       -          -
31   Spl    4 20Dec2008 19:05      -       -          -     4578   5.243      1.070      -       -          -
31   Spl  Avg                                            4589   5.258      1.073
31   Spl  SDev                                         189.903
31   Spl  %RSD                                            4.14
```

** Spl Name: 1201743561 Data File: XX265
Remarks: 827153|1|1|221387003:DUP ID:TOC267

32	Spl	1 20Dec2008 19:13	-	-	-	3845	4.331	0.884	-	-	-
32	Spl	2 20Dec2008 19:23	-	-	-	4793	5.511	1.125	-	-	-
32	Spl	Avg				4319	4.921	1.004			
32	Spl	SDev				670.337					
32	Spl	%RSD				15.52					

** Spl Name: 1201743562 Data File: XX266
Remarks: 827153|1|1|221387003:PS ID:TOC267

33	Spl	1 20Dec2008 19:33	-	-	-	47156	58.222	11.882	-	-	-

** Spl Name: 221439001 Data File: XX267
Remarks: 827153|1|1| ID:TOC267

34	Spl	1 20Dec2008 19:41	-	-	-	5434	6.308	1.287	-	-	-
34	Spl	2 20Dec2008 19:49	-	-	-	6038	7.060	1.441	-	-	-
34	Spl	3 20Dec2008 19:57	-	-	-	5743	6.693	1.366	-	-	-
34	Spl	4 20Dec2008 20:07	-	-	-	5823	6.793	1.386	-	-	-
34	Spl	Avg				5759	6.713	1.370			
34	Spl	SDev				250.211					
34	Spl	%RSD				4.34					

** Spl Name: 221439004 Data File: XX268
Remarks: 827153|1|1| ID:TOC267

35	Spl	1 20Dec2008 20:15	-	-	-	4838	5.567	1.136	-	-	-
35	Spl	2 20Dec2008 20:23	-	-	-	5121	5.919	1.208	-	-	-
35	Spl	3 20Dec2008 20:31	-	-	-	4969	5.730	1.169	-	-	-
35	Spl	4 20Dec2008 20:40	-	-	-	5102	5.895	1.203	-	-	-
35	Spl	Avg				5007	5.778	1.179			
35	Spl	SDev				131.688					
35	Spl	%RSD				2.63					

** Spl Name: 221442001 Data File: XX269
Remarks: 827153|1|1| ID:TOC267

36	Spl	1 20Dec2008 20:49	-	-	-	11960	14.429	2.945	-	-	-
36	Spl	2 20Dec2008 20:56	-	-	-	13116	15.867	3.238	-	-	-
36	Spl	3 20Dec2008 21:04	-	-	-	13119	15.871	3.239	-	-	-
36	Spl	4 20Dec2008 21:14	-	-	-	12957	15.669	3.198	-	-	-
36	Spl	Avg				12788	15.459	3.155			
36	Spl	SDev				557.162					
36	Spl	%RSD				4.36					

** Spl Name: 221510001 Data File: XX270
Remarks: 827153|1|1| ID:TOC267

37	Spl	1 20Dec2008 21:22	-	-	-	23903	29.289	5.977	-	-	-
37	Spl	2 20Dec2008 21:32	-	-	-	28573	35.100	7.163	-	-	-
37	Spl	Avg				26238	32.194	6.570			
37	Spl	SDev				3302.189					
37	Spl	%RSD				12.59					

** Spl Name: 221510002 Data File: XX271
Remarks: 827153|1|1| ID:TOC267

38	Spl	1 20Dec2008 21:40	-	-	-	13759	16.667	3.401	-	-	-
38	Spl	2 20Dec2008 21:50	-	-	-	17172	20.914	4.268	-	-	-
38	Spl	Avg				15465	18.790	3.835			
38	Spl	SDev				2413.355					
38	Spl	%RSD				15.60					

** Chk2 Name: CCV Data File: XX272
Remarks: 827153|1|1|WTC081220-02 ID:TOC267

39	Chk2	1 20Dec2008 21:59	-	-	-	39651	48.278	9.853	-	-	-

** Chk5 Name: CCB Data File: XX273
Remarks: 827153|1|1| ID:TOC267

40	Chk5	1 20Dec2008 22:08	-	-	-	1110	0.322	0.066	-	-	-

** Spl Name: 221510004 Data File: XX274
Remarks: 827153|5|1| ID:TOC267

41	Spl	1 20Dec2008 22:16	-	-	-	172242	213.864	43.646	-	-	-
41	Spl	2 20Dec2008 22:26	-	-	-	200149	248.588	50.732	-	-	-
41	Spl	Avg				186195	231.226	47.189			
41	Spl	SDev				19733.229					
41	Spl	%RSD				10.60					

** Spl Name: 221510005 Data File: XX275
Remarks: 827153|1|1| ID:TOC267

42	Spl	1 20Dec2008 22:34	-	-	-	17692	21.561	4.400	-	-	-
42	Spl	2 20Dec2008 22:44	-	-	-	20046	24.490	4.998	-	-	-
42	Spl	Avg				18869	23.025	4.699			
42	Spl	SDev				1664.529					
42	Spl	%RSD				8.82					

** Spl Name: 221563001 Data File: XX276
Remarks: 827153|1|1| ID:TOC267

43	Spl	1 20Dec2008 22:52	-	-	-	10206	12.246	2.499	-	-	-
43	Spl	2 20Dec2008 23:00	-	-	-	11175	13.452	2.745	-	-	-
43	Spl	3 20Dec2008 23:07	-	-	-	10904	13.115	2.677	-	-	-
43	Spl	4 20Dec2008 23:17	-	-	-	10923	13.138	2.681	-	-	-
43	Spl	Avg				10802	12.988	2.651			
43	Spl	SDev				416.089					
43	Spl	%RSD				3.85					

** Spl Name: 221563003 Data File: XX277
Remarks: 827153|1|1| ID:TOC267

44	Spl	1 20Dec2008 23:26	-	-	-	9112	10.885	2.221	-	-	-
44	Spl	2 20Dec2008 23:33	-	-	-	10203	12.242	2.499	-	-	-
44	Spl	3 20Dec2008 23:41	-	-	-	9895	11.859	2.420	-	-	-
44	Spl	4 20Dec2008 23:51	-	-	-	10081	12.091	2.467	-	-	-
44	Spl	Avg				9822	11.769	2.402			
44	Spl	SDev				490.465					
44	Spl	%RSD				4.99					

** Spl Name: 1201744412 Data File: XX278
Remarks: 827153|1|1|221563003:DUP ID:TOC267

45	Spl	1 20Dec2008 23:59	-	-	-	9061	10.821	2.208	-	-	-
45	Spl	2 21Dec2008 00:09	-	-	-	9925	11.897	2.428	-	-	-
45	Spl	Avg				9493	11.359	2.318			
45	Spl	SDev				610.940					
45	Spl	%RSD				6.44					

** Spl Name: 1201744413 Data File: XX279
Remarks: 827153|1|1|221563003:PS ID:TOC267

46	Spl	1 21Dec2008 00:19	-	-	-	51920	64.150	13.092	-	-	-

** Chk2 Name: CCV Data File: XX280
Remarks: 827153|1|1|WTC081220-02 ID:TOC267

47	Chk2	1 21Dec2008 00:28	-	-	-	40874	49.800	10.163	-	-	-

** Chk5 Name: CCB Data File: XX281
Remarks: 827153|1|1| ID:TOC267

48	Chk5	1 21Dec2008 00:37	-	-	-	1091	0.299	0.061	-	-	-

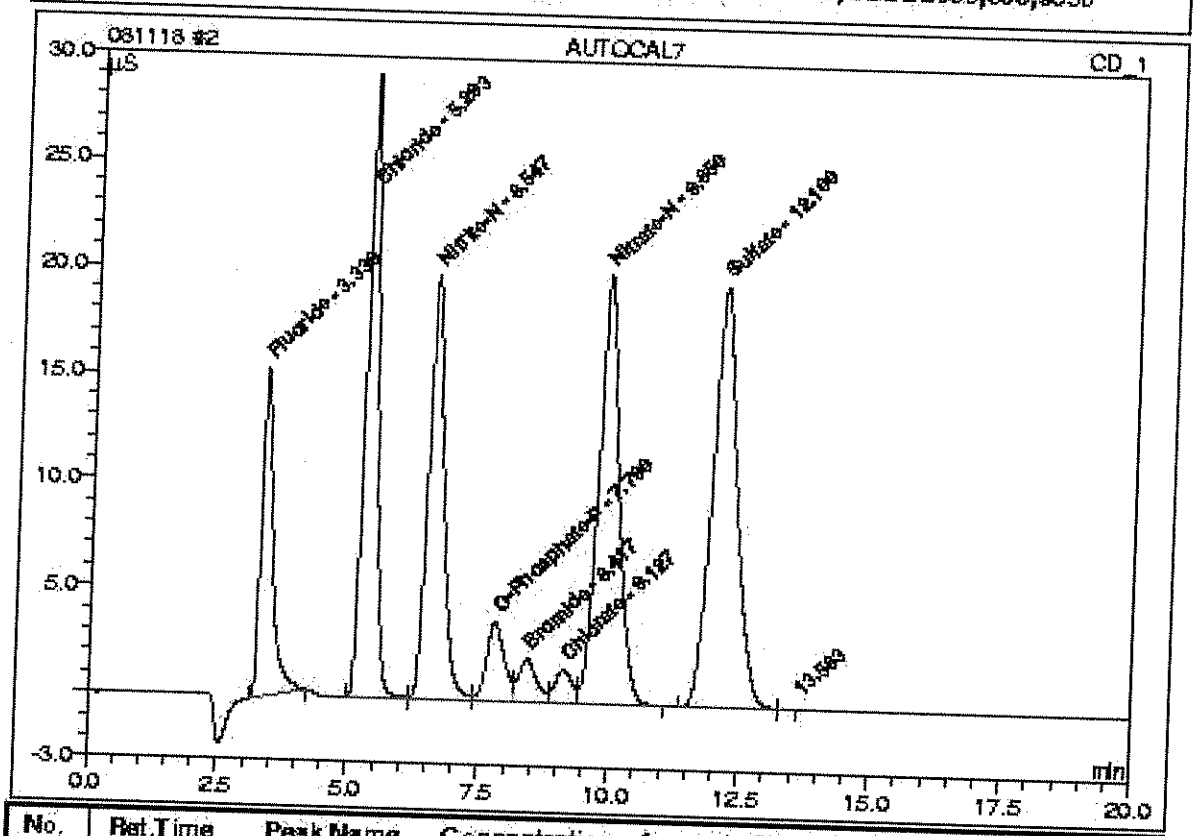
Ion Chromatography

This is runlog for Sequence 081118.seq for IC5

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
BLK	11/18/08 15:23		1	081118	VH1
ICAL-07	11/18/08 15:43		1	081118	VH1
ICAL-06	11/18/08 16:04		1	081118	VH1
ICAL-05	11/18/08 16:24		1	081118	VH1
ICAL-04	11/18/08 16:44		1	081118	VH1
ICAL-03	11/18/08 17:04		1	081118	VH1
ICAL-02	11/18/08 17:24		1	081118	VH1
ICAL-01	11/18/08 17:44		1	081118	VH1
ICV	11/18/08 18:04		1	081118	VH1
ICB	11/18/08 18:24		1	081118	VH1
1201719688	11/18/08 18:44	816607	1	081118	VH1
1201719691	11/18/08 19:04	816607	1	081118	VH1
219693001	11/18/08 19:24	816607	1	081118	VH1
1201719689	11/18/08 19:45	816607	1	081118	VH1
1201719690	11/18/08 20:05	816607	1	081118	VH1
219693002	11/18/08 20:25	816607	1	081118	VH1
219693003	11/18/08 20:45	816607	1	081118	VH1
219693004	11/18/08 21:05	816607	1	081118	VH1
219693005	11/18/08 21:25	816607	1	081118	VH1
219693006	11/18/08 21:45	816607	1	081118	VH1
CVH	11/18/08 22:05		1	081118	VH1
CCB	11/18/08 22:25		1	081118	VH1
219693007	11/18/08 22:45	816607	1	081118	VH1
219693008	11/18/08 23:05	816607	1	081118	VH1
219693009	11/18/08 23:26	816607	1	081118	VH1
CCV	11/18/08 23:46		1	081118	VH1

2 AUTOCAL7

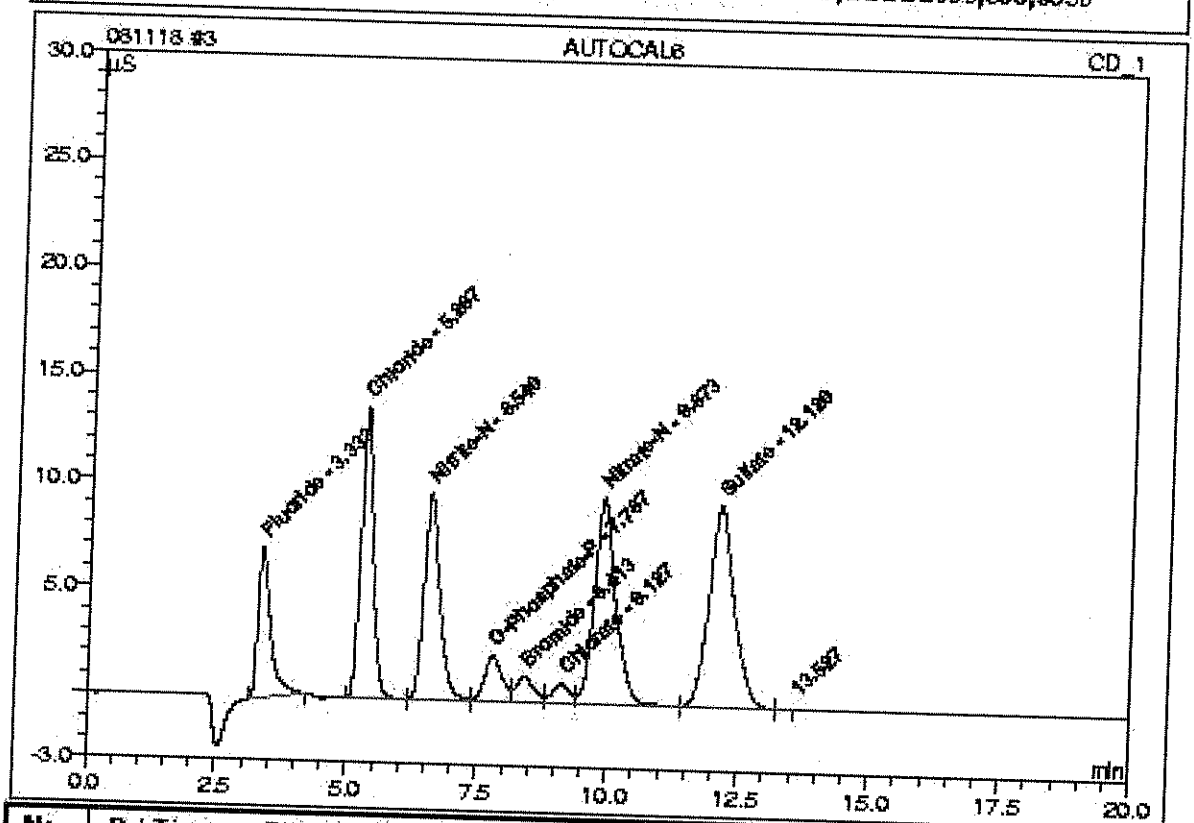
Sample Name:	AUTOCAL7	Injection Volume:	50.0
Vial Number:	9	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS9_HC	Sample Weight:	1.0000
Quantif. Method:	111808AN	Sample Amount:	1.0000
Recording Time:	11/18/08 15:43	Analyst:	VH1
Run Time (min):	20.00	Column:	AS9HC-014108;GLGCE088;300;9058



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	3.33	Fluoride	10.0000	10.0000		4.044	9.78
2	5.29	Chloride	20.0000	20.0000		7.636	18.46
3	6.55	Nitrite-N	10.0000	10.0000		6.891	16.66
4	7.79	O-Phosphate-P	5.0000	5.0000		1.440	3.48
5	8.42	Bromide	5.0000	5.0000		0.789	1.91
6	9.13	Chlorate	5.0000	5.0000		0.592	1.43
7	9.85	Nitrate-N	10.0000	10.0000		9.191	22.22
8	12.10	Sulfate	40.0000	40.0000		10.776	26.05
Total:				105.0000	0.000	41.360	99.99

3 AUTOCAL6

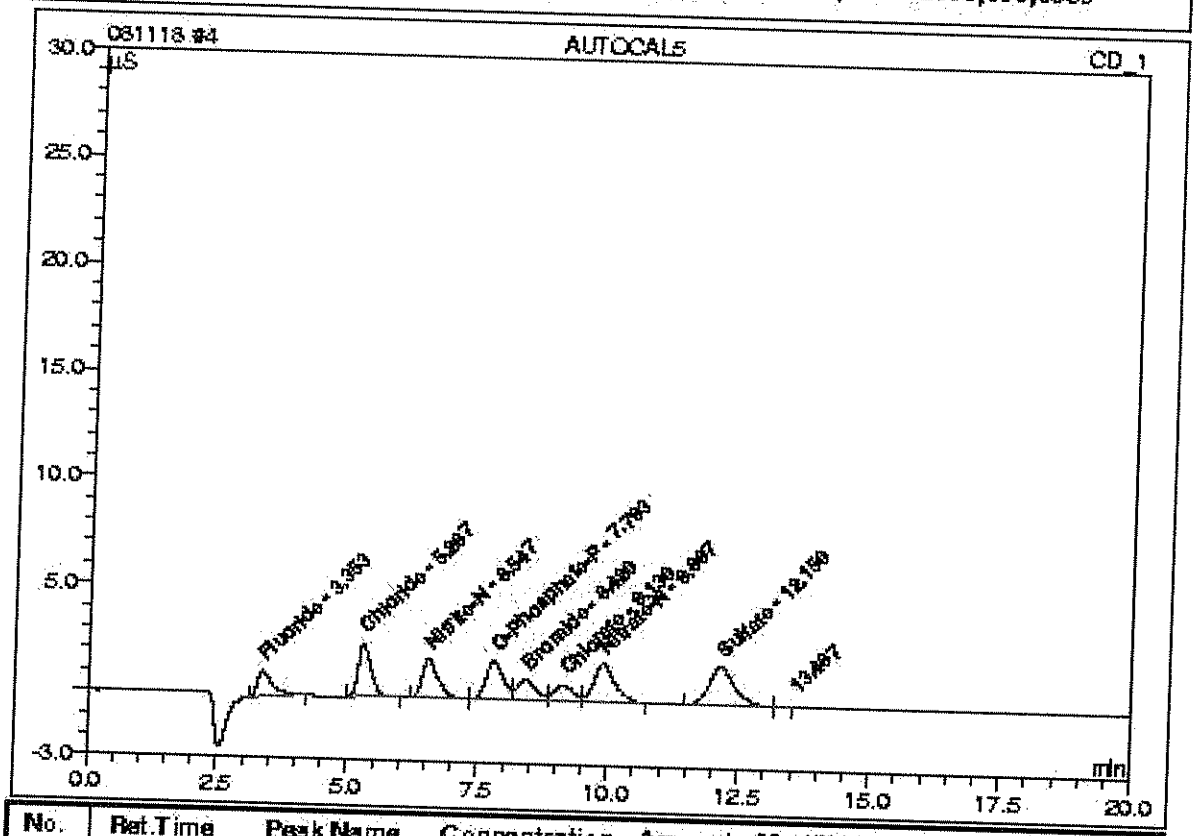
Sample Name:	AUTOCAL6	*Injection Volume:*	50.0
Vial Number:	10	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS9_HC	*Sample Weight:*	1.0000
Quantif. Method:	111808AN	*Sample Amount:*	1.0000
Recording Time:	11/18/08 18:04	*Analyst:*	VH1
Run Time (min):	20.00	*Column:*	AS9HC-014108;GLGCE088;300;905B



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	3.33	Fluoride	5.0000	4.9146		1.970	9.60
2	5.29	Chloride	10.0000	9.7303		3.664	17.86
3	6.54	Nitrite-N	5.0000	4.9552		3.399	16.57
4	7.79	O-Phosphate-P	3.0000	2.9824		0.856	4.17
5	8.41	Bromide	3.0000	3.0210		0.479	2.33
6	9.13	Chlorate	3.0000	3.0515		0.364	1.78
7	9.87	Nitrate-N	5.0000	4.9650		4.547	22.17
8	12.12	Sulfate	20.0000	19.6144		5.232	25.50
Total:				53.2345	0.000	20.512	99.99

4 AUTOCAL5

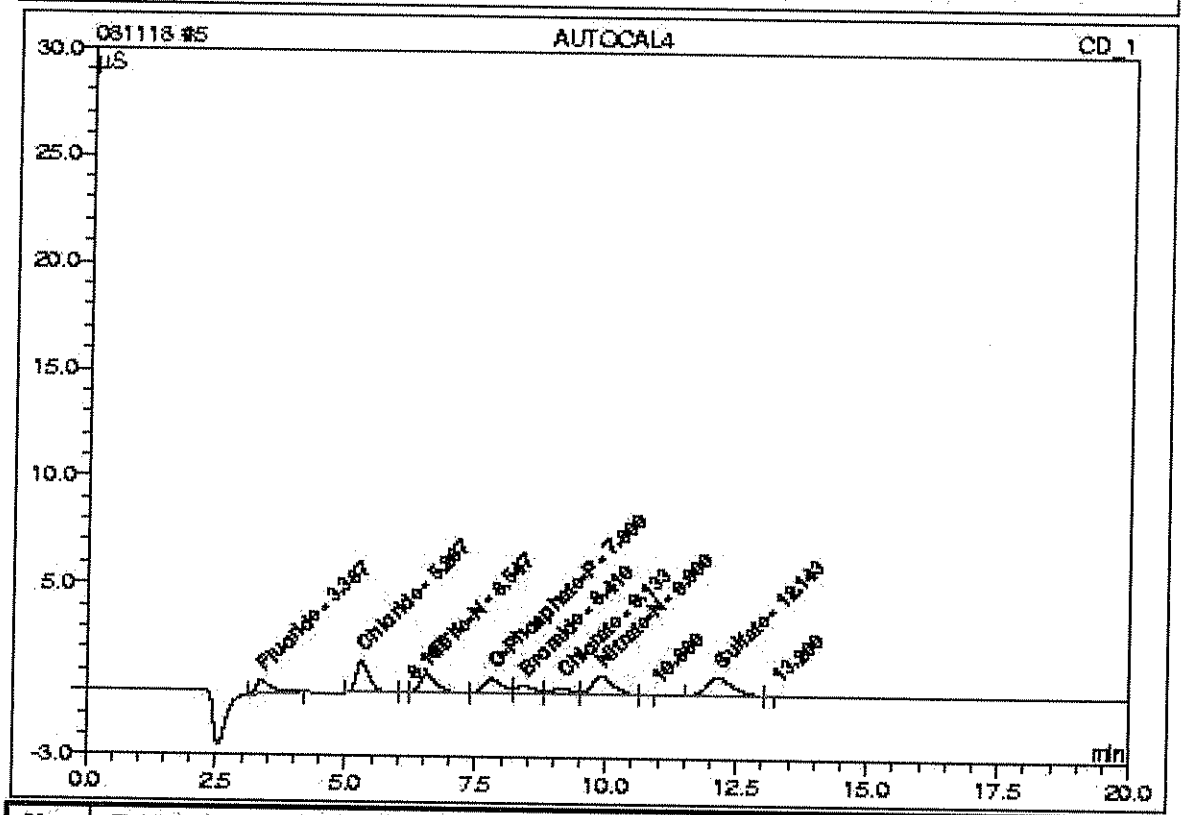
Sample Name:	AUTOCAL5	Injection Volume:	50.0
Vial Number:	11	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS9_HC	Sample Weight:	1.0000
Quantif. Method:	111808AN	Sample Amount:	1.0000
Recording Time:	11/18/08 18:24	Analyst:	MH1
Run Time (min):	20.00	Column:	AS9HC-014108;GLGCE088;300;9058



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	3.35	Fluoride	1.0000	1.0046		0.390	7.74
2	5.29	Chloride	2.0000	1.9702		0.693	13.76
3	6.55	Nitrite-N	1.0000	0.9847		0.656	13.02
4	7.79	O-Phosphate-P	2.5000	2.4932		0.715	14.19
5	8.42	Bromide	2.5000	2.5272		0.402	7.99
6	9.13	Chlorate	2.5000	2.6469		0.322	6.39
7	9.90	Nitrate-N	1.0000	0.9625		0.846	16.79
8	12.15	Sulfate	4.0000	3.9736		1.014	20.12
Total:				16.5629	0.000	5.039	99.99

5 AUTOCAL4

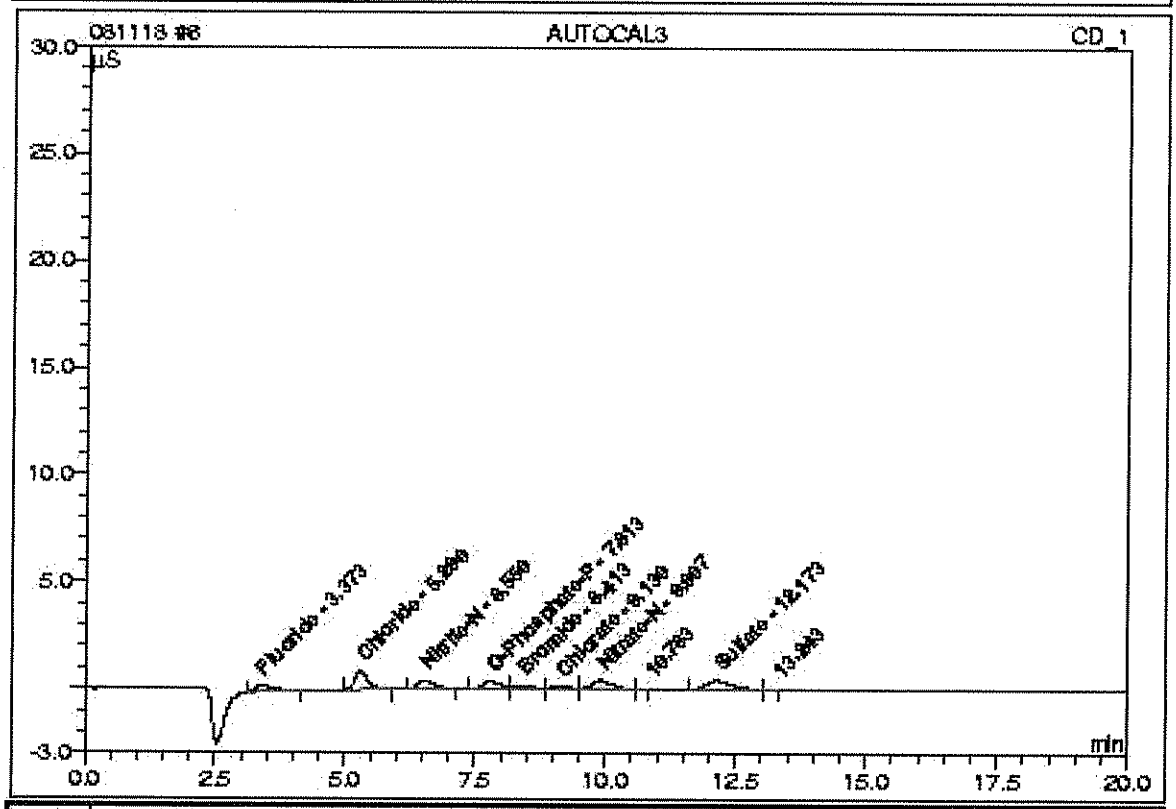
Sample Name:	AUTOCAL4	*Injection Volume:*	50.0
Vial Number:	12	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS9_HC	*Sample Weight:*	1.0000
Quantif. Method:	111808AN	*Sample Amount:*	1.0000
Recording Time:	11/18/08 18:44	Analyst:	VH1
Run Time (min):	20.00	Column:	AS9HC-014108;GLGCE088;300;9058



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	3.37	Fluoride	0.5000	0.5473		0.214	8.50
2	5.29	Chloride	1.0000	1.1899		0.427	16.97
4	6.55	Nitrite-N	0.5000	0.5220		0.344	13.67
5	7.80	O-Phosphate-P	1.0000	1.0357		0.300	11.93
6	8.41	Bromide	1.0000	1.0248		0.167	6.62
7	9.13	Chlorate	1.0000	1.0144		0.130	5.16
8	9.90	Nitrate-N	0.5000	0.5009		0.421	16.72
10	12.14	Sulfate	2.0000	2.0680		0.508	20.21
Total:				7.9031	0.000	2.510	99.78

6 AUTOCAL3

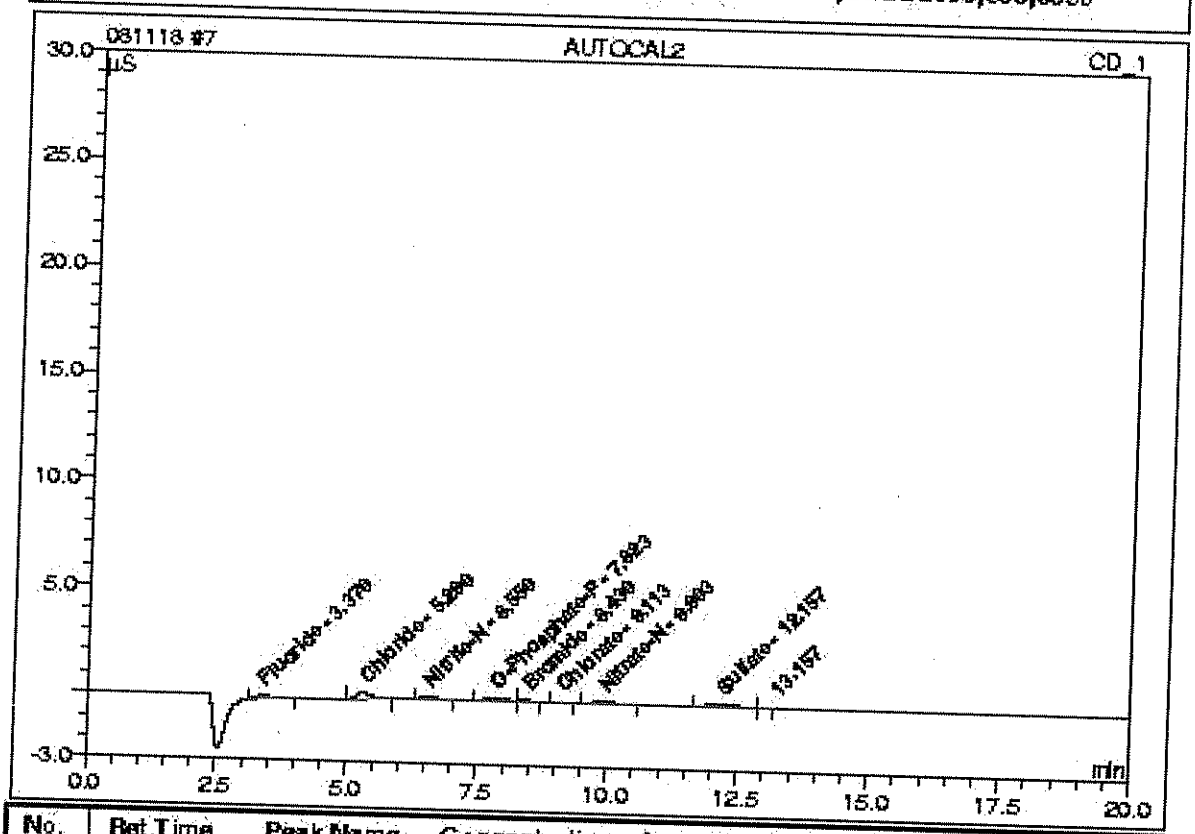
Sample Name:	AUTOCAL3	*Injection Volume:*	50.0
Vial Number:	13	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS9_HC	*Sample Weight:*	1.0000
Quantif. Method:	111808AN	*Sample Amount:*	1.0000
Recording Time:	11/18/08 17:04	Analyst:	VH1
Run Time (min):	20.00	Column:	AS9HC-014108;GLGCE088;300;9058



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	3.37	Fluoride	0.2500	0.2981		0.120	9.21
2	5.29	Chloride	0.5000	0.6717		0.251	19.32
3	6.55	Nitrite-N	0.2500	0.2505		0.157	12.06
4	7.81	O-Phosphate-P	0.5000	0.5131		0.152	11.69
5	8.41	Bromide	0.5000	0.5022		0.084	6.49
6	9.13	Chlorate	0.5000	0.4776		0.065	5.01
7	9.91	Nitrate-N	0.2500	0.2670		0.210	16.19
9	12.17	Sulfate	1.0000	1.1102		0.260	20.02
Total:				4.0904	0.000	1.300	99.99

7 AUTOCAL2

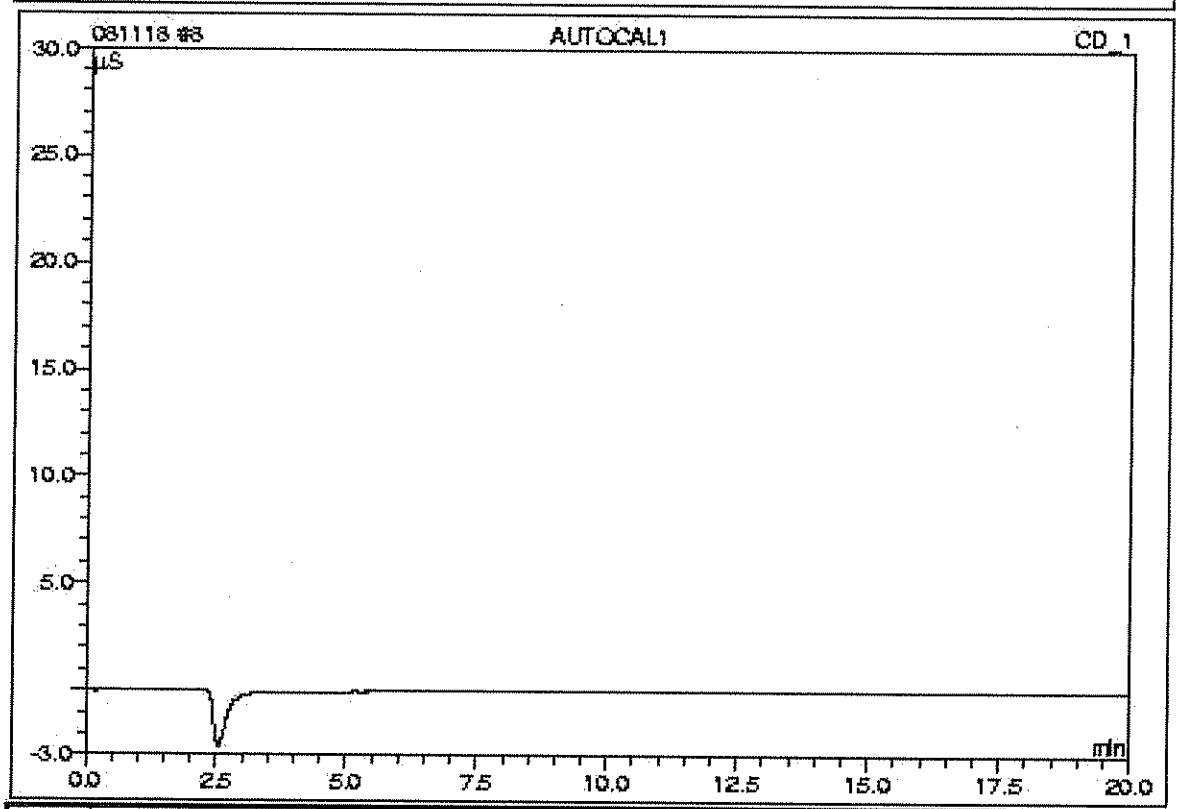
Sample Name:	AUTOCAL2	Injection Volume:	50.0
Vial Number:	14	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS9_HC	Sample Weight:	1.0000
Quantif. Method:	111808AN	Sample Amount:	1.0000
Recording Time:	11/18/08 17:24	Analyst:	WH1
Run Time (min):	20.00	Column:	AS9HC-014108;GLGCE088;300;9058



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	3.37	Fluoride	0.1000	0.1200		0.050	10.45
2	5.29	Chloride	0.2000	0.2465		0.095	19.72
3	6.55	Nitrite-N	0.1000	0.1081		0.060	12.53
4	7.82	O-Phosphate-P	0.2000	0.2196		0.070	14.56
5	8.43	Bromide	0.2000	0.1289		0.022	4.51
6	9.11	Chlorate	0.2000	0.0598		0.009	1.99
7	9.90	Nitrate-N	0.1000	0.1085		0.066	13.80
8	12.16	Sulfate	0.4000	0.5114		0.107	22.29
Total:				1.5029	0.000	0.479	99.82

8 AUTOCAL1

Sample Name:	AUTOCAL1	*Injection Volume:*	50.0
Vial Number:	11	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS9_HC	*Sample Weight:*	1.0000
Quantif. Method:	111808AN	*Sample Amount:*	1.0000
Recording Time:	11/18/08 17:44	Analyst:	VH1
Run Time (min):	20.00	Column:	AS9HC-014108;GLGCE088;300;9058

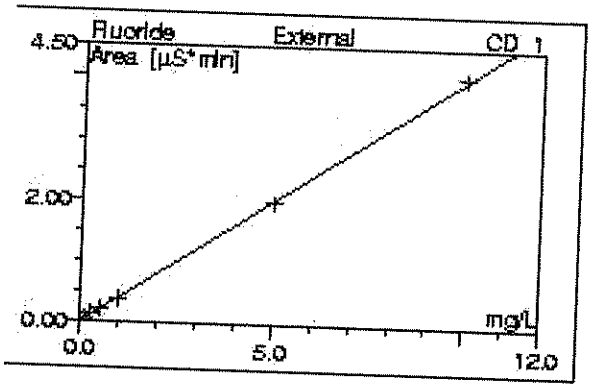


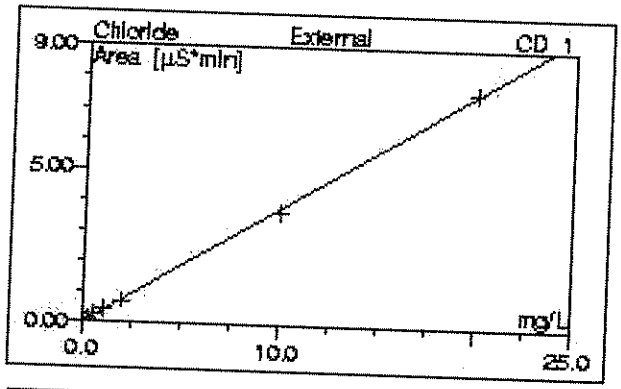
No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	0.0000	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

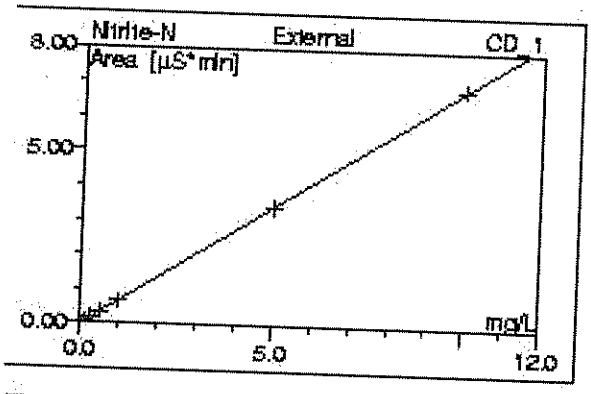
8 AUTOCAL1

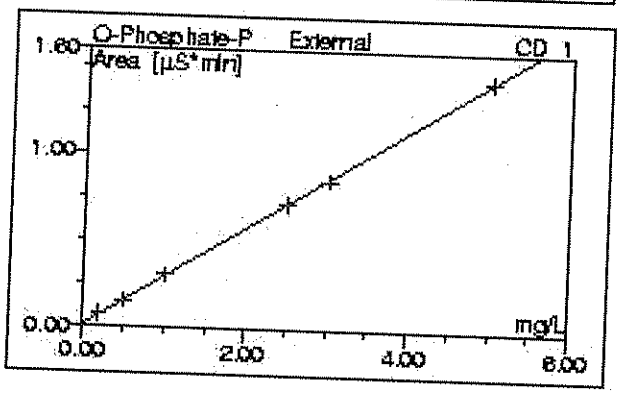
Sample Name:	AUTOCAL1	*Injection Volume:*	50.0
Vial Number:	11	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS9_HC	*Sample Weight:*	1.0000
Quantif. Method:	111808AN	*Sample Amount:*	1.0000
Recording Time:	############	*Analyst:*	VH1
Run Time (min):	20.00		

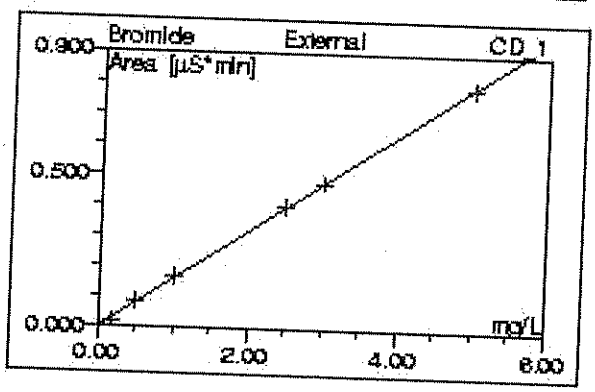
Column: AS9HC-014108;GLGCE088;300;9058

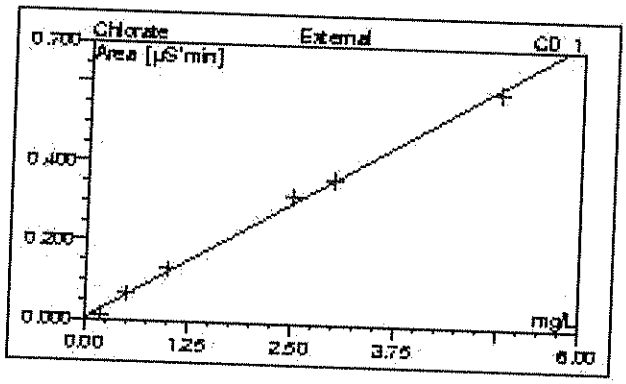


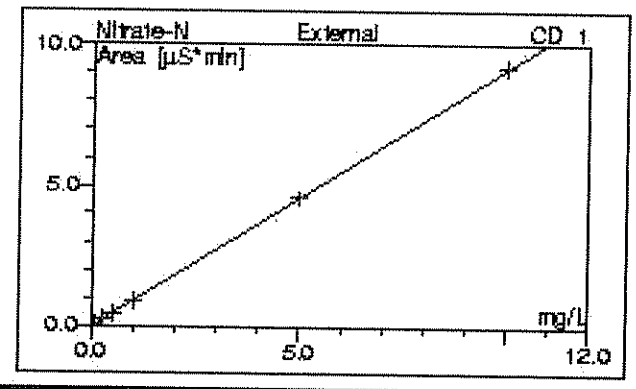


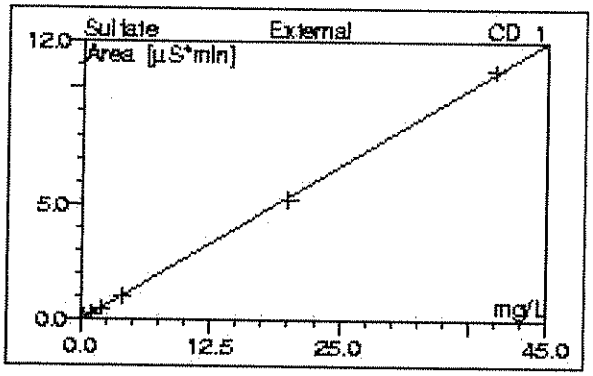








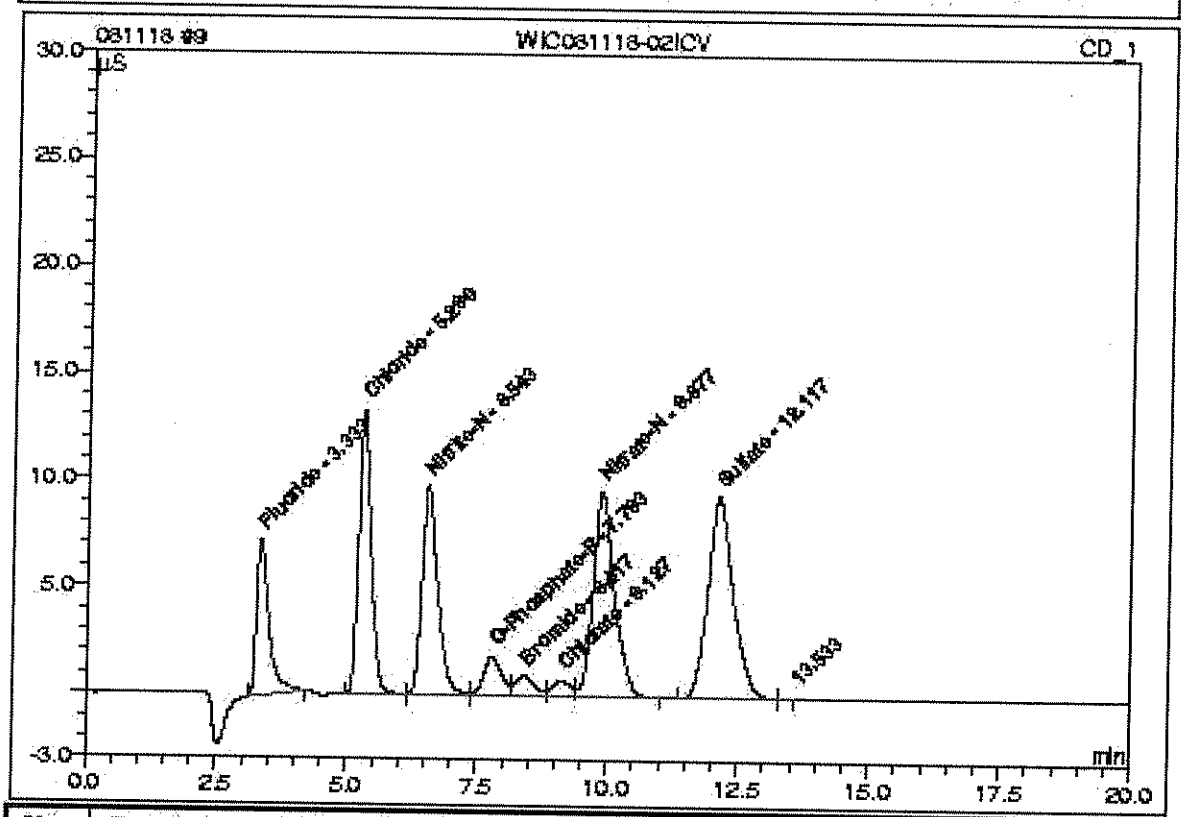




No. CD_1	Ret.Time CD_1 min	Peak Name CD_1	Cal.Type CD_1	Coeff.Det. CD_1 %	Offset CD_1	Slope CD_1	Curve CD_1
n.a.	n.a.	Fluoride	0LOff	99.9773	0.0019	0.4021	0.0000
n.a.	n.a.	Chloride	0LOff	99.9345	0.0012	0.3785	0.0000
n.a.	n.a.	Nitrite-N	0LOff	99.9953	-0.0144	0.6889	0.0000
n.a.	n.a.	O-Phosphate-P	0LOff	99.9847	0.0071	0.2855	0.0000
n.a.	n.a.	Bromide	0LOff	99.9443	0.0012	0.1585	0.0000
n.a.	n.a.	Chlorate	0LOff	99.6469	0.0023	0.1202	0.0000
n.a.	n.a.	Nitrate-N	0LOff	99.9958	-0.0397	0.9209	0.0000
n.a.	n.a.	Sulfate	0LOff	99.9802	-0.0305	0.2687	0.0000
Average:				99.9324	-0.0081	0.4029	0.0000

9 WIC081118-02ICV

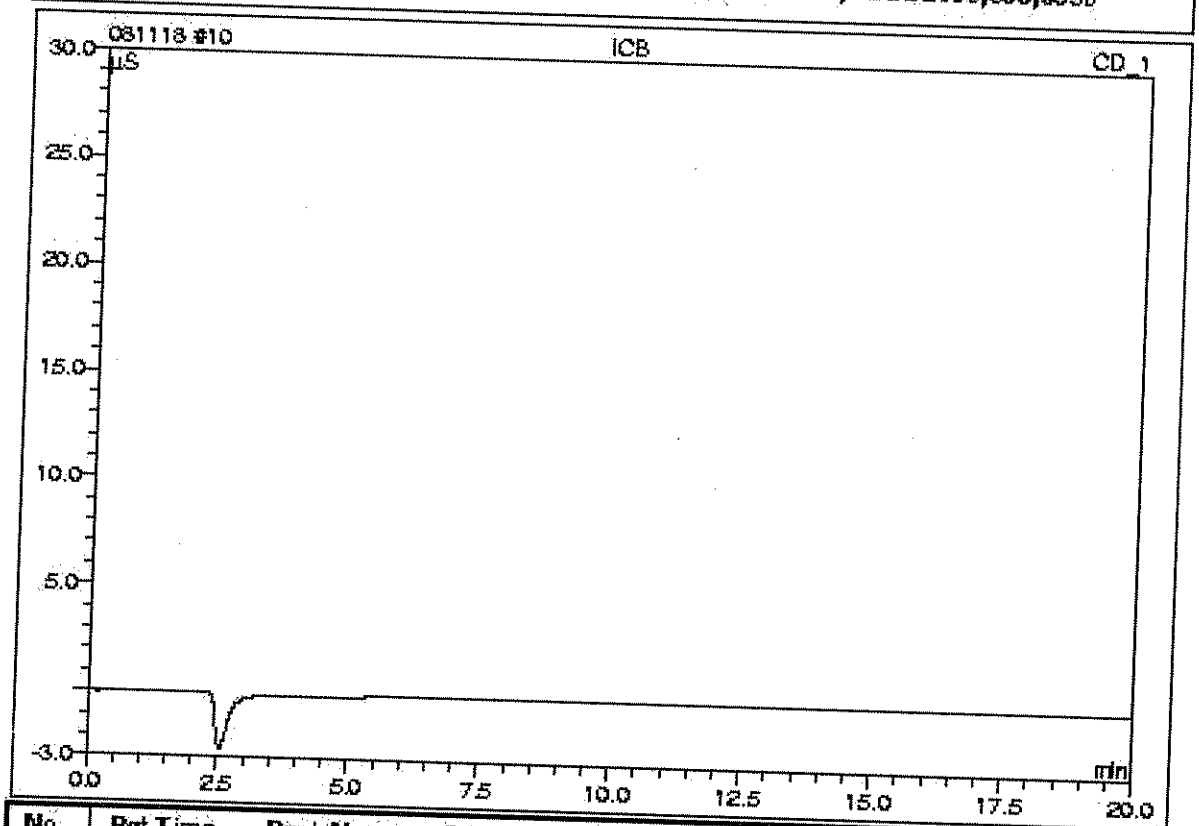
Sample Name:	WIC081118-02ICV	*Injection Volume:*	50.0
Vial Number:	28	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS9_HC	*Sample Weight:*	1.0000
Quantif. Method:	111808AN	*Sample Amount:*	1.0000
Recording Time:	11/18/08 18:04	Analyst:	VH1
Run Time (min):	20.00	Column:	AS9HC-014108;GLGCE08B;300;9058



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	3.33	Fluoride	n.a.	4.9964		2.011	9.96
2	5.29	Chloride	n.a.	9.5495		3.616	17.91
3	6.54	Nitrite-N	n.a.	5.0040		3.433	17.00
4	7.79	O-Phosphate-P	n.a.	2.5495		0.735	3.64
5	8.42	Bromide	n.a.	2.5361		0.403	2.00
6	9.13	Chlorate	n.a.	2.5325		0.307	1.52
7	9.88	Nitrate-N	n.a.	4.8606		4.442	22.00
8	12.12	Sulfate	n.a.	19.6254		5.243	25.97
Total:				51.6539	0.000	20.191	99.99

10 ICB

Sample Name:	ICB	*Injection Volume:*	50.0
Vial Number:	27	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS9_HC	*Sample Weight:*	1.0000
Quantif. Method:	111808AN	*Sample Amount:*	1.0000
Recording Time:	11/18/08 18:24	*Analyst:*	WH1
Run Time (min):	20.00	*Column:*	AS9HC-014108;GLGCE088;300;905B



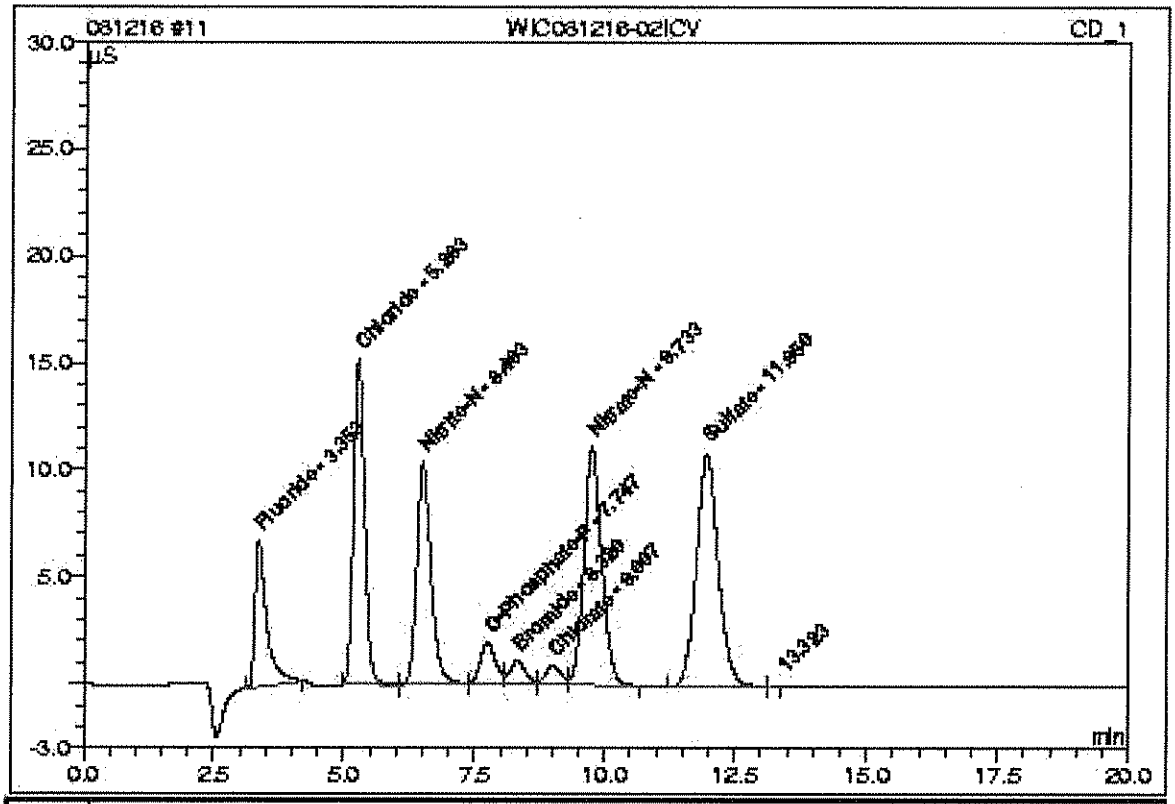
No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

This is runlog for Sequence 081216.seq for IC5

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
BLK	12/16/08 17:40		1	081216	VH1
ICV	12/16/08 18:00		1	081216	VH1
ICB	12/16/08 18:20		1	081216	VH1
ICV	12/16/08 18:40		1	081216	VH1
ICB	12/16/08 19:00		1	081216	VH1
1201741109	12/16/08 19:21	826043	1	081216	VH1
1201741112	12/16/08 19:41	826043	1	081216	VH1
221329001	12/16/08 20:01	826043	1	081216	VH1
1201741110	12/16/08 20:21	826043	1	081216	VH1
1201741111	12/16/08 20:41	826043	1	081216	VH1
221329002	12/16/08 21:01	826043	1	081216	VH1
CCV	12/16/08 21:21		1	081216	VH1
CCB	12/16/08 21:41		1	081216	VH1
1201737945	12/16/08 22:01	824818	1	081216	VH1
1201737950	12/16/08 22:21	824818	1	081216	VH1
221094001	12/16/08 22:42	824818	1	081216	VH1
1201737946	12/16/08 23:02	824818	1	081216	VH1
1201737948	12/16/08 23:22	824818	1	081216	VH1
221094002	12/16/08 23:42	824818	1	081216	VH1

11 WIC081216-02ICV

Sample Name:	WIC081216-02ICV	*Injection Volume:*	50.0
Vial Number:	32	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS9_HC	*Sample Weight:*	1.0000
Quantif. Method:	111808AN	*Sample Amount:*	1.0000
Recording Time:	12/16/08 18:40	Analyst:	VH1
Run Time (min):	20.00	Column:	AS9HC-014108;GLGCE088;300;9058

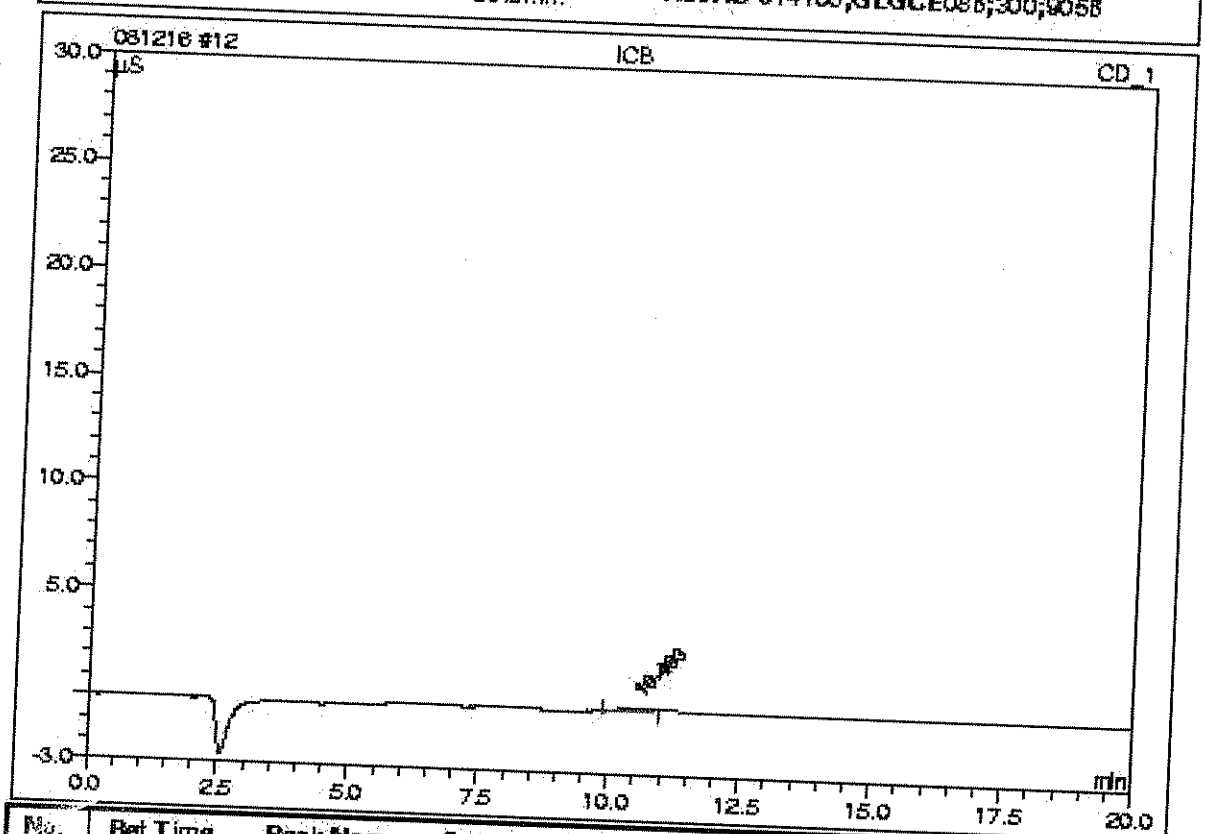


No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	3.35	Fluoride	n.a.	4.5215		1.820	9.17
2	5.26	Chloride	n.a.	9.6401		3.650	18.39
3	6.49	Nitrite-N	n.a.	4.7924		3.287	16.56
4	7.75	O-Phosphate-P	n.a.	2.2827		0.659	3.32
5	8.32	Bromide	n.a.	2.3473		0.373	1.88
6	9.01	Chlorate	n.a.	2.4665		0.299	1.51
7	9.73	Nitrate-N	n.a.	4.8718		4.453	22.43
8	11.95	Sulfate	n.a.	19.8564		5.305	26.73
Total:				50.7786	0.000	19.846	99.99

12 ICB

Sample Name:	ICB	Injection Volume:	50.0
Vial Number:	32	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS9_HC	Sample Weight:	1.0000
Quantif. Method:	111808AN	Sample Amount:	1.0000
Recording Time:	12/16/08 19:00	Analyst:	VH1
Run Time (min):	20.00		

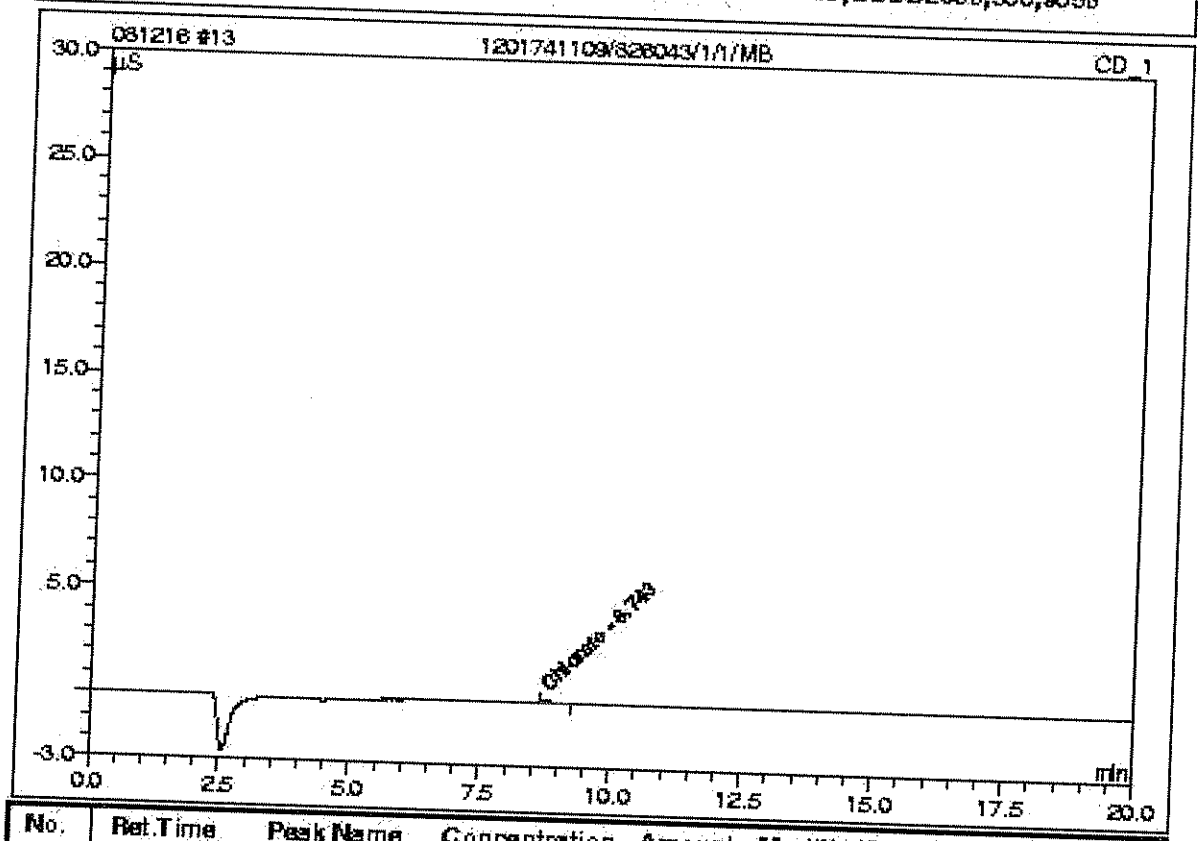
Column: AS9HC-014108;GLGCE088;300;9058



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

13 1201741109/826043/1/1/MB

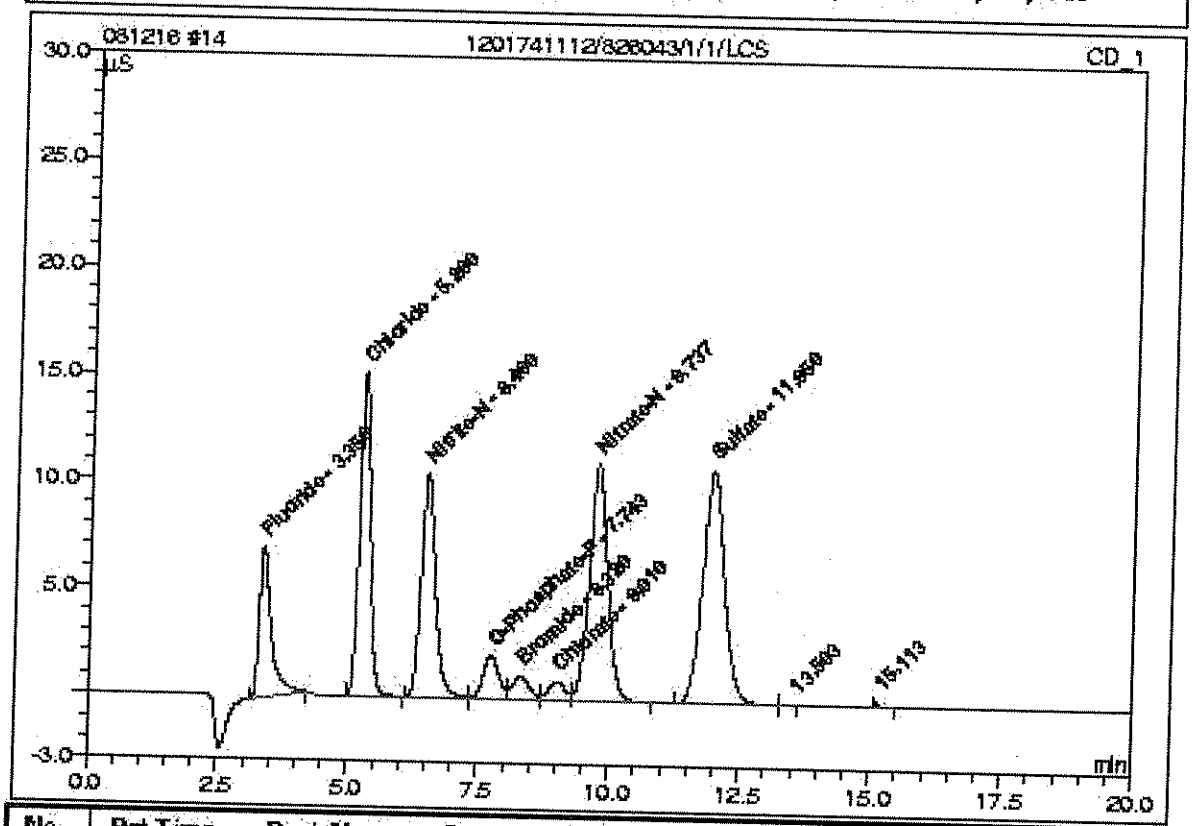
Sample Name:	1201741109/826043/1/1/MB	Injection Volume:	50.0
Vial Number:	31	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS9_HC	Sample Weight:	1.0000
Quantif. Method:	111808AN	Sample Amount:	1.0000
Recording Time:	12/16/08 19:21	Analyst:	VH1
Run Time (min):	20.00	Column:	AS9HC-014108;GLGCE088;300;9058



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
1	8.74	Chlorate	n.a.	0.2498		0.032	100.00
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.2498	0.000	0.032	100.00

14 1201741112/826043/1/1/LCS

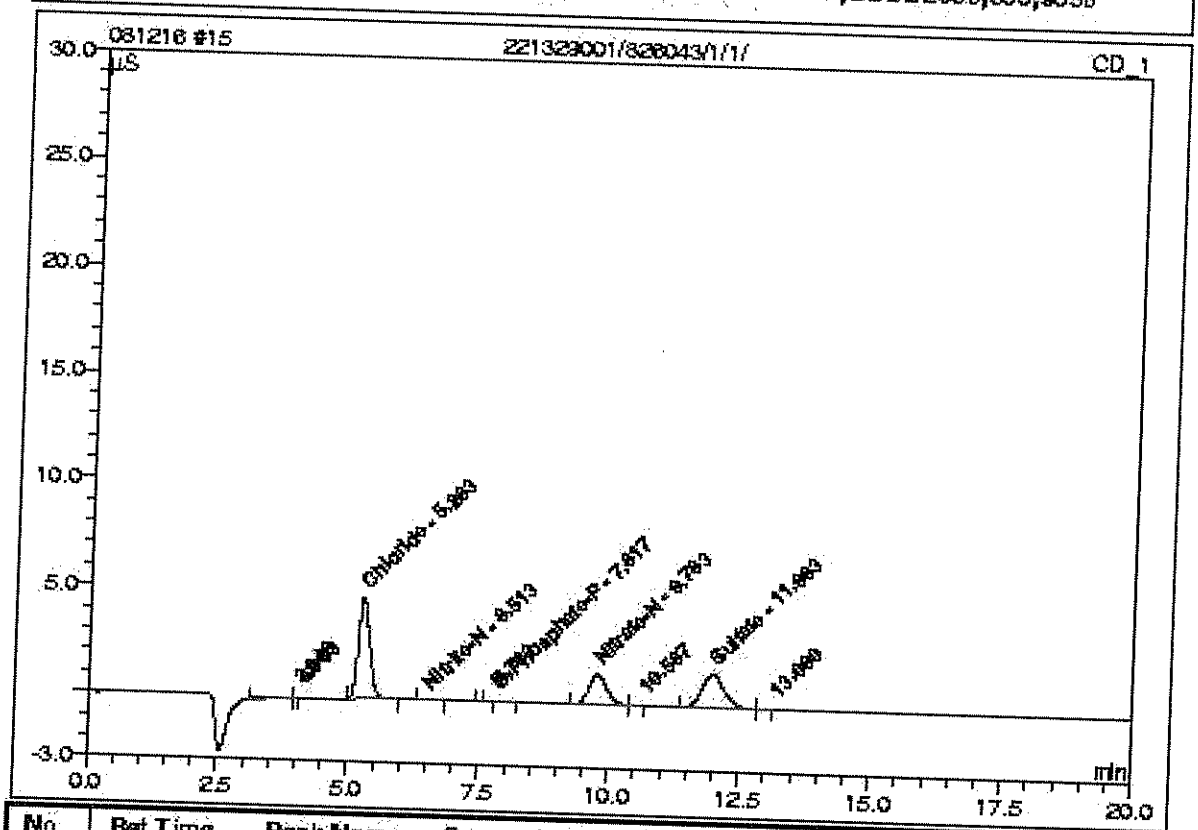
Sample Name:	1201741112/826043/1/1/LCS	Injection Volume:	50.0
Vial Number:	32	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS9_HC	Sample Weight:	1.0000
Quantif. Method:	111808AN	Sample Amount:	1.0000
Recording Time:	12/16/08 19:41	Analyst:	VH1
Run Time (min):	20.00	Column:	AS9HC-014108;GLGCE088;300;9058



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	3.35	Fluoride	n.a.	4.6159		1.858	9.24
2	5.26	Chloride	n.a.	9.6403		3.651	18.16
3	6.49	Nitrite-N	n.a.	4.8651		3.337	16.60
4	7.74	O-Phosphate-P	n.a.	2.4476		0.706	3.51
5	8.32	Bromide	n.a.	2.5520		0.406	2.02
6	9.01	Chlorate	n.a.	2.6817		0.325	1.62
7	9.74	Nitrate-N	n.a.	4.9043		4.493	22.30
8	11.95	Sulfate	n.a.	19.9072		5.319	26.45
Total:				51.6142	0.000	20.094	99.89

15 221329001/826043/1/1/

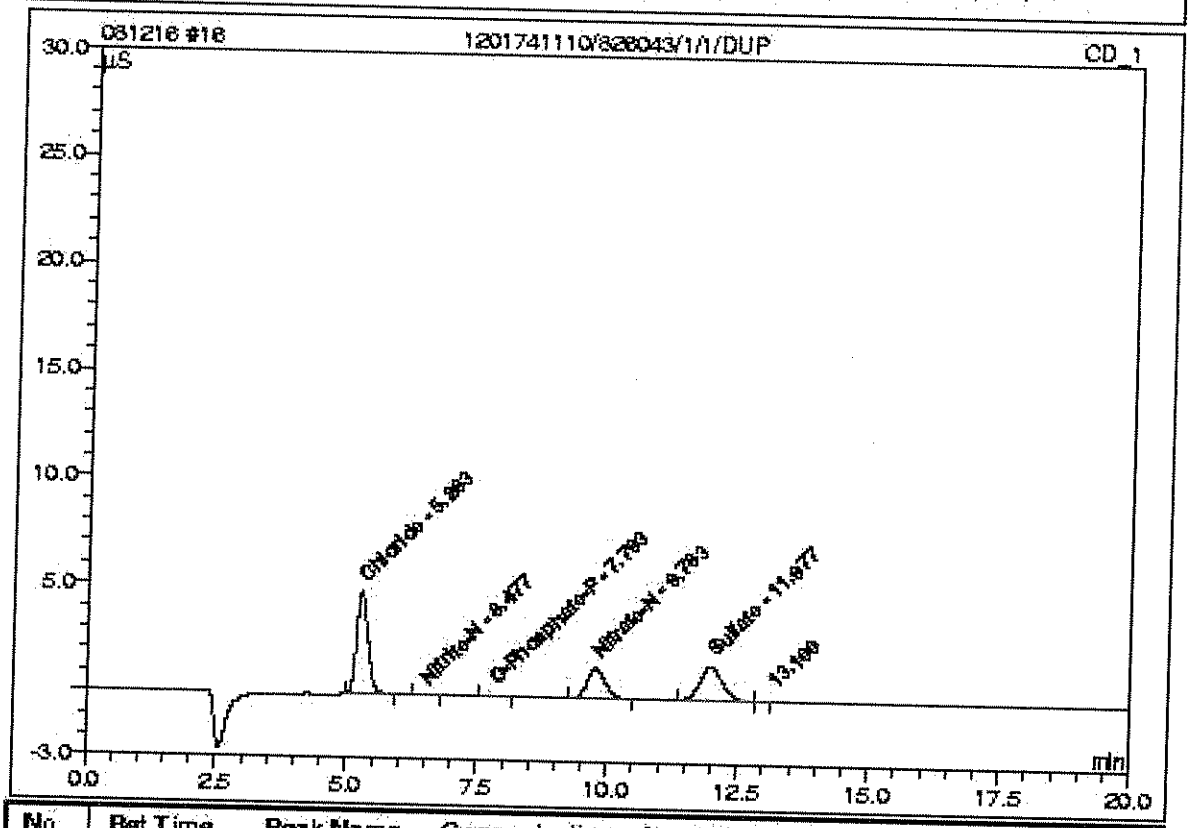
Sample Name:	221329001/826043/1/1/	Injection Volume:	50.0
Vial Number:	32	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS9_HC	Sample Weight:	1.0000
Quantif. Method:	111808AN	Sample Amount:	1.0000
Recording Time:	12/16/08 20:01	Analyst:	VH1
Run Time (min):	20.00	Column:	AS9HC-014108;GLGCE088;300;9058



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
3	5.26	Chloride	n.a.	3.0813		1.168	44.49
4	6.51	Nitrite-N	n.a.	0.0380		0.012	0.45
6	7.82	O-Phosphate-P	n.a.	0.0801		0.030	1.14
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
7	9.76	Nitrate-N	n.a.	0.6747		0.588	22.39
9	11.99	Sulfate	n.a.	3.0824		0.798	30.39
Total:				6.9565	0.000	2.595	98.86

16 1201741110/826043/1/1/DUP

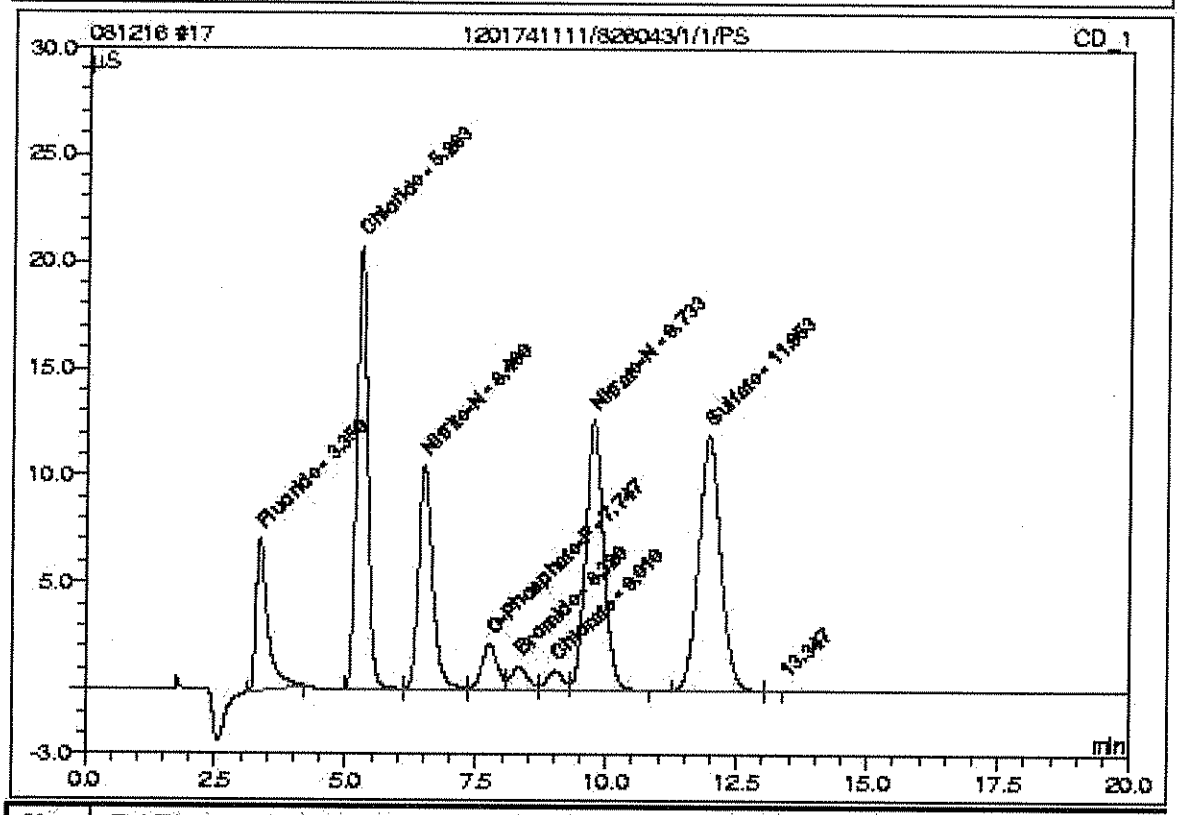
Sample Name:	1201741110/826043/1/1/DUP	*Injection Volume:*	50.0
Vial Number:	32	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS9_HC	*Sample Weight:*	1.0000
Quantif. Method:	111808AN	*Sample Amount:*	1.0000
Recording Time:	12/16/08 20:21	*Analyst:*	VH1
Run Time (min):	20.00	*Column:*	AS9HC-014108;GLGCE0815;300;9058



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
1	5.26	Chloride	n.a.	3.0789		1.167	44.67
2	6.48	Nitrite-N	n.a.	0.0399		0.013	0.50
3	7.79	O-Phosphate-P	n.a.	0.0575		0.024	0.90
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
4	9.76	Nitrate-N	n.a.	0.6695		0.583	22.32
5	11.98	Sulfate	n.a.	3.1757		0.823	31.50
Total:				7.0216	0.000	2.609	99.90

17 1201741111/826043/1/1/PS

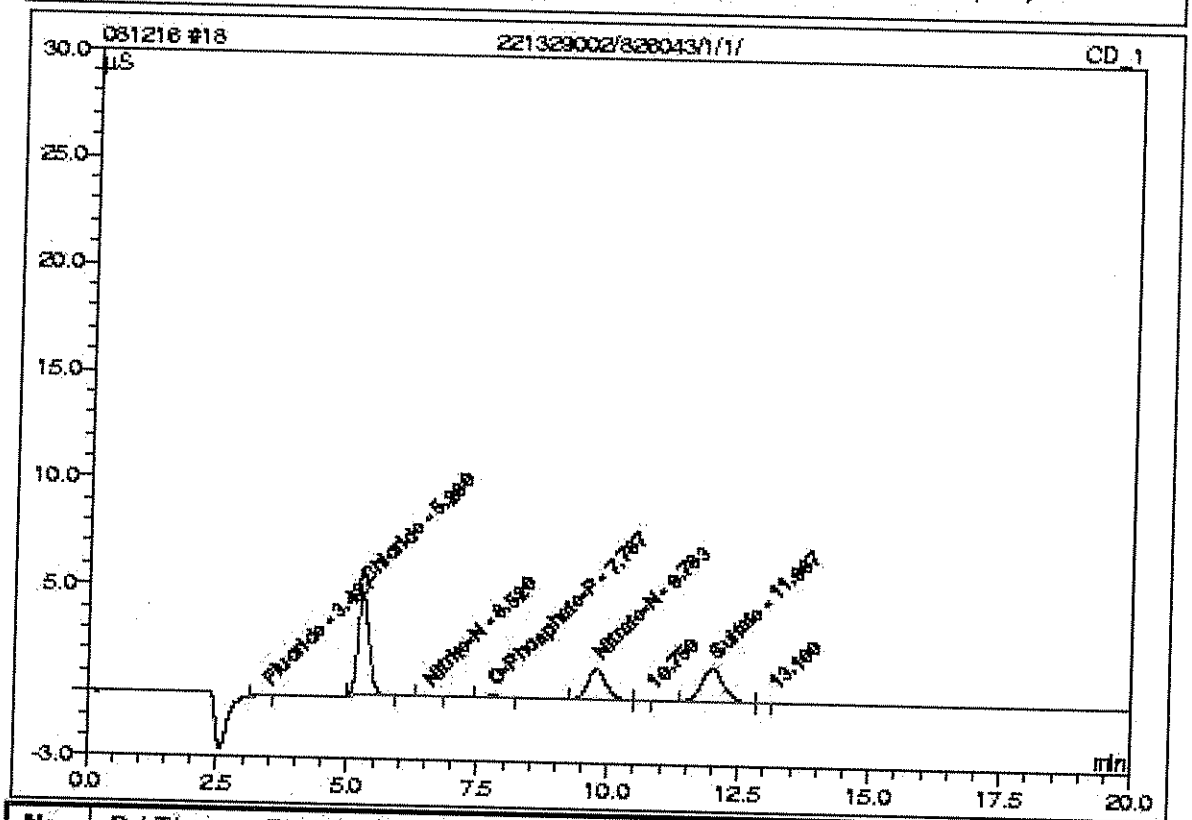
Sample Name:	1201741111/826043/1/1/PS	*Injection Volume:*	50.0
Vial Number:	32	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS9_HC	*Sample Weight:*	1.0000
Quantif. Method:	111808AN	*Sample Amount:*	1.0000
Recording Time:	12/16/08 20:41	Analyst:	VH1
Run Time (min):	20.00	Column:	AS9HC-014108;GLGCE088;300;9058



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	3.35	Fluoride	n.a.	4.6182		1.859	8.29
2	5.26	Chloride	n.a.	13.0110		4.927	21.98
3	6.49	Nitrite-N	n.a.	4.8294		3.313	14.78
4	7.75	O-Phosphate-P	n.a.	2.5305		0.730	3.25
5	8.32	Bromide	n.a.	2.4666		0.392	1.75
6	9.01	Chlorate	n.a.	2.5915		0.314	1.40
7	9.73	Nitrate-N	n.a.	5.5454		5.073	22.63
8	11.95	Sulfate	n.a.	21.7294		5.809	25.91
Total:				57.3221	0.000	22.415	99.98

18 221329002/826043/1/1/

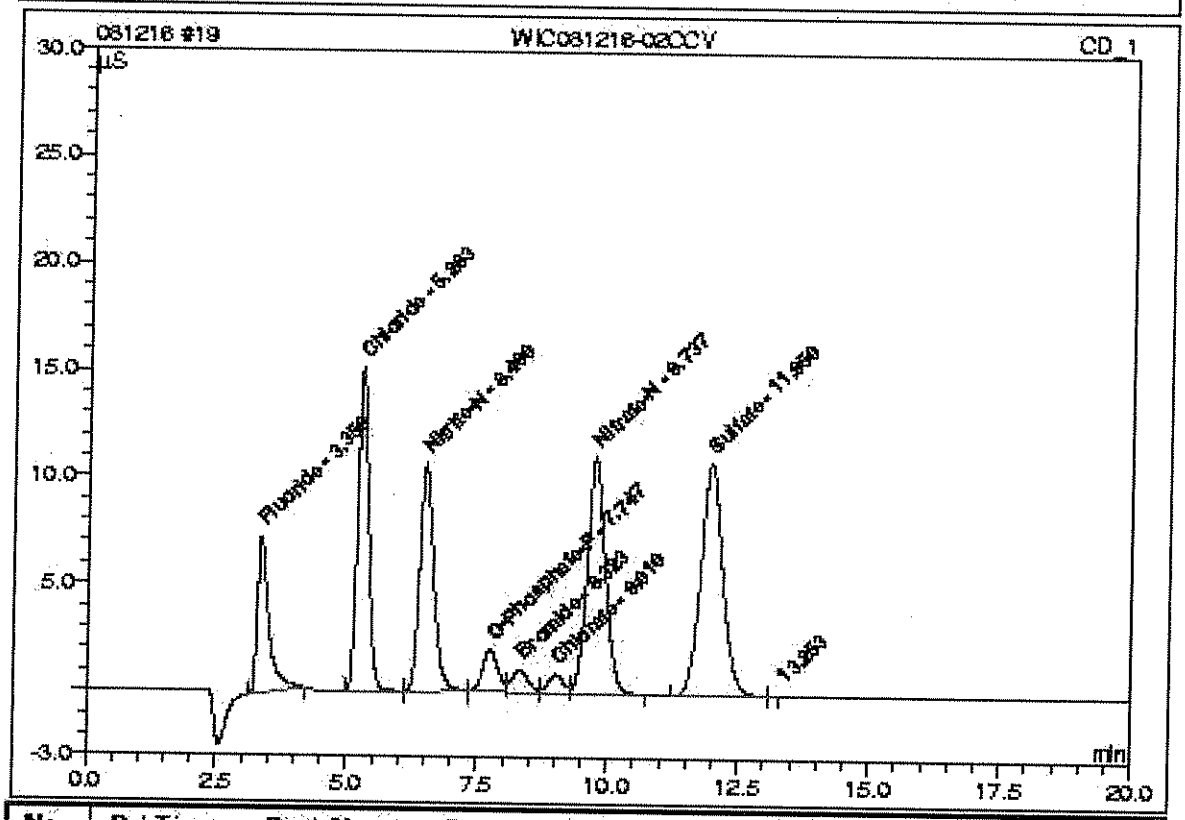
Sample Name:	221329002/826043/1/1/	Injection Volume:	50.0
Vial Number:	32	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS9_HC	Sample Weight:	1.0000
Quantif. Method:	111808AN	Sample Amount:	1.0000
Recording Time:	12/16/08 21:01	Analyst:	VH1
Run Time (min):	20.00	Column:	AS9HC-014108;GLGCE088;300;9058



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	3.43	Fluoride	n.a.	0.0266		0.013	0.49
2	5.26	Chloride	n.a.	3.0879		1.170	44.56
3	6.52	Nitrite-N	n.a.	0.0390		0.012	0.49
4	7.77	O-Phosphate-P	n.a.	0.0967		0.035	1.32
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
5	9.76	Nitrate-N	n.a.	0.6910		0.603	22.95
7	11.99	Sulfate	n.a.	3.0574		0.791	30.12
Total:				6.9986	0.000	2.624	99.91

19 WIC081216-02CCV

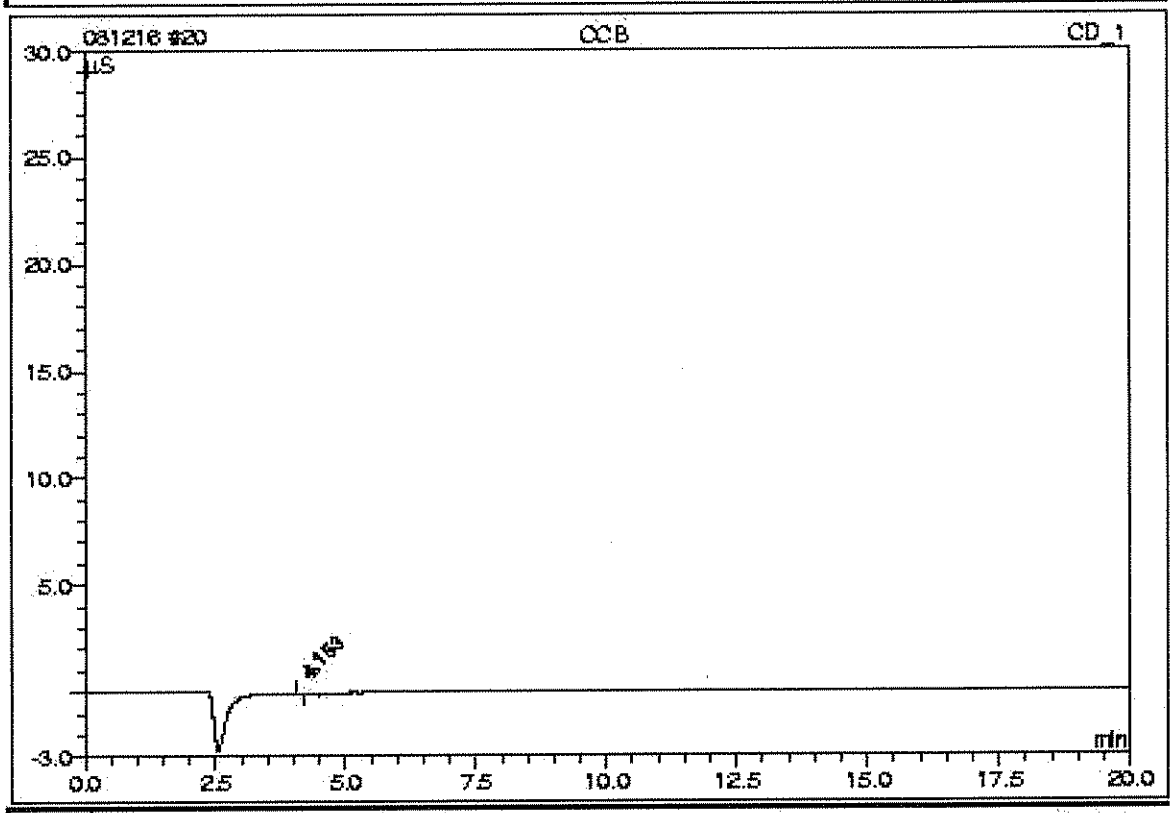
Sample Name:	WIC081216-02CCV	*Injection Volume:*	50.0
Vial Number:	29	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS9_HC	*Sample Weight:*	1.0000
Quantif. Method:	111808AN	*Sample Amount:*	1.0000
Recording Time:	12/16/08 21:21	Analyst:	VH1
Run Time (min):	20.00	Column:	AS9HC-014108;GLGCE088;300;9058



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	3.35	Fluoride	n.a.	4.7129		1.897	9.49
2	5.26	Chloride	n.a.	9.6391		3.650	18.25
3	6.49	Nitrite-N	n.a.	4.8684		3.339	16.70
4	7.75	O-Phosphate-P	n.a.	2.3195		0.669	3.35
5	8.32	Bromide	n.a.	2.3300		0.371	1.85
6	9.01	Chlorate	n.a.	2.4998		0.303	1.51
7	9.74	Nitrate-N	n.a.	4.8796		4.460	22.30
8	11.95	Sulfate	n.a.	19.8640		5.307	26.54
Total:				51.1139	0.000	19.996	100.00

20 CCB

Sample Name:	CCB	*Injection Volume:*	50.0
Vial Number:	30	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS9_HC	*Sample Weight:*	1.0000
Quantif. Method:	111808AN	*Sample Amount:*	1.0000
Recording Time:	12/16/08 21:41	Analyst:	VH1
Run Time (min):	20.00	Column:	AS9HC-014108;GLGCE088;300;9058



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

Solids, Total Dissolved

Batch: 826227.0
Analyst:NXM1

TDS/TS/VS LogBook

Procedure Code BALDSEP_LF
Procedure Description EPA 160.1 Solids, Dissolved
Lab Sop GL-GC-E-001

Sample Type	Sample Id	Lot Id	Nc(mg/L)	Recovery(%)
LCS	1201741486	WTD1058620-01	300	98.333

Sample Type	Sample Id	Rpd(%)
DUP	1201741485	1.4598540145985

Sample Id	Sample Type	Original Hsn	Instrument	Run Date	Crucible ID	Aliquot (L)	Crucible Wt(g)	Final Wt Event 1	Final Wt Event 2	Final Wt Event 3	Final Wt Event 4	Result	Units
1201741484	MB		BAL216	17-DEC-2008 11:17	GAS	0.1	55.6252	55.625	55.625			-2	mg/L
1201741486	LCS		BAL216	17-DEC-2008 11:17	MJ	0.1	47.2114	47.2409	47.2409			295	mg/L
221209002	SAMPLE		BAL216	17-DEC-2008 11:17	OAK	0.1	47.086	47.1133	47.1132			272	mg/L
1201741485	DUP	221209002	BAL216	17-DEC-2008 11:17	YAK	0.1	49.9363	49.9643	49.9639			276	mg/L
221209004	SAMPLE		BAL216	17-DEC-2008 11:17	LIP	0.1	51.1061	51.1172	51.1168			107	mg/L
221209005	SAMPLE		BAL216	17-DEC-2008 11:17	DIE	0.1	48.4387	48.4502	48.4499			112	mg/L
221329001	SAMPLE		BAL216	17-DEC-2008 11:17	BOX	0.1	50.5986	50.604	50.6039			53	mg/L
221329002	SAMPLE		BAL216	17-DEC-2008 11:17	MAY	0.1	48.0506	48.0552	48.0554			48	mg/L
221334001	SAMPLE		BAL216	17-DEC-2008 11:17	TRY	0.1	50.6388	50.6416	50.6411			23	mg/L

Comments: **All Weights are in Grams**
A) Result = (Final - Crucible)/Aliquot * 1000
B) Prep Factor = 0.5 / Aliquot

Date: 17-DEC-08 11:17:42
Temperature: 180 C
Date: 18-DEC-08 12:30:00
Temperature: 180 C

Note: Aliquot is used for the determination of the effective MDL and PQL in LIMS

Solids, Total Suspended

TSS/VSS LogBook

Batch: 826230.0
Analyst: NXM1
Procedure Code TSS2540DL
Procedure Description SM 2540D Total Suspended Solids
Lab Sop GL-GC-E-012

Sample Type	Sample Id	Lot Id	Nc(mg/L)	Recovery(%)
LCS	1201741489	WTS1061410	500	99.2

Sample Type	Sample Id	Rpd(%)
DUP	1201741488	2.6666666666667

Sample Id	Run Date	Instrument	Filter ID	Aliquot (L)	Initial Filter Wt Event 1	Initial Filter Wt Event 2	Final Filter Wt Event 1	Final Filter Wt Event 2	Final Filter Wt Event 3	Final Filter Wt Event 4	Result (mg/L)
1201741487-MB	17-DEC-2008 11:11	BAL216	1	0.5	0.117	0.1171	0.1171	0.117			-0.2
1201741489-LCS	17-DEC-2008 11:11	BAL216	2	0.1	0.1184	0.1185	0.168	0.1681			496
221297001	17-DEC-2008 11:11	BAL216	3	0.18	0.1178	0.118	0.1296	0.1294			63.33333
1201741488-DUP (221297001)	17-DEC-2008 11:11	BAL216	4	0.18	0.1163	0.1163	0.1273	0.1274			61.66667
221301001	17-DEC-2008 11:11	BAL216	5	0.045	0.1174	0.1175	0.1401	0.1399			497.7777
221323001	17-DEC-2008 11:11	BAL216	6	1	0.1162	0.1164	0.1187	0.1185			2.1
221329001	17-DEC-2008 11:11	BAL216	7	0.415	0.116	0.116	0.125	0.1248			21.20482
221329002	17-DEC-2008 11:11	BAL216	8	0.4	0.1161	0.1163	0.1249	0.1252			22.25
221334001	17-DEC-2008 11:11	BAL216	9	0.62	0.1171	0.1172	0.1194	0.1192			3.22581
221338001	17-DEC-2008 11:11	BAL216	10	0.36	0.118	0.1179	0.1203	0.1201			6.11111
221338002	17-DEC-2008 11:11	BAL216	11	0.43	0.1187	0.1188	0.1204	0.1199			2.55814

Comments: A) TSS Result = (Final Filter Wt - Initial Filter Wt) * 1000 / Aliquot

Date: 17-DEC-08 11:11:18
Temperature: 103 C
Date: 18-DEC-08 12:00:00
Temperature: 103 C

Note: Aliquot is used for the determination of the effective MDL and PQL in LIMS
All Weights are in Grams

Miscellaneous

GEL Laboratories LLC
Form GEL-NCR
Rev. 06/05

NCR Report No.: 641281
Revision No.: 1

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr. 24-DEC-08	**Division:** Federal	**Quality Criteria:** Specifications	**Type:** Process
Instrument Type: TOC	**Test / Method:** SW846 9060/SM 5310 D	**Matrix Type:** Liquid	**Client Code:** DCRG, WEIS, GELC, LCPM
Batch ID: 826596	**Sample Numbers:** See below.		

Potentially affected work order(s)(SDG): 221329,221365,221408,221419

Application Issues:

Other

Specification and Requirements Nonconformance Description:	**NRG Disposition:**
1. More than 10 analytical runs between bracketing QC sets: QC1201742320MB QC1201742325LCS 221329001 221329002 221365001 221365002 221408002 221408003 221419001	1. The data reported has eleven analytical runs between CCVs and CCBs. The data is reported with NCR to document variance.

Originator's Name:
Julia Hamilton 24-DEC-08

Data Validator/Group Leader:
Kristen Parson 24-DEC-08

Quality Review:

Director:

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Weiss Associates (WEIS)
SDG 221349

Method/Analysis Information

Product: **n-Hexane Extractable Material**

Analytical Batch: 827803 **Method:** EPA 1664A

Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA 1664A:

Sample ID	Client ID
221349001	RWSW0049
221349002	RWSW0048
1201745130	Method Blank (MB)
1201745132	221560001(20081217H00105) Matrix Spike (MS)
1201745133	Laboratory Control Sample (LCS)
1201745134	Laboratory Control Sample Duplicate (LCSD)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-094 REV# 8.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Oil & Grease analysis was performed on a Sartorius Balance.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recovery met the acceptance limits.

Laboratory Control Sample Duplicate (LCSD) Recovery

The LCSD spike recovery met the acceptance limits.

LCS/LCSD Relative Percent Difference (RPD) Statement

The RPD between the LCS and LCSD met the acceptance limits.

Quality Control (QC) Designation
The following sample was selected for QC analysis: 221560001 (20081217H00105).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The spike recovery falls outside of the established acceptance limits due to matrix interference: 1201745132 (20081217H00105).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 643807 1201745132 (20081217H00105).

Additional Comments
Less sample used due to limited sample volume for this test. 221349002 (RWSW0048).

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Tom Lewis, Jr. **Date:** 13Jan09

Sample Data Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

WEIS001 Weiss Associates (128-4108-124-2)

Client SDG: 221349 GEL Work Order: 221349

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

J Value is estimated

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Edith Kent.

Reviewed by

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Weiss Associates
Address : 5801 Christie Ave
Suite 600
Emeryville, California 94608
Contact: Mr. Tim Utterback
Project: **LEHR PO# 130-4110-05-P-C074**

Report Date: January 8, 2009

Client Sample ID: RWSW0049
Sample ID: 221349001
Matrix: Water
Collect Date: 15-DEC-08 08:42
Receive Date: 16-DEC-08
Collector: Client

Project: WEIS00405
Client ID: WEIS001

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Oil & Grease Analysis Federal										
EPA 1664A n-Hexane Extractable Material (Oil and G "As Received"										
Oil and Grease	J	4.06	1.50	5.35	mg/L		JXT1	12/22/08 0932	827803	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 1664A	

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Weiss Associates
Address : 5801 Christie Ave
Suite 600
Emeryville, California 94608
Contact: Mr. Tim Utterback
Project: **LEHR PO# 130-4110-05-P-C074**

Report Date: January 8, 2009

Client Sample ID: RWSW0048
Sample ID: 221349002
Matrix: Water
Collect Date: 15-DEC-08 08:40
Receive Date: 16-DEC-08
Collector: Client

Project: WEIS00405
Client ID: WEIS001

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Oil & Grease Analysis Federal										
EPA 1664A n-Hexane Extractable Material (Oil and G "As Received"										
Oil and Grease	J	3.20	1.40	5.00	mg/L		JXT1 12/22/08	0932	827803	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 1664A	

Quality Control Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: January 8, 2009

Weiss Associates
5801 Christie Ave
Suite 600
Emeryville, California

Contact: Mr. Tim Utterback

Workorder: 221349

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Oil & Grease Analysis											
Batch 827803											
QC1201745133 LCS											
Oil and Grease	40.0				39.1	mg/L		98	(78%-114%)	JXT1	12/22/08 09:32
QC1201745134 LCSD											
Oil and Grease	40.0				38.9	mg/L	1	97	(0%-18%)		12/22/08 09:32
QC1201745130 MB											
Oil and Grease				J	3.90	mg/L					12/22/08 09:32
QC1201745132 221560001 MS											
Oil and Grease	40.0	J	3.20		12.9	mg/L		24*	(78%-114%)		12/22/08 11:09

Notes:
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- F Estimated Value
- H Analytical holding time was exceeded
- J Value is estimated
- M Matrix Related Failure
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
- ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
- d 5-day BOD--The 2:1 depletion requirement was not met for this sample
- h Preparation or preservation holding time was exceeded

QC Summary

Workorder: 221349

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

n-Hexane Extractable Material

Oil & Grease / TPH LogBook

Batch: 827803.0
Analyst: John Thomas
Procedure Code BALHEM_LF
Procedure Description EPA 1664A n-Hexane Extractable Material (HEM)
Lab SOP :GL-GC-E-094

Sample Type	Sample Id	Lot Id	Nc(mg/L)	Recovery(%)
LCS	1201745133	WOG1056898-01	40	97.75
LCSD	1201745134	WOG1056898-01	40	97.25
MS	1201745132	WOG1056898-01	40	24.25

Sample Type	Sample Id	Rpd(%)
LCSD	1201745134	.513

Sample Identification	Run Date	Balance ID	Aliquot	Initial Holder Wt.	1st Final Holder Wt.	2nd Final Holder Wt.	3rd Final Holder Wt.	Result	Result Units
1201745130 MB	22-DEC-08 09:32	BAL030	1 L	2.568	2.5718	2.5719	N/A	3.9	mg/L
1201745133 LCS	22-DEC-08 09:32	BAL030	1 L	2.5716	2.6106	2.6107	N/A	39.1	mg/L
1201745134 LCSD	22-DEC-08 09:32	BAL030	1 L	2.5701	2.6092	2.609	N/A	38.9	mg/L
221349001	22-DEC-08 09:32	BAL030	0.935 L	2.5743	2.5781	2.5781	N/A	4.06417	mg/L
221349002	22-DEC-08 09:32	BAL030	1 L	2.5876	2.5907	2.5908	N/A	3.2	mg/L
221446001	22-DEC-08 11:09	BAL030	1 L	2.5794	3.6728	3.6728	N/A	1093.4	mg/L
221560001	22-DEC-08 09:32	BAL030	1 L	2.599	2.6022	2.6022	N/A	3.2	mg/L
1201745132 MS(221560001)	22-DEC-08 11:09	BAL030	1 L	2.5476	2.5605	2.5605	N/A	12.9	mg/L
221607001	22-DEC-08 11:09	BAL030	1 L	2.5832	2.6214	2.6217	N/A	38.5	mg/L

All Weights are in Grams

Speedisk ID: G19421
Speed Vap Temperature: 40 C
Time in Desiccator: 22-DEC-08 10:05:00
Time out Desiccator: 22-DEC-08 13:45:15
Thermometer ID: 13704

Comments:

A) Result Liquid = ((Final - Initial) - Blank) / Aliquot * 1000
B) Result Hexane Liquid = (Final - Initial)/ Aliquot * 1000
C) Result Solid = ((Final - Initial) / Aliquot) / (1 - Moisture) * 1000
D) All samples were cooled in the desiccator for at least 30 minutes before they are weighed.
E) Note: Aliquot is used for the determination of the MDL and PQL in LIMS

Miscellaneous

GEL Laboratories LLC
Form GEL-NCR
Rev. 06/05

NCR Report No.: 643807
Revision No.: 2

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr. 02-JAN-09	**Division:** Federal	**Quality Criteria:** Specifications	**Type:** Process
Instrument Type: BALANCE	**Test / Method:** EPA 1664A	**Matrix Type:** Liquid	**Client Code:** ENRG, PNTX, WEIS, WSRS
Batch ID: 827803	**Sample Numbers:** 1201745132, 221446001		

Potentially affected work order(s)(SDG): 221349,221446(08272),221560,221607

Application Issues:

Failed Recovery for MS/PS

Sample improperly preserved

Specification and Requirements Nonconformance Description:	**NRG Disposition:**
1. Failed Recovery for MS: QC 1201745132MS	1. MS recovery was outside acceptance limits due to matrix interference.
2. Sample improperly preserved: 221446001	2. The following sample was received unpreserved. At the request of the PM the sample was analyzed unpreserved.

Originator's Name:
John Thomas 02-JAN-09

Data Validator/Group Leader:
Elzbieta Szulc 07-JAN-09

Quality Review:

Director:

RADIOLOGICAL ANALYSIS

Radiochemistry Case Narrative
Weiss Associates (WEIS)
SDG 221329

Method/Analysis Information

Product:	**GFPC, Sr90, liquid**
Analytical Method:	EPA 905.0 Modified
Analytical Batch Number:	829228

Sample ID	Client ID
221329001	RWSW0049
221329002	RWSW0048
1201748542	Method Blank (MB)
1201748543	221329002(RWSW0048) Sample Duplicate (DUP)
1201748544	221329002(RWSW0048) Matrix Spike (MS)
1201748545	221329002(RWSW0048) Matrix Spike Duplicate (MSD)
1201748546	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-004 REV# 12.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 221329002 (RWSW0048).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Chemical Recoveries
All chemical recoveries meet the required acceptance limits for this sample set.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Additional Comments
Additional comments were not required for this sample set.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	**LSC, Tritium Dist, Liquid**
Analytical Method:	EPA 906.0 Modified
Analytical Batch Number:	830652

Sample ID	Client ID
221329001	RWSW0049
221329002	RWSW0048
1201751853	Method Blank (MB)
1201751854	221329002(RWSW0048) Sample Duplicate (DUP)
1201751855	221329002(RWSW0048) Matrix Spike (MS)
1201751856	221329002(RWSW0048) Matrix Spike Duplicate (MSD)
1201751857	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-002 REV# 17.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 221329002 (RWSW0048).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Additional Comments
Additional comments were not required for this sample set.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	**Liquid Scint C14, Liquid**
Analytical Method:	EPA EERF C-01 Modified
Analytical Batch Number:	833423

Sample ID	Client ID
221329001	RWSW0049
221329002	RWSW0048
1201758082	Method Blank (MB)
1201758083	221329002(RWSW0048) Sample Duplicate (DUP)
1201758084	221329002(RWSW0048) Matrix Spike (MS)
1201758085	221329002(RWSW0048) Matrix Spike Duplicate (MSD)
1201758086	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-003 REV# 11.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 221329002 (RWSW0048).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis
Samples were reprepped due to low/high recovery.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Additional Comments
Additional comments were not required for this sample set.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	**Lucas Cell, Ra226, liquid**
Analytical Method:	EPA 903.1 Modified
Analytical Batch Number:	828069

Sample ID	Client ID
221329001	RWSW0049
221329002	RWSW0048
1201745738	Method Blank (MB)
1201745739	221329002(RWSW0048) Sample Duplicate (DUP)
1201745740	221329002(RWSW0048) Matrix Spike (MS)
1201745741	221329002(RWSW0048) Matrix Spike Duplicate (MSD)
1201745742	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-008 REV# 12.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 221329002 (RWSW0048).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Additional Comments
Additional comments were not required for this sample set.

Qualifier information

Manual qualifiers were not required.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer/Date: Pamela Wilkes 1/16/09

SAMPLE DATA SUMMARY

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

WEIS001 Weiss Associates (128-4108-124-2)

Client SDG: 221329 GEL Work Order: 221329

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

J Value is estimated

P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Edith Kent.

Reviewed by

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Weiss Associates
Address : 5801 Christie Ave
Suite 600
Emeryville, California 94608
Contact: Mr. Tim Utterback
Project: **LEHR PO# 130-4110-05-P-C074**

Report Date: January 16, 2009

Client Sample ID: RWSW0049
Sample ID: 221329001
Matrix: Water
Collect Date: 15-DEC-08 08:42
Receive Date: 16-DEC-08
Collector: Client

Project: WEIS00405
Client ID: WEIS001

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Rad Gas Flow Proportional Counting											
GFPC, Sr90, liquid "As Received"											
Strontium-90	U	-0.108	+/-0.474	0.936	1.00	pCi/L		JXC5 01/12/09	2028	829228	1
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Liquid "As Received"											
Tritium	U	0.127	+/-0.269	0.470	300	pCi/mL		SXL4 01/07/09	2100	830652	2
Liquid Scint C14, Liquid "As Received"											
Carbon-14	U	-4.31	+/-10.7	18.8	20.0	pCi/L		RXE1 01/15/09	1736	833423	3
Rad Radium-226											
Lucas Cell, Ra226, liquid "As Received"											
Radium-226	U	0.180	+/-0.186	0.287	1.00	pCi/L		KSD1 01/03/09	1930	828069	4

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 905.0 Modified	
2	EPA 906.0 Modified	
3	EPA EERF C-01 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery %	Acceptable Limits
Strontium Carrier	GFPC, Sr90, liquid "As Received"			83	(25%-125%)

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Weiss Associates
Address : 5801 Christie Ave
Suite 600
Emeryville, California 94608
Contact: Mr. Tim Utterback
Project: **LEHR PO# 130-4110-05-P-C074**

Report Date: January 16, 2009

Client Sample ID: RWSW0048
Sample ID: 221329002
Matrix: Water
Collect Date: 15-DEC-08 08:40
Receive Date: 16-DEC-08
Collector: Client

Project: WEIS00405
Client ID: WEIS001

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Rad Gas Flow Proportional Counting											
GFPC, Sr90, liquid "As Received"											
Strontium-90	U	-0.11	+/-0.330	0.708	1.00	pCi/L		JXC5 01/12/09	2028	829228	1
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Liquid "As Received"											
Tritium	U	0.0891	+/-0.267	0.472	300	pCi/mL		SXL4 01/07/09	2116	830652	2
Liquid Scint C14, Liquid "As Received"											
Carbon-14	U	-11.6	+/-10.5	18.8	20.0	pCi/L		RXE1 01/15/09	1809	833423	3
Rad Radium-226											
Lucas Cell, Ra226, liquid "As Received"											
Radium-226	U	0.356	+/-0.356	0.576	1.00	pCi/L		KSD1 01/03/09	2000	828069	4

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 905.0 Modified	
2	EPA 906.0 Modified	
3	EPA EERF C-01 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Strontium Carrier	GFPC, Sr90, liquid "As Received"			82	(25%-125%)

QUALITY CONTROL DATA

QC Summary

Weiss Associates
5801 Christie Ave
Suite 600
Emeryville, California

Contact: Mr. Tim Utterback

Workorder: 221329

Report Date: January 16, 2009

Parmname	NOM		Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date Time
Rad Gas Flow											
Batch 829228											
QC1201748543 221329002 DUP											
Strontium-90		U	-0.11 +/-0.330	U	0.248 +/-0.354	pCi/L	0.522		N/A	JXC5	01/12/09 20:28
QC1201748546 LCS											
Strontium-90	39.5				42.6 +/-2.57	pCi/L		108	(75%-125%)		01/12/09 20:28
QC1201748542 MB											
Strontium-90				U	-0.0565 +/-0.410	pCi/L					01/12/09 20:28
QC1201748544 221329002 MS											
Strontium-90	79.1	U	-0.11 +/-0.330		84.3 +/-4.96	pCi/L		107	(75%-125%)		01/12/09 20:28
QC1201748545 221329002 MSD											
Strontium-90	79.1	U	-0.11 +/-0.330		84.6 +/-4.95	pCi/L	0.0121	107			01/12/09 20:28
Rad Liquid Scintillation											
Batch 830652											
QC1201751854 221329002 DUP											
Tritium		U	0.0891 +/-0.267	U	-0.103 +/-0.244	pCi/mL	0.376		N/A	SXL4	01/07/09 22:38
QC1201751857 LCS											
Tritium	2.40				2.36 +/-0.423	pCi/mL		98	(75%-125%)		01/07/09 23:28
QC1201751853 MB											
Tritium				U	-0.0509 +/-0.247	pCi/mL					01/07/09 22:22
QC1201751855 221329002 MS											
Tritium	2.41	U	0.0891 +/-0.267		2.26 +/-0.418	pCi/mL		94	(75%-125%)		01/07/09 22:55
QC1201751856 221329002 MSD											
Tritium	2.41	U	0.0891 +/-0.267		2.21 +/-0.416	pCi/mL	0.0437	92			01/07/09 23:11
Batch 833423											
QC1201758083 221329002 DUP											
Carbon-14		U	-11.6 +/-10.5	U	-3.58 +/-10.7	pCi/L	0.378		N/A	RXE1	01/15/09 19:15
QC1201758086 LCS											
Carbon-14	523				494 +/-21.6	pCi/L		94	(75%-125%)		01/15/09 20:54
QC1201758082 MB											
Carbon-14				U	-6.55 +/-10.6	pCi/L					01/15/09 18:42
QC1201758084 221329002 MS											

QC Summary

Workorder: 221329

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date Time
Rad Liquid Scintillation										
Batch 833423										
Carbon-14	523	-11.6 +/-10.5	U	535 +/-22.4	pCi/L		102	(75%-125%)		01/15/09 19:48
QC1201758085 221329002 MSD										
Carbon-14	523	-11.6 +/-10.5	U	546 +/-22.4	pCi/L	0.056	104		RXE1	01/15/09 20:21
Rad Ra-226										
Batch 828069										
QC1201745739 221329002 DUP										
Radium-226		0.356 +/-0.356	U	0.227 +/-0.261	pCi/L	0.206		N/A	KSD1	01/03/09 20:30
QC1201745742 LCS										
Radium-226	15.1			15.4 +/-1.13	pCi/L		102	(75%-125%)		01/03/09 20:30
QC1201745738 MB										
Radium-226			U	0.191 +/-0.199	pCi/L					01/03/09 20:30
QC1201745740 221329002 MS										
Radium-226	24.2	0.356 +/-0.356	U	21.1 +/-1.60	pCi/L		88	(75%-125%)		01/03/09 20:30
QC1201745741 221329002 MSD										
Radium-226	24.2	0.356 +/-0.356	U	24.9 +/-1.82	pCi/L	0.414	103	(0%-20%)		01/03/09 20:30

Notes:
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E Organics--Concentration of the target analyte exceeds the instrument calibration range
- F Estimated Value
- H Analytical holding time was exceeded
- J Value is estimated
- M M if above MDC and less than LLD
- M Matrix Related Failure
- N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based

QC Summary

Workorder: 221329

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date	Time

on nearest internal standard response factor

N/A	RPD or %Recovery limits do not apply.
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI	Gamma Spectroscopy--Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
h	Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

RAW DATA

Radiochemistry Batch Checklist, Rev 9

Batch# 829228 Product: SR90 Date: 1/13/09

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to100 mg for GAB.			NA
Samples have been blank corrected (if required)			NA
If activity less 10* MDA/ MDC, error is 150% or less of sample activity. If greater 10* MDA/ MDC, error is 40% or less. If below the MDA/ MDC, error is okay.	✓		
Instrument source check is within limits.	✓		
Instrument bkg check is within limits.	✓		
Method RDL/ LLD has been met.	✓		
If duplicate activities are less 5* MDA/ MDC, then RPD is 100% or less. If greater 5* MDA/ MDC, then RPD 20% or less. If below the MDA/ MDC, the RPD is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.	✓		
Method blank is less than the RDL/ LLD. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.	✓		
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All line outs initialed and dated. No transcription errors are apparent.	✓		
Aux data is correct.			NA
Client Special requirements page has been checked.	✓		
Raw Data and/ or spectrum are included and properly statused.	✓		
QC data entered into QC database and batch is in REVW	✓		
Hit notification complete (if necessary)			NA
Batch entered into Case Narrative.	✓		
Batch non-conformances completed, if applicable.			NA
Batch non-conformances second reviewed and disposition verified to be completed.			NA
Aliquot Correction completed if required.			NA
Review sample historical results if available (If REMP, results above MDC have been verified by historical results, recount or re-analysis.)	✓		

GEL Laboratories, LLC

revised 8/1/08

Primary Review Performed By: [signature]

Secondary Review Performed By: [signature] 1/13/09

1/15
WES

Strontium 90 Que Sheet

12/29/08

Batch #: 829228 Analyst: JXC5 First Client Due Date: 01/15/2009 Internal Due Date01/04/2009 Comments

Sr-90 Spike Code: 1067-B Expiration Date: 7-23-09 Vol: 0.1 Sr Sep. Date/time: 1/12/09 0846

Sr-90 LCS Code: 1067-B Expiration Date: 7-23-09 Vol: 0.1

Sr Carrier Code: 908945 Exp Date: 8-27-09 Vol: 0.5 Sdt Wt: 93

Prep Date: 1-9-09 Initials: BE Pipet ID: 27606953 Balance #: 17955160 Analytical Scale #: 38110097 Witness: 1/9/09

Sample ID	Client Description	Type	RDL	Collection Date	Matrix	Client	Rad	Pos. #	Wet/Dry Aliquot (mL) or (g)	Det # 1 & 2	Initial Sr wt (g)	Final Sr wt (g)	Net Sr wt (mg)
221329001-1	RWSW0049	SAMPLE	1 pCi/L	DEC-15-08 08:42 AM	WATER	WEIS001		1	500	6D	0.0248	0.0325	7.7
221329002-1	RWSW0048	SAMPLE	1 pCi/L	DEC-15-08 08:40 AM	WATER	WEIS001		2	500	7A	0.0244	0.0320	7.6
1201748542-1	MB for batch 829228	MB	1 pCi/L		WATER	QC ACCOUNT		3	500	7B	0.0244	0.0319	7.5
1201748543-1	RWSW0048(221329002DUP)	DUP	1 pCi/L	DEC-15-08 08:40 AM	WATER	QC ACCOUNT		4	500	7C	0.0246	0.0325	7.9
1201748544-1	RWSW0048(221329002MS)	MS	1 pCi/L	DEC-15-08 08:40 AM	WATER	QC ACCOUNT		5	250	7D	0.0248	0.0326	7.8
1201748545-1	RWSW0048(221329002MSD)	MSD	1 pCi/L	DEC-15-08 08:40 AM	WATER	QC ACCOUNT		6	250	8A	0.0240	0.0318	7.8
1201748546-1	LCS for batch 829228	LCS	1 pCi/L		WATER	QC ACCOUNT		7	500	8B	0.0240	0.0318	7.8

daily ✓ 1/13/09 wt ✓

759

Instruments used: LB4110 S/N 8219, PIC S/N 10751-4 Solid Sample Dissolution by: NA LEACH or DIGESTION Data Reviewed By:

Circle One

Strontium-90 Liquid

Filename : SR90.XLS
File type : Excel
Version # : 1.2.4

Spike S/N : 1067-B
Spike Exp Date : 7/23/2009
Spike Activity (dpm/ml): 438.30
Spike Volume Added: 0.10

Batch : 829228
Analyst : JXC5
Prep Date : 1/9/2009

Sr-90 Abundance : 1
Method Uncertainty : 0.0784

Calibration Date : 1/1/2009
Calibration Due Date : 1/31/2010

LCS S/N : 1067-B
LCS Exp Date : 7/23/2009
LCS Activity (dpm/ml): 438.30
LCS Volume Added: 0.10

Carrier S/N : 908945
Carrier Exp Date : 8/27/2009
Carrier Volume Added: 0.50
Carrier Weight (mg/ml): 18.60
Carrier Weight StDev.: 0.08

Pipet, 0.1 ml Stdev : +/- 0.000701 ml
Pipet, 0.5 ml Stdev : +/- 0.002564 ml
Pipet, 1 ml Stdev : +/- 0.005480 ml

Procedure Code : GFC90SRL
Parmname : Strontium-90
Required MDA : 1 pCi/L
Halflife of Sr-90 : 28.6 years
Halflife of Y-90 : 64.1 hours
Batch counted on : PIC
BKG Count time : 500 min

Sample Characteristics				Carrier Calculations				
Sample ID	Sample Aliquot L	Sample Aliquot StDev. L	Sample Date/Time	Carrier Weight (mg) (Standard)	Net Weight (mg) (Sample)	Net Weight StDev. (mg)	Carrier Aliquot (mL)	Carrier Aliquot StDev. (mL)
221329001.1	0.5000	2.0256E-05	12/15/2008 8:42	18.60	7.70	0.040425	0.5	0.002564
221329002.1	0.5000	2.0256E-05	12/15/2008 8:40	18.60	7.60	0.039995	0.5	0.002564
1201748542.1	0.5000	2.0256E-05	1/9/2009 0:00	18.60	7.50	0.039565	0.5	0.002564
1201748543.1	0.5000	2.0256E-05	12/15/2008 8:40	18.60	7.90	0.041284	0.5	0.002564
1201748544.1	0.2500	1.7439E-05	12/15/2008 8:40	18.60	7.80	0.040854	0.5	0.002564
1201748545.1	0.2500	1.7439E-05	12/15/2008 8:40	18.60	7.80	0.040854	0.5	0.002564
1201748546.1	0.5000	2.0256E-05	1/9/2009 0:00	18.60	7.80	0.040854	0.5	0.002564

760

Count Raw Data

Detector ID	Counting Time (min.)	Gross Counts Alpha	Gross Counts Beta	Gross Beta CPM	Weekly Bkg CPM	Weekly Bkg Count Time (min.)	Detector Efficiency (cpm/dpm) Sr-90	Detector Efficiency (cpm/dpm) Y-90	Detector Efficiency Error (cpm/dpm)	Alpha X-Talk	Count Start Date/Time	Strontium Separation Date/Time	Yttrium Ingrowth	Sr-90 Decay	Calculated Sample Recovery %	Sample Recovery Error %
6D	60	6	37	0.612	0.660	500	0.4154	0.5526	0.00816	0.04804	1/12/2009 20:28	1/12/2009 8:46	0.124	0.998	82.80%	1.00%
7A	60	3	17	0.280	0.328	500	0.4108	0.5546	0.00816	0.05866	1/12/2009 20:28	1/12/2009 8:46	0.124	0.998	81.72%	1.00%
7B	60	2	26	0.432	0.456	500	0.4125	0.5564	0.00816	0.04974	1/12/2009 20:28	1/12/2009 8:46	0.124	1.000	80.65%	1.00%
7C	60	1	22	0.366	0.254	500	0.4096	0.5557	0.00816	0.05045	1/12/2009 20:28	1/12/2009 8:46	0.124	0.998	84.95%	1.00%
7D	60	14	1154	19.221	0.368	500	0.4129	0.5551	0.00816	0.05448	1/12/2009 20:28	1/12/2009 8:46	0.124	0.998	83.87%	1.00%
8A	60	9	1167	19.442	0.358	500	0.4162	0.5601	0.00816	0.05393	1/12/2009 20:28	1/12/2009 8:46	0.124	0.998	83.87%	1.00%
8B	60	1	1268	21.132	1.748	500	0.4191	0.5598	0.00816	0.06554	1/12/2009 20:28	1/12/2009 8:46	0.124	1.000	83.87%	1.00%

Notes:
1 - Results are decay corrected to Sample Date/Time
2 - Reference date for Spike Activity (dpm/ml) is the batch Prep Date
3 - Spike Nominals are decay corrected to Sample Date/Time

* - RPD changed to 0% due to activity below MDA for 1201748543.1

Results

Decision Level pCi/L	Critical Level pCi/L	MDA pCi/L	Sample Act. Conc. pCi/L	Sample Act. Error pCi/L	Net Count Rate CPM	Net Count Rate Error CPM	2 SIGMA Counting Uncertainty pCi/L	2 SIGMA Total Prop. Uncertainty pCi/L	Sample QC	Sample Type	RPD	RER	Nominal pCi/L	Recovery
0.5828	0.4115	0.9356	**-0.1085**	2.2295	-0.0481	0.1073	0.4740	0.4741		SAMPLE				
0.4201	0.2966	0.7083	**-0.1097**	1.5337	-0.0476	0.0730	0.3297	0.3297		SAMPLE				
0.4990	0.3523	0.8207	**-0.0565**	3.7014	-0.0243	0.0900	0.4096	0.4097		MB				
0.3564	0.2516	0.6143	**0.2484**	0.7269	0.1118	0.0813	0.3539	0.3560	221329002.1	DUP	0.0%	0.5222		
0.8631	0.6094	1.4423	**84.2645**	0.0327	18.8526	0.5666	4.9640	14.0944	221329002.1	MS			79.1015	106.5%
0.8444	0.5962	1.4140	**84.6055**	0.0325	19.0839	0.5699	4.9518	14.1401	221329002.1	MSD	0.4%	0.0121	79.1015	107.0%
0.9260	0.6538	1.4175	**42.6474**	0.0334	19.3842	0.5964	2.5718	7.1545		LCS			39.4861	108.0%

762

829228

SampleID	Instr	Time (min.)	Alpha Counts	Beta Counts	Count Start Time	Count End Time	Machine
221329001	6D	60	6	37	1/12/2009 20:28	1/12/2009 21:28	Protean
221329002	7A	60	3	17	1/12/2009 20:28	1/12/2009 21:28	Protean
1201748542	7B	60	2	26	1/12/2009 20:28	1/12/2009 21:28	Protean
1201748543	7C	60	1	22	1/12/2009 20:28	1/12/2009 21:28	Protean
1201748544	7D	60	14	1154	1/12/2009 20:28	1/12/2009 21:28	Protean
1201748545	8A	60	9	1167	1/12/2009 20:28	1/12/2009 21:28	Protean
1201748546	8B	60	1	1268	1/12/2009 20:28	1/12/2009 21:28	Protean

Radiochemistry Batch Checklist, Rev 9

Batch# 830652 Product: tritium Date: 11/12/09

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to100 mg for GAB.			NA
Samples have been blank corrected (if required)			NA
If activity less 10* MDA/ MDC, error is 150% or less of sample activity. If greater 10* MDA/ MDC, error is 40% or less. If below the MDA/ MDC, error is okay.	✓		
Instrument source check is within limits.	✓		
Instrument bkg check is within limits.	✓		
Method RDL/ LLD has been met.	✓		
If duplicate activities are less 5* MDA/ MDC, then RPD is 100% or less. If greater 5* MDA/ MDC, then RPD 20% or less. If below the MDA/ MDC, the RPD is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.			NA
Method blank is less than the RDL/ LLD. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.	✓		
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All line outs initialed and dated. No transcription errors are apparent.	✓		
Aux data is correct.			NA
Client Special requirements page has been checked.	✓		
Raw Data and/ or spectrum are included and properly statused.	✓		
QC data entered into QC database and batch is in REVW	✓		
Hit notification complete (if necessary)			NA
Batch entered into Case Narrative.	✓		
Batch non-conformances completed, if applicable.			NA
Batch non-conformances second reviewed and disposition verified to be completed.			NA
Aliquot Correction completed if required.			NA
Review sample historical results if available (If REMP, results above MDC have been verified by historical results, recount or re-analysis.)	✓		

GEL Laboratories, LLC

revised 8/1/08

Primary Review Performed By: [signature]

Secondary Review Performed By: [signature] 11/12/09

1/15 WEIS/ ALSV / ANNA

Tritium Que Sheet

06-JAN-09

Batch #: 830652 Analyst:SXL4 First Client Due Date 15-JAN-09 Internal Due Date:04-JAN-09

Spike Isotope: Hydrogen-3 Spike Code: 0134-J Expiration Date: 7/29/09 Vol: 0.1

LCS Isotope: Hydrogen-3 LCS Code: 0134-J Expiration Date: 7/29/09 Vol: 0.1

Prep Date: 1/7/09 Initials: SXL4 Pipet ID: ~~29709168~~ 27666953 SXL4 1/7/09 Witness: SRS 1/7/09

Sample ID	Client Samp ID	Type	Hazard Code	Min CRDL	Matrix	Client	Sample Date	Aliquot in vial (g/mL)	LSC Rack #	Dist Rig #	Vol added for Dist (mL)	Initial Sample Aliquot (g/mL)	Final Wt (g)	Dist Vol (mL)
221329001-1	RWSW0049	SAMPLE		300 pCi/mL	WATER	WEIS001	15-DEC-08 1	10	61-2	32		50		13
221329002-1	RWSW0048	SAMPLE		300 pCi/mL	WATER	WEIS001	15-DEC-08 2	10	61-3	78		50		13
221862001-1	9768697 001	SAMPLE		.7 pCi/mL	WASTE WATE	ALSV001	15-DEC-08 3	10	61-4	87	SXL4 1/7/09	50	SXL4 1/7/09	13
221950001-1	U-1 Alleyway Well #1	SAMPLE		.7 pCi/mL	WATER	ANNA003	30-DEC-08 4	10	61-5	103		50		13
221950002-1	U-1 Alleyway Well #3	SAMPLE		.7 pCi/mL	WATER	ANNA003	30-DEC-08 5	10	61-6	290		50		13
1201751853-1	MB for batch 830652	MB		.7 pCi/mL	WATER	QC ACCOUNT	6	10	61-7	403		50		13
1201751854-1	RWSW0048(221329002DUP)	DUP		300 pCi/mL	WATER	QC ACCOUNT	15-DEC-08 7	10	61-8	1008		50		13
1201751855-1	RWSW0048(221329002MS)	MS		300 pCi/mL	WATER	QC ACCOUNT	15-DEC-08 8	10	61-9	1011		50		13
1201751856-1	RWSW0048(221329002MSD)	MSD		300 pCi/mL	WATER	QC ACCOUNT	15-DEC-08 9	10	61-10	1012		50		13
1201751857-1	LCS for batch 830652	LCS		.7 pCi/mL	WATER	QC ACCOUNT	10	10	61-11	1100		50		13

Bkg Rack #: 61-1

daily ✓

765

Comments:

Instrument Used (circle as appropriate): *LS6000 (Red) 7065155, LS6500 (Blue) 7067083, LS6500 (Gold) 7070506, LS6500 (Green) 7067404, Wallac (Yellow) 4040127, LS6000 (Brown) 7060658, Wallac (Pink) 2200082, Wallac (White) 4140299, Purple 7069123, Silver 7060656*

Bkg prepared with dead water? Yes/No

Calibration Used : *Ultima Gold LLT (10 mL sample/13 mL LLT) poly vial; Ecoscint Ultra (10 mL sample/13 mL Econscint Ultra)*

Data Reviewed By:

Page 1 of 1

Tritium Liquid

Filename : H3DST.XLS
File type : Excel
Version # : 1.2.3

Batch : 830652
Analyst : SXL4
Prep Date : 1/7/2009

Spike S/N : 0134-J
Spike Exp Date : 7/29/2009
Spike Activity (dpm/ml): 2664.00
Spike Volume Added: 0.10

LCS S/N : 0134-J
LCS Exp Date : 7/29/2009
LCS Activity (dpm/ml): 2664.00
LCS Volume Added: 0.10

H-3 Abundance : 1
Method Uncertainty : 0.0983
Geometry: 10mL DW/13mL Ecoscint Ultra

Pipet, 0.1 ml Stdev : +/- 0.000701 ml
Pipet, 0.5 ml Stdev : +/- 0.002564 ml
Pipet, 1.0 ml Stdev : +/- 0.005480 ml
Pipet, 5.0 ml Stdev : +/- 0.025729 ml

Procedure Code : LSCDSH3L
Parmname : Tritium
Required MDA : 700 pCi/L
Halflife of Tritium : 12.28 years

Sample Characteristics

Sample ID	Total Sample Volume (L)	Sample Aliquot L	Sample Aliquot StDev. L	Distilled Sample Counted L	Sample Counted StDev. L	Rig number	Sample Date/Time
221329001.1	0.0500	0.0500	7.8337E-06	0.0100	2.5729E-05	32	12/15/2008 8:42
221329002.1	0.0500	0.0500	7.8337E-06	0.0100	2.5729E-05	78	12/15/2008 8:40
221862001.1	0.0500	0.0500	7.8337E-06	0.0100	2.5729E-05	81	12/15/2008 11:40
221950001.1	0.0500	0.0500	7.8337E-06	0.0100	2.5729E-05	103	12/30/2008 11:45
221950002.1	0.0500	0.0500	7.8337E-06	0.0100	2.5729E-05	290	12/30/2008 10:15
1201751853.1	0.0500	0.0500	7.8337E-06	0.0100	2.5729E-05	403	1/7/2009 0:00
1201751854.1	0.0500	0.0500	7.8337E-06	0.0100	2.5729E-05	1008	12/15/2008 8:40
1201751855.1	0.0500	0.0500	7.8337E-06	0.0100	2.5729E-05	1011	12/15/2008 8:40
1201751856.1	0.0500	0.0500	7.8337E-06	0.0100	2.5729E-05	1012	12/15/2008 8:40
1201751857.1	0.0500	0.0500	7.8337E-06	0.0100	2.5729E-05	1100	1/7/2009 0:00

Count raw Data				Background				Calibration Data					Backgrounds	
Rack Position #	Counting Time (min.)	Quench#	Gross cpm	cpm	Count Time (min.)	Count Start Date/Time	Sample Decay	Counted on	Calibration Date	Calibration Due Date	Detector Efficiency (cpm/dpm)	Detector Efficiency Error (cpm/dpm)	Rack Position #	Count Start Date/Time
61-2	15	121.2	4.13	3.47	15	1/7/2009 21:00	0.996	LSCBROWN	8/6/2008	8/31/2009	0.2344	0.00792	61-1	1/7/2009 20:43
61-3	15	122	3.93	3.47	15	1/7/2009 21:16	0.996	LSCBROWN	8/6/2008	8/31/2009	0.2335	0.00792	61-1	1/7/2009 20:43
61-4	15	117.8	148.6	3.47	15	1/7/2009 21:33	0.996	LSCBROWN	8/6/2008	8/31/2009	0.2382	0.00792	61-1	1/7/2009 20:43
61-5	15	117.7	6.67	3.47	15	1/7/2009 21:49	0.999	LSCBROWN	8/6/2008	8/31/2009	0.2383	0.00792	61-1	1/7/2009 20:43
61-6	15	118.7	32.8	3.47	15	1/7/2009 22:05	0.999	LSCBROWN	8/6/2008	8/31/2009	0.2372	0.00792	61-1	1/7/2009 20:43
61-7	15	117.3	3.2	3.47	15	1/7/2009 22:22	1.000	LSCBROWN	8/6/2008	8/31/2009	0.2388	0.00792	61-1	1/7/2009 20:43
61-8	15	118.7	2.93	3.47	15	1/7/2009 22:38	0.996	LSCBROWN	8/6/2008	8/31/2009	0.2372	0.00792	61-1	1/7/2009 20:43
61-9	15	118.5	15.33	3.47	15	1/7/2009 22:55	0.996	LSCBROWN	8/6/2008	8/31/2009	0.2374	0.00792	61-1	1/7/2009 20:43
61-10	15	119.5	15	3.47	15	1/7/2009 23:11	0.996	LSCBROWN	8/6/2008	8/31/2009	0.2363	0.00792	61-1	1/7/2009 20:43
61-11	15	118.8	15.87	3.47	15	1/7/2009 23:28	1.000	LSCBROWN	8/6/2008	8/31/2009	0.2371	0.00792	61-1	1/7/2009 20:43

767

Notes:
1 - Results are decay corrected to Sample Date/Time
2 - Reference date for Spike Activity (dpm/ml) is the batch Prep Date
3 - Spike Nominals are decay corrected to Sample Date/Time

* - RPD changed to 0% due to activity below MDA for 1201751854.1

Results

Decision Level pCi/L	Critical Level pCi/L	MDA pCi/L	Sample Act. Conc. pCi/L	Sample Act. Error pCi/L	Net Count Rate CPM	Net Count Rate Error CPM	2 SIGMA Counting Uncertainty pCi/L	2 SIGMA Total Prop. Uncertainty pCi/L	Sample QC	Sample Type	RPD	RER	Nominal pCi/L	Recovery
305.6874	215.8179	470.2119	**127.3009**	1.0785	0.6600	0.7118	269.0945	270.2187		SAMPLE				
306.9054	216.6779	472.0855	**89.0784**	1.5269	0.4600	0.7024	266.5881	267.1444		SAMPLE				
300.7814	212.3542	462.6654	**27543.4367**	0.0236	145.1300	3.1840	1184.3857	5457.6289		SAMPLE				
299.9481	211.7659	461.3836	**605.6282**	0.2571	3.2000	0.8222	304.9899	326.7130		SAMPLE				
301.3406	212.7491	463.5256	**5576.7310**	0.0537	29.3300	1.5550	579.4979	1224.4819		SAMPLE				
299.0567	211.1366	460.0125	**-50.9480**	2.4698	-0.2700	0.6668	246.6249	246.6369		MB				
302.0441	213.2457	464.6077	**-102.9139**	1.2097	-0.5400	0.6532	243.9949	244.0073	221329002.1	DUP	0.0%	0.3756		
301.7632	213.0474	464.1756	**2258.1921**	0.0948	11.8600	1.1195	417.7972	604.4328	221329002.1	MS			2408.4095	93.8%
303.1862	214.0521	466.3646	**2205.7117**	0.0966	11.5300	1.1097	416.0671	595.9292	221329002.1	MSD	2.4%	0.0437	2408.4095	91.6%
301.1316	212.6015	463.2041	**2356.0690**	0.0920	12.4000	1.1355	422.8682	621.6902		LCS			2399.9982	98.2%

768

ID: TRITIUM

USER: 6 COMMENT:BROWN 7 JAN 2009 20:45

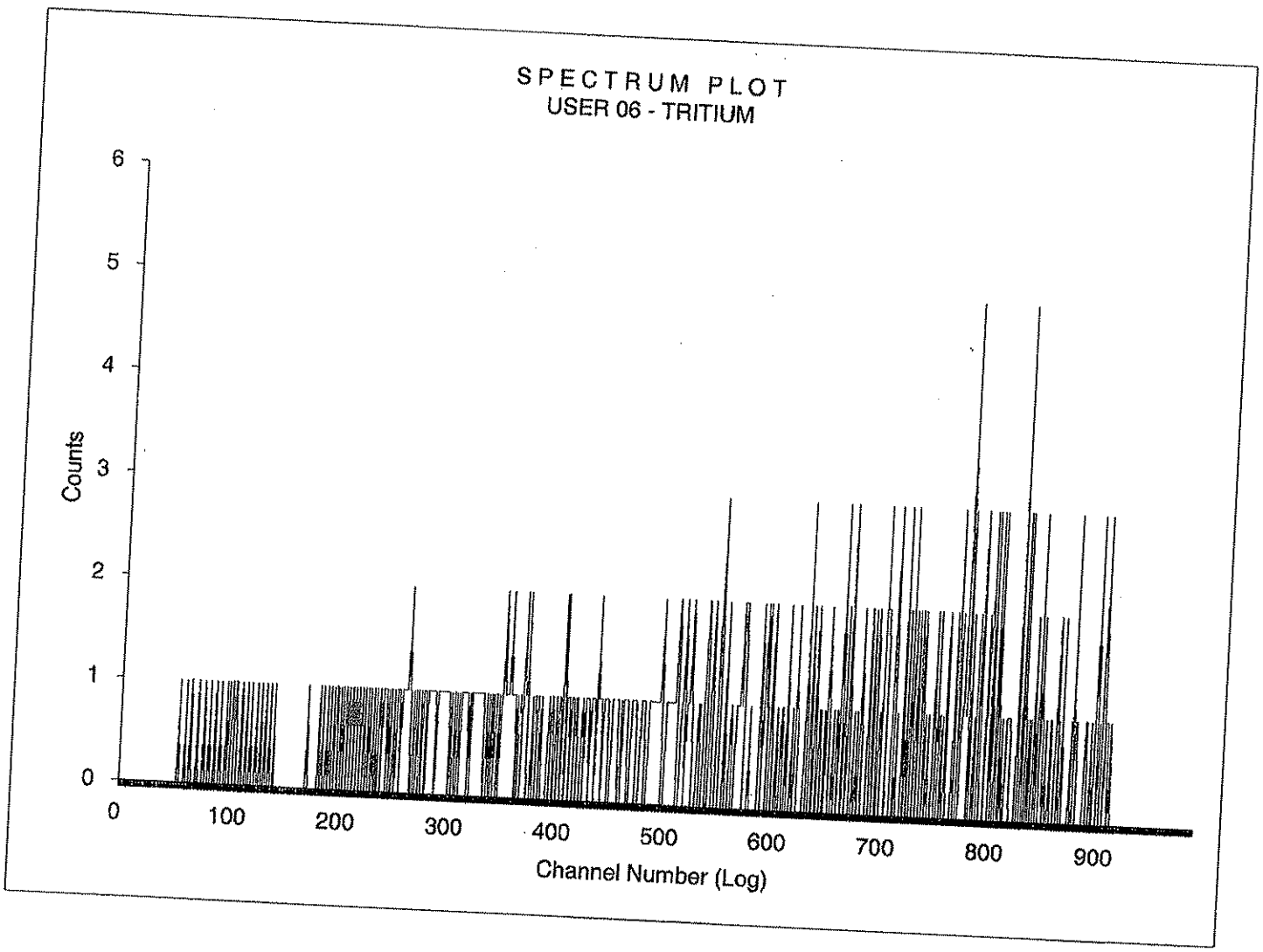
PRESET TIME :	15.00						
DATA CALC :	CPM	H#	:YES	SAMPLE REPEATS:	1	PRINTER	: STD
COUNT BLANK :	NO	IC#	: NO	REPLICATES :	1	RS232	:EDIT
TWO PHASE :	NO	AQC	: NO	CYCLE REPEATS :	1	DISK	: OFF
SCINTILLATOR:	LIQUID	LUMEX	:YES	LOW SAMPLE REJ:	0		
LOW LEVEL :	NO	HALF LIFE CORRECTION DATE:				none	

CHAN: 0.0 - 240.0 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0
CHAN: 0.0 - 900.0 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0

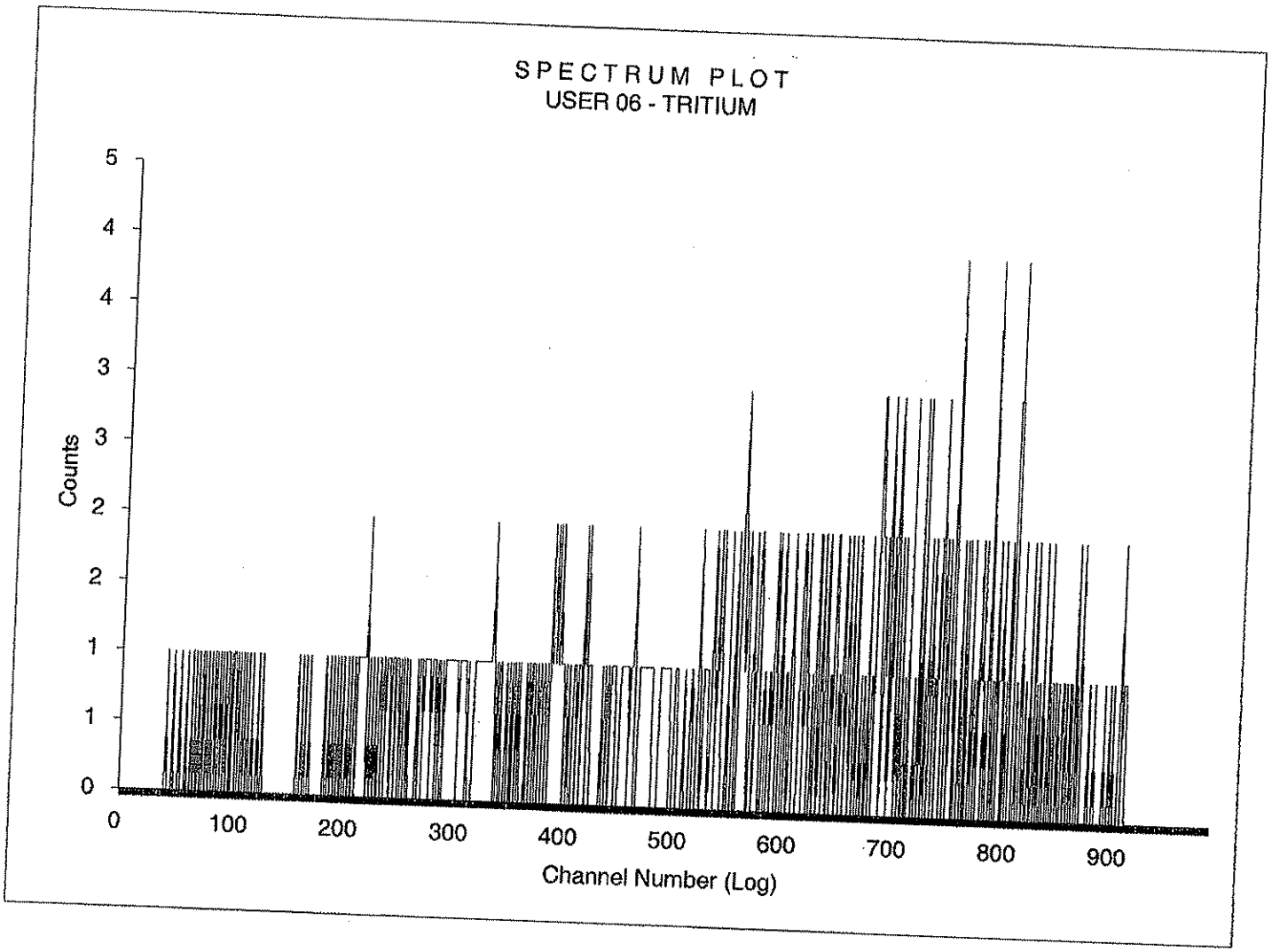
SAM NO	POS	TIME MIN	H#	WINDOW CPM	WINDOW %ERROR	LUMEX %	ELAPSED TIME
1	61-1	15.00	119.5	3.47	37.90	7.28	15.94
2	61-2	15.00	121.2	4.13	34.00	7.87	32.38
3	61-3	15.00	122.0	3.93	32.87	5.98	48.79
4	61-4	15.00	117.8	148.60	4.27	1.29	65.19
5	61-5	15.00	117.7	6.67	23.50	5.66	81.60
6	61-6	15.00	118.7	32.80	9.32	3.19	98.02
7	61-7	15.00	117.3	3.20	38.43	5.89	114.43
8	61-8	15.00	118.7	2.93	40.67	6.36	130.85
9	61-9	15.00	118.5	15.33	14.21	4.47	147.27
10	61-10	15.00	119.5	15.00	14.33	4.37	163.68
11	61-11	15.00	118.8	15.87	13.89	4.38	180.08

INSTRUMENT CALIBRATION: Mini 8 JAN 2009 06:58
Calibration successful

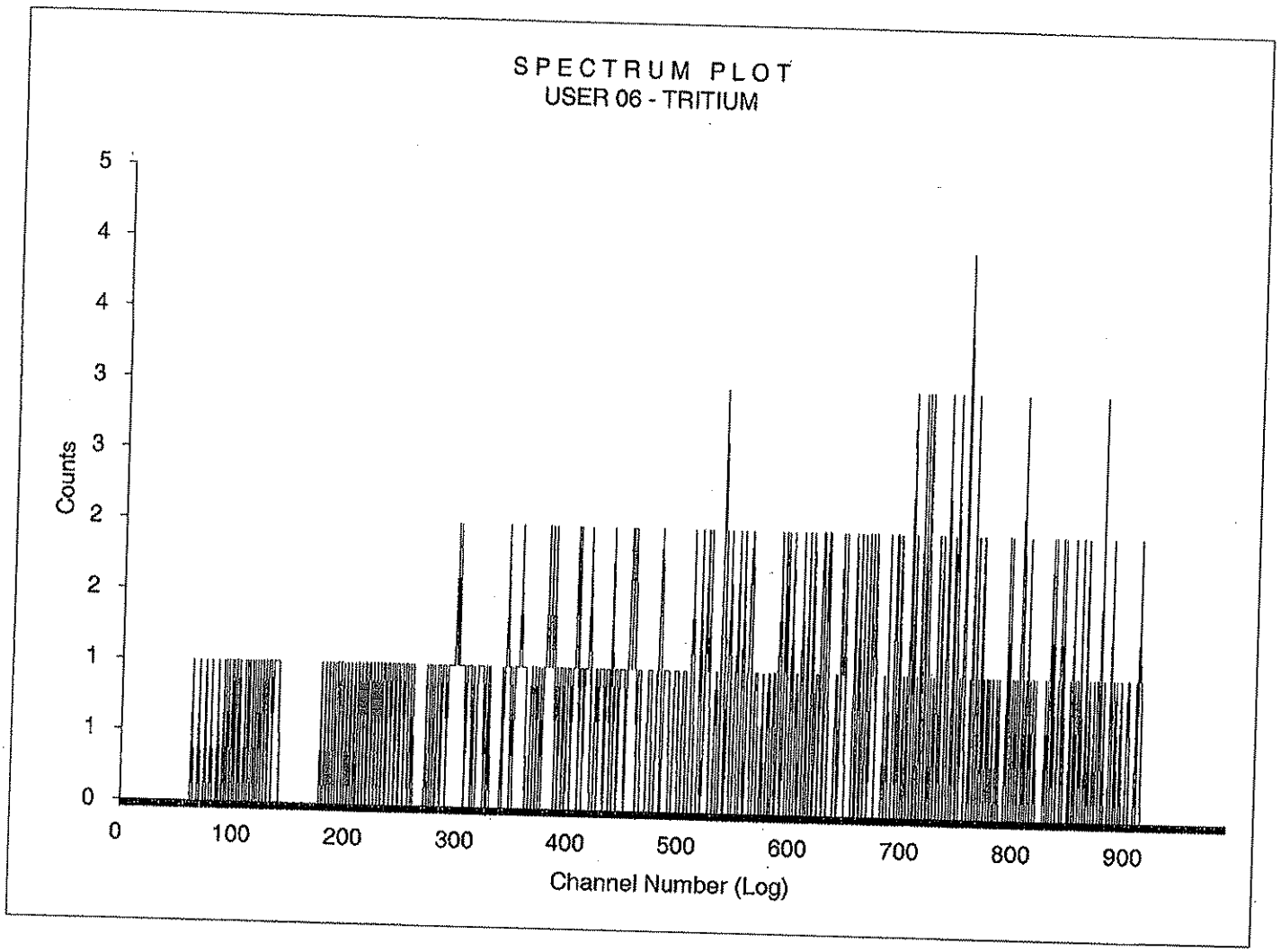
Sample Count Start Time:			
Data Capture Date:	7 Jan 2009 20:43:53		
User Filename:	1/7/2009 20:59:17		
	S06010761-1A.WK1		
Spectrum Type	U06010761-1A.WK1		
User Number:	Log Counts		
User Id:	06		
User Comment:	TRITIUM		
Isotope Name:	BROWN		
Scintillator:	14C		
Sample, Rack-Pos, Time:	LIQUID		
H#, Total Counts:	1	61-1	15.00
Start, End, X-Axis:	119.5	525	
	0	990	Channel Number



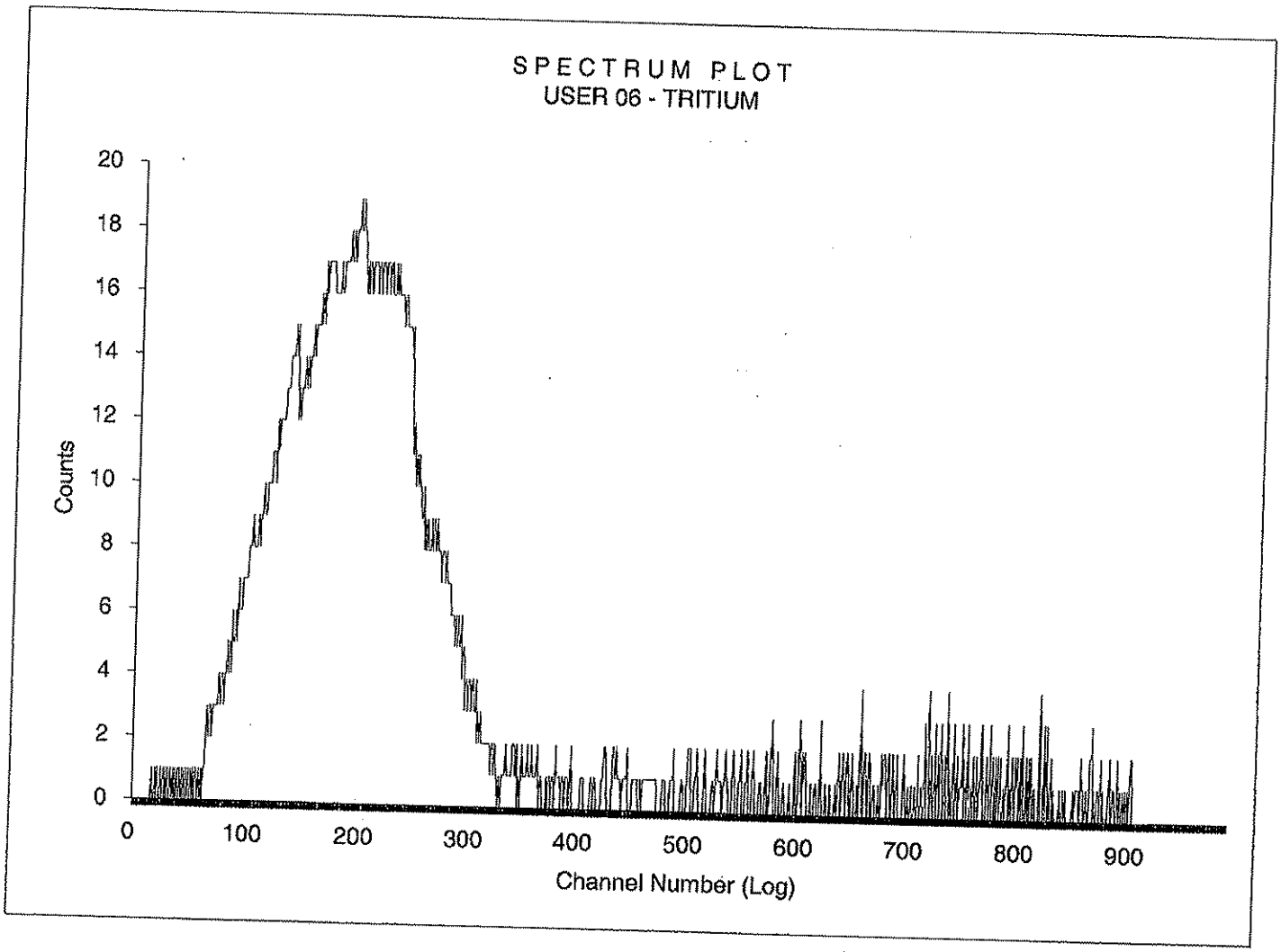
Sample Count Start Time:	7 Jan 2009 21:00:20		
Data Capture Date:	1/7/2009 21:15:44		
User Filename:	S06010761-2A.WK1		
	U06010761-1A.WK1		
Spectrum Type	Log Counts		
User Number:	06		
User Id:	TRITIUM		
User Comment:	BROWN		
Isotope Name:	14C		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	2	61-2	15.00
H#, Total Counts:	121.2	540	
Start, End, X-Axis:	0	990	Channel Number



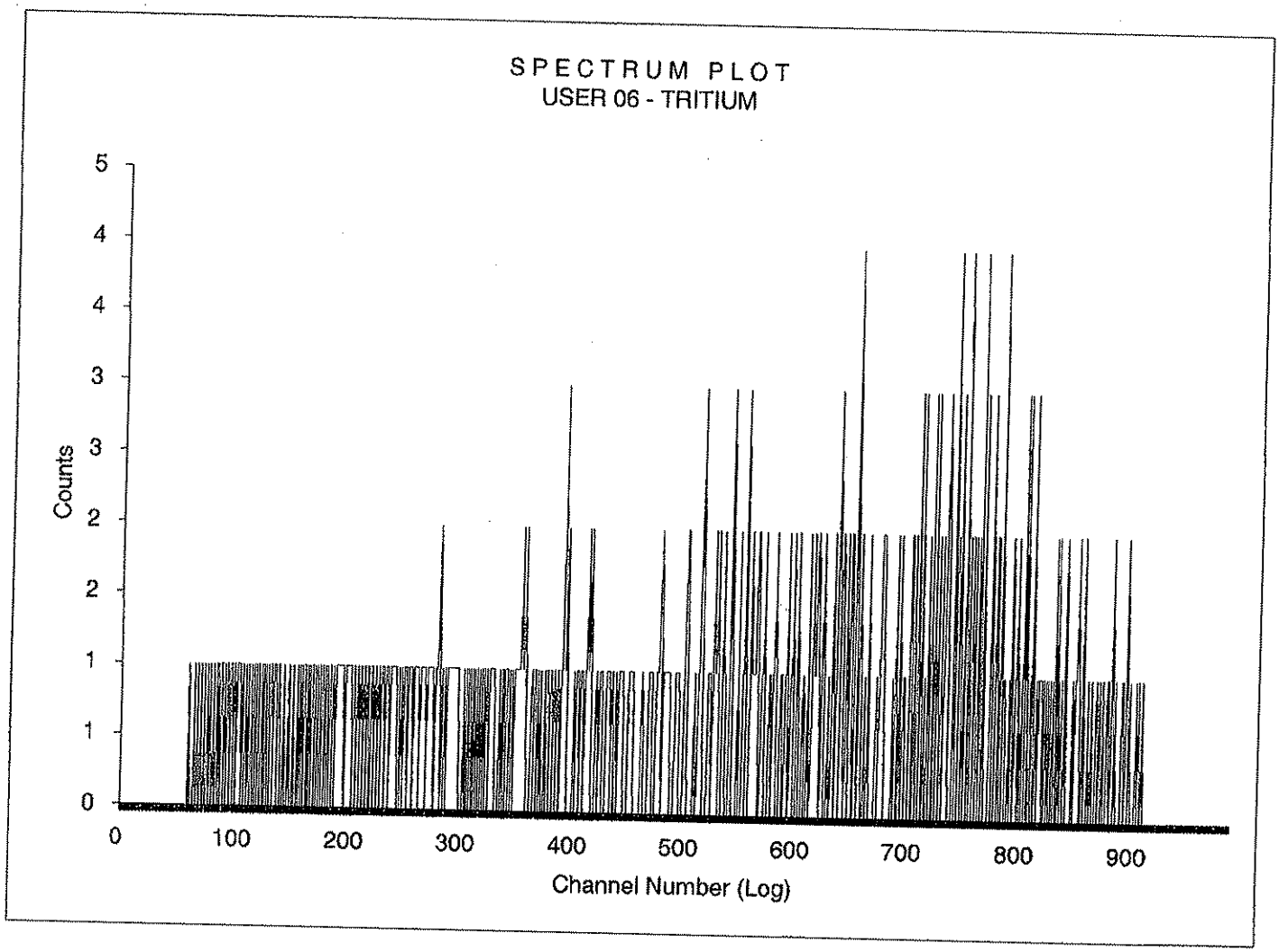
Sample Count Start Time:	7 Jan 2009 21:16:44		
Data Capture Date:	1/7/2009 21:32:08		
User Filename:	S06010761-3A.WK1		
	U06010761-1A.WK1		
Spectrum Type	Log Counts		
User Number:	06		
User Id:	TRITIUM		
User Comment:	BROWN		
Isotope Name:	14C		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	3	61-3	15.00
H#, Total Counts:	122.0	502	
Start, End, X-Axis:	0	990	Channel Number



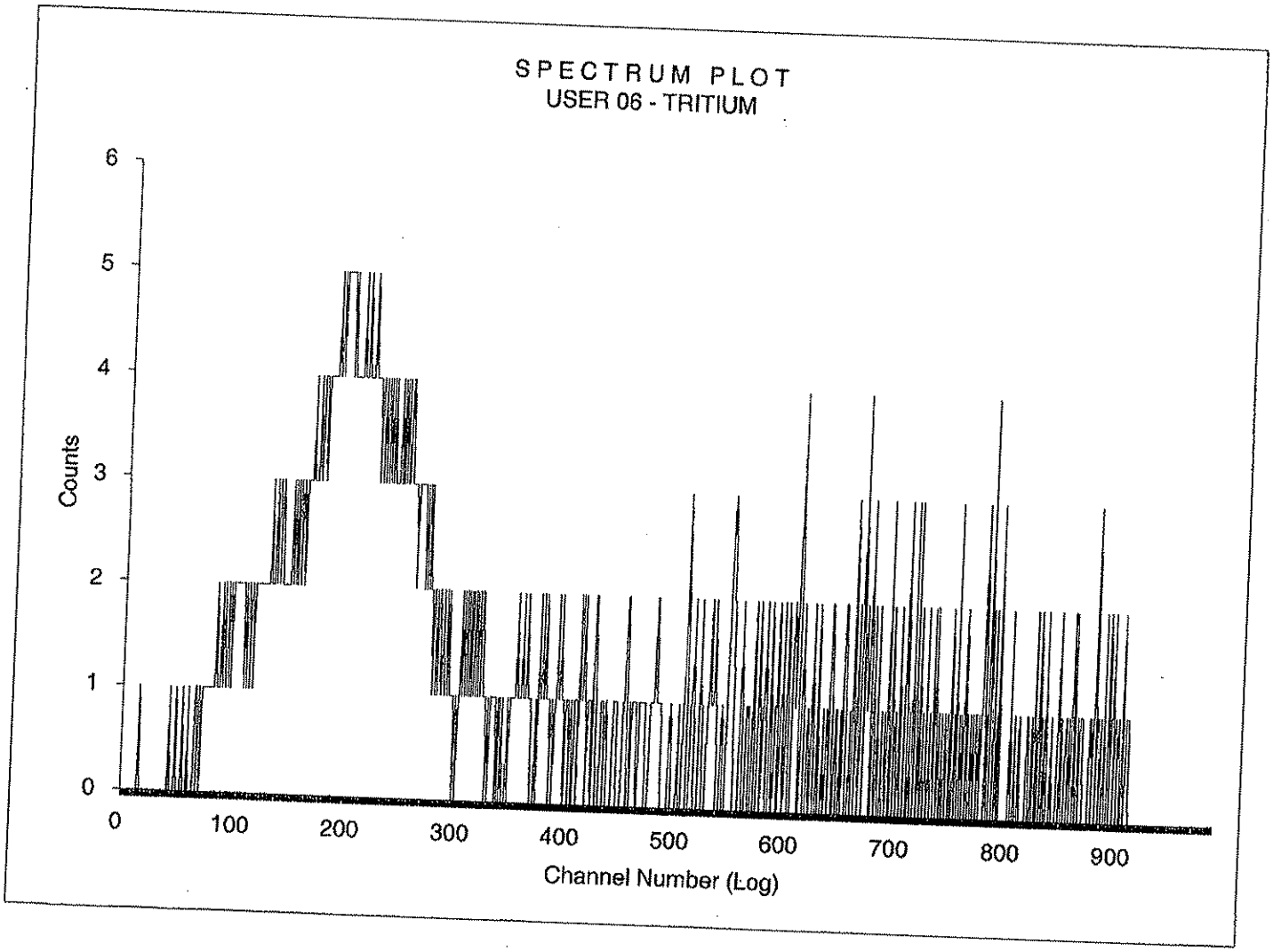
Sample Count Start Time:	7 Jan 2009 21:33:08		
Data Capture Date:	1/7/2009 21:48:33		
User Filename:	S06010761-4A.WK1		
	U06010761-1A.WK1		
Spectrum Type	Log Counts		
User Number:	06		
User Id:	TRITIUM		
User Comment:	BROWN		
Isotope Name:	14C		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	4	61-4	15.00
H#, Total Counts:	117.8	3224	
Start, End, X-Axis:	0	990	Channel Number



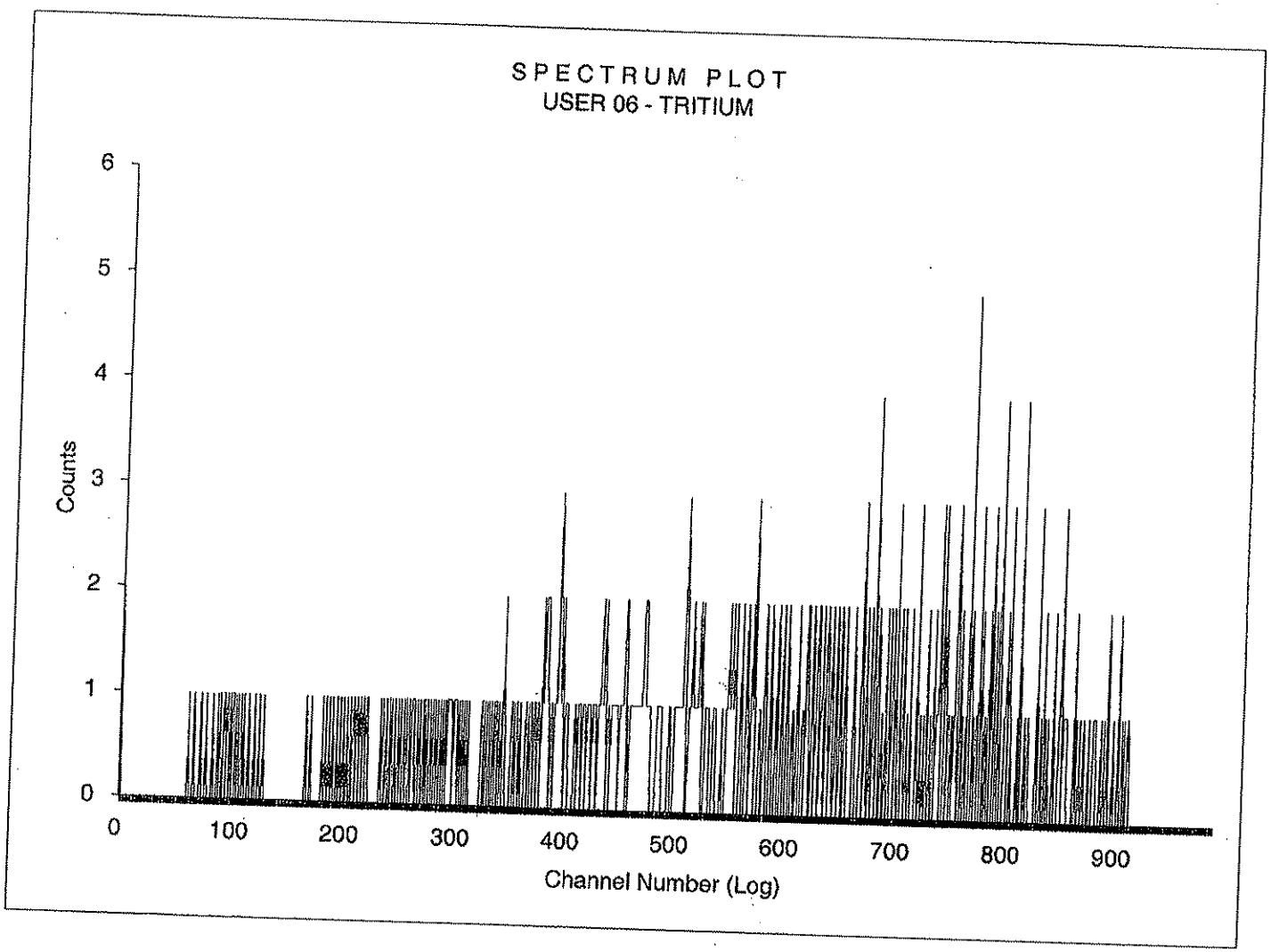
Sample Count Start Time:	7 Jan 2009 21:49:33		
Data Capture Date:	1/7/2009 22:04:58		
User Filename:	S06010761-5A.WK1		
	U06010761-1A.WK1		
Spectrum Type	Log Counts		
User Number:	06		
User Id:	TRITIUM		
User Comment:	BROWN		
Isotope Name:	14C		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	5	61-5	15.00
H#, Total Counts:	117.7	575	
Start, End, X-Axis:	0	990	Channel Number



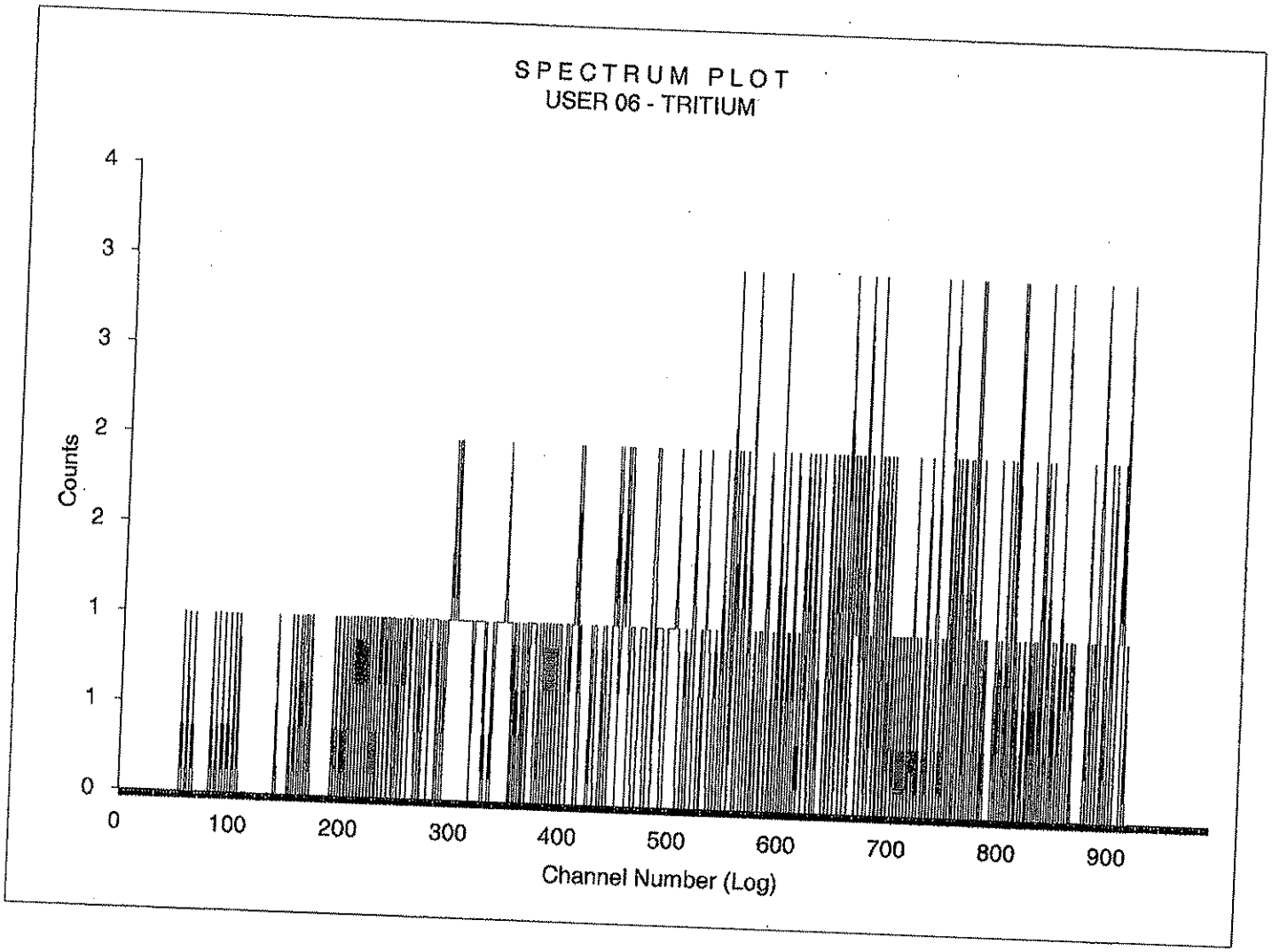
Sample Count Start Time:	7 Jan 2009 22:05:58		
Data Capture Date:	1/7/2009 22:21:23		
User Filename:	S06010761-6A.WK1		
	U06010761-1A.WK1		
Spectrum Type	Log Counts		
User Number:	06		
User Id:	TRITIUM		
User Comment:	BROWN		
Isotope Name:	14C		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	6	61-6	15.00
H#, Total Counts:	118.7	1093	
Start, End, X-Axis:	0	990	Channel Number



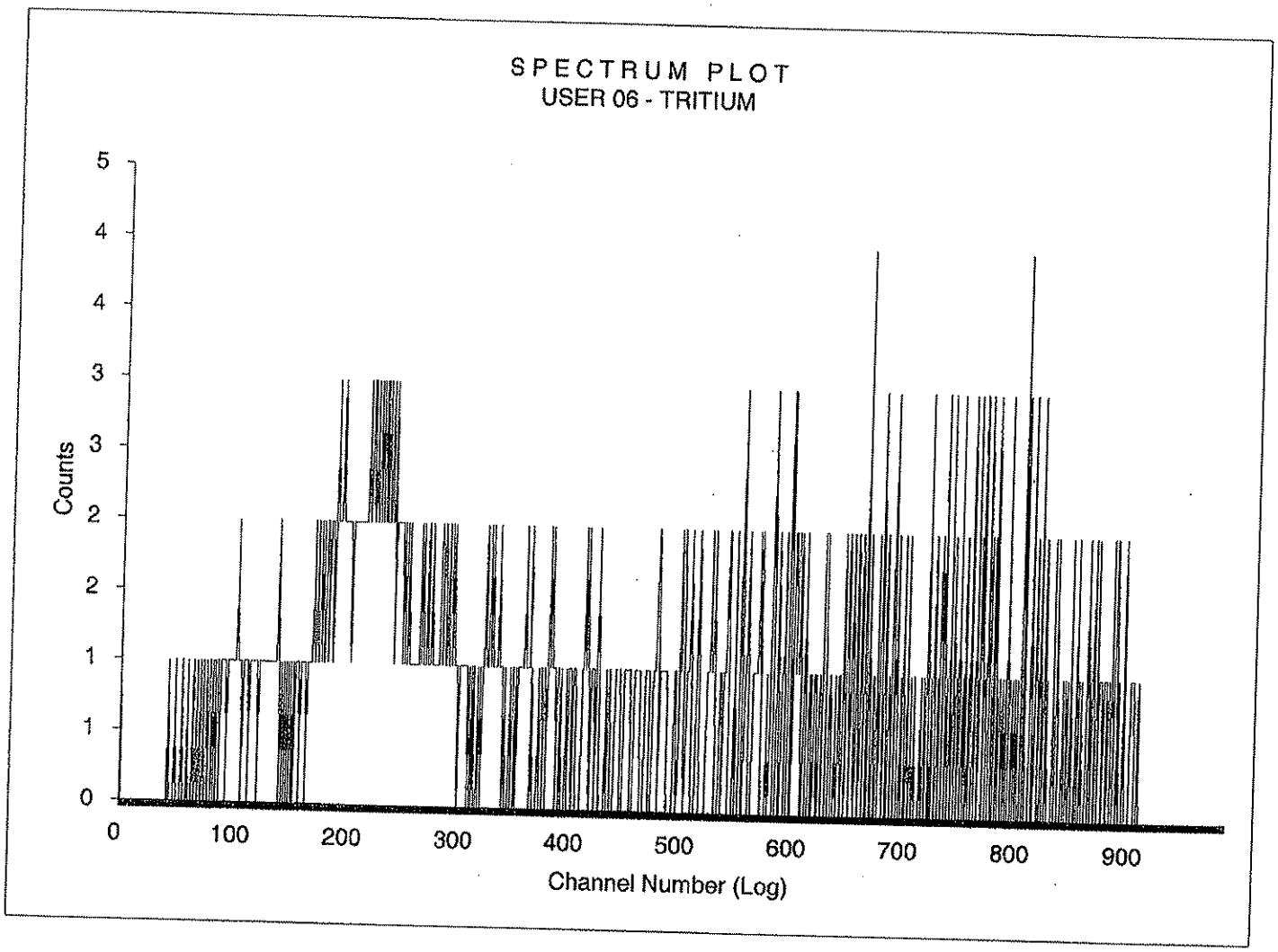
Sample Count Start Time:	7 Jan 2009 22:22:23		
Data Capture Date:	1/7/2009 22:37:47		
User Filename:	S06010761-7A.WK1		
	U06010761-1A.WK1		
Spectrum Type	Log Counts		
User Number:	06		
User Id:	TRITIUM		
User Comment:	BROWN		
Isotope Name:	14C		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	7	61-7	15.00
H#, Total Counts:	117.3	519	
Start, End, X-Axis:	0	990	Channel Number



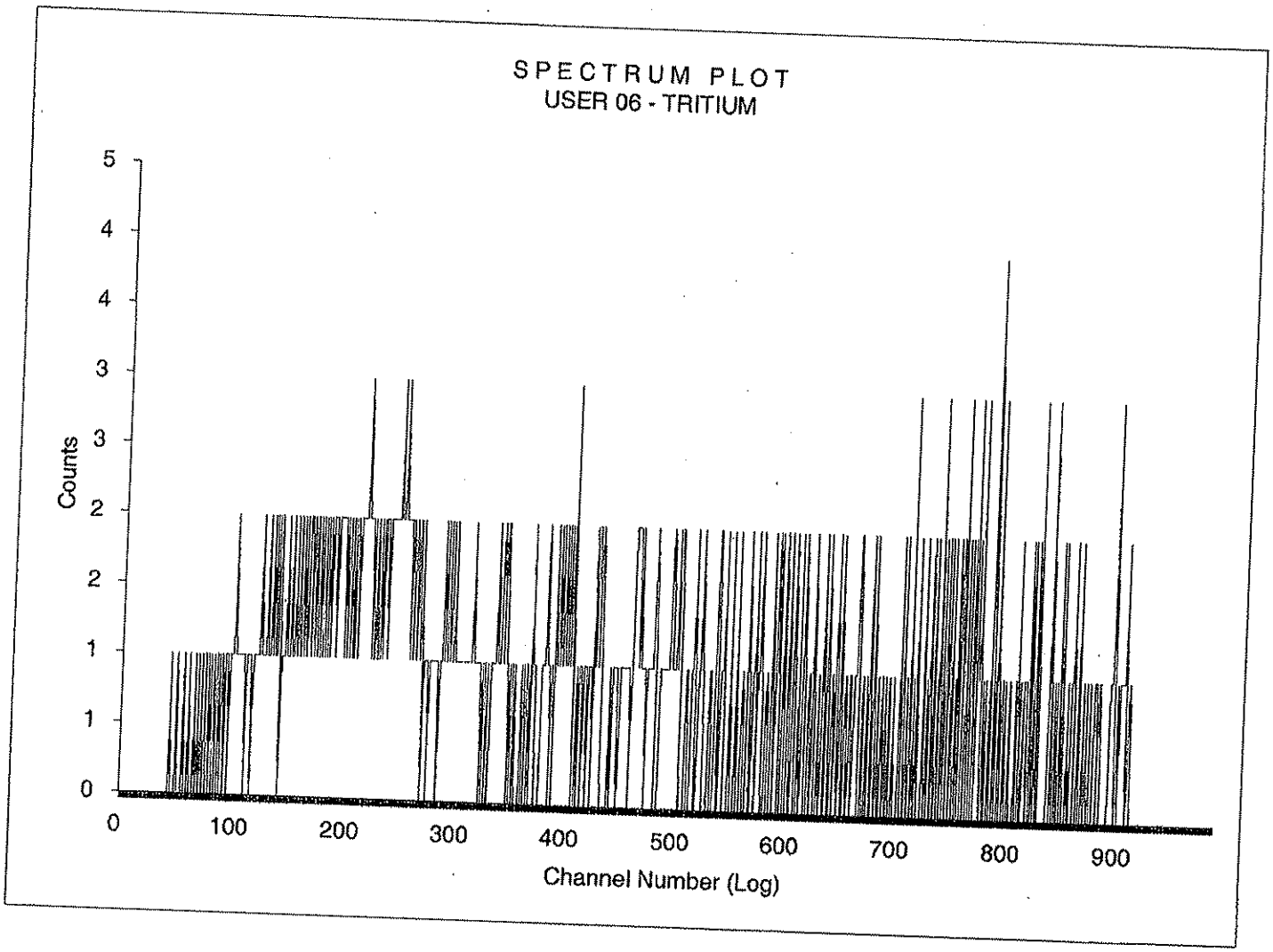
Sample Count Start Time:	7 Jan 2009 22:38:48		
Data Capture Date:	1/7/2009 22:54:12		
User Filename:	S06010761-8A.WK1		
	U06010761-1A.WK1		
Spectrum Type	Log Counts		
User Number:	06		
User Id:	TRITIUM		
User Comment:	BROWN		
Isotope Name:	14C		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	8	61-8	15.00
H#, Total Counts:	118.7	493	
Start, End, X-Axis:	0	990	Channel Number



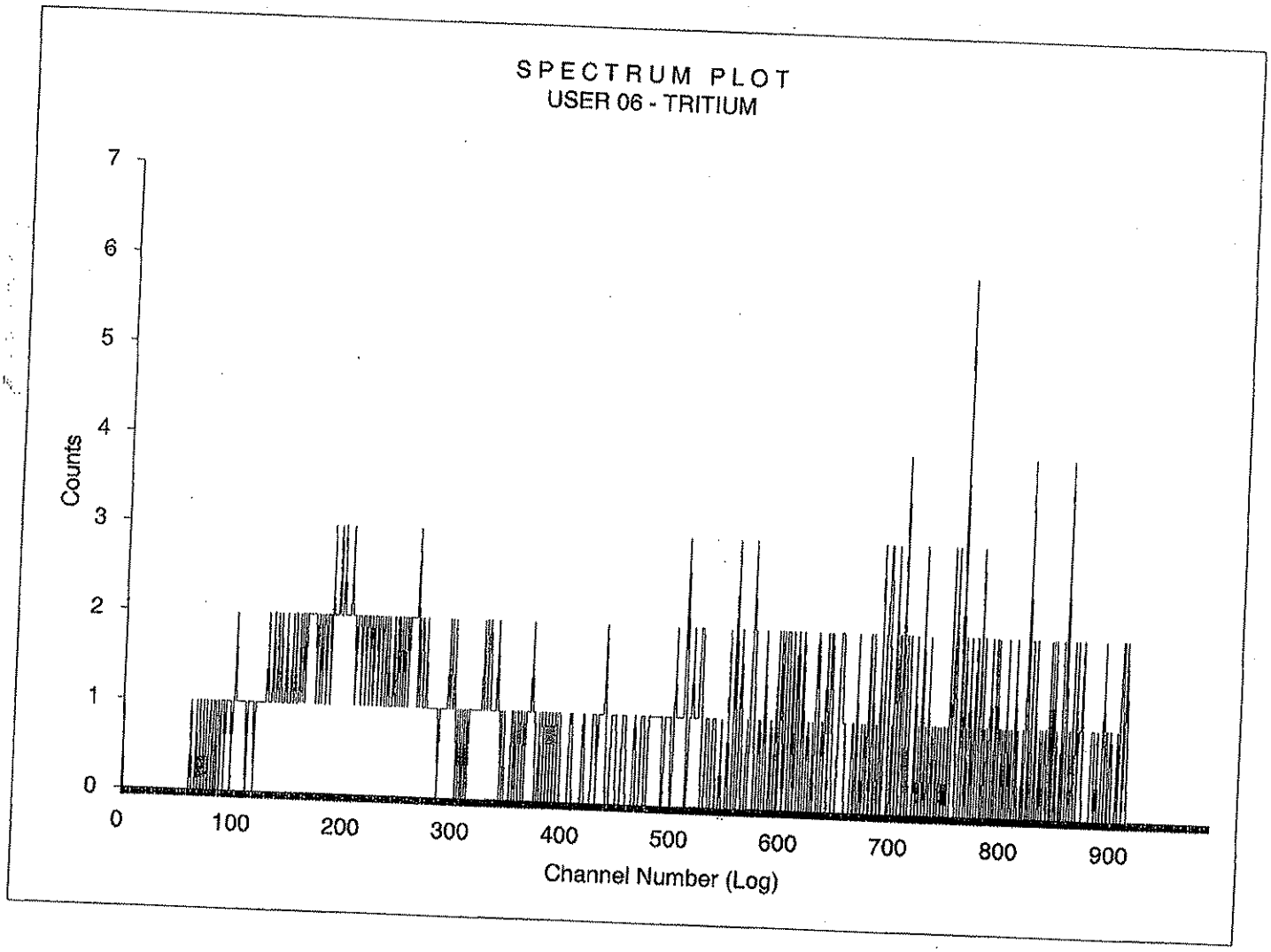
Sample Count Start Time:	7 Jan 2009 22:55:13		
Data Capture Date:	1/7/2009 23:10:37		
User Filename:	S06010761-9A.WK1		
	U06010761-1A.WK1		
Spectrum Type	Log Counts		
User Number:	06		
User Id:	TRITIUM		
User Comment:	BROWN		
Isotope Name:	14C		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	9	61-9	15.00
H#, Total Counts:	118.5	762	
Start, End, X-Axis:	0	990	Channel Number



Sample Count Start Time:	7 Jan 2009 23:11:38		
Data Capture Date:	1/7/2009 23:27:02		
User Filename:	S06010761-10A.WK1		
	U06010761-1A.WK1		
Spectrum Type	Log Counts		
User Number:	06		
User Id:	TRITIUM		
User Comment:	BROWN		
Isotope Name:	14C		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	10	61-10	15.00
H#, Total Counts:	119.5	766	
Start, End, X-Axis:	0	990	Channel Number



Sample Count Start Time:	7 Jan 2009 23:28:02		
Data Capture Date:	1/7/2009 23:43:26		
User Filename:	S06010761-11A.WK1		
	U06010761-1A.WK1		
Spectrum Type	Log Counts		
User Number:	06		
User Id:	TRITIUM		
User Comment:	BROWN		
Isotope Name:	14C		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	11	61-11	15.00
H#, Total Counts:	118.8	743	
Start, End, X-Axis:	0	990	Channel Number



Radiochemistry Batch Checklist, Rev 9

Batch# 833423 Product: Carbon Date: 1/16/09

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to100 mg for GAB.			NA
Samples have been blank corrected (if required)			NA
If activity less 10* MDA/ MDC, error is 150% or less of sample activity. If greater 10* MDA/ MDC, error is 40% or less. If below the MDA/ MDC, error is okay.	✓		
Instrument source check is within limits.	✓		
Instrument bkg check is within limits.	✓		
Method RDL/ LLD has been met.	✓		
If duplicate activities are less 5* MDA/ MDC, then RPD is 100% or less. If greater 5* MDA/ MDC, then RPD 20% or less. If below the MDA/ MDC, the RPD is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.			NA
Method blank is less than the RDL/ LLD. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.	✓		
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All line outs initialed and dated. No transcription errors are apparent.	✓		
Aux data is correct.			NA
Client Special requirements page has been checked.	✓		
Raw Data and/ or spectrum are included and properly statused.	✓		
QC data entered into QC database and batch is in REVW	✓		
Hit notification complete (if necessary)			NA
Batch entered into Case Narrative.	✓		
Batch non-conformances completed, if applicable.			NA
Batch non-conformances second reviewed and disposition verified to be completed.			NA
Aliquot Correction completed if required.			NA
Review sample historical results if available (If REMP, results above MDC have been verified by historical results, recount or re-analysis.)	✓		

GEL Laboratories, LLC

revised 8/1/08

Primary Review Performed By: [signature]

Secondary Review Performed By: [signature] 1/16/09

1/15
WEIS

Carbon-14 Que Sheet

01/15/2009

Batch #: 833423 Analyst:RXE1 First Client Due Date:01/15/2009 Internal Due Date:01/04/2009 Comments

Spike Isotope: Carbon-14 Spike Code: 0786-C Expiration Date: 3/31/09 Vol: 0.1

LCS Isotope: Carbon-14 LCS Code: 0786-C Expiration Date: 3/31/09 Vol: 0.1

Prep Date: 1/15/09 Initials: RXE1 Pipet ID: 29709968 Balance ID: 51204863 Witness: RF 1-15-09

Sample I	Client Description	Type	Hazard Code	Min CRDL	Matrix	Client	Collection Date
221329001-2	RWSW0049	SAMPLE		20 pCi/L	WATER	WEIS001	15-DEC-08
221329002-2	RWSW0048	SAMPLE		20 pCi/L	WATER	WEIS001	15-DEC-08
1201758082-1	MB for batch 833423	MB		UCF pCi/L to pCi/L	WATER	QC ACCOUNT	
1201758083-2	RWSW0048 (221329002) ~~RWSW0049 (221329001DUP)~~	DUP		20 pCi/L	WATER	QC ACCOUNT	15-DEC-08
1201758084-2	RWSW0048 (221329002) ~~RWSW0049 (221329001MS)~~	MS		20 pCi/L	WATER	QC ACCOUNT	15-DEC-08
1201758085-2	RWSW0048 (221329002) ~~RWSW0049 (221329001MSD)~~	MSD		20 pCi/L	WATER	QC ACCOUNT	15-DEC-08
1201758086-1	LCS for batch 833423	LCS		UCF pCi/L to pCi/L	WATER	QC ACCOUNT	

Label	Sample Mass (g/mL)	LSC Rack #	C-14 Rig #
1	125	S2-2	504
2	125	S2-3	507
3	125	S2-4	509
4	125	S2-5	512
5	125	S2-6	514
6	125	S2-7	516
7	125	S2-8	521

Bkg Rack #: S2-1

782

Comments:

Instrument Used: LS6000 (Red) 7065155, LS6500 (Blue) 7067083, LS6500 (Green) 7067404 Wallac (Yellow) 4040127, Wallac [illegible] Wallac (White) [illegible] Purple [illegible] Silver 7059656

Data Reviewed By: [signature]

Page 1 of 1

[signature] 1/16/09

Carbon-14 Liquid

Filename : C14.XLS
File type : Excel
Version # : 1.2.3

Batch : 833423
Analyst : RXE1
Prep Date : 1/15/2009

C-14 Abundance : 1
Method Uncertainty : 0.0944

Spike S/N : 0786-C
Spike Exp Date : 3/31/2009
Spike Activity (dpm/ml): 1451.53
Spike Volume Added: 0.10

LCS S/N : 0786-C
LCS Exp Date : 3/31/2009
LCS Activity (dpm/ml): 1451.53
LCS Volume Added: 0.10

Procedure Code : LSC_14CL
Parmname : Carbon-14
Required MDA : 20 pCi/L
Halflife of Carbon-14 : 5730.00 years

Geometry: 3mL Ethanolamine/9mL Methanol/10mL EcoScint A

Pipet, 0.1 ml Stdev : +/- 0.000701 ml
Pipet, 0.5 ml Stdev : +/- 0.002564 ml

Sample Characteristics				Count raw Data				Background			
Sample ID	Sample Aliquot L	Sample Aliquot StDev. L	Sample Date/Time	Rack Position #	Counting Time (min.)	Quench#	Gross cpm	cpm	Count Time (min.)	Count Start Date/Time	Sample Decay
221329001.2	0.1250	1.2800E-05	12/15/2008 8:42	52-2	30	208.5	13.9	14.67	30	1/15/2009 17:36	1.000
221329002.2	0.1250	1.2800E-05	12/15/2008 8:40	52-3	30	208.8	12.6	14.67	30	1/15/2009 18:09	1.000
1201758082.1	0.1250	1.2800E-05	1/15/2009 0:00	52-4	30	209	13.5	14.67	30	1/15/2009 18:42	1.000
1201758083.2	0.1250	1.2800E-05	12/15/2008 8:40	52-5	30	208.9	14.03	14.67	30	1/15/2009 19:15	1.000
1201758084.2	0.1250	1.2800E-05	12/15/2008 8:40	52-6	30	208.9	110.27	14.67	30	1/15/2009 19:48	1.000
1201758085.2	0.1250	1.2800E-05	12/15/2008 8:40	52-7	30	214.2	113.8	14.67	30	1/15/2009 20:21	1.000
1201758086.1	0.1250	1.2800E-05	1/15/2009 0:00	52-8	30	210.4	103.27	14.67	30	1/15/2009 20:54	1.000

783

Calibration Data

Counted on	Calibration Date	Calibration Due Date	Detector Efficiency (cpm/dpm)	Detector Efficiency Error (cpm/dpm)	Backgrounds Rack Position #	Backgrounds Count Start Date/Time
LSCRED	6/19/2008	6/19/2009	0.6431	0.00792	52-1	1/15/2009 17:03
LSCRED	6/19/2008	6/19/2009	0.6438	0.00792	52-1	1/15/2009 17:03
LSCRED	6/19/2008	6/19/2009	0.6442	0.00792	52-1	1/15/2009 17:03
LSCRED	6/19/2008	6/19/2009	0.6440	0.00792	52-1	1/15/2009 17:03
LSCRED	6/19/2008	6/19/2009	0.6440	0.00792	52-1	1/15/2009 17:03
LSCRED	6/19/2008	6/19/2009	0.6537	0.00792	52-1	1/15/2009 17:03
LSCRED	6/19/2008	6/19/2009	0.6469	0.00792	52-1	1/15/2009 17:03

Notes:
* - Results are decay corrected to Sample Date/Time
* - Reference date for Spike Activity (dpm/ml) is the batch Prep Date
* - Spike Nominals are decay corrected to Sample Date/Time

* - RPD changed to 0% due to activity below MDA for 1201758083.2

785

Results

Decision Level pCi/L	Critical Level pCi/L	MDA pCi/L	Sample Act. Conc. pCi/L	Sample Act. Error pCi/L	Net Count Rate CPM	Net Count Rate Error CPM	**2 SIGMA** Counting Uncertainty pCi/L	**2 SIGMA** Total Prop. Uncertainty pCi/L	Sample QC	Sample Type	RPD	RER	Nominal pCi/L	Recovery
12.9110	9.1153	18.7909	**-4.3145**	1.4212	-0.7700	0.9759	10.7173	10.7174		SAMPLE				
12.8986	9.1065	18.7728	**-11.5874**	0.7916	-2.0700	0.9534	10.4605	10.4606		SAMPLE				
12.8902	9.1006	18.7606	**-6.5452**	1.0492	-1.1700	0.9690	10.6249	10.6249		MB				
12.8944	9.1036	18.7668	**-3.5814**	1.6584	-0.6400	0.9781	10.7279	10.7279	221329002.2	DUP	0.0%	0.3778		
12.8944	9.1036	18.7668	**534.9771**	0.6443	95.6000	2.0408	22.3833	101.8221	221329002.2	MS			523.0803	102.3%
12.7029	8.9684	18.4880	**546.4914**	0.6540	99.1300	2.0694	22.3601	103.9038	221329002.2	MSD	2.1%	0.0560	523.0803	104.5%
12.8349	9.0615	18.6801	**493.5156**	0.6473	88.6000	1.9828	21.6468	94.1552		LCS			523.0750	94.3%

ID:C-14
USER: 7 COMMENT:RED 15 JAN 2009 17:04

PRESET TIME :	30.00						
DATA CALC :	CPM	H#	:YES	SAMPLE REPEATS:	1	PRINTER	:EDIT
COUNT BLANK :	NO	IC#	: NO	REPLICATES :	1	RS232	:EDIT
TWO PHASE :	NO	ADC	: NO	CYCLE REPEATS :	1	DISK	: OFF
SCINTILLATOR:	LIQUID	LUMEX	:YES	LOW SAMPLE REJ:	0		
LOW LEVEL :	YES	HALF LIFE CORRECTION DATE:				none	

CHAN: 150.0 - 400.0 %ERROR: 2.00 FACTOR: 1.000000 BKG. SUB: 0
CHAN: 0.0 - 900.0 %ERROR: 2.00 FACTOR: 1.000000 BKG. SUB: 0

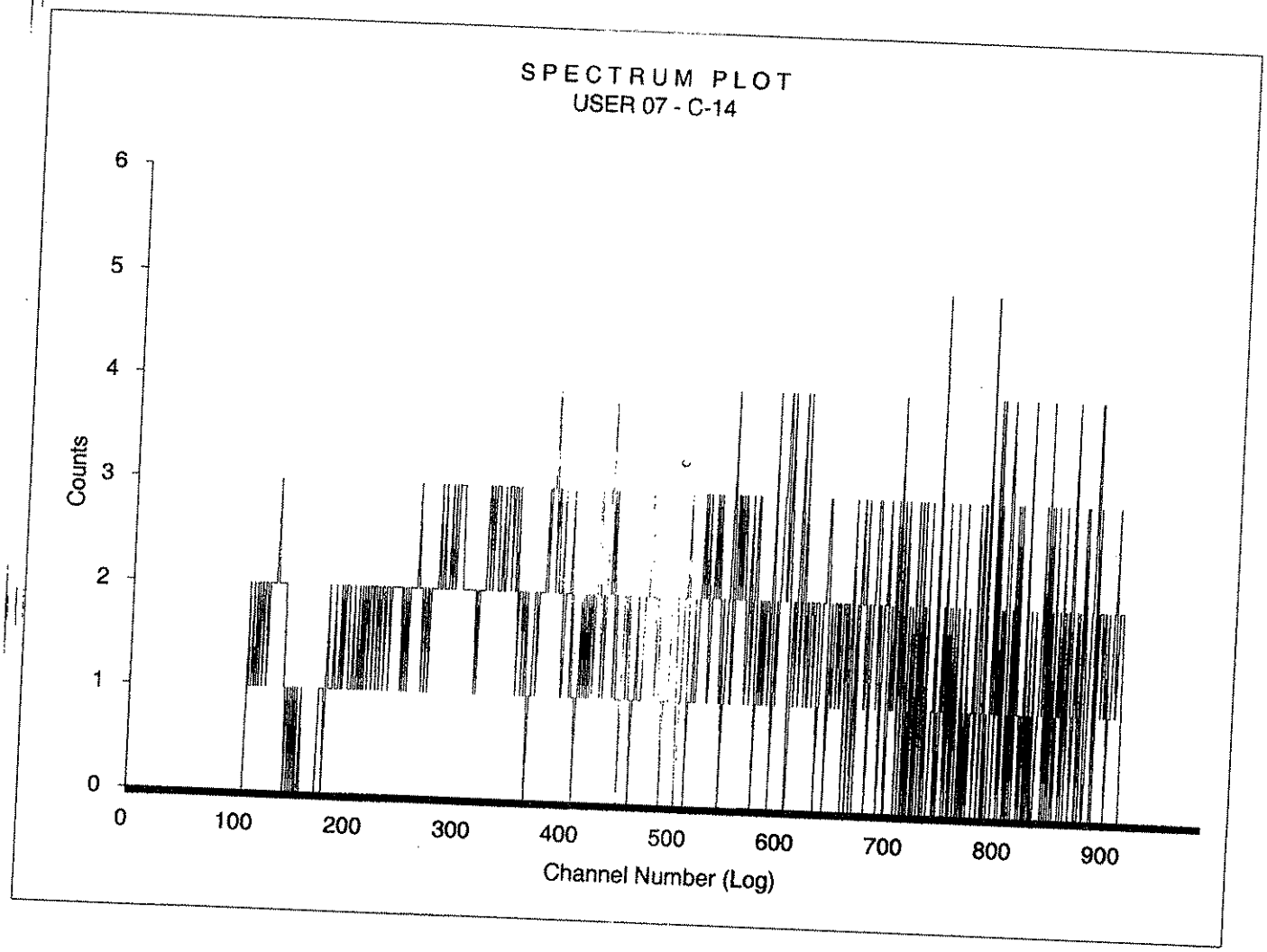
ALPHA-BETA DISCRIMINATION: NO

SAM NO	POS	TIME MIN	H#	WIND1 RAW CPM	WIND2 RAW CPM	WIND1 CPM	WIND2 CPM	LUMEX %	ELAPSED TIME
1	52-1	30.00	216.9	16.20	84.03	14.67	42.37	47.25	32.72
2	52-2	30.00	208.5	15.13	79.17	13.90	40.53	45.96	65.89
3	52-3	30.00	208.8	13.60	72.77	12.60	41.93	40.18	98.93
4	52-4	30.00	209.0	14.10	64.87	13.50	39.73	36.47	131.83
5	52-5	30.00	208.9	14.73	66.90	14.03	42.37	34.36	164.72
6	52-6	30.00	208.9	110.90	185.80	110.27	161.63	12.76	197.61
7	52-7	30.00	214.2	114.40	186.07	113.80	163.50	11.86	230.48
8	52-8	30.00	210.4	103.87	173.47	103.27	151.93	12.14	263.32

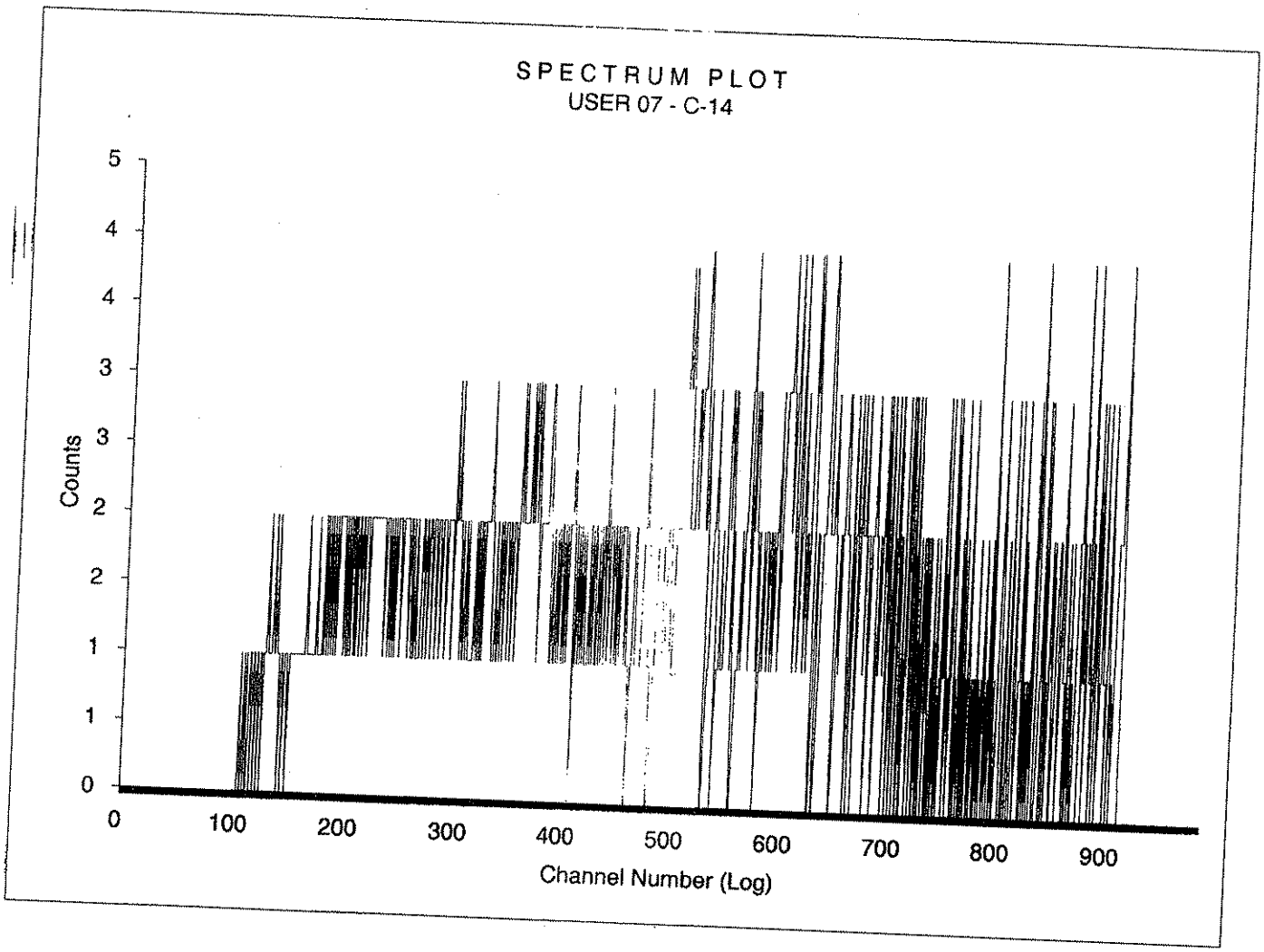
INSTRUMENT CALIBRATION: Mini 16 JAN 2009 06:58
Calibration successful

Calibrating Auto DPM
Counting Standard for 14C
Calibration Complete: 14C
Counting Standard for 3H
Calibration Complete: 3H
Calibration Successful

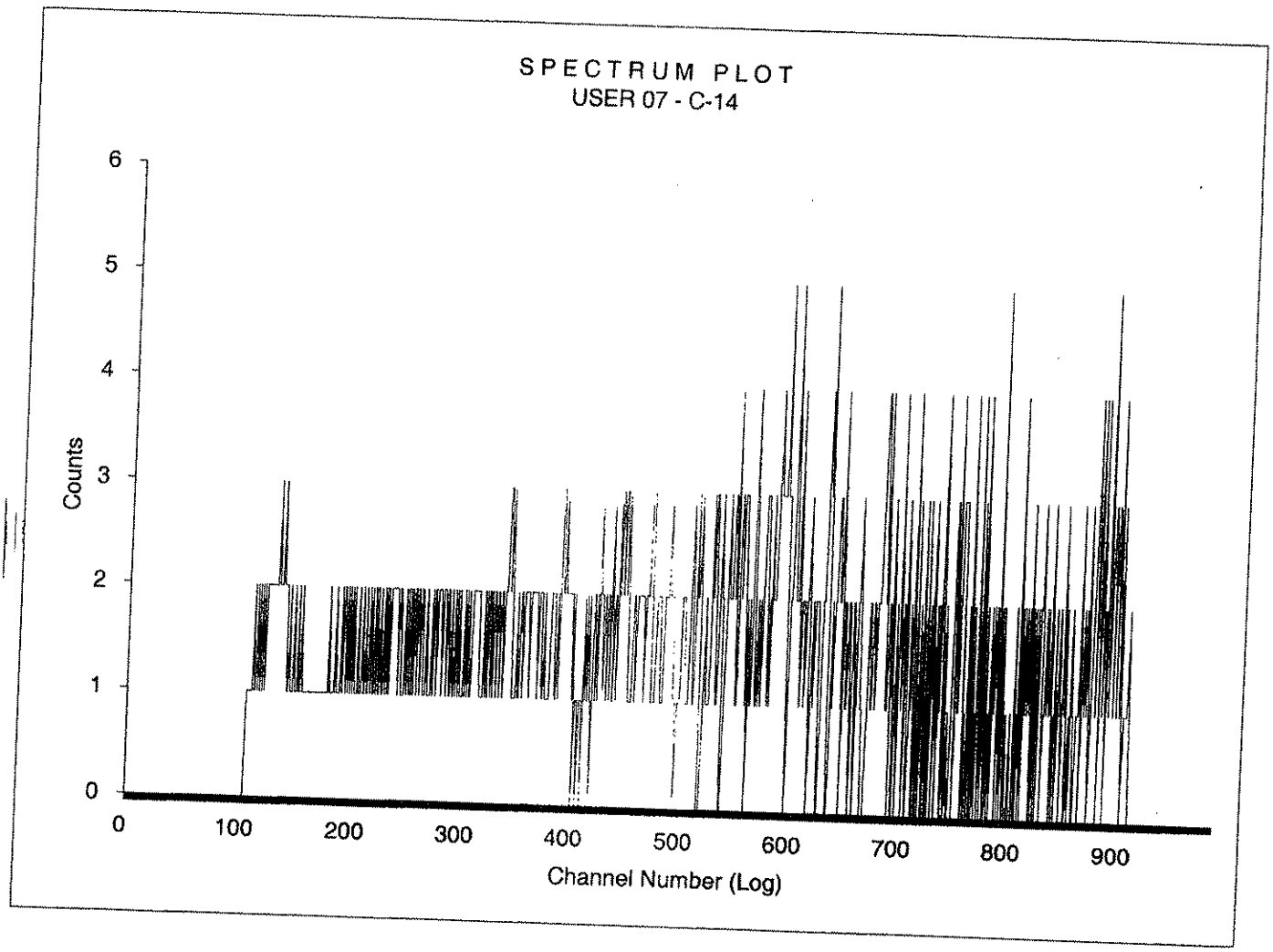
Sample Count Start Time:	15 Jan 2009 17:03:45		
Data Capture Date:	1/15/2009 17:34:10		
User Filename:	S07011552-1A.WK1		
	U07011552-1A.WK1		
Spectrum Type	Log Counts		
User Number:	07		
User Id:	C-14		
User Comment:	RED		
Isotope Name:	14C		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	1	52-1	30.00
H#, Total Counts:	216.9	1292	
Start, End, X-Axis:	0	990	Channel Number



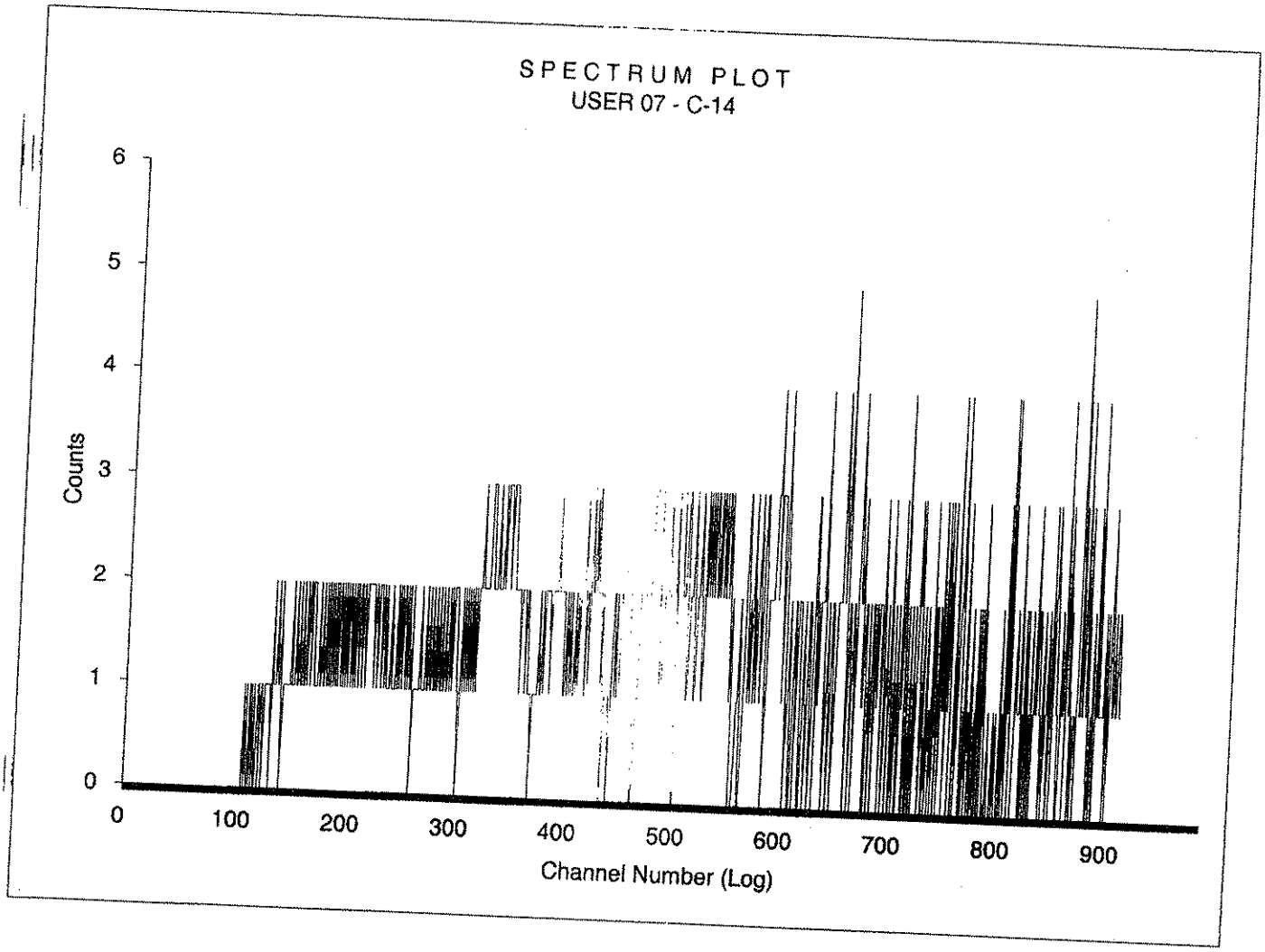
Sample Count Start Time:	15 Jan 2009 17:36:55		
Data Capture Date:	1/15/2009 18:07:20		
User Filename:	S07011552-2A.WK1		
	U07011552-1A.WK1		
Spectrum Type	Log Counts		
User Number:	07		
User Id:	C-14		
User Comment:	RED		
Isotope Name:	14C		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	2	52-2	30.00
H#, Total Counts:	208.5	1238	
Start, End, X-Axis:	0	990	Channel Number



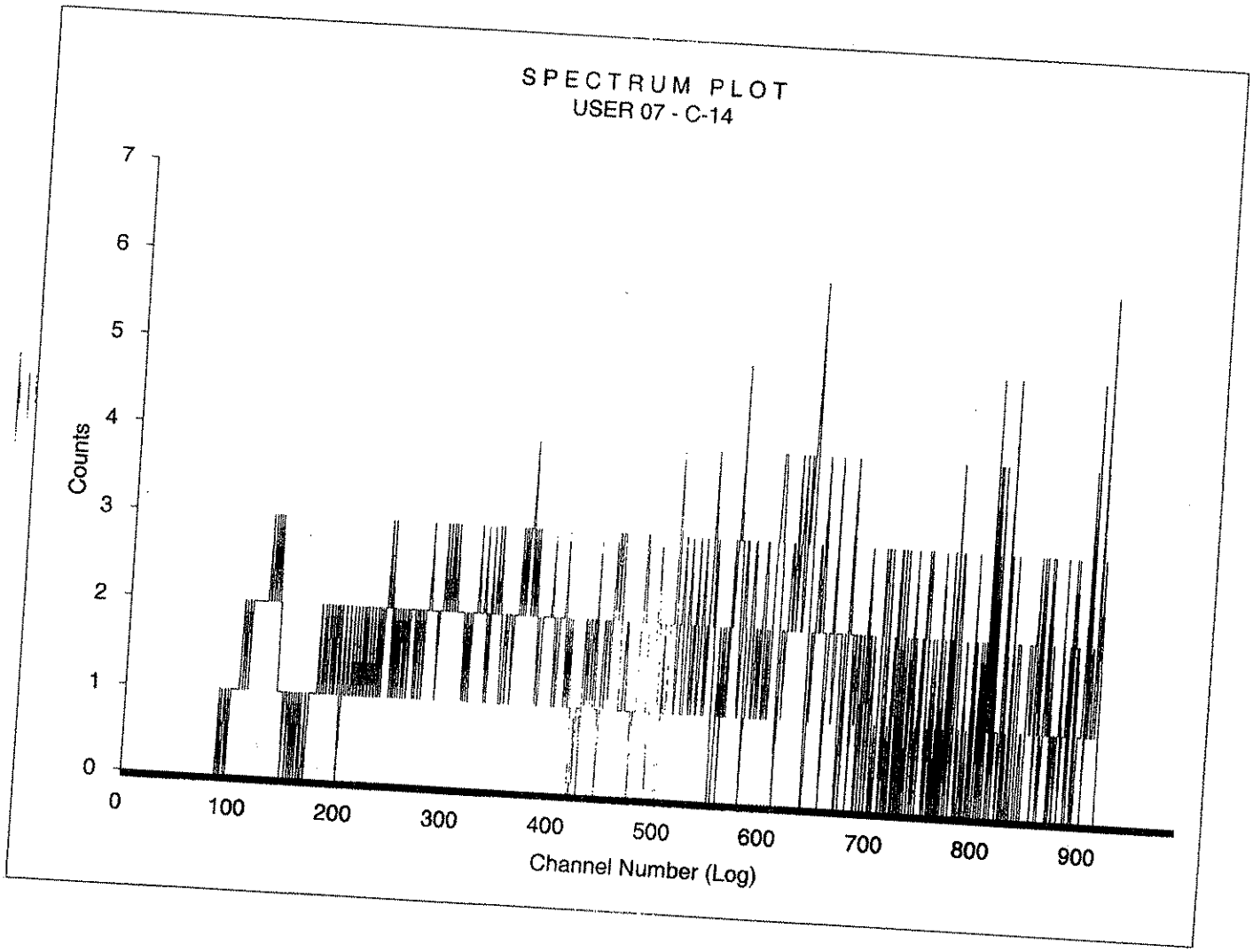
Sample Count Start Time:	15 Jan 2009 18:09:58		
Data Capture Date:	1/15/2009 18:40:21		
User Filename:	S07011552-3A.WK1		
	U07011552-1A.WK1		
Spectrum Type	Log Counts		
User Number:	07		
User Id:	C-14		
User Comment:	RED		
Isotope Name:	14C		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	3	52-3	30.00
H#, Total Counts:	208.8	1276	
Start, End, X-Axis:	0	990	Channel Number



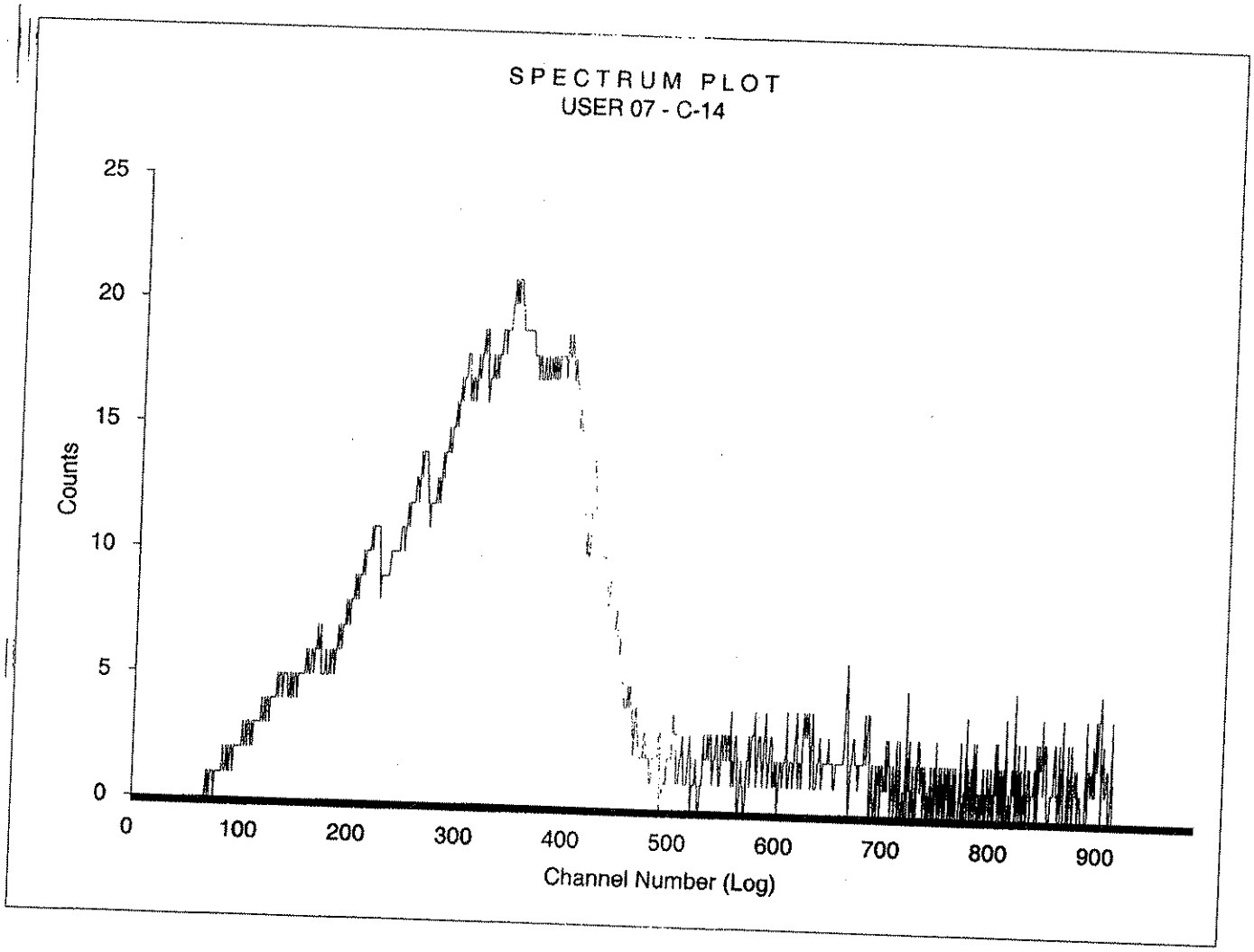
Sample Count Start Time:	15 Jan 2009 18:42:52		
Data Capture Date:	1/15/2009 19:13:16		
User Filename:	S07011552-4A.WK1		
	U07011552-1A.WK1		
Spectrum Type	Log Counts		
User Number:	07		
User Id:	C-14		
User Comment:	RED		
Isotope Name:	14C		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	4	52-4	30.00
H#, Total Counts:	209.0	1212	
Start, End, X-Axis:	0	990	Channel Number



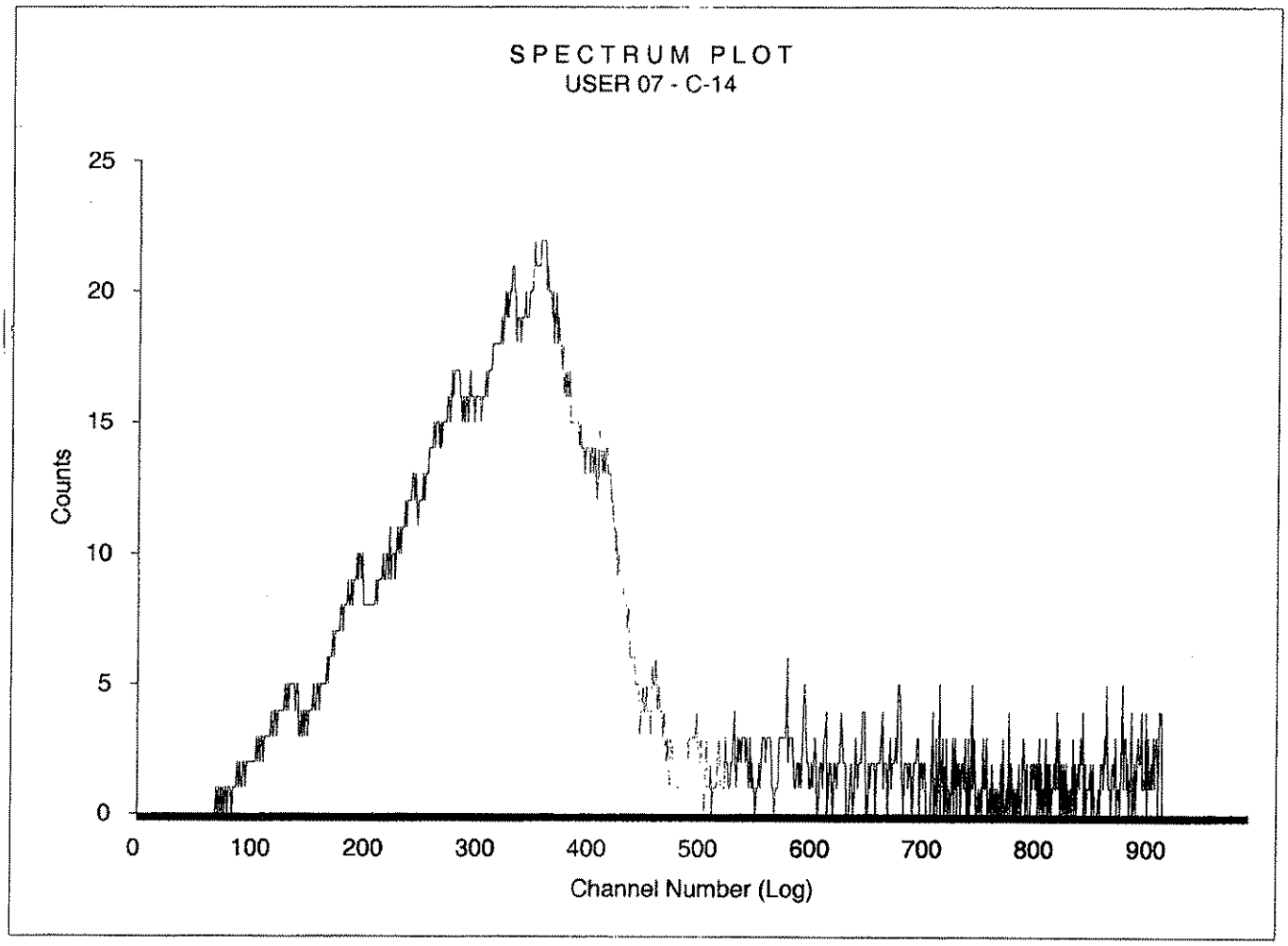
Sample Count Start Time:	15 Jan 2009 19:15:45		
Data Capture Date:	1/15/2009 19:46:10		
User Filename:	S07011552-5A.WK1		
	U07011552-1A.WK1		
Spectrum Type	Log Counts		
User Number:	07		
User Id:	C-14		
User Comment:	RED		
Isotope Name:	14C		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	5	52-5	30.00
H#, Total Counts:	208.9	1299	
Start, End, X-Axis:	0	990	Channel Number



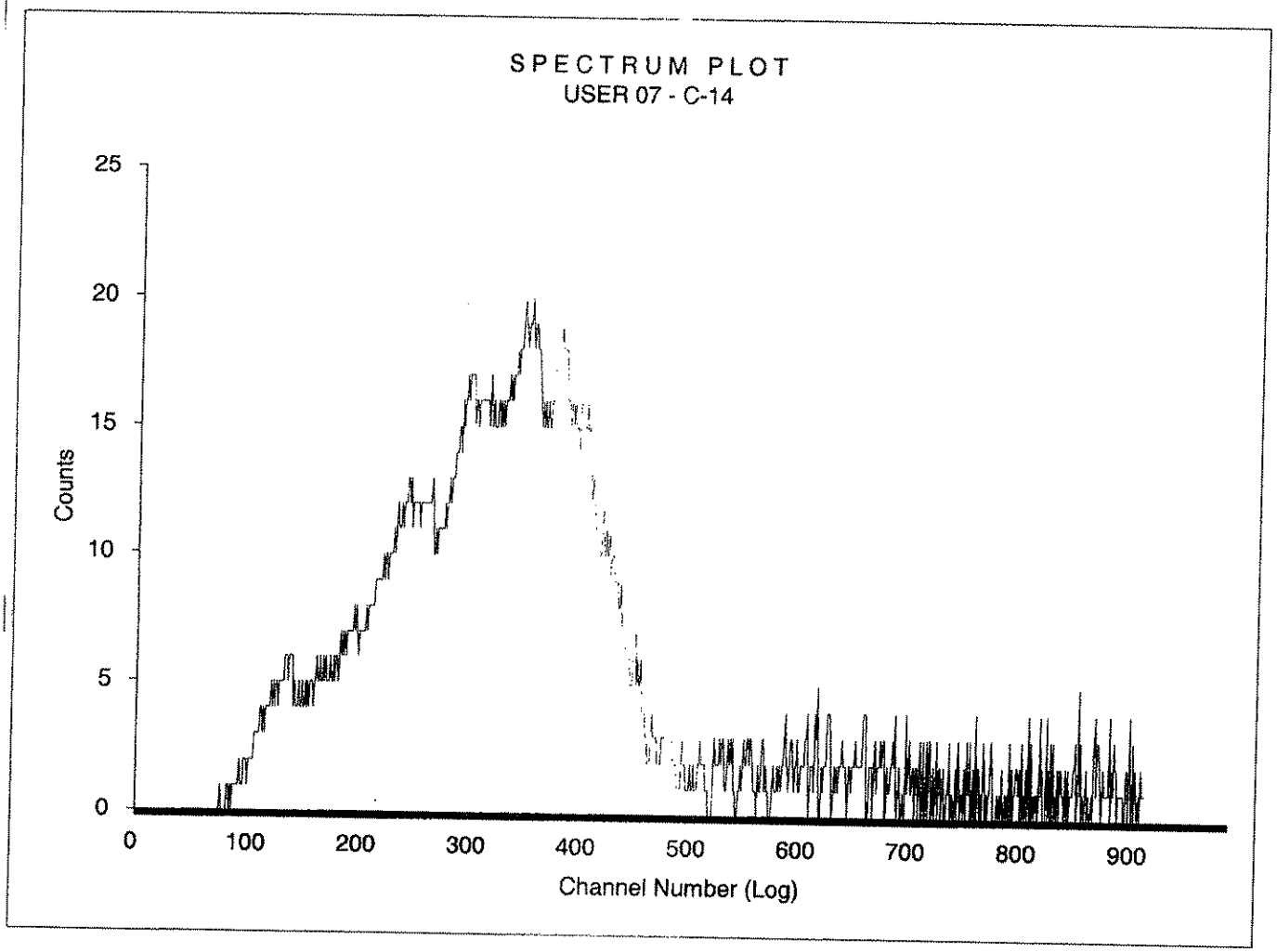
Sample Count Start Time:	15 Jan 2009 19:48:39		
Data Capture Date:	1/15/2009 20:19:03		
User Filename:	S07011552-6A.WK1		
	U07011552-1A.WK1		
Spectrum Type	Log Counts		
User Number:	07		
User Id:	C-14		
User Comment:	RED		
Isotope Name:	14C		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	6	52-6	30.00
H#, Total Counts:	208.9	4874	
Start, End, X-Axis:	0	990	Channel Number



Sample Count Start Time:	15 Jan 2009 20:21:31		
Data Capture Date:	1/15/2009 20:51:56		
User Filename:	S07011552-7A.WK1		
	U07011552-1A.WK1		
Spectrum Type	Log Counts		
User Number:	07		
User Id:	C-14		
User Comment:	RED		
Isotope Name:	14C		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	7	52-7	30.00
H#, Total Counts:	214.2	4935	
Start, End, X-Axis:	0	990	Channel Number



Sample Count Start Time:	15 Jan 2009 20:54:21		
Data Capture Date:	1/15/2009 21:24:46		
User Filename:	S07011552-8A.WK1		
	U07011552-1A.WK1		
Spectrum Type	Log Counts		
User Number:	07		
User Id:	C-14		
User Comment:	RED		
Isotope Name:	14C		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	8	52-8	30.00
H#, Total Counts:	210.4	4575	
Start, End, X-Axis:	0	990	Channel Number



Radiochemistry Batch Checklist, Rev 9

Batch# 828661 Product: Ra-226 Date: 1/5/09

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to100 mg for GAB.			NA
Samples have been blank corrected (if required)			NA
If activity less 10* MDA/ MDC, error is 150% or less of sample activity. If greater 10* MDA/ MDC, error is 40% or less. If below the MDA/ MDC, error is okay.	✓		
Instrument source check is within limits.	✓		
Instrument bkg check is within limits.	✓		
Method RDL/ LLD has been met.	✓		
If duplicate activities are less 5* MDA/ MDC, then RPD is 100% or less. If greater 5* MDA/ MDC, then RPD 20% or less. If below the MDA/ MDC, the RPD is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.			NA
Method blank is less than the RDL/ LLD. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.	✓		~~NA~~ NL 1/5/09
Smears Taken for Radioactive batches.	~~✓~~ NA 1/5/09		NA
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All line outs initialed and dated. No transcription errors are apparent.	✓		
Aux data is correct.			NA
Client Special requirements page has been checked.	✓		
Raw Data and/ or spectrum are included and properly statused.	✓		
QC data entered into QC database and batch is in REVW	✓		
Hit notification complete (if necessary)			NA
Batch entered into Case Narrative.	✓		
Batch non-conformances completed, if applicable.			NA
Batch non-conformances second reviewed and disposition verified to be completed.			NA
Aliquot Correction completed if required.			NA
Review sample historical results if available (If REMP, results above MDC have been verified by historical results, recount or re-analysis.)	✓		

GEL Laboratories, LLC

revised 8/1/08

Primary Review Performed By: [signature]

Secondary Review Performed By: [signature] 1/5/09

FAX 1/5

LEIS / ICERR / NSFI / MILA

Radium-226 Que Sheet

FAX DUE 1/5/09 12/22/2008

General Engineering Laboratories, Radiochemistry Division

Batch #: 828069 Analyst:KSD1 First Client Due Date:01/02/2009 Internal Due Date:12/29/2008

Spike Isotope: Radium-226 Spike Code: 016384 Expiration Date: 7/23/09 Vol: 0.1 Nom Conc: 24.1725 pCi/L 24.1725 pCi/L

LCS Isotope: Radium-226 LCS Code: 016384 Expiration Date: 7/23/09 Vol: 0.1 Nom Conc: 15.1076 pCi/L

Prep Date: 12/28/08 Pipet ID: 7166954 Initials: KW Witness: NA Sample Count Time: 30 (Min) Bkg Count Time: 30 (Min)

	Sample I	Client Description	Type	Hazard Code	Matrix	Min CRDL	Client	Vol (mL)	End Init Degas Date/Tin	End LN Date/Time	De-em	Start Count Date/Time	Cell #	Det #	Bkg counts	Total Counts
1	221329001-1	RWSW0049	SAMPLE		WATER	1 pCi/L	WEIS001	500	12/28/08 1515	1/2/09	1455	1.3.09 1930	103	7	2	8
2	221329002-1	RWSW0048	SAMPLE		WATER	1 pCi/L	WEIS001	500	12/28/08 1515	1/2/09	1520	1.3.09 2000	101	1	8	18
3	221431001-1	RM-01-DECEMBER 2008 com	SAMPLE		WATER	.3 pCi/L	KERR003	500	12/28/08 1515	1/2/09	1520	1.3.09 2000	201	2	8	16
4	221470001-1	S-0000593910	SAMPLE		WATER	1 pCi/L	NSFI001	500	12/28/08 1515	1/2/09	1520	1.3.09 2000	306	3	8	10
5	221470002-1	S-0000593914	SAMPLE		WATER	1 pCi/L	NSFI001	500	12/28/08 1515	1/2/09	1520	1.3.09 2000	402	4	8	23
6	221470003-1	S-0000593924	SAMPLE		WATER	1 pCi/L	NSFI001	500	12/28/08 1515	1/2/09	1520	1.3.09 2000	509	5	3	54
7	221470004-1	S-0000594032	SAMPLE		WATER	1 pCi/L	NSFI001	500	12/28/08 1515	1/2/09	1520	1.3.09 2000	610	6	6	19
8	221555001-1	08L0519-06	SAMPLE		WATER	1 pCi/L	MILA001	500	12/28/08 1515	1/2/09	1520	1.3.09 2000	701	7	2	1
9	1201745738-1	MB for batch 828069	MB		WATER	.3 pCi/L	QC ACCOUNT	500	12/28/08 1515	1/2/09	1545	1.3.09 2030	106	1	7	16
10	1201745739-1	RWSW0048(221329002DUP)	DUP		WATER	1 pCi/L	QC ACCOUNT	500	12/28/08 1515	1/2/09	1545	1.3.09 2030	204	2	7	15
11	1201745740-1	RWSW0048(221329002MS)	MS		WATER	1 pCi/L	QC ACCOUNT	500	12/28/08 1515	1/2/09	1545	1.3.09 2030	308	3	5	684
12	1201745741-1	RWSW0048(221329002MSD)	MSD		WATER	1 pCi/L	QC ACCOUNT	500	12/28/08 1515	1/2/09	545	1.3.09 2030	410	4	8	743
13	1201745742-1	LCS for batch 828069	LCS		WATER	.3 pCi/L	QC ACCOUNT	500	12/28/08 1515	1/2/09	1545	1.3.09 2030	611	6	6	734

daily ✓

Comments:

Data Reviewed By: [signature] KW 1/5/09

Radium-226 Liquid

Filename : RA226.XLS
File type : Excel
Version # : 1.2.3

Spike S/N : 0638-H
Spike Exp Date : 7/23/2009
Spike Activity (dpm/ml): 268.31
Spike Volume Added: 0.10

Pipet, 0.1 ml Stdev : +/- 0.000701 ml
Pipet, 0.5 ml Stdev : +/- 0.002564 ml
Pipet, 1 ml Stdev : +/- 0.005480 ml

Batch : 828069
Analyst : KSD1
Prep Date : 12/28/2008
Ra-226 Abundance : 1
Ra-226 Method Uncertainty : 0.0918

LCS S/N : 0638-H
LCS Exp Date : 7/23/2009
LCS Activity (dpm/ml): 268.31
LCS Volume Added: 0.10

Procedure Code : LUC26RAL
Parmname : Radium-226
Required MDA : 0.3 pCi/L
Halflife of Ra-226 : 1600 years
Halflife of Rn-222: 3.823 days
Batch counted on : LUCAS CELL DETECTOR
BKG Count time : 30 min

Sample Characteristics				Count Raw Data				Weekly Background			
Sample ID	Sample Aliquot L	Sample Aliquot StDev. L	Sample Date/Time	Cell Number	Counting Time (min.)	Gross Counts	Gross CPM	Counts	CPM	Count Time (min.)	Detector Efficiency (cpm/dpm)
221329001.1	0.5000	2.0256E-05	12/15/2008 8:42	703	30	8	0.267	2	0.067	30	2.0830
221329002.1	0.5000	2.0256E-05	12/15/2008 8:40	101	30	18	0.600	8	0.267	30	1.7510
221431001.1	0.8000	2.0861E-05	12/16/2008 9:00	201	30	16	0.533	8	0.267	30	1.9930
221470001.1	0.5000	2.0256E-05	12/15/2008 12:00	306	30	10	0.333	8	0.267	30	1.9500
221470002.1	0.5000	2.0256E-05	12/15/2008 12:00	402	30	23	0.767	8	0.267	30	1.8460
221470003.1	0.5000	2.0256E-05	12/10/2008 12:00	509	30	54	1.800	3	0.100	30	1.7580
221470004.1	0.5000	2.0256E-05	12/16/2008 12:00	610	30	19	0.633	6	0.200	30	2.0720
221555001.1	0.5000	2.0256E-05	12/17/2008 8:15	701	30	1	0.033	2	0.067	30	1.8150
1201745738.1	0.8000	2.0861E-05	12/28/2008 0:00	108	30	16	0.533	7	0.233	30	1.8400
1201745739.1	0.5000	2.0256E-05	12/15/2008 8:40	204	30	15	0.500	7	0.233	30	2.1930
1201745740.1	0.5000	2.0256E-05	12/15/2008 8:40	308	30	684	22.800	5	0.167	30	2.0010
1201745741.1	0.5000	2.0256E-05	12/15/2008 8:40	410	30	743	24.767	8	0.267	30	1.8400
1201745742.1	0.8000	2.0861E-05	12/28/2008 0:00	611	30	734	24.467	6	0.200	30	1.8460

Detector Efficiency Error (cpm/dpm)	Cell Calibration Date	Cell Calibration Due Date	De-Gas Date/Time	Rn-222 Ingrow End Date/Time	Count Start Date/Time	Rn-222 Corrections De-Gas to Ingrowth	Ingrowth to Count	During Count	Ra-226 Decay
0.00000	11/21/2008	11/21/2009	12/28/2008 15:15	1/2/2009 14:55	1/3/2009 19:30	0.595	0.806	1.002	1.000
0.02415	8/29/2008	8/29/2009	12/28/2008 15:15	1/2/2009 15:20	1/3/2009 20:00	0.596	0.805	1.002	1.000
0.02691	12/19/2008	12/19/2009	12/28/2008 15:15	1/2/2009 15:20	1/3/2009 20:00	0.596	0.805	1.002	1.000
0.00980	1/23/2008	1/22/2009	12/28/2008 15:15	1/2/2009 15:20	1/3/2009 20:00	0.596	0.805	1.002	1.000
0.01759	2/1/2008	1/31/2009	12/28/2008 15:15	1/2/2009 15:20	1/3/2009 20:00	0.596	0.805	1.002	1.000
0.02843	2/20/2008	2/19/2009	12/28/2008 15:15	1/2/2009 15:20	1/3/2009 20:00	0.596	0.805	1.002	1.000
0.02655	5/30/2008	5/30/2009	12/28/2008 15:15	1/2/2009 15:20	1/3/2009 20:00	0.596	0.805	1.002	1.000
0.00000	11/21/2008	11/21/2009	12/28/2008 15:15	1/2/2009 15:20	1/3/2009 20:00	0.596	0.805	1.002	1.000
0.02415	8/29/2008	8/29/2009	12/28/2008 15:15	1/2/2009 15:45	1/3/2009 20:30	0.598	0.805	1.002	1.000
0.02691	12/19/2008	12/19/2009	12/28/2008 15:15	1/2/2009 15:45	1/3/2009 20:30	0.598	0.805	1.002	1.000
0.00980	1/23/2008	1/22/2009	12/28/2008 15:15	1/2/2009 15:45	1/3/2009 20:30	0.598	0.805	1.002	1.000
0.01759	2/1/2008	1/31/2009	12/28/2008 15:15	1/2/2009 15:45	1/3/2009 20:30	0.598	0.805	1.002	1.000
0.02655	5/30/2008	5/30/2009	12/28/2008 15:15	1/2/2009 15:45	1/3/2009 20:30	0.598	0.805	1.002	1.000

Notes:
1 - Results are decay corrected to Sample Date/Time
2 - Reference date for Spike Activity (dpm/ml) is the batch Prep Date
3 - Spike Nominals are decay corrected to Sample Date/Time

* - RPD changed to 0% due to activity below MDA for 1201745739.1

Results

Decision Level pCi/L	Critical Level pCi/L	MDA pCi/L	Sample Act. Conc. pCi/L	Sample Act. Error pCi/L	Net Count Rate CPM	Net Count Rate Error CPM	**2 SIGMA** Counting Uncertainty pCi/L	**2 SIGMA** Total Prop. Uncertainty pCi/L	Sample QC	Sample Type	RPD	RER	Nominal pCi/L	Recovery
0.1398	0.0987	0.2875	**0.1801**	0.5270	0.2000	0.1054	0.1860	0.1888		SAMPLE				
0.3322	0.2346	0.5760	**0.3565**	0.5105	0.3333	0.1700	0.3563	0.3624		SAMPLE				
0.1824	0.1288	0.3163	**0.1566**	0.6130	0.2667	0.1633	0.1879	0.1902		SAMPLE				
0.2983	0.2106	0.5173	**0.0640**	2.1213	0.0667	0.1414	0.2662	0.2664		SAMPLE				
0.3151	0.2225	0.5464	**0.5072**	0.3716	0.5000	0.1856	0.3690	0.3805		SAMPLE				
0.2026	0.1431	0.3926	**1.8107**	0.1507	1.7000	0.2517	0.5254	0.6264		SAMPLE				
0.2431	0.1717	0.4337	**0.3916**	0.3855	0.4333	0.1667	0.2952	0.3042		SAMPLE				
0.1603	0.1131	0.3295	**-0.0344**	1.7321	-0.0333	0.0577	0.1167	0.1169		SAMPLE				
0.1846	0.1303	0.3241	**0.1905**	0.5334	0.3000	0.1599	0.1990	0.2021		MB				
0.2478	0.1749	0.4351	**0.2274**	0.5869	0.2667	0.1563	0.2613	0.2647	221329002.1	DUP	0.0%	0.2059		
0.2295	0.1620	0.4175	**21.1483**	0.0399	22.6333	0.8750	1.6024	4.1487	221329002.1	MS			24.1725	87.5%
0.3157	0.2229	0.5474	**24.8956**	0.0412	24.5000	0.9135	1.8193	4.9104	221329002.1	MSD	16.3%	0.4136	24.1725	103.0%
0.1703	0.1202	0.3038	**15.3612**	0.0458	24.2667	0.9068	1.1250	3.0893		LCS			15.1076	101.7%

CONTINUING CALIBRATION DATA

Gas Flow Proportional Counter Checks for 12-Jan-2009

Detectors LB4100 A1 through H4 and PIC 1A through 10D

Short Name	Status	Parmname	Run Time	Count Time	CPM or dec	Low Limit	High Limit	Stdev
LB4100A1	Above	Alpha eff	08:46	5	9719	8280	9622	+3.43
LB4100A2	Above	Alpha eff	08:46	5	14405	11625	13510	+5.85
LB4100A2	Above	Beta bkg	00:32	500	5.714	1.00E-15	2.000	+14.14
LB4100A3	Above	Beta bkg	00:32	500	2.734	1.00E-15	2.000	+5.20
LB4100A4	Below	Alpha eff	08:46	5	0.00E+0	92.500	108	-40.00
LB4100A4	Above	Alpha XTalk	08:46	5	3100	82.000	118	+500.00
LB4100A4	Above	Beta bkg	00:32	500	167	1.00E-15	2.000	+498.58
LB4100A4	Above	Beta eff	08:59	5	113	100	100	#DIV/0!
LB4100A4	Below	Beta XTalk	08:59	5	0.00E+0	10.000	190	-3.33
LB4100B2	Above	Alpha bkg	00:32	500	0.338	0.00E+0	0.300	+3.76
LB4100D2	Above	Beta bkg	03:15	500	2.018	1.00E-15	2.000	+3.05
LB4100E3	Above	Beta XTalk	08:32	5	1.29E-4	6.59E-6	1.25E-4	+3.22
LB4100F2	Above	Alpha bkg	00:32	500	0.330	0.00E+0	0.300	+3.60
LB4100F4	Above	Beta bkg	00:32	500	5.050	1.00E-15	2.000	+12.15
PIC1D	Above	Alpha bkg	15:24	500	0.426	-6.64E-2	0.269	+5.80
*PIC2A	Below	Beta bkg	15:24	500	0.310	0.323	2.165	-3.04

INSTRUMENTS NOT LISTED HAVE PASSED ALL QUALITY ASSURANCE PARAMETERS

The following detectors that may not have properly transfered to the LIMS system

Reviewed by _____

Date 1/14/09

GEL Laboratories LLC

* Detector background is outside -3 Sigma. Approved for use while trending.

1/14/09

Liquid Scintillation Counter Checks for 07-JAN-2009

Short Name	Parmname	Run Time	Count Time	Counts	CPM	Stdev	Status	Comments
LSCBLUE	Carbon-14	01:15	.95		42400	0.93		
	Carbon-14	01:16	1		41900	-1.5		
	Tritium	01:18	.75		64000	-0.87		
	Tritium	01:19	.75		64000	-0.97		
	BKG	01:21	30		23.9	1.5		
	BKG	01:53	30		21.5	-0.68		
LSCBROWN	Carbon-14	10:39	.95		42500	0.21		
	Carbon-14	10:41	.95		42300	-0.53		
	Tritium	10:43	.75		64600	2.03		
	Tritium	10:44	.75		64200	0.76		
	BKG	10:46	30		23.7	-1.1		
	BKG	11:17	30		24.6	-0.38		
LSCGOLD	Carbon-14	11:36	.95		43600	-0.89		
	Carbon-14	11:37	.95		43900	0.42		
	Tritium	11:39	.65		87900	-0.09		
	Tritium	11:40	.65		87800	-0.13		
	BKG	11:42	30		22.1	-0.82		
	BKG	12:12	30		23.6	0.6		
LSCGREEN	Carbon-14	05:46	.95		42500	0.76		
	Carbon-14	05:47	.95		42500	0.81		
	Tritium	05:49	.8		61400	-0.27		
	Tritium	05:50	.8		61700	0.45		
	BKG	05:52	30		21.4	-0.22		
	BKG	06:23	30		22.2	0.84		
LSCPINK	Carbon-14	09:38	1.012433		94000	-0.39		
	Tritium	09:41	1.012433		58000	0.01		
	BKG	10:14	30.01243		6.91	-0.1		
	Carbon-14	10:19	1.012433		94200	0.24		
	Tritium	10:22	1.012433		58300	1.16		
	BKG	10:55	30.01243		7.59	0.88		
LSCPURPLE	Carbon-14	00:35	.55		94400	-0.64		
	Carbon-14	00:36	.55		94700	0.02		
	Tritium	00:37	.85		67600	0.37		
	Tritium	00:38	.85		67600	0.37		
	BKG	00:40	30		26.8	0.55		
	BKG	01:10	30		25.2	-0.02		
LSCRED	Carbon-14	03:20	.95		42100	-1.4		
	Carbon-14	03:21	.95		42400	-0.35		
	Tritium	03:23	.7		67400	0.25		
	Tritium	03:24	.7		67000	-1.1		
	BKG	03:26	30		28.8	-0.65		
	BKG	03:57	30		28.	-1.1		
LSCSILVER	Carbon-14	06:42	.45		95500	0.88		
	Carbon-14	06:43	.45		95500	0.83		
	Tritium	06:44	.7		68200	0.75		
	Tritium	06:45	.7		68200	0.96		
	BKG	06:46	30		22.2	-0.13		
	BKG	07:17	30		22.7	0.37		
LSCYELLOW	Carbon-14	00:43	1.717		98100	0.87		
	Carbon-14	00:46	1.717		97800	-0.1		
	Tritium	00:48	1.85		133000	-2.3		
	Tritium	00:51	1.867		134000	-00		
	BKG	00:54	30		15.4	0.69		
	BKG	01:25	30		15.4	0.69		

SRB
1.7.09

Reviewed by SAB

Date 1.7.09

GEL Laboratories LLC

Liquid Scintillation Counter Checks for 15-JAN-2009

Short Name	Parmname	Run Time	Count Time	Counts	CPM	Stdev	Status	Comments
LSCBLUE	Carbon-14	07:52	.95		42300	0.54		
	Carbon-14	07:53	1		42100	-0.49		
	Tritium	07:55	.75		62900	-4.2	Outside Three Sigma	cleaned Lockout by rem. 8 1/15/09
	Tritium	07:56	.75		63300	-3.1	Outside Three Sigma	
	BKG	07:58	30		21.7	-0.5		
	BKG	08:29	30		21.9	-0.37		
	Carbon-14	10:04	.95		42100	-0.26		
	Carbon-14	10:05	1		41900	-1.7		
	Tritium	10:07	.75		62900	-4.3	Outside Three Sigma	
	Tritium	10:08	.75		63400	-2.7		
LSCBROWN	Carbon-14	07:08	.95		42400	-0.26		
	Carbon-14	07:09	.95		42500	0.4		
	Tritium	07:11	.75		63500	-1.3		
	Tritium	07:13	.75		63000	-2.9		
	BKG	07:15	30		27.7	2.12		
	BKG	07:46	30		26.4	1.06		
LSCGOLD	Carbon-14	07:15	.95		43900	0.29		
	Carbon-14	07:16	.95		43500	-1.3		
	Tritium	07:18	.65		87800	-0.11		
	Tritium	07:19	.65		87200	-0.31		
	BKG	07:21	30		22.6	-0.36		
	BKG	07:51	30		21.3	-1.6		
LSCGREEN	Carbon-14	07:06	.95		42300	0.23		
	Carbon-14	07:07	.95		42500	1.05		
	Tritium	07:09	.8		61400	-0.1		
	Tritium	07:10	.8		61300	-0.43		
	BKG	07:12	30		21.6	0.04		
	BKG	07:43	30		21.6	0.07		
LSCPINK	Carbon-14	07:03	1.012433		94100	0.01		
	Tritium	07:06	1.012433		58200	0.93		
	BKG	07:39	30.01243		6.78	-0.28		
	Carbon-14	07:44	1.012433		94000	-0.4		
	Tritium	07:47	1.012433		58300	1.12		
	BKG	08:20	30.01243		7.55	0.83		
LSCPURPLE	Carbon-14	07:08	.55		95900	2.79		
	Carbon-14	07:09	.55		94700	0.08		

	Tritium	07:10	.85	67900	1.55
	Tritium	07:12	.85	67700	0.85
	BKG	07:13	30	25.6	0.11
	BKG	07:44	30	25.5	0.09
LSCRED	Carbon-14	10:55	.95	42200	-1.4
	Carbon-14	10:56	1	42100	-1.5
	Tritium	10:58	.7	66700	-1.9
	Tritium	10:59	.7	66500	-2.5
	BKG	11:01	30	26.3	-2.2
	BKG	11:32	30	27.4	-1.5
LSCSILVER	Carbon-14	07:19	.45	95000	-0.37
	Carbon-14	07:20	.45	95000	-0.46
	Tritium	07:21	.7	68400	1.51
	Tritium	07:22	.7	68800	2.54
	BKG	07:24	30	22	-0.37
	BKG	07:54	30	24.5	2.31
LSCYELLOW	Carbon-14	07:01	1.75	97900	0.11
	Carbon-14	07:04	1.717	98000	0.42
	Tritium	07:06	1.85	134000	-0.38
	Tritium	07:09	1.867	134000	0.29
	BKG	07:12	30	14.3	-0.73
	BKG	07:43	30	13.2	-2.2

Reviewed by _____

Date 1/15/09

GEL Laboratories LLC

Ludlum Alpha Scintillation Counter Checks for 03-JAN-2009

Short Name	Parmname	Run Time	Count Time	Counts	CPM	Stdev	Status	Comments
LUCAS1	EFF	16:30	1	1.30E+05	130382	1.52		
LUCAS2	EFF	16:30	1	1.31E+05	131102	-0.53		
LUCAS3	EFF	16:30	1	1.26E+05	125632	-1.4		
LUCAS4	EFF	16:30	1	1.43E+05	143380	1.11		
LUCAS5	EFF	16:30	1	1.37E+05	137412	-0.78		
LUCAS6	EFF	16:30	1	1.24E+05	124168	-0.14		
LUCAS7	EFF	16:30	1	1.38E+05	138106	0.58		

Reviewed by SRB

Date 1.3.09

GEL Laboratories LLC

RUNLOGS

Instrument Run Log

Instrument Type: LUCAS CELL DETECTOR **Batch ID: 828069**

Sample ID	Sample Type	Analyst	Instrument	Run Date	Status	Geometry	Calibration Date
221329001	SAMPLE	KSD1	LUCAS7	03-JAN-09 19:30	DONE	Lucas Cell	21-NOV-08 00:00
221329002	SAMPLE	KSD1	LUCAS1	03-JAN-09 20:00	DONE	Lucas Cell	29-AUG-08 00:00
221431001	SAMPLE	KSD1	LUCAS2	03-JAN-09 20:00	DONE	Lucas Cell	19-DEC-08 00:00
221470001	SAMPLE	KSD1	LUCAS3	03-JAN-09 20:00	DONE	Lucas Cell	23-JAN-08 00:00
221470002	SAMPLE	KSD1	LUCAS4	03-JAN-09 20:00	DONE	Lucas Cell	01-FEB-08 00:00
221470003	SAMPLE	KSD1	LUCAS5	03-JAN-09 20:00	DONE	Lucas Cell	20-FEB-08 00:00
221470004	SAMPLE	KSD1	LUCAS6	03-JAN-09 20:00	DONE	Lucas Cell	30-MAY-08 00:00
221555001	SAMPLE	KSD1	LUCAS7	03-JAN-09 20:00	DONE	Lucas Cell	21-NOV-08 00:00
1201745738	MB	KSD1	LUCAS1	03-JAN-09 20:30	DONE	Lucas Cell	29-AUG-08 00:00
1201745739	DUP	KSD1	LUCAS2	03-JAN-09 20:30	DONE	Lucas Cell	19-DEC-08 00:00
1201745740	MS	KSD1	LUCAS3	03-JAN-09 20:30	DONE	Lucas Cell	23-JAN-08 00:00
1201745741	MSD	KSD1	LUCAS4	03-JAN-09 20:30	DONE	Lucas Cell	01-FEB-08 00:00
1201745742	LCS	KSD1	LUCAS6	03-JAN-09 20:30	DONE	Lucas Cell	30-MAY-08 00:00

Instrument Run Log

Instrument Type: GFPC

Batch ID: 829228

Sample ID	Sample Type	Analyst	Instrument	Run Date	Status	Geometry	Calibration Date
221329001	SAMPLE	JXC5	PIC6D	12-JAN-09 20:28	DONE	Tuffryn Filter	01-JAN-09 00:00
1201748543	DUP	JXC5	PIC7C	12-JAN-09 20:28	DONE	Tuffryn Filter	01-JAN-09 00:00
1201748544	MS	JXC5	PIC7D	12-JAN-09 20:28	DONE	Tuffryn Filter	01-JAN-09 00:00
221329002	SAMPLE	JXC5	PIC7A	12-JAN-09 20:28	DONE	Tuffryn Filter	01-JAN-09 00:00
1201748542	MB	JXC5	PIC7B	12-JAN-09 20:28	DONE	Tuffryn Filter	01-JAN-09 00:00
1201748545	MSD	JXC5	PIC8A	12-JAN-09 20:28	DONE	Tuffryn Filter	01-JAN-09 00:00
1201748546	LCS	JXC5	PIC8B	12-JAN-09 20:28	DONE	Tuffryn Filter	01-JAN-09 00:00

Instrument Run Log

Instrument Type: LSC

Batch ID: 830652

Sample ID	Sample Type	Analyst	Instrument	Run Date	Status	Geometry	Calibration Date
221329001	SAMPLE	SXL4	LSCBROWN	07-JAN-09 21:00	DONE	10mL DW/13mL Ecoscint Ultra	06-AUG-08 00:00
221329002	SAMPLE	SXL4	LSCBROWN	07-JAN-09 21:16	DONE	10mL DW/13mL Ecoscint Ultra	06-AUG-08 00:00
221862001	SAMPLE	SXL4	LSCBROWN	07-JAN-09 21:33	DONE	10mL DW/13mL Ecoscint Ultra	06-AUG-08 00:00
221950001	SAMPLE	SXL4	LSCBROWN	07-JAN-09 21:49	DONE	10mL DW/13mL Ecoscint Ultra	06-AUG-08 00:00
221950002	SAMPLE	SXL4	LSCBROWN	07-JAN-09 22:05	DONE	10mL DW/13mL Ecoscint Ultra	06-AUG-08 00:00
1201751853	MB	SXL4	LSCBROWN	07-JAN-09 22:22	DONE	10mL DW/13mL Ecoscint Ultra	06-AUG-08 00:00
1201751854	DUP	SXL4	LSCBROWN	07-JAN-09 22:38	DONE	10mL DW/13mL Ecoscint Ultra	06-AUG-08 00:00
1201751855	MS	SXL4	LSCBROWN	07-JAN-09 22:55	DONE	10mL DW/13mL Ecoscint Ultra	06-AUG-08 00:00
1201751856	MSD	SXL4	LSCBROWN	07-JAN-09 23:11	DONE	10mL DW/13mL Ecoscint Ultra	06-AUG-08 00:00
1201751857	LCS	SXL4	LSCBROWN	07-JAN-09 23:28	DONE	10mL DW/13mL Ecoscint Ultra	06-AUG-08 00:00

Instrument Run Log

Instrument Type: LSC

Batch ID: 833423

Sample ID	Sample Type	Analyst	Instrument	Run Date	Status	Geometry	Calibration Date
221329001	SAMPLE	RXE1	LSCRED	15-JAN-09 17:36	DONE	3mL Ethanolamine/9mL Methanol/10mL EcoScint A	19-JUN-08 00:00
221329002	SAMPLE	RXE1	LSCRED	15-JAN-09 18:09	DONE	3mL Ethanolamine/9mL Methanol/10mL EcoScint A	19-JUN-08 00:00
1201758082	MB	RXE1	LSCRED	15-JAN-09 18:42	DONE	3mL Ethanolamine/9mL Methanol/10mL EcoScint A	19-JUN-08 00:00
1201758083	DUP	RXE1	LSCRED	15-JAN-09 19:15	DONE	3mL Ethanolamine/9mL Methanol/10mL EcoScint A	19-JUN-08 00:00
1201758084	MS	RXE1	LSCRED	15-JAN-09 19:48	DONE	3mL Ethanolamine/9mL Methanol/10mL EcoScint A	19-JUN-08 00:00
1201758085	MSD	RXE1	LSCRED	15-JAN-09 20:21	DONE	3mL Ethanolamine/9mL Methanol/10mL EcoScint A	19-JUN-08 00:00
1201758086	LCS	RXE1	LSCRED	15-JAN-09 20:54	DONE	3mL Ethanolamine/9mL Methanol/10mL EcoScint A	19-JUN-08 00:00

BLOCK ENVIRONMENTAL SERVICES

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Pleasant Hill, CA 94523-3911
(925) 682-7200 FAX 686-0399

Static Percent Survival Aquatic Toxicity Screening Test Results for Two Water Samples (Project ID: #130-4113-139-1)

December 2008

Prepared For:
Tim Utterback
Weiss Associates
5801 Christie Ave., Suite 600
Emeryville, CA 94608-1939

BES Sample #25646-47

Prepared By:
Block Environmental Services, Inc.
2451 Estand Way
Pleasant Hill, CA 94523-3911
(925) 682-7200

December 23, 2008

N Bradbury
Nanette Bradbury
Laboratory Manager

David Block, Ph.D.
Laboratory Director

BES

1. INTRODUCTION

The Federal Water Pollution Control Act Amendments of 1972 (PL 92-500), the Clean Water Act (CWA) of 1977 (PL 95-217), and the Water Quality Act of 1987 (PL 100-4) explicitly state that it is the national policy that the discharge of toxic substances in toxic amounts be prohibited. Toxicity to aquatic life is one of the criteria used to gauge the hazardous potential of a discharged waste. The type of toxicity test and particular species used for testing of effluents is dictated under the framework of the National Pollutant Discharge Elimination System and falls under the jurisdiction of the local Regional Water Quality Control Board.

This report describes the procedures used and the results obtained for the static percent survival aquatic toxicity-screening test performed by Block Environmental Services (BES) for Weiss Associates.

BES is an Environmental Laboratory Accreditation Program certified laboratory (#1812).

2. MATERIALS AND METHODS

2.1 TEST ORGANISMS

- Fathead Minnow, *Pimephales promelas*, obtained from a commercial supplier or in-house culture.

2.2 TEST PROCEDURES

A detailed procedure for this test is outlined in DPHS-ELAP approved standard operating procedures (SOPs), which are on file at the BES laboratory. These SOPs are based upon the following references:

- Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, (4th Edition (EPA/600/4-90/027F).

2.3 DATA ANALYSIS

Toxicity testing results will be reported as the percent of surviving organisms during the exposure period.

BES

3. RESULTS

3.1 Sample Identification	3.2 BES Sample #	3.3 Sample Collection Date	3.4 Date Received	3.5 Testing Period
RWSW0048	25646	12/15/08	12/15/08	12/15/08-12/19/08
RWSW0049	25647	12/15/08	12/15/08	12/15/08-12/19/08

3.6 SUMMARY OF SAMPLE WATER CHEMISTRY – These values represent the water quality of the sample as received at the BES laboratory.

Water Chemistry	25646	25647
D.O. (mg/L)	12.8	12.8
pH	7.5	7.5
Conductivity (µS/cm)	8.2	8.3
Salinity (ppt)	0.0	0.0
Temperature (°C)	3.0	3.0
Total Chlorine (mg/L)	ND	ND
Ammonia (ppm as N)	0.56	0.49
Alkalinity (mg/L as $CaCO_3$)	30	28
Hardness (mg/L as $CaCO_3$)	26	20

ND – Not Detected

3.7 *P. promelas* TEST RESULTS

Treatment Concentration (% Sample)	96-Hour Percent Survival	
	25646	25647
Control	95	95
100	90	100

BES

3.8 NOTES

EPA Whole Effluent Testing Guidelines (EPA/600/4-90/027F) requires that all effluent samples be cooled to 4 °C immediately upon collection in order to maintain sample integrity. The California Department of Health Services Environmental Laboratory Accreditation Program highly recommends that the temperature of all outgoing samples designated for subcontract analyses be documented on the chain of custody in order to assess the effect of transit on sample temperature.

For the present study, the temperature of the client's samples were less than 4 °C upon receipt at the BES Laboratory. The outgoing sample temperature for each sample was recorded on the client chain of custody.

The photocopied data sheets and chain-of-custody for testing, are attached. If you have any questions concerning this report please contact the BES laboratory, (925) 682 – 7200.

BLOCK ENVIRONMENTAL SERVICES

4th And 5th Edition 96 Hr Acute Screening Static Test Data Sheet

Client: WEISS ASSOC. Client ID #: RWSW0048 BES Sample #: 256460
Species: P. PROMELAS Common Name: FATHEAD MINNOW Stock #: 12-2-08
Control Water: CEW

Treatment	Survival A	Survival B	D.O. (mg/L) A O	D.O. A N	D.O. B O	D.O. B N	pH A O	pH A N	pH B O	pH B N	Temperature (°C) A O	Temperature A N	Temperature B O	Temperature B N	Technician
Control	10	10	9.5		9.5		8.2		8.2		19.0		19.0		Tech: SC Date: 12/15/08 Time: 1600
100	10	10	11.5		11.5		7.3		7.3		19.0		19.0		
Control	10	10	8.7		8.6		8.0		8.0		19.1		19.0		Tech: SC Date: 12/16/08 Time: 1620
100	8	10	8.2		8.3		7.2		7.2		19.1		19.0		
Control	10	10	8.4	9.0	8.3	9.0	8.0	8.3	8.0	8.3	19.7	19.2	19.7	19.2	Tech: SC Date: 12/17/08 Time: 1600
100	8	10	7.6	10.3	7.6	10.3	7.3	7.3	7.3	7.3	19.6	19.0	19.6	19.0	
Control	10	10	7.9		7.9		7.9		7.9		19.2		19.2		Tech: TC Date: 12-18-08 Time: 1500
100	8	10	7.0		7.0		7.2		7.2		19.2		19.2		
Control	9	10	8.1		8.0		8.0		8.0		19.7		19.7		Tech: TC Date: 12-19-08 Time: 1600
100	8	10	7.6		7.6		7.4		7.3		19.6		19.6		

O - Old N - New

48Hr feeding (where applicable) ☑ SC

Subsamples taken: SC 0Hr ⇧ SC 48Hr ⇧ SC 96Hr ⇩

	0Hr Cl	0Hr 100	48Hr Cl	48Hr 100	96Hr Cl	96Hr 100
Hardness (mg/L as $CaCO_3$)	110	26	120	26	112	28
Alkalinity (mg/L as $CaCO_3$)	78	30	84	32	76	32
Ammonia (mg/L as N)	ND	0.56	ND	0.90	0.04	2.1
Total Chlorine (mg/L)	2.05	ND	ND	0.04	ND	0.03
Conductivity (µS/cm)	1018	83	1028	84	650	99
Salinity (ppt)	0.3	0.0	0.3	0.0	0.3	0.0

ND - Not Detected (detection limit 0.03 mg/L)

Notes: ND - Not Detected

Test Supervisor: N Bradbury QA/QC Check: K. Eves

BLOCK ENVIRONMENTAL SERVICES

4th And 5th Edition 96 Hr Acute Screening Static Test Data Sheet

Client: Weiss Assoc. Client ID #: RWSW0049 BES Sample #: 250647
Species: P. Promelas Common Name: Fathead Minnow Stock #: 12-2-08
Control Water: CFW

Treatment	Survival A	Survival B	D.O. (mg/L) A O	D.O. A N	D.O. B O	D.O. B N	pH A O	pH A N	pH B O	pH B N	Temperature (°C) A O	Temperature A N	Temperature B O	Temperature B N	Technician
Control	10	10	9.5		9.5		8.2		8.2		19.0		19.0		Tech: SC Date: 12/15/08 Time: 1600
100	10	10	11.6		11.6		7.4		7.4		19.0		19.0		
Control	10	10	8.7		8.6		8.0		8.0		19.1		19.0		Tech: SC Date: 12/16/08 Time: 1620
100	10	10	8.2		8.3		7.2		7.2		19.1		19.1		
Control	10	10	8.4	9.0	8.3	9.0	8.0	8.3	8.0	8.3	19.7	19.2	19.7	19.2	Tech: SC Date: 12/17/08 Time: 1600
100	10	10	7.5	10.3	7.5	10.3	7.3	7.3	7.2	7.3	19.7	19.0	19.7	19.0	
Control	10	10	7.9		7.9		7.9		7.9		19.2		19.2		Tech: TC Date: 12-18-08 Time: 1500
100	10	10	7.0		7.0		7.1		7.1		19.3		19.3		
Control	9	10	8.1		8.0		8.0		8.0		19.7		19.7		Tech: TC Date: 12-19-08 Time: 1600
100	10	10	7.6		7.6		7.3		7.2		19.7		19.7		

O - Old N - New

48Hr feeding (where applicable) ☑

Subsamples taken: SC 0Hr ⇧ SC 48Hr ⇧ TC 96Hr ⇩

	0Hr Cl	0Hr 100	48Hr Cl	48Hr 100	96Hr Cl	96Hr 100
Hardness (mg/L as $CaCO_3$)	110	20	120	24	112	24
Alkalinity (mg/L as $CaCO_3$)	78	28	84	32	76	36
Ammonia (mg/L as N)	ND	0.49	ND	1.00	0.04	0.70
Total Chlorine (mg/L)	2.05	ND	ND	0.04	ND	ND
Conductivity (µS/cm)	608	83	628	84	650	94
Salinity (ppt)	0.3	0.0	0.3	0.0	0.3	0.0

ND – Not Detected (detection limit 0.03 mg/L)

Notes: ND - Not Detected

Test Supervisor: N Bradbury QA/QC Check: K Eves

Weiss Associates Environmental Science, Engineering and Management
5801 Christie Avenue, Suite 600, Emeryville, CA 94608-1939 Fax: 510-547-5043 Phone: 510-450-6000

LEHR Chain-of-Custody Record

Lab Name: Block Environmental Services
Lab Address: 2451 Estand Way
Pleasant Hill, CA 94523 Ph: 925-682-7200
Lab Login:

Project Name: LEHR/RWSW
Project Number: 130-4113-139-1
Sampled by: OMB
Samplers Signature:

Control Number: LEHR-RWSW
Send Results To: Tim Utterback
Email: data@weiss.com
Fax: (510) 547-5043

Sample ID	Sample Date	Sample Time	Matrix (1) / Container (2)	Number of Containers	Preservative Y/N	Accute Aquatic Tox (EPA 600/4-90/027F	Additional Comments
#25646 25647							Turnaround Time: **Normal**
RWSW0048	12-15-08	840	W/P	1	N	X	Fat Head Minnow
RWSW0049	1	842	W/P	1	N	X	Fat Head Minnow

temp @ time of sample 8.3 C

1 of 1

Signature		Company	Date	Time
Relinquished by:	OMB	WEISS	12-15-08	1430
Received by:	Jim Hampton	BLOCK	12-15-08	1430
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

(1) Matrix: S - Soil, W - Water, O - Other (describe)
(2) Container:
V = VOA Vial
P = Polyethylene Bottle
G = Glass Bottle/Jar
T = BrassTube
O = Other (describe)

2008 Hg STORM WATER

NELAP Accreditation 01103CA

ELAP Certification 1664

Caltest
ANALYTICAL LABORATORY
ENVIRONMENTAL ANALYSES

Monday, January 28, 2008

Jim Aborn
UC DAVIS WWTP
One Shields Avenue
Davis, CA 95616

RE:	Lab Order:	I010659	Collected By:	CLIENT
	Project ID:	LEHR STORMWATER SAMPLING	PO/Contract #:	BROWN&CALDWELL

Dear Jim Aborn:

Enclosed are the analytical results for sample(s) received by the laboratory on Tuesday, January 15, 2008. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Enclosures

Project Manager: Bill Svoboda

CAHorn

Lab Director: Christine Horn

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1885 North Kelly Road • Napa, California 94558
(707) 258-4000 • Fax: (707) 226-1001 • e-mail: info@caltestlabs.com

ENVIRONMENTAL ANALYSES

SAMPLE SUMMARY

Lab Order: I010659

Project ID: LEHR STORMWATER SAMPLING

Lab ID	Sample ID	Matrix	Date Collected	Date Received
I010659001	**HGST060**	Water	1/8/2008 16:20	1/15/2008 14:10
I010659002	**HGST062**	Water	1/8/2008 16:20	1/15/2008 14:10

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NARRATIVE

Lab Order: I010659

Project ID: LEHR STORMWATER SAMPLING

General Qualifiers and Notes

CALTEST authorizes this report to be reproduced only in its entirety. Results are specific to the sample(s) as submitted and only to the parameter(s) reported.

Caltest certifies that all test results for wastewater and hazardous waste analyses meet all applicable NELAC requirements; all microbiology and drinking water testing meet applicable ELAP requirements, unless stated otherwise.

All analyses performed by EPA Methods or Standard Methods (SM) 18th Ed. except where noted.

Caltest collects samples in compliance with 40 CFR, EPA Methods, Cal. Title 22, and Standard Methods.

Dilution Factors (DF) reported greater than '1' have been used to adjust the result, Reporting Limit (RL), and Method Detection Limit (MDL).

All Solid, sludge, and/or biosolids data is reported in Wet Weight, unless otherwise specified.

Results Qualifiers: Report fields may contain codes and non-numeric data correlating to one or more of the following definitions:

ND - Non Detect - indicates analytical result has not been detected.

RL - Reporting Limit is the quantitation limit at which the laboratory is able to detect an analyte. An analyte not detected at or above the RL is reported as ND unless otherwise noted or qualified. For analyses pertaining to the State Implementation Plan of the California Toxics Rule, the Caltest Reporting Limit (RL) is equivalent to the Minimum Level (ML). A standard is always run at or below the ML. Where Reporting Limits are elevated due to dilution, the ML calibration criteria has been met.

J - reflects estimated analytical result value detected below the Reporting Limit (RL) and above the Method Detection Limit (MDL). The 'J' flag is equivalent to the DNQ Estimated Concentration flag.

E - indicates an estimated analytical result value.

B - indicates the analyte has been detected in the blank associated with the sample.

NC - means not able to be calculated for RPD or Spike Recoveries.

SS - compound is a Surrogate Spike used per laboratory quality assurance manual.

NOTE: This document represents a complete Analytical Report for the samples referenced herein and should be retained as a permanent record thereof.

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ANALYTICAL RESULTS

Lab Order: I010659
Project ID LEHR STORMWATER SAMPLING

Lab ID: I010659001 Date Collected: 1/8/2008 16:20 Matrix: Water
Sample ID: HGST060 Date Received: 1/15/2008 14:10

Parameters	Result	Units	R. L.	MDL	DF	Prepared	Batch	Analyzed	Batch	Qual
Mercury Analysis, Trace Level		**Prep Method:**	EPA 1631E			**Prep by:**	UK			
		Analytical Method:	EPA 1631E					**Analyzed by:**	LM	
Mercury	0.25	ug/L	0.0025	0.0010	5	01/23/08 00:00	MPR 5502	01/24/08 13:15	MHG 2182	

Lab ID: I010659002 Date Collected: 1/8/2008 16:20 Matrix: Water
Sample ID: HGST062 Date Received: 1/15/2008 14:10

Parameters	Result	Units	R. L.	MDL	DF	Prepared	Batch	Analyzed	Batch	Qual
Mercury Analysis, Trace Level		**Prep Method:**	EPA 1631E			**Prep by:**	UK			
		Analytical Method:	EPA 1631E					**Analyzed by:**	LM	
Mercury	0.0014	ug/L	0.0005	0.00020	1	01/23/08 00:00	MPR 5502	01/24/08 13:20	MHG 2182	

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QUALITY CONTROL DATA

Lab Order: I010659

Project ID: LEHR STORMWATER SAMPLING

Analysis Description:	Mercury Analysis, Trace Level	**QC Batch:**	MPR/5502
Analysis Method:	EPA 1631E	**QC Batch Method:**	EPA 1631E

METHOD BLANK: 195332

Parameter	Blank Result	Reporting Limit	Units	Qualifiers
Mercury	ND	0.0005	ug/L	

LABORATORY CONTROL SAMPLE: 195333

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	0.02	0.019	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 195334 195335

Parameter	Units	I010662002 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Mercury	ug/L	0.0031	0.02	0.02	.02	85	85	71-125	0.2	20	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA QUALIFIERS

Lab Order: I010659

Project ID: LEHR STORMWATER SAMPLING

QUALITY CONTROL PARAMETER QUALIFIERS

Results Qualifiers: Report fields may contain codes and non-numeric data correlating to one or more of the following definitions:

NS - means not spiked and will not have recoveries reported for Analyte Spike Amounts

NC - means not able to be calculated for RPD or Spike Recoveries.

QC Codes Keys: These descriptors are used to help identify the specific QC samples and clarify the report.

MB - Method Blank

LCS/LCSD - Laboratory Control Spike / Laboratory Control Spike Duplicate

DUP - Duplicate of Original Sample Matrix

MS/MSD - Matrix Spike / Matrix Spike Duplicate

RPD - Relative Percent Difference

%Recovery - Spike Recovery stated as a percentage

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab Order: I010659

Project ID: LEHR STORMWATER SAMPLING

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
I010659001	**HGST060**	EPA 1631E	MPR/5502	EPA 1631E	MHG/2182
I010659002	**HGST062**	EPA 1631E	MPR/5502	EPA 1631E	MHG/2182

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UCDAVIS

University of California at Davis
Environmental Health and Safety
One Shields Avenue
Davis, CA 95616

Field Chain-of-Custody Form

IO10659

Lab Name and Address:	Project Name:	Date:	Page:	P.O.#
Bill Svoboda 707-258-4000 Caltest Analytical Labs 1885 North Kelly Road Napa, CA 94558	LEHR Stormwater Sampling	1-10-08	1 of 1	Brown & Caldwell

Sample ID	Collection	Matrix Code*	Sample Type**	Field Preserved (Y or N)	Number of Containers	Total Mercury EPA 1631E	Comments
HGST060	Date: 1-8-08 Time: 1620	STW	G	Y	1	✓	
~~HGST061~~	Date: Time:	~~STW~~	~~G~~	~~Y~~	~~1~~	✓	
HGST062	Date: 1-8-08 Time: 1620	STW	G	Y	1	✓	
	Date: Time:						
	Date: Time:						
	Date: Time:						
	Date: Time:						
	Date: Time:						

TEMP (°C): 0.0
SEALED: YES
INTACT: YES

Relinquished by: (Signature) [signature] Date: 1-10-08 Time: 1030

Received by: (Signature) [signature] Date: 1/10/08 Time: 10:30

Relinquished by: (Signature) [signature] Date: 1/15/08 Time: 14:12

Cooler Numbers

Comments: Please contact Jim Aborn (530-752-8589) with any problems.

Received for Laboratory By: (Signature) [signature] 1410 Date: 1/15/08 Time:
Method of Shipment: Airbill No.
Cooler Survey (pass / fail) If FAIL do not open, contact the Program Development Department and the Radiation Safety Officer IMMEDIATELY
Surveyed by: (Signature) Date: Time:
Cooler Condition Upon Receipt at Laboratory:
Seals Intact: YES NO
Internal Cooler Temp. °C Samples in good condition (Y/N) Samples surveyed (pass/fail)

*Sample Matrix Codes				**Sample Type Codes
SW - Surface Water	AR - Air	SD - Sediment		G - Grab
GW - Ground Water	SL - Soil	WW - Waste Water	BI - Biota	C - Composite
STW - Storm Water	SG - Sludge	FI - Filter	O - Other	O - Other

Rec'd [signature] 1/15/08 1910 Leah Sacto 1/15/08 1910
COOLER 26

EHSCOC.FRM

2008 Hg STORM WATER

NELAP Accreditation 01103CA

ELAP Certification 1664

Caltest
ANALYTICAL LABORATORY
ENVIRONMENTAL ANALYSES

Friday, March 21, 2008

Jim Aborn
UC DAVIS WWTP
One Shields Avenue
Davis, CA 95616

RE:	Lab Order:	I030332	Collected By:	CLIENT
	Project ID:	LEHR STORMWATER SAMPLING	PO/Contract #:	BROWN & CALDWELL

Dear Jim Aborn:

Enclosed are the analytical results for sample(s) received by the laboratory on Friday, March 07, 2008. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Enclosures

Bill Svoboda

Project Manager: Bill Svoboda

CAHorn

Lab Director: Christine Horn

REPORT OF LABORATORY ANALYSIS

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ENVIRONMENTAL ANALYSES

SAMPLE SUMMARY

Lab Order: I030332

Project ID: LEHR STORMWATER SAMPLING

Lab ID	Sample ID	Matrix	Date Collected	Date Received
I030332001	**HGST063**	Water	2/24/2008 10:30	3/7/2008 10:37
I030332002	**HGST064**	Water	2/24/2008 10:30	3/7/2008 10:37

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NARRATIVE

Lab Order: I030332

Project ID: LEHR STORMWATER SAMPLING

General Qualifiers and Notes

CALTEST authorizes this report to be reproduced only in its entirety. Results are specific to the sample(s) as submitted and only to the parameter(s) reported.

Caltest certifies that all test results for wastewater and hazardous waste analyses meet all applicable NELAC requirements; all microbiology and drinking water testing meet applicable ELAP requirements, unless stated otherwise.

All analyses performed by EPA Methods or Standard Methods (SM) 18th Ed. except where noted.

Caltest collects samples in compliance with 40 CFR, EPA Methods, Cal. Title 22, and Standard Methods.

Dilution Factors (DF) reported greater than '1' have been used to adjust the result, Reporting Limit (RL), and Method Detection Limit (MDL).

All Solid, sludge, and/or biosolids data is reported in Wet Weight, unless otherwise specified.

Results Qualifiers: Report fields may contain codes and non-numeric data correlating to one or more of the following definitions:

ND - Non Detect - indicates analytical result has not been detected.

RL - Reporting Limit is the quantitation limit at which the laboratory is able to detect an analyte. An analyte not detected at or above the RL is reported as ND unless otherwise noted or qualified. For analyses pertaining to the State Implementation Plan of the California Toxics Rule, the Caltest Reporting Limit (RL) is equivalent to the Minimum Level (ML). A standard is always run at or below the ML. Where Reporting Limits are elevated due to dilution, the ML calibration criteria has been met.

J - reflects estimated analytical result value detected below the Reporting Limit (RL) and above the Method Detection Limit (MDL). The 'J' flag is equivalent to the DNQ Estimated Concentration flag.

E - indicates an estimated analytical result value.

B - indicates the analyte has been detected in the blank associated with the sample.

NC - means not able to be calculated for RPD or Spike Recoveries.

SS - compound is a Surrogate Spike used per laboratory quality assurance manual.

NOTE: This document represents a complete Analytical Report for the samples referenced herein and should be retained as a permanent record thereof.

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ENVIRONMENTAL ANALYSES

ANALYTICAL RESULTS

Lab Order: I030332

Project ID LEHR STORMWATER SAMPLING

Lab ID: **I030332001** Date Collected: 2/24/2008 10:30 Matrix: Water

Sample ID: **HGST063** Date Received: 3/7/2008 10:37

Parameters	Result	Units	R. L.	MDL	DF	Prepared	Batch	Analyzed	Batch	Qual
Mercury Analysis, Trace Level		**Prep Method:**	EPA 1631E			**Prep by:** UK				
		Analytical Method:	EPA 1631E					**Analyzed by:** LM		
Mercury	0.14	ug/L	0.0010	0.00040	2	03/13/08 00:00	MPR 5738	03/14/08 15:40	MHG 2230	

Lab ID: **I030332002** Date Collected: 2/24/2008 10:30 Matrix: Water

Sample ID: **HGST064** Date Received: 3/7/2008 10:37

Parameters	Result	Units	R. L.	MDL	DF	Prepared	Batch	Analyzed	Batch	Qual
Mercury Analysis, Trace Level		**Prep Method:**	EPA 1631E			**Prep by:** UK				
		Analytical Method:	EPA 1631E					**Analyzed by:** LM		
Mercury	0.0013	ug/L	0.0005	0.00020	1	03/17/08 00:00	MPR 5754	03/18/08 14:09	MHG 2233	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Lab Order: I030332

Project ID: LEHR STORMWATER SAMPLING

Analysis Description:	Mercury Analysis, Trace Level	**QC Batch:**	MPR/5738
Analysis Method:	EPA 1631E	**QC Batch Method:**	EPA 1631E

METHOD BLANK: 204335

Parameter	Blank Result	Reporting Limit	Units	Qualifiers
Mercury	ND	0.0005	ug/L	

LABORATORY CONTROL SAMPLE: 204336

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	0.02	0.022	112	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 204339 204340

Parameter	Units	I030339002 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Mercury	ug/L	0.012	0.02	0.032	.033	97	105	71-125	5.1	20	

Analysis Description:	Mercury Analysis, Trace Level	**QC Batch:**	MPR/5754
Analysis Method:	EPA 1631E	**QC Batch Method:**	EPA 1631E

METHOD BLANK: 204837

Parameter	Blank Result	Reporting Limit	Units	Qualifiers
Mercury	ND	0.0005	ug/L	

LABORATORY CONTROL SAMPLE: 204838

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	0.02	0.023	116	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 204337 204338

Parameter	Units	I030314003 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Mercury	ug/L	0.012	0.02	0.035	.035	113	112	71-125	0.5	20	

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QUALITY CONTROL DATA QUALIFIERS

Lab Order: I030332

Project ID: LEHR STORMWATER SAMPLING

QUALITY CONTROL PARAMETER QUALIFIERS

Results Qualifiers: Report fields may contain codes and non-numeric data correlating to one or more of the following definitions:

NS - means not spiked and will not have recoveries reported for Analyte Spike Amounts

NC - means not able to be calculated for RPD or Spike Recoveries.

QC Codes Keys: These descriptors are used to help identify the specific QC samples and clarify the report.

MB - Method Blank

LCS/LCSD - Laboratory Control Spike / Laboratory Control Spike Duplicate

DUP - Duplicate of Original Sample Matrix

MS/MSD - Matrix Spike / Matrix Spike Duplicate

RPD - Relative Percent Difference

%Recovery - Spike Recovery stated as a percentage

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(707) 258-4000 • Fax: (707) 226-1001 • e-mail: info@caltestlabs.com

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab Order: I030332

Project ID: LEHR STORMWATER SAMPLING

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
I030332001	**HGST063**	EPA 1631E	MPR/5738	EPA 1631E	MHG/2230
I030332002	**HGST064**	EPA 1631E	MPR/5754	EPA 1631E	MHG/2233

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UCDAVIS

University of California at Davis
Environmental Health and Safety
One Shields Avenue
Davis, CA 95616

Field Chain-of-Custody Form

TEMP. (°C): 2
SEALED: Y
INTACT: Y
I030332

Lab Name and Address:	Project Name:	Date:	Page:	P.O.#
Bill Svoboda 707-258-4000 Caltest Analytical Labs 1885 North Kelly Road Napa, CA 94558	LEHR Stormwater Sampling	2-25-08	1 of 1	Brown & Caldwell

Sample ID	Collection	Matrix Code*	Sample Type**	Field Preserved (Y or N)	Number of Containers	Total Mercury EPA 1631E	Comments
HGST063	Date: 2-24-08 Time: 1030	STW	G	Y	1	✓	
HGST064	Date: 2-24-08 Time: 1030	STW	G	Y	1	✓	
	Date: Time:						
	Date: Time:						
	Date: Time:						
	Date: Time:						
	Date: Time:						
	Date: Time:						

Relinquished by: (Signature) Jim Aborn — Date: 2-25-08 Time: 1200

Received by: (Signature) [signature] — Date: 2/25/08 Time: 12:14

Relinquished by: (Signature) [signature] — Date: 3/7/08 Time: 9:16

Cooler Numbers

Comments: Please contact Jim Aborn (530-752-8589) with any problems.

Received for Laboratory By: (Signature) Date: Time:

Method of Shipment: Airbill No.

Cooler Survey (pass / fail) _____ If FAIL do not open; contact the Program Development Department and the Radiation Safety Officer IMMEDIATELY.

Surveyed by: (Signature) Date: Time:

Cooler Condition Upon Receipt at Laboratory:

Seals Intact: YES ____ NO ____

Internal Cooler Temp: _____ °C. Samples in good condition: (Y/N) _____ Samples surveyed (pass/fail)

*Sample Matrix Codes

SW - Surface Water	AR - Air	SD - Sediment	
GW - Ground Water	SL - Soil	WW - Waste Water	BI - Biota
STW - Storm Water	SG - Sludge	FI - Filter	O - Other

**Sample Type Codes

G - Grab
C - Composite
O - Other

[signature] 3/7/08 9:16
[signature] 3/7/08 1037

[signature] 3-7-08 1037 218

EHSCOC.FRM