

Rocky Flats, Colorado, Site

**Quarterly Report of Site Surveillance
and Maintenance Activities
Third Quarter Calendar Year 2012**

January 2013



U.S. DEPARTMENT OF
ENERGY

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**U.S. Department of Energy
Office of Legacy Management**

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Abbreviations

Am	americium
AOC	Area of Concern
CAD/ROD	Corrective Action Decision/Record of Decision
CDPHE	Colorado Department of Public Health and Environment
COU	Central Operable Unit
CY	calendar year
DOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
ETPTS	East Trenches Plume Treatment System
LANL	Los Alamos National Laboratory
LM	Office of Legacy Management
µg/L	micrograms per liter
M&M	monitoring and maintenance
MSPTS	Mound Site Plume Treatment System
OLF	Original Landfill
pCi/L	picocuries per liter
PLF	Present Landfill
PLFTS	Present Landfill Treatment System
PMJM	Preble's meadow jumping mouse
POC	point-of-compliance
POE	point-of-evaluation
Pu	plutonium
RCRA	Resource Conservation and Recovery Act
RFLMA	<i>Rocky Flats Legacy Management Agreement</i>
RFSOG	<i>Rocky Flats Site Operations Guide</i>
Site	Rocky Flats Site
SPPTS	Solar Ponds Plume Treatment System
U	uranium
USFWS	U.S. Fish and Wildlife Service
ZVI	zero-valent iron

1.0 Introduction

The U.S. Department of Energy (DOE) Office of Legacy Management (LM) is responsible for implementing the final response action selected in the *Corrective Action Decision/Record of Decision for Rocky Flats Plant (USDOE) Peripheral Operable Unit and Central Operable Unit (CAD/ROD)* (DOE, EPA, and CDPHE 2006) issued on September 29, 2006, and amended on September 21, 2011 (DOE, EPA, and CDPHE 2011), for the Rocky Flats Site (the Site) in Colorado. DOE, the U.S. Environmental Protection Agency (EPA), and the Colorado Department of Public Health and Environment (CDPHE) have chosen to implement the monitoring and maintenance requirements of the CAD/ROD as described in the *Rocky Flats Legacy Management Agreement (RFLMA)* (DOE 2007). Attachment 2 of the RFLMA defines the Central Operable Unit (COU) remedy surveillance and maintenance requirements, the frequency for each required activity, and the monitoring and maintenance locations. The requirements include environmental monitoring; maintenance of the erosion controls, access controls (signs), landfill covers, and groundwater treatment systems; and operation of the groundwater treatment systems. The RFLMA also requires that the institutional controls, in the form of use restrictions as established in the CAD/ROD, be maintained.

This report is required in accordance with Section 7.0 of RFLMA Attachment 2. The purpose of this report is to inform the regulatory agencies and stakeholders of the remedy-related surveillance, monitoring, and maintenance activities being conducted at the Site. LM provides periodic communications through several means, such as this report, web-based tools, and public meetings.

LM prepared the *Rocky Flats, Colorado, Site Site Operations Guide (RFSOG)* (DOE 2012a) to serve as the primary internal document to guide work to satisfy the requirements of the RFLMA and to implement best management practices at the Site.

Several other Site-specific documents provide additional detail regarding the requirements described in RFLMA Attachment 2, including all aspects of surveillance, monitoring, and maintenance activities, as well as data evaluation protocols.

Monitoring data and summaries of surveillance and maintenance activities for past quarters are available in the quarterly reports. Extensive discussion and evaluation of surveillance, monitoring, and maintenance activities are presented each calendar year in the annual report of Site surveillance and maintenance activities.

This report addresses remedy-related surveillance, monitoring, and operations and maintenance activities conducted at the Site during the third quarter of calendar year (CY) 2012 (July 1 through September 30). This report describes the following activities:

- Maintenance and inspection of the Original Landfill (OLF) and Present Landfill (PLF)
- Maintenance and inspection of the four groundwater treatment systems
- Erosion control and revegetation activities
- Routine (in accordance with the RFLMA and the RFSOG) water monitoring
- Inspection of signs posted at the perimeter of the COU as physical controls.

2.0 Site Operations and Maintenance

2.1 Landfills

2.1.1 Present Landfill

The PLF is inspected quarterly in accordance with the requirements of the PLF Monitoring and Maintenance (M&M) Plan (DOE 2008a) and the RFLMA (DOE 2007). Vegetation monitoring has been conducted on the PLF according to the requirements in RFLMA Attachment 2, Table 3.

2.1.1.1 Inspection Results

The routine PLF inspection for the third quarter of CY 2012 was performed on August 30, 2012. No significant problems were observed during this inspection. Copies of the landfill inspection forms are presented in Appendix A.

2.1.1.2 Settlement Monuments

The annual settlement monument surveys were performed on December 13, 2011. The 2012 survey of the PLF settlement monuments will be completed at the end of the calendar year. Additional information on the settlement monuments is included in the *Rocky Flats Site Quarterly Report of Site Surveillance and Maintenance Activities, First Quarter Calendar Year 2008* (DOE 2008b).

2.1.2 Original Landfill

The OLF is inspected monthly, in accordance with the requirements in the OLF M&M Plan (DOE 2009a) and the RFLMA. It was anticipated that after the first year, the inspection frequency might be reduced to quarterly for an additional 4 years. However, because of observed localized slumping and seep areas, and investigation and repairs to the OLF cover completed in 2009, no change to the monthly inspection frequency was recommended in the third five-year review of the Site (DOE 2012b).

2.1.2.1 Inspection Results

Routine OLF inspections during the third quarter of CY 2012 were performed on July 30, August 30, and September 27, 2012. The landfill cover vegetation was evaluated on September 13, 2012. The completed inspection forms are presented in Appendix A.

2.1.2.2 Settlement Monuments

The OLF settlement monuments were surveyed on September 21, 2012. Survey data indicate that settling at each monument does not exceed the limits published in the OLF M&M Plan (DOE 2009a). The survey results are presented in Appendix A.

2.1.2.3 *Inclinometers*

As discussed in the quarterly report for the second quarter of CY 2009 (DOE 2009b), seven inclinometers were installed in boreholes at the OLF in 2008 as part of the geotechnical investigation of localized areas of instability (Figure 1).

Movement of the inclinometers has been monitored approximately monthly since installation. Inclinometers deflect by lateral movement of the ground in which they are located and can deflect enough to cause the inclinometer tubes to break. Once an inclinometer tube breaks, the inclinometer will no longer be monitored. Inclinometer monitoring data provide information on localized soil movement and serve to focus the periodic inspections of the soil cover surface on signs of potential instability, such as cracking, vertical displacement, and slumping. A deflection of more than 1 inch is used as a trigger for evaluation of the data by a qualified geotechnical engineer. The engineer determines the significance of the deflection in relation to recommendations for maintenance or repairs to address potential instability in accordance with the OLF M&M Plan (DOE 2009a).

Inclinometer measurements were taken on July 25, August 22, and September 25, 2012. The data logger recording for inclinometer 82708I (Tt-7) contained erroneous data, so a measurement was taken on October 1, 2012. The October 1, 2012, reading was satisfactorily logged. The readings showed very little deflection for any inclinometer over this quarter. Very little deflection has been noted over the past approximately 2 years. Based on the geotechnical investigation, maintenance and repairs in 2009 were made to minimize the effects of lubrication of a subsurface organic layer by groundwater and precipitation infiltration. As discussed in the annual report for 2011, routine maintenance to fill any surface cracking noted in inspections to minimize infiltration of precipitation appears to be an effective way to address conditions that may lead to localized instability.

2.1.2.4 *Slumps*

As discussed in the 2009 annual report (DOE 2010), areas where the landfill cover is pushed up or rolling are noticeable on the western end of the OLF between Berms 2 and 3; however, no new slumps were observed during the third quarter of 2012. It has been approximately 2 years since significant movement has been observed on the OLF cover.

2.1.2.5 *Seeps*

Seeps at the OLF were evaluated during the monthly inspections and during unscheduled visits. Individual seep location flow rates can be found in the monthly inspection reports.

2.2 Groundwater Treatment Systems

Four groundwater treatment systems are operated and maintained in accordance with requirements defined in the RFLMA and the RFSOG. Three of these systems (the Mound Site Plume Treatment System [MSPTS], East Trenches Plume Treatment System [ETPTS], and Solar Ponds Plume Treatment System [SPPTS]) include a groundwater intercept trench (collection trench), which is similar to a French drain with an impermeable membrane on the downgradient side. Groundwater entering the trench is routed through a drainpipe into one or more treatment

cells, where it is treated and then discharged. The fourth system, the PLF Treatment System (PLFTS), treats water from the northern and southern components of the Groundwater Intercept System and flow from the PLF seep.

2.2.1 Mound Site Plume Treatment System

Routine maintenance activities and optimization of the small effluent-polishing air stripper installed in the MSPTS effluent manhole continued through the third quarter of CY 2012. A solar powered ventilation fan was installed on the manhole cover to enhance volatilization of residual volatile organic compounds in the system effluent. The fan operated when the sun shined on the small solar panel that directly powered the fan (i.e., the fan has no battery backup). The two inexpensive pumps used to test the feasibility and effectiveness of the prototype air stripper did not operate continuously through the quarter, as each malfunctioned at some point. As a result, only one pump at a time was operating for most of the quarter.

Testing continued to identify adjustments needed to achieve optimal effectiveness, and efforts were underway to develop the design of a full-scale, full-time air stripper to be installed within the same effluent manhole, and to utilize the same foundation installed for the prototype solar array. This larger air stripper and the associated solar power components will be installed in the fourth quarter of 2012 and first quarter of 2013.

The annual report for 2012 will provide a more detailed discussion of the MSPTS air stripper, including operation and testing results.

Refer to Section 3.1.9.1 for information on water quality sampling.

2.2.2 East Trenches Plume Treatment System

Routine maintenance activities continued at the ETPTS through the third quarter of CY 2012. These activities included checking influent and effluent flow conditions, measuring water levels in the cells, and clearing accumulations of biofilm that can lead to clogging. Planning continued for the installation of an air stripper at the ETPTS that is similar in concept to that at the MSPTS, but which will be installed in the influent manhole rather than the effluent manhole. The ETPTS air stripper will therefore pre-treat influent to that system, rather than polish its effluent. This air stripper and the associated solar power components will be installed in the fourth quarter of 2012 and first quarter of 2013.

Refer to Section 3.1.9.2 for information on water quality sampling.

2.2.3 Solar Ponds Plume Treatment System

Routine maintenance activities continued at the SPPTS through the third quarter of CY 2012. These activities included weekly inspections of the solar/battery systems that power the pumps, the operation of the pumps, and influent and effluent flow conditions. Redevelopment of SPIN, the collection well, is planned for the fourth quarter. This activity was performed twice prior to Site closure to address reduced influent availability and flow, but has not been done since. (Although there have been no indications that the screened interval is clogging, periodic redevelopment of the collection well is a prudent maintenance activity.)



Figure 1. Original Landfill Features

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Tests continued on the feasibility of treating uranium (U) with a smaller-scale treatment component, referred to informally as a “microcell.” Microcell tests performed in the third quarter focused on continued tests of zero-valent iron (ZVI) treatment media; tests conducted during the second quarter of 2012 of ion exchange resins designed to remove uranium did not generate attractive results. ZVI is the basis of the existing treatment media at the SPPTS.

In addition, bench-scale tests focusing on a “lagoon” approach to nitrate treatment, in which the high-nitrate influent is dosed with nutrients and then stored in a pool or lagoon that is rich in bacteria, continued. During the third quarter, the first bench-scale tests (begun in the second quarter and referred to as the Part 1 tests) were concluded, a second (Part 2) test was conducted, and a third (Part 3) test began. These bench-scale tests utilize the same nutrients used to dose Phase III Cell A (i.e., MicroCg). Trash cans were used as the bench-scale test lagoons, with each trash can containing between 25 and 30 gallons of water. The Part 1 lagoon tests focused on proving the principle (essentially confirming that this style of treatment is effective), and also compared results from a completely stagnant lagoon to a lagoon that was periodically agitated with a low-volume pump. These tests confirmed the treatment approach is effective at removing nitrate from SPPTS influent. The Part 2 series involved two stagnant lagoons that were provided different doses of the nutrient, MicroCg. The Part 3 tests, which began in the third quarter, included one container intended to replicate the most successful test from the Part 2 series, and a second that investigated a lower MicroCg dose but higher ratio of inoculum (the bacteria-rich water) to untreated influent.

Both the microcell and lagoon tests are expected to continue for the next several months. As the third quarter ended, preparations were underway to retrofit the Phase III pilot-scale cells for nitrate treatment using the lagoon approach. This pilot-scale testing of the lagoon approach to nitrate treatment is scheduled to begin in the fourth quarter of CY 2012.

Microcell and lagoon tests and associated results will be discussed in greater detail in the annual report for 2012. Refer to Section 3.1.9.3 for information on water quality sampling.

2.2.4 Present Landfill Treatment System

Routine maintenance activities continued at the PLFTS through the third quarter of CY 2012. These activities generally consisted of inspecting the system for potential problems.

Refer to Section 3.1.9.4 for information on water quality sampling.

2.3 Sign Inspection

“U.S. Department of Energy - No Trespassing” signs are required to be posted at intervals around the perimeter of the COU to notify persons that they are at the boundary of the COU. Signs listing the use restrictions (institutional controls) and providing contact information are also required to be posted at access points to the COU. The signs are required as physical controls of the remedy, are inspected quarterly, and are maintained by repairing or replacing signs as needed. Physical controls protect the engineered components of the remedy, including landfill covers, groundwater treatment systems, and monitoring equipment, which are also inspected routinely during monitoring and maintenance activities.

The signs were inspected on September 5, 2012, and they met the requirements.

2.4 Erosion Control and Revegetation

Maintenance of the Site erosion control features required continued effort throughout the third quarter of CY 2012, especially following high-wind or precipitation events. Erosion wattles and matting loosened and displaced by high winds or rain were repaired. Erosion controls were installed and maintained for the various projects that were ongoing during the third quarter of CY 2012.

3.0 Environmental Monitoring

This section summarizes the environmental monitoring conducted in accordance with the RFLMA.

3.1 Water Monitoring

This section includes:

- A discussion of analytical results for the Point of Compliance (POC), Point of Evaluation (POE), PLF, and OLF surface-water monitoring objectives.
- Summaries of Area of Concern (AOC) well, Evaluation well, Sentinel well, and Resource Conservation and Recovery Act (RCRA) well groundwater monitoring; treatment system monitoring; and Surface Water Support monitoring at the Site.

RFLMA Attachment 2 and the RFSOG offer details about the monitoring locations, sampling criteria, and evaluation protocols for the water monitoring objectives mentioned in the following sections. Appendix B provides analytical water quality data for the third quarter of CY 2012. A more detailed interpretation and discussion will be provided in the annual report for CY 2012.

3.1.1 Water Monitoring Highlights

During the third quarter of CY 2012, water monitoring successfully met the targeted monitoring objectives as required by the RFLMA and was in conformance with RFSOG implementation guidance. The routine RFLMA network consists of 10 automated gaging stations, 12 surface water grab-sampling locations, 8 treatment system locations, 97 wells, and 10 precipitation gages. Additional locations are occasionally sampled in support of investigations in response to reportable conditions. During the quarter, 7 flow-paced composite samples, 16 surface water grab samples, 10 treatment system samples, and 10 groundwater samples were collected (in accordance with RFLMA protocols) and submitted for analysis.¹ Analysis is pending for two flow-paced composites that were started during the quarter and have been retrieved from the field. Five additional flow-paced composites are still in progress, so analytical data for those composites were not available for this report.

¹ Composite samples consist of multiple aliquots (“grabs”) of identical volume. Each grab is delivered by the automatic sampler to the composite container at each predetermined flow volume or time interval. During the third quarter of CY 2012, the 7 flow-paced composites comprised 319 individual grabs.

Water quality data at the RFLMA POCs remained below the applicable standards through the third quarter of CY 2012.

Reportable 12-month rolling average uranium concentrations were observed starting on April 30, 2011, in surface water at RFLMA POE monitoring station GS10, which is located on South Walnut Creek upstream of former Pond B-1. Reportable 12-month rolling average americium (Am) and plutonium (Pu) activities were also observed starting on August 31, 2011, and May 31, 2012, respectively. As of the end of the third quarter of CY 2012, these three analytes were still reportable. GS10 is evaluated in Section 3.1.3.1 of this report.

Except for the GS10 analytes discussed above, all other analyte concentrations at POEs were less than the applicable RFLMA Attachment 2 water quality standards as of the end of the third quarter of CY 2012.

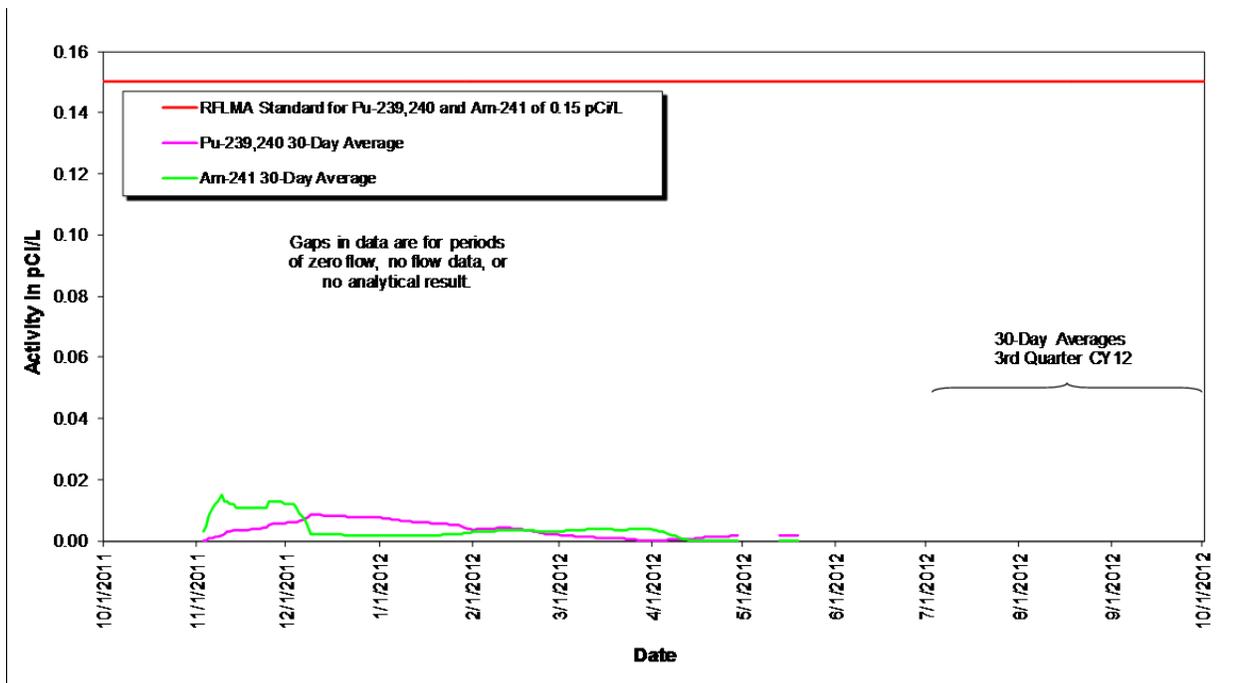
Groundwater monitoring results will be evaluated as part of the annual report for CY 2012.

3.1.2 POC Monitoring

The following sections include summary tables and plots showing the applicable 30-day and 12-month rolling averages for the POC analytes.

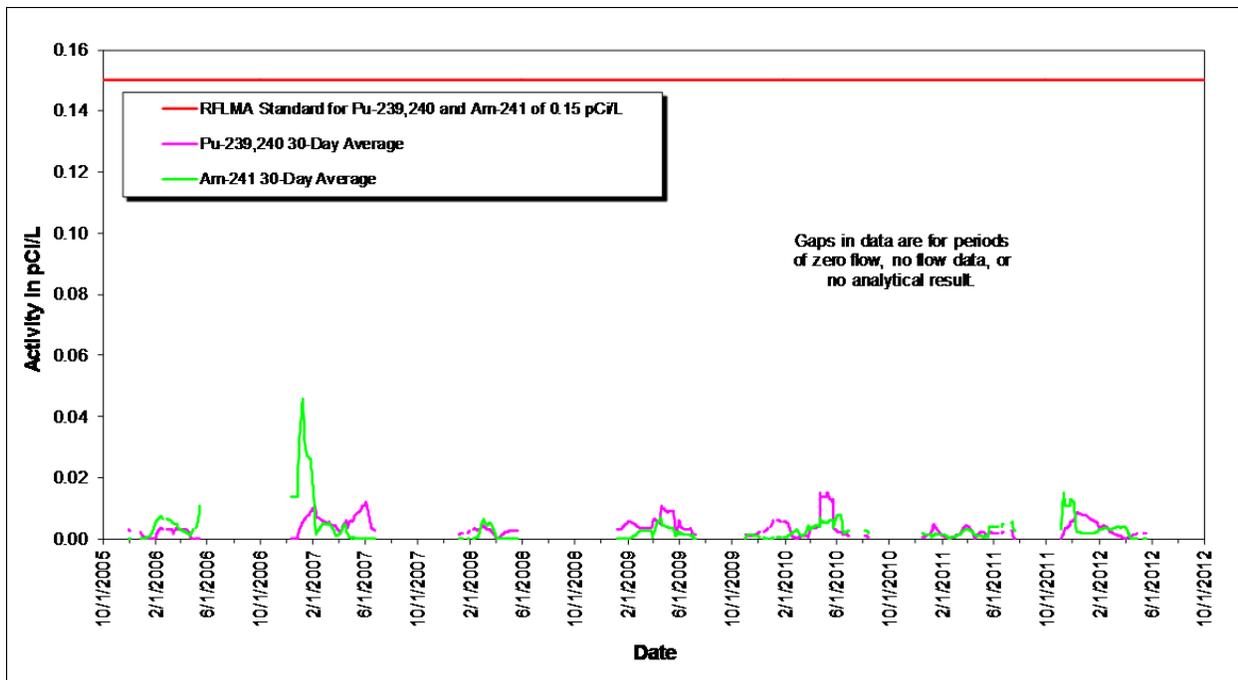
3.1.2.1 Monitoring Location GS01

Monitoring location GS01 is on Woman Creek at Indiana Street. Figure 2 and Figure 4 show no occurrences of reportable 30-day averages for the quarter using the available data. Figure 3 and Figure 5 show sampling data from 2005 through the third quarter of CY 2012. There has been no flow at GS01 since May 23, 2012.



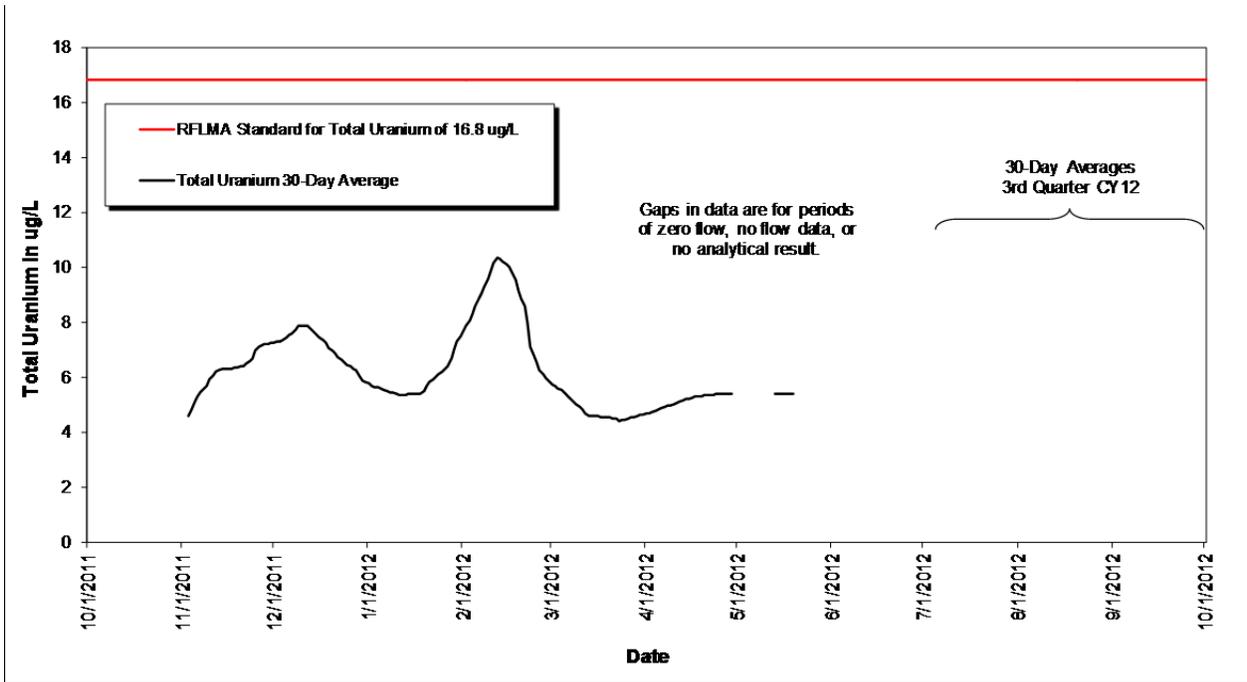
As of this report, the composite sample started on June 6, 2012, was still in progress.
pCi/L = picocuries per liter

Figure 2. Volume-Weighted 30-Day Average Plutonium and Americium Activities at GS01: Year Ending Third Quarter CY 2012



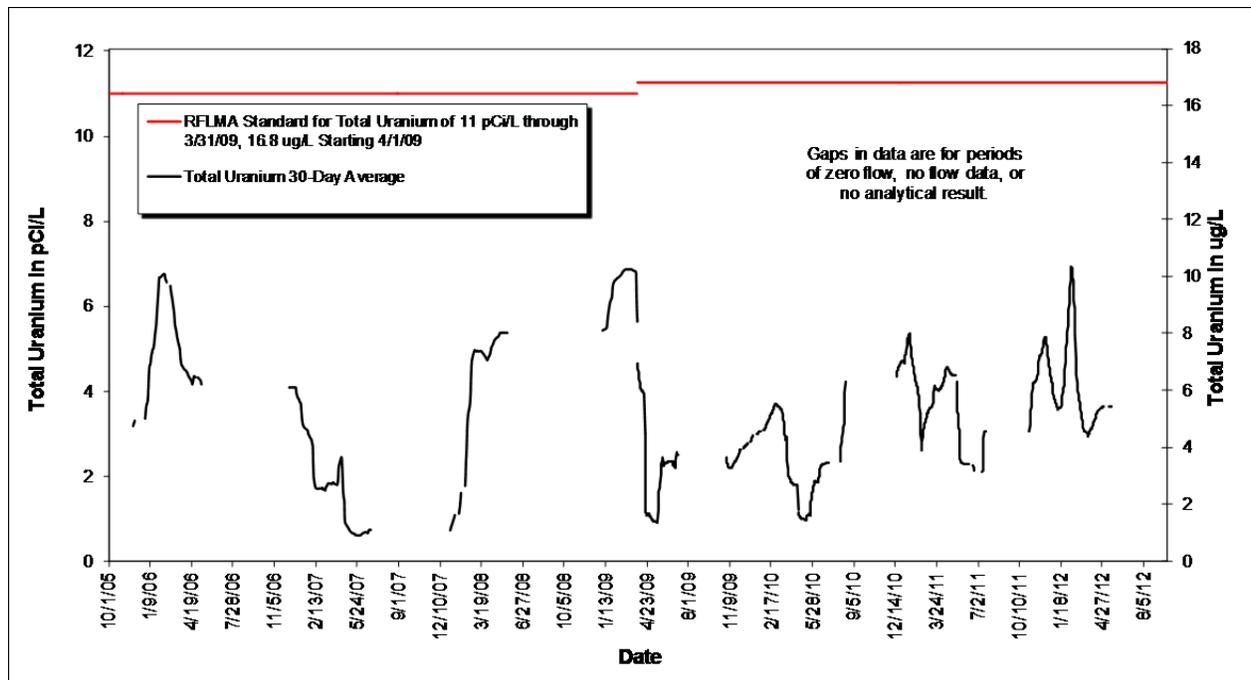
As of this report, the composite sample started on June 6, 2012, was still in progress.
pCi/L = picocuries per liter

Figure 3. Volume-Weighted 30-Day Average Plutonium and Americium Activities at GS01: Post-Closure Period Ending Third Quarter CY 2012



As of this report, the composite sample started on June 6, 2012, was still in progress.
 µg/L = micrograms per liter

Figure 4. Volume-Weighted 30-Day Average Total Uranium Concentrations at GS01: Year Ending Third Quarter CY 2012

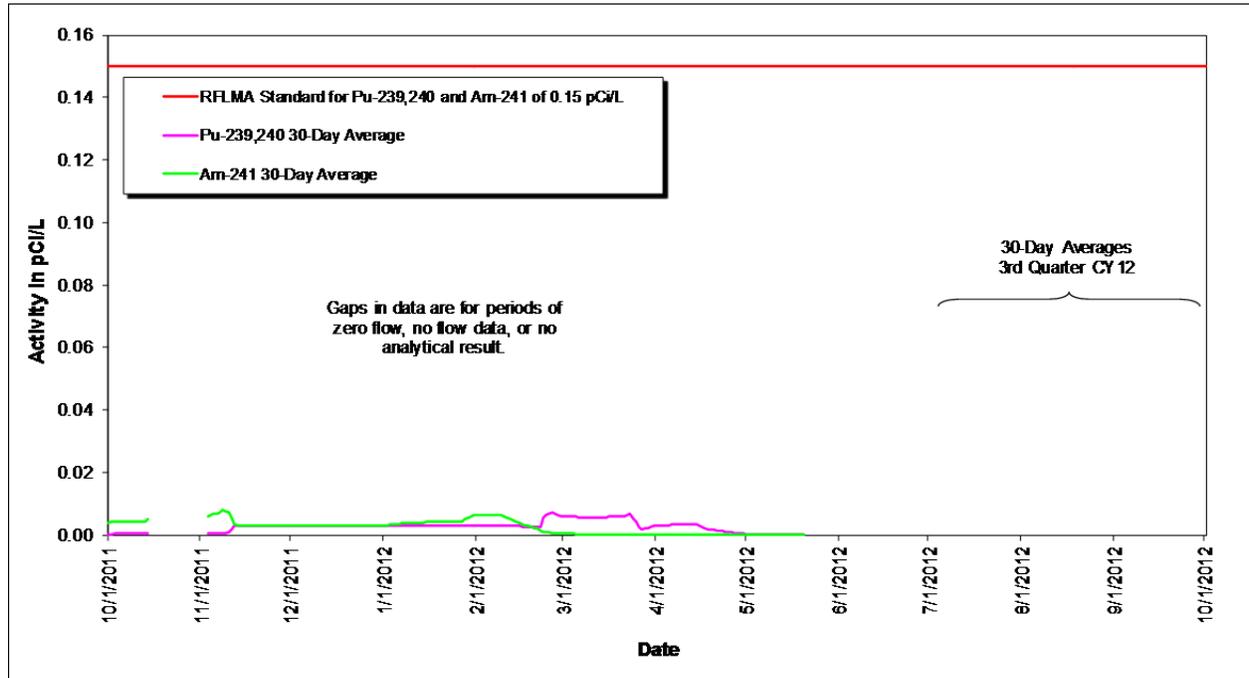


As of this report, the composite sample started on June 6, 2012, was still in progress.
 µg/L = micrograms per liter
 pCi/L = picocuries per liter

Figure 5. Volume-Weighted 30-Day Average Total Uranium Concentrations at GS01: Post-Closure Period Ending Third Quarter CY 2012

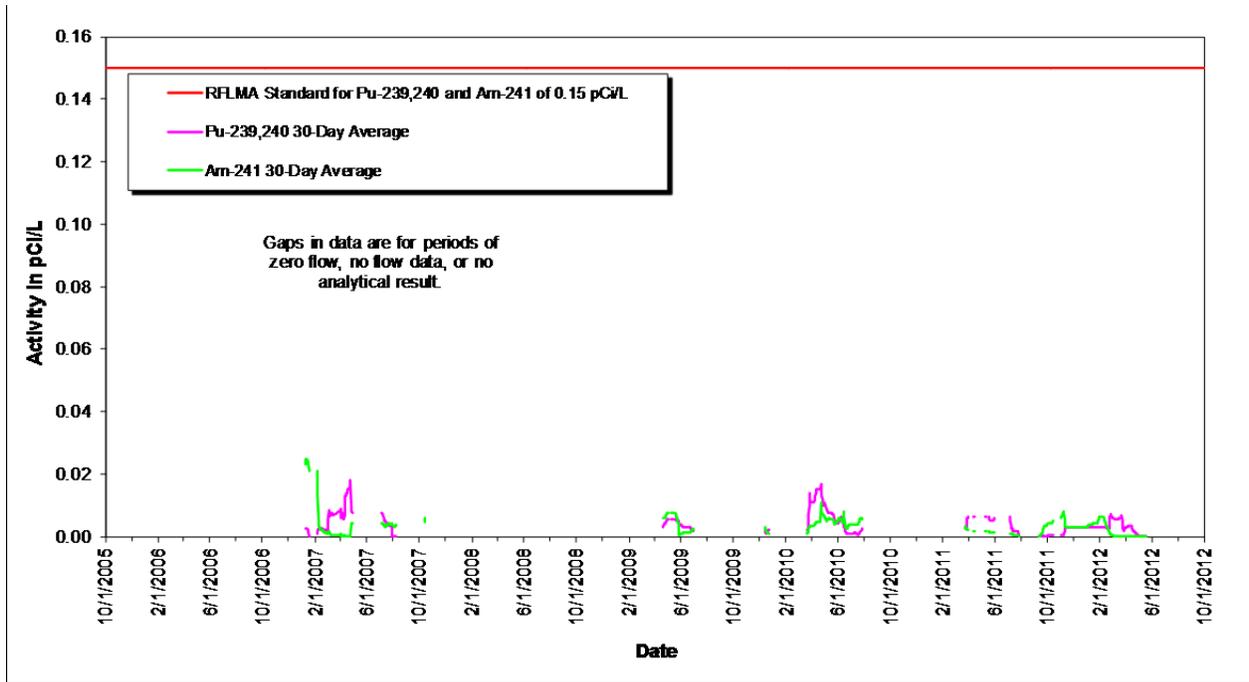
3.1.2.2 Monitoring Location GS03

Monitoring location GS03 is on Walnut Creek at Indiana Street. Figure 6, Figure 8, and Figure 10 show no occurrences of reportable water quality for the quarter using the available data. Figure 7, Figure 9, and Figure 11 show sampling data from 2005 through the third quarter of CY 2012. There has been no flow at GS03 since May 23, 2012.



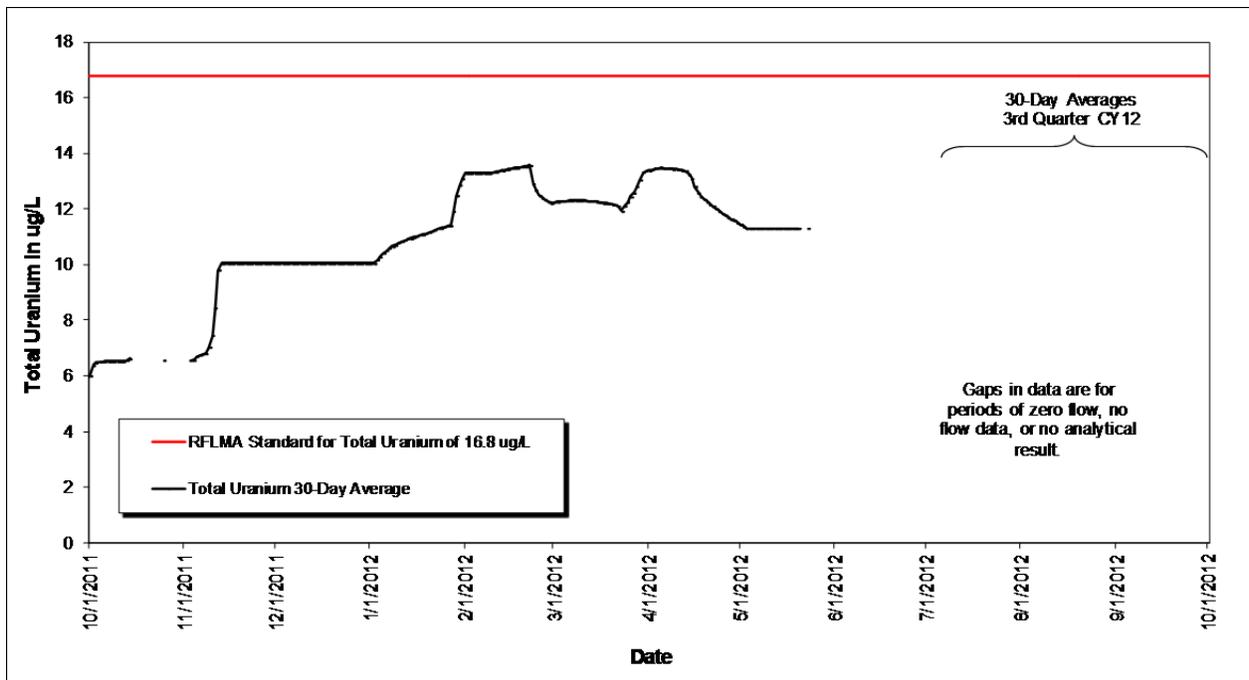
As of this report, the composite sample started on June 6, 2012, was still in progress.
pCi/L = picocuries per liter

Figure 6. Volume-Weighted 30-Day Average Plutonium and Americium Activities at GS03: Year Ending Third Quarter CY 2012



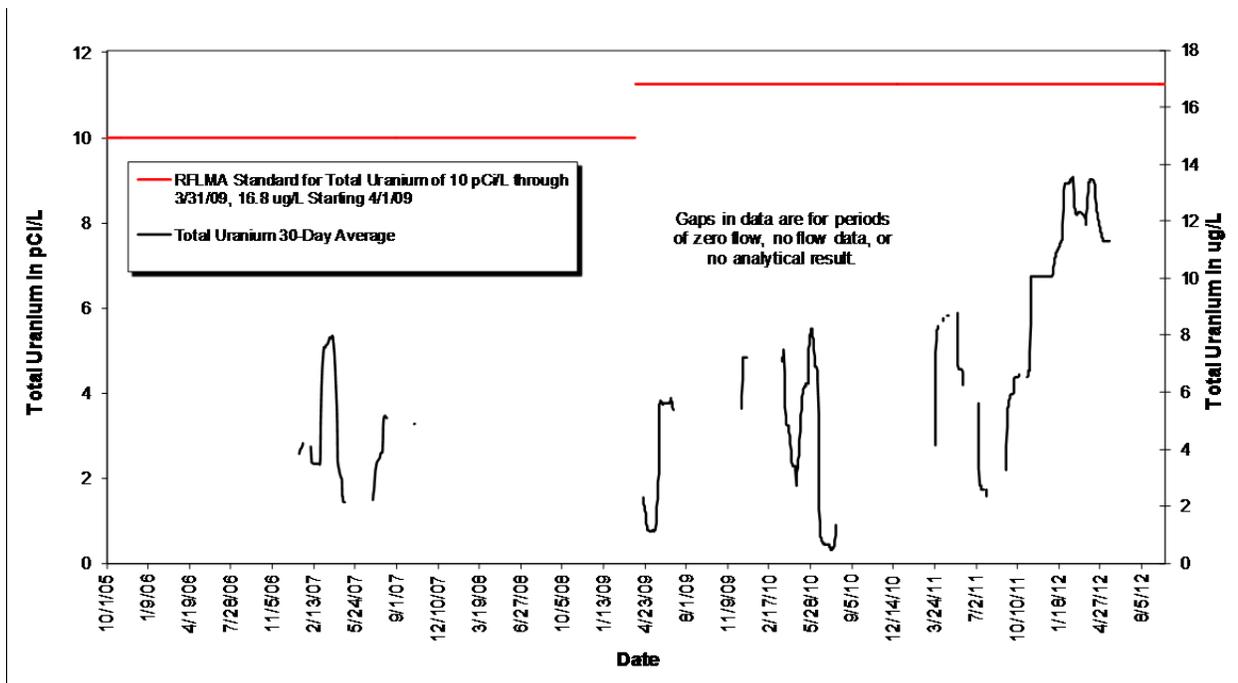
As of this report, the composite sample started on June 6, 2012, was still in progress.
 pCi/L = picocuries per liter

Figure 7. Volume-Weighted 30-Day Average Plutonium and Americium Activities at GS03: Post-Closure Period Ending Third Quarter CY 2012



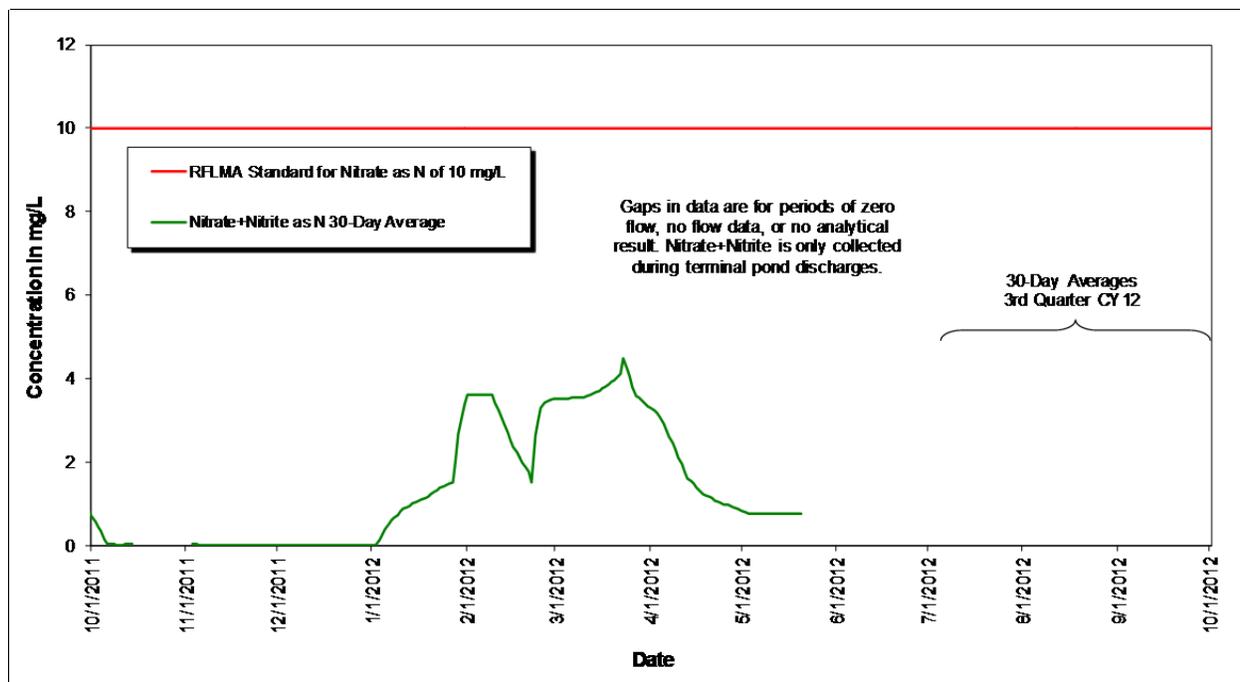
As of this report, the composite sample started on June 6, 2012, was still in progress.
 µg/L = micrograms per liter

Figure 8. Volume-Weighted 30-Day Average Total Uranium Concentrations at GS03: Year Ending Third Quarter CY 2012



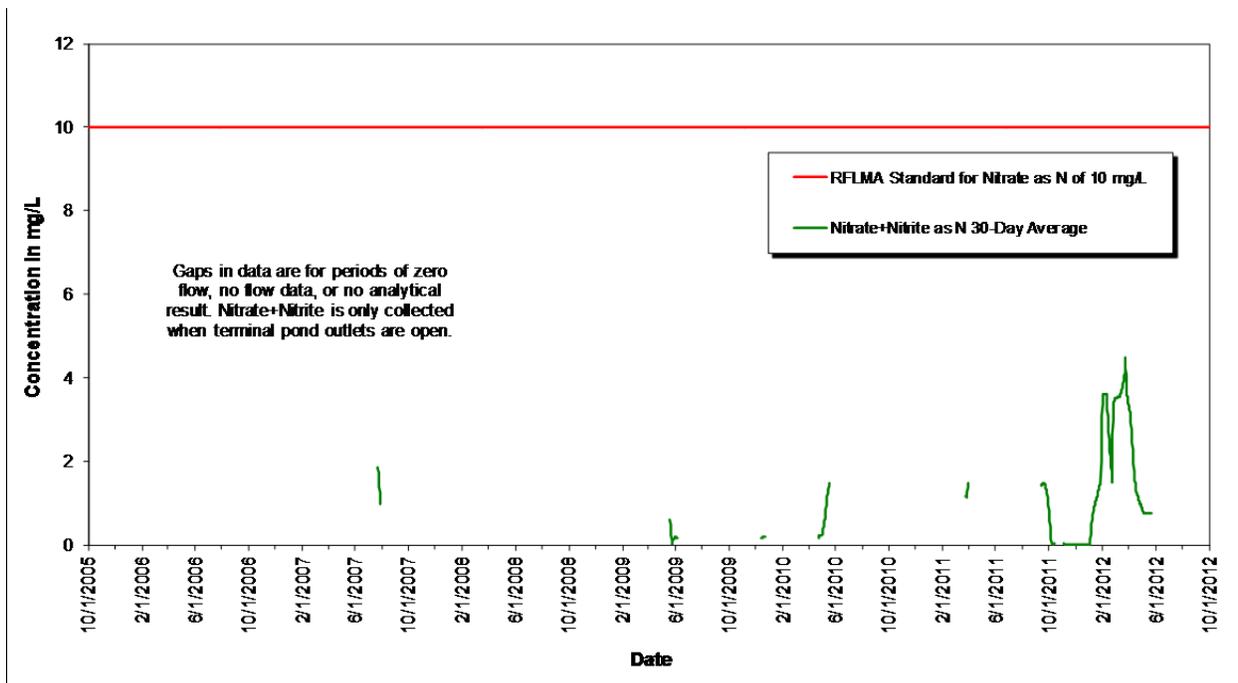
As of this report, the composite sample started on June 6, 2012, was still in progress.
 µg/L = micrograms per liter
 pCi/L = picocuries per liter

Figure 9. Volume-Weighted 30-Day Average Total Uranium Concentrations at GS03: Post-Closure Period Ending Third Quarter CY 2012



mg/L = milligrams per liter

Figure 10. Volume-Weighted 30-Day Average Nitrate + Nitrite as Nitrogen Concentrations at GS03: Year Ending Third Quarter CY 2012



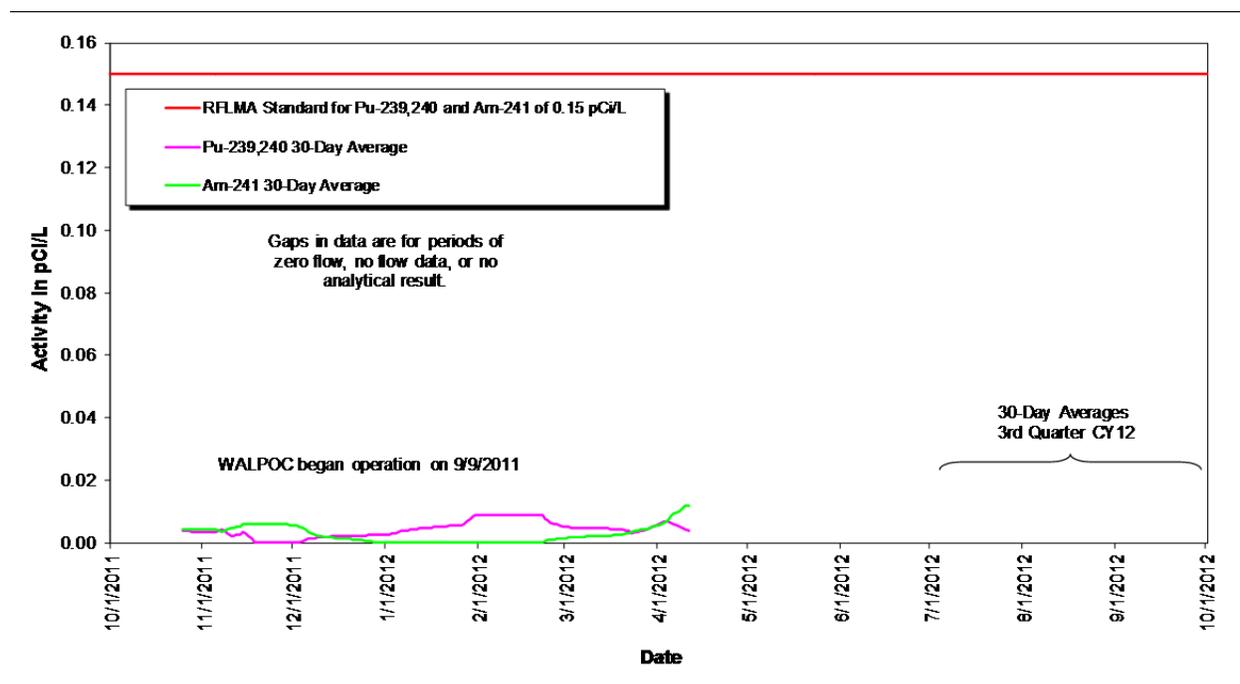
mg/L = milligrams per liter

Figure 11. Volume-Weighted 30-Day Average Nitrate + Nitrite as Nitrogen Concentrations at GS03: Post-Closure Period Ending Third Quarter CY 2012

3.1.2.3 Monitoring Location WALPOC

Monitoring location WALPOC is on Walnut Creek at the eastern COU boundary. Figure 12 through Figure 17 show no occurrences of reportable 12-month rolling or 30-day averages for the quarter using the available data. There has been no flow at WALPOC since May 26, 2012.

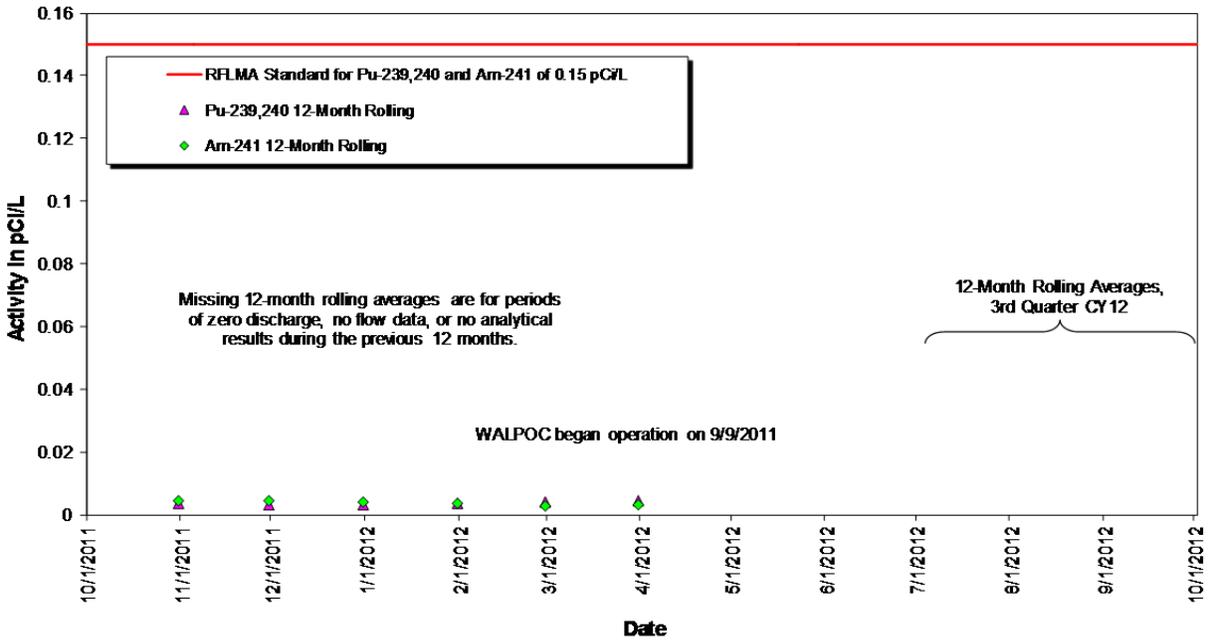
WALPOC began operation as a RFLMA POC on September 9, 2011. The first flow was observed (and sample collection began) at WALPOC on September 12, 2011. Therefore, based on routine data evaluation protocols, a 12-month rolling average cannot be formally calculated until at least 1 year has elapsed from the date WALPOC began operation as a RFLMA POC. Since WALPOC began operation as a POC on September 9, 2011, the first formal 12-month rolling average will be calculated for September 30, 2012.² Therefore, the values shown here for WALPOC are for information only and use only the available data.



As of this report, the composite sample started on April 13, 2012, was still in progress.
pCi/L = picocuries per liter

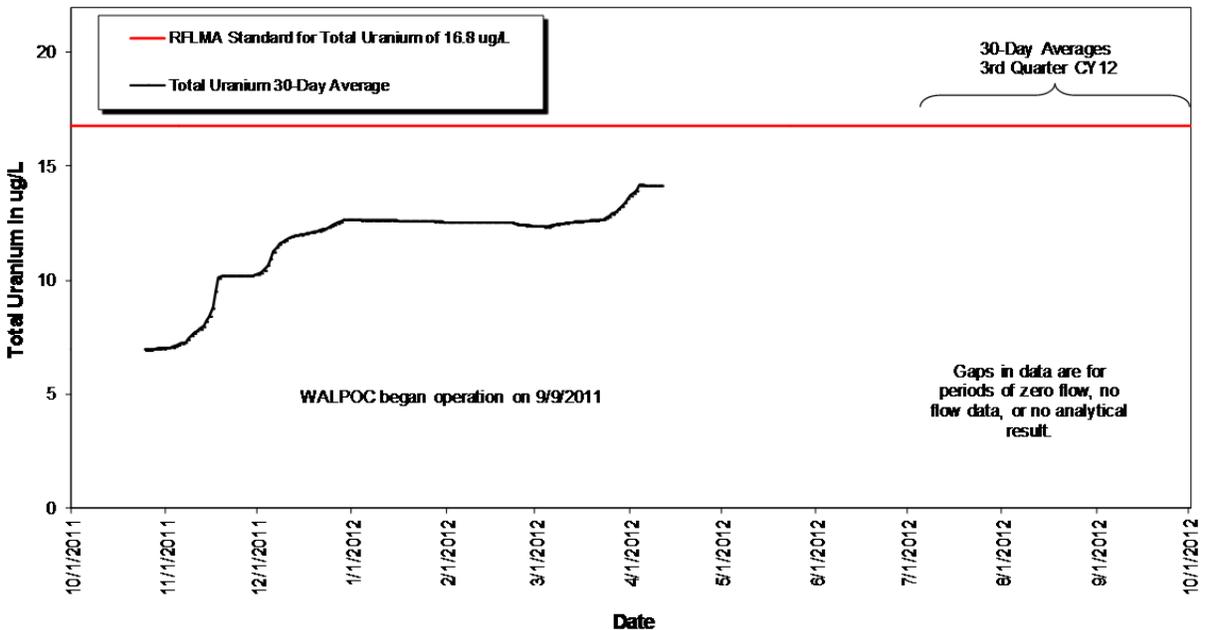
Figure 12. Volume-Weighted 30-Day Average Plutonium and Americium Activities at WALPOC: Year Ending Third Quarter CY 2012

² Individual 12-month rolling average values are only calculated for the last day of each month.



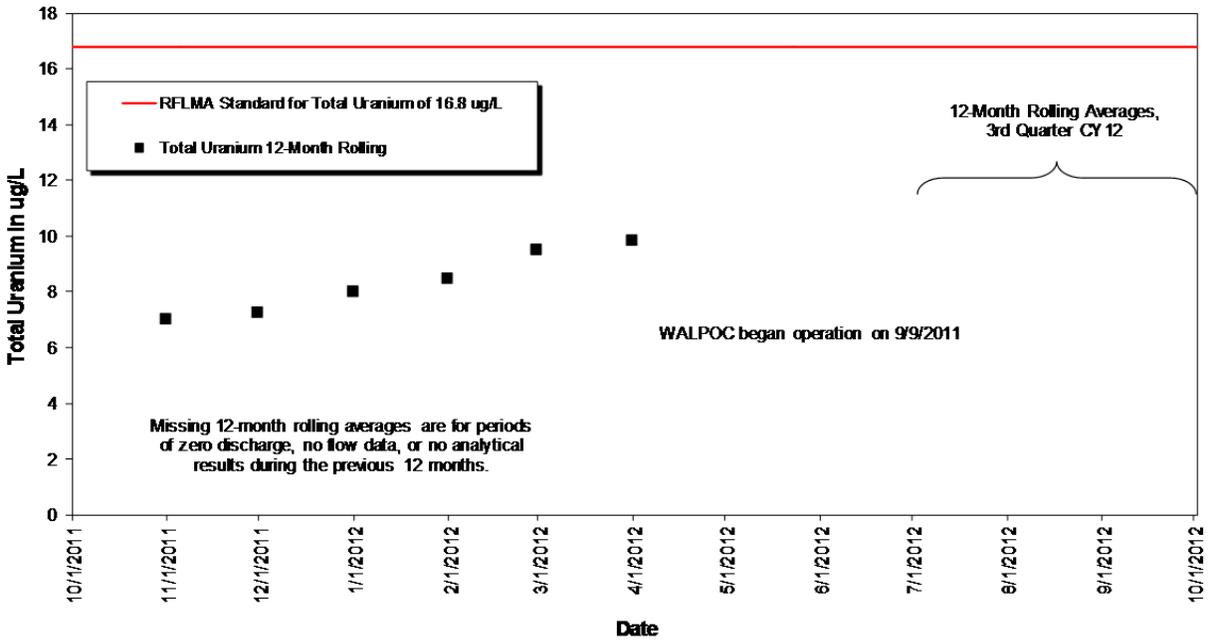
As of this report, the composite sample started on April 13, 2012, was still in progress.
pCi/L = picocuries per liter

Figure 13. Volume-Weighted 12-Month Rolling Average Plutonium and Americium Activities at WALPOC: Year Ending Third Quarter CY 2012



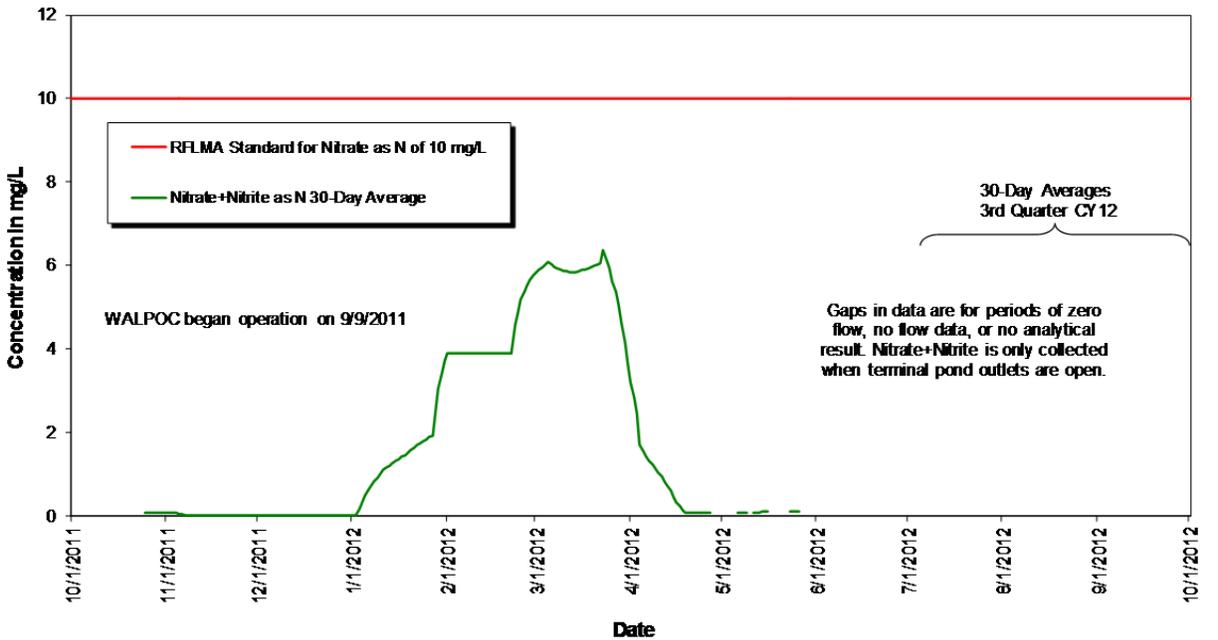
As of this report, the composite sample started on April 13, 2012, was still in progress.
µg/L = micrograms per liter

Figure 14. Volume-Weighted 30-Day Average Total Uranium Concentrations at WALPOC: Year Ending Third Quarter CY 2012



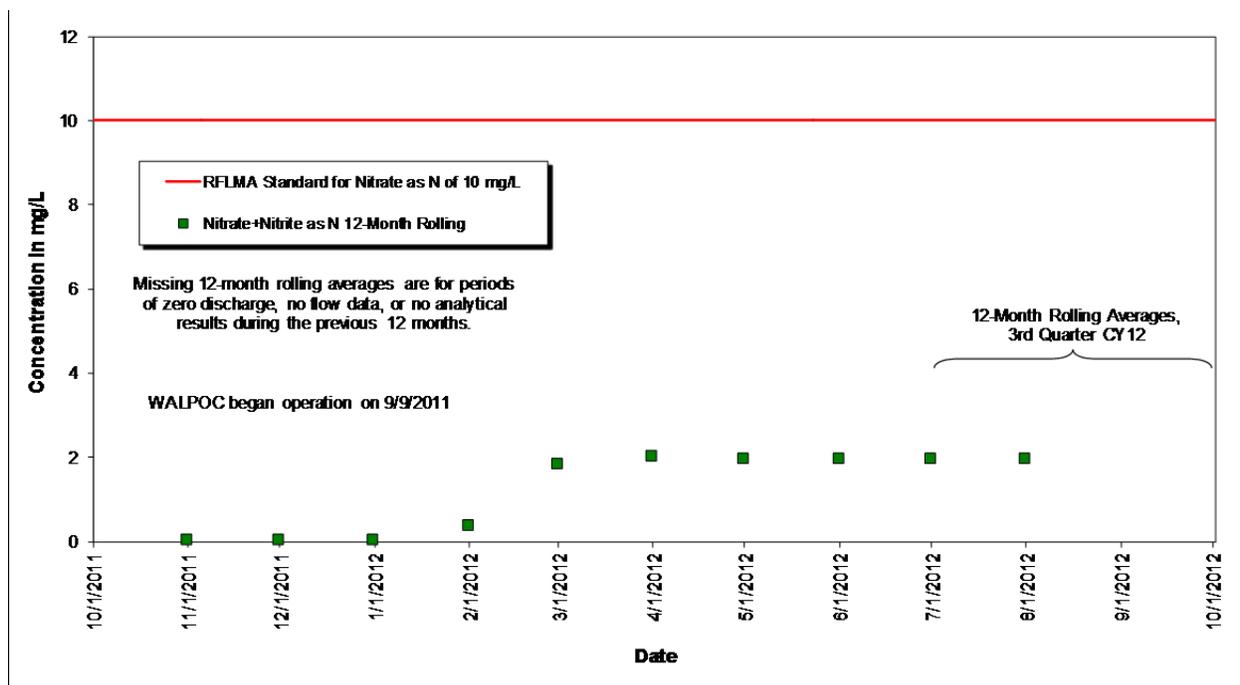
As of this report, the composite sample started on April 13, 2012, was still in progress.
 µg/L = micrograms per liter

Figure 15. Volume-Weighted 12-Month Rolling Average Total Uranium Concentrations at WALPOC: Year Ending Third Quarter CY 2012



mg/L = milligrams per liter

Figure 16. Volume-Weighted 30-Day Average Nitrate + Nitrite as Nitrogen Concentrations at WALPOC: Year Ending Third Quarter CY 2012



Nitrate + nitrite as nitrogen 12-month averages are conservatively compared to the nitrate standard only.
 mg/L = milligrams per liter

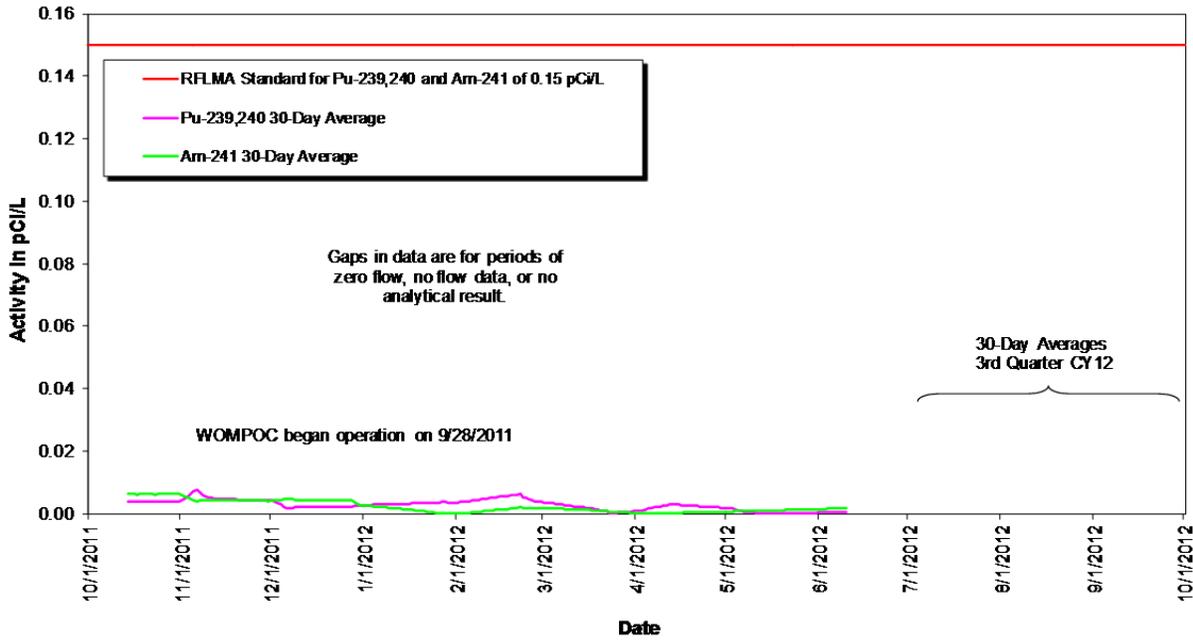
Figure 17. Volume-Weighted 12-Month Rolling Average Nitrate + Nitrite as Nitrogen Concentrations at WALPOC: Year Ending Third Quarter CY 2012

3.1.2.4 Monitoring Location WOMPOC

Monitoring location WOMPOC is on Woman Creek at the eastern COU boundary. Figure 18 through Figure 21 show no occurrences of reportable 12-month rolling or 30-day averages for the quarter using the available data. There was no flow at WOMPOC for the period June 11, 2012, through October 17, 2012.

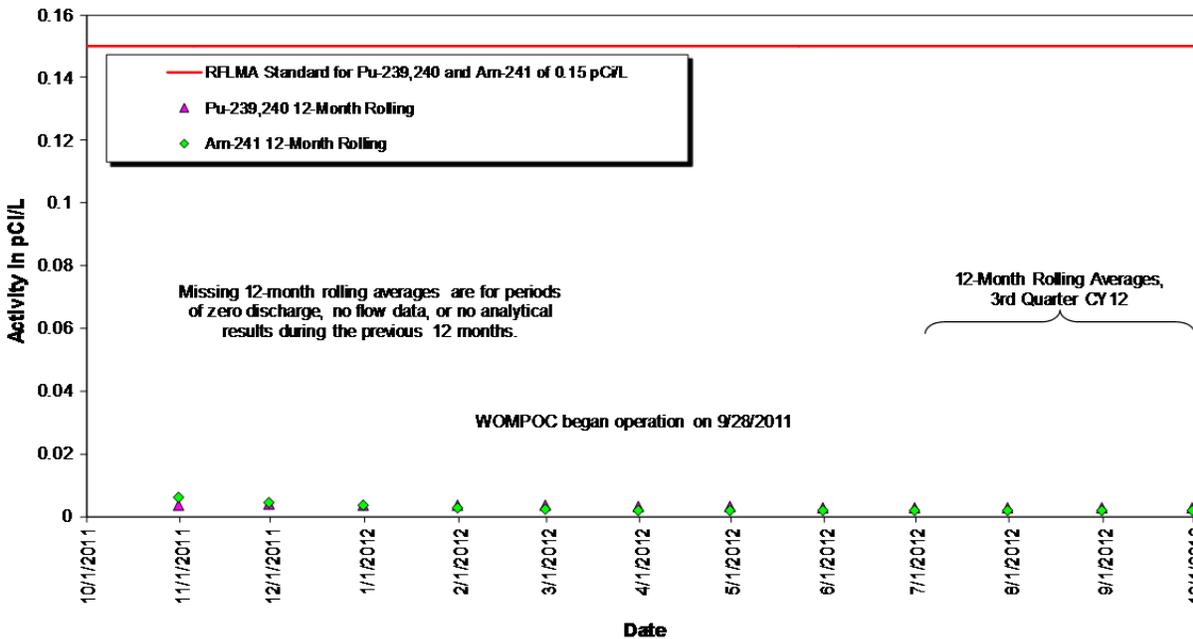
WOMPOC began operation as a RFLMA POC on September 28, 2011. The first flow was observed (and sample collection began) at WOMPOC on October 14, 2011. Therefore, based on routine data evaluation protocols, a 12-month rolling average cannot be formally calculated until at least 1 year has elapsed from the date WOMPOC began operation as a RFLMA POC. Since WOMPOC began operation as a POC on September 28, 2011, the first formal 12-month rolling average is calculated for September 30, 2012.³

³ Individual 12-month rolling average values are calculated using only the last day of each month.



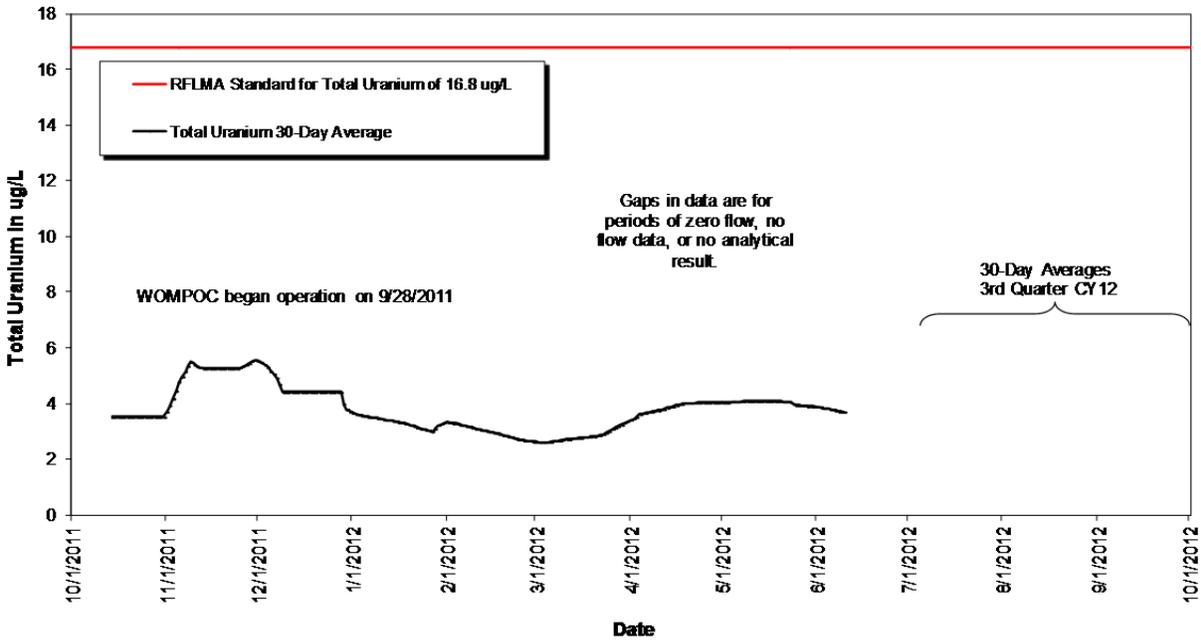
pCi/L = picocuries per liter

Figure 18. Volume-Weighted 30-Day Average Plutonium and Americium Activities at WOMPOC: Year Ending Third Quarter CY 2012



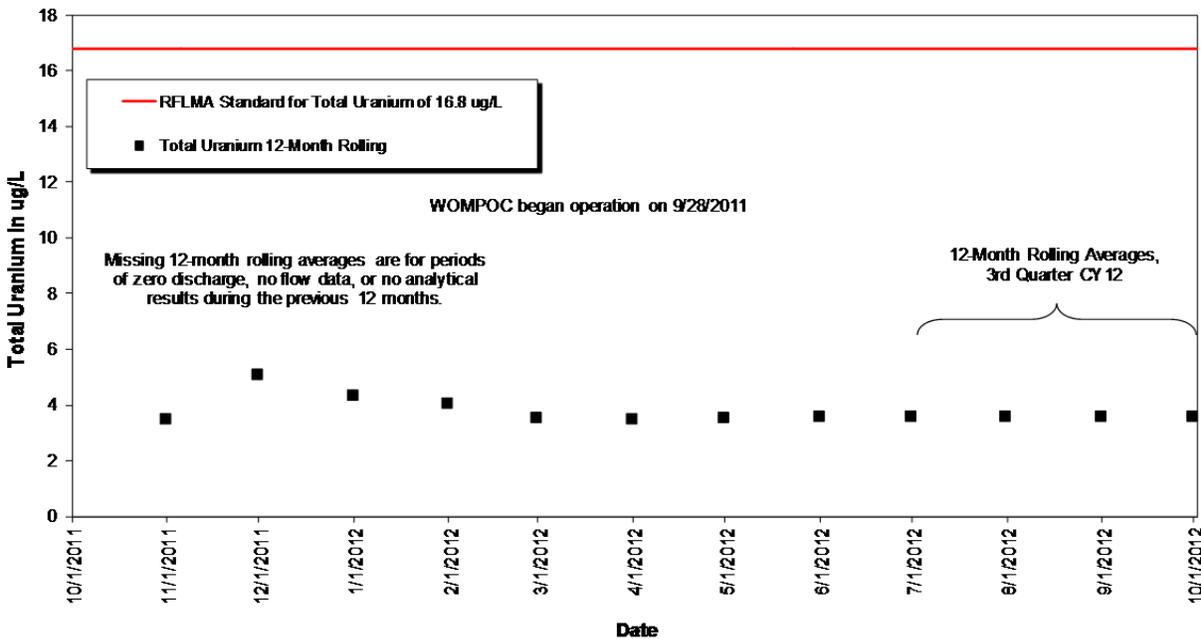
pCi/L = picocuries per liter

Figure 19. Volume-Weighted 12-Month Rolling Average Plutonium and Americium Activities at WOMPOC: Year Ending Third Quarter CY 2012



µg/L = micrograms per liter

Figure 20. Volume-Weighted 30-Day Average Total Uranium Concentrations at WOMPOC: Calendar Year Ending Third Quarter CY 2012



µg/L = micrograms per liter

Figure 21. Volume-Weighted 12-Month Rolling Average Total Uranium Concentrations at WOMPOC: Calendar Year Ending Third Quarter CY 2012

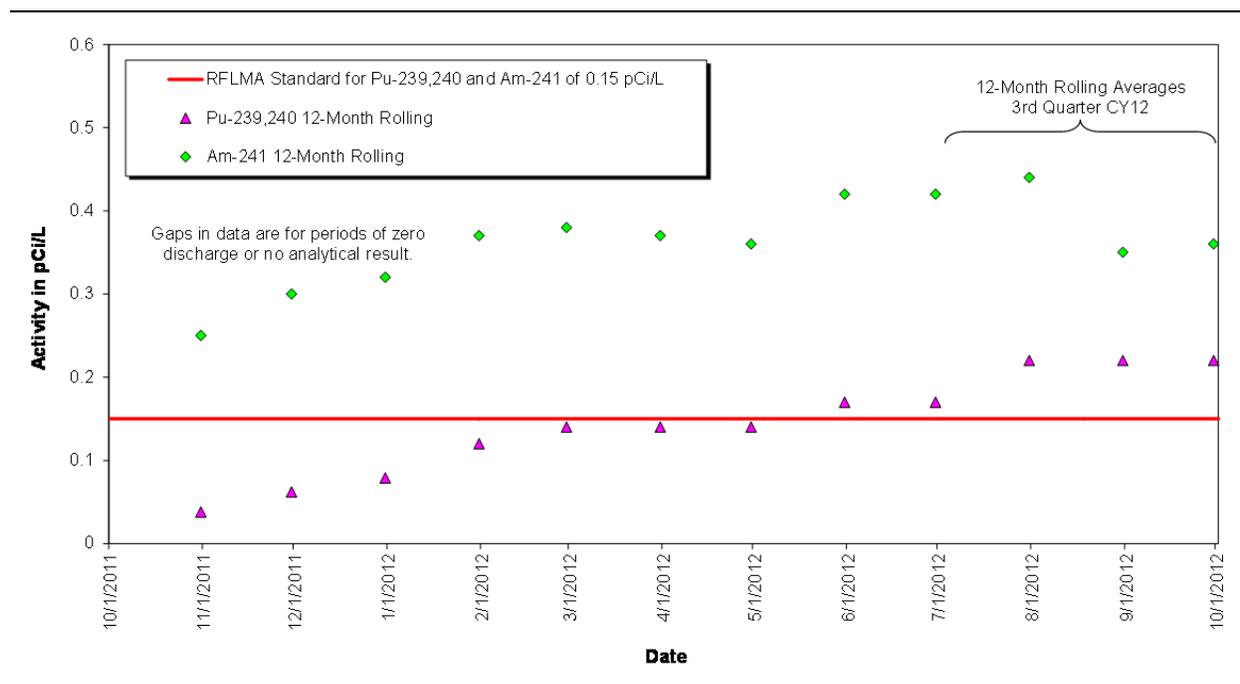
3.1.3 POE Monitoring

The following sections include summary plots showing the applicable 12-month rolling averages for the POE analytes.

3.1.3.1 Monitoring Location GS10

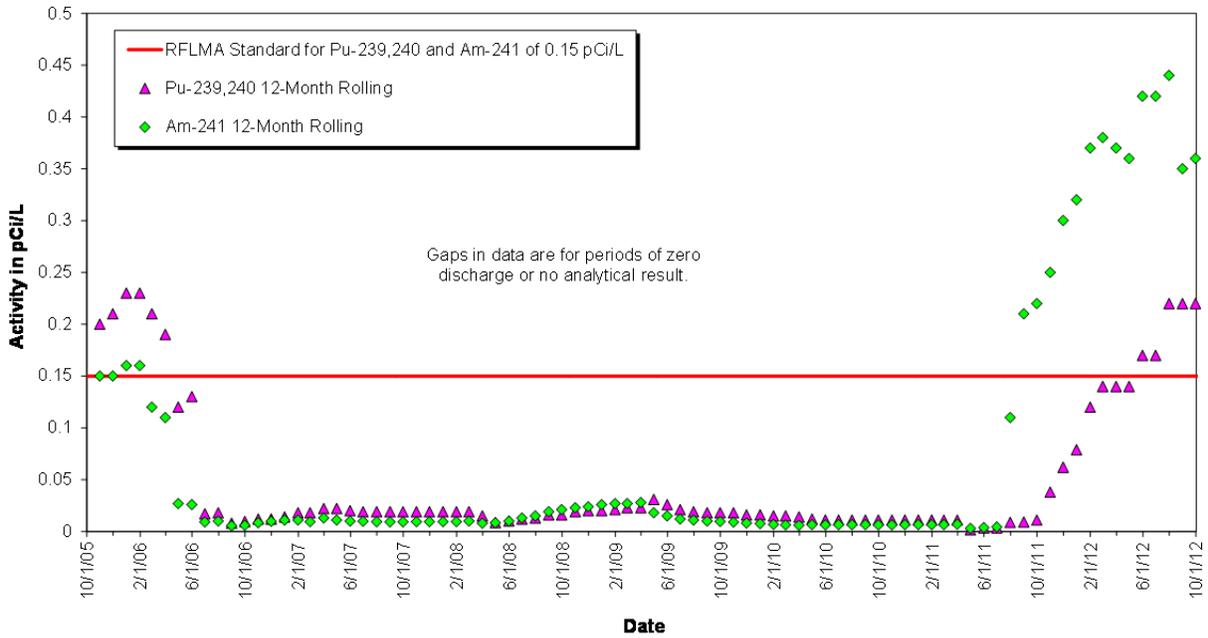
Monitoring location GS10 is on South Walnut Creek just upstream of the B-Series ponds. Figure 22 and Figure 24 show the 12-month rolling averages for Pu, Am, and total uranium values during the quarter. Figure 23 and Figure 25 show sampling data from 2005 through the third quarter of CY 2012.

Reportable 12-month rolling average uranium concentrations were observed starting on April 30, 2011, in surface water at RFLMA POE monitoring station GS10. Reportable 12-month rolling average Am and Pu activities were also observed starting on August 31, 2011, and May 31, 2012, respectively. As of the end of the third quarter of CY 2012, these three analytes were still reportable. No other analytes were reportable during the third quarter of CY 2012.



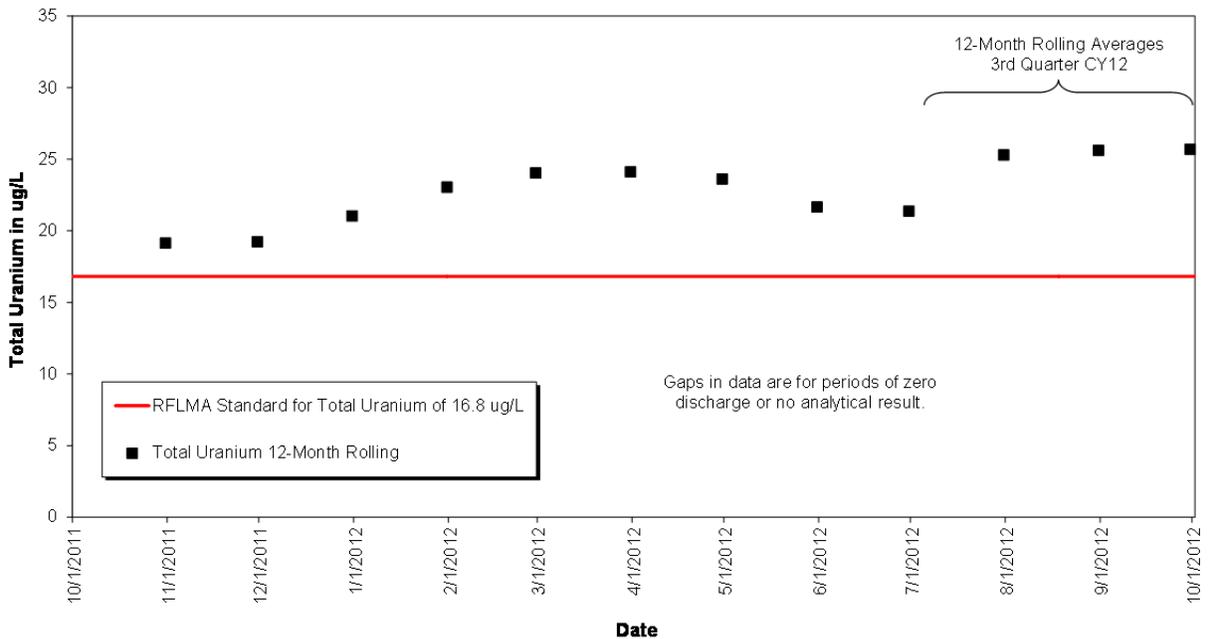
pCi/L = picocuries per liter

Figure 22. Volume-Weighted 12-Month Rolling Average Plutonium and Americium Activities at GS10: Year Ending Third Quarter CY 2012



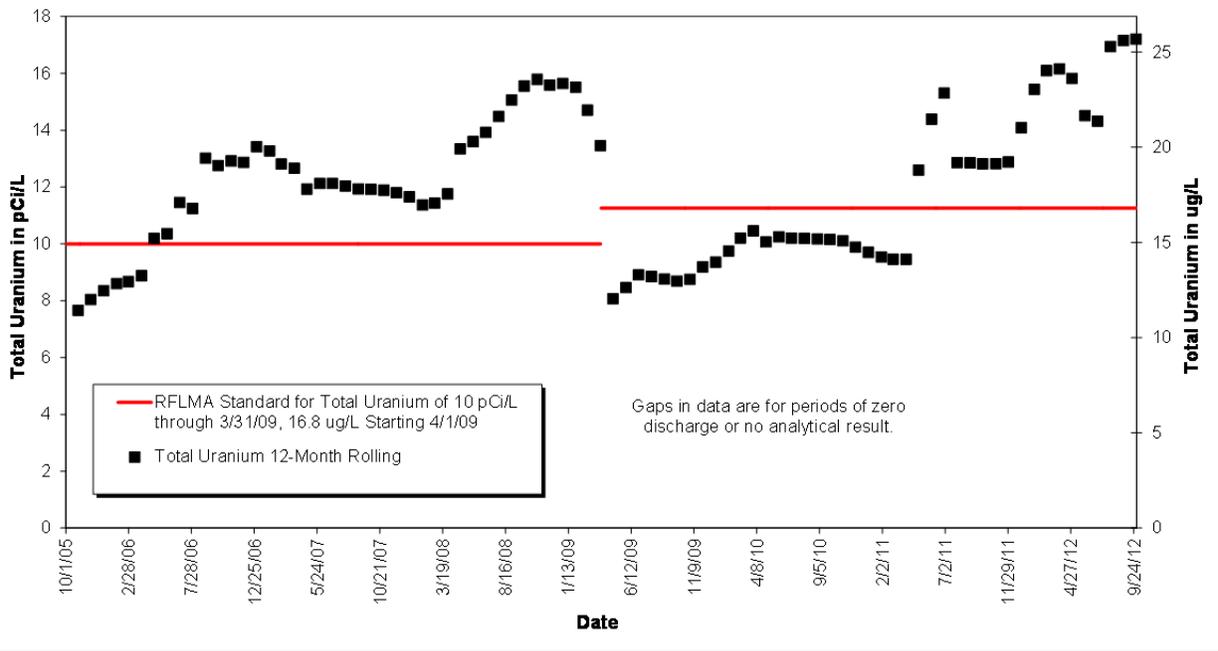
pCi/L = picocuries per liter

Figure 23. Volume-Weighted 12-Month Rolling Average Plutonium and Americium Activities at GS10: Post-Closure Period Ending Third Quarter CY 2012



µg/L = micrograms per liter

Figure 24. Volume-Weighted 12-Month Rolling Average Total Uranium Concentrations at GS10: Year Ending Third Quarter CY 2012



µg/L = micrograms per liter
 pCi/L = picocuries per liter

Figure 25. Volume-Weighted 12-Month Rolling Average Total Uranium Concentrations at GS10: Post-Closure Period Ending Third Quarter CY 2012

The sampling results for plutonium, americium, and uranium from composite samples collected at GS10 during 2011–2012 are given in Table 1.

Table 1. CY 2011–2012 Composite Sampling Results at GS10

Date-Time Start	Date-Time End	Am-241 Result (pCi/L)	Pu-239, 240 Result (pCi/L)	Uranium Result (µg/L)
1/3/2011–10:25	2/16/2011–9:47	0.000	0.000	21.8
2/16/2011–9:47	4/11/2011–10:50	0.000	0.013	89.2
4/11/2011–10:50	5/4/2011–11:39	0.023	0.021	71.0
5/4/2011–11:39	5/13/2011–12:25	0.019	0.017	46.5
5/13/2011–12:25	5/20/2011–12:03	0.003	0.007	18.6
5/20/2011–12:03	6/3/2011–10:56	0.004	0.001	35.8
6/3/2011–10:56	6/13/2011–10:22	0.015	0.000	20.1
6/13/2011–10:22	7/1/2011–9:00	0.010	0.004	10.6
7/1/2011–9:00	7/8/2011–11:08	0.008	0.008	7.75
7/8/2011–11:08	7/10/2011–11:05	0.015	0.005	4.36
7/10/2011–11:05	7/11/2011–10:59	0.020	0.011	6.06
7/11/2011–10:59	7/21/2011–8:56	0.058	0.037	11.3
7/21/2011–8:56	8/24/2011–9:41	3.490	^a	7.82
8/24/2011–9:41	9/29/2011–12:35	0.044	0.020	8.16
9/29/2011–12:35	10/25/2011–10:27	0.877	0.658	8.24
10/25/2011–10:27	11/17/2011–10:40	0.904	0.405	16.5
11/17/2011–10:40	12/14/2011–12:17	0.349	0.189	16.4
12/14/2011–12:17	1/5/2012–13:19	0.435	0.238	44.5
1/5/2012–13:19	1/23/2012–10:43	1.140	0.735	49.7
1/23/2012–10:43	2/2/2012–12:36	0.037	0.021	38.3
2/2/2012–12:36	2/21/2012–11:18	0.776	0.466	49.0
2/21/2012–11:18	2/24/2012–9:34	0.214	0.267	25.1
2/24/2012–9:34	3/6/2012–12:04	0.074	0.050	33.9
3/6/2012–12:04	3/21/2012–9:37	0.150	0.114	38.7
3/21/2012–9:37	4/4/2012–10:20	0.318	0.246	35.5
4/4/2012–10:20	4/25/2012–9:31	0.052	0.034	27.6
4/25/2012–9:31	5/9/2012–13:36	0.478	0.264	16.1
5/9/2012–13:36	5/23/2012–9:37	0.159	0.107	12.9
5/23/2012–9:37	6/14/2012–10:08	0.034	0.033	8.98
6/14/2012–10:08	7/9/2012–11:53	0.085	0.049	4.68
7/9/2012–11:53	7/26/2012–8:58	0.224	0.173	7.07
7/26/2012–8:58	9/12/2012–13:06	0.464	0.314	4.20
9/12/2012–13:06	10/24/2012–10:19	0.012	0.009	3.75
10/24/2012–10:19	12/4/2012–10:43	^b	^b	^b
12/4/2012–10:43	in progress	^c	^c	^c

Recent results from the third quarter of CY 2012 are not yet validated and are subject to revision.

^a Through data validation, results determined to be unusable

^b Analysis pending

^c Sample in progress

µg/L = micrograms per liter

pCi/L = picocuries per liter

Reportable Americium and Plutonium Activities at GS10

Formal notification of a reportable condition for 12-month rolling average americium values at GS10 was made on December 12, 2011. Formal notification of a reportable condition for 12-month rolling average plutonium values at GS10 was made on July 24, 2012.

The above notifications were triggered by routine data evaluation performed in accordance with RFLMA Attachment 2, Figure 6, “Points of Evaluation,” which resulted in 12-month rolling

average values for Am of 0.21 picocuries per liter (pCi/L) on August 31, 2011, and 0.22 pCi/L on September 30, 2011. As of September 30, 2012, using validated data, the 12-month rolling average for Am remained above the standard at 0.36 pCi/L. Similarly, data evaluation resulted in a 12-month rolling average value for Pu of 0.17 pCi/L on May 31, 2012. As of September 30, 2012, using validated data, the 12-month rolling average for Pu remained above the standard at 0.22 pCi/L. The applicable RFLMA Table 1 standard for Am and Pu is 0.15 pCi/L.

Downstream monitoring at GS08, WALPOC, and GS03 continue to show Pu and Am activities well below the RFLMA standard of 0.15 pCi/L. Recent analytical results from these downstream locations are given in Table 2. All the locations in Table 2 have been dry since May 27, 2012. The latest available 12-month rolling and 30-day average Pu/Am activities calculated from flow-paced composite samples are shown on Figure 26 and Figure 27.

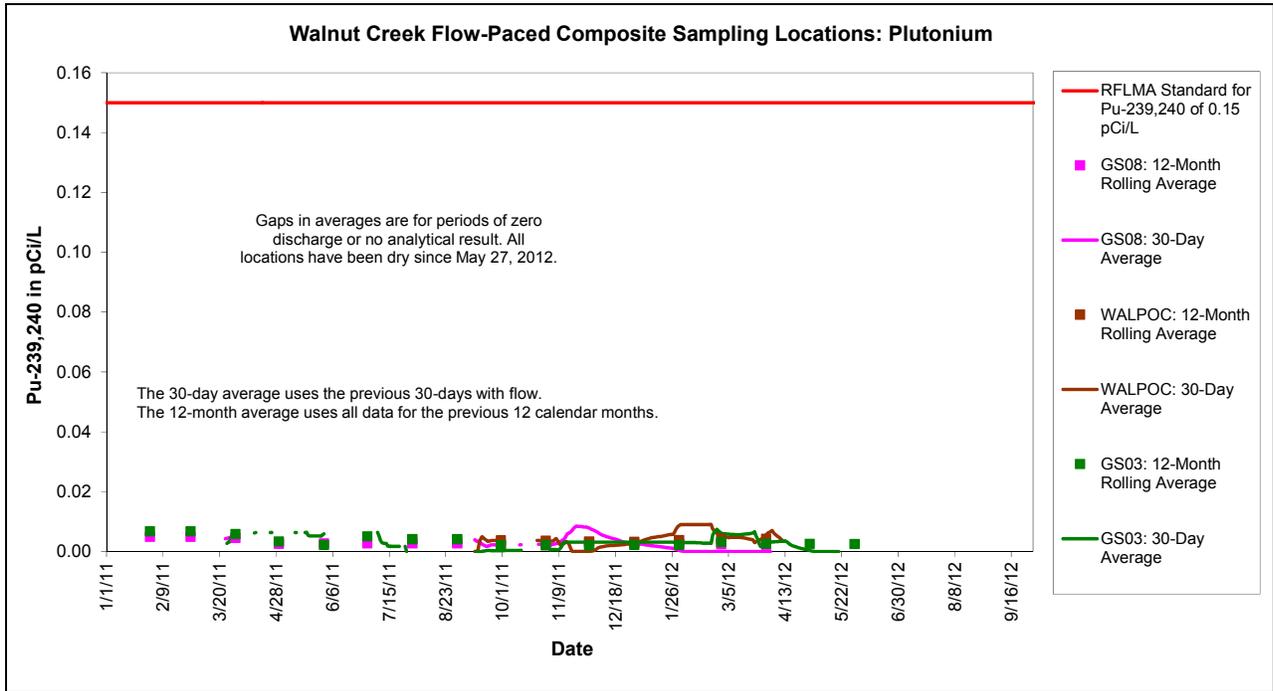
An aliquot from each flow-paced composite sample routinely being collected at B5INFLOW (supporting the GS10 uranium evaluation; Figure 28) is also being held for Pu and Am analysis if upstream sample results at GS10 suggest analysis would inform the evaluation. To date, five Pu/Am results have been obtained and all results are well below the RFLMA standard of 0.15 pCi/L. The highest single result is 0.01 pCi/L Pu for the April 13–May 21, 2012, composite sample.

Table 2. Recent Pu and Am Flow-Paced Composite Sample Results

GS08		WALPOC		GS03	
Sample Period	Result Am/Pu (pCi/L)	Sample Period	Result Am/Pu (pCi/L)	Sample Period	Result Am/Pu (pCi/L)
3/24–3/26/11	0.002/0.003			3/24–3/26/11	0.0/0.002
3/26–3/28/11	0.002/0.004			3/26–3/28/11	0.002/0.003
3/28–3/30/11	0.003/0.0			3/28–3/31/11	0.001/0.011
				3/31–5/20/11	0.002/0.007
				5/20–9/12/11	0.0/0.0
9/12–9/15/11	0.002/0.002	9/12–9/15/11	0.008/0.0	9/12–9/15/11	0.0/0.0
9/15–9/18/11	0.001/0.0	9/15–9/18/11	0.0/0.009	9/15–9/18/11	0.002/0.0
9/18–9/21/11	0.0/0.0	9/18–9/22/11	0.003/0.0	9/18–9/22/11	0.003/0.001
9/21–9/27/11	0.0/0.005	9/22–9/27/11	0.006/0.004	9/22–9/27/11	0.009/0.0
9/27–11/9/11	0.0/0.009	9/27–11/30/11	0.006/0.0	9/27/11–1/3/12	0.003/0.003
11/9–11/29/11	0.005/0.008				
11/29/11–1/5/12	0.005/0.003	11/30/11–1/3/12	0.0/0.003		
1/5–2/1/12	0.001/0.0	1/3–2/23/12	0.0/0.009	1/3–2/10/12	0.006/0.003
2/1–4/4/12	0.0/0.0			2/10–2/23/12	0.0/0.003
		2/23–3/6/12	0.003/0.001	2/23–2/27/12	0.0/0.012
				2/27–3/1/12	0.0/0.0
		3/6–3/21/12	0.004/0.009	3/1–3/15/12	0.0/0.002
		3/21–4/13/12	0.018/0.0	3/15–4/4/12	0.0/0.005
4/4/12–	^a	4/13/12–	^a	4/4–6/6/12	0.0/0.0
				6/6/12–	^a

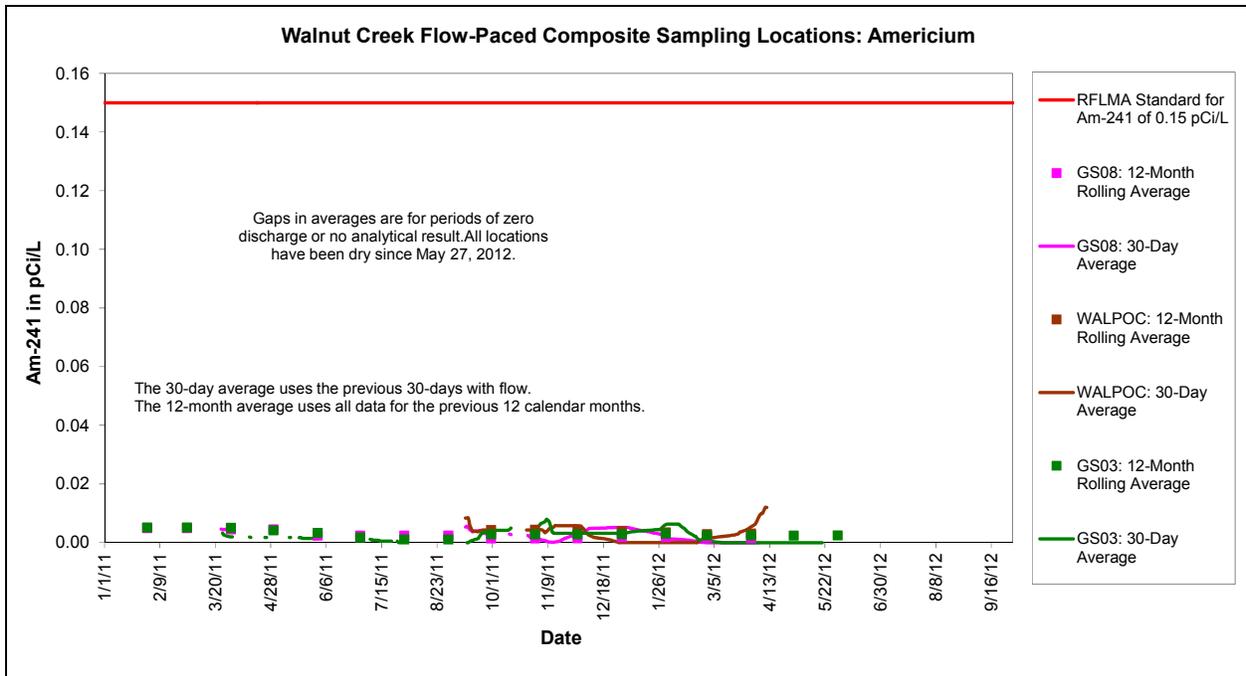
Some results are preliminary and subject to revision; negative results are set to zero.

^a Sample in progress



Plot includes data that are preliminary and subject to revision.
 Values for 12-month and 30-day averages shown here are presented for comparison purposes only.

Figure 26. Average Plutonium Activities at Locations Downstream of GS10



Plot includes data that are preliminary and subject to revision.
 Values for 12-month and 30-day averages shown here are presented for comparison purposes only.

Figure 27. Average Americium Activities at Locations Downstream of GS10

The dry conditions observed during late spring, summer, and fall of 2012 have made it all but impossible to collect additional water samples. Other than GS10, no new upstream or downstream locations have been sampled since the previous quarterly report. Although further evaluation and consultation is ongoing, the following list summarizes action to date:

- Rocky Flats staff walked down the GS10 drainage on November 16, 2011, to see if any obvious conditions were promoting potential soil erosion. Some thin vegetation spots were noted on the north side of the riprap upstream of GS10. Some reseeding/erosion matting may have been useful, but given that the current water quality does not appear to be a result of soil transport, additional erosion controls were not implemented. A closer examination of the drainage to focus on seeps and former utility corridors was conducted on November 22, 2011; representatives from DOE and EPA were in attendance. Additional seed was spread and raked into the ground along the riprap areas upstream of GS10 in FC-4 and at the confluence of FC-4/FC-5 on November 29, 2011.
- Historical Pu and Am well data from wells in the drainage have been reviewed. The review gave no indication that additional well sampling would be informative at this stage.
- The previous GS10 evaluation reports have been reviewed for information that may aid this current evaluation.
- Several of the sampling locations already designated for evaluation of the reportable condition for uranium at GS10 (FC4991, GS10, and B3OUTFLOW; Figure 28) were grab-sampled on November 25, 2011. Several seep sampling locations (SEEP995, SEEP995A, SEEP995B, and SEEP995C; Figure 28) were also grab-sampled on November 25, 2011. The Seep 995 area was chosen for sampling for the following reasons:
 - GS10 samples with elevated Pu/Am were collected during low-flow conditions, not during high-flow conditions when soil/sediment would be expected to be transported.
 - Visible surface flow from this seep was observed reaching FC-4.
 - This seep, which has increased in size since closure, is in the same location of the former Wastewater Treatment Plant outfall and a former utility corridor that included Original Process Waste Lines.

The results in Table 3 suggest that the SEEP995 locations could be contributing Pu and Am to GS10. However, activities at GS10 for this grab sample are low.

Table 3. Grab Sampling Results Upstream of GS10: November 25, 2011

Location Code	SEEP995	SEEP995A	SEEP995B	SEEP995C
Pu [pCi/L]	0.096	0.156	0.157	0.105
Am [pCi/L]	0.066	0.127	0.035	0.052



	Upstream	→	Downstream
Location Code	FC4991		GS10 B3OUTFLOW
Pu [pCi/L]	0.006		0.030 0.005
Am [pCi/L]	0.005		0.012 0.005

The arrow from the upper table indicates the relative location of the SEEP995 locations along FC-4.

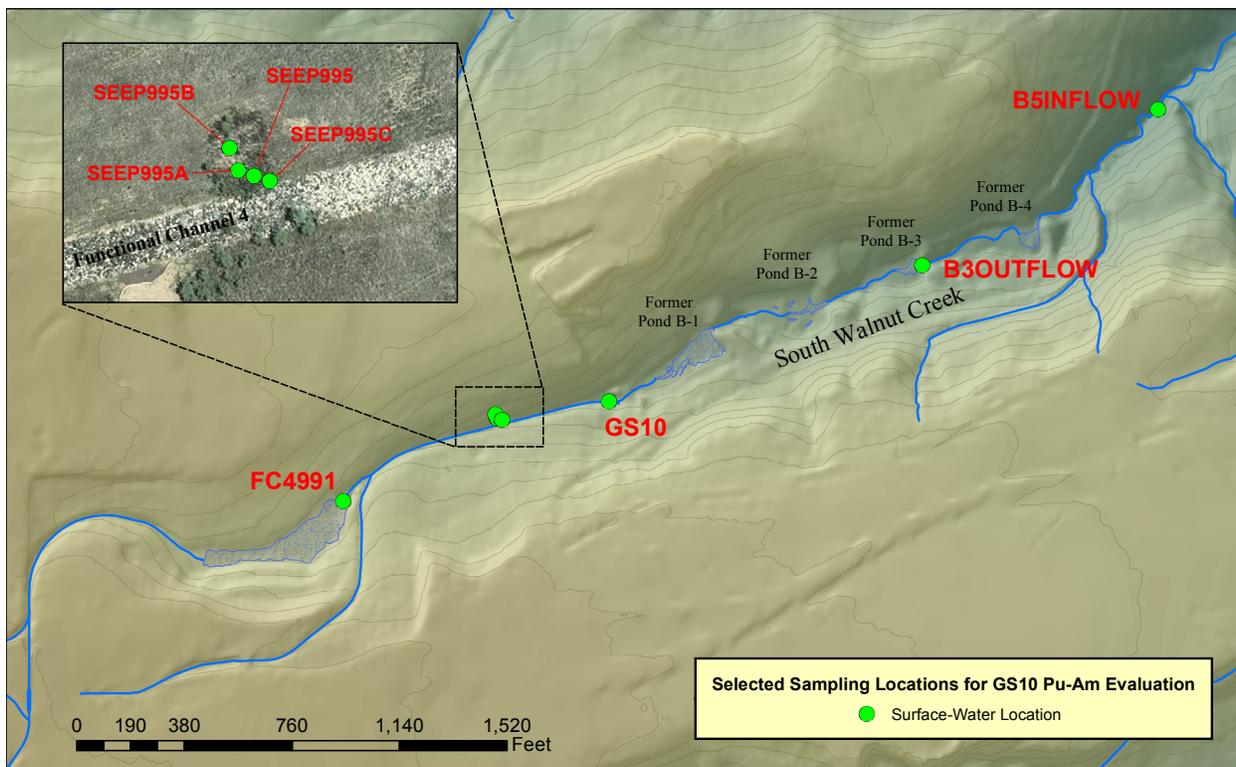


Figure 28. Pu/Am Evaluation Sampling Location Map for GS10 Drainage Area

- Additional samples are being collected at SEEP995A when water is available (i.e., unfrozen seep flow not affected by surface flow such as snowmelt). Samples were collected on January 6, January 24, and April 13, 2012. For the January 24 sample, analysis was performed for total Pu/Am (unfiltered) and also for filtered Pu/Am (sample filtered with 0.45-micron filter) to evaluate for the possibility of colloidal transport. Table 4 shows some measurable activity for the January 6 and April 13 samples. However, the low activities for the January 24 samples do not provide additional insight into the possibility of colloidal transport.

Additional samples will be collected when water is available.

Table 4. Grab Sampling Results from SEEP995A

SEEP995A	1/6/12 (total)	1/24/12 (total)	1/24/12 (filtered)	4/13/12 (total)
Pu [pCi/L]	0.079	0.007	0.000	0.052
Am [pCi/L]	0.052	0.000	0.000	0.040
U [ug/L]	12.3	13.7	NA	7.8

NA = not analyzed
 ug/L = micrograms per liter

- To evaluate whether there could be other seep-related contributions along FC-4 that are not visible due to the thick riprap, several sampling locations were established along FC-4 where water could be reached between the rock (Figure 29). These locations were grab-sampled on March 6, 2012, for both total and filtered analytes.

The results in Table 5 show low Pu and Am activities and no significant spatial trends for any of the analytes. Additional samples will be collected when water is available.

Table 5. Grab Sampling Results in FC-4 Upstream of GS10: March 6, 2012

Location Code	SEEP995A
Pu [pCi/L]	0.004
Am [pCi/L]	0.003
U [ug/L]	11.2
Alk as CaCO3 [mg/L]	143
Hardness as CaCO3 [mg/L]	384
pH	7.84@4.1C
TSS [mg/L]	6

	Upstream	→	→	Downstream
Location Code	FC4988	FC4995	FC4997	FC4EFF
Pu [pCi/L]	0.026	0.000	0.007	0.004
Am [pCi/L]	0.002	0.001	0.002	0.000
U [ug/L]	19.0	19.1	18.7	18.7
Alk as CaCO3 [mg/L]	261	256	246	246
Hardness as CaCO3 [mg/L]	478	468	464	462
pH	7.74@3.5C	7.62@3.2C	7.64@3.5C	7.71@3.7C
TSS [mg/L]	113	2	1	5

The arrow from the upper table indicates the relative location of SEEP995A along FC-4.

Alk = alkalinity
 CaCO3 = calcium carbonate
 ug/L = micrograms per liter
 mg/L = milligrams per liter
 TSS = total suspended solids

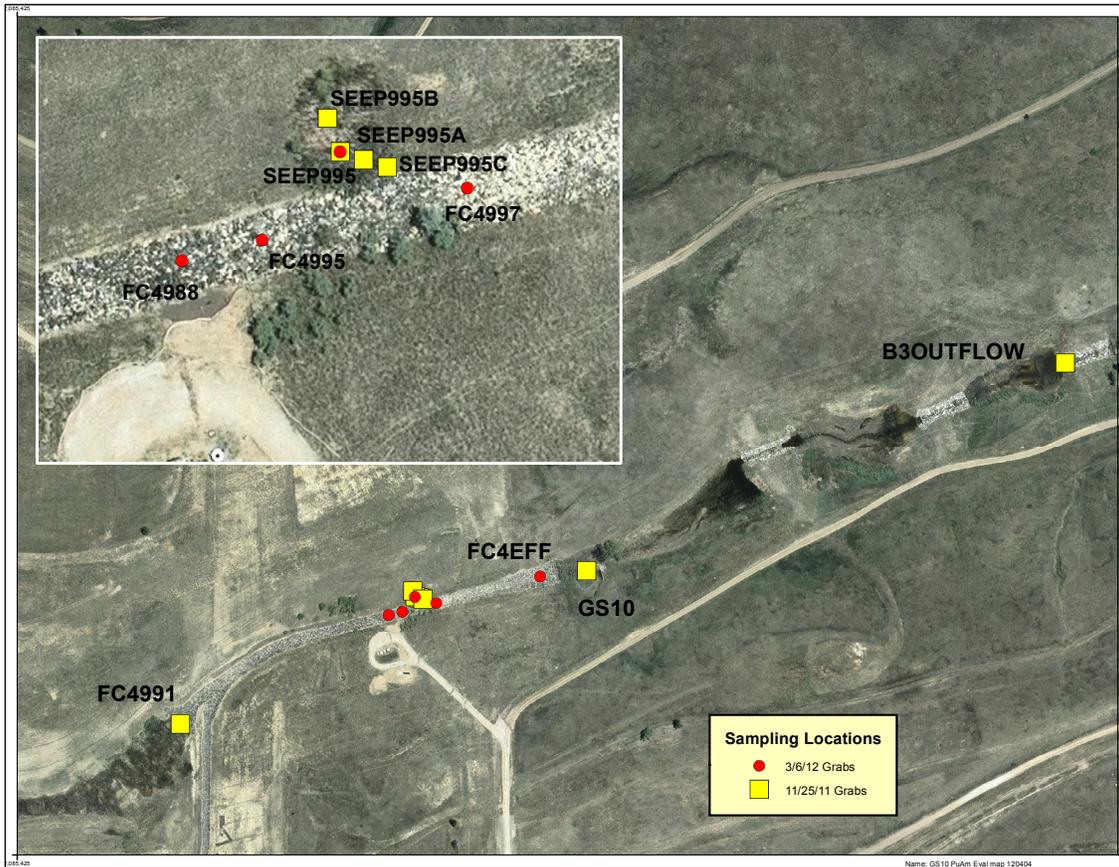


Figure 29. Pu/Am Evaluation Sampling Location Map in FC-4 and South Walnut Creek

- To evaluate for any Pu and Am transport characteristics specifically related to the dissolved, colloidal, and particulate mechanisms, water from the routine GS10 composite samples is periodically being analyzed after filtration with a 0.45-micron filter.

A filtered sample is prepared from selected composite carboys collected at GS10. The routine RFLMA sample is analyzed for total (unfiltered) Pu, Am, uranium, beryllium, chromium, and hardness. If the analytical results show Pu and Am concentrations above the 0.15 pCi/L standard, then the corresponding filtered sample may be submitted for analysis. To date, three GS10 composite samples have been analyzed as filtered and unfiltered (Table 6).

Table 6. Results for Filtered and Unfiltered Sample Pairs at GS10: March 21, April 25, and July 26, 2012, Composites

Analyte	3/21–4/4/12 Composite		4/25–5/9/12 Composite		7/26–9/12/12 Composite	
	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
Am-241 (pCi/L)	0.318	0.000	0.478	0.000	0.464	0.000
Pu-239, 240 (pCi/L)	0.246	0.000	0.264	0.026	0.314	0.002
Uranium (µg/L)	35.5	34.2	16.1	not analyzed	3.75	3.63

µg/L = micrograms per liter

Table 6 shows that nearly all of the Pu and Am were removed by the 0.45-micron filter. Additionally, nearly all of the uranium passed through the filter. These results support the conclusions of previous research showing that Pu and Am move in association with particulates, while uranium is dissolved. However, these results indicate that the Pu and Am are only associated with particles larger than 0.45 micron once they reach GS10 and are processed for submittal to the laboratory. It is still possible that Pu and Am could reach surface water in association with sub-0.45 micron colloids, but then adsorb to other geologic materials or simply aggregate.

Additional unfiltered-filtered sample pairs are planned to be collected from seeps and surface water upstream of GS10 once the current extremely dry conditions end and water is available for sampling.

- Grab samples have been collected upstream of GS10 from both seeps and surface water in an attempt to define the spatial variability of Pu and Am activities. However, grab samples have failed to show activities similar to those measured in flow-paced composites collected at GS10. This suggests either that the source of the GS10 Pu/Am is not affecting the grab sample locations, the source could be very close to GS10, the Pu and Am follow a pathway that is difficult to sample (e.g., below the riprap and fill in FC-4), or the source is intermittent, such that grabs have missed the Pu/Am, while the flow-paced composites at GS10 (with up to 100 individual grabs) have been more successful.

Therefore, time-paced automated samplers were deployed at FC4997 and GS10 (Figure 29; the latter is a secondary sampler located at GS10) to collect 72 grabs (200 milliliters each) at 2-hour intervals over the course of 6 days. Table 7 presents the results, which show very low Pu/Am activities and give practically no indication of spatial variability.

Table 7. Results for Time-Paced Composites at GS10 and FC4997: May 22–28, 2012

Analyte	FC4997 (upstream)	GS10 (downstream)
Am-241 (pCi/L)	0.005	0.005
Pu-239, 240 (pCi/L)	0.00	0.00
Uranium (µg/L)	10.4	10.6
Alkalinity as CaCO ₃ (mg/L)	205	246
Hardness as CaCO ₃ (mg/L)	492	517

CaCO₃ = calcium carbonate

µg/L = micrograms per liter

mg/L = milligrams per liter

- Flow-paced composite samples routinely being collected at WALPOC will continue to be requested to be analyzed on a 2-week turnaround. Analyses for flow-paced composite samples routinely being collected at GS10 and GS08 are also currently being requested to be analyzed on a 2-week turnaround.

Updates to the ongoing evaluation for GS10 will periodically be communicated through public meetings, routine reports, and contact records. For additional information go to

http://www.lm.doe.gov/Rocky_Flats/ContactRecords.aspx

Reportable Uranium Concentrations at GS10

The routine GS10 uranium data evaluation is performed in accordance with RFLMA Attachment 2, Figure 6, “Points of Evaluation,” which resulted in a calculated 12-month rolling average concentration for uranium on April 30, 2011, of 18.8 micrograms per liter (µg/L). More recent 12-month rolling averages using validated data through September 30, 2012, continue to exceed the RFLMA applicable Table 1 standard of 16.8 µg/L.

Initial notification to the regulatory agencies and the public, in accordance with RFLMA Attachment 2, Figure 6, was made by e-mail on June 16, 2011. RFLMA Contact Record 2011-04 (July 8, 2011), “Reportable Condition for Uranium at Point of Evaluation GS10,” provides a discussion of the monitoring results and recaps the outcome of the RFLMA Parties consultation regarding the evaluation steps to be taken. RFLMA Contact Record 2011-05 (October 4, 2011), “Update for Reportable Condition for Uranium at Point of Evaluation GS10,” provides an update of the monitoring results and provides further discussion of the path forward. Both contact records are available on the Rocky Flats website,

http://www.lm.doe.gov/Rocky_Flats/ContactRecords.aspx.

Figure 30 shows the locations sampled during CY 2011–2012 in support of the uranium evaluation for GS10. (GS03, which is the current POC on Walnut Creek at Indiana Street, is not shown.)

The following is an update to the ongoing GS10 uranium evaluation:

- Downstream monitoring at B5INFLOW, GS08, WALPOC, and GS03 (Figure 30) continue to show uranium concentrations below 16.8 µg/L. Recent analytical results at downstream locations are given in Table 8. The latest available 12-month rolling and 30-day average uranium concentrations calculated from flow-paced composite samples are shown in Figure 31.

- Additional sampling and analysis for uranium within the GS10 drainage continues. Following the initial consultation, two temporary surface-water sample locations upstream of GS10 were established for biweekly uranium grab sampling (FC4991 and FC4750; Figure 30). Biweekly sampling at these locations was initiated on June 30, 2011.

These new locations supplement GS10, B3OUTFLOW, B5INFLOW, and B5 POND (Figure 30), which have been sampled biweekly for uranium since January 27, 2010. Data from these six locations are summarized in Table 9. The averages are shown on Figure 32.

- As noted in previous RFLMA quarterly reports, the following samples were sent to Los Alamos National Laboratory (LANL) for isotopic analysis during the spring of 2011. LANL determines the percentages of natural and anthropogenic uranium to compare with percentages in pre-closure and post-closure samples previously analyzed by LANL. The locations described below are shown on Figure 30:

- Flow-paced surface-water sample from GS10 for the period June 3 to June 13, 2011. (Historically, GS10 has shown approximately 70 percent natural uranium.)
- Groundwater sample from upgradient well 99405. (Historically, 99405 has shown uranium concentrations that typically exceed 100 µg/L and have been 99.9 to 100 percent natural uranium.)

The results of the LANL analysis have been reported by LANL to S.M. Stoller Corporation (Stoller) staff. The following highlights are noted:

- The signature results for GS10 do not match the historical natural uranium percentage of approximately 70 percent. Natural uranium was reported as 50.6 percent. The uranium concentration was 21.6 µg/L. The previous LANL sample, taken on March 17, 2010, was 24.1 µg/L and 72.3 percent natural uranium.
- The results for well 99405 were 411.1 µg/L uranium, with a 100 percent natural uranium signature. These results are consistent with historical data.

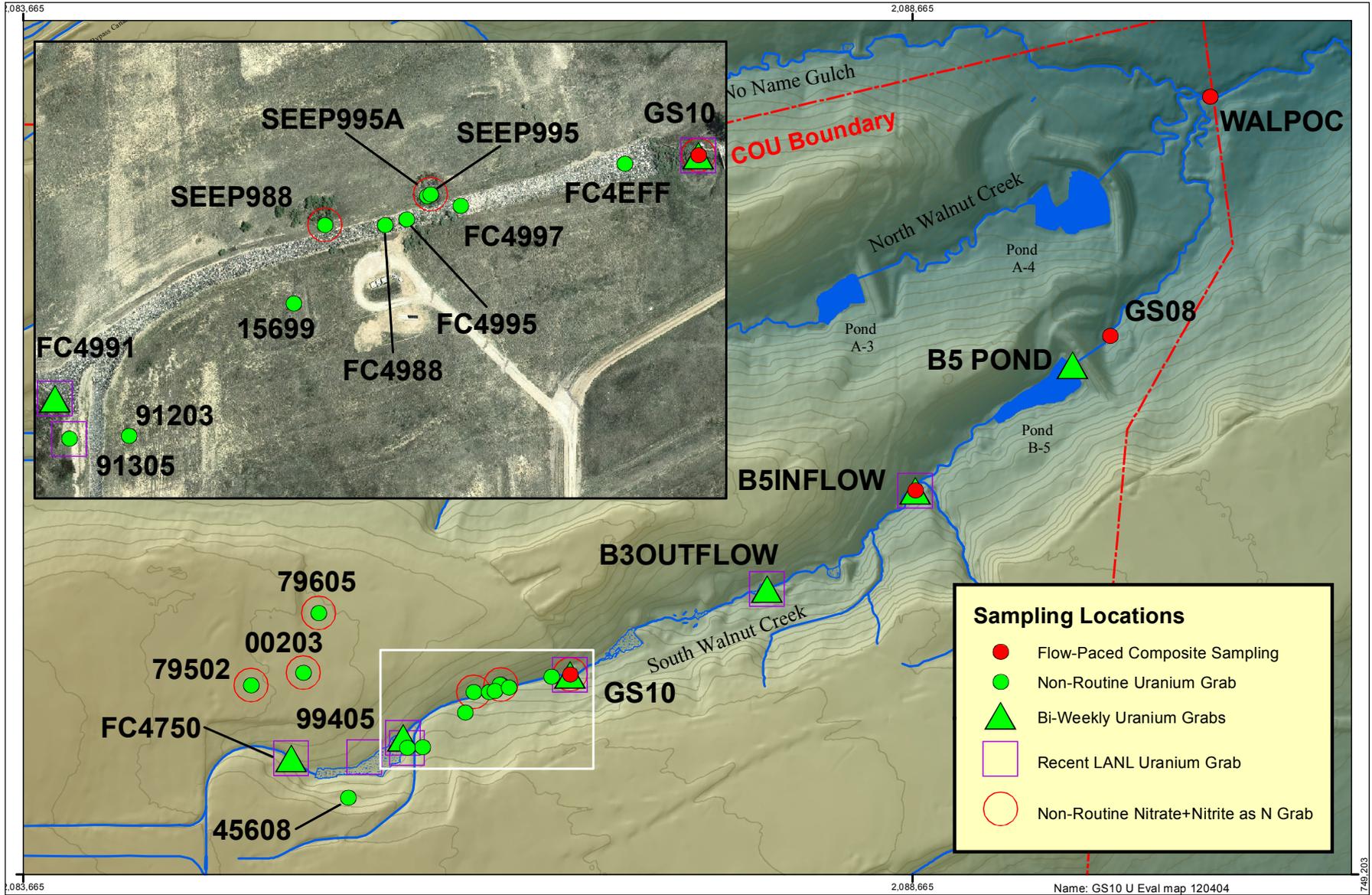


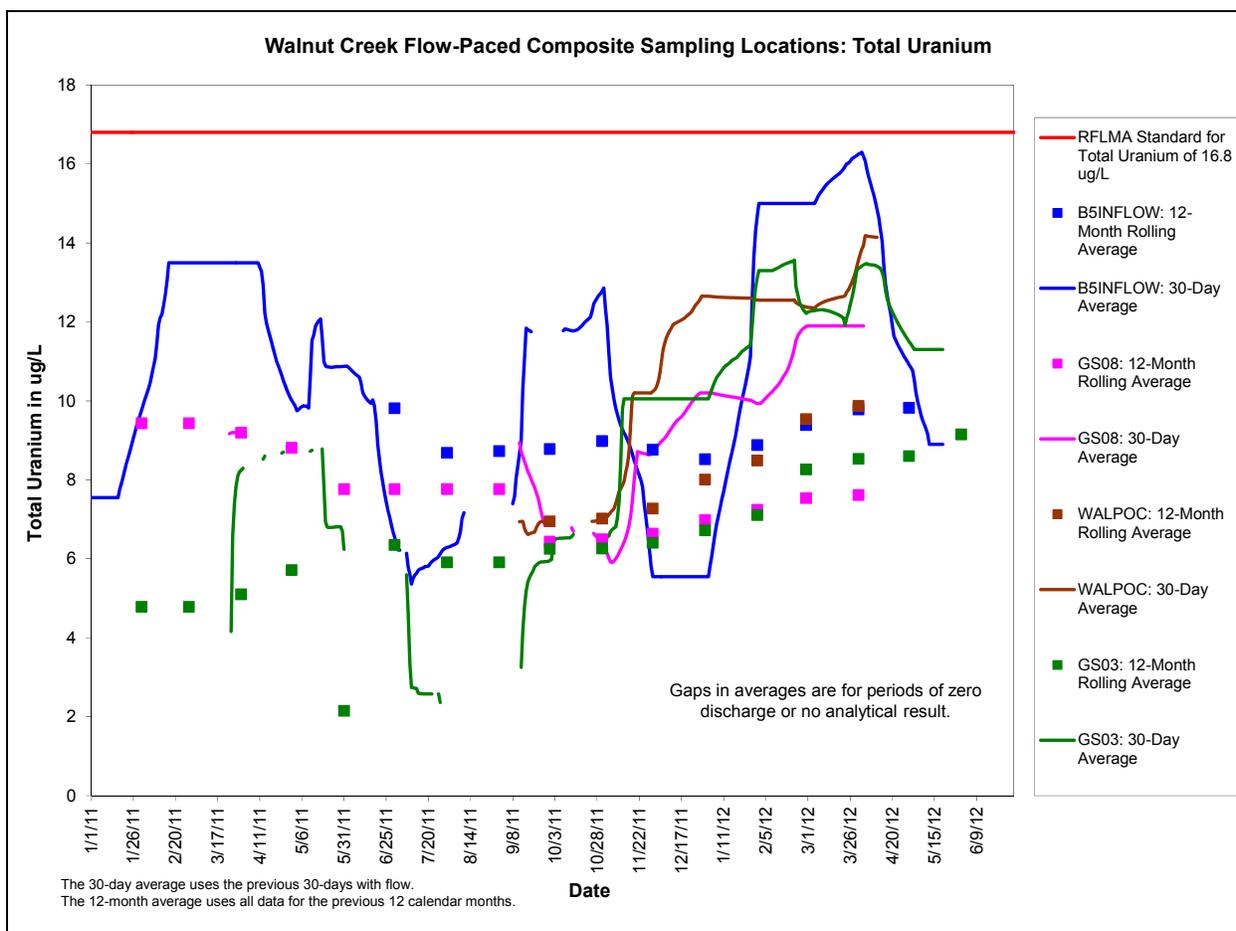
Figure 30. Uranium Evaluation Sampling Location Map for GS10 Drainage Area

Table 8. Recent Uranium Flow-Paced Composite Sample Results

B5INFLOW		GS08		WALPOC		GS03	
Sample Period	Result (µg/L)	Sample Period	Result (µg/L)	Sample Period	Result (µg/L)	Sample Period	Result (µg/L)
1/18–4/11/11	13.5	3/24–3/26/11	7.9			3/24–3/26/11	8.0
4/11–5/4/11	9.1	3/26–3/28/11	7.5			3/26–3/28/11	9.1
5/4–5/13/11	14.6	3/28–3/30/11	7.9			3/28–3/31/11	9.2
5/13–5/18/11	11.9					3/31–5/20/11	3.3
5/18–5/19/11	8.0					5/20–9/12/11	2.4
5/19–5/20/11	10.3						
5/20–6/3/11	10.5						
6/3–7/1/11	6.2						
7/1–7/10/11	5.3						
7/10–7/11/11	4.7						
7/11–7/21/11	6.2						
7/21–8/24/11	12.2	9/12–9/15/11	5.6	9/12–9/15/11	6.9	9/12–9/15/11	6.1
8/24–9/29/11	11.2	9/15–9/18/11	5.4	9/15–9/18/11	6.3	9/15–9/18/11	6.9
		9/18–9/21/11	5.7	9/18–9/22/11	6.8	9/18–9/22/11	6.7
9/29–11/1/11	13.3	9/21–9/27/11	6.0	9/22–9/27/11	7.6	9/22–9/27/11	6.2
11/1/11–1/3/12	5.6	9/27–11/9/11	8.8	9/27–11/30/11	10.2	9/27/11–1/3/12	10.1
		11/9–11/29/11	8.5				
		11/29/11–1/5/12	10.2	11/30/11–1/3/12	12.7		
1/3–3/6/12	15.0	1/5–2/1/12	9.9	1/3–2/23/12	12.6	1/3–2/10/12	13.3
		2/1–4/4/12	11.9			2/10–2/23/12	13.7
				2/23–3/6/12	12.2	2/23–2/27/12	11.2
						2/27–3/1/12	11.4
3/6–3/23/12	17.4			3/6–3/21/12	14.2	3/1–3/15/12	13.1
3/23–4/13/12	13.2			3/21–4/13/12	14.1	3/15–4/4/12	14.2
4/13–5/21/12	8.90	4/4/12–	^a	4/13/12–	^a	4/4–6/6/12	11.3
5/21/12–	^a					6/6/12–	^a

Some results are preliminary and subject to revision.

^a Sample in progress



Plot includes unvalidated analytical data that are preliminary and subject to revision.

Figure 31. Average Uranium Concentrations at Locations Downstream of GS10

Table 9. Summary of Biweekly Uranium Grab Sampling in South Walnut Creek

South Walnut Creek		Uranium (ug/L)			
		Location Code	Average	Sample Count	85th Percentile
Upstream ↓ ↓ ↓ ↓	FC4750	21.5	21	25.0	19.0
	FC4991	13.7	23	22.7	11.0
	GS10	14.4	73	21.2	13.0
	B3OUTFLOW	15.7	57	23.0	17.0
	B5INFLOW	12.4	53	18.0	11.0
Downstream	B5 POND	8.23	75	10.9	7.30

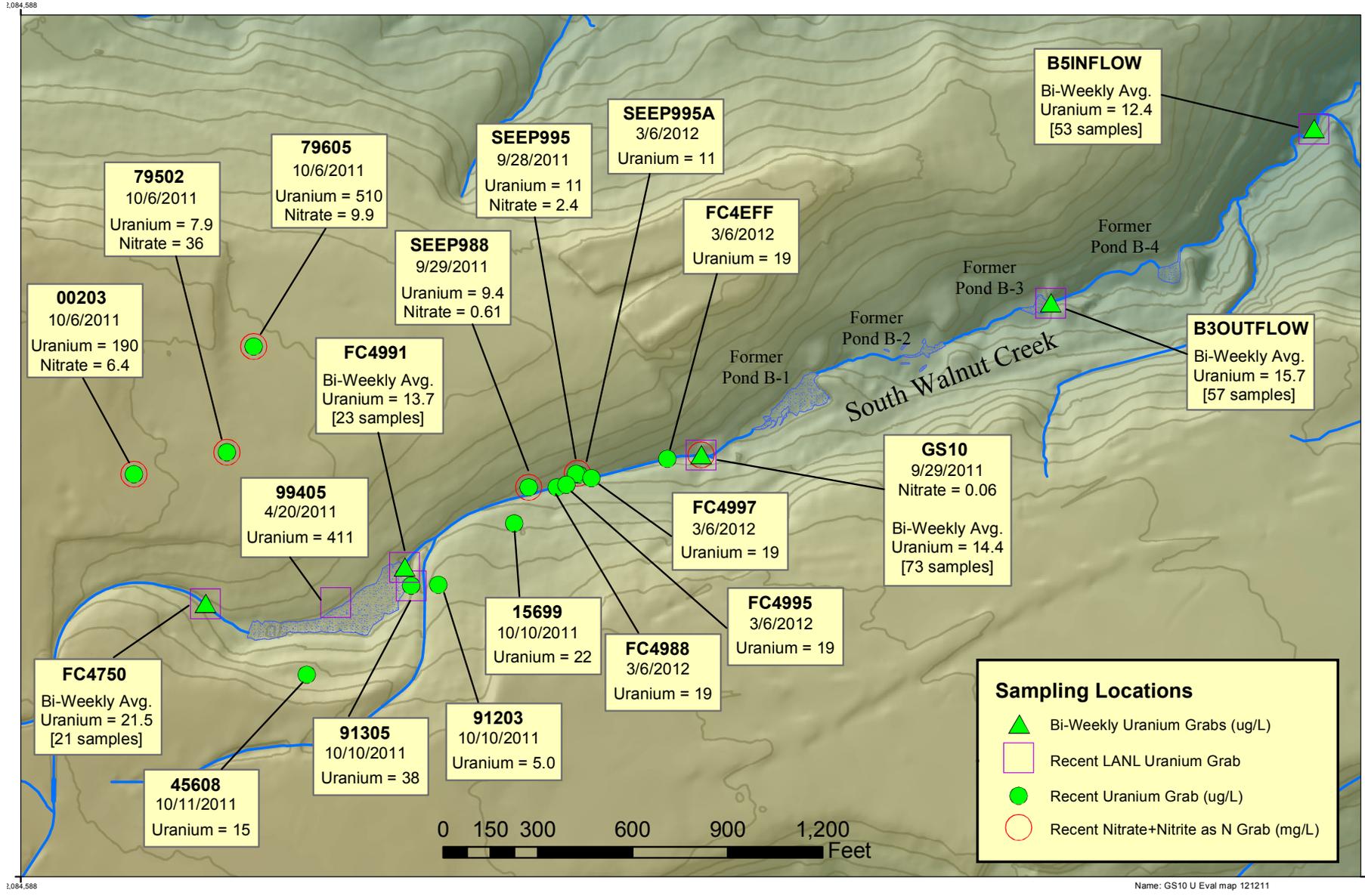


Figure 32. Uranium and Nitrate + Nitrite as N Results for Grab Samples Collected in South Walnut Creek

Name: GS10 U Eval map 121211

- Based on the above LANL results for GS10, the following additional samples were collected in the fall of 2011 and sent to LANL for isotopic analysis (the locations are shown on Figure 30):
 - Water from the routine flow-paced composite sample collected at GS10 during the period August 24–September 29, 2011, to help confirm the previous sample results.
 - Grab samples at FC4750 and FC4991 collected on September 28, 2011.
 - Water from the routine flow-paced composite sample collected at B5INFLOW during the period August 24–September 29, 2011. This location does not have previous LANL results.
 - A grab sample at B3OUTFLOW collected on September 27, 2011. One post-closure LANL sample has been collected at B3OUTFLOW. The result was a 74.7 percent natural uranium signature.
 - A grab sample at well 91305, which is upgradient of GS10, collected on October 10, 2011.

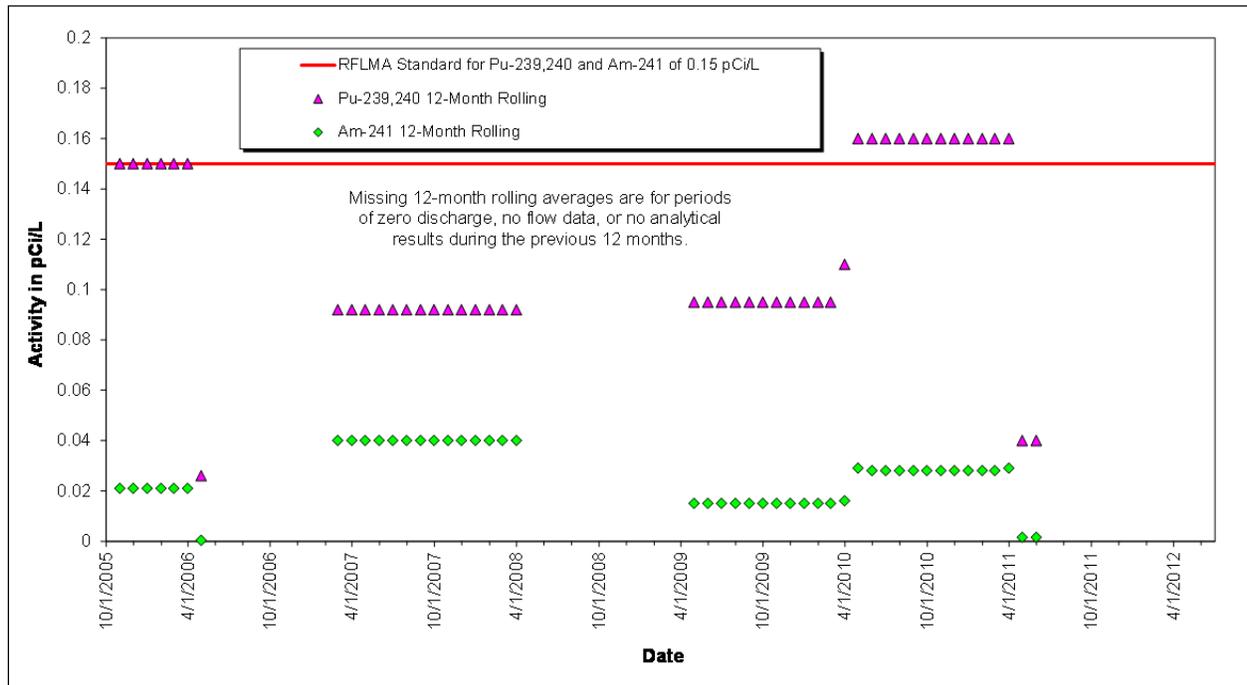
The results of the LANL analysis have been reported by LANL to Stoller staff. The following highlights are noted:

- The signature results for GS10 have returned to the historical natural uranium percentage of approximately 70 percent. Natural uranium was reported as 70.2 percent. The uranium concentration was 8.9 µg/L.
- The results for all of the other locations show natural uranium signatures between 70.9 and 90.8 percent. These results are consistent with historical data (where said data exist).
- Additional nonroutine grab samples have been collected to assist in the possible identification of a source that may have contributed to elevated uranium levels at GS10. The results are shown on Figure 32. These additional samples included the following:
 - Wells 15699, 45608, 91305, and 91203 were grab-sampled for uranium on October 10–October 11, 2011.
 - Wells 00203, 79502, and 79605 were grab-sampled for uranium and nitrate + nitrite as N on October 6, 2011.
 - GS10 and hillside seep locations SEEP988 and SEEP995 were also grab-sampled for uranium and nitrate + nitrite as N on September 28–September 29, 2011.
- Additional samples are scheduled to be sent to LANL for isotopic analysis in the near future. The locations are shown on Figure 30 and are described below:
 - Flow-paced surface-water sample from GS10 for the period March 6–21, 2012.
 - Flow-paced surface-water samples from WALPOC for the periods September 22–27, 2011; January 3–February 23, 2012; February 23–March 6, 2012; and March 6–21, 2012. Water from WALPOC has not been previously analyzed at LANL.

Updates to the ongoing evaluation for GS10 will periodically be communicated through public meetings, routine reports, and contact records. For additional information go to http://www.lm.doe.gov/Rocky_Flats/ContactRecords.aspx.

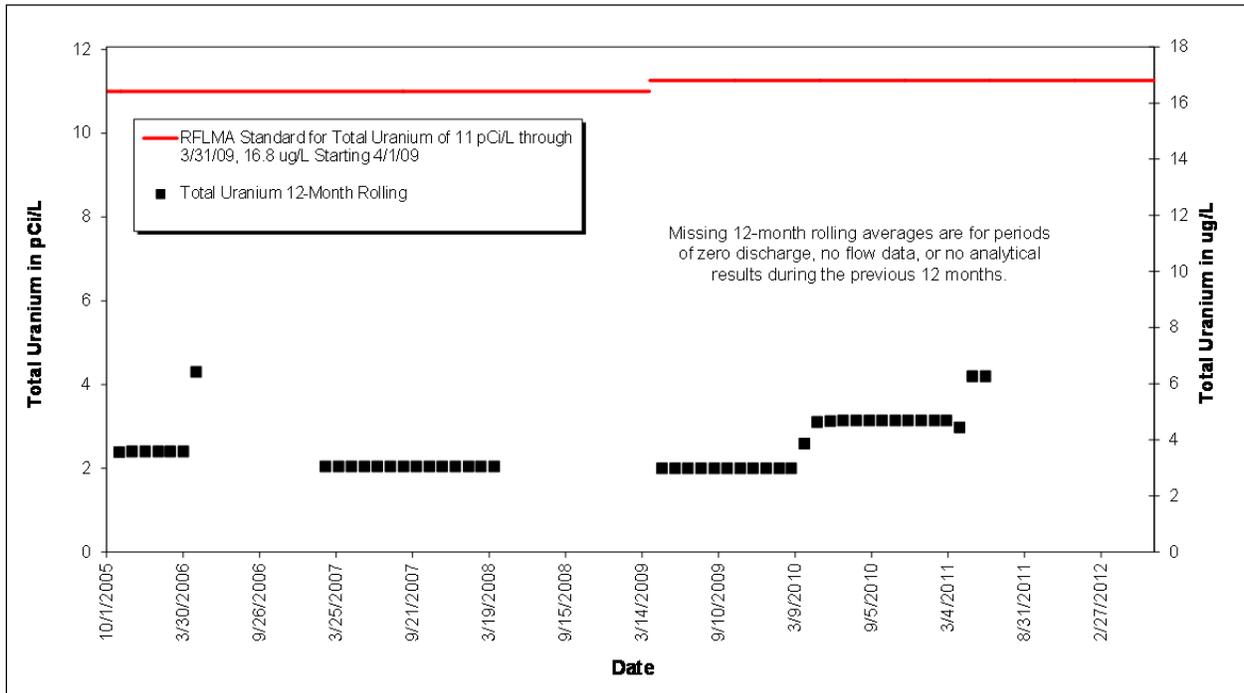
3.1.3.2 Monitoring Location SW027

Monitoring location SW027 is at the end of the South Interceptor Ditch at the inlet to Pond C-2. Since no samples have been successfully collected since 2010 (only 4,033 gallons of flow have been recorded at SW027 in the last 2.5 years), no 12-month rolling averages can be calculated for the year ending on September 30, 2012. Figure 33 and Figure 34 show water-quality data for plutonium, americium, and uranium from 2005 through the third quarter of CY 2012. The most recent 12-month rolling averages are all below the applicable standards. All other analytes were also not reportable for the quarter.



No samples have been successfully collected since 2010; only 4,033 gallons of flow have been recorded in the last 2.5 years.

Figure 33. Volume-Weighted 12-Month Rolling Average Plutonium and Americium Activities at SW027: Post-Closure Period Ending Third Quarter CY 2012

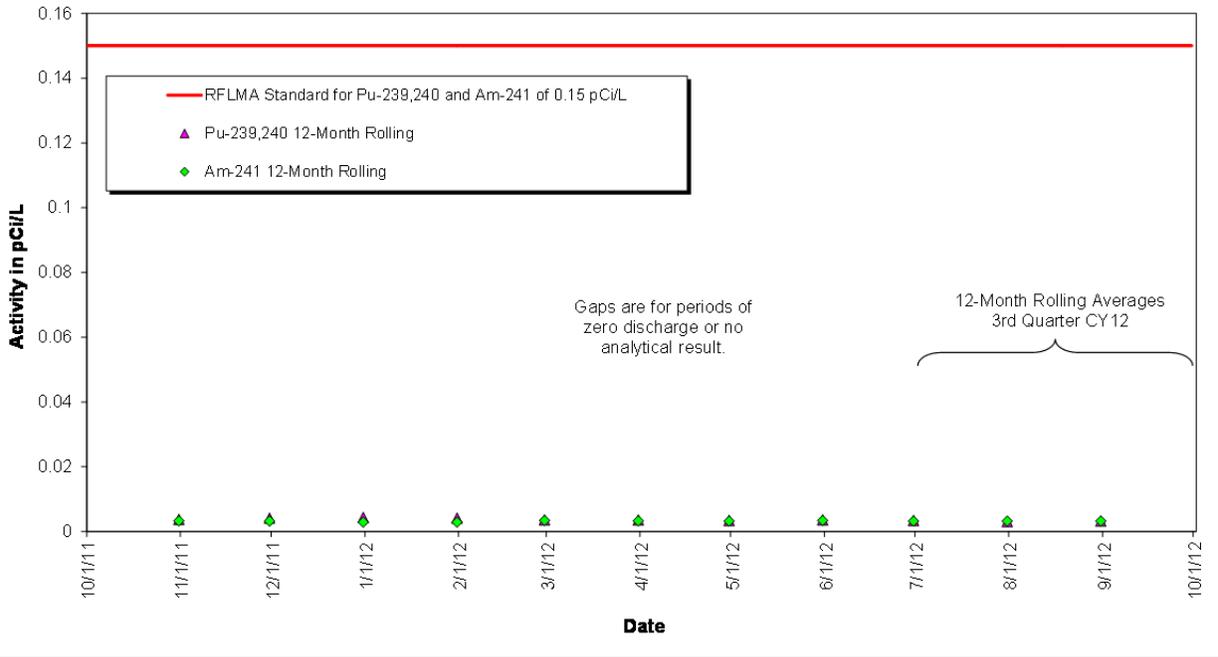


No samples have been successfully collected since 2010; only 4,033 gallons of flow have been recorded in the last 2.5 years.

Figure 34. Volume-Weighted 12-Month Rolling Average Total Uranium Concentrations at SW027: Post-Closure Period Ending Third Quarter CY 2012

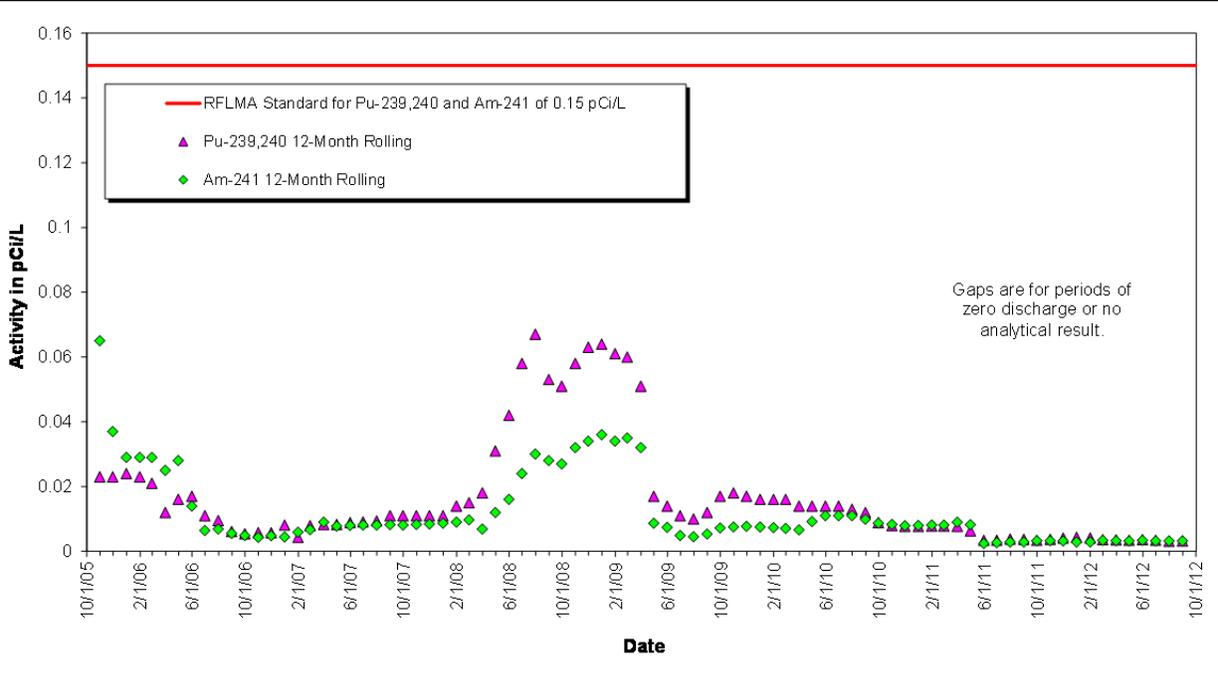
3.1.3.3 Monitoring Location SW093

Monitoring location SW093 is on North Walnut Creek 1,300 feet upstream of former Pond A-1. Figure 35 and Figure 37 show no reportable plutonium, americium, or total uranium values during the quarter. Figure 36 and Figure 38 show sampling data from 2005 through the third quarter of CY 2012. All other analytes were also not reportable for the quarter.



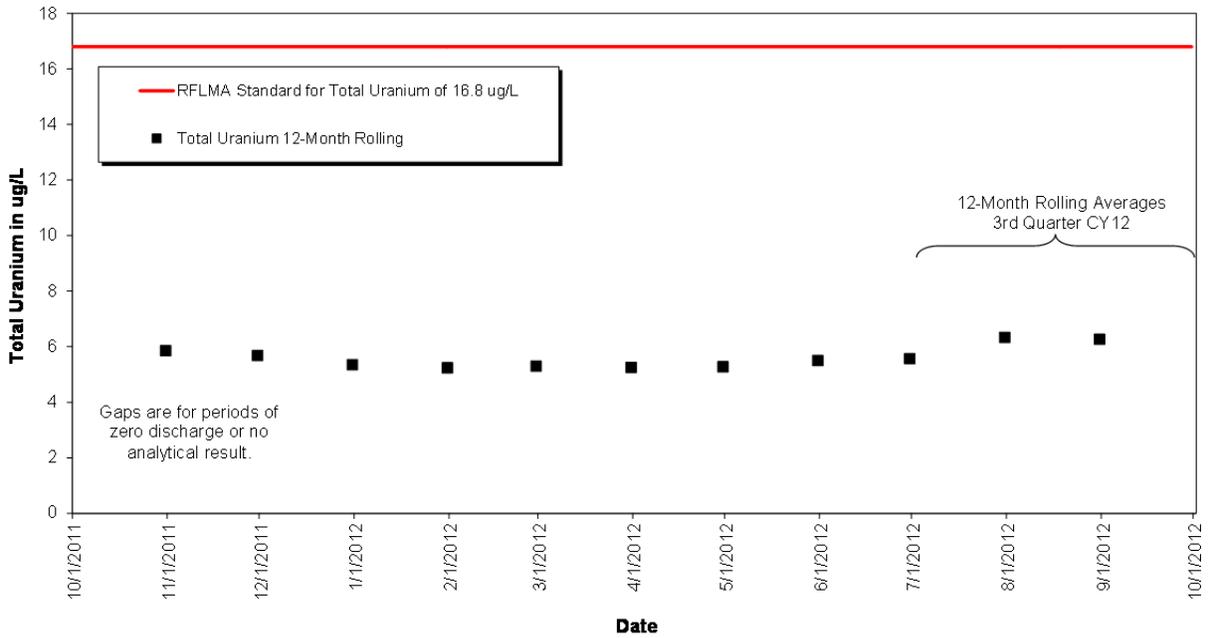
Results from the composite sample for the period September 12–November 15, 2012, have not been received.

Figure 35. Volume-Weighted 12-Month Rolling Average Plutonium and Americium Activities at SW093: Year Ending Third Quarter CY 2012



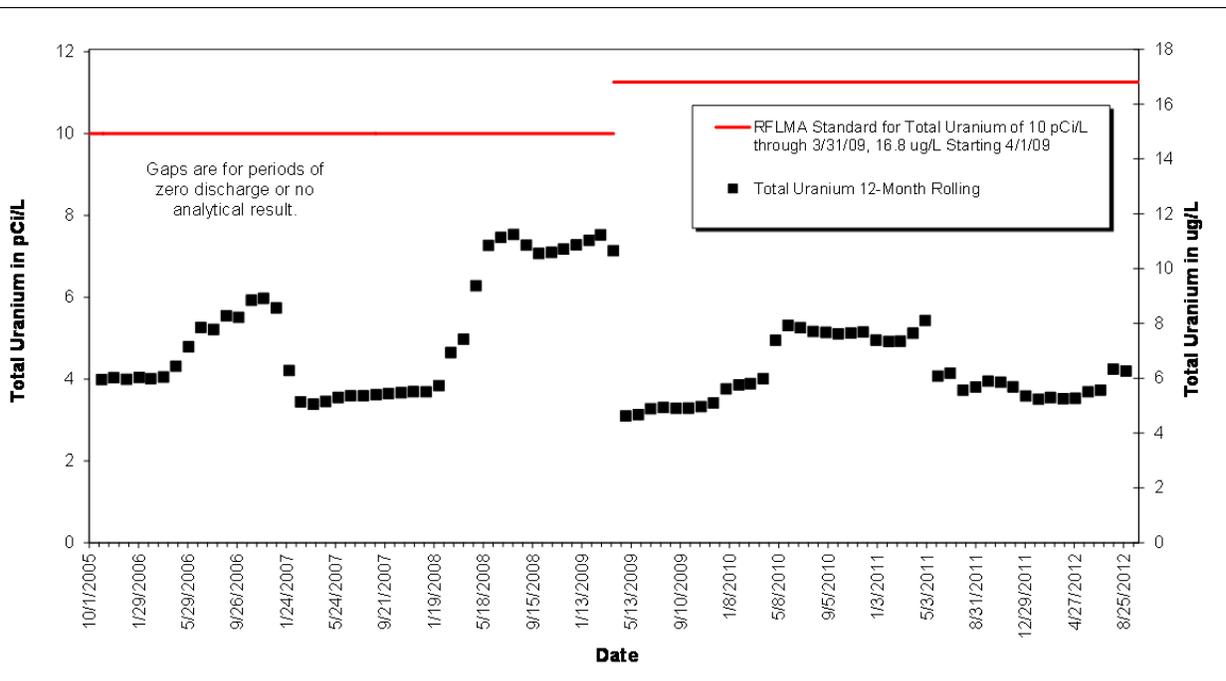
Results from the composite sample for the period September 12–November 15, 2012, have not been received.

Figure 36. Volume-Weighted 12-Month Rolling Average Plutonium and Americium Activities at SW093: Post-Closure Period Ending Third Quarter CY 2012



Results from the composite sample for the period September 12–November 15, 2012, have not been received.

Figure 37. Volume-Weighted 12-Month Rolling Average Total Uranium Concentrations at SW093: Year Ending Third Quarter CY 2012



Results from the composite sample for the period September 12–November 15, 2012, have not been received.

Figure 38. Volume-Weighted 12-Month Rolling Average Total Uranium Concentrations at SW093: Post-Closure Period Ending Third Quarter CY 2012

3.1.4 AOC Wells and Surface Water Location SW018

The AOC wells and SW018 were not scheduled for RFLMA monitoring in the third quarter of CY 2012.

3.1.5 Sentinel Wells

The Sentinel wells were not scheduled for RFLMA monitoring in the third quarter of CY 2012.

3.1.6 Evaluation Wells

The Evaluation wells were not scheduled for RFLMA monitoring in the third quarter of CY 2012.

3.1.7 PLF Monitoring

All RCRA groundwater monitoring wells at the PLF were sampled during the third quarter of CY 2012. Analytical results (Appendix B) were generally consistent with past samples and will be discussed and statistically evaluated as part of the annual report for CY 2012. Section 3.1.9.4 discusses monitoring the PLFTS.

3.1.8 OLF Monitoring

All RCRA groundwater monitoring wells at the OLF were sampled during the third quarter of CY 2012. Analytical results (Appendix B) were generally consistent with past samples and will be discussed and statistically evaluated as part of the annual report for CY 2012.

During the third quarter of CY 2012, when routine surface water sampling was performed in Woman Creek downstream of the OLF (GS59), all analytical results were less than the applicable surface water standards.

3.1.9 Groundwater Treatment System Monitoring

As described in Section 2.2, contaminated groundwater is intercepted and treated in four areas of the Site. The MSPTS, ETPTS, and SPPTS include a groundwater intercept trench. Groundwater entering the trenches is routed through a drainpipe into one or more treatment cells, where it is treated and then discharged to the subsurface. The PLFTS treats water from the northern and southern components of the Groundwater Intercept System and flow from the PLF seep.

3.1.9.1 Mound Site Plume Treatment System

MSPTS monitoring locations were not scheduled for RFLMA sampling in the third quarter of CY 2012. However, non-RFLMA samples were collected at the MSPTS to support continued optimization of the air stripper. The associated results (Appendix B) will be discussed in the annual report for 2012.

3.1.9.2 East Trenches Plume Treatment System

ETPTS monitoring locations were not scheduled for RFLMA sampling in the third quarter of CY 2012.

3.1.9.3 Solar Ponds Plume Treatment System

SPPTS monitoring locations were not scheduled for semiannual RFLMA sampling in the third quarter of CY 2012. However, other samples were collected at the SPPTS, some to support the Adaptive Management Plan (DOE 2011) and others to support continued testing of a small-scale uranium treatment component (referred to as a “microcell”) and small-scale nitrate treatment via lagoons. As stated in Section 2.2.3, both of these testing efforts will continue for some time. Additional information and discussion on these tests will be provided in the annual report for 2012. Appendix B contains the results from the third quarter samples collected in accordance with RFLMA protocols.

3.1.9.4 PLF Treatment System

During collection of the July 18, 2012, sample at the system influent (monitoring location PLFSEEPINF), the flow rate was 1.3 gallons per minute. Breaching of the PLF Dam was completed in June 2012, and since then any PLF effluent flows through the remaining wetland area. This flow configuration is now essentially equivalent to the historic open valve configuration.

During the third quarter of CY 2012, all routine sampling of the treated effluent exiting the system (monitoring location PLFSYSEFF) showed results below the RFLMA standards.

3.1.10 Pre-Discharge Monitoring

Pre-discharge samples are collected prior to opening the valves to initiate a discharge period at Ponds A-4, B-5, and C-2 on North Walnut Creek, South Walnut Creek, and Woman Creek, respectively.

No pre-discharge samples were collected at Ponds A-4, B-5, or C-2 during the third quarter of CY 2012. All three ponds were operated in a flow-through configuration during the entire quarter.

4.0 Adverse Biological Conditions

No evidence of adverse biological conditions (e.g., unexpected mortality or morbidity) was observed during monitoring and maintenance activities in the third quarter of CY 2012.

5.0 Ecology Monitoring

During the third quarter of CY 2012, Preble's meadow jumping mouse (PMJM) mitigation monitoring and wetland mitigation monitoring were conducted. The PMJM monitoring data were summarized and delivered to the U.S. Fish and Wildlife Service (USFWS) in the *Preble's Meadow Jumping Mouse Mitigation Monitoring Report for Biological Opinion ES/LK-6-CO-04-F-012 – 2012 Annual Report* (DOE 2012c). This report was delivered to USFWS on November 19, 2012. The wetland monitoring data will be summarized and delivered in two reports. As part of the Nationwide Permit #43 that was used to breach the PLF and A-3 dams, an annual wetland mitigation monitoring report for the mitigation wetlands at those locations is due to the USACE on December 31, 2012. Another report, the *2012 Rocky Flats Site Annual Wetland Mitigation Monitoring Report*, is due to the EPA on March 1, 2013. A brief summary of the information from these reports will be included in the annual report for CY 2012. Other ecological monitoring conducted during the third quarter included revegetation monitoring, weed mapping, PLF/OLF quarterly vegetation surveys, nest box surveys, prairie dog surveys, and photopoint monitoring.

Approximately 96 acres were treated this fall with herbicides to control noxious weeds in the COU. Several dozen small Russian olive trees and a few saltcedar (tamarisk) plants throughout the COU were also treated with herbicides to kill the plants. The former road between the A-3 pond and PLF pond was ripped and revegetated to return it to native prairie. Several roadside edges/centers were mowed to reduce wildfire potential, and some other off-road locations were mowed to control weeds. Thirty-six woody plants were installed on the SPPTS hillside in spring 2012 to increase habitat diversity on the hillside. Supplemental watering was continued throughout the summer and fall to increase the potential for successful establishment of the plants.

6.0 References

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DOE, EPA, and CDPHE (U.S. Department of Energy, U.S. Environmental Protection Agency, and Colorado Department of Public Health and Environment), 2011. *Corrective Action Decision/Record of Decision Amendment for Rocky Flats Plant (USDOE) Central Operable Unit*, U.S. Department of Energy, U.S. Environmental Protection Agency, and Colorado Department of Public Health and Environment, September 21.

Appendix A

Landfill Inspection Forms and Survey Data

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ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

INSPECTOR: J. McLaughlin DATE: 7/30/12 TIME: 1000 REVIEWED BY: [Signature]
 TEMPERATURE: 80°F WEATHER CONDITIONS: Sunny + Warm REVIEW DATE: 8-1-12

SUBSIDENCE / CONSOLIDATION

REGION	EVIDENCE OF CRACKS?	EVIDENCE OF DEPRESSIONS?	EVIDENCE OF SINK HOLES?	EVIDENCE OF PONDING?	OTHER (DESCRIBE BELOW)
COVER – WEST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
COVER – EAST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
BUTTRESS FILL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 2	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 4	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 5	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 6	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 7	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			

Settlement Plates – Inspect integrity. Intact? Yes No

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

None

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

SLOPE STABILITY

REGION	EVIDENCE OF CRACKS?	EVIDENCE OF SEEPS?	EVIDENCE OF BLOCK OR CIRCULAR FAILURE?	OTHER (DESCRIBE BELOW)
COVER – WEST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	—
COVER – EAST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	—
BUTTRESS FILL SIDESLOPE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	—
WEST PERIMETER CHANNEL SIDESLOPES	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	—
EAST PERIMETER CHANNEL SIDESLOPES	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	—
COVER SEEPS (IF PRESENT)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	—

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

See Attachment 1 for details on Seep locations.

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

SOIL COVER

REGION	EVIDENCE OF SOIL DEPOSITION OR EROSION?	EVIDENCE OF EROSION RILLS/GULLIES?	EVIDENCE OF BURROWING ANIMALS?	OTHER (DESCRIBE BELOW)
COVER – WEST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	—
COVER – EAST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	—
BUTTRESS FILL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	—
BUTTRESS FILL SIDESLOPE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	—

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

None.

The quarterly vegetation inspection will be completed in August or September.

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

VEGETATION

REGION	CONDITION OF GRASS	UNWANTED VEGETATION PRESENT*?	PERCENTAGE OF GRASS VERSUS BARE GROUND?	PERCENTAGE OF UNWANTED VEGETATION?
COVER- WEST		<input type="checkbox"/> Yes <input type="checkbox"/> No		
COVER - EAST		<input type="checkbox"/> Yes <input type="checkbox"/> No		
DIVERSION BERM 1		<input type="checkbox"/> Yes <input type="checkbox"/> No		
DIVERSION BERM 2		<input type="checkbox"/> Yes <input type="checkbox"/> No		
DIVERSION BERM 3		<input type="checkbox"/> Yes <input type="checkbox"/> No		
DIVERSION BERM 4		<input type="checkbox"/> Yes <input type="checkbox"/> No		
DIVERSION BERM 5		<input type="checkbox"/> Yes <input type="checkbox"/> No		
DIVERSION BERM 6		<input type="checkbox"/> Yes <input type="checkbox"/> No		
DIVERSION BERM 7		<input type="checkbox"/> Yes <input type="checkbox"/> No		
WEST PERIMETER CHANNEL		<input type="checkbox"/> Yes <input type="checkbox"/> No		
EAST PERIMETER CHANNEL		<input type="checkbox"/> Yes <input type="checkbox"/> No		
UPPER BUTTERESS FILL SIDESLOPE		<input type="checkbox"/> Yes <input type="checkbox"/> No		
LOWER BUTTRESS FILL SIDESLOPE		<input type="checkbox"/> Yes <input type="checkbox"/> No		

* Unwanted vegetation includes weeds and "woody vegetation." Woody vegetation within the OLF waste footprint shall be removed. Other locations shall be evaluated per Section 3.5.

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

STORMWATER MANAGEMENT STRUCTURES

CHANNELS

STRUCTURE	EVIDENCE OF EXCESSIVE EROSION, GULLYING, SCOUR, OR UNDERMINING?	EVIDENCE OF SETTLEMENT/ SUBSIDENCE OR DEPRESSIONS?	EVIDENCE OF BREACHING OR BANK FAILURE?	EVIDENCE OF BURROWING ANIMALS?	EVIDENCE OF SEDIMENT BUILD-UP OR OTHER BLOCKAGE?
DIVERSION BERM 1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 2	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 4	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 5	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 6	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 7	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
TEMPORARY CHECK DAMS*	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
WEST PERIMETER CHANNEL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
EAST PERIMETER CHANNEL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				

* Check dams may be removed after vegetation is established.

OTHER DEFICIENCIES?

None

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

None

**ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM
STORMWATER MANAGEMENT STRUCTURES (CONTINUED)**

OUTFALLS

CHECK EACH STRUCTURE FOR EXCESSIVE EROSION AND SEDIMENT DEPTH. IF SEDIMENT DEPTH IS COMPROMISING THE DESIGN CHARACTERISTICS, REMOVE SEDIMENT.

STRUCTURE	CONDITION / SEDIMENT DEPTH
DIVERSION BERM OUTFALL 1	<i>Good condition / No sediment</i>
DIVERSION BERM OUTFALL 2	
DIVERSION BERM OUTFALL 3	
DIVERSION BERM OUTFALL 4	
DIVERSION BERM OUTFALL 5	
DIVERSION BERM OUTFALL 6	
DIVERSION BERM OUTFALL 7	
WEST PERIMETER CHANNEL OUTFALL	
EAST PERIMETER CHANNEL OUTFALL	
FRENCH DRAIN OUTFALL (SID)	

OTHER DEFICIENCIES?

None.

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

None.

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

“RUN-ON” CONTROL

AREA	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	ADVERSELY AFFECTING OLF?
NORTH OF THE ORIGINAL LANDFILL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	COMMENT: —
WEST OF THE WEST PERIMETER CHANNEL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	COMMENT: —
EAST OF THE EAST PERIMETER CHANNEL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	COMMENT: —
NORTH OF WOMAN CREEK	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	COMMENT: —

MAINTENANCE REQUIRED

None.

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

INSTITUTIONAL CONTROLS

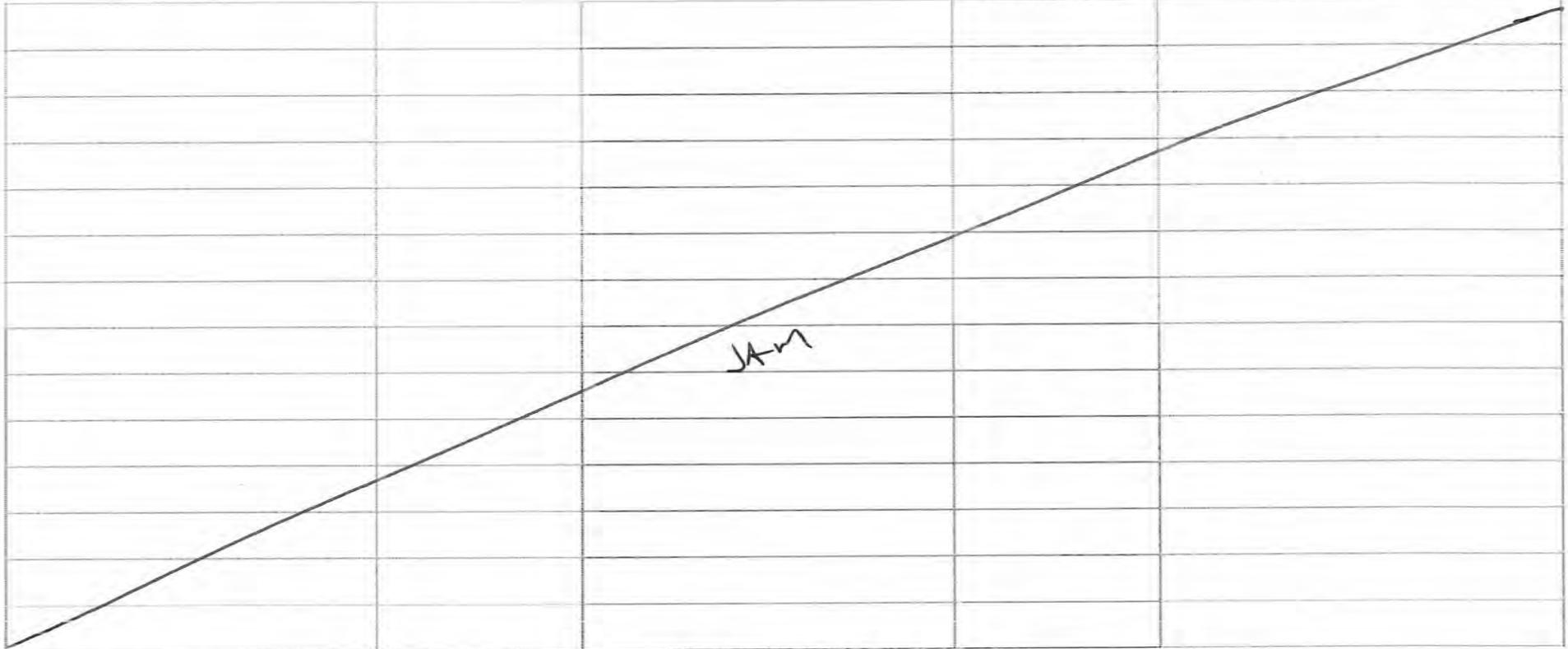
ITEM			
EVIDENCE OF EXCAVATION(S) OF COVER AND IMMEDIATE VICINITY OF COVER?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: <u> </u>
EVIDENCE OF CONSTRUCTION OF ROADS, TRAILS, OR BUILDINGS ON COVER?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: <u> </u>
EVIDENCE OF DRILLING OF WELLS OR USE OF GROUNDWATER?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: <u> </u>
DAMAGE OR REMOVAL OF ANY SIGNAGE OR GROUNDWATER MONITORING WELLS?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: <u> </u>

OTHER DEFICIENCIES / PHOTO LOG

None

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

ACTION ITEMS

DEFICIENCY	DATE NOTED	ACTION	DATE COMPLETED	COMMENTS
				

INSPECTOR SIGNATURE: *[Signature]* DATE: 7/30/12
 REVIEWER SIGNATURE: *[Signature]* DATE: 8-1-12

Original Landfill July 2012 Monthly Inspection—Attachment 1

The monthly inspection of the OLF was completed on July 30. The Rocky Flats Site received 2.02 inches of precipitation during the month of July. The cover was dry at the time of the inspection except for seep locations. The slump in the East Perimeter Channel (EPC) remained unchanged.

Berms and channels remain in good condition. Vegetation on the landfill cover is very dry in most locations except for the wetland areas. No new cracks, depressions, or slumps were noted on the landfill cover during the July inspection. There were no locations that required any maintenance or repairs.

Per the OLF M&M Plan, woody vegetation is not allowed to grow within the waste footprint. In accordance with the M&M Plan requirements, woody vegetation growing within the waste footprint on the OLF was treated with the herbicide Garlon 3A on June 27, 2012. Since then most of it has died.

OLF Cover



OLF Cover Facing West

Project Locations



Berm 1



West Perimeter Channel

Seeps

The seep locations were saturated at the time of this inspection except for Seep 1. Seep 8 was the only seep that produced any surface flow. Seep 8 was flowing at approximately 1 gpm.

Vegetation in the seep locations is well established, but growth has slowed significantly. The woody vegetation that was sprayed can be seen in the pictures below.



Seep 4 Area



Seep 7 Area

EPC Slump

The slump that was observed on the eastern slope of the EPC toward the top of the channel remains unchanged. The wooden stakes that were installed around the perimeter of the slumping area have not moved. No cracks are apparent. We will continue to monitor the slumping area for any changes during routine and nonroutine inspections of the OLF.



EPC Slump

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

INSPECTOR: J. McLaughlin DATE: 8/30/12 TIME: 1200 REVIEWED BY: [Signature]
 TEMPERATURE: 84°F WEATHER CONDITIONS: Pt. Cloudy REVIEW DATE: 9-4-12

SUBSIDENCE / CONSOLIDATION

REGION	EVIDENCE OF CRACKS?	EVIDENCE OF DEPRESSIONS?	EVIDENCE OF SINK HOLES?	EVIDENCE OF PONDING?	OTHER (DESCRIBE BELOW)
COVER – WEST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
COVER – EAST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
BUTTRESS FILL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 2	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 4	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 5	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 6	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 7	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			

Settlement Plates – Inspect integrity. Intact? Yes No

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG
None

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

SLOPE STABILITY

REGION	EVIDENCE OF CRACKS?	EVIDENCE OF SEEPS?	EVIDENCE OF BLOCK OR CIRCULAR FAILURE?	OTHER (DESCRIBE BELOW)
COVER – WEST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
COVER – EAST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
BUTTRESS FILL SIDESLOPE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
WEST PERIMETER CHANNEL SIDESLOPES	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
EAST PERIMETER CHANNEL SIDESLOPES	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
COVER SEEPS (IF PRESENT)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

Attachment 1 contains information about Seeps.

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

SOIL COVER

REGION	EVIDENCE OF SOIL DEPOSITION OR EROSION?	EVIDENCE OF EROSION RILLS/GULLIES?	EVIDENCE OF BURROWING ANIMALS?	OTHER (DESCRIBE BELOW)
COVER – WEST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
COVER – EAST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
BUTTRESS FILL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
BUTTRESS FILL SIDESLOPE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

None.

The quarterly vegetation inspection will be completed in September.

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

VEGETATION

REGION	CONDITION OF GRASS	UNWANTED VEGETATION PRESENT*?	PERCENTAGE OF GRASS VERSUS BARE GROUND?	PERCENTAGE OF UNWANTED VEGETATION?
COVER- WEST		<input type="checkbox"/> Yes <input type="checkbox"/> No		
COVER - EAST		<input type="checkbox"/> Yes <input type="checkbox"/> No		
DIVERSION BERM 1		<input type="checkbox"/> Yes <input type="checkbox"/> No		
DIVERSION BERM 2		<input type="checkbox"/> Yes <input type="checkbox"/> No		
DIVERSION BERM 3		<input type="checkbox"/> Yes <input type="checkbox"/> No		
DIVERSION BERM 4		<input type="checkbox"/> Yes <input type="checkbox"/> No		
DIVERSION BERM 5		<input type="checkbox"/> Yes <input type="checkbox"/> No		
DIVERSION BERM 6		<input type="checkbox"/> Yes <input type="checkbox"/> No		
DIVERSION BERM 7		<input type="checkbox"/> Yes <input type="checkbox"/> No		
WEST PERIMETER CHANNEL		<input type="checkbox"/> Yes <input type="checkbox"/> No		
EAST PERIMETER CHANNEL		<input type="checkbox"/> Yes <input type="checkbox"/> No		
UPPER BUTTERESS FILL SIDESLOPE		<input type="checkbox"/> Yes <input type="checkbox"/> No		
LOWER BUTTRESS FILL SIDESLOPE		<input type="checkbox"/> Yes <input type="checkbox"/> No		

* Unwanted vegetation includes weeds and "woody vegetation." Woody vegetation within the OLF waste footprint shall be removed. Other locations shall be evaluated per Section 3.5.

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

STORMWATER MANAGEMENT STRUCTURES

CHANNELS

STRUCTURE	EVIDENCE OF EXCESSIVE EROSION, GULLYING, SCOUR, OR UNDERMINING?	EVIDENCE OF SETTLEMENT/ SUBSIDENCE OR DEPRESSIONS?	EVIDENCE OF BREACHING OR BANK FAILURE?	EVIDENCE OF BURROWING ANIMALS?	EVIDENCE OF SEDIMENT BUILD-UP OR OTHER BLOCKAGE?
DIVERSION BERM 1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 2	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 4	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 5	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 6	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 7	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
TEMPORARY CHECK DAMS*	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
WEST PERIMETER CHANNEL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
EAST PERIMETER CHANNEL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				

* Check dams may be removed after vegetation is established.

OTHER DEFICIENCIES?

None

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

None

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

STORMWATER MANAGEMENT STRUCTURES (CONTINUED)

OUTFALLS

CHECK EACH STRUCTURE FOR EXCESSIVE EROSION AND SEDIMENT DEPTH. IF SEDIMENT DEPTH IS COMPROMISING THE DESIGN CHARACTERISTICS, REMOVE SEDIMENT.

STRUCTURE	CONDITION / SEDIMENT DEPTH
DIVERSION BERM OUTFALL 1	<i>Good condition / No sediment</i>
DIVERSION BERM OUTFALL 2	
DIVERSION BERM OUTFALL 3	
DIVERSION BERM OUTFALL 4	
DIVERSION BERM OUTFALL 5	
DIVERSION BERM OUTFALL 6	
DIVERSION BERM OUTFALL 7	
WEST PERIMETER CHANNEL OUTFALL	
EAST PERIMETER CHANNEL OUTFALL	
FRENCH DRAIN OUTFALL (SID)	

OTHER DEFICIENCIES?

None

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

None

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

“RUN-ON” CONTROL

AREA	ADVERSELY AFFECTING OLF?		
NORTH OF THE ORIGINAL LANDFILL	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: —
WEST OF THE WEST PERIMETER CHANNEL	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: —
EAST OF THE EAST PERIMETER CHANNEL	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: —
NORTH OF WOMAN CREEK	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: —

MAINTENANCE REQUIRED

None.

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

INSTITUTIONAL CONTROLS

ITEM			
EVIDENCE OF EXCAVATION(S) OF COVER AND IMMEDIATE VICINITY OF COVER?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: -
EVIDENCE OF CONSTRUCTION OF ROADS, TRAILS, OR BUILDINGS ON COVER?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: -
EVIDENCE OF DRILLING OF WELLS OR USE OF GROUNDWATER?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: -
DAMAGE OR REMOVAL OF ANY SIGNAGE OR GROUNDWATER MONITORING WELLS?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: -

OTHER DEFICIENCIES / PHOTO LOG

None.

Original Landfill August 2012 Monthly Inspection—Attachment 1

The monthly inspection of the OLF was completed on August 30. The Rocky Flats Site received .36 inches of precipitation during the month of August. The cover was dry at the time of the inspection except for seep locations. The slump in the East Perimeter Channel (EPC) remained unchanged.

Berms and channels remain in good condition. Vegetation on the landfill cover is very dry in most locations except for the wetland areas. No new cracks, depressions, or slumps were noted on the landfill cover during the August inspection. There were no locations that required any maintenance or repairs.

OLF Cover



OLF Cover Facing West

Former Project Locations



Berm 1



West Perimeter Channel

Seeps

The seep locations were dry at the time of this inspection except for Seep 8. Seep 8 was flowing at approximately 1 gpm. Vegetation in the seep locations is well established, but growth has slowed significantly. The woody vegetation that was sprayed can be seen in the pictures below.



Seep 4 Area



Seep 7 Area

EPC Slump

The slump that was observed on the eastern slope of the EPC toward the top of the channel remains unchanged. The wooden stakes that were installed around the perimeter of the slumping area have not moved. No cracks are apparent. We will continue to monitor the slumping area for any changes during routine and nonroutine inspections of the OLF.



EPC Slump

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

INSPECTOR: J. McLaughlin DATE: 9/27/12 TIME: 1300 REVIEWED BY: Greg Squill
 TEMPERATURE: 70°F WEATHER CONDITIONS: Pt. cloudy REVIEW DATE: 10-2-12

SUBSIDENCE / CONSOLIDATION

REGION	EVIDENCE OF CRACKS?	EVIDENCE OF DEPRESSIONS?	EVIDENCE OF SINK HOLES?	EVIDENCE OF PONDING?	OTHER (DESCRIBE BELOW)
COVER – WEST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
COVER – EAST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
BUTTRESS FILL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 2	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 4	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 5	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 6	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
DIVERSION BERM 7	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			

Settlement Plates – Inspect integrity. Intact? Yes No

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

None

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

SLOPE STABILITY

REGION	EVIDENCE OF CRACKS?	EVIDENCE OF SEEPS?	EVIDENCE OF BLOCK OR CIRCULAR FAILURE?	OTHER (DESCRIBE BELOW)
COVER – WEST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	—
COVER – EAST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	—
BUTTRESS FILL SIDESLOPE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	—
WEST PERIMETER CHANNEL SIDESLOPES	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	—
EAST PERIMETER CHANNEL SIDESLOPES	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	—
COVER SEEPS (IF PRESENT)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	—

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

None. See Attachment 1 for details.

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

SOIL COVER

REGION	EVIDENCE OF SOIL DEPOSITION OR EROSION?	EVIDENCE OF EROSION RILLS/GULLIES?	EVIDENCE OF BURROWING ANIMALS?	OTHER (DESCRIBE BELOW)
COVER – WEST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
COVER – EAST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
BUTTRESS FILL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
BUTTRESS FILL SIDESLOPE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

None

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

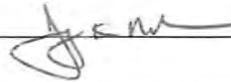
OLF Vegetation Survey 9/13/12
 - body needs -

VEGETATION

REGION	CONDITION OF GRASS	UNWANTED VEGETATION PRESENT*?	PERCENTAGE OF GRASS VERSUS BARE GROUND?	PERCENTAGE OF UNWANTED VEGETATION?	
COVER- WEST	Sparse to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5-95%	CEDH, VETHI, CIARI, SAAMI, SAEXI	<1%
COVER - EAST	Sparse to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	15-100%	CEDH, VETHI,	<1%
DIVERSION BERM 1	Sparse to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5-95%	VETHI, CEDH	1-2%
DIVERSION BERM 2	Sparse to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5-95%	VETHI, CEDH	<1%
DIVERSION BERM 3	Sparse to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5-100%	CEDH, VETHI, SAAMI, SAEXI	<1%
DIVERSION BERM 4	Sparse to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10-80%	CEDH,	1-2%
DIVERSION BERM 5	Sparse to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5-90%	CEDH, VETHI,	<1%
DIVERSION BERM 6	moderate to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	20-70%	CEDH, VEELI, BRTEI	<1%
DIVERSION BERM 7	Sparse to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5-90%	CEDH, COARI, VETHI,	<1%
WEST PERIMETER CHANNEL	Sparse to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5-95%	CEDH, BRTEI, VETHI	<1%
EAST PERIMETER CHANNEL	Sparse to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	15-95%	CEDH, VETHI, CIARI	<1%
UPPER BUTTERESS FILL SIDESLOPE	Sparse to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	15-90%	CEDH, VETHI, VEELI, SAAMI, PODEI	<1%
LOWER BUTTRESS FILL SIDESLOPE	Sparse to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	15-90%	VETHI, BRTEI, CEDH, LIDAI,	<1%

* Unwanted vegetation includes weeds and "woody vegetation." Woody vegetation within the OLF waste footprint shall be removed. Other locations shall be evaluated per Section 3.5.

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

Most of woody plants w/in waste footprint sprayed in 2012. 

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

STORMWATER MANAGEMENT STRUCTURES

CHANNELS

STRUCTURE	EVIDENCE OF EXCESSIVE EROSION, GULLYING, SCOUR, OR UNDERMINING?	EVIDENCE OF SETTLEMENT/ SUBSIDENCE OR DEPRESSIONS?	EVIDENCE OF BREACHING OR BANK FAILURE?	EVIDENCE OF BURROWING ANIMALS?	EVIDENCE OF SEDIMENT BUILD-UP OR OTHER BLOCKAGE?
DIVERSION BERM 1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 2	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 4	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 5	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 6	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 7	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
TEMPORARY CHECK DAMS*	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
WEST PERIMETER CHANNEL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
EAST PERIMETER CHANNEL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				

* Check dams may be removed after vegetation is established.

OTHER DEFICIENCIES?

The EPC has a localized slumping area on the east side toward the top of the channel. The bank has not failed. See Attachment 1 for details and pictures.

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

None

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM
STORMWATER MANAGEMENT STRUCTURES (CONTINUED)

OUTFALLS

CHECK EACH STRUCTURE FOR EXCESSIVE EROSION AND SEDIMENT DEPTH. IF SEDIMENT DEPTH IS COMPROMISING THE DESIGN CHARACTERISTICS, REMOVE SEDIMENT.

STRUCTURE	CONDITION / SEDIMENT DEPTH
DIVERSION BERM OUTFALL 1	<i>Good condition / No sediment</i> 
DIVERSION BERM OUTFALL 2	
DIVERSION BERM OUTFALL 3	
DIVERSION BERM OUTFALL 4	
DIVERSION BERM OUTFALL 5	
DIVERSION BERM OUTFALL 6	
DIVERSION BERM OUTFALL 7	
WEST PERIMETER CHANNEL OUTFALL	
EAST PERIMETER CHANNEL OUTFALL	
FRENCH DRAIN OUTFALL (SID)	

OTHER DEFICIENCIES?

None.

MAINTENANCE REQUIRED / COMMENTS / PHOTO LOG

None.

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

“RUN-ON” CONTROL

AREA	ADVERSELY AFFECTING OLF?	COMMENT:
NORTH OF THE ORIGINAL LANDFILL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
WEST OF THE WEST PERIMETER CHANNEL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
EAST OF THE EAST PERIMETER CHANNEL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
NORTH OF WOMAN CREEK	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-

MAINTENANCE REQUIRED

None.

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

INSTITUTIONAL CONTROLS

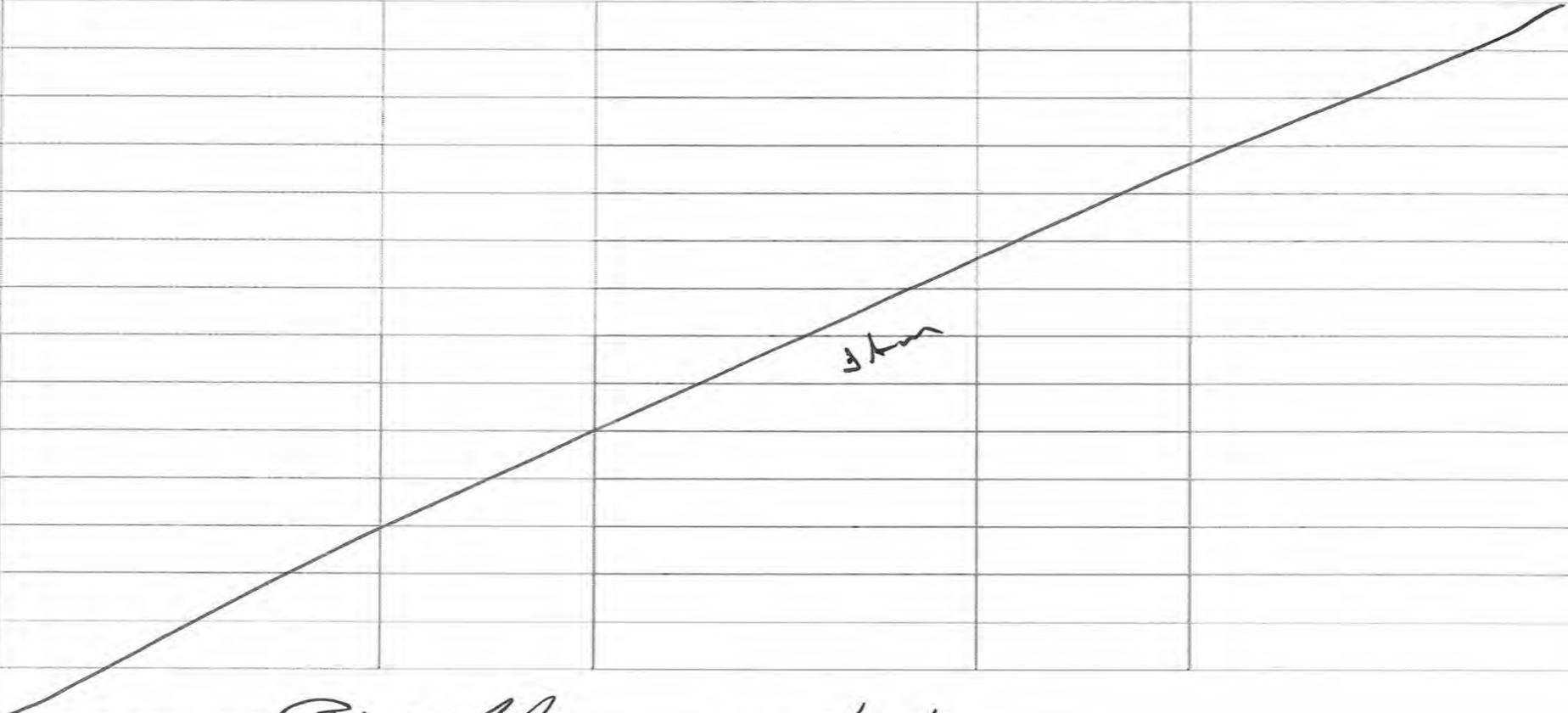
ITEM	
EVIDENCE OF EXCAVATION(S) OF COVER AND IMMEDIATE VICINITY OF COVER?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No COMMENT: —
EVIDENCE OF CONSTRUCTION OF ROADS, TRAILS, OR BUILDINGS ON COVER?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No COMMENT: —
EVIDENCE OF DRILLING OF WELLS OR USE OF GROUNDWATER?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No COMMENT: —
DAMAGE OR REMOVAL OF ANY SIGNAGE OR GROUNDWATER MONITORING WELLS?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No COMMENT: —

OTHER DEFICIENCIES / PHOTO LOG

None.

ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PLAN INSPECTION FORM

ACTION ITEMS

DEFICIENCY	DATE NOTED	ACTION	DATE COMPLETED	COMMENTS
				

INSPECTOR SIGNATURE: *[Signature]* DATE: 9/27/12

REVIEWER SIGNATURE: *[Signature]* DATE: 10-2-12

Original Landfill September 2012 Monthly Inspection—Attachment 1

The monthly inspection of the OLF was completed on September 27. The Rocky Flats Site received 1.66 inches of precipitation during the month of September. The cover was dry at the time of the inspection including the majority of the seep locations. The slump in the East Perimeter Channel (EPC) remained unchanged.

Berms and channels remain in good condition. Vegetation on the landfill cover is dry and is beginning to enter into dormancy. No new cracks, depressions, or slumps were noted on the landfill cover during the September inspection. There were no locations that required any maintenance or repairs.

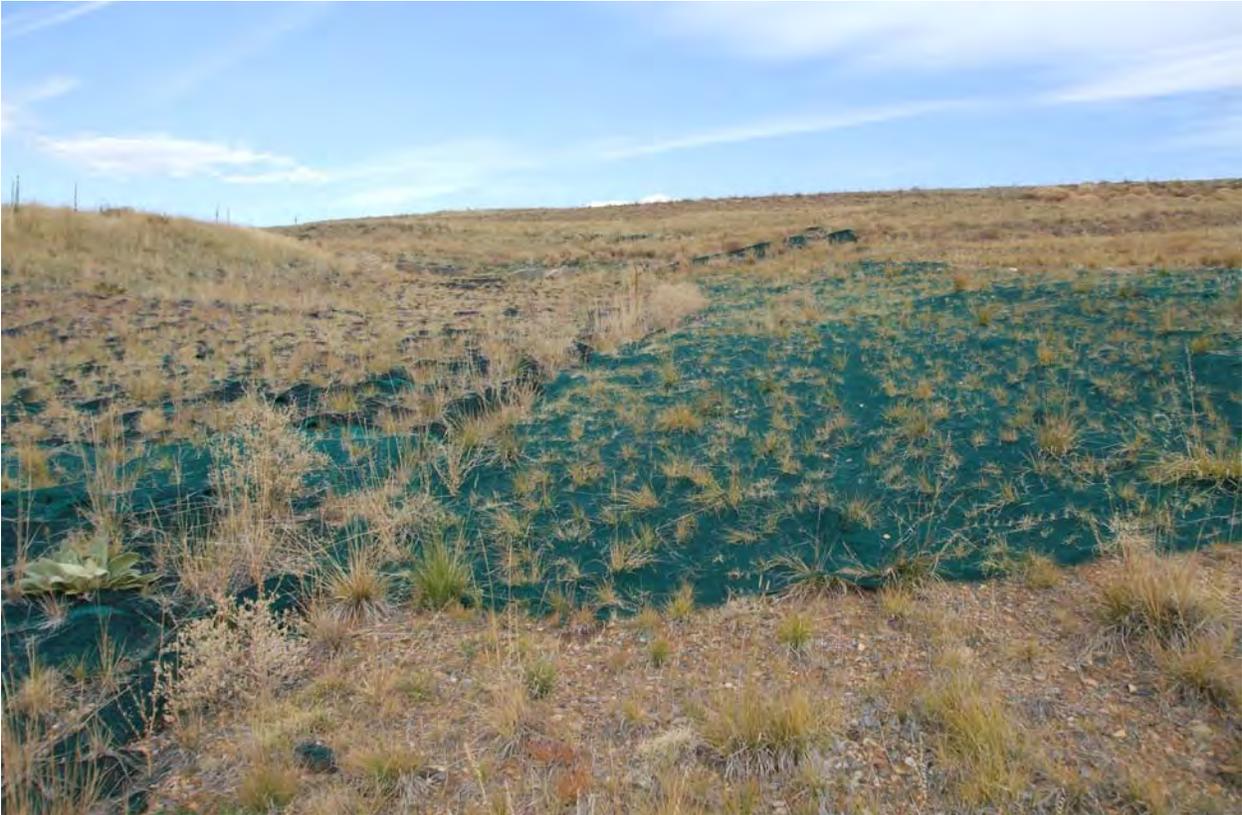
OLF Pictures



OLF Cover Facing West from Berm 2



OLF Buttress



Lower West Perimeter Channel

Seeps

The seep locations were dry at the time of this inspection except for Seeps 4 and 8. Seep 4 was saturated and Seep 8 was flowing at approximately .5 gallons per minute. Vegetation in the seep locations is beginning to enter into dormancy.



Lower Seep7 Area

EPC Slump

The slump that was observed on the eastern slope of the EPC toward the top of the channel remains unchanged. The wooden stakes that were installed around the perimeter of the slumping area have not moved. No cracks are apparent. We will continue to monitor the slumping area for any changes during routine and nonroutine inspections of the OLF.



EPC Slump

PRESENT LANDFILL – MONITORING AND MAINTENANCE PROGRAM

INSPECTION FORM

INSPECTOR: J. McLaughlin DATE: 8/30/12 TIME: 1400 REVIEWED BY: Gene Spill
 TEMPERATURE: 84°F WEATHER CONDITIONS: pt. cloudy REVIEW DATE: 9-4-12
 METEOROLOGICAL STATION LOCATION: NREL Wind Site

SUBSIDENCE/CONSOLIDATION

REGION	EVIDENCE OF CRACKS?	EVIDENCE OF DEPRESSIONS?	EVIDENCE OF SINK HOLES?	EVIDENCE OF PONDING?	OTHER (DESCRIBE BELOW)
TOP OF COVER – WEST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
TOP OF COVER – EAST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
COVER SIDESLOPE – NORTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
COVER SIDESLOPE – SOUTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
EAST FACE SLOPE – NORTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
EAST FACE SLOPE – SOUTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
EAST FACE SLOPE – CENTRAL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			
EAST FACE SLOPE – NORTH SEEP*	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-			

Settlement Plates and side-slope monitoring points to be inspected for integrity. During Year 1, they will be surveyed quarterly, and annually thereafter

Integrity intact?
 Yes No

MAINTENANCE REQUIRED/COMMENTS/PHOTO LOG

None.

* AREA OF SEEP IS OUTSIDE OF LANDFILL COVER AND EAST OF THE COVER ANCHOR TRENCH

SLOPE STABILITY

REGION	EVIDENCE OF CRACKS?	EVIDENCE OF BLOCK OR CIRCULAR FAILURE?	EVIDENCE OF SEEPS?	OTHER (DESCRIBE BELOW)
COVER SIDESLOPE – NORTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
COVER SIDESLOPE – SOUTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
PERIMETER CHANNEL OUTER SLOPE – NORTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
PERIMETER CHANNEL OUTER SLOPE – SOUTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
EAST FACE SLOPE – NORTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
EAST FACE SLOPE – SOUTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
EAST FACE SLOPE – CENTRAL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
EAST FACE SLOPE – NORTH SEEP*	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	-

MAINTENANCE REQUIRED/COMMENTS/PHOTO LOG

Seep was dry at the time of this inspection.

* AREA OF SEEP IS OUTSIDE OF LANDFILL COVER AND EAST OF THE COVER ANCHOR TRENCH

SOIL COVER

REGION	EVIDENCE OF SOIL DEPOSITION OR EROSION?	EVIDENCE OF EROSION RILLS/GULLIES?	EVIDENCE OF BURROWING ANIMALS?	OTHER (DESCRIBE BELOW)
TOP OF COVER – WEST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
TOP OF COVER – EAST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
COVER SIDESLOPE – NORTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
COVER SIDESLOPE – SOUTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
EAST FACE SLOPE – NORTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
EAST FACE SLOPE – SOUTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
EAST FACE SLOPE – CENTRAL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
AREA WHERE EAST SLOPE CENTRAL MEETS EAST SLOPE NORTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
AREA WHERE EAST SLOPE CENTRAL MEETS EAST SLOPE SOUTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
	VENT CAPS IN PLACE & SECURE?	STANDPIPES IN GOOD CONDITION?	BIRDS OR INSECTS IN VENT CAPS?	
COVER – BAROMETRIC VENTS	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

MAINTENANCE REQUIRED/COMMENTS/PHOTO LOG

None.

VEGETATION

REGION	CONDITION OF GRASS	UNWANTED VEGETATION PRESENT*?	OTHER (DESCRIBE BELOW)	
TOP OF COVER - WEST	good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	VETHI, CEDII, BRTEI, LIDAI,	<1%
TOP OF COVER - EAST	moderate to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	CEDII, VETHI, LIDAI, CIARI HYPEI	<1%
EAST FACE SLOPE - NORTH	moderate to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	CEDII, HYPEI, VETHI, CIARI	1%
EAST FACE SLOPE - SOUTH <i>Central 9/13/12</i>	moderate to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	CEDII, CIARI, HYPEI, CIARI <i>9/13/12</i> VETHI	1%
EAST FACE SLOPE - CENTRAL <i>South</i>	moderate to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	CEDII, HYPEI, CIARI,	<1%
COVER SIDESLOPE - NORTH	moderate to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	LIDAI, CEDII, BRTEI,	<1%
COVER SIDESLOPE - SOUTH	moderate to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	CEDII, VETHI, BRTEI, LIDAI,	1%
VEGETATION-LINED PERIMETER CHANNEL - NORTH	moderate to good	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		0%
VEGETATION-LINED PERIMETER CHANNEL - SOUTH	moderate to good	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	VETHI, CEDII,	<1%

* Unwanted vegetation includes weeds and deep-rooting trees.

MAINTENANCE REQUIRED/COMMENTS/PHOTO LOG

Top of PLF sprayed - summer 2012.

[Signature]

SEEP TREATMENT SYSTEM

REGION	EVIDENCE OF PLUGGING, OBSTRUCTIONS, OR EXCESS DEBRIS?	EVIDENCE OF CRACKS OR DETERIORATION?	OTHER (DESCRIBE BELOW)
GWIS INLET PIPES	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
STRIP DRAIN INLET PIPE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
NORTH MANHOLE OUTLET PIPE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
SOUTH MANHOLE OUTLET PIPE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
TREATMENT UNIT	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
TREATMENT UNIT OUTLET PIPE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
NORTH MANHOLE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
SOUTH MANHOLE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-
TREATMENT UNIT GRATING	NA	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-

MAINTENANCE REQUIRED/COMMENTS/PHOTO LOG

None

STORMWATER MANAGEMENT STRUCTURES

CHANNELS/LINING

STRUCTURE	EVIDENCE OF EXCESSIVE EROSION, GULLYING, SCOUR, OR UNDERMINING?	EVIDENCE OF SETTLEMENT/SUBSIDENCE OR DEPRESSIONS?	EVIDENCE OF BREACHING OR BANK FAILURE?	EVIDENCE OF BURROWING ANIMALS?	EVIDENCE OF SEDIMENT BUILD-UP OR OTHER BLOCKAGE?	EVIDENCE OF LINING DETERIORATION, HOLES, RIPS, OR SEPARATION?	EVIDENCE OF LINING DISPLACEMENT?
DIVERSION BERM	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
VEGETATION-LINED PERIMETER CHANNEL – NORTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
VEGETATION-LINED PERIMETER CHANNEL – SOUTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
RIPRAP-LINED PERIMETER CHANNEL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
C350-LINED EAST FACE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
EAST FACE RIPRAP CHANNEL – NORTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
EAST FACE RIPRAP CHANNEL – SOUTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						

OTHER DEFICIENCIES?

None.

MAINTENANCE REQUIRED/COMMENTS/PHOTO LOG

None.

STORMWATER MANAGEMENT STRUCTURES (CONTINUED)

OUTFALLS

CHECK EACH STRUCTURE FOR EXCESSIVE EROSION AND SEDIMENT DEPTH. IF SEDIMENT DEPTH IS COMPROMISING THE DESIGN CHARACTERISTICS, REMOVE SEDIMENT.

STRUCTURE	CONDITION/SEDIMENT DEPTH
DIVERSION BERM OUTFALL – NORTH	<i>Good condition / No sediment</i> 
DIVERSION BERM OUTFALL – SOUTH	
CULVERT 1 OUTFALL	
CULVERT 2 OUTFALL	
SOUTHWEST CULVERT OUTFALL	

CULVERTS

CHECK EACH STRUCTURE FOR BLOCKAGE, SURROUNDING CONDITIONS, BREACHING, SEDIMENT BUILD-UP, AND INLET/OUTLET CONDITIONS.

STRUCTURE	CONDITION
CULVERT 1	<i>Good condition / No sediment</i> 
CULVERT 2	
SOUTHWEST CULVERT	

MAINTENANCE REQUIRED/PHOTO LOG

None

"RUN-ON" EROSION CONTROL

AREA	ADVERSELY AFFECTING PLF?		
RUN-ON INTO PERIMETER CHANNEL – NORTH	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: —
RUN-ON INTO PERIMETER CHANNEL – SOUTH	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: —
NATURAL DRAINAGE FED BY CULVERT 1	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: —
NATURAL DRAINAGE FED BY NORTHEAST PERIMETER CHANNEL	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: —
NATURAL DRAINAGE FED BY RIPRAP	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: —

MAINTENANCE REQUIRED/PHOTO LOG

None.

INSTITUTIONAL CONTROLS

ITEM			
EVIDENCE OF EXCAVATION(S) OF COVER AND IMMEDIATE VICINITY OF COVER?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: -
EVIDENCE OF CONSTRUCTION OF ROADS OR TRAILS ON COVER OR BUILDINGS?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: -
EVIDENCE OF UNAUTHORIZED ENTRY?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: -
EVIDENCE OF DRILLING OF WELLS OR USE OF GROUNDWATER?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: -
DISRUPTION OR DAMAGE OF SEEP TREATMENT SYSTEM?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: -
DAMAGE OR REMOVAL OF ANY SIGNAGE OR GROUNDWATER MONITORING WELLS?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: -

OTHER DEFICIENCIES/PHOTO LOG

None.

Rocky Flats Site
Original Landfill - Settlement Plates Monitoring
Quarterly Survey September 21, 2012 Comparison to Previous June 21, 2012

09-21-12 OBSERVATIONS					DELTA	DELTA	DELTA	PREVIOUS 06-21-12 OBSERVATIONS				
POINT NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION	NORTHING	EASTING	ELEVATION	POINT NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
62186	747913.66	2082233.09	6005.89	N RIM PIPE AA	0.03	-0.02	0.04	62101	747913.69	2082233.07	6005.92	N RIM PIPE AA
62188	747644.88	2081851.18	5975.29	N RIM PIPE BB	0.05	0.00	0.07	62117	747644.93	2081851.17	5975.35	N RIM PIPE BB
62173	747883.30	2081666.03	6019.57	N RIM PIPE CC	-0.02	0.01	0.01	62115	747883.28	2081666.04	6019.58	N RIM PIPE CC
62174	747803.43	2081642.35	6006.09	N RIM PIPE DD	0.00	-0.01	-0.01	62114	747803.43	2081642.34	6006.08	N RIM PIPE DD
62177	747700.76	2081620.51	5988.52	N RIM PIPE EE	0.01	0.01	-0.02	62111	747700.77	2081620.52	5988.50	N RIM PIPE EE
62179	747704.40	2081406.94	5997.15	N RIM PIPE FF	-0.01	0.00	-0.01	62109	747704.39	2081406.94	5997.14	N RIM PIPE FF
62178	747563.11	2081656.31	5974.17	N RIM PIPE GG	0.00	-0.01	-0.03	62110	747563.11	2081656.31	5974.14	N RIM PIPE GG
62181	747741.63	2081226.23	6013.13	N RIM PIPE HH	0.01	-0.03	-0.01	62107	747741.64	2081226.21	6013.12	N RIM PIPE HH

DELTA'S ARE CALCULATED AS THE DIFFERENCE BETWEEN THE 09-21-12 OBSERVATION AND THE 06-21-12 OBSERVATION

POINTS ARE GRID BASED COLORADO STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE, NAD 27, NGVD 29

Appendix B

Analytical Results for Water Samples—Third Quarter CY 2012

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RFLMA Data

LOCATION_CODE	LOCATION_TYPE	DATE SAMPLED	LAB REQUISITION NUMBER	CAS	ANALYTE	SAMPLE ID	RESULT	UNITS	LAB QUALIFIERS	SAMPLE TYPE	DETECTION LIMIT	UNCERTAINTY	DATA VALIDATION QUALIFIERS
WOMPOC	SL	5/21/2012	12104927	AM-241	Americium-241	N001	0.00256	pCi/L	U	F	0.0117	0.00869	
WOMPOC	SL	5/21/2012	12104927	PU-239,240	Plutonium-239, 240	N001	0.00145	pCi/L	U	F	0.018	0.00753	
WOMPOC	SL	5/21/2012	12104927	7440-61-1	Uranium	N001	3.19	ug/L	U	F	0.067		
GS05	SL	6/7/2012	12084814	7440-38-2	Arsenic	N001	4.4	ug/L	U	F	4.4		
GS05	SL	6/7/2012	12084814	7440-41-7	Beryllium	N001	0.47	ug/L	U	F	0.47		
GS05	SL	6/7/2012	12084814	7440-42-8	Boron	N001	9.6	ug/L	J	F	4.4		U
GS05	SL	6/7/2012	12084814	7440-43-9	Cadmium	0001	0.45	ug/L	U	F	0.45		
GS05	SL	6/7/2012	12084814	7440-47-3	Chromium	N001	3.2	ug/L	J	F	0.66		
GS05	SL	6/7/2012	12084814	7440-50-8	Copper	0001	1.7	ug/L	J	F	1.4		
GS05	SL	6/7/2012	12084814	7439-92-1	Lead	0001	2.6	ug/L	U	F	2.6		
GS05	SL	6/7/2012	12084814	7439-97-6	Mercury	N001	0.027	ug/L	UH	F	0.027		J
GS05	SL	6/7/2012	12084814	7440-02-0	Nickel	0001	1.3	ug/L	U	F	1.3		
GS05	SL	6/7/2012	12084814	7782-49-2	Selenium	N001	4.9	ug/L	U	F	4.9		
GS05	SL	6/7/2012	12084814	7440-22-4	Silver	0001	0.93	ug/L	U	F	0.93		
GS05	SL	6/7/2012	12084814	7440-61-1	Uranium	N001	1.6	ug/L	U	F	0.05		
GS05	SL	6/7/2012	12084814	7440-61-1	Uranium	N002	1.2	ug/L	U	F	0.05		
GS05	SL	6/7/2012	12084814	7440-66-6	Zinc	0001	4.5	ug/L	U	F	4.5		
GS59	SL	6/6/2012	12084814	7440-38-2	Arsenic	N001	4.4	ug/L	U	F	4.4		
GS59	SL	6/6/2012	12084814	7440-41-7	Beryllium	N001	0.47	ug/L	U	F	0.47		
GS59	SL	6/6/2012	12084814	7440-42-8	Boron	N001	25	ug/L	J	F	4.4		U
GS59	SL	6/6/2012	12084814	7440-43-9	Cadmium	0001	0.45	ug/L	U	F	0.45		
GS59	SL	6/6/2012	12084814	7440-47-3	Chromium	N001	1.1	ug/L	J	F	0.66		
GS59	SL	6/6/2012	12084814	7440-50-8	Copper	0001	1.9	ug/L	J	F	1.4		
GS59	SL	6/6/2012	12084814	7439-92-1	Lead	0001	2.6	ug/L	U	F	2.6		
GS59	SL	6/6/2012	12084814	7439-97-6	Mercury	N001	0.027	ug/L	UH	F	0.027		J
GS59	SL	6/6/2012	12084814	7440-02-0	Nickel	0001	1.3	ug/L	U	F	1.3		
GS59	SL	6/6/2012	12084814	7782-49-2	Selenium	N001	4.9	ug/L	U	F	4.9		
GS59	SL	6/6/2012	12084814	7440-22-4	Silver	0001	0.93	ug/L	U	F	0.93		
GS59	SL	6/6/2012	12084814	7440-61-1	Uranium	N001	0.48	ug/L	J	F	0.05		
GS59	SL	6/6/2012	12084814	7440-61-1	Uranium	N002	0.46	ug/L	U	F	0.05		
GS59	SL	6/6/2012	12084814	7440-66-6	Zinc	0001	4.5	ug/L	U	F	4.5		
70193	WL	8/15/2012	12084781	71-55-6	1,1,1-Trichloroethane	N001	0.16	ug/L	U	F	0.16		
70193	WL	8/15/2012	12084781	79-34-5	1,1,2,2-Tetrachloroethane	N001	0.21	ug/L	U	F	0.21		
70193	WL	8/15/2012	12084781	79-00-5	1,1,2-Trichloroethane	N001	0.27	ug/L	U	F	0.27		
70193	WL	8/15/2012	12084781	75-35-4	1,1-Dichloroethene	N001	0.23	ug/L	U	F	0.23		
70193	WL	8/15/2012	12084781	120-82-1	1,2,4-Trichlorobenzene	N001	0.21	ug/L	U	F	0.21		
70193	WL	8/15/2012	12084781	96-12-8	1,2-Dibromo-3-chloropropane	N001	0.47	ug/L	U	F	0.47		
70193	WL	8/15/2012	12084781	106-93-4	1,2-Dibromoethane	N001	0.18	ug/L	U	F	0.18		
70193	WL	8/15/2012	12084781	95-50-1	1,2-Dichlorobenzene	N001	0.15	ug/L	U	F	0.15		
70193	WL	8/15/2012	12084781	107-06-2	1,2-Dichloroethane	N001	0.13	ug/L	U	F	0.13		
70193	WL	8/15/2012	12084781	78-87-5	1,2-Dichloropropane	N001	0.18	ug/L	U	F	0.18		
70193	WL	8/15/2012	12084781	541-73-1	1,3-Dichlorobenzene	N001	0.13	ug/L	U	F	0.13		
70193	WL	8/15/2012	12084781	106-46-7	1,4-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		
70193	WL	8/15/2012	12084781	7440-38-2	Arsenic	0001	4.4	ug/L	U	F	4.4		
70193	WL	8/15/2012	12084781	71-43-2	Benzene	N001	0.16	ug/L	U	F	0.16		
70193	WL	8/15/2012	12084781	7440-41-7	Beryllium	0001	0.47	ug/L	U	F	0.47		
70193	WL	8/15/2012	12084781	7440-42-8	Boron	0001	25	ug/L	JB	F	4.4		U
70193	WL	8/15/2012	12084781	75-27-4	Bromodichloromethane	N001	0.17	ug/L	U	F	0.17		
70193	WL	8/15/2012	12084781	75-25-2	Bromoform	N001	0.19	ug/L	U	F	0.19		
70193	WL	8/15/2012	12084781	74-83-9	Bromomethane	N001	0.21	ug/L	U	F	0.21		
70193	WL	8/15/2012	12084781	7440-43-9	Cadmium	0001	0.45	ug/L	U	F	0.45		
70193	WL	8/15/2012	12084781	56-23-5	Carbon tetrachloride	N001	0.19	ug/L	U	F	0.19		
70193	WL	8/15/2012	12084781	108-90-7	Chlorobenzene	N001	0.17	ug/L	U	F	0.17		
70193	WL	8/15/2012	12084781	124-48-1	Chlorodibromomethane	N001	0.17	ug/L	U	F	0.17		

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70193	WL	8/15/2012	12084781	67-66-3	Chloroform	N001	0.16	ug/L	U	F	0.16		
70193	WL	8/15/2012	12084781	74-87-3	Chloromethane	N001	0.3	ug/L	U	F	0.3		
70193	WL	8/15/2012	12084781	7440-47-3	Chromium	0001	0.66	ug/L	U	F	0.66		
70193	WL	8/15/2012	12084781	7440-50-8	Copper	0001	1.4	ug/L	U	F	1.4		
70193	WL	8/15/2012	12084781	100-41-4	Ethylbenzene	N001	0.16	ug/L	U	F	0.16		
70193	WL	8/15/2012	12084781	87-68-3	Hexachlorobutadiene	N001	0.36	ug/L	U	F	0.36		
70193	WL	8/15/2012	12084781	7439-92-1	Lead	0001	2.6	ug/L	U	F	2.6		
70193	WL	8/15/2012	12084781	7439-97-6	Mercury	0001	0.027	ug/L	U	F	0.027		
70193	WL	8/15/2012	12084781	75-09-2	Methylene chloride	N001	0.36	ug/L	JB	F	0.32		U
70193	WL	8/15/2012	12084781	91-20-3	Naphthalene	N001	0.22	ug/L	U	F	0.22		
70193	WL	8/15/2012	12084781	7440-02-0	Nickel	0001	1.3	ug/L	U	F	1.3		
70193	WL	8/15/2012	12084781	7782-49-2	Selenium	0001	4.9	ug/L	U	F	4.9		
70193	WL	8/15/2012	12084781	7440-22-4	Silver	0001	0.93	ug/L	U	F	0.93		
70193	WL	8/15/2012	12084781	100-42-5	Styrene	N001	0.17	ug/L	U	F	0.17		
70193	WL	8/15/2012	12084781	127-18-4	Tetrachloroethene	N001	0.2	ug/L	U	F	0.2		
70193	WL	8/15/2012	12084781	108-88-3	Toluene	N001	0.17	ug/L	U	F	0.17		
70193	WL	8/15/2012	12084781	1330-20-7	Total Xylenes	N001	0.19	ug/L	U	F	0.19		
70193	WL	8/15/2012	12084781	79-01-6	Trichloroethene	N001	0.16	ug/L	U	F	0.16		
70193	WL	8/15/2012	12084781	7440-61-1	Uranium	0001	0.073	ug/L	J	F	0.05		
70193	WL	8/15/2012	12084781	75-01-4	Vinyl chloride	N001	0.1	ug/L	U	F	0.1		
70193	WL	8/15/2012	12084781	7440-66-6	Zinc	0001	6.3	ug/L	J	F	4.5		
70193	WL	8/15/2012	12084781	156-59-2	cis-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		
70193	WL	8/15/2012	12084781	156-60-5	trans-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		
70193	WL	8/15/2012	12084781	10061-02-6	trans-1,3-dichloropropene	N001	0.19	ug/L	U	F	0.19		
70393	WL	8/15/2012	12084781	71-55-6	1,1,1-Trichloroethane	N001	0.76	ug/L	J	F	0.16		
70393	WL	8/15/2012	12084781	79-34-5	1,1,2,2-Tetrachloroethane	N001	0.21	ug/L	U	F	0.21		
70393	WL	8/15/2012	12084781	79-00-5	1,1,2-Trichloroethane	N001	0.27	ug/L	U	F	0.27		
70393	WL	8/15/2012	12084781	75-35-4	1,1-Dichloroethene	N001	1.7	ug/L		F	0.23		
70393	WL	8/15/2012	12084781	120-82-1	1,2,4-Trichlorobenzene	N001	0.21	ug/L	U	F	0.21		
70393	WL	8/15/2012	12084781	96-12-8	1,2-Dibromo-3-chloropropane	N001	0.47	ug/L	U	F	0.47		
70393	WL	8/15/2012	12084781	106-93-4	1,2-Dibromoethane	N001	0.18	ug/L	U	F	0.18		
70393	WL	8/15/2012	12084781	95-50-1	1,2-Dichlorobenzene	N001	0.15	ug/L	U	F	0.15		
70393	WL	8/15/2012	12084781	107-06-2	1,2-Dichloroethane	N001	0.13	ug/L	U	F	0.13		
70393	WL	8/15/2012	12084781	78-87-5	1,2-Dichloropropane	N001	0.18	ug/L	U	F	0.18		
70393	WL	8/15/2012	12084781	541-73-1	1,3-Dichlorobenzene	N001	0.13	ug/L	U	F	0.13		
70393	WL	8/15/2012	12084781	106-46-7	1,4-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		
70393	WL	8/15/2012	12084781	7440-38-2	Arsenic	0001	4.4	ug/L	U	F	4.4		
70393	WL	8/15/2012	12084781	71-43-2	Benzene	N001	0.16	ug/L	U	F	0.16		
70393	WL	8/15/2012	12084781	7440-41-7	Beryllium	0001	0.47	ug/L	U	F	0.47		
70393	WL	8/15/2012	12084781	7440-42-8	Boron	0001	15	ug/L	JB	F	4.4		U
70393	WL	8/15/2012	12084781	75-27-4	Bromodichloromethane	N001	0.17	ug/L	U	F	0.17		
70393	WL	8/15/2012	12084781	75-25-2	Bromoform	N001	0.19	ug/L	U	F	0.19		
70393	WL	8/15/2012	12084781	74-83-9	Bromomethane	N001	0.21	ug/L	U	F	0.21		
70393	WL	8/15/2012	12084781	7440-43-9	Cadmium	0001	0.45	ug/L	U	F	0.45		
70393	WL	8/15/2012	12084781	56-23-5	Carbon tetrachloride	N001	0.19	ug/L	U	F	0.19		
70393	WL	8/15/2012	12084781	108-90-7	Chlorobenzene	N001	0.17	ug/L	U	F	0.17		
70393	WL	8/15/2012	12084781	124-48-1	Chlorodibromomethane	N001	0.17	ug/L	U	F	0.17		
70393	WL	8/15/2012	12084781	67-66-3	Chloroform	N001	0.16	ug/L	U	F	0.16		
70393	WL	8/15/2012	12084781	74-87-3	Chloromethane	N001	0.3	ug/L	U	F	0.3		
70393	WL	8/15/2012	12084781	7440-47-3	Chromium	0001	0.66	ug/L	U	F	0.66		
70393	WL	8/15/2012	12084781	7440-50-8	Copper	0001	1.4	ug/L	U	F	1.4		
70393	WL	8/15/2012	12084781	100-41-4	Ethylbenzene	N001	0.16	ug/L	U	F	0.16		
70393	WL	8/15/2012	12084781	87-68-3	Hexachlorobutadiene	N001	0.36	ug/L	U	F	0.36		
70393	WL	8/15/2012	12084781	7439-92-1	Lead	0001	2.6	ug/L	U	F	2.6		

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70393	WL	8/15/2012	12084781	7439-97-6	Mercury	0001	0.027	ug/L	U	F	0.027		
70393	WL	8/15/2012	12084781	75-09-2	Methylene chloride	N001	0.37	ug/L	JB	F	0.32		U
70393	WL	8/15/2012	12084781	91-20-3	Naphthalene	N001	0.22	ug/L	U	F	0.22		
70393	WL	8/15/2012	12084781	7440-02-0	Nickel	0001	2.6	ug/L	J	F	1.3		
70393	WL	8/15/2012	12084781	7782-49-2	Selenium	0001	4.9	ug/L	U	F	4.9		
70393	WL	8/15/2012	12084781	7440-22-4	Silver	0001	0.93	ug/L	U	F	0.93		
70393	WL	8/15/2012	12084781	100-42-5	Styrene	N001	0.17	ug/L	U	F	0.17		
70393	WL	8/15/2012	12084781	127-18-4	Tetrachloroethene	N001	1.5	ug/L		F	0.2		
70393	WL	8/15/2012	12084781	108-88-3	Toluene	N001	0.17	ug/L	U	F	0.17		
70393	WL	8/15/2012	12084781	1330-20-7	Total Xylenes	N001	0.19	ug/L	U	F	0.19		
70393	WL	8/15/2012	12084781	79-01-6	Trichloroethene	N001	5.5	ug/L		F	0.16		
70393	WL	8/15/2012	12084781	7440-61-1	Uranium	0001	0.05	ug/L	U	F	0.05		
70393	WL	8/15/2012	12084781	75-01-4	Vinyl chloride	N001	0.1	ug/L	U	F	0.1		
70393	WL	8/15/2012	12084781	7440-66-6	Zinc	0001	5.4	ug/L	J	F	4.5		
70393	WL	8/15/2012	12084781	156-59-2	cis-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		
70393	WL	8/15/2012	12084781	156-60-5	trans-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		
70393	WL	8/15/2012	12084781	10061-02-6	trans-1,3-dichloropropene	N001	0.19	ug/L	U	F	0.19		
70693	WL	8/15/2012	12084781	71-55-6	1,1,1-Trichloroethane	N001	1.2	ug/L		F	0.16		
70693	WL	8/15/2012	12084781	79-34-5	1,1,2,2-Tetrachloroethane	N001	0.21	ug/L	U	F	0.21		
70693	WL	8/15/2012	12084781	79-00-5	1,1,2-Trichloroethane	N001	0.27	ug/L	U	F	0.27		
70693	WL	8/15/2012	12084781	75-35-4	1,1-Dichloroethene	N001	2.2	ug/L		F	0.23		
70693	WL	8/15/2012	12084781	120-82-1	1,2,4-Trichlorobenzene	N001	0.21	ug/L	U	F	0.21		
70693	WL	8/15/2012	12084781	96-12-8	1,2-Dibromo-3-chloropropane	N001	0.47	ug/L	U	F	0.47		
70693	WL	8/15/2012	12084781	106-93-4	1,2-Dibromoethane	N001	0.18	ug/L	U	F	0.18		
70693	WL	8/15/2012	12084781	95-50-1	1,2-Dichlorobenzene	N001	0.15	ug/L	U	F	0.15		
70693	WL	8/15/2012	12084781	107-06-2	1,2-Dichloroethane	N001	0.13	ug/L	U	F	0.13		
70693	WL	8/15/2012	12084781	78-87-5	1,2-Dichloropropane	N001	0.18	ug/L	U	F	0.18		
70693	WL	8/15/2012	12084781	541-73-1	1,3-Dichlorobenzene	N001	0.13	ug/L	U	F	0.13		
70693	WL	8/15/2012	12084781	106-46-7	1,4-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		
70693	WL	8/15/2012	12084781	7440-38-2	Arsenic	0001	4.4	ug/L	U	F	4.4		
70693	WL	8/15/2012	12084781	71-43-2	Benzene	N001	0.16	ug/L	U	F	0.16		
70693	WL	8/15/2012	12084781	7440-41-7	Beryllium	0001	0.47	ug/L	U	F	0.47		
70693	WL	8/15/2012	12084781	7440-42-8	Boron	0001	35	ug/L	B	F	4.4		U
70693	WL	8/15/2012	12084781	75-27-4	Bromodichloromethane	N001	0.17	ug/L	U	F	0.17		
70693	WL	8/15/2012	12084781	75-25-2	Bromoform	N001	0.19	ug/L	U	F	0.19		
70693	WL	8/15/2012	12084781	74-83-9	Bromomethane	N001	0.21	ug/L	U	F	0.21		
70693	WL	8/15/2012	12084781	7440-43-9	Cadmium	0001	0.45	ug/L	U	F	0.45		
70693	WL	8/15/2012	12084781	56-23-5	Carbon tetrachloride	N001	0.19	ug/L	U	F	0.19		
70693	WL	8/15/2012	12084781	108-90-7	Chlorobenzene	N001	0.17	ug/L	U	F	0.17		
70693	WL	8/15/2012	12084781	124-48-1	Chlorodibromomethane	N001	0.17	ug/L	U	F	0.17		
70693	WL	8/15/2012	12084781	67-66-3	Chloroform	N001	0.16	ug/L	U	F	0.16		
70693	WL	8/15/2012	12084781	74-87-3	Chloromethane	N001	0.3	ug/L	U	F	0.3		
70693	WL	8/15/2012	12084781	7440-47-3	Chromium	0001	0.7	ug/L	J	F	0.66		
70693	WL	8/15/2012	12084781	7440-50-8	Copper	0001	1.4	ug/L	U	F	1.4		
70693	WL	8/15/2012	12084781	100-41-4	Ethylbenzene	N001	0.16	ug/L	U	F	0.16		
70693	WL	8/15/2012	12084781	87-68-3	Hexachlorobutadiene	N001	0.36	ug/L	U	F	0.36		
70693	WL	8/15/2012	12084781	7439-92-1	Lead	0001	2.6	ug/L	U	F	2.6		
70693	WL	8/15/2012	12084781	7439-97-6	Mercury	0001	0.027	ug/L	U	F	0.027		
70693	WL	8/15/2012	12084781	75-09-2	Methylene chloride	N001	0.32	ug/L	U	F	0.32		
70693	WL	8/15/2012	12084781	91-20-3	Naphthalene	N001	0.22	ug/L	U	F	0.22		
70693	WL	8/15/2012	12084781	7440-02-0	Nickel	0001	1.7	ug/L	J	F	1.3		
70693	WL	8/15/2012	12084781	7782-49-2	Selenium	0001	4.9	ug/L	U	F	4.9		
70693	WL	8/15/2012	12084781	7440-22-4	Silver	0001	0.93	ug/L	U	F	0.93		
70693	WL	8/15/2012	12084781	100-42-5	Styrene	N001	0.17	ug/L	U	F	0.17		

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70693	WL	8/15/2012	12084781	127-18-4	Tetrachloroethene	N001	0.88	ug/L	J	F	0.2		
70693	WL	8/15/2012	12084781	108-88-3	Toluene	N001	0.17	ug/L	U	F	0.17		
70693	WL	8/15/2012	12084781	1330-20-7	Total Xylenes	N001	0.19	ug/L	U	F	0.19		
70693	WL	8/15/2012	12084781	79-01-6	Trichloroethene	N001	2.9	ug/L		F	0.16		
70693	WL	8/15/2012	12084781	7440-61-1	Uranium	0001	0.05	ug/L	U	F	0.05		
70693	WL	8/15/2012	12084781	75-01-4	Vinyl chloride	N001	0.1	ug/L	U	F	0.1		
70693	WL	8/15/2012	12084781	7440-66-6	Zinc	0001	4.8	ug/L	J	F	4.5		
70693	WL	8/15/2012	12084781	156-59-2	cis-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		
70693	WL	8/15/2012	12084781	156-60-5	trans-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		
70693	WL	8/15/2012	12084781	10061-02-6	trans-1,3-dichloropropene	N001	0.19	ug/L	U	F	0.19		
73005	WL	8/16/2012	12084781	71-55-6	1,1,1-Trichloroethane	N001	0.16	ug/L	U	F	0.16		
73005	WL	8/16/2012	12084781	79-34-5	1,1,2,2-Tetrachloroethane	N001	0.21	ug/L	U	F	0.21		
73005	WL	8/16/2012	12084781	79-00-5	1,1,2-Trichloroethane	N001	0.27	ug/L	U	F	0.27		
73005	WL	8/16/2012	12084781	75-35-4	1,1-Dichloroethene	N001	0.23	ug/L	U	F	0.23		
73005	WL	8/16/2012	12084781	120-82-1	1,2,4-Trichlorobenzene	N001	0.21	ug/L	U	F	0.21		
73005	WL	8/16/2012	12084781	96-12-8	1,2-Dibromo-3-chloropropane	N001	0.47	ug/L	U	F	0.47		
73005	WL	8/16/2012	12084781	106-93-4	1,2-Dibromoethane	N001	0.18	ug/L	U	F	0.18		
73005	WL	8/16/2012	12084781	95-50-1	1,2-Dichlorobenzene	N001	0.15	ug/L	U	F	0.15		
73005	WL	8/16/2012	12084781	107-06-2	1,2-Dichloroethane	N001	0.13	ug/L	U	F	0.13		
73005	WL	8/16/2012	12084781	78-87-5	1,2-Dichloropropane	N001	0.18	ug/L	U	F	0.18		
73005	WL	8/16/2012	12084781	541-73-1	1,3-Dichlorobenzene	N001	0.13	ug/L	U	F	0.13		
73005	WL	8/16/2012	12084781	106-46-7	1,4-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		
73005	WL	8/16/2012	12084781	7440-38-2	Arsenic	0001	4.4	ug/L	U	F	4.4		
73005	WL	8/16/2012	12084781	71-43-2	Benzene	N001	0.16	ug/L	U	F	0.16		
73005	WL	8/16/2012	12084781	7440-41-7	Beryllium	0001	0.47	ug/L	U	F	0.47		
73005	WL	8/16/2012	12084781	7440-42-8	Boron	0001	43	ug/L	B	F	4.4		U
73005	WL	8/16/2012	12084781	75-27-4	Bromodichloromethane	N001	0.17	ug/L	U	F	0.17		
73005	WL	8/16/2012	12084781	75-25-2	Bromoform	N001	0.19	ug/L	U	F	0.19		
73005	WL	8/16/2012	12084781	74-83-9	Bromomethane	N001	0.21	ug/L	U	F	0.21		
73005	WL	8/16/2012	12084781	7440-43-9	Cadmium	0001	0.45	ug/L	U	F	0.45		
73005	WL	8/16/2012	12084781	56-23-5	Carbon tetrachloride	N001	0.19	ug/L	U	F	0.19		
73005	WL	8/16/2012	12084781	108-90-7	Chlorobenzene	N001	0.17	ug/L	U	F	0.17		
73005	WL	8/16/2012	12084781	124-48-1	Chlorodibromomethane	N001	0.17	ug/L	U	F	0.17		
73005	WL	8/16/2012	12084781	67-66-3	Chloroform	N001	0.16	ug/L	U	F	0.16		
73005	WL	8/16/2012	12084781	74-87-3	Chloromethane	N001	0.3	ug/L	U	F	0.3		
73005	WL	8/16/2012	12084781	7440-47-3	Chromium	0001	1	ug/L	J	F	0.66		
73005	WL	8/16/2012	12084781	7440-50-8	Copper	0001	1.4	ug/L	U	F	1.4		
73005	WL	8/16/2012	12084781	100-41-4	Ethylbenzene	N001	0.16	ug/L	U	F	0.16		
73005	WL	8/16/2012	12084781	87-68-3	Hexachlorobutadiene	N001	0.36	ug/L	U	F	0.36		
73005	WL	8/16/2012	12084781	7439-92-1	Lead	0001	2.6	ug/L	U	F	2.6		
73005	WL	8/16/2012	12084781	7439-97-6	Mercury	0001	0.027	ug/L	U	F	0.027		
73005	WL	8/16/2012	12084781	75-09-2	Methylene chloride	N001	0.32	ug/L	U	F	0.32		
73005	WL	8/16/2012	12084781	91-20-3	Naphthalene	N001	0.22	ug/L	U	F	0.22		
73005	WL	8/16/2012	12084781	7440-02-0	Nickel	0001	1.3	ug/L	J	F	1.3		
73005	WL	8/16/2012	12084781	7782-49-2	Selenium	0001	16	ug/L		F	4.9		
73005	WL	8/16/2012	12084781	7440-22-4	Silver	0001	0.93	ug/L	U	F	0.93		
73005	WL	8/16/2012	12084781	100-42-5	Styrene	N001	0.17	ug/L	U	F	0.17		
73005	WL	8/16/2012	12084781	127-18-4	Tetrachloroethene	N001	0.2	ug/L	U	F	0.2		
73005	WL	8/16/2012	12084781	108-88-3	Toluene	N001	0.17	ug/L	U	F	0.17		
73005	WL	8/16/2012	12084781	1330-20-7	Total Xylenes	N001	0.19	ug/L	U	F	0.19		
73005	WL	8/16/2012	12084781	79-01-6	Trichloroethene	N001	0.16	ug/L	U	F	0.16		
73005	WL	8/16/2012	12084781	7440-61-1	Uranium	0001	27	ug/L		F	0.05		
73005	WL	8/16/2012	12084781	75-01-4	Vinyl chloride	N001	0.1	ug/L	U	F	0.1		
73005	WL	8/16/2012	12084781	7440-66-6	Zinc	0001	7.9	ug/L	J	F	4.5		

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73005	WL	8/16/2012	12084781	156-59-2	cis-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		
73005	WL	8/16/2012	12084781	156-60-5	trans-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		
73005	WL	8/16/2012	12084781	10061-02-6	trans-1,3-dichloropropene	N001	0.19	ug/L	U	F	0.19		
73105	WL	8/16/2012	12084781	71-55-6	1,1,1-Trichloroethane	N001	0.16	ug/L	U	F	0.16		
73105	WL	8/16/2012	12084781	79-34-5	1,1,2,2-Tetrachloroethane	N001	0.21	ug/L	U	F	0.21		
73105	WL	8/16/2012	12084781	79-00-5	1,1,2-Trichloroethane	N001	0.27	ug/L	U	F	0.27		
73105	WL	8/16/2012	12084781	75-35-4	1,1-Dichloroethene	N001	0.23	ug/L	U	F	0.23		
73105	WL	8/16/2012	12084781	120-82-1	1,2,4-Trichlorobenzene	N001	0.21	ug/L	U	F	0.21		
73105	WL	8/16/2012	12084781	96-12-8	1,2-Dibromo-3-chloropropane	N001	0.47	ug/L	U	F	0.47		
73105	WL	8/16/2012	12084781	106-93-4	1,2-Dibromoethane	N001	0.18	ug/L	U	F	0.18		
73105	WL	8/16/2012	12084781	95-50-1	1,2-Dichlorobenzene	N001	0.15	ug/L	U	F	0.15		
73105	WL	8/16/2012	12084781	107-06-2	1,2-Dichloroethane	N001	0.13	ug/L	U	F	0.13		
73105	WL	8/16/2012	12084781	78-87-5	1,2-Dichloropropane	N001	0.18	ug/L	U	F	0.18		
73105	WL	8/16/2012	12084781	541-73-1	1,3-Dichlorobenzene	N001	0.13	ug/L	U	F	0.13		
73105	WL	8/16/2012	12084781	106-46-7	1,4-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		
73105	WL	8/16/2012	12084781	7440-38-2	Arsenic	0001	4.4	ug/L	U	F	4.4		
73105	WL	8/16/2012	12084781	71-43-2	Benzene	N001	0.16	ug/L	U	F	0.16		
73105	WL	8/16/2012	12084781	7440-41-7	Beryllium	0001	0.47	ug/L	U	F	0.47		
73105	WL	8/16/2012	12084781	7440-42-8	Boron	0001	130	ug/L	B	F	4.4		
73105	WL	8/16/2012	12084781	75-27-4	Bromodichloromethane	N001	0.17	ug/L	U	F	0.17		
73105	WL	8/16/2012	12084781	75-25-2	Bromoform	N001	0.19	ug/L	U	F	0.19		
73105	WL	8/16/2012	12084781	74-83-9	Bromomethane	N001	0.21	ug/L	U	F	0.21		
73105	WL	8/16/2012	12084781	7440-43-9	Cadmium	0001	0.45	ug/L	U	F	0.45		
73105	WL	8/16/2012	12084781	56-23-5	Carbon tetrachloride	N001	0.19	ug/L	U	F	0.19		
73105	WL	8/16/2012	12084781	108-90-7	Chlorobenzene	N001	0.17	ug/L	U	F	0.17		
73105	WL	8/16/2012	12084781	124-48-1	Chlorodibromomethane	N001	0.17	ug/L	U	F	0.17		
73105	WL	8/16/2012	12084781	67-66-3	Chloroform	N001	0.16	ug/L	U	F	0.16		
73105	WL	8/16/2012	12084781	74-87-3	Chloromethane	N001	0.3	ug/L	U	F	0.3		
73105	WL	8/16/2012	12084781	7440-47-3	Chromium	0001	0.66	ug/L	U	F	0.66		
73105	WL	8/16/2012	12084781	7440-50-8	Copper	0001	1.4	ug/L	U	F	1.4		
73105	WL	8/16/2012	12084781	100-41-4	Ethylbenzene	N001	0.16	ug/L	U	F	0.16		
73105	WL	8/16/2012	12084781	87-68-3	Hexachlorobutadiene	N001	0.36	ug/L	U	F	0.36		
73105	WL	8/16/2012	12084781	7439-92-1	Lead	0001	2.6	ug/L	U	F	2.6		
73105	WL	8/16/2012	12084781	7439-97-6	Mercury	0001	0.027	ug/L	U	F	0.027		
73105	WL	8/16/2012	12084781	75-09-2	Methylene chloride	N001	0.32	ug/L	U	F	0.32		
73105	WL	8/16/2012	12084781	91-20-3	Naphthalene	N001	0.22	ug/L	U	F	0.22		
73105	WL	8/16/2012	12084781	7440-02-0	Nickel	0001	3.3	ug/L	J	F	1.3		
73105	WL	8/16/2012	12084781	7782-49-2	Selenium	0001	4.9	ug/L	U	F	4.9		
73105	WL	8/16/2012	12084781	7440-22-4	Silver	0001	0.93	ug/L	U	F	0.93		
73105	WL	8/16/2012	12084781	100-42-5	Styrene	N001	0.17	ug/L	U	F	0.17		
73105	WL	8/16/2012	12084781	127-18-4	Tetrachloroethene	N001	0.2	ug/L	U	F	0.2		
73105	WL	8/16/2012	12084781	108-88-3	Toluene	N001	0.17	ug/L	U	F	0.17		
73105	WL	8/16/2012	12084781	1330-20-7	Total Xylenes	N001	0.19	ug/L	U	F	0.19		
73105	WL	8/16/2012	12084781	79-01-6	Trichloroethene	N001	0.16	ug/L	U	F	0.16		
73105	WL	8/16/2012	12084781	7440-61-1	Uranium	0001	20	ug/L		F	0.05		
73105	WL	8/16/2012	12084781	75-01-4	Vinyl chloride	N001	0.1	ug/L	U	F	0.1		
73105	WL	8/16/2012	12084781	7440-66-6	Zinc	0001	8.2	ug/L	J	F	4.5		
73105	WL	8/16/2012	12084781	156-59-2	cis-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		
73105	WL	8/16/2012	12084781	156-60-5	trans-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		
73105	WL	8/16/2012	12084781	10061-02-6	trans-1,3-dichloropropene	N001	0.19	ug/L	U	F	0.19		
73205	WL	8/16/2012	12084781	71-55-6	1,1,1-Trichloroethane	N001	0.16	ug/L	U	F	0.16		
73205	WL	8/16/2012	12084781	79-34-5	1,1,2,2-Tetrachloroethane	N001	0.21	ug/L	U	F	0.21		
73205	WL	8/16/2012	12084781	79-00-5	1,1,2-Trichloroethane	N001	0.27	ug/L	U	F	0.27		
73205	WL	8/16/2012	12084781	75-35-4	1,1-Dichloroethene	N001	0.23	ug/L	U	F	0.23		

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73205	WL	8/16/2012	12084781	120-82-1	1,2,4-Trichlorobenzene	N001	0.21	ug/L	U	F	0.21		
73205	WL	8/16/2012	12084781	96-12-8	1,2-Dibromo-3-chloropropane	N001	0.47	ug/L	U	F	0.47		
73205	WL	8/16/2012	12084781	106-93-4	1,2-Dibromoethane	N001	0.18	ug/L	U	F	0.18		
73205	WL	8/16/2012	12084781	95-50-1	1,2-Dichlorobenzene	N001	0.15	ug/L	U	F	0.15		
73205	WL	8/16/2012	12084781	107-06-2	1,2-Dichloroethane	N001	0.13	ug/L	U	F	0.13		
73205	WL	8/16/2012	12084781	78-87-5	1,2-Dichloropropane	N001	0.18	ug/L	U	F	0.18		
73205	WL	8/16/2012	12084781	541-73-1	1,3-Dichlorobenzene	N001	0.13	ug/L	U	F	0.13		
73205	WL	8/16/2012	12084781	106-46-7	1,4-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		
73205	WL	8/16/2012	12084781	7440-38-2	Arsenic	0001	5.5	ug/L	J	F	4.4		U
73205	WL	8/16/2012	12084781	71-43-2	Benzene	N001	0.16	ug/L	U	F	0.16		
73205	WL	8/16/2012	12084781	7440-41-7	Beryllium	0001	0.47	ug/L	U	F	0.47		
73205	WL	8/16/2012	12084781	7440-42-8	Boron	0001	67	ug/L	B	F	4.4		
73205	WL	8/16/2012	12084781	75-27-4	Bromodichloromethane	N001	0.17	ug/L	U	F	0.17		
73205	WL	8/16/2012	12084781	75-25-2	Bromoform	N001	0.19	ug/L	U	F	0.19		
73205	WL	8/16/2012	12084781	74-83-9	Bromomethane	N001	0.21	ug/L	U	F	0.21		
73205	WL	8/16/2012	12084781	7440-43-9	Cadmium	0001	0.45	ug/L	U	F	0.45		
73205	WL	8/16/2012	12084781	56-23-5	Carbon tetrachloride	N001	0.19	ug/L	U	F	0.19		
73205	WL	8/16/2012	12084781	108-90-7	Chlorobenzene	N001	0.17	ug/L	U	F	0.17		
73205	WL	8/16/2012	12084781	124-48-1	Chlorodibromomethane	N001	0.17	ug/L	U	F	0.17		
73205	WL	8/16/2012	12084781	67-66-3	Chloroform	N001	0.16	ug/L	U	F	0.16		
73205	WL	8/16/2012	12084781	74-87-3	Chloromethane	N001	0.3	ug/L	U	F	0.3		
73205	WL	8/16/2012	12084781	7440-47-3	Chromium	0001	0.66	ug/L	U	F	0.66		
73205	WL	8/16/2012	12084781	7440-50-8	Copper	0001	1.4	ug/L	U	F	1.4		
73205	WL	8/16/2012	12084781	100-41-4	Ethylbenzene	N001	0.16	ug/L	U	F	0.16		
73205	WL	8/16/2012	12084781	87-68-3	Hexachlorobutadiene	N001	0.36	ug/L	U	F	0.36		
73205	WL	8/16/2012	12084781	7439-92-1	Lead	0001	2.6	ug/L	U	F	2.6		
73205	WL	8/16/2012	12084781	7439-97-6	Mercury	0001	0.027	ug/L	U	F	0.027		
73205	WL	8/16/2012	12084781	75-09-2	Methylene chloride	N001	0.32	ug/L	U	F	0.32		
73205	WL	8/16/2012	12084781	91-20-3	Naphthalene	N001	0.22	ug/L	U	F	0.22		
73205	WL	8/16/2012	12084781	7440-02-0	Nickel	0001	2.1	ug/L	J	F	1.3		
73205	WL	8/16/2012	12084781	7782-49-2	Selenium	0001	380	ug/L		F	4.9		
73205	WL	8/16/2012	12084781	7440-22-4	Silver	0001	0.93	ug/L	U	F	0.93		
73205	WL	8/16/2012	12084781	100-42-5	Styrene	N001	0.17	ug/L	U	F	0.17		
73205	WL	8/16/2012	12084781	127-18-4	Tetrachloroethene	N001	0.2	ug/L	U	F	0.2		
73205	WL	8/16/2012	12084781	108-88-3	Toluene	N001	0.17	ug/L	U	F	0.17		
73205	WL	8/16/2012	12084781	1330-20-7	Total Xylenes	N001	0.19	ug/L	U	F	0.19		
73205	WL	8/16/2012	12084781	79-01-6	Trichloroethene	N001	0.16	ug/L	U	F	0.16		
73205	WL	8/16/2012	12084781	7440-61-1	Uranium	0001	92	ug/L		F	0.05		
73205	WL	8/16/2012	12084781	75-01-4	Vinyl chloride	N001	0.1	ug/L	U	F	0.1		
73205	WL	8/16/2012	12084781	7440-66-6	Zinc	0001	8	ug/L	J	F	4.5		
73205	WL	8/16/2012	12084781	156-59-2	cis-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		
73205	WL	8/16/2012	12084781	156-60-5	trans-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		
73205	WL	8/16/2012	12084781	10061-02-6	trans-1,3-dichloropropene	N001	0.19	ug/L	U	F	0.19		
80005	WL	8/16/2012	12084781	71-55-6	1,1,1-Trichloroethane	N001	0.16	ug/L	U	F	0.16		
80005	WL	8/16/2012	12084781	79-34-5	1,1,2,2-Tetrachloroethane	N001	0.21	ug/L	U	F	0.21		
80005	WL	8/16/2012	12084781	79-00-5	1,1,2-Trichloroethane	N001	0.27	ug/L	U	F	0.27		
80005	WL	8/16/2012	12084781	75-35-4	1,1-Dichloroethene	N001	0.23	ug/L	U	F	0.23		
80005	WL	8/16/2012	12084781	120-82-1	1,2,4-Trichlorobenzene	N001	0.21	ug/L	U	F	0.21		
80005	WL	8/16/2012	12084781	96-12-8	1,2-Dibromo-3-chloropropane	N001	0.47	ug/L	U	F	0.47		
80005	WL	8/16/2012	12084781	106-93-4	1,2-Dibromoethane	N001	0.18	ug/L	U	F	0.18		
80005	WL	8/16/2012	12084781	95-50-1	1,2-Dichlorobenzene	N001	0.15	ug/L	U	F	0.15		
80005	WL	8/16/2012	12084781	107-06-2	1,2-Dichloroethane	N001	0.13	ug/L	U	F	0.13		
80005	WL	8/16/2012	12084781	78-87-5	1,2-Dichloropropane	N001	0.18	ug/L	U	F	0.18		
80005	WL	8/16/2012	12084781	541-73-1	1,3-Dichlorobenzene	N001	0.13	ug/L	U	F	0.13		

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80005	WL	8/16/2012	12084781	106-46-7	1,4-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		
80005	WL	8/16/2012	12084781	105-67-9	2, 4-Dimethylphenol	N001	0.67	ug/L	U	F	0.67		
80005	WL	8/16/2012	12084781	95-95-4	2,4,5-Trichlorophenol	N001	0.52	ug/L	U	F	0.52		
80005	WL	8/16/2012	12084781	88-06-2	2,4,6-Trichlorophenol	N001	0.33	ug/L	U	F	0.33		
80005	WL	8/16/2012	12084781	120-83-2	2,4-Dichlorophenol	N001	0.73	ug/L	U	F	0.73		
80005	WL	8/16/2012	12084781	51-28-5	2,4-Dinitrophenol	N001	11	ug/L	U	F	11		
80005	WL	8/16/2012	12084781	121-14-2	2,4-Dinitrotoluene	N001	1.9	ug/L	U	F	1.9		
80005	WL	8/16/2012	12084781	606-20-2	2,6-Dinitrotoluene	N001	2.2	ug/L	U	F	2.2		
80005	WL	8/16/2012	12084781	91-58-7	2-Chloronaphthalene	N001	0.3	ug/L	U	F	0.3		
80005	WL	8/16/2012	12084781	95-57-8	2-Chlorophenol	N001	2.3	ug/L	U	F	2.3		
80005	WL	8/16/2012	12084781	91-94-1	3,3'-Dichlorobenzidine	N001	2.3	ug/L	U	F	2.3		
80005	WL	8/16/2012	12084781	534-52-1	4,6-Dinitro-2-methyl phenol	N001	4.6	ug/L	U	F	4.6		
80005	WL	8/16/2012	12084781	59-50-7	4-Chloro-3-methylphenol	N001	2.8	ug/L	U	F	2.8		
80005	WL	8/16/2012	12084781	100-02-7	4-Nitrophenol	N001	1.4	ug/L	U	F	1.4		
80005	WL	8/16/2012	12084781	83-32-9	Acenaphthene	N001	0.32	ug/L	U	F	0.32		
80005	WL	8/16/2012	12084781	120-12-7	Anthracene	N001	0.48	ug/L	U	F	0.48		
80005	WL	8/16/2012	12084781	7440-38-2	Arsenic	0001	4.4	ug/L	U	F	4.4		
80005	WL	8/16/2012	12084781	56-55-3	Benz(a)anthracene	N001	0.4	ug/L	U	F	0.4		
80005	WL	8/16/2012	12084781	71-43-2	Benzene	N001	0.16	ug/L	U	F	0.16		
80005	WL	8/16/2012	12084781	50-32-8	Benzo(a)pyrene	N001	0.36	ug/L	U	F	0.36		
80005	WL	8/16/2012	12084781	205-99-2	Benzo(b)fluoranthene	N001	0.61	ug/L	U	F	0.61		
80005	WL	8/16/2012	12084781	191-24-2	Benzo(g,h,i)Perylene	N001	0.57	ug/L	U	F	0.57		
80005	WL	8/16/2012	12084781	207-08-9	Benzo(k)fluoranthene	N001	0.53	ug/L	U	F	0.53		
80005	WL	8/16/2012	12084781	7440-41-7	Beryllium	0001	0.47	ug/L	U	F	0.47		
80005	WL	8/16/2012	12084781	111-44-4	Bis(2-chloroethyl) ether	N001	0.47	ug/L	U	F	0.47		
80005	WL	8/16/2012	12084781	108-60-1	Bis(2-chloroisopropyl) ether	N001	0.32	ug/L	U	F	0.32		
80005	WL	8/16/2012	12084781	117-81-7	Bis(2-ethylhexyl) phthalate	N001	2.6	ug/L	J	F	0.64		
80005	WL	8/16/2012	12084781	7440-42-8	Boron	0001	51	ug/L	B	F	4.4		
80005	WL	8/16/2012	12084781	75-27-4	Bromodichloromethane	N001	0.17	ug/L	U	F	0.17		
80005	WL	8/16/2012	12084781	75-25-2	Bromoform	N001	0.19	ug/L	U	F	0.19		
80005	WL	8/16/2012	12084781	74-83-9	Bromomethane	N001	0.21	ug/L	U	F	0.21		
80005	WL	8/16/2012	12084781	85-68-7	Butyl benzyl phthalate	N001	1.1	ug/L	U	F	1.1		
80005	WL	8/16/2012	12084781	7440-43-9	Cadmium	0001	0.45	ug/L	U	F	0.45		
80005	WL	8/16/2012	12084781	56-23-5	Carbon tetrachloride	N001	0.19	ug/L	U	F	0.19		
80005	WL	8/16/2012	12084781	108-90-7	Chlorobenzene	N001	0.17	ug/L	U	F	0.17		
80005	WL	8/16/2012	12084781	124-48-1	Chlorodibromomethane	N001	0.17	ug/L	U	F	0.17		
80005	WL	8/16/2012	12084781	67-66-3	Chloroform	N001	0.16	ug/L	U	F	0.16		
80005	WL	8/16/2012	12084781	74-87-3	Chloromethane	N001	0.3	ug/L	U	F	0.3		
80005	WL	8/16/2012	12084781	7440-47-3	Chromium	0001	0.66	ug/L	U	F	0.66		
80005	WL	8/16/2012	12084781	218-01-9	Chrysene	N001	0.62	ug/L	U	F	0.62		
80005	WL	8/16/2012	12084781	7440-50-8	Copper	0001	1.4	ug/L	U	F	1.4		
80005	WL	8/16/2012	12084781	84-74-2	Di-n-butyl phthalate	N001	1.3	ug/L	U	F	1.3		
80005	WL	8/16/2012	12084781	53-70-3	Dibenz(a,h)anthracene	N001	0.59	ug/L	U	F	0.59		
80005	WL	8/16/2012	12084781	84-66-2	Diethyl phthalate	N001	0.44	ug/L	U	F	0.44		
80005	WL	8/16/2012	12084781	131-11-3	Dimethyl phthalate	N001	0.24	ug/L	U	F	0.24		
80005	WL	8/16/2012	12084781	100-41-4	Ethylbenzene	N001	0.16	ug/L	U	F	0.16		
80005	WL	8/16/2012	12084781	206-44-0	Fluoranthene	N001	0.23	ug/L	U	F	0.23		
80005	WL	8/16/2012	12084781	86-73-7	Fluorene	N001	0.36	ug/L	U	F	0.36		
80005	WL	8/16/2012	12084781	118-74-1	Hexachlorobenzene	N001	0.76	ug/L	U	F	0.76		
80005	WL	8/16/2012	12084781	87-68-3	Hexachlorobutadiene	N001	0.36	ug/L	U	F	0.36		
80005	WL	8/16/2012	12084781	77-47-4	Hexachlorocyclopentadiene	N001	11	ug/L	U	F	11		
80005	WL	8/16/2012	12084781	67-72-1	Hexachloroethane	N001	2.4	ug/L	U	F	2.4		
80005	WL	8/16/2012	12084781	193-39-5	Indeno(1,2,3-cd)pyrene	N001	0.75	ug/L	U	F	0.75		
80005	WL	8/16/2012	12084781	78-59-1	Isophorone	N001	0.24	ug/L	U	F	0.24		

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80005	WL	8/16/2012	12084781	7439-92-1	Lead	0001	2.6	ug/L	U	F	2.6		
80005	WL	8/16/2012	12084781	7439-97-6	Mercury	0001	0.027	ug/L	U	F	0.027		
80005	WL	8/16/2012	12084781	75-09-2	Methylene chloride	N001	0.32	ug/L	U	F	0.32		
80005	WL	8/16/2012	12084781	621-64-7	N-Nitrosodi-n-propylamine	N001	0.4	ug/L	U	F	0.4		
80005	WL	8/16/2012	12084781	86-30-6	N-Nitrosodiphenylamine	N001	0.5	ug/L	U	F	0.5		
80005	WL	8/16/2012	12084781	91-20-3	Naphthalene	N001	0.22	ug/L	U	F	0.22		
80005	WL	8/16/2012	12084781	7440-02-0	Nickel	0001	1.5	ug/L	J	F	1.3		
80005	WL	8/16/2012	12084781	98-95-3	Nitrobenzene	N001	0.93	ug/L	U	F	0.93		
80005	WL	8/16/2012	12084781	87-86-5	Pentachlorophenol	N001	23	ug/L	U	F	23		
80005	WL	8/16/2012	12084781	108-95-2	Phenol	N001	2.3	ug/L	U	F	2.3		
80005	WL	8/16/2012	12084781	129-00-0	Pyrene	N001	0.42	ug/L	U	F	0.42		
80005	WL	8/16/2012	12084781	7782-49-2	Selenium	0001	4.9	ug/L	U	F	4.9		
80005	WL	8/16/2012	12084781	7440-22-4	Silver	0001	0.93	ug/L	U	F	0.93		
80005	WL	8/16/2012	12084781	100-42-5	Styrene	N001	0.17	ug/L	U	F	0.17		
80005	WL	8/16/2012	12084781	127-18-4	Tetrachloroethene	N001	0.2	ug/L	U	F	0.2		
80005	WL	8/16/2012	12084781	108-88-3	Toluene	N001	0.17	ug/L	U	F	0.17		
80005	WL	8/16/2012	12084781	1330-20-7	Total Xylenes	N001	0.19	ug/L	U	F	0.19		
80005	WL	8/16/2012	12084781	79-01-6	Trichloroethene	N001	0.16	ug/L	U	F	0.16		
80005	WL	8/16/2012	12084781	7440-61-1	Uranium	0001	9	ug/L		F	0.05		
80005	WL	8/16/2012	12084781	75-01-4	Vinyl chloride	N001	0.1	ug/L	U	F	0.1		
80005	WL	8/16/2012	12084781	7440-66-6	Zinc	0001	6.1	ug/L	J	F	4.5		
80005	WL	8/16/2012	12084781	156-59-2	cis-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		
80005	WL	8/16/2012	12084781	156-60-5	trans-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		
80005	WL	8/16/2012	12084781	10061-02-6	trans-1,3-dichloropropene	N001	0.19	ug/L	U	F	0.19		
80105	WL	8/16/2012	12084781	71-55-6	1,1,1-Trichloroethane	N001	0.16	ug/L	U	F	0.16		
80105	WL	8/16/2012	12084781	79-34-5	1,1,2,2-Tetrachloroethane	N001	0.21	ug/L	U	F	0.21		
80105	WL	8/16/2012	12084781	79-00-5	1,1,2-Trichloroethane	N001	0.27	ug/L	U	F	0.27		
80105	WL	8/16/2012	12084781	75-35-4	1,1-Dichloroethene	N001	0.23	ug/L	U	F	0.23		
80105	WL	8/16/2012	12084781	120-82-1	1,2,4-Trichlorobenzene	N001	0.21	ug/L	U	F	0.21		
80105	WL	8/16/2012	12084781	96-12-8	1,2-Dibromo-3-chloropropane	N001	0.47	ug/L	U	F	0.47		
80105	WL	8/16/2012	12084781	106-93-4	1,2-Dibromoethane	N001	0.18	ug/L	U	F	0.18		
80105	WL	8/16/2012	12084781	95-50-1	1,2-Dichlorobenzene	N001	0.15	ug/L	U	F	0.15		
80105	WL	8/16/2012	12084781	107-06-2	1,2-Dichloroethane	N001	0.13	ug/L	U	F	0.13		
80105	WL	8/16/2012	12084781	78-87-5	1,2-Dichloropropane	N001	0.18	ug/L	U	F	0.18		
80105	WL	8/16/2012	12084781	541-73-1	1,3-Dichlorobenzene	N001	0.13	ug/L	U	F	0.13		
80105	WL	8/16/2012	12084781	106-46-7	1,4-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		
80105	WL	8/16/2012	12084781	105-67-9	2, 4-Dimethylphenol	N001	0.73	ug/L	U	F	0.73		
80105	WL	8/16/2012	12084781	95-95-4	2,4,5-Trichlorophenol	N001	0.56	ug/L	U	F	0.56		
80105	WL	8/16/2012	12084781	88-06-2	2,4,6-Trichlorophenol	N001	0.36	ug/L	U	F	0.36		
80105	WL	8/16/2012	12084781	120-83-2	2,4-Dichlorophenol	N001	0.8	ug/L	U	F	0.8		
80105	WL	8/16/2012	12084781	51-28-5	2,4-Dinitrophenol	N001	13	ug/L	U	F	13		
80105	WL	8/16/2012	12084781	121-14-2	2,4-Dinitrotoluene	N001	2.1	ug/L	U	F	2.1		
80105	WL	8/16/2012	12084781	606-20-2	2,6-Dinitrotoluene	N001	2.4	ug/L	U	F	2.4		
80105	WL	8/16/2012	12084781	91-58-7	2-Chloronaphthalene	N001	0.33	ug/L	U	F	0.33		
80105	WL	8/16/2012	12084781	95-57-8	2-Chlorophenol	N001	2.5	ug/L	U	F	2.5		
80105	WL	8/16/2012	12084781	91-94-1	3,3-Dichlorobenzidine	N001	2.5	ug/L	U	F	2.5		
80105	WL	8/16/2012	12084781	534-52-1	4,6-Dinitro-2-methyl phenol	N001	5	ug/L	U	F	5		
80105	WL	8/16/2012	12084781	59-50-7	4-Chloro-3-methylphenol	N001	3	ug/L	U	F	3		
80105	WL	8/16/2012	12084781	100-02-7	4-Nitrophenol	N001	1.5	ug/L	U	F	1.5		
80105	WL	8/16/2012	12084781	83-32-9	Acenaphthene	N001	0.35	ug/L	U	F	0.35		
80105	WL	8/16/2012	12084781	120-12-7	Anthracene	N001	0.53	ug/L	U	F	0.53		
80105	WL	8/16/2012	12084781	7440-38-2	Arsenic	0001	4.4	ug/L	U	F	4.4		
80105	WL	8/16/2012	12084781	56-55-3	Benz(a)anthracene	N001	0.44	ug/L	U	F	0.44		
80105	WL	8/16/2012	12084781	71-43-2	Benzene	N001	0.16	ug/L	U	F	0.16		

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80105	WL	8/16/2012	12084781	50-32-8	Benzo(a)pyrene	N001	0.39	ug/L	U	F	0.39		
80105	WL	8/16/2012	12084781	205-99-2	Benzo(b)fluoranthene	N001	0.66	ug/L	U	F	0.66		
80105	WL	8/16/2012	12084781	191-24-2	Benzo(g,h,i)Perylene	N001	0.63	ug/L	U	F	0.63		
80105	WL	8/16/2012	12084781	207-08-9	Benzo(k)fluoranthene	N001	0.58	ug/L	U	F	0.58		
80105	WL	8/16/2012	12084781	7440-41-7	Beryllium	0001	0.47	ug/L	U	F	0.47		
80105	WL	8/16/2012	12084781	111-44-4	Bis(2-chloroethyl) ether	N001	0.51	ug/L	U	F	0.51		
80105	WL	8/16/2012	12084781	108-60-1	Bis(2-chloroisopropyl) ether	N001	0.35	ug/L	U	F	0.35		
80105	WL	8/16/2012	12084781	117-81-7	Bis(2-ethylhexyl) phthalate	N001	2.7	ug/L	J	F	0.7		
80105	WL	8/16/2012	12084781	7440-42-8	Boron	0001	150	ug/L	B	F	4.4		
80105	WL	8/16/2012	12084781	75-27-4	Bromodichloromethane	N001	0.17	ug/L	U	F	0.17		
80105	WL	8/16/2012	12084781	75-25-2	Bromoform	N001	0.19	ug/L	U	F	0.19		
80105	WL	8/16/2012	12084781	74-83-9	Bromomethane	N001	0.21	ug/L	U	F	0.21		
80105	WL	8/16/2012	12084781	85-68-7	Butyl benzyl phthalate	N001	1.3	ug/L	U	F	1.3		
80105	WL	8/16/2012	12084781	7440-43-9	Cadmium	0001	0.45	ug/L	U	F	0.45		
80105	WL	8/16/2012	12084781	56-23-5	Carbon tetrachloride	N001	0.19	ug/L	U	F	0.19		
80105	WL	8/16/2012	12084781	108-90-7	Chlorobenzene	N001	0.17	ug/L	U	F	0.17		
80105	WL	8/16/2012	12084781	124-48-1	Chlorodibromomethane	N001	0.17	ug/L	U	F	0.17		
80105	WL	8/16/2012	12084781	67-66-3	Chloroform	N001	0.16	ug/L	U	F	0.16		
80105	WL	8/16/2012	12084781	74-87-3	Chloromethane	N001	0.3	ug/L	U	F	0.3		
80105	WL	8/16/2012	12084781	7440-47-3	Chromium	0001	0.66	ug/L	U	F	0.66		
80105	WL	8/16/2012	12084781	218-01-9	Chrysene	N001	0.68	ug/L	U	F	0.68		
80105	WL	8/16/2012	12084781	7440-50-8	Copper	0001	1.4	ug/L	U	F	1.4		
80105	WL	8/16/2012	12084781	84-74-2	Di-n-butyl phthalate	N001	1.5	ug/L	U	F	1.5		
80105	WL	8/16/2012	12084781	53-70-3	Dibenz(a,h)anthracene	N001	0.64	ug/L	U	F	0.64		
80105	WL	8/16/2012	12084781	84-66-2	Diethyl phthalate	N001	0.48	ug/L	U	F	0.48		
80105	WL	8/16/2012	12084781	131-11-3	Dimethyl phthalate	N001	0.26	ug/L	U	F	0.26		
80105	WL	8/16/2012	12084781	100-41-4	Ethylbenzene	N001	0.16	ug/L	U	F	0.16		
80105	WL	8/16/2012	12084781	206-44-0	Fluoranthene	N001	0.25	ug/L	U	F	0.25		
80105	WL	8/16/2012	12084781	86-73-7	Fluorene	N001	0.39	ug/L	U	F	0.39		
80105	WL	8/16/2012	12084781	118-74-1	Hexachlorobenzene	N001	0.83	ug/L	U	F	0.83		
80105	WL	8/16/2012	12084781	87-68-3	Hexachlorobutadiene	N001	0.36	ug/L	U	F	0.36		
80105	WL	8/16/2012	12084781	77-47-4	Hexachlorocyclopentadiene	N001	13	ug/L	U	F	13		
80105	WL	8/16/2012	12084781	67-72-1	Hexachloroethane	N001	2.6	ug/L	U	F	2.6		
80105	WL	8/16/2012	12084781	193-39-5	Indeno(1,2,3-cd)pyrene	N001	0.81	ug/L	U	F	0.81		
80105	WL	8/16/2012	12084781	78-59-1	Isophorone	N001	0.26	ug/L	U	F	0.26		
80105	WL	8/16/2012	12084781	7439-92-1	Lead	0001	2.6	ug/L	U	F	2.6		
80105	WL	8/16/2012	12084781	7439-97-6	Mercury	0001	0.027	ug/L	U	F	0.027		
80105	WL	8/16/2012	12084781	75-09-2	Methylene chloride	N001	0.32	ug/L	U	F	0.32		
80105	WL	8/16/2012	12084781	621-64-7	N-Nitrosodi-n-propylamine	N001	0.44	ug/L	U	F	0.44		
80105	WL	8/16/2012	12084781	86-30-6	N-Nitrosodiphenylamine	N001	0.55	ug/L	U	F	0.55		
80105	WL	8/16/2012	12084781	91-20-3	Naphthalene	N001	0.22	ug/L	U	F	0.22		
80105	WL	8/16/2012	12084781	7440-02-0	Nickel	0001	1.3	ug/L	U	F	1.3		
80105	WL	8/16/2012	12084781	98-95-3	Nitrobenzene	N001	1	ug/L	U	F	1		
80105	WL	8/16/2012	12084781	87-86-5	Pentachlorophenol	N001	25	ug/L	U	F	25		
80105	WL	8/16/2012	12084781	108-95-2	Phenol	N001	2.5	ug/L	U	F	2.5		
80105	WL	8/16/2012	12084781	129-00-0	Pyrene	N001	0.46	ug/L	U	F	0.46		
80105	WL	8/16/2012	12084781	7782-49-2	Selenium	0001	4.9	ug/L	U	F	4.9		
80105	WL	8/16/2012	12084781	7440-22-4	Silver	0001	0.93	ug/L	U	F	0.93		
80105	WL	8/16/2012	12084781	100-42-5	Styrene	N001	0.17	ug/L	U	F	0.17		
80105	WL	8/16/2012	12084781	127-18-4	Tetrachloroethene	N001	0.2	ug/L	U	F	0.2		
80105	WL	8/16/2012	12084781	108-88-3	Toluene	N001	0.17	ug/L	U	F	0.17		
80105	WL	8/16/2012	12084781	1330-20-7	Total Xylenes	N001	0.19	ug/L	U	F	0.19		
80105	WL	8/16/2012	12084781	79-01-6	Trichloroethene	N001	0.16	ug/L	U	F	0.16		
80105	WL	8/16/2012	12084781	7440-61-1	Uranium	0001	8.7	ug/L	U	F	0.05		

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80105	WL	8/16/2012	12084781	75-01-4	Vinyl chloride	N001	0.1	ug/L	U	F	0.1		
80105	WL	8/16/2012	12084781	7440-66-6	Zinc	0001	5.1	ug/L	J	F	4.5		
80105	WL	8/16/2012	12084781	156-59-2	cis-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		
80105	WL	8/16/2012	12084781	156-60-5	trans-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		
80105	WL	8/16/2012	12084781	10061-02-6	trans-1,3-dichloropropene	N001	0.19	ug/L	U	F	0.19		
80205	WL	8/16/2012	12084781	71-55-6	1,1,1-Trichloroethane	N001	0.16	ug/L	U	F	0.16		
80205	WL	8/16/2012	12084781	71-55-6	1,1,1-Trichloroethane	N002	0.16	ug/L	U	D	0.16		
80205	WL	8/16/2012	12084781	79-34-5	1,1,2,2-Tetrachloroethane	N001	0.21	ug/L	U	F	0.21		
80205	WL	8/16/2012	12084781	79-34-5	1,1,2,2-Tetrachloroethane	N002	0.21	ug/L	U	D	0.21		
80205	WL	8/16/2012	12084781	79-00-5	1,1,2-Trichloroethane	N001	0.27	ug/L	U	F	0.27		
80205	WL	8/16/2012	12084781	79-00-5	1,1,2-Trichloroethane	N002	0.27	ug/L	U	D	0.27		
80205	WL	8/16/2012	12084781	75-35-4	1,1-Dichloroethene	N001	0.23	ug/L	U	F	0.23		
80205	WL	8/16/2012	12084781	75-35-4	1,1-Dichloroethene	N002	0.23	ug/L	U	D	0.23		
80205	WL	8/16/2012	12084781	120-82-1	1,2,4-Trichlorobenzene	N001	0.21	ug/L	U	F	0.21		
80205	WL	8/16/2012	12084781	120-82-1	1,2,4-Trichlorobenzene	N002	0.21	ug/L	U	D	0.21		
80205	WL	8/16/2012	12084781	96-12-8	1,2-Dibromo-3-chloropropane	N001	0.47	ug/L	U	F	0.47		
80205	WL	8/16/2012	12084781	96-12-8	1,2-Dibromo-3-chloropropane	N002	0.47	ug/L	U	D	0.47		
80205	WL	8/16/2012	12084781	106-93-4	1,2-Dibromoethane	N001	0.18	ug/L	U	F	0.18		
80205	WL	8/16/2012	12084781	106-93-4	1,2-Dibromoethane	N002	0.18	ug/L	U	D	0.18		
80205	WL	8/16/2012	12084781	95-50-1	1,2-Dichlorobenzene	N001	0.15	ug/L	U	F	0.15		
80205	WL	8/16/2012	12084781	95-50-1	1,2-Dichlorobenzene	N002	0.15	ug/L	U	D	0.15		
80205	WL	8/16/2012	12084781	107-06-2	1,2-Dichloroethane	N001	0.13	ug/L	U	F	0.13		
80205	WL	8/16/2012	12084781	107-06-2	1,2-Dichloroethane	N002	0.13	ug/L	U	D	0.13		
80205	WL	8/16/2012	12084781	78-87-5	1,2-Dichloropropane	N001	0.18	ug/L	U	F	0.18		
80205	WL	8/16/2012	12084781	78-87-5	1,2-Dichloropropane	N002	0.18	ug/L	U	D	0.18		
80205	WL	8/16/2012	12084781	541-73-1	1,3-Dichlorobenzene	N001	0.13	ug/L	U	F	0.13		
80205	WL	8/16/2012	12084781	541-73-1	1,3-Dichlorobenzene	N002	0.13	ug/L	U	D	0.13		
80205	WL	8/16/2012	12084781	106-46-7	1,4-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		
80205	WL	8/16/2012	12084781	106-46-7	1,4-Dichlorobenzene	N002	0.16	ug/L	U	D	0.16		
80205	WL	8/16/2012	12084781	105-67-9	2, 4-Dimethylphenol	N001	0.75	ug/L	U	F	0.75		
80205	WL	8/16/2012	12084781	105-67-9	2, 4-Dimethylphenol	N002	0.71	ug/L	U	D	0.71		
80205	WL	8/16/2012	12084781	95-95-4	2,4,5-Trichlorophenol	N001	0.58	ug/L	U	F	0.58		
80205	WL	8/16/2012	12084781	95-95-4	2,4,5-Trichlorophenol	N002	0.55	ug/L	U	D	0.55		
80205	WL	8/16/2012	12084781	88-06-2	2,4,6-Trichlorophenol	N001	0.37	ug/L	U	F	0.37		
80205	WL	8/16/2012	12084781	88-06-2	2,4,6-Trichlorophenol	N002	0.35	ug/L	U	D	0.35		
80205	WL	8/16/2012	12084781	120-83-2	2,4-Dichlorophenol	N001	0.83	ug/L	U	F	0.83		
80205	WL	8/16/2012	12084781	120-83-2	2,4-Dichlorophenol	N002	0.78	ug/L	U	D	0.78		
80205	WL	8/16/2012	12084781	51-28-5	2,4-Dinitrophenol	N001	13	ug/L	U	F	13		
80205	WL	8/16/2012	12084781	51-28-5	2,4-Dinitrophenol	N002	12	ug/L	U	D	12		
80205	WL	8/16/2012	12084781	121-14-2	2,4-Dinitrotoluene	N001	2.1	ug/L	U	F	2.1		
80205	WL	8/16/2012	12084781	121-14-2	2,4-Dinitrotoluene	N002	2	ug/L	U	D	2		
80205	WL	8/16/2012	12084781	606-20-2	2,6-Dinitrotoluene	N001	2.4	ug/L	U	F	2.4		
80205	WL	8/16/2012	12084781	606-20-2	2,6-Dinitrotoluene	N002	2.3	ug/L	U	D	2.3		
80205	WL	8/16/2012	12084781	91-58-7	2-Chloronaphthalene	N001	0.34	ug/L	U	F	0.34		
80205	WL	8/16/2012	12084781	91-58-7	2-Chloronaphthalene	N002	0.32	ug/L	U	D	0.32		
80205	WL	8/16/2012	12084781	95-57-8	2-Chlorophenol	N001	2.6	ug/L	U	F	2.6		
80205	WL	8/16/2012	12084781	95-57-8	2-Chlorophenol	N002	2.4	ug/L	U	D	2.4		
80205	WL	8/16/2012	12084781	91-94-1	3,3'-Dichlorobenzidine	N001	2.6	ug/L	U	F	2.6		
80205	WL	8/16/2012	12084781	91-94-1	3,3'-Dichlorobenzidine	N002	2.4	ug/L	U	D	2.4		
80205	WL	8/16/2012	12084781	534-52-1	4,6-Dinitro-2-methyl phenol	N001	5.2	ug/L	U	F	5.2		
80205	WL	8/16/2012	12084781	534-52-1	4,6-Dinitro-2-methyl phenol	N002	4.9	ug/L	U	D	4.9		
80205	WL	8/16/2012	12084781	59-50-7	4-Chloro-3-methylphenol	N001	3.1	ug/L	U	F	3.1		
80205	WL	8/16/2012	12084781	59-50-7	4-Chloro-3-methylphenol	N002	2.9	ug/L	U	D	2.9		
80205	WL	8/16/2012	12084781	100-02-7	4-Nitrophenol	N001	1.6	ug/L	U	F	1.6		

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80205	WL	8/16/2012	12084781	100-02-7	4-Nitrophenol	N002	1.5	ug/L	U	D	1.5		
80205	WL	8/16/2012	12084781	83-32-9	Acenaphthene	N001	0.36	ug/L	U	F	0.36		
80205	WL	8/16/2012	12084781	83-32-9	Acenaphthene	N002	0.34	ug/L	U	D	0.34		
80205	WL	8/16/2012	12084781	120-12-7	Anthracene	N001	0.54	ug/L	U	F	0.54		
80205	WL	8/16/2012	12084781	120-12-7	Anthracene	N002	0.51	ug/L	U	D	0.51		
80205	WL	8/16/2012	12084781	7440-38-2	Arsenic	0001	4.4	ug/L	U	F	4.4		
80205	WL	8/16/2012	12084781	7440-38-2	Arsenic	0002	4.4	ug/L	U	D	4.4		
80205	WL	8/16/2012	12084781	56-55-3	Benz(a)anthracene	N001	0.45	ug/L	U	F	0.45		
80205	WL	8/16/2012	12084781	56-55-3	Benz(a)anthracene	N002	0.43	ug/L	U	D	0.43		
80205	WL	8/16/2012	12084781	71-43-2	Benzene	N001	0.16	ug/L	U	F	0.16		
80205	WL	8/16/2012	12084781	71-43-2	Benzene	N002	0.16	ug/L	U	D	0.16		
80205	WL	8/16/2012	12084781	50-32-8	Benzo(a)pyrene	N001	0.4	ug/L	U	F	0.4		
80205	WL	8/16/2012	12084781	50-32-8	Benzo(a)pyrene	N002	0.38	ug/L	U	D	0.38		
80205	WL	8/16/2012	12084781	205-99-2	Benzo(b)fluoranthene	N001	0.68	ug/L	U	F	0.68		
80205	WL	8/16/2012	12084781	205-99-2	Benzo(b)fluoranthene	N002	0.65	ug/L	U	D	0.65		
80205	WL	8/16/2012	12084781	191-24-2	Benzo(g,h,i)Perylene	N001	0.64	ug/L	U	F	0.64		
80205	WL	8/16/2012	12084781	191-24-2	Benzo(g,h,i)Perylene	N002	0.61	ug/L	U	D	0.61		
80205	WL	8/16/2012	12084781	207-08-9	Benzo(k)fluoranthene	N001	0.59	ug/L	U	F	0.59		
80205	WL	8/16/2012	12084781	207-08-9	Benzo(k)fluoranthene	N002	0.56	ug/L	U	D	0.56		
80205	WL	8/16/2012	12084781	7440-41-7	Beryllium	0001	0.47	ug/L	U	F	0.47		
80205	WL	8/16/2012	12084781	7440-41-7	Beryllium	0002	0.47	ug/L	U	D	0.47		
80205	WL	8/16/2012	12084781	111-44-4	Bis(2-chloroethyl) ether	N001	0.53	ug/L	U	F	0.53		
80205	WL	8/16/2012	12084781	111-44-4	Bis(2-chloroethyl) ether	N002	0.5	ug/L	U	D	0.5		
80205	WL	8/16/2012	12084781	108-60-1	Bis(2-chloroisopropyl) ether	N001	0.36	ug/L	U	F	0.36		
80205	WL	8/16/2012	12084781	108-60-1	Bis(2-chloroisopropyl) ether	N002	0.34	ug/L	U	D	0.34		
80205	WL	8/16/2012	12084781	117-81-7	Bis(2-ethylhexyl) phthalate	N001	2.9	ug/L	J	F	0.72		
80205	WL	8/16/2012	12084781	117-81-7	Bis(2-ethylhexyl) phthalate	N002	2.8	ug/L	J	D	0.68		
80205	WL	8/16/2012	12084781	7440-42-8	Boron	0001	84	ug/L	B	F	4.4		
80205	WL	8/16/2012	12084781	7440-42-8	Boron	0002	93	ug/L	B	D	4.4		
80205	WL	8/16/2012	12084781	75-27-4	Bromodichloromethane	N001	0.17	ug/L	U	F	0.17		
80205	WL	8/16/2012	12084781	75-27-4	Bromodichloromethane	N002	0.17	ug/L	U	D	0.17		
80205	WL	8/16/2012	12084781	75-25-2	Bromoform	N001	0.19	ug/L	U	F	0.19		
80205	WL	8/16/2012	12084781	75-25-2	Bromoform	N002	0.19	ug/L	U	D	0.19		
80205	WL	8/16/2012	12084781	74-83-9	Bromomethane	N001	0.21	ug/L	U	F	0.21		
80205	WL	8/16/2012	12084781	74-83-9	Bromomethane	N002	0.21	ug/L	U	D	0.21		
80205	WL	8/16/2012	12084781	85-68-7	Butyl benzyl phthalate	N001	1.3	ug/L	U	F	1.3		
80205	WL	8/16/2012	12084781	85-68-7	Butyl benzyl phthalate	N002	1.2	ug/L	U	D	1.2		
80205	WL	8/16/2012	12084781	7440-43-9	Cadmium	0001	0.45	ug/L	U	F	0.45		
80205	WL	8/16/2012	12084781	7440-43-9	Cadmium	0002	0.45	ug/L	U	D	0.45		
80205	WL	8/16/2012	12084781	56-23-5	Carbon tetrachloride	N001	0.19	ug/L	U	F	0.19		
80205	WL	8/16/2012	12084781	56-23-5	Carbon tetrachloride	N002	0.19	ug/L	U	D	0.19		
80205	WL	8/16/2012	12084781	108-90-7	Chlorobenzene	N001	0.17	ug/L	U	F	0.17		
80205	WL	8/16/2012	12084781	108-90-7	Chlorobenzene	N002	0.17	ug/L	U	D	0.17		
80205	WL	8/16/2012	12084781	124-48-1	Chlorodibromomethane	N001	0.17	ug/L	U	F	0.17		
80205	WL	8/16/2012	12084781	124-48-1	Chlorodibromomethane	N002	0.17	ug/L	U	D	0.17		
80205	WL	8/16/2012	12084781	67-66-3	Chloroform	N001	0.16	ug/L	U	F	0.16		
80205	WL	8/16/2012	12084781	67-66-3	Chloroform	N002	0.16	ug/L	U	D	0.16		
80205	WL	8/16/2012	12084781	74-87-3	Chloromethane	N001	0.3	ug/L	U	F	0.3		
80205	WL	8/16/2012	12084781	74-87-3	Chloromethane	N002	0.3	ug/L	U	D	0.3		
80205	WL	8/16/2012	12084781	7440-47-3	Chromium	0001	0.66	ug/L	U	F	0.66		
80205	WL	8/16/2012	12084781	7440-47-3	Chromium	0002	0.66	ug/L	U	D	0.66		
80205	WL	8/16/2012	12084781	218-01-9	Chrysene	N001	0.7	ug/L	U	F	0.7		
80205	WL	8/16/2012	12084781	218-01-9	Chrysene	N002	0.66	ug/L	U	D	0.66		
80205	WL	8/16/2012	12084781	7440-50-8	Copper	0001	1.4	ug/L	U	F	1.4		

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80205	WL	8/16/2012	12084781	7440-50-8	Copper	0002	1.4	ug/L	U	D	1.4		
80205	WL	8/16/2012	12084781	84-74-2	Di-n-butyl phthalate	N001	1.5	ug/L	U	F	1.5		
80205	WL	8/16/2012	12084781	84-74-2	Di-n-butyl phthalate	N002	1.4	ug/L	U	D	1.4		
80205	WL	8/16/2012	12084781	53-70-3	Dibenz(a,h)anthracene	N001	0.66	ug/L	U	F	0.66		
80205	WL	8/16/2012	12084781	53-70-3	Dibenz(a,h)anthracene	N002	0.62	ug/L	U	D	0.62		
80205	WL	8/16/2012	12084781	84-66-2	Diethyl phthalate	N001	0.49	ug/L	U	F	0.49		
80205	WL	8/16/2012	12084781	84-66-2	Diethyl phthalate	N002	0.46	ug/L	U	D	0.46		
80205	WL	8/16/2012	12084781	131-11-3	Dimethyl phthalate	N001	0.27	ug/L	U	F	0.27		
80205	WL	8/16/2012	12084781	131-11-3	Dimethyl phthalate	N002	0.26	ug/L	U	D	0.26		
80205	WL	8/16/2012	12084781	100-41-4	Ethylbenzene	N001	0.16	ug/L	U	F	0.16		
80205	WL	8/16/2012	12084781	100-41-4	Ethylbenzene	N002	0.16	ug/L	U	D	0.16		
80205	WL	8/16/2012	12084781	206-44-0	Fluoranthene	N001	0.26	ug/L	U	F	0.26		
80205	WL	8/16/2012	12084781	206-44-0	Fluoranthene	N002	0.24	ug/L	U	D	0.24		
80205	WL	8/16/2012	12084781	86-73-7	Fluorene	N001	0.4	ug/L	U	F	0.4		
80205	WL	8/16/2012	12084781	86-73-7	Fluorene	N002	0.38	ug/L	U	D	0.38		
80205	WL	8/16/2012	12084781	118-74-1	Hexachlorobenzene	N001	0.85	ug/L	U	F	0.85		
80205	WL	8/16/2012	12084781	118-74-1	Hexachlorobenzene	N002	0.8	ug/L	U	D	0.8		
80205	WL	8/16/2012	12084781	87-68-3	Hexachlorobutadiene	N001	0.36	ug/L	U	F	0.36		
80205	WL	8/16/2012	12084781	87-68-3	Hexachlorobutadiene	N002	0.36	ug/L	U	D	0.36		
80205	WL	8/16/2012	12084781	77-47-4	Hexachlorocyclopentadiene	N001	13	ug/L	U	F	13		
80205	WL	8/16/2012	12084781	77-47-4	Hexachlorocyclopentadiene	N002	12	ug/L	U	D	12		
80205	WL	8/16/2012	12084781	67-72-1	Hexachloroethane	N001	2.7	ug/L	U	F	2.7		
80205	WL	8/16/2012	12084781	67-72-1	Hexachloroethane	N002	2.6	ug/L	U	D	2.6		
80205	WL	8/16/2012	12084781	193-39-5	Indeno(1,2,3-cd)pyrene	N001	0.84	ug/L	U	F	0.84		
80205	WL	8/16/2012	12084781	193-39-5	Indeno(1,2,3-cd)pyrene	N002	0.79	ug/L	U	D	0.79		
80205	WL	8/16/2012	12084781	78-59-1	Isophorone	N001	0.27	ug/L	U	F	0.27		
80205	WL	8/16/2012	12084781	78-59-1	Isophorone	N002	0.26	ug/L	U	D	0.26		
80205	WL	8/16/2012	12084781	7439-92-1	Lead	0001	2.6	ug/L	U	F	2.6		
80205	WL	8/16/2012	12084781	7439-92-1	Lead	0002	2.6	ug/L	U	D	2.6		
80205	WL	8/16/2012	12084781	7439-97-6	Mercury	0001	0.027	ug/L	U	F	0.027		
80205	WL	8/16/2012	12084781	7439-97-6	Mercury	0002	0.027	ug/L	U	D	0.027		
80205	WL	8/16/2012	12084781	75-09-2	Methylene chloride	N001	0.32	ug/L	U	F	0.32		
80205	WL	8/16/2012	12084781	75-09-2	Methylene chloride	N002	0.32	ug/L	JB	D	0.32		U
80205	WL	8/16/2012	12084781	621-64-7	N-Nitrosodi-n-propylamine	N001	0.45	ug/L	U	F	0.45		
80205	WL	8/16/2012	12084781	621-64-7	N-Nitrosodi-n-propylamine	N002	0.43	ug/L	U	D	0.43		
80205	WL	8/16/2012	12084781	86-30-6	N-Nitrosodiphenylamine	N001	0.57	ug/L	U	F	0.57		
80205	WL	8/16/2012	12084781	86-30-6	N-Nitrosodiphenylamine	N002	0.53	ug/L	U	D	0.53		
80205	WL	8/16/2012	12084781	91-20-3	Naphthalene	N001	0.22	ug/L	U	F	0.22		
80205	WL	8/16/2012	12084781	91-20-3	Naphthalene	N002	0.22	ug/L	U	D	0.22		
80205	WL	8/16/2012	12084781	7440-02-0	Nickel	0001	3.4	ug/L	J	F	1.3		
80205	WL	8/16/2012	12084781	7440-02-0	Nickel	0002	3.6	ug/L	J	D	1.3		
80205	WL	8/16/2012	12084781	98-95-3	Nitrobenzene	N001	1	ug/L	U	F	1		
80205	WL	8/16/2012	12084781	98-95-3	Nitrobenzene	N002	0.98	ug/L	U	D	0.98		
80205	WL	8/16/2012	12084781	87-86-5	Pentachlorophenol	N001	26	ug/L	U	F	26		
80205	WL	8/16/2012	12084781	87-86-5	Pentachlorophenol	N002	24	ug/L	U	D	24		
80205	WL	8/16/2012	12084781	108-95-2	Phenol	N001	2.6	ug/L	U	F	2.6		
80205	WL	8/16/2012	12084781	108-95-2	Phenol	N002	2.4	ug/L	U	D	2.4		
80205	WL	8/16/2012	12084781	129-00-0	Pyrene	N001	0.48	ug/L	U	F	0.48		
80205	WL	8/16/2012	12084781	129-00-0	Pyrene	N002	0.45	ug/L	U	D	0.45		
80205	WL	8/16/2012	12084781	7782-49-2	Selenium	0001	4.9	ug/L	U	F	4.9		
80205	WL	8/16/2012	12084781	7782-49-2	Selenium	0002	4.9	ug/L	U	D	4.9		
80205	WL	8/16/2012	12084781	7440-22-4	Silver	0001	0.93	ug/L	U	F	0.93		
80205	WL	8/16/2012	12084781	7440-22-4	Silver	0002	0.93	ug/L	U	D	0.93		
80205	WL	8/16/2012	12084781	100-42-5	Styrene	N001	0.17	ug/L	U	F	0.17		

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LOCATION_CODE	LOCATION_TYPE	DATE SAMPLED	LAB REQUISITION NUMBER	CAS	ANALYTE	SAMPLE ID	RESULT	UNITS	LAB QUALIFIERS	SAMPLE TYPE	DETECTION LIMIT	UNCERTAINTY	DATA VALIDATION QUALIFIERS
80205	WL	8/16/2012	12084781	100-42-5	Styrene	N002	0.17	ug/L	U	D	0.17		
80205	WL	8/16/2012	12084781	127-18-4	Tetrachloroethene	N001	0.2	ug/L	U	F	0.2		
80205	WL	8/16/2012	12084781	127-18-4	Tetrachloroethene	N002	0.2	ug/L	U	D	0.2		
80205	WL	8/16/2012	12084781	108-88-3	Toluene	N001	0.17	ug/L	U	F	0.17		
80205	WL	8/16/2012	12084781	108-88-3	Toluene	N002	0.17	ug/L	U	D	0.17		
80205	WL	8/16/2012	12084781	1330-20-7	Total Xylenes	N001	0.19	ug/L	U	F	0.19		
80205	WL	8/16/2012	12084781	1330-20-7	Total Xylenes	N002	0.19	ug/L	U	D	0.19		
80205	WL	8/16/2012	12084781	79-01-6	Trichloroethene	N001	0.16	ug/L	U	F	0.16		
80205	WL	8/16/2012	12084781	79-01-6	Trichloroethene	N002	0.16	ug/L	U	D	0.16		
80205	WL	8/16/2012	12084781	7440-61-1	Uranium	0001	50	ug/L		F	0.05		
80205	WL	8/16/2012	12084781	7440-61-1	Uranium	0002	50	ug/L		D	0.05		
80205	WL	8/16/2012	12084781	75-01-4	Vinyl chloride	N001	0.1	ug/L	U	F	0.1		
80205	WL	8/16/2012	12084781	75-01-4	Vinyl chloride	N002	0.1	ug/L	U	D	0.1		
80205	WL	8/16/2012	12084781	7440-66-6	Zinc	0001	7.2	ug/L	J	F	4.5		
80205	WL	8/16/2012	12084781	7440-66-6	Zinc	0002	6.9	ug/L	J	D	4.5		
80205	WL	8/16/2012	12084781	156-59-2	cis-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		
80205	WL	8/16/2012	12084781	156-59-2	cis-1,2-Dichloroethene	N002	0.15	ug/L	U	D	0.15		
80205	WL	8/16/2012	12084781	156-60-5	trans-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		
80205	WL	8/16/2012	12084781	156-60-5	trans-1,2-Dichloroethene	N002	0.15	ug/L	U	D	0.15		
80205	WL	8/16/2012	12084781	10061-02-6	trans-1,3-dichloropropene	N001	0.19	ug/L	U	F	0.19		
80205	WL	8/16/2012	12084781	10061-02-6	trans-1,3-dichloropropene	N002	0.19	ug/L	U	D	0.19		
B5 POND	SL	7/3/2012	12074703	7440-61-1	Uranium	N001	5.6	ug/L		F	0.05		
B5 POND	SL	7/18/2012	12074726	7440-61-1	Uranium	N001	5.2	ug/L		F	0.05		
B5 POND	SL	8/1/2012	12084770	7440-61-1	Uranium	N001	5.5	ug/L		F	0.05		
B5 POND	SL	9/26/2012	12104883	7440-61-1	Uranium	N001	6.4	ug/L		F	0.05		
B5 POND	SL	8/15/2012	12084800	7440-61-1	Uranium	N001	5.9	ug/L		F	0.05		
B5 POND	SL	8/29/2012	12084818	7440-61-1	Uranium	N001	6.8	ug/L		F	0.05		
B5 POND	SL	9/13/2012	12094855	7440-61-1	Uranium	N001	7.9	ug/L		F	0.05		
B5 POND	SL	8/1/2012	12084770	7440-61-1	Uranium	N002	5.5	ug/L		D	0.05		
GS05	SL	7/3/2012	12074705	71-55-6	1,1,1-Trichloroethane	N001	0.16	ug/L	U	F	0.16		
GS05	SL	7/3/2012	12074705	79-34-5	1,1,2,2-Tetrachloroethane	N001	0.21	ug/L	U	F	0.21		
GS05	SL	7/3/2012	12074705	79-00-5	1,1,2-Trichloroethane	N001	0.27	ug/L	U	F	0.27		
GS05	SL	7/3/2012	12074705	75-35-4	1,1-Dichloroethene	N001	0.23	ug/L	U	F	0.23		
GS05	SL	7/3/2012	12074705	120-82-1	1,2,4-Trichlorobenzene	N001	0.21	ug/L	U	F	0.21		
GS05	SL	7/3/2012	12074705	96-12-8	1,2-Dibromo-3-chloropropane	N001	0.47	ug/L	U	F	0.47		
GS05	SL	7/3/2012	12074705	106-93-4	1,2-Dibromoethane	N001	0.18	ug/L	U	F	0.18		
GS05	SL	7/3/2012	12074705	95-50-1	1,2-Dichlorobenzene	N001	0.15	ug/L	U	F	0.15		
GS05	SL	7/3/2012	12074705	107-06-2	1,2-Dichloroethane	N001	0.13	ug/L	U	F	0.13		
GS05	SL	7/3/2012	12074705	78-87-5	1,2-Dichloropropane	N001	0.18	ug/L	U	F	0.18		
GS05	SL	7/3/2012	12074705	541-73-1	1,3-Dichlorobenzene	N001	0.13	ug/L	U	F	0.13		
GS05	SL	7/3/2012	12074705	106-46-7	1,4-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		
GS05	SL	8/20/2012	12104929	7440-38-2	Arsenic	N001	5	ug/L	U	F	5		
GS05	SL	7/3/2012	12074705	71-43-2	Benzene	N001	0.16	ug/L	U	F	0.16		
GS05	SL	8/20/2012	12104929	7440-41-7	Beryllium	N001	1	ug/L	U	F	1		
GS05	SL	8/20/2012	12104929	7440-42-8	Boron	N001	15	ug/L	U	F	15		
GS05	SL	7/3/2012	12074705	75-27-4	Bromodichloromethane	N001	0.17	ug/L	U	F	0.17		
GS05	SL	7/3/2012	12074705	75-25-2	Bromoform	N001	0.19	ug/L	U	F	0.19		
GS05	SL	7/3/2012	12074705	74-83-9	Bromomethane	N001	0.21	ug/L	U	F	0.21		
GS05	SL	8/20/2012	12104929	7440-43-9	Cadmium	0001	1	ug/L	U	F	1		
GS05	SL	7/3/2012	12074705	56-23-5	Carbon tetrachloride	N001	0.19	ug/L	U	F	0.19		
GS05	SL	7/3/2012	12074705	108-90-7	Chlorobenzene	N001	0.17	ug/L	U	F	0.17		
GS05	SL	7/3/2012	12074705	124-48-1	Chlorodibromomethane	N001	0.17	ug/L	U	F	0.17		
GS05	SL	7/3/2012	12074705	67-66-3	Chloroform	N001	0.16	ug/L	U	F	0.16		
GS05	SL	7/3/2012	12074705	74-87-3	Chloromethane	N001	0.3	ug/L	U	F	0.3		

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GS05	SL	8/20/2012	12104929	7440-47-3	Chromium	N001	1	ug/L	U	F	1		
GS05	SL	8/20/2012	12104929	7440-50-8	Copper	0001	3	ug/L	U	F	3		
GS05	SL	7/3/2012	12074705	100-41-4	Ethylbenzene	N001	0.16	ug/L	U	F	0.16		
GS05	SL	7/3/2012	12074705	87-68-3	Hexachlorobutadiene	N001	0.36	ug/L	U	F	0.36		
GS05	SL	8/20/2012	12104929	7439-92-1	Lead	0001	3.3	ug/L	U	F	3.3		
GS05	SL	7/3/2012	12074705	7439-97-6	Mercury	N001	0.027	ug/L	U	F	0.027		
GS05	SL	8/20/2012	12104929	7439-97-6	Mercury	N001	0.067	ug/L	U	F	0.067		
GS05	SL	7/3/2012	12074705	75-09-2	Methylene chloride	N001	0.32	ug/L	U	F	0.32		
GS05	SL	7/3/2012	12074705	91-20-3	Naphthalene	N001	0.22	ug/L	U	F	0.22		
GS05	SL	8/20/2012	12104929	7440-02-0	Nickel	0001	1.5	ug/L	U	F	1.5		
GS05	SL	8/20/2012	12104929	7782-49-2	Selenium	N001	6	ug/L	U	F	6		
GS05	SL	8/20/2012	12104929	7440-22-4	Silver	0001	1	ug/L	U	F	1		
GS05	SL	7/3/2012	12074705	100-42-5	Styrene	N001	0.17	ug/L	U	F	0.17		
GS05	SL	7/3/2012	12074705	127-18-4	Tetrachloroethene	N001	0.2	ug/L	U	F	0.2		
GS05	SL	7/3/2012	12074705	108-88-3	Toluene	N001	0.17	ug/L	U*	F	0.17		
GS05	SL	7/3/2012	12074705	1330-20-7	Total Xylenes	N001	0.19	ug/L	U	F	0.19		
GS05	SL	7/3/2012	12074705	79-01-6	Trichloroethene	N001	0.16	ug/L	U	F	0.16		
GS05	SL	8/20/2012	12104929	7440-61-1	Uranium	N002	0.139	ug/L	B	F	0.067		
GS05	SL	7/3/2012	12074705	75-01-4	Vinyl chloride	N001	0.1	ug/L	U	F	0.1		
GS05	SL	8/20/2012	12104929	7440-66-6	Zinc	0001	4.01	ug/L	B	F	3.3		
GS05	SL	7/3/2012	12074705	156-59-2	cis-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		
GS05	SL	7/3/2012	12074705	156-60-5	trans-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		
GS05	SL	7/3/2012	12074705	10061-02-6	trans-1,3-dichloropropene	N001	0.19	ug/L	U	F	0.19		
GS10	SL	9/12/2012	12104927	AM-241	Americium-241	N001	0.0117	pCi/L	U	F	0.0153	0.0119	
GS10	SL	7/9/2012	12074742	AM-241	Americium-241	N001	0.224	pCi/L		F	0.016	0.0408	
GS10	SL	7/26/2012	12094853	AM-241	Americium-241	N002	0.464	pCi/L		F	0.0194	0.07	
GS10	SL	9/12/2012	12104927	7440-41-7	Beryllium	N001	1	ug/L	U	F	1		
GS10	SL	7/9/2012	12074742	7440-41-7	Beryllium	N001	1	ug/L	U	F	1		
GS10	SL	7/26/2012	12094853	7440-41-7	Beryllium	N002	1	ug/L	U	F	1		
GS10	SL	7/9/2012	12074742	7440-43-9	Cadmium	0001	0.11	ug/L	U	F	0.11		
GS10	SL	9/12/2012	12104927	7440-43-9	Cadmium	0001	0.11	ug/L	U	F	0.11		
GS10	SL	7/26/2012	12094853	7440-43-9	Cadmium	0002	0.11	ug/L	U	F	0.11		
GS10	SL	9/12/2012	12104927	7440-47-3	Chromium	N001	1	ug/L	U	F	1		
GS10	SL	7/9/2012	12074742	7440-47-3	Chromium	N001	1	ug/L	U	F	1		
GS10	SL	7/26/2012	12094853	7440-47-3	Chromium	N002	4.28	ug/L	B	F	1		
GS10	SL	9/12/2012	12104927	HARDNESS	Hardness	N001	475	mg/L		F	3.33		
GS10	SL	7/9/2012	12074742	HARDNESS	Hardness	N001	478	mg/L		F	2		
GS10	SL	7/26/2012	12094853	HARDNESS	Hardness	N002	509	mg/L		F	5		
GS10	SL	9/12/2012	12104927	PU-239,240	Plutonium-239, 240	N001	0.00866	pCi/L	U	F	0.0179	0.00897	
GS10	SL	7/9/2012	12074742	PU-239,240	Plutonium-239, 240	N001	0.173	pCi/L		F	0.0163	0.0375	
GS10	SL	7/26/2012	12094853	PU-239,240	Plutonium-239, 240	N002	0.314	pCi/L		F	0.0243	0.065	
GS10	SL	7/9/2012	12074742	7440-22-4	Silver	0001	0.2	ug/L	U	F	0.2		
GS10	SL	9/12/2012	12104927	7440-22-4	Silver	0001	0.2	ug/L	U	F	0.2		
GS10	SL	7/26/2012	12094853	7440-22-4	Silver	0002	0.2	ug/L	U	F	0.2		
GS10	SL	9/26/2012	12104883	7440-61-1	Uranium	N001	3.8	ug/L		F	0.05		
GS10	SL	7/3/2012	12074703	7440-61-1	Uranium	N001	6.4	ug/L		F	0.25		
GS10	SL	8/15/2012	12084800	7440-61-1	Uranium	N001	4.2	ug/L		F	0.05		
GS10	SL	8/1/2012	12084770	7440-61-1	Uranium	N001	7.9	ug/L		F	0.05		
GS10	SL	7/18/2012	12074726	7440-61-1	Uranium	N001	4.5	ug/L		F	0.05		
GS10	SL	9/13/2012	12094855	7440-61-1	Uranium	N001	4.4	ug/L		F	0.05		
GS10	SL	8/29/2012	12084818	7440-61-1	Uranium	N001	3.3	ug/L		F	0.05		
GS10	SL	7/9/2012	12074742	7440-61-1	Uranium	N001	7.07	ug/L		F	0.067		
GS10	SL	9/12/2012	12104927	7440-61-1	Uranium	N001	3.75	ug/L		F	0.067		
GS10	SL	8/1/2012	12084770	7440-61-1	Uranium	N002	7.9	ug/L		D	0.05		

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GS10	SL	7/26/2012	12094853	7440-61-1	Uranium	N002	4.2	ug/L		F	0.067		
GS59	SL	7/3/2012	12074705	71-55-6	1,1,1-Trichloroethane	N001	0.16	ug/L	U	F	0.16		
GS59	SL	7/3/2012	12074705	79-34-5	1,1,2,2-Tetrachloroethane	N001	0.21	ug/L	U	F	0.21		
GS59	SL	7/3/2012	12074705	79-00-5	1,1,2-Trichloroethane	N001	0.27	ug/L	U	F	0.27		
GS59	SL	7/3/2012	12074705	75-35-4	1,1-Dichloroethene	N001	0.23	ug/L	U	F	0.23		
GS59	SL	7/3/2012	12074705	120-82-1	1,2,4-Trichlorobenzene	N001	0.21	ug/L	U	F	0.21		
GS59	SL	7/3/2012	12074705	96-12-8	1,2-Dibromo-3-chloropropane	N001	0.47	ug/L	U	F	0.47		
GS59	SL	7/3/2012	12074705	106-93-4	1,2-Dibromoethane	N001	0.18	ug/L	U	F	0.18		
GS59	SL	7/3/2012	12074705	95-50-1	1,2-Dichlorobenzene	N001	0.15	ug/L	U	F	0.15		
GS59	SL	7/3/2012	12074705	107-06-2	1,2-Dichloroethane	N001	0.13	ug/L	U	F	0.13		
GS59	SL	7/3/2012	12074705	78-87-5	1,2-Dichloropropane	N001	0.18	ug/L	U	F	0.18		
GS59	SL	7/3/2012	12074705	541-73-1	1,3-Dichlorobenzene	N001	0.13	ug/L	U	F	0.13		
GS59	SL	7/3/2012	12074705	106-46-7	1,4-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		
GS59	SL	8/20/2012	12104929	7440-38-2	Arsenic	N001	5.14	ug/L	B	F	5		
GS59	SL	7/3/2012	12074705	71-43-2	Benzene	N001	0.16	ug/L	U	F	0.16		
GS59	SL	8/20/2012	12104929	7440-41-7	Beryllium	N001	1	ug/L	U	F	1		
GS59	SL	8/20/2012	12104929	7440-42-8	Boron	N001	15	ug/L	U	F	15		
GS59	SL	7/3/2012	12074705	75-27-4	Bromodichloromethane	N001	0.17	ug/L	U	F	0.17		
GS59	SL	7/3/2012	12074705	75-25-2	Bromoform	N001	0.19	ug/L	U	F	0.19		
GS59	SL	7/3/2012	12074705	74-83-9	Bromomethane	N001	0.21	ug/L	U	F	0.21		
GS59	SL	8/20/2012	12104929	7440-43-9	Cadmium	0001	1	ug/L	U	F	1		
GS59	SL	7/3/2012	12074705	56-23-5	Carbon tetrachloride	N001	0.19	ug/L	U	F	0.19		
GS59	SL	7/3/2012	12074705	108-90-7	Chlorobenzene	N001	0.17	ug/L	U	F	0.17		
GS59	SL	7/3/2012	12074705	124-48-1	Chlorodibromomethane	N001	0.17	ug/L	U	F	0.17		
GS59	SL	7/3/2012	12074705	67-66-3	Chloroform	N001	0.16	ug/L	U	F	0.16		
GS59	SL	7/3/2012	12074705	74-87-3	Chloromethane	N001	0.3	ug/L	U	F	0.3		
GS59	SL	8/20/2012	12104929	7440-47-3	Chromium	N001	1	ug/L	U	F	1		
GS59	SL	8/20/2012	12104929	7440-50-8	Copper	0001	5.45	ug/L	B	F	3		
GS59	SL	7/3/2012	12074705	100-41-4	Ethylbenzene	N001	0.16	ug/L	U	F	0.16		
GS59	SL	7/3/2012	12074705	87-68-3	Hexachlorobutadiene	N001	0.36	ug/L	U	F	0.36		
GS59	SL	8/20/2012	12104929	7439-92-1	Lead	0001	3.3	ug/L	U	F	3.3		
GS59	SL	7/3/2012	12074705	7439-97-6	Mercury	N001	0.027	ug/L	U	F	0.027		
GS59	SL	8/20/2012	12104929	7439-97-6	Mercury	N001	0.067	ug/L	U	F	0.067		
GS59	SL	7/3/2012	12074705	75-09-2	Methylene chloride	N001	0.32	ug/L	U	F	0.32		
GS59	SL	7/3/2012	12074705	91-20-3	Naphthalene	N001	0.22	ug/L	U	F	0.22		
GS59	SL	8/20/2012	12104929	7440-02-0	Nickel	0001	1.5	ug/L	U	F	1.5		
GS59	SL	8/20/2012	12104929	7782-49-2	Selenium	N001	6	ug/L	U	F	6		
GS59	SL	8/20/2012	12104929	7440-22-4	Silver	0001	1	ug/L	U	F	1		
GS59	SL	7/3/2012	12074705	100-42-5	Styrene	N001	0.17	ug/L	U	F	0.17		
GS59	SL	7/3/2012	12074705	127-18-4	Tetrachloroethene	N001	0.2	ug/L	U	F	0.2		
GS59	SL	7/3/2012	12074705	108-88-3	Toluene	N001	0.17	ug/L	U*	F	0.17		
GS59	SL	7/3/2012	12074705	1330-20-7	Total Xylenes	N001	0.19	ug/L	U	F	0.19		
GS59	SL	7/3/2012	12074705	79-01-6	Trichloroethene	N001	0.16	ug/L	U	F	0.16		
GS59	SL	8/20/2012	12104929	7440-61-1	Uranium	N002	0.313	ug/L		F	0.067		
GS59	SL	7/3/2012	12074705	75-01-4	Vinyl chloride	N001	0.1	ug/L	U	F	0.1		
GS59	SL	8/20/2012	12104929	7440-66-6	Zinc	0001	6.61	ug/L	B	F	3.3		
GS59	SL	7/3/2012	12074705	156-59-2	cis-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		
GS59	SL	7/3/2012	12074705	156-60-5	trans-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		
GS59	SL	7/3/2012	12074705	10061-02-6	trans-1,3-dichloropropene	N001	0.19	ug/L	U	F	0.19		
MOUND R1-0	TS	8/9/2012	12084769	71-55-6	1,1,1-Trichloroethane	N001	330	ug/L		F	6.4		
MOUND R1-0	TS	8/9/2012	12084769	79-34-5	1,1,2,2-Tetrachloroethane	N001	0.84	ug/L	U	F	0.84		
MOUND R1-0	TS	8/9/2012	12084769	79-00-5	1,1,2-Trichloroethane	N001	1.1	ug/L	U	F	1.1		
MOUND R1-0	TS	8/9/2012	12084769	75-35-4	1,1-Dichloroethene	N001	49	ug/L		F	0.92		
MOUND R1-0	TS	8/9/2012	12084769	120-82-1	1,2,4-Trichlorobenzene	N001	0.84	ug/L	U	F	0.84		

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MOUND R1-0	TS	8/9/2012	12084769	96-12-8	1,2-Dibromo-3-chloropropane	N001	1.9	ug/L	U	F	1.9		
MOUND R1-0	TS	8/9/2012	12084769	106-93-4	1,2-Dibromoethane	N001	0.72	ug/L	U	F	0.72		
MOUND R1-0	TS	8/9/2012	12084769	95-50-1	1,2-Dichlorobenzene	N001	0.6	ug/L	U	F	0.6		
MOUND R1-0	TS	8/9/2012	12084769	107-06-2	1,2-Dichloroethane	N001	1.5	ug/L	J	F	0.52		
MOUND R1-0	TS	8/9/2012	12084769	78-87-5	1,2-Dichloropropane	N001	0.72	ug/L	U	F	0.72		
MOUND R1-0	TS	8/9/2012	12084769	541-73-1	1,3-Dichlorobenzene	N001	0.52	ug/L	U	F	0.52		
MOUND R1-0	TS	8/9/2012	12084769	106-46-7	1,4-Dichlorobenzene	N001	0.64	ug/L	U	F	0.64		
MOUND R1-0	TS	8/9/2012	12084769	71-43-2	Benzene	N001	0.68	ug/L	J	F	0.64		
MOUND R1-0	TS	8/9/2012	12084769	75-27-4	Bromodichloromethane	N001	0.68	ug/L	U	F	0.68		
MOUND R1-0	TS	8/9/2012	12084769	75-25-2	Bromoform	N001	0.76	ug/L	U	F	0.76		
MOUND R1-0	TS	8/9/2012	12084769	74-83-9	Bromomethane	N001	0.84	ug/L	U	F	0.84		
MOUND R1-0	TS	8/9/2012	12084769	56-23-5	Carbon tetrachloride	N001	87	ug/L		F	0.76		
MOUND R1-0	TS	8/9/2012	12084769	108-90-7	Chlorobenzene	N001	0.68	ug/L	U	F	0.68		
MOUND R1-0	TS	8/9/2012	12084769	124-48-1	Chlorodibromomethane	N001	0.68	ug/L	U	F	0.68		
MOUND R1-0	TS	8/9/2012	12084769	67-66-3	Chloroform	N001	47	ug/L		F	0.64		
MOUND R1-0	TS	8/9/2012	12084769	74-87-3	Chloromethane	N001	1.2	ug/L	U	F	1.2		
MOUND R1-0	TS	8/9/2012	12084769	100-41-4	Ethylbenzene	N001	0.64	ug/L	U	F	0.64		
MOUND R1-0	TS	8/9/2012	12084769	87-68-3	Hexachlorobutadiene	N001	1.4	ug/L	U	F	1.4		
MOUND R1-0	TS	8/9/2012	12084769	75-09-2	Methylene chloride	N001	2.2	ug/L	JB	F	1.3		U
MOUND R1-0	TS	8/9/2012	12084769	91-20-3	Naphthalene	N001	0.88	ug/L	U	F	0.88		
MOUND R1-0	TS	8/9/2012	12084769	100-42-5	Styrene	N001	0.68	ug/L	U	F	0.68		
MOUND R1-0	TS	8/9/2012	12084769	127-18-4	Tetrachloroethene	N001	740	ug/L		F	8		
MOUND R1-0	TS	8/9/2012	12084769	108-88-3	Toluene	N001	0.68	ug/L	U	F	0.68		
MOUND R1-0	TS	8/9/2012	12084769	1330-20-7	Total Xylenes	N001	0.76	ug/L	U	F	0.76		
MOUND R1-0	TS	8/9/2012	12084769	79-01-6	Trichloroethene	N001	1800	ug/L		F	6.4		
MOUND R1-0	TS	8/9/2012	12084769	75-01-4	Vinyl chloride	N001	7.4	ug/L		F	0.4		
MOUND R1-0	TS	8/9/2012	12084769	156-59-2	cis-1,2-Dichloroethene	N001	2100	ug/L		F	6		
MOUND R1-0	TS	8/9/2012	12084769	156-60-5	trans-1,2-Dichloroethene	N001	1.8	ug/L	J	F	0.6		
MOUND R1-0	TS	8/9/2012	12084769	10061-02-6	trans-1,3-dichloropropene	N001	0.76	ug/L	U	F	0.76		
P416589	WL	8/16/2012	12084781	71-55-6	1,1,1-Trichloroethane	N001	0.16	ug/L	U	F	0.16		
P416589	WL	8/16/2012	12084781	79-34-5	1,1,2,2-Tetrachloroethane	N001	0.21	ug/L	U	F	0.21		
P416589	WL	8/16/2012	12084781	79-00-5	1,1,2-Trichloroethane	N001	0.27	ug/L	U	F	0.27		
P416589	WL	8/16/2012	12084781	75-35-4	1,1-Dichloroethene	N001	0.23	ug/L	U	F	0.23		
P416589	WL	8/16/2012	12084781	120-82-1	1,2,4-Trichlorobenzene	N001	0.21	ug/L	U	F	0.21		
P416589	WL	8/16/2012	12084781	96-12-8	1,2-Dibromo-3-chloropropane	N001	0.47	ug/L	U	F	0.47		
P416589	WL	8/16/2012	12084781	106-93-4	1,2-Dibromoethane	N001	0.18	ug/L	U	F	0.18		
P416589	WL	8/16/2012	12084781	95-50-1	1,2-Dichlorobenzene	N001	0.15	ug/L	U	F	0.15		
P416589	WL	8/16/2012	12084781	107-06-2	1,2-Dichloroethane	N001	0.13	ug/L	U	F	0.13		
P416589	WL	8/16/2012	12084781	78-87-5	1,2-Dichloropropane	N001	0.18	ug/L	U	F	0.18		
P416589	WL	8/16/2012	12084781	541-73-1	1,3-Dichlorobenzene	N001	0.13	ug/L	U	F	0.13		
P416589	WL	8/16/2012	12084781	106-46-7	1,4-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		
P416589	WL	8/16/2012	12084781	105-67-9	2,4-Dimethylphenol	N001	0.69	ug/L	U	F	0.69		
P416589	WL	8/16/2012	12084781	95-95-4	2,4,5-Trichlorophenol	N001	0.54	ug/L	U	F	0.54		
P416589	WL	8/16/2012	12084781	88-06-2	2,4,6-Trichlorophenol	N001	0.35	ug/L	U	F	0.35		
P416589	WL	8/16/2012	12084781	120-83-2	2,4-Dichlorophenol	N001	0.77	ug/L	U	F	0.77		
P416589	WL	8/16/2012	12084781	51-28-5	2,4-Dinitrophenol	N001	12	ug/L	U	F	12		
P416589	WL	8/16/2012	12084781	121-14-2	2,4-Dinitrotoluene	N001	2	ug/L	U	F	2		
P416589	WL	8/16/2012	12084781	606-20-2	2,6-Dinitrotoluene	N001	2.3	ug/L	U	F	2.3		
P416589	WL	8/16/2012	12084781	91-58-7	2-Chloronaphthalene	N001	0.31	ug/L	U	F	0.31		
P416589	WL	8/16/2012	12084781	95-57-8	2-Chlorophenol	N001	2.4	ug/L	U	F	2.4		
P416589	WL	8/16/2012	12084781	91-94-1	3,3'-Dichlorobenzidine	N001	2.4	ug/L	U	F	2.4		
P416589	WL	8/16/2012	12084781	534-52-1	4,6-Dinitro-2-methyl phenol	N001	4.8	ug/L	U	F	4.8		
P416589	WL	8/16/2012	12084781	59-50-7	4-Chloro-3-methylphenol	N001	2.9	ug/L	U	F	2.9		
P416589	WL	8/16/2012	12084781	100-02-7	4-Nitrophenol	N001	1.5	ug/L	U	F	1.5		

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P416589	WL	8/16/2012	12084781	83-32-9	Acenaphthene	N001	0.33	ug/L	U	F	0.33		
P416589	WL	8/16/2012	12084781	120-12-7	Anthracene	N001	0.5	ug/L	U	F	0.5		
P416589	WL	8/16/2012	12084781	7440-38-2	Arsenic	0001	4.4	ug/L	U	F	4.4		
P416589	WL	8/16/2012	12084781	56-55-3	Benzo(a)anthracene	N001	0.42	ug/L	U	F	0.42		
P416589	WL	8/16/2012	12084781	71-43-2	Benzene	N001	0.16	ug/L	U	F	0.16		
P416589	WL	8/16/2012	12084781	50-32-8	Benzo(a)pyrene	N001	0.37	ug/L	U	F	0.37		
P416589	WL	8/16/2012	12084781	205-99-2	Benzo(b)fluoranthene	N001	0.63	ug/L	U	F	0.63		
P416589	WL	8/16/2012	12084781	191-24-2	Benzo(g,h,i)Perylene	N001	0.6	ug/L	U	F	0.6		
P416589	WL	8/16/2012	12084781	207-08-9	Benzo(k)fluoranthene	N001	0.55	ug/L	U	F	0.55		
P416589	WL	8/16/2012	12084781	7440-41-7	Beryllium	0001	0.47	ug/L	U	F	0.47		
P416589	WL	8/16/2012	12084781	111-44-4	Bis(2-chloroethyl) ether	N001	0.49	ug/L	U	F	0.49		
P416589	WL	8/16/2012	12084781	108-60-1	Bis(2-chloroisopropyl) ether	N001	0.37	ug/L	J	F	0.33		
P416589	WL	8/16/2012	12084781	117-81-7	Bis(2-ethylhexyl) phthalate	N001	2.7	ug/L	J	F	0.67		
P416589	WL	8/16/2012	12084781	7440-42-8	Boron	0001	11	ug/L	JB	F	4.4		U
P416589	WL	8/16/2012	12084781	75-27-4	Bromodichloromethane	N001	0.17	ug/L	U	F	0.17		
P416589	WL	8/16/2012	12084781	75-25-2	Bromoform	N001	0.19	ug/L	U	F	0.19		
P416589	WL	8/16/2012	12084781	74-83-9	Bromomethane	N001	0.21	ug/L	U	F	0.21		
P416589	WL	8/16/2012	12084781	85-68-7	Butyl benzyl phthalate	N001	1.2	ug/L	U	F	1.2		
P416589	WL	8/16/2012	12084781	7440-43-9	Cadmium	0001	0.45	ug/L	U	F	0.45		
P416589	WL	8/16/2012	12084781	56-23-5	Carbon tetrachloride	N001	0.19	ug/L	U	F	0.19		
P416589	WL	8/16/2012	12084781	108-90-7	Chlorobenzene	N001	0.17	ug/L	U	F	0.17		
P416589	WL	8/16/2012	12084781	124-48-1	Chlorodibromomethane	N001	0.17	ug/L	U	F	0.17		
P416589	WL	8/16/2012	12084781	67-66-3	Chloroform	N001	0.16	ug/L	U	F	0.16		
P416589	WL	8/16/2012	12084781	74-87-3	Chloromethane	N001	0.3	ug/L	U	F	0.3		
P416589	WL	8/16/2012	12084781	7440-47-3	Chromium	0001	0.76	ug/L	J	F	0.66		
P416589	WL	8/16/2012	12084781	218-01-9	Chrysene	N001	0.65	ug/L	U	F	0.65		
P416589	WL	8/16/2012	12084781	7440-50-8	Copper	0001	1.4	ug/L	U	F	1.4		
P416589	WL	8/16/2012	12084781	84-74-2	Di-n-butyl phthalate	N001	1.4	ug/L	U	F	1.4		
P416589	WL	8/16/2012	12084781	53-70-3	Dibenz(a,h)anthracene	N001	0.61	ug/L	U	F	0.61		
P416589	WL	8/16/2012	12084781	84-66-2	Diethyl phthalate	N001	0.45	ug/L	U	F	0.45		
P416589	WL	8/16/2012	12084781	131-11-3	Dimethyl phthalate	N001	0.25	ug/L	U	F	0.25		
P416589	WL	8/16/2012	12084781	100-41-4	Ethylbenzene	N001	0.16	ug/L	U	F	0.16		
P416589	WL	8/16/2012	12084781	206-44-0	Fluoranthene	N001	0.24	ug/L	U	F	0.24		
P416589	WL	8/16/2012	12084781	86-73-7	Fluorene	N001	0.37	ug/L	U	F	0.37		
P416589	WL	8/16/2012	12084781	118-74-1	Hexachlorobenzene	N001	0.79	ug/L	U	F	0.79		
P416589	WL	8/16/2012	12084781	87-68-3	Hexachlorobutadiene	N001	0.36	ug/L	U	F	0.36		
P416589	WL	8/16/2012	12084781	77-47-4	Hexachlorocyclopentadiene	N001	12	ug/L	U	F	12		
P416589	WL	8/16/2012	12084781	67-72-1	Hexachloroethane	N001	2.5	ug/L	U	F	2.5		
P416589	WL	8/16/2012	12084781	193-39-5	Indeno(1,2,3-cd)pyrene	N001	0.78	ug/L	U	F	0.78		
P416589	WL	8/16/2012	12084781	78-59-1	Isophorone	N001	0.25	ug/L	U	F	0.25		
P416589	WL	8/16/2012	12084781	7439-92-1	Lead	0001	2.6	ug/L	U	F	2.6		
P416589	WL	8/16/2012	12084781	7439-97-6	Mercury	0001	0.027	ug/L	U	F	0.027		
P416589	WL	8/16/2012	12084781	75-09-2	Methylene chloride	N001	0.34	ug/L	JB	F	0.32		U
P416589	WL	8/16/2012	12084781	621-64-7	N-Nitrosodi-n-propylamine	N001	0.42	ug/L	U	F	0.42		
P416589	WL	8/16/2012	12084781	86-30-6	N-Nitrosodiphenylamine	N001	0.53	ug/L	U	F	0.53		
P416589	WL	8/16/2012	12084781	91-20-3	Naphthalene	N001	0.22	ug/L	U	F	0.22		
P416589	WL	8/16/2012	12084781	7440-02-0	Nickel	0001	1.8	ug/L	J	F	1.3		
P416589	WL	8/16/2012	12084781	98-95-3	Nitrobenzene	N001	0.97	ug/L	U	F	0.97		
P416589	WL	8/16/2012	12084781	87-86-5	Pentachlorophenol	N001	24	ug/L	U	F	24		
P416589	WL	8/16/2012	12084781	108-95-2	Phenol	N001	2.4	ug/L	U	F	2.4		
P416589	WL	8/16/2012	12084781	129-00-0	Pyrene	N001	0.44	ug/L	U	F	0.44		
P416589	WL	8/16/2012	12084781	7782-49-2	Selenium	0001	4.9	ug/L	U	F	4.9		
P416589	WL	8/16/2012	12084781	7440-22-4	Silver	0001	0.93	ug/L	U	F	0.93		
P416589	WL	8/16/2012	12084781	100-42-5	Styrene	N001	0.17	ug/L	U	F	0.17		

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P416589	WL	8/16/2012	12084781	127-18-4	Tetrachloroethene	N001	0.2	ug/L	U	F	0.2		
P416589	WL	8/16/2012	12084781	108-88-3	Toluene	N001	0.17	ug/L	U	F	0.17		
P416589	WL	8/16/2012	12084781	1330-20-7	Total Xylenes	N001	0.19	ug/L	U	F	0.19		
P416589	WL	8/16/2012	12084781	79-01-6	Trichloroethene	N001	0.16	ug/L	U	F	0.16		
P416589	WL	8/16/2012	12084781	7440-61-1	Uranium	0001	2.1	ug/L	U	F	0.05		
P416589	WL	8/16/2012	12084781	75-01-4	Vinyl chloride	N001	0.1	ug/L	U	F	0.1		
P416589	WL	8/16/2012	12084781	7440-66-6	Zinc	0001	4.7	ug/L	J	F	4.5		
P416589	WL	8/16/2012	12084781	156-59-2	cis-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		
P416589	WL	8/16/2012	12084781	156-60-5	trans-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		
P416589	WL	8/16/2012	12084781	10061-02-6	trans-1,3-dichloropropene	N001	0.19	ug/L	U	F	0.19		
PLFSEEPINF	TS	7/18/2012	12074724	71-55-6	1,1,1-Trichloroethane	N001	0.16	ug/L	U	F	0.16		
PLFSEEPINF	TS	7/18/2012	12074724	79-34-5	1,1,2,2-Tetrachloroethane	N001	0.21	ug/L	U	F	0.21		
PLFSEEPINF	TS	7/18/2012	12074724	79-00-5	1,1,2-Trichloroethane	N001	0.27	ug/L	U	F	0.27		
PLFSEEPINF	TS	7/18/2012	12074724	75-35-4	1,1-Dichloroethene	N001	0.23	ug/L	U	F	0.23		
PLFSEEPINF	TS	7/18/2012	12074724	120-82-1	1,2,4-Trichlorobenzene	N001	0.21	ug/L	U	F	0.21		
PLFSEEPINF	TS	7/18/2012	12074724	96-12-8	1,2-Dibromo-3-chloropropane	N001	0.47	ug/L	U	F	0.47		
PLFSEEPINF	TS	7/18/2012	12074724	106-93-4	1,2-Dibromoethane	N001	0.18	ug/L	U	F	0.18		
PLFSEEPINF	TS	7/18/2012	12074724	95-50-1	1,2-Dichlorobenzene	N001	0.15	ug/L	U	F	0.15		
PLFSEEPINF	TS	7/18/2012	12074724	107-06-2	1,2-Dichloroethane	N001	0.13	ug/L	U	F	0.13		
PLFSEEPINF	TS	7/18/2012	12074724	78-87-5	1,2-Dichloropropane	N001	0.18	ug/L	U	F	0.18		
PLFSEEPINF	TS	7/18/2012	12074724	541-73-1	1,3-Dichlorobenzene	N001	0.13	ug/L	U	F	0.13		
PLFSEEPINF	TS	7/18/2012	12074724	106-46-7	1,4-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		
PLFSEEPINF	TS	7/18/2012	12074724	7440-38-2	Arsenic	N001	4.9	ug/L	J	F	4.4		
PLFSEEPINF	TS	7/18/2012	12074724	71-43-2	Benzene	N001	2	ug/L	U	F	0.16		
PLFSEEPINF	TS	7/18/2012	12074724	7440-41-7	Beryllium	N001	0.47	ug/L	U	F	0.47		
PLFSEEPINF	TS	7/18/2012	12074724	7440-42-8	Boron	N001	1200	ug/L	U	F	4.4		
PLFSEEPINF	TS	7/18/2012	12074724	75-27-4	Bromodichloromethane	N001	0.17	ug/L	U	F	0.17		
PLFSEEPINF	TS	7/18/2012	12074724	75-25-2	Bromoform	N001	0.19	ug/L	U	F	0.19		
PLFSEEPINF	TS	7/18/2012	12074724	74-83-9	Bromomethane	N001	0.21	ug/L	U	F	0.21		
PLFSEEPINF	TS	7/18/2012	12074724	7440-43-9	Cadmium	0001	0.45	ug/L	U	F	0.45		
PLFSEEPINF	TS	7/18/2012	12074724	56-23-5	Carbon tetrachloride	N001	0.19	ug/L	U	F	0.19		
PLFSEEPINF	TS	7/18/2012	12074724	108-90-7	Chlorobenzene	N001	0.63	ug/L	J	F	0.17		
PLFSEEPINF	TS	7/18/2012	12074724	124-48-1	Chlorodibromomethane	N001	0.17	ug/L	U	F	0.17		
PLFSEEPINF	TS	7/18/2012	12074724	67-66-3	Chloroform	N001	0.16	ug/L	U	F	0.16		
PLFSEEPINF	TS	7/18/2012	12074724	74-87-3	Chloromethane	N001	0.3	ug/L	U	F	0.3		
PLFSEEPINF	TS	7/18/2012	12074724	7440-47-3	Chromium	N001	0.73	ug/L	J	F	0.66		
PLFSEEPINF	TS	7/18/2012	12074724	7440-50-8	Copper	0001	3.7	ug/L	JB	F	1.4		U
PLFSEEPINF	TS	7/18/2012	12074724	100-41-4	Ethylbenzene	N001	0.16	ug/L	U	F	0.16		
PLFSEEPINF	TS	7/18/2012	12074724	87-68-3	Hexachlorobutadiene	N001	0.36	ug/L	U	F	0.36		
PLFSEEPINF	TS	7/18/2012	12074724	7439-92-1	Lead	0001	2.6	ug/L	U	F	2.6		
PLFSEEPINF	TS	7/18/2012	12074724	7439-97-6	Mercury	N001	0.027	ug/L	U	F	0.027		
PLFSEEPINF	TS	7/18/2012	12074724	75-09-2	Methylene chloride	N001	0.32	ug/L	U	F	0.32		
PLFSEEPINF	TS	7/18/2012	12074724	91-20-3	Naphthalene	N001	19	ug/L	U	F	0.22		
PLFSEEPINF	TS	7/18/2012	12074724	7440-02-0	Nickel	0001	4.3	ug/L	J	F	1.3		
PLFSEEPINF	TS	7/18/2012	12074724	7782-49-2	Selenium	N001	4.9	ug/L	U	F	4.9		
PLFSEEPINF	TS	7/18/2012	12074724	7440-22-4	Silver	0001	0.93	ug/L	U	F	0.93		
PLFSEEPINF	TS	7/18/2012	12074724	100-42-5	Styrene	N001	0.17	ug/L	U	F	0.17		
PLFSEEPINF	TS	7/18/2012	12074724	127-18-4	Tetrachloroethene	N001	0.2	ug/L	U	F	0.2		
PLFSEEPINF	TS	7/18/2012	12074724	108-88-3	Toluene	N001	0.17	ug/L	U	F	0.17		
PLFSEEPINF	TS	7/18/2012	12074724	1330-20-7	Total Xylenes	N001	2.2	ug/L	U	F	0.19		
PLFSEEPINF	TS	7/18/2012	12074724	79-01-6	Trichloroethene	N001	0.16	ug/L	U	F	0.16		
PLFSEEPINF	TS	7/18/2012	12074724	7440-61-1	Uranium	N001	0.17	ug/L	J	F	0.05		
PLFSEEPINF	TS	7/18/2012	12074724	7440-61-1	Uranium	N002	0.17	ug/L	U	F	0.05		
PLFSEEPINF	TS	7/18/2012	12074724	75-01-4	Vinyl chloride	N001	0.4	ug/L	J	F	0.1		

RFLMA Data

LOCATION_CODE	LOCATION_TYPE	DATE SAMPLED	LAB REQUISITION NUMBER	CAS	ANALYTE	SAMPLE ID	RESULT	UNITS	LAB QUALIFIERS	SAMPLE TYPE	DETECTION LIMIT	UNCERTAINTY	DATA VALIDATION QUALIFIERS
PLFSEEPINF	TS	7/18/2012	12074724	7440-66-6	Zinc	0001	37	ug/L	B	F	4.5		U
PLFSEEPINF	TS	7/18/2012	12074724	156-59-2	cis-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		
PLFSEEPINF	TS	7/18/2012	12074724	156-60-5	trans-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		
PLFSEEPINF	TS	7/18/2012	12074724	10061-02-6	trans-1,3-dichloropropene	N001	0.19	ug/L	U	F	0.19		
PLFSYSEFF	TS	7/18/2012	12074724	71-55-6	1,1,1-Trichloroethane	N001	0.16	ug/L	U	F	0.16		
PLFSYSEFF	TS	7/18/2012	12074724	79-34-5	1,1,2,2-Tetrachloroethane	N001	0.21	ug/L	U	F	0.21		
PLFSYSEFF	TS	7/18/2012	12074724	79-00-5	1,1,2-Trichloroethane	N001	0.27	ug/L	U	F	0.27		
PLFSYSEFF	TS	7/18/2012	12074724	75-35-4	1,1-Dichloroethene	N001	0.23	ug/L	U	F	0.23		
PLFSYSEFF	TS	7/18/2012	12074724	120-82-1	1,2,4-Trichlorobenzene	N001	0.21	ug/L	U	F	0.21		
PLFSYSEFF	TS	7/18/2012	12074724	96-12-8	1,2-Dibromo-3-chloropropane	N001	0.47	ug/L	U	F	0.47		
PLFSYSEFF	TS	7/18/2012	12074724	106-93-4	1,2-Dibromoethane	N001	0.18	ug/L	U	F	0.18		
PLFSYSEFF	TS	7/18/2012	12074724	95-50-1	1,2-Dichlorobenzene	N001	0.15	ug/L	U	F	0.15		
PLFSYSEFF	TS	7/18/2012	12074724	107-06-2	1,2-Dichloroethane	N001	0.13	ug/L	U	F	0.13		
PLFSYSEFF	TS	7/18/2012	12074724	78-87-5	1,2-Dichloropropane	N001	0.18	ug/L	U	F	0.18		
PLFSYSEFF	TS	7/18/2012	12074724	541-73-1	1,3-Dichlorobenzene	N001	0.13	ug/L	U	F	0.13		
PLFSYSEFF	TS	7/18/2012	12074724	106-46-7	1,4-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		
PLFSYSEFF	TS	7/18/2012	12074724	105-67-9	2, 4-Dimethylphenol	N001	0.64	ug/L	UH	F	0.64		J
PLFSYSEFF	TS	7/18/2012	12074724	95-95-4	2,4,5-Trichlorophenol	N001	0.5	ug/L	UH	F	0.5		J
PLFSYSEFF	TS	7/18/2012	12074724	88-06-2	2,4,6-Trichlorophenol	N001	0.32	ug/L	UH	F	0.32		J
PLFSYSEFF	TS	7/18/2012	12074724	120-83-2	2,4-Dichlorophenol	N001	0.71	ug/L	UH	F	0.71		J
PLFSYSEFF	TS	7/18/2012	12074724	51-28-5	2,4-Dinitrophenol	N001	11	ug/L	UH	F	11		J
PLFSYSEFF	TS	7/18/2012	12074724	121-14-2	2,4-Dinitrotoluene	N001	1.8	ug/L	UH	F	1.8		J
PLFSYSEFF	TS	7/18/2012	12074724	606-20-2	2,6-Dinitrotoluene	N001	2.1	ug/L	UH	F	2.1		J
PLFSYSEFF	TS	7/18/2012	12074724	91-58-7	2-Chloronaphthalene	N001	0.29	ug/L	UH	F	0.29		J
PLFSYSEFF	TS	7/18/2012	12074724	95-57-8	2-Chlorophenol	N001	2.2	ug/L	UH	F	2.2		J
PLFSYSEFF	TS	7/18/2012	12074724	91-94-1	3,3'-Dichlorobenzidine	N001	2.2	ug/L	UH	F	2.2		J
PLFSYSEFF	TS	7/18/2012	12074724	534-52-1	4,6-Dinitro-2-methyl phenol	N001	4.4	ug/L	UH	F	4.4		J
PLFSYSEFF	TS	7/18/2012	12074724	59-50-7	4-Chloro-3-methylphenol	N001	2.7	ug/L	UH	F	2.7		J
PLFSYSEFF	TS	7/18/2012	12074724	100-02-7	4-Nitrophenol	N001	1.4	ug/L	UH	F	1.4		J
PLFSYSEFF	TS	7/18/2012	12074724	83-32-9	Acenaphthene	N001	1.2	ug/L	JH	F	0.31		J
PLFSYSEFF	TS	7/18/2012	12074724	120-12-7	Anthracene	N001	0.47	ug/L	UH	F	0.47		J
PLFSYSEFF	TS	7/18/2012	12074724	7440-38-2	Arsenic	N001	4.4	ug/L	U	F	4.4		
PLFSYSEFF	TS	7/18/2012	12074724	56-55-3	Benz(a)anthracene	N001	0.39	ug/L	UH	F	0.39		J
PLFSYSEFF	TS	7/18/2012	12074724	71-43-2	Benzene	N001	0.44	ug/L	J	F	0.16		
PLFSYSEFF	TS	7/18/2012	12074724	50-32-8	Benzo(a)pyrene	N001	0.34	ug/L	UH	F	0.34		J
PLFSYSEFF	TS	7/18/2012	12074724	205-99-2	Benzo(b)fluoranthene	N001	0.59	ug/L	UH	F	0.59		J
PLFSYSEFF	TS	7/18/2012	12074724	191-24-2	Benzo(g,h,i)Perylene	N001	1	ug/L	JH	F	0.55		J
PLFSYSEFF	TS	7/18/2012	12074724	207-08-9	Benzo(k)fluoranthene	N001	0.51	ug/L	UH	F	0.51		J
PLFSYSEFF	TS	7/18/2012	12074724	7440-41-7	Beryllium	N001	0.47	ug/L	U	F	0.47		
PLFSYSEFF	TS	7/18/2012	12074724	111-44-4	Bis(2-chloroethyl) ether	N001	0.45	ug/L	UH	F	0.45		J
PLFSYSEFF	TS	7/18/2012	12074724	108-60-1	Bis(2-chloroisopropyl) ether	N001	0.31	ug/L	UH	F	0.31		J
PLFSYSEFF	TS	7/18/2012	12074724	117-81-7	Bis(2-ethylhexyl) phthalate	N001	0.62	ug/L	UH	F	0.62		J
PLFSYSEFF	TS	7/18/2012	12074724	7440-42-8	Boron	N001	940	ug/L	F	F	4.4		
PLFSYSEFF	TS	7/18/2012	12074724	75-27-4	Bromodichloromethane	N001	0.17	ug/L	U	F	0.17		
PLFSYSEFF	TS	7/18/2012	12074724	75-25-2	Bromoform	N001	0.19	ug/L	U	F	0.19		
PLFSYSEFF	TS	7/18/2012	12074724	74-83-9	Bromomethane	N001	0.21	ug/L	U	F	0.21		
PLFSYSEFF	TS	7/18/2012	12074724	85-68-7	Butyl benzyl phthalate	N001	1.1	ug/L	UH	F	1.1		J
PLFSYSEFF	TS	7/18/2012	12074724	7440-43-9	Cadmium	0001	0.45	ug/L	U	F	0.45		
PLFSYSEFF	TS	7/18/2012	12074724	56-23-5	Carbon tetrachloride	N001	0.19	ug/L	U	F	0.19		
PLFSYSEFF	TS	7/18/2012	12074724	108-90-7	Chlorobenzene	N001	0.17	ug/L	U	F	0.17		
PLFSYSEFF	TS	7/18/2012	12074724	124-48-1	Chlorodibromomethane	N001	0.17	ug/L	U	F	0.17		
PLFSYSEFF	TS	7/18/2012	12074724	67-66-3	Chloroform	N001	0.16	ug/L	U	F	0.16		
PLFSYSEFF	TS	7/18/2012	12074724	74-87-3	Chloromethane	N001	0.3	ug/L	U	F	0.3		
PLFSYSEFF	TS	7/18/2012	12074724	7440-47-3	Chromium	N001	0.66	ug/L	U	F	0.66		

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PLFSYSEFF	TS	7/18/2012	12074724	218-01-9	Chrysene	N001	0.6	ug/L	UH	F	0.6		J
PLFSYSEFF	TS	7/18/2012	12074724	7440-50-8	Copper	0001	2.7	ug/L	JB	F	1.4		U
PLFSYSEFF	TS	7/18/2012	12074724	84-74-2	Di-n-butyl phthalate	N001	1.3	ug/L	UH	F	1.3		J
PLFSYSEFF	TS	7/18/2012	12074724	53-70-3	Dibenz(a,h)anthracene	N001	0.57	ug/L	UH	F	0.57		J
PLFSYSEFF	TS	7/18/2012	12074724	84-66-2	Diethyl phthalate	N001	0.59	ug/L	JH	F	0.42		J
PLFSYSEFF	TS	7/18/2012	12074724	131-11-3	Dimethyl phthalate	N001	0.23	ug/L	UH	F	0.23		J
PLFSYSEFF	TS	7/18/2012	12074724	100-41-4	Ethylbenzene	N001	0.16	ug/L	U	F	0.16		
PLFSYSEFF	TS	7/18/2012	12074724	206-44-0	Fluoranthene	N001	0.45	ug/L	JH	F	0.22		J
PLFSYSEFF	TS	7/18/2012	12074724	86-73-7	Fluorene	N001	1.1	ug/L	JH	F	0.34		J
PLFSYSEFF	TS	7/18/2012	12074724	118-74-1	Hexachlorobenzene	N001	0.73	ug/L	UH	F	0.73		J
PLFSYSEFF	TS	7/18/2012	12074724	87-68-3	Hexachlorobutadiene	N001	0.36	ug/L	U	F	0.36		
PLFSYSEFF	TS	7/18/2012	12074724	77-47-4	Hexachlorocyclopentadiene	N001	11	ug/L	UH	F	11		J
PLFSYSEFF	TS	7/18/2012	12074724	67-72-1	Hexachloroethane	N001	2.3	ug/L	UH	F	2.3		J
PLFSYSEFF	TS	7/18/2012	12074724	193-39-5	Indeno(1,2,3-cd)pyrene	N001	0.72	ug/L	UH	F	0.72		J
PLFSYSEFF	TS	7/18/2012	12074724	78-59-1	Isophorone	N001	0.23	ug/L	UH	F	0.23		J
PLFSYSEFF	TS	7/18/2012	12074724	7439-92-1	Lead	0001	2.6	ug/L	U	F	2.6		
PLFSYSEFF	TS	7/18/2012	12074724	7439-97-6	Mercury	N001	0.027	ug/L	U	F	0.027		
PLFSYSEFF	TS	7/18/2012	12074724	75-09-2	Methylene chloride	N001	0.32	ug/L	U	F	0.32		
PLFSYSEFF	TS	7/18/2012	12074724	621-64-7	N-Nitrosodi-n-propylamine	N001	0.39	ug/L	UH	F	0.39		J
PLFSYSEFF	TS	7/18/2012	12074724	86-30-6	N-Nitrosodiphenylamine	N001	0.49	ug/L	UH	F	0.49		J
PLFSYSEFF	TS	7/18/2012	12074724	91-20-3	Naphthalene	N001	2.5	ug/L		F	0.22		
PLFSYSEFF	TS	7/18/2012	12074724	7440-02-0	Nickel	0001	4.1	ug/L	J	F	1.3		
PLFSYSEFF	TS	7/18/2012	12074724	98-95-3	Nitrobenzene	N001	0.9	ug/L	UH	F	0.9		J
PLFSYSEFF	TS	7/18/2012	12074724	87-86-5	Pentachlorophenol	N001	22	ug/L	UH	F	22		J
PLFSYSEFF	TS	7/18/2012	12074724	108-95-2	Phenol	N001	2.2	ug/L	UH	F	2.2		J
PLFSYSEFF	TS	7/18/2012	12074724	129-00-0	Pyrene	N001	0.41	ug/L	UH	F	0.41		J
PLFSYSEFF	TS	7/18/2012	12074724	7782-49-2	Selenium	N001	4.9	ug/L	U	F	4.9		
PLFSYSEFF	TS	7/18/2012	12074724	7440-22-4	Silver	0001	0.93	ug/L	U	F	0.93		
PLFSYSEFF	TS	7/18/2012	12074724	100-42-5	Styrene	N001	0.17	ug/L	U	F	0.17		
PLFSYSEFF	TS	7/18/2012	12074724	127-18-4	Tetrachloroethene	N001	0.2	ug/L	U	F	0.2		
PLFSYSEFF	TS	7/18/2012	12074724	108-88-3	Toluene	N001	0.17	ug/L	U	F	0.17		
PLFSYSEFF	TS	7/18/2012	12074724	1330-20-7	Total Xylenes	N001	0.35	ug/L	J	F	0.19		
PLFSYSEFF	TS	7/18/2012	12074724	79-01-6	Trichloroethene	N001	0.16	ug/L	U	F	0.16		
PLFSYSEFF	TS	7/18/2012	12074724	7440-61-1	Uranium	N001	0.82	ug/L	J	F	0.05		
PLFSYSEFF	TS	7/18/2012	12074724	7440-61-1	Uranium	N002	0.85	ug/L		F	0.05		
PLFSYSEFF	TS	7/18/2012	12074724	75-01-4	Vinyl chloride	N001	0.1	ug/L	U	F	0.1		
PLFSYSEFF	TS	7/18/2012	12074724	7440-66-6	Zinc	0001	7.2	ug/L	JB	F	4.5		U
PLFSYSEFF	TS	7/18/2012	12074724	156-59-2	cis-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		
PLFSYSEFF	TS	7/18/2012	12074724	156-60-5	trans-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		
PLFSYSEFF	TS	7/18/2012	12074724	10061-02-6	trans-1,3-dichloropropene	N001	0.19	ug/L	U	F	0.19		
SPOUT	TS	7/18/2012	12074726	NO3+NO2 AS N	Nitrate + Nitrite as Nitrogen	N001	240	mg/L		F	0.95		
SPOUT	TS	8/15/2012	12084800	NO3+NO2 AS N	Nitrate + Nitrite as Nitrogen	N001	160	mg/L		F	0.38		
SPOUT	TS	8/1/2012	12084770	NO3+NO2 AS N	Nitrate + Nitrite as Nitrogen	N001	170	mg/L		F	0.95		
SPOUT	TS	7/3/2012	12074703	NO3+NO2 AS N	Nitrate + Nitrite as Nitrogen	N001	280	mg/L		F	1.9		
SPOUT	TS	9/26/2012	12104883	NO3+NO2 AS N	Nitrate + Nitrite as Nitrogen	N001	280	mg/L		F	0.95		
SPOUT	TS	9/13/2012	12094855	NO3+NO2 AS N	Nitrate + Nitrite as Nitrogen	N001	250	mg/L		F	0.95		
SPOUT	TS	8/29/2012	12084818	NO3+NO2 AS N	Nitrate + Nitrite as Nitrogen	N001	110	mg/L		F	0.95		J
SPOUT	TS	8/1/2012	12084770	NO3+NO2 AS N	Nitrate + Nitrite as Nitrogen	N002	170	mg/L		D	0.95		
SPOUT	TS	8/1/2012	12084770	7440-61-1	Uranium	N001	52	ug/L		F	0.05		
SPOUT	TS	7/18/2012	12074726	7440-61-1	Uranium	N001	47	ug/L		F	0.05		
SPOUT	TS	8/15/2012	12084800	7440-61-1	Uranium	N001	46	ug/L		F	0.05		
SPOUT	TS	7/3/2012	12074703	7440-61-1	Uranium	N001	55	ug/L		F	0.05		
SPOUT	TS	9/26/2012	12104883	7440-61-1	Uranium	N001	34	ug/L		F	0.05		J
SPOUT	TS	8/29/2012	12084818	7440-61-1	Uranium	N001	41	ug/L		F	0.05		

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SPOUT	TS	9/13/2012	12094855	7440-61-1	Uranium	N001	51	ug/L		F	0.05		
SPOUT	TS	8/1/2012	12084770	7440-61-1	Uranium	N002	53	ug/L		D	0.05		
SW093	SL	7/9/2012	12094854	AM-241	Americium-241	N001	0.0113	pCi/L	U	F	0.0246	0.0134	
SW093	SL	7/9/2012	12094854	7440-41-7	Beryllium	N001	1	ug/L	U	F	1		
SW093	SL	7/9/2012	12094854	7440-43-9	Cadmium	0001	0.11	ug/L	U	F	0.11		
SW093	SL	7/9/2012	12094854	7440-47-3	Chromium	N001	3.65	ug/L	B	F	1		
SW093	SL	7/9/2012	12094854	HARDNESS	Hardness	N001	565	mg/L		F	2		
SW093	SL	7/9/2012	12094854	PU-239,240	Plutonium-239, 240	N001	0.0204	pCi/L		F	0.0193	0.0151	U
SW093	SL	7/9/2012	12094854	7440-22-4	Silver	0001	0.2	ug/L	U	F	0.2		
SW093	SL	7/9/2012	12094854	7440-61-1	Uranium	N001	8.74	ug/L		F	0.067		
GS10	SL	7/26/2012	12104927	7440-61-1	Uranium	0001	3.63	ug/L		F	0.067		

EXPLANATION

SAMPLE_ID

N00x = Sample was not filtered.
000x = Sample was filtered.

WATER_UNIT_OF_MEASURE

mg/L; ppm = milligrams per liter
pCi/L = picocuries per liter
ug/L = micrograms per liter
C = degrees celsius
mS/cm = milliSiemens per centimeter
NTU = normal turbidity units
s.u. = standard pH units
uS/cm = microSiemens per centimeter
umhos/cm = microSiemens per centimeter

SAMPLE_TYPE

F = Field Sample
D = Duplicate

DATA_VALIDATION_QUALIFIERS

valid Result is valid.
F Low flow sampling method used.
G Possible grout contamination, pH > 9.
J Estimated value.
L Less than 3 bore volumes purged prior to sampling.
Q Qualitative result due to sampling technique
R Unusable result.
U Parameter analyzed for but was not detected.
X Location is undefined.
999 Validation not complete

LAB_QUALIFIERS

* Replicate analysis not within control limits.
+ Correlation coefficient for MSA < 0.995.
> Result above upper detection limit.
A TIC is a suspected aldol-condensation product.
B Inorganic: Result is between the IDL and CRDL. Organic & Radiochemistry: Analyte also found in method blank.
C Pesticide result confirmed by GC-MS.
D Analyte determined in diluted sample.
E Inorganic: Estimate value because of interference, see case narrative. Organic: Analyte exceeded calibration range of the GC-MS.
H Holding time expired, value suspect.
I Increased detection limit due to required dilution.
J Estimated
M GFAA duplicate injection precision not met.
N Inorganic or radiochemical: Spike sample recovery not within control limits. Organic: Tentatively identified compound (TIC).
P > 25% difference in detected pesticide or Arochlor concentrations between 2 columns.
S Result determined by method of standard addition (MSA).
U Analytical result below detection limit.
W Post-digestion spike outside control limits while sample absorbance < 50% of analytical spike absorbance.
X Laboratory defined (USEPA CLP organic) qualifier, see case narrative.
Y Laboratory defined (USEPA CLP organic) qualifier, see case narrative.
Z Laboratory defined (USEPA CLP organic) qualifier, see case narrative.

LOCATION_TYPE

SL SURFACE LOCATION
TS TREATMENT SYSTEM
WL WELL

COLLECTION_METHOD

G Grab
C Composite

Appendix B2

Information for RFLMA Composite Samples with Unavailable Data

Location	Sample Dates*	Status
WALPOC	4/13/2012 10:08 -->	In Progress
GS01	6/6/12 11:43 -->	In Progress
GS03	6/6/12 11:20 -->	In Progress
GS08	4/4/12 10:54 -->	In Progress
B5INFLOW	5/21/12 12:17 -->	In Progress
GS13	5/21/12 13:00 -->	In Progress
SW093	9/12/12 13:59 - 11/15/12 10:05	Results Pending

* Analytical results are reported with the start date of the composite sampling period

--> Composite sample end date to be determined

NSQ: non-sufficient quantity for analysis