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21 August 1996

EG&G Mound Applied Technologies, Inc.
Attn.: Mr. James N. Rigano
P.O. Box 3000, OSW-4
Miamisburg, Ohio 45343-3000

RE: ER Program, Mound Plant
BOA No. 24251, Task Order No. 68282
Groundwater Sweeps Revision RFW WO# 05376-060-001 x14

Dear Mr. Rigano:

Roy F. Weston, Inc. (WESTON®) is transmitting the attached replacement pages for the Groundwater Sweeps Report. Included in the attachment are four pages of text from Section 3, Analytical Results; Figure 3.3; Table III.2; Table III.9; Table III.10; Table III.11; and two pages of the Table of Contents. Also included are instructions on how these pages are to be inserted. The change pages are identified by modifications to the footer which include "Revison 1" changed to "Revision 1, Modification 1," and "April 1995" changed to "August 1996."

A complete set of change pages have been sent to Mr. Alec Bray.

This completes the requirements for this work assignment. If you have any questions, please call me at (513) 825-3440.

Very truly yours,

ROY F. WESTON, INC.

Gordon S. Horn, P.E., DEE
Alternate Project Manager

GSH/ard

Attachments

cc: Mr. Richard Christopher (w/o attachments)
Mr. Alec Bray (w/attachments)

The following pages are to be replaced in the Groundwater Sweeps Report

Original Page	**Replacement Page**
Page iv, Table of Contents - Text	Page iv, Table of Contents - Text
Page v, Table of Contents - Text	Page v, Table of Contents - Text
Page 3-2, Table III.2. (Page 1 of 9) Revision 1	Page 3-2, Table III.2. (Page 1 of 9) Revision 1, Modification 1
Page 3-3, Table III.2. (Page 2 of 9) Revision 1	Page 3-3, Table III.2. (Page 2 of 9) Revision 1, Modification 1
Page 3-4, Table III.2. (Page 3 of 9) Revision 1	Page 3-4 ,Table III.2. (Page 3 of 9) Revision 1, Modification 1
Page 3-5, Table III.2. (Page 4 of 9) Revision 1	Page 3-5, Table III.2. (Page 4 of 9) Revision 1, Modification 1
Page 3-6, Table III.2. (Page 5 of 9) Revision 1	Page 3-6, Table III.2. (Page 5 of 9) Revision 1, Modification 1
Page 3-7, Table III.2. (Page 6 of 9) Revision 1	Page 3-7, Table III.2. (Page 6 of 9) Revision 1, Modification 1
Page 3-8, Table III.2. (Page 7 of 9) Revision 1	Page 3-8, Table III.2. (Page 7 of 9) Revision 1, Modification 1
Page 3-9, Table III.2. (Page 8 of 9) Revision 1	Page 3-9, Table III.2. (Page 8 of 9) Revision 1, Modification 1
Page 3-10, Table III.2. (Page 9 of 9) Revision 1	Page 3-10, Table III.2. (Page 9 of 9) Revision 1, Modification 1
Page 3-23, Revision 1 (text)	Page 3-23, Revision 1, Modification 1 (text)
Page 3-24, Revision 1 (figure)	Page 3-24, Revision 1, Modification 1 (text)
Page 3-25, Revision 1 (text)	Page 3-25, Revision 1, Modification 1 (figure)
Page 3-26, Table III.9. (Page 1 of 4) Revision 1	Page 3-26, Table III.9. (Page 1 of 5) Revision 1, Modification 1
Page 3-27, Table III.9. (Page 2 of 4) Revision 1	Page 3-27, Table III.9. (Page 2 of 5) Revision 1, Modification 1
Page 3-28, Table III.9. (Page 3 of 4) Revision 1	Page 3-28, Table III.9. (Page 3 of 5) Revision 1, Modification 1
Page 3-29, Table III.9. (Page 4 of 4) Revision 1	Page 3-29, Table III.9. (Page 4 of 5) Revision 1, Modification 1
Page 3-30, Table III.10. (Page 1 of 3) Revision 1	Page 3-30, Table III.9. (Page 5 of 5) Revision 1, Modification 1
Page 3-31, Table III.10. (Page 2 of 3) Revision 1	Page 3-31, Table III.10. (Page 1 of 3) Revision 1, Modification 1
Page 3-32, Table III.10. (Page 3 of 3) Revision 1	Page 3-32, Table III.10. (Page 2 of 3) Revision 1, Modification 1

Page 3-33, Revision 1 (text)	Page 3-33, Table III.10. (Page 3 of 3) Revision 1, Modification 1 ✓
Page 3-34, Table III.11. (Page 1 of 5) Revision 1	Page 3-34, Revision 1, Modification 1 (text) ✓
Page 3-35, Table III.11. (Page 2 of 5) Revision 1	Page 3-35, Revision 1, Modification 1 (text) ✓
Page 3-36, Table III.11. (Page 3 of 5) Revision 1	Page 3-36, Table III.11. (Page 1 of 2) Revision 1, Modification 1 ✓
Page 3-37, Table III.11. (Page 4 of 5) Revision 1	Page 3-37, Table III.11. (Page 2 of 2) Revision 1, Modification 1
Page 3-38, Table III.11. (Page 5 of 5) Revision 1	Page 3-38, Revision 1, Modification 1 (Page left intentionally blank)

TO: Recipients of the OU 9 Hydrogeologic Investigation: Groundwater Sweeps Report

Please pull Plates 1 and 2 (combined in one pocket) from the previous version of this document and insert into this current version (April 1995, Revision 1).

Sections of text and appendices with no changes retain the January 1995 footer. Sections with the April 1995 (Revision 1) footer indicate changes within.

MIAMISBURG
AREA OFFICE

Department of Energy

Ohio Field Office
Miamisburg Area Office
P.O. Box 66
Miamisburg, Ohio 45343-0066

APR 11 1995

Mr. Tim Fisher
U.S. EPA
HSRM-6J
77 W. Jackson
Chicago, Illinois 60604

Mr. Brian Nickel
Ohio EPA
401 E. Fifth Street
Dayton, Ohio 45402-2911

Dear Mr. Fischer and Mr. Nickel:

RE: Groundwater Sweeps Sampling Report (FINAL) OU-9

This letter serves to transmit the Final Groundwater Sweeps Sampling Report (OU-9).

Should you have any questions concerning this submittal, please feel free to call Debbie White at (513) 865-5137.

Sincerely,

Arthur Kleinrath

Arthur W. Kleinrath
Project Engineer Team leader

Enclosure

cc w/enclosure:
Debbie White, MB
Pat Shirley, OH
John Murphy, OH
John Sands, EM-453, HQ
Regina Bayer, CH2M Hill
Harvey Bruger, ODH
Doug Draper, HAZWRAP

cc w/o enclosure:
Chuck Friedman, EG&G
Monte Williams, EG&G
Jim Zahora, EG&G
Dave Rakel, EG&G

US DOE MOUND PLANT
RI/FS
OPERABLE UNIT 9, SITE-WIDE STUDIES
HYDROGEOLOGIC INVESTIGATION: GROUNDWATER SWEEPS REPORT
JANUARY 1995
US ENVIRONMENTAL PROTECTION AGENCY COMMENTS

SPECIFIC COMMENTS

1. Executive Summary, Page ES-1, Paragraph 6. The report is obviously written with the general public in mind as the primary audience. It is then misleading to state that organic compounds, i.e., tetrachloroethene (PCE) and 1,1,1-trichloroethane, are common in the background wells sampled, and the PCE exceeds the MCL in one background well. These wells are not appropriately labeled as background wells if they contain anthropological organic compounds, be it from the Mound Plant, or another source of contamination.

   We continue to assert that the identified wells are appropriate background wells for the Mound Plant Site. The presence or absence of anthropogenic compounds in some of these wells does not detract from this assertion, which is based on the hydrogeologic evidence. However, we do agree that it would be inappropriate to use the presence of PCE, say, in background to bias the consideration of a no-action alternative, for example.

2. Section 3, Analytical Results, Pages 3-1 through 3-10. Why is vinyl chloride listed in Table III.1 Analytes of Interest, but not listed in Table III.2 Detection of Analytes of Interest?

   Vinyl chloride has been an analyte of interest. However, it was not detected in any of the monitoring wells in the program, only in piezometer P015. Since P015 was not part of the regular program, results of that sampling were not shown on Table III.2. Results from both P015 and P027 will be included in the revised document.

3. Section 3, Analytical Results, Page 3-12, Figure 3.2. Figure 3.2 depicts that vinyl chloride was detected at location P015. That is not represented in Table III.2.

   See response to Comment No. 2.

4. Section 3, Analytical Results, Page 3-14, Table III.3. Table III.3 List of Detected Analytes shows all of the analytes that were detected during the two sampling events, and indicates which ones are considered analytes of interest. Paragraph 2, on page 3-1, describes briefly how the analytes of interest were determined (based upon previous investigation, toxicity, decisions in the investigation) but does not give the reader enough information to understand how the individual analytes were screened from the list of Analytes of Interest.

   Individual analytes were not "screened from" the list. Rather, the list of analytes of concern was built up from the references cited and the authors' understanding of contemporary issues at the site. Additional analytes can be added, upon request.

5. Section 3, Analytical Results, Pages 3-17 through 3-22. Units should be added to the Mean column in Table III.7.

   The requested change will be made.

6. Section 3, Analytical Results, Page 3-23, Item 1. Item 1 states that the sporadic occurrences of metals in the Buried Valley Aquifer above their respective MCLs are at a sufficient distance from the Mound Plant to suggest that they are unrelated to plant activities. Such a statement

requires some supporting rationale. Are there wells located between the site and these "distant" wells that are clean, or is there any other evidence to support this claim.

The supporting rationale is displayed on the figures in the section. As may be seen, the metals observations are, indeed, sporadic and interspersed with clean wells. The text will be modified to include the phrase, "interspersed with clean wells."

7. Section 3, Analytical Results, Page 3-23, Paragraph 2. The statement that monitoring well 0327 does not display Mound Plant-related compounds is not true. PCE is a Mound Plant-related compound which was detected twice in monitoring well 0327.

Well 0327 is approximately one-half mile hydraulically upgradient of Mound Plant. Therefore, we conclude that the PCE detected in Well 0327 is not related to Mound Plant activities.

US DOE MOUND OPERABLE UNIT 9
HYDROGEOLOGIC INVESTIGATION
GROUNDWATER SWEEPS REPORT
JANUARY 1995
OHIO ENVIRONMENTAL PROTECTION AGENCY COMMENTS

SPECIFIC COMMENTS

1. Section 1.2, Page 1-2, Paragraph 6:
Why were results compared to MCL's and not background groundwater concentrations?

The results were compared to both criteria -- data shown in Table II.2, for example, are all hits above background. Observations above the relevant MCL are further highlighted.

2. Section 2.1, Page 2-1, Paragraph 4:
Specific descriptions of the "deviations" belong in the document text. What impacts do these deviations have on the data pool?

Paragraph 3, p.2-1: Deviations occurred during the fall and spring sampling events that pertain to purging (insufficient water for full purging, packer failure necessitating alternative purge scenario) and sampling (insufficient water for sampling or dry well, non-recording of field parameters) and are indicated in Appendix B, Table B.1.10 (CARs: C032, C040 - C048, C054 and C055). These deviations did not impact the balance of the data quality.

Paragraph 4, p.2-1: During the fall sampling event, two deviations occurred: field parameters, dissolved oxygen and redox, were not recorded for production wells 0071, 0076, and 0271 (CAR C040); and alkalinity was not recorded for production well 0076 (CAR C040). These deviations did not impact the balance of the data quality.

Paragraph 5, p.2-1: Two deviations (CAR C040 (non-recording of field parameters), C046 (non-sampling due to lack of water)) occurred during the sampling of the seeps that resulted in no impact to the balance of the data quality.

The text will be modified to reflect the above.

3. Section 3.1, Page 3-1, General:
Please include a table and discussion of state and federal maximum contaminant levels (MCLs) for "Analytes of Interest" and those parameters that exceed the MCLs. Please note that the State MCL for tritium is 20,000 pCi/L (OAC 3745-81-16) and differs from the DCGs discussed in Section 3.1.3.

The complete set of observations above their respective MCL is presented in Appendix C. An MCL of 20,000 pCi/L was used for tritium.

We choose to defer discussion of the significance of observations above MCL, since that significance will depend on the ER issues in the immediate vicinity of the observations. The OU-specific studies will address the significance of observations above MCL.

4. Section 3.1.1, Page 3-13, Paragraph 4:
Is this paragraph stating that bis(2-ethylhexyl) phthalate was present in 10% of groundwater samples taken during the fall sampling event?

Yes -- nine samples had detectable quantities of this common laboratory contaminant. Since it was detected only in the fall sampling round, we believe it to be symptomatic of a laboratory problem, but the data from one additional round are not conclusive.

5. Section 3.1.1, Page 3-15, Paragraph 1:
The increase in spring detections is not entirely due to an increase in laboratory reporting limits; consequently spring data should not be construed as either a "false positive" or as potentially rejected data. The solubility of Pu-238 in water is dependent upon the pH of the water and the organic ligands present (Eisenbud, 1987). Plutonium generally binds tightly to soils and generally possesses a low solubility in the environment. However, the introduction of other chemical constituents (i.e. organics) can affect and subsequently increase the solubility of plutonium in the environment. The organics data for this sampling project indicate high levels of organics throughout the sampling area. The data also indicate an increase in organics during spring sampling. These increased levels of organics can potentially affect the solubility of plutonium, thus causing detections that are not expected.

Presently, the data are not sufficient to support any definitive statements regarding the seasonal influences on plutonium concentrations. Reducing the plutonium quantitation limit 100 fold in the second round of sampling appears to have introduced some plutonium detections. However, those apparent detections are close to quantitation limit and could be false detections. We agree that seasonal trends could become apparent as groundwater monitoring continues.

6. Section 3.1.1, Page 3-16, Paragraph 3:
Why is one-half the detection limit used in some cases? Also, "divide the average concentration by the relevant DCG" should be changed to "compare the average concentration to the relevant DCG."

We have uniformly used one-half the detection limit for all "U" observations. This provides a generally-accepted maximum likelihood estimate of the actual concentration. The explanation of application of this rule and the treatment of DCGs will be modified as you suggest.

7. Section 3.1.3, Page 3-16, Paragraph 4:
Seasonal changes will also affect U-238 levels. Spring thaws of hoarfrost and diminishing frost lines in soils can yield an increase in detectable U-238. Consequently, Ra-226 levels are normally higher in the spring than in the fall, due to increased infiltration of U-238. It should be noted that Ra-226 is decay daughter of U-238. Therefore, higher Ra-226 spring levels are possibly valid and should not be instantly attributed to a "false positive" detection.

We agree with the possibility of soil freezing and thawing influencing geochemistry. The observation discussed in this paragraph is: a) from a bedrock well which is unlikely to be influenced by seasonal freeze-thaw cycles; and b) a factor several times larger than the next highest observation. Thus, this observation is unlikely to be explainable by seasonal influences such as the spring thaw.

8. Section 3.2.1, Page 3-25, Paragraph 1:
Calculated background values may be skewed as a result of taking both sets of data together. The background wells should continue to be sampled so that the effects of seasonality can be determined. This information may not be available for the RI phase, but may prove useful for the FS and the RD/RA. This information needs to be gathered and statistically analyzed for seasonal trends. This will allow us to determine accurate background concentrations and permit the application of the appropriate statistics.

We agree, in principle, with your thesis. However, seasonal differences in background are not pronounced and may continue to be overshadowed by the variability in the data set.

Ongoing monitoring for the Mound Plant Site is planned and may show seasonal trends.

9. Section 3.2.1, Page 3-25, Paragraph 4:
Lower background levels obtained due to instrument sensitivity (so long as it is accurate) should not be discounted due to the DQO's presented in the QAPP. The purpose of establishing background data is to characterize groundwater outside the influences of the Mound facility as accurately as possible.

The paragraph is not intended to suggest the data are unusable. Paragraph 4 was included to prevent the misuse of the background water sample data. The background sample data were collected for three reasons:

- *to characterize water quality outside the area of influence, as noted in your comment;*
- *to provide a data set that could be compared to samples collected within an area of suspected contamination; and*
- *to provide background data that could be used for purposes other than just the OU9 investigation.*

Because the background alpha spectrometry data were reported at 1/100th of the QAPP limits, the data quality objective associated with these data is different than the data quality objective established by the QAPP. The deviation to the QAPP was made to permit the background data to be applied for purposes other than just the OU9 investigation.

However, when the background data are used for the OU9 investigation, the data user must recognize the difference in data quality objectives. For instance, action limits or risk levels calculated directly from this data may not be comparable to data collected in accordance with the QAPP. If the average background sample activity for plutonium-238 was established as 0.4 pCi/L, then sample data collected for OU9 within an area of interest and reported non-detect at the QAPP reporting limit of 1.0 pCi/L, would be assessed inconclusive and unusable. However, this example data complied with the QAPP data quality objectives and should not be invalidated because a background sample was collected and analyzed at 1/100th of the QAPP reporting limit.

This type of data misuse could occur very easily, and result in inappropriate decisions being made by the data user. These inappropriate decisions could include establishing unachievable cleanup criteria, excessive re-sampling and analysis, extensive and unnecessary remediation effort, etc. For this reason, paragraph 4 is critical to defining proper data usage.

10. Section 3.2.1, Page 3-29, Table III.10:
Th-232, Pu-239/240, U-234 and U-238 are listed in the table as constituents that were never detected, yet they appear in the "Hits Table" for various background wells. Why?

The values for Pu-238/240 (in 0328 and 0333) and Th-230 (in 0330) were rejected by the validators and, thus, not used. The values for U-234 and U-238 appear on Table III.11, not Table III.10.

11. Section 3.2.1, Page 3-31, Table III.11:
Why would Americium-241 and Plutonium-238 be expected to be found in upgradient monitoring wells? How does DOE Mound know that these are not attributable to facility operations?

The three Americium-241 observations are validated data, but represent levels very near the analytical detection point. The hydrologic evidence strongly suggests that the background wells are beyond the surface influence of the plant. This is the extent of the assertions in the report. Additional considerations will wait upon future sampling.

The single Plutonium-238 hit is subject to confirmation, as discussed in Section 3.2.1, the third paragraph.

12. Section 3.2.1, Page 3-32, Table III.11.:
Do the ratios of Th-228, Th-230, U-234 and U-238 detected in the upgradient monitoring wells correspond to the naturally occurring ratios?

The present evidence suggests that they do, subject to the limitations of analytical detection limits. U-234 and U-238 are present in roughly equal amounts; U-235 is much less. In the geochemical environment of the Buried Valley Aquifer, there is no necessary relationship between Thorium-230 and the Uranium isotopes. Thorium-228 is on a separate decay chain.

13. Section 3.2.2, Page 3-33, Paragraph 1:
If seasonality is indicated in the groundwater analyses data, it is improper to simply lump all data together and average without regard to seasonal trends. Instead, downgradient data should be grouped by season, and should be compared to upgradient values for the same season.

As we state, there are insufficient data to prove or disprove seasonality. This is especially true of the background data. Additional monitoring (planned and ongoing) will shed additional light on the issue. Certainly, application of seasonally segregated data need only be done on a case-by-case basis, within each operable unit, as discussed in Section 3.1.4.

14. Section 3.2.2, Page 3-33, Paragraph 2:
What criteria was used to identify "outliers" in the analytical data? The data need to be analyzed for normality and distribution assumptions and should be verified so that outliers are rejected before tolerance limits are calculated.

The statistical treatment is being applied to the background data only, with its limited number of data points. Inspection of the data reveals no obvious candidates for outliers. As additional data are made available (through additional sampling), appropriate parametric tests can be applied to the whole data set.

15. Section 3.2.2, Page 3-33, Paragraph 3:
Are additional background data being collected now or in the future in order to justify using a "tolerance factor" of k = 2?

Additional monitoring is planned.

16. Appendix B, Page B.1-32, Table B.1.9:
The conclusion of page 4-1 states that the detection limits for Pu-238 were changed from 1 pCi/L to 0.01 pCi/L. This table states that the change was "from 1 pCi/L to 0.00001 pCi/L." The table should be changed to adequately reflect the actual activity.

The stated conclusion on page 4-1 is correct. WESTON initiated a plan change notification to permit IT Analytical Services - Oak Ridge, TN to report plutonium concentrations at a lower level. Since IT asserted that the laboratory could achieve 0.0001 pCi/L with no increase in cost, this was the target that was specified for the spring 1994 samples. However, prior to starting the spring sampling event, IT Analytical Services in Oak Ridge drastically changed their operations (corrective action report C016). Due to IT's operational changes, the Team decided not to submit samples to IT and the plan change (ISPCN-005) was not implemented, as noted on the table.

Spring samples were submitted to Enseco-RMAL for analysis. However, Enseco could only achieve a reporting limit of 0.01 pCi/L for plutonium and a new ISPCN (ISPCN-017) was generated to document the change in reporting limit. The Team considered that the 0.01 pCi/L reporting limit was a satisfactory improvement.

In the table in Appendix B, it is now noted that the change was not implemented, but reported herein for completeness.

17. Appendix B, Page B.1-34, Table B.1.9:
ISPCN-017 does not agree with ISPCN-005. Text should be changed for consistency.

See response to Specific Comment No. 16.

18. Appendix B, Page B-1-35, Table B.1.9:
ISPCN-022 states that the "blank criteria was too restrictive." What is meant by this statement? (Also reference C and PCN 321.)

A copy of ISPCN-022 has been attached to this response. The QAPP validation criteria rejected usable data. Due to the lack of promulgated and extensively tested validation procedures for the methods specified in the QAPP, WESTON had to develop criteria based on the experiences of several validators. However, the criteria were defective, as explained on the ISPCN. Because of the large number of data points impacted by this criteria and the possibility of other data points in the future being impacted, an investigation-specific plan change (ISPCN-022) and a program-wide plan change (PCN-317) were implemented to document the change to our validation procedures.

19. Appendix B, Page B.2-21, Paragraph 1:
In the first line of text: "rejected values have not been changed in the report." Please explain or correct the text.

Because the data validation service applied the rejection (R) qualifiers properly based on their subcontract with WESTON and the QAPP specification, WESTON decided that changing those qualifications in the electronic database or on the data validation reports could be construed as altering data. Rather than correcting the electronic database and validation reports, WESTON elected to use the data assessment cycle to identify select data as usable and to document the data usability with a corrective action report (C049).

An explanation of this issue will be placed in the text.

20. Appendix C, Page C-5, Table C.2:
In some cases, individual groundwater well data does not support the data presented in the table. For example, no Ra-226 appears in the Spring or Fall "Hits Table" for location 0335. Similarly, "Hits Table" data for location 0304 includes Th-230 (Spring) and Th-228 (Fall), but Table C-2 presents a mean value for Th-232. Finally, no Ra-226 values appear in the "Hits Tables" to support the value listed in Table C-2 for location 0304.

The data appear to be present. Relevant data are on the following pages:

Location 0335 for Ra-226 Appendix C.4. Spring hits table p. 120

Location 0304 for Th-232 Appendix C.3. Fall hits table p. 73

" Appendix C.4. Spring hits table p. 70

Location 0304 for Ra-226 Appendix C.3. Fall hits table p. 73

" Appendix C.4. Spring hits table p. 70

Mound ER Program
Investigation-Specific Planned Change Notification (ISPCN)

ISPCN No.: 022 (Task Project Manager Assigns)

Investigation/Activity: Groundwater Investigation Sweeps II

Work Order No.: 05376-039-009

Document/Plan/Procedure: RI/FS Operable Unit 9, Site-Wide Quality Assurance Project Plan

Section: Appendix H

Document Date: June 1993

Revision No.: 3

Effective Date From: 26 August 1994 To: End of Project

Description and Justification of Change: The QAPP specification for radiochemical data qualification based on the activity of target radionuclides in laboratory blanks has resulted in the rejection of a significiant portion of radiochemical data. The data rejection is inconsistent with the validation guidelines applied to other types of chemical analysis and not a reasonable criteria. Prior to the OU-9 Groundwater Investigation the criteria had not been implemented and the resultant qualifications were not anticipated. To correct this problem, other validation criteria were obtained from other WESTON investigations of DOE sites, the subcontracted data validation service (QuantaLex), and other radiochemists. As a result of this investigation, a revised qualification criteria was derived for radiochemical method blank contamination. The criteria are described below:

If blank contamination is reported above the blank Minimum Detectable Activity (MDA), then:

(1) If the sample result is less than the sample MDA, then the sample result will not be qualified.

(2) If the sample result is greater than the sample MDA and less than 5 times the blank activity, the sample activity will be qualified estimated (J). A data qualification of 'J' will be used to ensure the reported value and associated error are considered for comparison to a derived action limit. Use of data qualified 'J-B' for deriving background activities may be inappropriate and will need to be further considered during data assessment.

(3) If the sample result is greater than the sample MDA and greater than 5 times the associated blank activity, then the reported activity will **not** be qualified.

Also see PCN #317 and GW CAR #C049

Follow-up/Actions:

Approval:
Task Project Manager: [signature] Date: 11/30/94

Distribution:

Program Manager	☐	Technical Manager	☐
Alternate Project Mgr.	☐	Quality Assurance Officer	☐
Project File Code 6.2.1	☐	Other: _____	☐

Operable Unit 9 Hydrogeologic Investigation: Groundwater Sweeps Report

Acknowledgments

This work was accomplished under the direction of Mr. Arthur Kleinrath of the U.S. Department of Energy (DOE). Mr. Kleinrath is the Remedial Project Manager for the Environmental Restoration Program at the Mound Plant.

The Groundwater Sweeps Team (the Team) consisted of personnel from DOE Miami Area Office (policy guidance), EG&G Mound Applied Technologies (Program Management and Technical Assistance), Roy F. Weston, Inc. (WESTON) (project management, field sampling, laboratory liaison, data management and reporting), Terran Corp. (field sampling), Weston Analytics Division (chemical analyses), IT Analytical Services (radiological analyses), Enseco (radiological analyses), and Quantalex (data validation).

Mr. James N. Rigano is the Operable Unit 9 Manager for EG&G. During the field effort, liaison was provided by Mr. Denny Gault. Report review and consultation were provided by Dr. Daniel G. Carfagno, Mr. James J. Zahora, and Mr. Alexander G. Bray.

Mr. Gordon C. Horn was the Project Manager for WESTON during the sampling and analysis program, and Mr. William Little for the reporting phase. Ms. Julianne M. Schucker was the field team leader and lead report author. Mr. Craig Stoll managed the chemistry program and executed the data assessment. Mr. Howard Seeley was the data manager and contributed to the chemistry and data assessment activities. Mr. C. William Criswell was the designated senior technical reviewer.

Preface

The U.S. Department of Energy (DOE), Miamisburg Area Office, oversees the operation of the Mound Plant in Miamisburg, Ohio. The plant, which started operation in 1949, is operated by EG&G Mound Applied Technologies. Currently, the facility supports the DOE weapons and energy programs by performing research, development, and production.

On 21 November 1989, the U.S. Environmental Protection Agency (EPA) placed the Mound Plant on the National Priorities List due to historical disposal practices and releases of chemicals to the environment. The National Priorities List identifies sites to be examined under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also known as Superfund). DOE signed a CERCLA Section 120 Federal Facility Agreement with the EPA and later with the Ohio EPA. The agreement requires that DOE investigate the magnitude of chemical releases and take appropriate remedial actions. DOE assigned these duties to the Environmental Restoration (ER) Program.

The ER Program's responsibilities are divided among six operable units. Operable Unit 1 involves investigation and remediation of the historic Site Sanitary Landfill. Operable Unit 2 includes investigation and remediation of environmental problems on the Main Hill at the Mound Plant. Operable Unit 4 includes addressing releases of plutonium to the Miami-Erie Canal adjacent to the plant. Examining and remediating the South Property is assigned to Operable Unit 5. Operable Unit 6 consists of overseeing the Decontamination and Decommissioning Program, and Operable Unit 9 involves investigating the possibility of chemical release beyond the plant boundary and items of common interest among all operable units. The ER Program has eliminated Operable Units 3, 7, and 8 by reassigning those responsibilities to the other operable units.

Table of Contents - Text

Executive Summary **ES-1**

1. Introduction **1-1**
1.1 Background Information 1-1
1.2 Scope of Report 1-2

2. Methods **2-5**
2.1 Field Program 2-5
2.2 Chemistry Program 2-8
2.2.1. Scientific Supervision 2-8
2.2.2. Laboratory Analyses 2-9
2.2.3. Data Validation 2-9
2.2.4. Data Assessment 2-9

3. Analytical Results **3-1**
3.1. Summary of Fall and Spring Sampling Events 3-1
3.1.1. Occurrence of Analytes of Interest for Both Sampling Events 3-7
3.1.2. Comparison of the Fall 1993 and Spring 1994 Sampling Events 3-14
3.1.3. Application of DOE Derived Concentration Guides 3-16
3.1.4. Other Observations 3-22
3.2. Background Water Quality 3-23
3.2.1. Establishing Background 3-24
3.2.2. Application of Background 3-34

4. Conclusions **4-1**

5. References **5-1**

FIGURES

3.1. Detections of Metals Above Maximum Contaminant Levels 3-11
3.2. Detections of Chemicals Above Maximum Contaminant Levels 3-12
3.3. Location of Background Wells, Mound Plant, Miamisburg, Ohio 3-25

TABLES

I.1. OU 9 Hydrogeologic Data Reports 1-1
II.1. Sampling Locations Operable Unit 9 Groundwater Sampling Investigation 2-2
III.1. Analytes of Interest 3-1
III.2. Detection Above Background of Analytes of Interest, Including Observations Above MCLs 3-2
III.3. List of Detected Analytes 3-14
III.4. Percentage of Samples with Detectable Metals 3-15

Table of Contents - Text

III.5. Percentage of Samples with Detectable Radionuclides 3-15
III.6. Percentage of Samples with Detectable VOCs 3-15
III.7. Fall 1993 Statistics 3-17
III.8. Spring 1994 Statistics 3-20
III.9. Constituents Not Detected in Background Wells 3-26
III.10. Constituents Detected in Background Wells 3-31
III.11. Calculated Tolerance Limits for Chemical Parameters in Background Wells 3-36

Table of Contents — Appendices

A. Summary of Field Measurements

A.1. Water Level Observation A-1

A.2. Summary of the Collection of Field Measurements . . . A-22

B. Quality Assurance Program

Introduction B-1

B.1. Quality Assurance Program B-1

B.1.1. Introduction B.1-1
B.1.2. Project Organization and Responsibility B.1-1
B.1.3. Quality Assurance Objectives in Terms of Accuracy, Precision, Completeness, Representativeness, and Comparability B.1-1
B.1.3.1. Accuracy B.1-1
B.1.3.1.1. PE Samples B.1-1
B.1.3.1.2. Matrix Spike Trends B.1-3
B.1.3.2. Precision B.1-6
B.1.3.3. Completeness B.1-6
B.1.3.4. Representativeness B.1-7
B.1.3.5. Comparability B.1-8
B.1.4. Sampling Procedures B.1-8
B.1.5. Sample Chain-of-Custody Procedures B.1-8
B.1.6. Analytical Procedures B.1-8
B.1.7. Calibration Procedures B.1-9
B.1.8. Internal Quality Control Checks (QCC) B.1-9
B.1.9. Data Reduction, Validation, and Reporting B.1-9
B.1.10. Performance and System Audits B.1-10
B.1.11. Preventive Maintenance B.1-10
B.1.12. Routine Procedures for Assessing Data Quality B.1-10
B.1.13. Corrective Actions B.1-10
B.1.14. Quality Assurance Reports to Management . . . B.1-10

B.2. Data Quality Assessment: Fall B.2-1
B.2.1. Volatiles B.2-2
B.2.1.1. Organic Volatiles - Method 8030 . . . . . B.2-2
B.2.1.2. Organic Volatiles - Method 8021 . . . . . B.2-2
B.2.2. Semivolatiles B.2-6
B.2.3. Pesticides/PCBs B.2-8
B.2.4. Explosives B.2-10
B.2.4.1. Explosives - PETN B.2-10

B.2.4.2. Explosives - Nitroaromatics B.2-12
B.2.5. Inorganics B.2-13
B.2.6. Anions B.2-18
B.2.7. Radionuclides B.2-20

B.3. Summary of Validation Qualifiers: Fall B.3-1
B.3.1. Summary of Appendix Purpose B.3-1
B.3.2. Description of Appendix Use B.3-1

B.4. Data Quality Assessment: Spring B.4-1
B.4.1. Volatiles B.4-1
B.4.1.1. Organic Volatiles - Method 8030 . . . . . B.4-2
B.4.1.2. Organic Volatiles - Method 8021 . . . . . B.4-3
B.4.1.3. Organic Volatiles - Method 8260 . . . . . B.4-6
B.4.1.4. Organic Volatiles - CLP SOW OLM01.8 . . . . . B.4-6
B.4.2. Semivolatiles B.4-7
B.4.3. Pesticides/PCBs B.4-9
B.4.4. Explosives B.4-11
B.4.5. Inorganics B.4-13
B.4.6. Anions B.4-17
B.4.7. Radionuclides B.4-18

B.5 Summary of Validation Qualifiers: Spring B.5-1
B.5.1. Summary of Appendix Purpose B.5-1
B.5.2. Description of Appendix Use B.5-1

C. Summary of Analytical Data C-1

FIGURES

B.1. Tetryl matrix spike control chart B.1-4

TABLES

A.1.1 Fall Groundwater Level Observations A-2
A.1.2 Spring Groundwater Level Observations A-13
B.1.1. PE Sample Summary Result B.1-11
B.1.2. EG&G Mound PE Sample Result Summary B.1-16
B.1.3. Summary of Matrix Spike Performance (Fall 1993) B.1-17
B.1.4. Summary of Matrix Spike Performance (Spring 1994) B.1-21
B.1.5. Summary of Sample Collection Completeness B.1-25
B.1.6. Laboratory Analysis Completeness - Fall 1993 Analyses B.1-26
B.1.7. Laboratory Analysis Completeness - Spring 1994 Analyses B.1-27

B.1.8. Plan Change Notification Summaries B.1-28
B.1.9. Investigation-Specific Plan Change Notice Summaries B.1-31
B.1.10. Corrective Action Report Summaries B.1-36
B.1.11. Summary of Audits B.1-45
B.2.1. Data Validation Qualifiers B.2-22
B.2.2. Exceeded Holding Times for Method 8030 . . . . . B.2-23
B.2.3. USEPA SW-846 (1992) Continuing Calibration Limits for Method 8010/8020 . . . . . B.2-24
B.2.4. Continuing Calibration Check Results Not Included in 1992 Guidelines . B.2-25
B.2.5. Usability of Samples with Very Poor CCC Recoveries B.2-26
B.2.6. Exceeded Holding Times for Method 8021 . . . . . B.2-27
B.2.7. Semivolatile Blank Contaminant Levels B.2-28
B.2.8. Semivolatiles Exceeding Continuing Calibration Criteria B.2-29
B.2.9. Pesticide/PCB Matrix Spike Recoveries Summary B.2-30
B.2.10. Pesticide/PCB Laboratory Control Sample Recoveries Summary B.2-31
B.2.11. Summary of Samples Affected by Continuing Calibration Check B.2-32
B.2.12. Summary of Deficient Laboratory Control Sample Recoveries B.2-33
B.2.13. Range of Blank Results for Metals B.2-34
B.2.14. Summary of Positive Blank Contaminants Above the PQL B.2-35
B.2.15. Exceeded Holding Time for Mercury Analysis B.2-36
B.2.16. Ammonia Holding Time Summary B.2-37
B.2.17. Cyanide Holding Time Summary B.2-38
B.2.18. Summary of Laboratory Replicate Results for Radionuclides B.2-39
B.3.1. Halogenated and Aromatic Volatiles by Gas Chromatography (Method 8021) B.3-2
B.3.2. Acrylonitrile and Acetonitrile by Gas Chromatography (Method 8030) . . B.3-39
B.3.3. Semivolatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS) (Method 8270) B.3-40
B.3.4. Radionuclides B.3-49
B.3.5. Pesticides/PCBs (Method 8080) B.3-54
B.3.6. Explosives B.3-59
B.3.7. Anions B.3-67
B.3.8. Metals B.3-71
B.4.1. Data Validation Qualifiers B.4-20
B.4.2. USEPA SW-846 (1992) Continuing Calibration Limits for Method 8010/8020 . . . . . B.4-21
B.4.3. Range of Continuing Calibration Results Not in SW-846 . . . . . B.4-22
B.4.4. Method 8021 Confirmation Result Summary B.4-23
B.4.5. Semivolatile Blank Contaminant Levels B.4-24
B.4.6. Semivolatiles Exceeding Continuing Calibration Criteria B.4-25
B.4.7. Explosives Laboratory Control Sample Deficiency Summary B.4-26
B.4.8. Summary of Nitroglycerin Surrogate Recovery B.4-27
B.4.9. Range of Blank Results for Metals B.4-28
B.4.10. Summary of Positive Blank Contaminants Above the PQL B.4-29
B.4.11. Summary of Reject Values due to Matrix Spike Performance B.4-30

Table of Contents — Appendices

B.4.12. Summary of Batches Affected by Serial Dilution Errors B.4-31
B.4.13. Field Duplicate Summary B.4-32
B.4.14. of Laboratory Replicates B.4-35
B.4.15. Radiological Field Duplicates Outside Criteria B.4-36
B.4.16. Radiological Laboratory Duplicates Outside Criteria B.4-37
B.5.1. Halogenated and Aromatic Volatiles by Gas Chromatography (Method 8021) B.5-2
B.5.2. Acrylonitrile and Acetonitrile by Gas Chromatography (Method 8030) . . B.5-17
B.5.3. Semivolatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS) (Method 8270) B.5-19
B.5.4. Radionuclides B.5-27
B.5.5. Pesticides/PCBs (Method 8030) B.5-31
B.5.6. Explosives B.5-34
B.5.7. Anions B.5-37
B.5.8. Metals and Cyanide B.5-38
C.1. Detections Above Maximum Contaminant Levels C-2
C.2. Detections above DOE Ingested Water Derived Concentration Guides . . . C-5
C.3. Fall Hits Table C-8
C.4. Spring Hits Table C-208

Table of Contents — Data Supplement

Volumes I through IV (To Be Provided in Separate Volumes)

A. Water Level Measurement Field Logs

B. Fall 1993 and Spring 1994 Tables Summarizing Field Measurements

C. Groundwater Quality Sampling Log Sheets
- C.1. Fall 1993 Groundwater Quality Sampling Log Sheets
- C.2. Spring 1994 Groundwater Quality Sampling Log Sheets
- C.3. Fall 1994 Groundwater Quality Sampling Log Sheets

D. Chain of Custodies
- D.1. Fall 1993 Chain of Custodies-Chemical
- D.2. Fall 1993 Chain of Custodies-Nitrite
- D.3. Fall 1993 Chain of Custodies-Radiological
- D.4. Spring 1994 Chain of Custodies-Chemical
- D.5. Spring 1994 Chain of Custodies-Nitrite
- D.6. Spring 1994 Chain of Custodies-Radiological
- D.7. Fall 1994 Chain of Custodies-Radiological

E. Log Books
- E.1. Fall 1993 Log Books
- E.2. Spring 1994 Log Books

F. Instrument Log Sheets
- F.1. Fall 1993 Instrument Log Sheets
- F.2. Spring 1994 Instrument Log Sheets
- F.3. Fall 1994 Instrument Log Sheets

G. Analytical Results
- G.1. Fall 1993 Analytical Results for all samples
- G.2. Spring 1994 Analytical Results for all samples
- G.3. Fall 1994 Analytical Results for all samples

H. Validation Assessment Reports
(To be provided separately unbound)

Abbreviations and Acronyms

BVA	Buried Valley Aquifer
CCC	continuing calibration checks
CLP	Contract Laboratory Program
CDRL	contract-required detection limit
CRQL	contract-required quantitation limit
DCB	dichlorobenzene decachlorobiphenyl
DCG	derived concentration guide
DOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
ER	Environmental Restoration (Program)
GC	gas chromatograph
GFAA	graphite furnace atomic absorption
ICP	inductively coupled plasma
ICS	interference check sample
MCL	maximum contaminant level
MDA	minimum detectable activity
MS	mass spectrometry
OU	operable unit
PCB	polychlorinated biphenyl
PE	performance evaluation
PETN	pentaerythritol tetranitrate (explosive)
PQL	practical quantitation limit
QA	quality assurance
QAPP	Quality Assurance Project Plan
QC	quality control
QCC	quality control check
RCRA	Resource Conservation and Recovery Act
RPD	relative percent difference
RSD	relative standard deviation
SOP	standard operating procedure
SVOC	semivolatile organic compound
TCMX	tetrachloro-m-xylene
TDS	total dissolved solids
TOC	total organic carbon
TSS	total suspended solids
USATHAMA	U.S. Army Toxic and Hazardous Materials Agency
VOC	volatile organic compound

Executive Summary

Synoptic **means each sampling event was conducted within a short period to describe conditions as they exist simultaneously, providing a general view of the whole groundwater system.**

Baseline **is a set of water quality data used as a comparison for judging whether water quality improves or worsens.**

Groundwater quality **is a description of organic, inorganic, or radiological constituents in groundwater.**

Background **is a description of the groundwater quality outside the influence of Mound Plant.**

As a part of the Operable Unit 9 (Site-wide) remedial investigation, field studies addressed the hydrogeology of the Mound Plant Site and the nature and extent of groundwater contamination outside the plant boundary. Two comprehensive, synoptic groundwater sampling events, the groundwater sweeps, comprised the final portion of these field studies.

The objective of the groundwater sweeps investigation was to establish a baseline of groundwater quality for the Mound Plant area. To accomplish this objective, the Environmental Restoration Program collected and analyzed samples to

1. Provide a snapshot of groundwater quality at all sampling locations.
2. Establish the chemicals most likely to be found in the groundwater at each location.
3. Establish whether water quality varies seasonally.
4. Establish background groundwater chemical quality.

The groundwater sweeps team (the Team) consisted of personnel from the U.S. Department of Energy Miami Area Office (policy guidance), EG&G Mound Applied Technologies (program management and technical assistance), Roy F. Weston, Inc. (project management, field sampling, laboratory liaison, data management and reporting), Terran Corp. (field sampling), Weston Analytics Division (chemical analyses), IT Analytical Services (radiological analyses), Enseco (radiological analyses), and QuantaLex (data validation).

The field team collected groundwater samples during a two-season sampling effort. Fall sampling occurred from 13 September to 15 October 1993, and spring sampling occurred from 8 March to 14 April 1994. The field team collected samples from three types of locations: monitoring wells, Mound Plant production wells, and bedrock seeps.

The Team performed data assessment according to the Operable Unit 9, Site-Wide Quality Assurance Program Plan (QAPP) requirements. The data assessment included deciding whether data thought to be less than totally accurate were usable. Data assessment also included determining if there were any differences between the method of sampling and the quality assurance program sampling requirements. The data assessment showed that 99 percent of the data collected were usable.

Review of the analytical results indicates that low concentrations of metals, volatile organic compounds, and radionuclides are common. Local concentrations of total and soluble chromium and lead, tetrachloroethene, and trichloroethene exceed maximum contaminant levels. Total and soluble chromium and arsenic, tetrachloroethene and 1,1,1-trichloroethane are common in the background wells sampled. Tetrachloroethene exceeds maximum contaminant levels in one background well.

***Completeness* is a measure of the amount of data obtained from a measurement system that achieves the project goals, compared to the amount expected under normal conditions.**

The groundwater sampling and analysis program described in this report provides a quality baseline. As required by the QAPP, the completeness goals are 90 percent for field measurements and sample collection, 95 percent for laboratory analysis, and 100 percent for collection and analysis of background samples. Sample collection, field measurements, and laboratory analysis of the entire groundwater monitoring network generally exceeded these goals. Collection of background samples met the goals, but individual analyses did not. Several analyses for specific explosive compounds were rejected. These are not expected to affect the quality of the baseline, as sampling will undoubtedly continue as part of a complete monitoring program.

The data presented in this report, together with the information in the companion reports identified in Table I.1, will be used to design a long-term groundwater monitoring program for the Mound Plant Site. The information will also support operable unit-specific studies.

1. Introduction

Synoptic **means each sampling events was conducted within a short period to describe condition as they exist simultaneously,providing a general view of the whole groundwater system.**

Baseline **is a set of water quality data used as a comparison for judging whether water quality improves or worsens.**

Groundwater quality **is a description of organic, inorganic, or radiological constituents in groundwater.**

Background **is a description of the groundwater quality outside the influence of Mound Plant.**

As a part of the Operable Unit (OU) 9 (Site-wide) remedial investigation, field studies addressed the hydrogeology of the Mound Plant Site and the nature and extent of groundwater contamination outside the plant boundary. Two comprehensive, synoptic groundwater sampling events (the groundwater sweeps conducted in fall 1993 and spring 1994) comprised the final portion of these field studies. The purpose of this technical memorandum is to report the data from this investigation.

1.1 Background Information

Because of the extensive scope of the OU 9 hydrogeologic investigations, the groundwater sweeps team (the Team) divided the work into phases. This Groundwater Sweeps Report is one of several technical memoranda that describe the OU 9 hydrogeologic investigations. Companion reports that provide additional data about these investigations are presented in Table I.1.

The field team collected the water samples included in this report from monitoring wells or piezometers in both the bedrock and sedimentary environments. Complete descriptions of these environments can be found in the companion reports.

Table I.1. OU 9 Hydrogeologic Data Reports

Document Title	Information Relevant to This Investigation
Site Scoping Report: Volume 2 - Geologic Log and Well Information Report (DOE 1992a)	Lithologic and completion logs of older monitoring wells and piezometers, some of which are mentioned in this report.
OU 9 Hydrogeologic Investigation: Well Information Report (DOE 1994a)	Lithologic and completion logs for all new monitoring wells and piezometers referenced in this report; locational data for the new survey conducted.
OU 9 Hydrogeologic Investigation: Bedrock Report (DOE 1994b)	Lithologic and stratigraphic data on the bedrock; results and interpretations of the fracture flow system.
OU 9 Hydrogeologic Investigation: Soil Chemistry Report (DOE 1994c)	Analytical data on samples collected at monitoring wells, piezometers, and other boreholes.
OU 9 Hydrogeologic Investigation: Buried Valley Aquifer (BVA) Report (DOE 1994d)	Stratigraphic and hydrologic data and interpretations of the BVA.

***Analytes* are elements or compounds that are the target of analysis.**

1.2 Scope of Report

In accordance with the OU 9 Site-Wide Work Plan (DOE 1992b), the Team developed this technical memorandum as part of the OU 9 hydrogeologic investigations. The objective of the groundwater sweeps investigation was to establish a baseline of groundwater quality for the Mound Plant area. To accomplish this objective, the Environmental Restoration (ER) Program collected and analyzed samples to

1. Provide a snapshot of groundwater quality at all sampling locations.

2. Establish the chemicals most likely to be found in the groundwater at each location.

3. Establish whether water quality varies seasonally.

4. Confirm or establish groundwater chemical quality background data.

An important element of both the investigation and the report is to evaluate success in meeting the completeness and other objectives specified in the Quality Assurance Project Plan (QAPP) listed above (DOE 1993). The groundwater quality baseline described according to the four elements will be compared with future conditions to help establish the need for, or effectiveness of, any remedial actions.

The data presented in this report, together with the information in the companion reports identified in Table I.1, will be used to design a long-term groundwater monitoring program for the Mound Plant Site. The information will also be used to support operable unit-specific studies.

This report provides descriptions of the methodologies and results of work conducted to refine the knowledge of the chemical characteristics of the system. The report includes this introductory section, plus the information discussed in the following paragraphs.

Section 2, Methods, summarizes the field program and the laboratory program. The field program section references the appropriate planning documents, describes any deviations from the procedures for the sampling events, and provides maps of sampling locations. The laboratory program section references appropriate planning documents, describes the results of the quality assurance and data assessment activities, and summarizes the data assessment.

Section 3, Summary of Analytical Results, presents a summary table of both the fall 1993 and spring 1994 validated analytical results of analytes of interest. This table and accompanying figures indicate which wells have results that exceed maximum contaminant levels (MCLs) or U.S. Department of Energy (DOE)

guidelines and which wells have any analyte detections above background levels. This section identifies specific areas of contamination, discusses the validity of the analytical data and compares the data from the fall 1993 and spring 1994 sampling events to indicate differences in the presence of contaminants. This section also identifies background locations and concentrations. The purpose of this examination is not to demonstrate compliance with drinking water quality standards or guidelines. It is merely to place the observed data in context.

Section 4, Conclusions, evaluates whether the analytical data obtained from the fall 1993 and spring 1994 groundwater sweeps supply a complete groundwater quality baseline and indicates any exceptions to this baseline.

The Appendices contain summaries of field measurements (Appendix A), the quality assurance program (Appendix B), and analytical data (Appendix C).

A **Data Supplement** volume (available at EG&G Mound) contains all notebooks, field logs, chains of custody, and complete analytical results.

2. Methods

The Team consisted of personnel from DOE Miami Area Office (policy guidance), EG&G Mound Applied Technologies (program management and technical assistance), WESTON (project management, field sampling, laboratory liaison, data management and reporting), Terran Corp. (field sampling), Weston Analytics Division (chemical analyses), IT Analytical Services (radiological analyses), Enseco Rocky Mountain Analytical Laboratory (radiological analyses), and QuantaLex (data validation).

The groundwater sweeps investigation included sampling 98 monitoring wells and five seeps. The Team conducted field sampling activities according to the requirements specified in the OU 9 Site-Wide Work Plan (DOE 1992b) and the QAPP (DOE 1993). The following sections summarize the field methods and the laboratory program.

2.1. Field Program

The Team collected groundwater samples during a two-season sampling effort. The field team collected samples from three types of locations: monitoring wells, Mound Plant production wells, and seeps. Fall sampling occurred from 13 September to 15 October 1993, and spring sampling occurred from 8 March 1994 to 14 April 1994. Two wells (0392 and 0342) were sampled on 3 October 1994. Data from these wells will be included in subsequent drafts of this report. Plate 1 and Table II.1 show the sampling locations.

As required by the QAPP, the completeness goals are 90 percent for field collection of the entire groundwater monitoring network and 100 percent for collection of background samples. Only 89 percent of the expected samples were collected in the fall 1993 events. Samples for explosives, semivolatiles, and pesticides could not be collected due to dry conditions (see Appendix B.1). Over 94 percent of the expected samples were collected in the spring 1994 events.

The field team purged and sampled the monitoring wells using either dedicated bailers, submersible pumps, or bladder pumps following the Standard Operating Procedures (SOPs) (DOE 1993). During the fall and spring sampling events, the field team did not sample several monitoring wells because groundwater was not present. Appendix B.1 discusses those monitoring wells for which deviation from the SOPs occurred during purging and sampling tasks. These deviations pertained to purging (insufficient water for full purging, packer failure necessitating alternative purge scenario) and sampling (insufficient water for sampling or dry well, non-recording of field parameters).

The field team purged the Mound Plant production wells (0071, 0076, and 0271) for a minimum of 10 minutes, and collected samples from sampling ports located within each pump house following the established SOPs. However, deviations occurred regarding the field measurement SOPs due to oversights by the field crew. Appendix B.1 describes these deviations. Field parameters, dissolved

Table II.1. Sampling Locations
Operable Unit 9 Groundwater Sampling Investigation

Mound Plant ER Program Groundwater Monitoring Wells			
0046	0158	0325	0375
0063	0159	0326	0376
0111	0160	0327	0377
0112	0301	0328	0378
0115	0302	0329	0379
0117	0303	0330	0380
0118	0304	0332	0381
0119	0305	0333	0382
0120	0306	0334	0383
0123	0307	0335	0385
0124	0308	0336	0386
0125	0309	0337	0387
0126	0310	0341	0388
0127	0311	0342	0389
0128	0312	0343	0393
0129	0313	0344	0394
0130	0314	0345	0397
0137	0315	0346	
0138	0316	0347	
0151	0317	0351	
0152	0318	0353	
0153	0319	0354	
0154	0320	0356	
0155	0322	0370	
0156	0323	0372	
0157	0324	0373	
Mound Plant Groundwater Production Wells			
0071	0076	0271	
Groundwater Seeps			
0601	0602	0605	0607
0608			

oxygen and redox, were not recorded for production wells 0071, 0076, and 0271; alkalinity was not recorded for production well 0076. These deviations did not impact the balance of the data quality.

The field team sampled five groundwater seeps during the fall and spring sampling events. Sampling was in general accordance with the SOPs, with deviations indicated in Appendix B.1. These deviations pertained to non-recording of field parameters and non-sampling due to lack of water. They resulted in no impact to the balance of the data quality.

As an additional task, the field team sampled two piezometers (P015 and P027) during the spring sampling event to develop preliminary data concerning groundwater quality beneath the spoils disposal area. In accordance with the SOP, the field team used disposable bailers to purge and sample the groundwater in the piezometers.

Also in accordance with the SOPs, the field team obtained field parameters prior to and during the purging of the groundwater. The field team obtained water level measurements at the start of the fall and spring sampling efforts. Appendix A.1 presents the water level elevations for both the fall and spring events. Field parameters measured during the purging of the groundwater included temperature, specific conductivity, dissolved oxygen, oxidation-reduction potential, and pH. Appendix A.2 discusses the methods and documentation of the field parameters.

The field team collected groundwater samples from each of the sampling locations according to the SOPs. The manufacturer cleaned all containers and certified them as clean according to U.S. Environmental Protection Agency (EPA) standards. The manufacturer's statement of certification and analytical results accompanied each sample container lot.

The field team collected and analyzed quality control (QC) samples for field QC. These samples included trip blanks, field duplicates, ambient blanks, and sample bank blanks. The field team prepared, collected, and analyzed the QC samples according to the QAPP (DOE 1993).

The field team identified the collected samples by using a 3-letter, 10-digit identifier (MNDXX-YYYY-ZZZZ). MNDXX indicates the area identifier (e.g., OU 9 is MND20 and OU 1 is MND01). The next portion of the identifier, YYYY, designates the specific sampling location (e.g., 0397). The last four digits, ZZZZ, serve as the sample identifier, which for groundwater samples is the sample round or sample depth. The first of the last four digits documents field QC.

The field team packaged and shipped these samples to the laboratories according to the SOPs and the current U.S. Department of Transportation and International Air Transport Association regulations.

Piezometers **are wells of small diameter installed primarily to measure water level.**

Ambient blank **is a container of organic-free water used to monitor VOCs potentially present in the sample collection area.**

The field team staged the purged groundwater from monitoring wells at each monitoring well location in bung-topped drums, and removed the drums daily by transferring the groundwater into a truck-mounted, temporary holding tank. This temporary holding tank was then emptied into staged 2,000-gallon tanks near the contractor storage trailer area. The field team reused the drums at subsequent monitoring well locations.

2.2 Chemistry Program

The chemistry program included scientific supervision, laboratory analyses, data validation, and data assessment in accordance with the OU 9 QAPP (DOE 1993). Appendices B.1 and B.2 present information about any instances in the chemistry program that did not meet the requirements of the QAPP. The Team evaluated these instances during data assessment. Appendix B.1 discusses adherence to the quality assurance program and indicates any deviations. Appendices B.2 and B.4 provide a detailed summary of the data assessment. The following subsections summarize the information in Appendix B.

2.2.1. Scientific Supervision

Scientific supervision included contracting approved laboratories, organizing sampling activities with the laboratories, supervising how the laboratories performed, and checking and judging data. Four laboratories analyzed samples during the groundwater sweeps investigation. Each laboratory demonstrated that it met the requirements of the QAPP.

Weston Analytics Division performed the chemical analyses, except for nitrite, for both the fall and spring samples. Because the holding time for nitrite is only 48 hours, it had to be analyzed locally to ensure that the sample was still good. Bowser Morner in Dayton, Ohio, analyzed the samples for nitrite.

Two laboratories, IT Analytical Services and Enseco, performed the radiochemical analyses. IT Analytical Services performed radiochemical analyses for the fall samples; Enseco performed the radiochemical analyses for the spring samples.

QuantaLex, Inc., performed data validation, which entailed making sure the laboratory followed required procedures and looking for data that might be of lesser quality or inaccurate. The people assigned by QuantaLex to validate the data followed the requirements of the QAPP. Additionally, a WESTON auditor visited QuantaLex in January 1994. During the data validation, the WESTON auditor supervised the scientific performance of QuantaLex and reviewed their reports.

As specified in the QAPP, the laboratories and validation service were judged on how well they did their jobs based on information provided in their daily reports and in onsite audits, and by testing the laboratory on certain test samples.

2.2.2. Laboratory Analyses

Bowser Morner, Enseco, IT Analytical Services, and WESTON Analytics Division analyzed samples.

The laboratories generally met the QAPP requirements. However, there were two deviations from the QAPP requirements during the investigation: (1) plan changes, and (2) QC checks (QCCs) not meeting program requirements. The Team made plan changes because the QAPP requirement was incomplete or too exact. For example, the QAPP did not name a surrogate for Method 8030. A surrogate is a nontarget chemical added to a sample to help find out how much of a target chemical is recovered during the analysis. The amount of nontarget chemical put in the sample helps to confirm how much of the target chemical is in the sample. The Team made a plan change to record the use of a surrogate with the method. Appendix B.1 describes the plan changes.

QuantaLex validated the laboratory data.

Because QCCs did not meet program requirements, the data had to be labeled as perhaps not quite accurate and sometimes not usable. The validators reported many QCC problems during data validation (see Appendix B.2); however, less than 1 percent of the data was unusable due to these problems.

2.2.3. Data Validation

The Team performed data validation in accordance with the requirements of the QAPP. Validating data means looking for data that may be of lesser quality or inaccurate.

Many QAPP (DOE 1993) validation guidelines had not been written or tested before. Thus, the Team identified several problems with the QAPP during the fall data validation. The problems ranged from application of improper standards resulting in the false rejection of usable data to the leaving out of worksheets for data validation. The Team corrected these problems through a combination of Corrective Action Reports and Plan Change Notices (presented in Appendices B.1 and B.2).

During data validation, the Team found that several data points for volatile organics, explosives, and radionuclides were of lesser quality. They also found that the results for samples analyzed for volatile organics by Method 8021 were not precise. These results were estimated because the laboratory system did not meet the QAPP requirements for fine tuning or adjusting the laboratory instruments. During data validation, the Team initially rejected many results for explosives and radionuclides. However, since the rejections were due to incorrect validation guidelines, data assessment later found that most of the results were usable.

2.2.4. Data Assessment

The Team performed data assessment following the QAPP requirements. The data assessment included deciding whether data thought to be less than totally

accurate were usable. This assessment action does not change the validated results (except for correction of errors); it merely interprets and appropriately applies them. Data assessment also included determining if there were any differences between the method of sampling and the quality assurance program requirements.

As required by the QAPP, the results of the data assessment, outlined in Appendices B.1 and B.2, show that 99 percent of the data collected was usable. Tables B.1.5 and B.1.6 in Appendix B.1 shows a breakdown of data usability.

The completeness goals (usable data) are 90 percent for field measurements, 95 percent for laboratory analysis, and 100 percent for collection and analysis of background samples. Sample collection, field measurements, and laboratory analysis of the entire groundwater monitoring network exceeded these requirements.

3. Analytical Results

The complete analytical record (nondetects as well as hits) is in the Data Supplement volume

The analytical results are presented in three steps or stages. This section of the report discusses the occurrence on a qualitative (non-numeric) basis, and also presents background data. Appendix C presents all of the analytical detections (hits) for each sampled location. The complete analytical record (nondetects as well as hits) is in the Data Supplement volume.

3.1. Summary of Fall and Spring Sampling Events

This section summarizes analytes of interest for the fall and spring groundwater sampling events with detections at concentrations above background. This list of analytes of interest includes eight Resource Conservation and Recovery Act (RCRA) metals, five radioisotopes, eight volatile organic compounds (VOCs), and two semivolatile organic compounds (SVOCs), as shown in Table III.1. The analytes of interest are selected for discussion on the basis of the previous investigations conducted at Mound Plant, toxicity, and their detections in this investigation. The RCRA metals, for example, have been identified by EPA as having specific toxic characteristics in comparison with other metals, such as aluminum and calcium. The VOCs identified are those that have been of historical concern in and around Area B (DOE 1994e). The radionuclides are all those of previous interest at the Mound Plant Site (DOE 1992b). The SVOCs are compounds detected in this study. The list was developed to reduce the data set to a manageable size, and to encompass all of the contaminants of previous interest at the site, not to exclude important observations. Review of the complete analyte list reveals that no important observations were omitted.

Table III.2 is a graphic representation that shows, for each well and each analyte of interest, whether that analyte was detected above background in the fall event, the spring event, or both. The corresponding analytical data are in Appendix C. This graphic also indicates whether the analyte is above the MCL set by EPA. Figure 3.1 depicts the locations of detections of metals and radionuclides and Figure 3.2 presents organic chemicals, respectively, that exceed the MCL. Underlined parameters had detections in both fall and spring. For clarity, wells that did not have detections above MCLs are not shown on the figures. Plate 2 also depicts wells with detections above MCLs. The color codes on the plate denote completion zones of the monitoring wells.

Table III.1. Analytes of Interest

RCRA Metals	Radioisotopes	VOCs	SVOCs
Arsenic Barium Cadmium Chromium Lead Mercury Selenium Silver	Tritium Plutonium-238 Uranium-234 Uranium-235/236 Uranium-238	1,1,1-trichloroethane 1,2-*cis*-dichloroethene 1,2-*trans*-dichloroethene Tetrachloroethene Trichloroethene Trichlorofluoromethane Trichloromethane Vinyl chloride	*bis*(2-ethylhexyl) phthalate Diethyl phthalate

3. Analytical Results

Table III.2. Detection Above Background of Analytes of Interest, Including Observations Above MCLs

ANALYTE	0046	0063	0071	0076	0111	0112	0115	0117	0118	0119	0120	0123	0124
Arsenic, Soluble													
Arsenic, Total													
Barium, Soluble													
Barium, Total													
Cadmium, Soluble							●						
Cadmium, Total								●			■		
Chromium, Soluble							●				●		
Chromium, Total					/●		■/■	■/■	●/●		■/■	●	
Lead, Soluble				/●									
Lead, Total	■/●	/●				/●	●/●	●		■	■/●		
Mercury, Soluble													
Mercury, Total													
Selenium, Soluble									●				
Selenium, Total	●					/●			/●		●	●	●
Silver, Soluble													
Silver, Total													
Tritium	●/●	●/●	●/●		●/●	●/●	■/●	●/●		●/●	■/●		●/●
Plutonium-238								●			●		
Uranium-234								●/●			●/●		
Uranium-235/236													
Uranium-238	●										●/●		
1,1,1-Trichloroethane			●/●	/●			●		/●				
1,2-cis-Dichloroethene		●/●	●/●	●			●						
1,2-trans-Dichloroethene													
Bis(2-ethylhexyl)phthalate													
Tetrachloroethene	/●	■/■	●/●	●/●			●/●						
Trichloroethene	●/●	■/■	●/●	●/●			●/●						
Trichlorofluoromethane													
Trichloromethane		/●			●/●								
Vinyl Chloride													

Notes:

● - indicates an analyte detection during the Fall sampling event
/● - indicates an analyte detection during the Spring sampling event
▒ - shading indicates analyte detections above maximum contaminant levels

3. Analytical Results

Table III.2. (Page 2 of 9)

ANALYTE	0125	0126	0127	0128	0129	0130	1037	0138	0151	0152	0153	0154	0155
Arsenic, Soluble													
Arsenic, Total													
Barium, Soluble													
Barium, Total													
Cadmium, Soluble		/●		●									
Cadmium, Total					●		●/●						
Chromium, Soluble									/●				
Chromium, Total					●		●	●/●	●/●	■/●	●/●		●/●
Lead, Soluble				■									
Lead, Total	■	●	/●	/■	/●		■/■		■/●				
Mercury, Soluble													
Mercury, Total							●/●						
Selenium, Soluble												●	
Selenium, Total		●			●			●		/●		●	●
Silver, Soluble													
Silver, Total							/●						
Tritium	●	●/●					●/●	●/●		●/●	●/●	●/●	●/●
Plutonium-238							/●						
Uranium-234	●/●								/●				
Uranium-235/236												●	
Uranium-238	●/●								/●				
1,1,1-Trichloroethane					●/●								
1,2-cis-Dichloroethene												●/●	●/●
1,2-trans-Dichloroethene													
Bis(2-ethylhexyl)phthalate													
Tetrachloroethene		/●					/●			●/●	●/●	/●	/●
Trichloroethene							●/●			●/■	■/■	●/●	●/●
Trichlorofluoromethane													
Trichloromethane							●						●/●
Vinyl Chloride													

Notes:

● - indicates an analyte detection during the Fall sampling event
/● - indicates an analyte detection during the Spring sampling event
▒ - shading indicates analyte detections above maximum contaminant levels

Table III.2. (Page 3 of 9)

ANALYTE	0156	0157	0158	0159	0160	0271	0301	0302	0303	0304	0305	0306	0307
Arsenic, Soluble													
Arsenic, Total				●									
Barium, Soluble								●/●		/●			
Barium, Total				●				●/●		●/●			
Cadmium, Soluble									/●	/●			
Cadmium, Total										●/●			
Chromium, Soluble										/●			
Chromium, Total							●		●	●/●	■/■	●	
Lead, Soluble							●			/■			
Lead, Total							/●	/●	/●	■/■		●	
Mercury, Soluble													
Mercury, Total													
Selenium, Soluble													
Selenium, Total													
Silver, Soluble										/●			
Silver, Total										/●			
Tritium						●/●		●/●	●/●	/●	●/●	●/●	●/●
Plutonium-238													
Uranium-234										●/●			
Uranium-235/236							●			●	●		
Uranium-238										●/●			
1,1,1-Trichloroethane						●/●							
1,2-cis-Dichloroethene						●/●					●/●		
1,2-trans-Dichloroethene											●		
Bis(2-ethylhexyl)phthalate													
Tetrachloroethene						●/●					■/■	●/●	●/●
Trichloroethene						●/●					■/■	■/■	■/■
Trichlorofluoromethane													
Trichloromethane											●/●		●
Vinyl Chloride													

Notes:

● - indicates an analyte detection during the Fall sampling event

/● - indicates an analyte detection during the Spring sampling event

▒ - shading indicates analyte detections above maximum contaminant levels

3. ANALYTICAL RESULTS

Table III.2. (Page 4 of 9)

ANALYTE	0308	0309	0310	0311	0312	0313	0314	0315	0316	0317	0318	0319	0320
Arsenic, Soluble													
Arsenic, Total							● / ●						
Barium, Soluble		● / ●											
Barium, Total		●											
Cadmium, Soluble					/ ●		/ ●						
Cadmium, Total											/ ●		
Chromium, Soluble					/ ■	/ ●							
Chromium, Total		/ ●			■	■ / ■	/ ●	● / ●					
Lead, Soluble													/ ●
Lead, Total			●	●	●	● / ●	/ ■	●		/ ■	/ ●		
Mercury, Soluble													
Mercury, Total													
Selenium, Soluble								●					
Selenium, Total				/ ●						●		/ ●	
Silver, Soluble													
Silver, Total													
Tritium			● / ●		● / ●	● / ●	● / ●	● / ●		/ ●	● / ●		
Plutonium-238													
Uranium-234					/ ●		●					●	
Uranium-235/236													
Uranium-238					/ ●		●					●	
1,1,1-Trichloroethane													
1,2-cis-Dichloroethene					● / ●			●					
1,2-trans-Dichloroethene					●								
Bis(2-ethylhexyl)phthalate													
Tetrachloroethene						● / ●							
Trichloroethene					■ / ■	● / ●		■ / ■					
Trichlorofluoromethane													
Trichloromethane													
Vinyl Chloride													

Notes:

● - indicates an analyte detection during the Fall sampling event
/● - indicates an analyte detection during the Spring sampling event
▒ - shading indicates analyte detections above maximum contaminant levels

3. Analytical Results

Table III.2. (Page 5 of 9)

ANALYTE	0321	0322	0323	0324	0325	0326	0327	0328	0329	0330	0332	0333	0334
Arsenic, Soluble													
Arsenic, Total													
Barium, Soluble													
Barium, Total													
Cadmium, Soluble													
Cadmium, Total													
Chromium, Soluble												●	
Chromium, Total		●		●	● / ●		▒ / ●						
Lead, Soluble												●	
Lead, Total				●	● / ●	●							
Mercury, Soluble													
Mercury, Total													
Selenium, Soluble							/ ●						
Selenium, Total				●			/ ●		/ ●				
Silver, Soluble													
Silver, Total													
Tritium				▒ / ●									
Plutonium-238													
Uranium-234				●	●								
Uranium-235/236													
Uranium-238													
1,1,1-Trichloroethane							●						/ ●
1,2-cis-Dichloroethene				● / ●				●					
1,2-trans-Dichloroethene													
Bis(2-ethylhexyl)phthalate						●		●					
Tetrachloroethene							▒ / ●		/ ●				
Trichloroethene				● / ●									
Trichlorofluoromethane													
Trichloromethane							●						●
Vinyl Chloride													

Notes:

● - indicates an analyte detection during the Fall sampling event
/● - indicates an analyte detection during the Spring sampling event
▒ - shading indicates analyte detections above maximum contaminant levels

3. ANALYTICAL RESULTS

Table III.2. (Page 6 of 9)

ANALYTE	0335	0336	0337	0341	0342	0343	0344	0345	0346	0347	0351	0353	0354
Arsenic, Soluble													
Arsenic, Total	/■												
Barium, Soluble	/●						●/●						
Barium, Total	/●						●/●						
Cadmium, Soluble						/●							
Cadmium, Total													
Chromium, Soluble		●											
Chromium, Total	●	●							●/●	●/●		/●	
Lead, Soluble													
Lead, Total				/●	●			/●	/●		/●	/●	
Mercury, Soluble													
Mercury, Total	/●												
Selenium, Soluble		/●	●					/●	/●				
Selenium, Total			●	●									
Silver, Soluble										/●			
Silver, Total													
Tritium				/●		●/●	●/●	/●	●/●	●/●		/●	
Plutonium-238													
Uranium-234										●/●			
Uranium-235/236					●								
Uranium-238										●			
1,1,1-Trichloroethane													
1,2-cis-Dichloroethene										●/●			
1,2-trans-Dichloroethene										●			
Bis(2-ethylhexyl)phthalate						●							
Tetrachloroethene													
Trichloroethene										■/■			
Trichlorofluoromethane													
Trichloromethane										●/●			
Vinyl Chloride													

Notes:

● - indicates an analyte detection during the Fall sampling event
/● - indicates an analyte detection during the Spring sampling event
▒ - shading indicates analyte detections above maximum contaminant levels

3. ANALYTICAL RESULTS

Table III.2. (Page 7 of 9)

ANALYTE	0356	0370	0372	0373	0375	0376	0377	0378	0379	0380	0381	0382	0383
Arsenic, Soluble													
Arsenic, Total													
Barium, Soluble													
Barium, Total													
Cadmium, Soluble	/●									/●			
Cadmium, Total													
Chromium, Soluble				/■			●/●				/●		
Chromium, Total			●/●	/■	●	/●	■/■	●	●/●		/●		
Lead, Soluble												/■	
Lead, Total		●	/●	●		●	●		■	●			
Mercury, Soluble													
Mercury, Total													
Selenium, Soluble								●					
Selenium, Total		/●	●					●					
Silver, Soluble										/●			
Silver, Total													
Tritium		●/●		●/●	/●	●/●	●/●	●/●	●/●				
Plutonium-238													
Uranium-234	/●												
Uranium-235/236								●					
Uranium-238	●/●	●/●		●									
1,1,1-Trichloroethane						/●	●/●	●/●			●		
1,2-cis-Dichloroethene		■/■		●/●									
1,2-trans-Dichloroethene		●											
Bis(2-ethylhexyl)phthalate				●						●			
Tetrachloroethene		■/■		■/■	●/●				●/●				
Trichloroethene		■/■		■/■	●/●				●/●				
Trichlorofluoromethane		●		●/●									
Trichloromethane		●/●		●/●									
Vinyl Chloride													

Notes:

● - indicates an analyte detection during the Fall sampling event
/● - indicates an analyte detection during the Spring sampling event
▒ - shading indicates analyte detections above maximum contaminant levels

3. ANALYTICAL RESULTS

Table III.2. (Page 8 of 9)

ANALYTE	0385	0386	0387	0388	0389	0393	0394	0397	0601	0602	0605	0607	0608
Arsenic, Soluble													
Arsenic, Total													
Barium, Soluble													
Barium, Total													
Cadmium, Soluble					/●								
Cadmium, Total													
Chromium, Soluble								/●				●	
Chromium, Total				●/■		/●	/●	/●		/●			
Lead, Soluble													
Lead, Total			●					●	●/●	▒	/●		/●
Mercury, Soluble													
Mercury, Total										●			
Selenium, Soluble					●								
Selenium, Total		●		/●		●			●				
Silver, Soluble													
Silver, Total													
Tritium		●/●	●/●	●/●	●/●	●/●	●/●	●/●	■/■	●/■	/●	■/●	●/■
Plutonium-238													
Uranium-234									●/●	/●			
Uranium-235/236													
Uranium-238													
1,1,1-Trichloroethane													
1,2-cis-Dichloroethene								●		●	/●	●	/●
1,2-trans-Dichloroethene													
Bis(2-ethylhexyl)phthalate									/●				
Tetrachloroethene		/●	●		●/●			■/■					
Trichloroethene		●/■			●/●			■/■	/●	●	/■	●/●	/■
Trichlorofluoromethane													
Trichloromethane								●					
Vinyl Chloride													

Notes:

● - indicates an analyte detection during the Fall sampling event
/● - indicates an analyte detection during the Spring sampling event
▒ - shading indicates analyte detections above maximum contaminant levels

3. ANALYTICAL RESULTS

Table III.2. (Page 9 of 9)

ANALYTE	P015	P027	0374 [a]	0392 [a]
Arsenic, Soluble				
Arsenic, Total				●
Barium, Soluble			●	●
Barium, Total			●	●
Cadmium, Soluble				
Cadmium, Total		/●		●
Chromium, Soluble				
Chromium, Total			●	■
Lead, Soluble				
Lead, Total		/■	●	■
Mercury, Soluble				
Mercury, Total			●	
Selenium, Soluble				
Selenium, Total				
Silver, Soluble				
Silver, Total		/●		
Tritium		/●	●	●
Plutonium-238				
Uranium-234			●	●
Uranium-235/236				
Uranium-238			●	●
1,1,1-Trichloroethane				
1,2-cis-Dichloroethene	/■	/●	●b	
1,2-trans-Dichloroethene	/●			
Bis(2-ethylhexyl)phthalate				
Tetrachloroethene	/●	/●	■	
Trichloroethene	/■	/■	■	
Trichlorofluoromethane	/●			
Trichloromethane	/●			
Vinyl Chloride	/■			

a - well sampled 3 October 1994
b - result is for total 1,2-Dichloroethene

Notes:

● - indicates an analyte detection during the Fall sampling event
/● - indicates an analyte detection during the Spring sampling event
▒ - shading indicates analyte detections above maximum contaminant levels

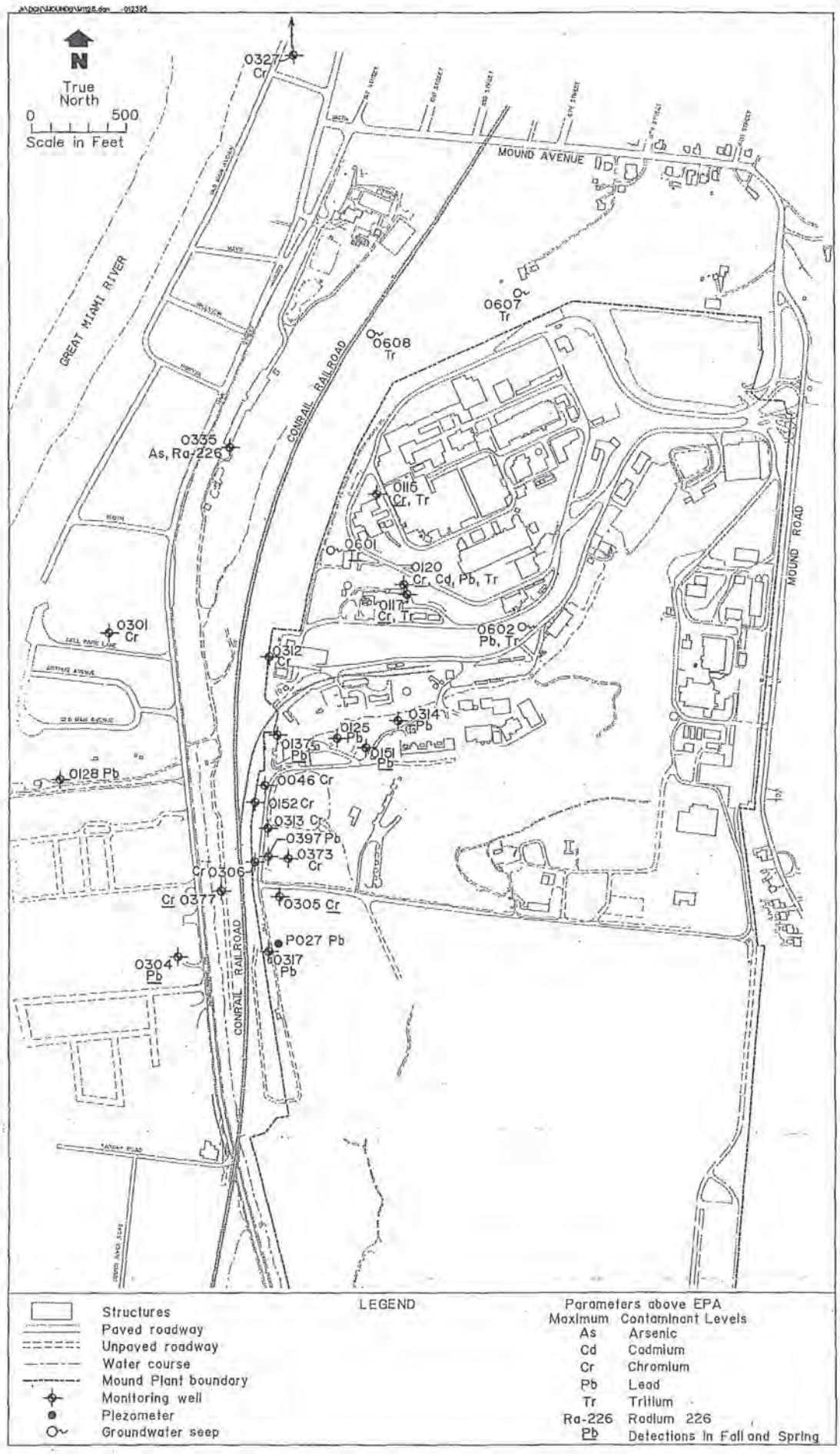

Figure 3.1. Detections of Metals Above Maximum Contaminant Levels

Figure 3.2. Detections of Chemicals Above Maximum Contaminant Levels

Table III.3 presents each metal analyte, chemical compound, and radioisotope detected in the groundwater samples collected during the field sampling. Each of the categories is discussed below for both events.

3.1.1. Occurrence of Analytes of Interest for Both Sampling Events

Among the analytes of interest are the eight RCRA metals, both filtered (soluble) and unfiltered (total). Soluble metals are metals dissolved within the groundwater, whereas total metals include metals that may be associated with solid material in the groundwater sample. Of the eight RCRA metals, soluble and/or total barium was detected above the method detection limit at each sampling location. There were no concentrations of soluble mercury detected above the method detection limit. The remaining metals were present above the method detection limit in the percentage of groundwater samples identified in Table III.4.

The radioisotopes of interest consist of five radioisotopes (see Table III.1). The five radioisotopes were present above the method detection limit in the percentage of groundwater samples identified in Table III.5.

The chemical compounds of interest consist of VOCs and SVOCs (see Table III.1). The VOCs were present above the method detection limit in the percentage of groundwater samples identified in Table III.6.

The SVOC *bis*(2-ethylhexyl)phthalate was present in 10 percent of fall groundwater samples. Five percent of fall groundwater samples contained diethyl phthalate; 4 percent of the samples contained diethyl phthalate in the spring.

3.1.2. Comparison of the Fall 1993 and Spring 1994 Sampling Events

The Team compared the concentrations of the analytes of interest for the fall and spring sampling events based on the percent differences between the two events per location. Several of the metal analytes have relatively small percent differences in the concentrations per sampling location. This may indicate that the metal analytes are naturally occurring (e.g., soluble and total arsenic). Other metal analytes have highly variable percent differences, which may indicate that they are not naturally occurring (e.g., soluble and total cadmium).

Table III.3. List of Detected Analytes

METALS	CHEMICAL	RADIOISOTOPES
Aluminum-soluble/total	1,1,1-trichloroethane	Americium-241
Antimony-soluble/total	1,1,2-trichloro-1,2,2-trifluoroethane	Bismuth-210 (spring)
Arsenic-soluble/total	1,2-*cis*-dichloroethene	Plutonium-238
Barium-soluble/total	1,2-dichloroethane	Plutonium-239/240
Beryllium-total	1,2-*trans*-dichloroethene	Potassium-40
Beryllium-soluble (spring)	1,3,5-trinitrobenzene (spring)	Radium-226
Bismuth-soluble/total	4,4'-DDE (fall)	Strontium-90
Cadmium-soluble/total	4-methylphenol	Thorium-228
Calcium-soluble/total	Acetonitrile (fall)	Thorium-230
Chromium-soluble/total	Alpha chlordane (spring)	Thorium-232
Cobalt-soluble/total	Ammonia	Tritium
Copper-soluble/total	Benzoic acid (spring)	Uranium-234
Cyanide-soluble/total	*Bis*(2-ethylhexyl)phthalate (fall)	Uranium-235/236
Iron-soluble/total	Butyl benzyl phthalate (fall)	Uranium-238
Lead-soluble/total	Chloride	
Lithium-soluble/total	Chloroethene(vinyl chloride)	
Magnesium-soluble/total	Di-n-butyl phthalate (fall)	
Manganese-soluble/total	Di-n-octyl phthalate (fall)	
Mercury-total	Dichloromethane (methylene chloride) (fall)	
Molybdenum-soluble/total	Diethyl phthalate	
Nickel-soluble/total	Fluoride	
Potassium-soluble/total	Gamma chlordane (fall)	
Selenium-soluble/total	Heptachlor epoxide (fall)	
Silver-soluble/total (spring)	Nitrate nitrite	
Sodium-soluble/total	PETN (fall)	
Thallium-soluble/total (fall)	Phenol	
Tin-soluble/total	Sulfate	
Vanadium-soluble/total	2,4,6-trinitrotoluene (TNT) (fall)	
Zinc-soluble/total	Tetrachloroethene	
	Tetrachloromethane (CCl4)	
	Total dissolved solids	
	Total kjeldahl nitrogen	
	Total organic carbon	
	Total phosphate	
	Total suspended solids	
	Trichloroethene	
	Trichlorofluoromethane	
	Trichloromethane (chloroform)	

Note: (spring) indicates analyte was detected spring event only
(fall) indicates analyte was detected fall event only
indicates analyte of interest

Table III.4. Percentage of Samples with Detectable Metals					
Sample	Fall (%)	Spring (%)	Sample	Fall (%)	Spring (%)
Soluble arsenic	9	10	Soluble lead	23	18
Total arsenic	13	15	Total lead	30	28
Soluble barium		99	Total mercury	2	2
Total barium		98	Soluble selenium	7	4
Soluble cadmium	2	9	Total selenium	16	2
Total cadmium	5	3	Soluble silver		3
Soluble chromium	12	13	Total silver		2
Total chromium	51	46			

Table III.5. Percentage of Samples with Detectable Radionuclides					
Sample	Fall (%)	Spring (%)	Sample	Fall (%)	Spring (%)
Tritium	84	86	Uranium-235/236	6	40
Plutonium-238	5	22	Uranium-238	80	95
Uranium-234	84	98			

Table III.6. Percentage of Samples with Detectable VOCs					
Sample	Fall (%)	Spring (%)	Sample	Fall (%)	Spring (%)
1,1,1-Trichloroethane	13	16	Trichloroethene	29	
1,2-Cis-dichloroethene	18	13	Trichlorofluoromethane	2	1
1,2-Trans-dichloroethene	4	26	Trichloromethane	16	8
Tetrachloroethene	19	39	Vinyl chloride	1	1

For each of the alpha isotopic radioisotopes (plutonium, thorium, and uranium), there is an increase in the number of detections per sampling location during the spring event. The Team attributes this increase to a change in laboratory reporting limits. The limit for plutonium was changed from 1 pCi/L (fall) to 0.01 pCi/L (spring). The 1 pCi/L is the limit set as a data quality objective by the QAPP. Mound Plant has used the lower limit for environmental monitoring for 20 years. The lower reporting limit was used for the spring sampling event so that the data could be compared with the Mound Plant historical data set. The actual presence of any real plutonium in groundwater is suspect due to its extremely low solubility. For the purposes of this report, the data are within the objectives outlined in the QAPP. Future data users should be aware of the changes.

Many of the chemical analytes of interest have highly variable percent differences per location (e.g., 1,1,1-trichloroethane). Several of the chemical analytes are also present at more locations in the spring than in the fall (e.g., 1,2-*cis*-dichloroethene).

Tables III.7 and III.8 are a compilation of statistical information for each detected analyte during the fall and spring sampling events. In general, sample parameter means and sample parameter standard deviations are higher in the spring than in the fall, although there are exceptions to this observation. This suggests that there may be differences between environmental conditions in the spring and fall. The differences may be due to a higher spring water table or to higher winter and spring infiltration through a contaminated area. An understanding of these differences might be important, for example, if a contemplated remedy were designed to control infiltration or if it depended on a fixed water table.

3.1.3. Application of DOE Derived Concentration Guides

DOE has established "standards and requirements for operations ... with respect to protection of members of the public and the environment against undue risk from radiation." (DOE 1990) For drinking water, DOE adopts the effective dose equivalent of 4 mrem per year cited in the primary drinking water regulations (40 CFR 141.16). The dose equivalent is calculated by comparing the observed concentration of each radionuclide to its derived concentration guide (DCG) from DOE Order 5400.5. (Since the DCGs in the order are for 100 mrem per year, this document uses 4 percent of the values to relate to 4 mrem per year.)

For the 14 radionuclides detected during the sweep sampling, the DCGs (for 4 mrem per year) are as follows (in pCi/L):

Americium-241	1.2
Bismuth-210	800.
Plutonium-238	1.6
Plutonium 239/240	1.2
Potassium-40	280.
Radium-226	4.
Strontium-90	40.
Thorium-228	16.
Thorium-230	12.
Thorium-232	2.0
Tritium	80,000.
Uranium-234	20.
Uranium-235/236	20.
Uranium-238	24.

The purpose of this examination is not to demonstrate compliance with drinking water quality standards or guidelines. It is merely to place the observed data in context.

Table III.7. Fall 1993 Statistics

Chemical Name	Detections	Mean	STD DEV	3 STD DEV
CONVENTIONALS (mg/L)				
AMMONIA	56	2.18	5.35	16.06
CHLORIDE	103	393.93	1606.32	4818.95
FLUORIDE	103	0.48	1.35	4.05
NITRATE NITRITE	74	2.52	3.06	9.18
SULFATE	90	89.35	52.92	158.76
TOTAL ORGANIC CARBON	95	1.98	4.92	14.77
TOTAL DISSOLVED SOLIDS	103	1107.71	3143.06	9429.19
TOTAL KJELDAHL NITROGEN	61	2.01	4.54	13.61
TOTAL PHOSPHATE	91	0.49	1.68	5.04
TOTAL SUSPENDED SOLIDS	69	109.03	416.44	1249.32
EXPLOSIVES (µg/L)				
1,3,5-TRINITROBENZENE	1	1.00	–	–
2,4,6-TRINITROTOLUENE	1	0.70	–	–
2,4-DINITROTOLUENE	2	32.00	2.83	8.49
NITROBENZENE	2	110.00	14.14	42.43
PETN	4	4.95	0.30	0.90
METALS (µg/L)				
ALUMINUM, SOLUBLE	23	29.57	34.83	104.49
ALUMINUM, TOTAL	63	2298.49	5683.41	17050.23
ANTIMONY, SOLUBLE	69	3.91	3.10	9.31
ANTIMONY, TOTAL	18	1.12	0.94	2.82
ARSENIC, SOLUBLE	10	8.99	11.97	35.91
ARSENIC, TOTAL	14	14.25	15.26	45.79
BARIUM, SOLUBLE	104	119.72	75.61	226.82
BARIUM, TOTAL	107	137.21	116.19	348.56
BERYLLIUM, TOTAL	13	6.85	21.66	64.98
BISMUTH, SOLUBLE	2	42.00	0.28	0.85
BISMUTH, TOTAL	6	41.35	5.40	16.19
CADMIUM, SOLUBLE	2	1.25	0.35	1.06
CADMIUM, TOTAL	6	10.53	14.34	43.01
CALCIUM, SOLUBLE	103	119081.55	121709.95	365129.84
CALCIUM, TOTAL	105	123669.52	85599.57	256798.70
CHROMIUM, SOLUBLE	12	3.22	2.91	8.74
CHROMIUM, TOTAL	56	626.50	2407.18	7221.55
COBALT, SOLUBLE	9	35.19	93.13	279.39
COBALT, TOTAL	31	24.15	55.32	165.95
COPPER, SOLUBLE	53	2.40	1.99	5.96
COPPER, TOTAL	73	37.19	131.09	393.27
CYANIDE, TOTAL (METAL)	1	261.00	–	–
IRON, SOLUBLE	76	722.29	1486.86	4460.59
IRON, TOTAL	98	5776.69	20061.08	60183.24
LEAD, SOLUBLE	25	6.70	8.50	25.51
LEAD, TOTAL	31	12.73	18.04	54.12
LITHIUM, SOLUBLE	61	105.30	413.86	1241.58
LITHIUM, TOTAL	64	110.00	461.61	1384.82
MAGNESIUM, SOLUBLE	104	44208.37	53234.87	159704.62
MAGNESIUM, TOTAL	105	46983.81	68225.15	204675.46
MANGANESE, SOLUBLE	97	109.72	304.80	914.40
MANGANESE, TOTAL	101	210.44	484.62	1453.85

Table III.7. (page 2 of 3)

Chemical Name	Detections	Mean	STD DEV	3 STD DEV
MERCURY, TOTAL	3	3.30	4.86	14.58
MOLYBDENUM	40	27.24	56.48	169.45
MOLYBDENUM, SOLUBLE	32	8.80	10.16	30.48
NICKEL, SOLUBLE	59	170.48	935.34	2806.01
NICKEL, TOTAL	74	179.70	791.20	2373.60
POTASSIUM, SOLUBLE	103	6847.24	20158.27	60474.81
POTASSIUM, TOTAL	106	7087.58	20460.41	61381.23
SELENIUM, SOLUBLE	7	1.27	0.24	0.71
SELENIUM, TOTAL	16	1.98	1.45	4.34
SILVER, TOTAL	1	64.10	–	–
SODIUM, SOLUBLE	104	162727.69	363102.66	1089307.98
SODIUM, TOTAL	107	144173.34	383712.30	1151136.90
THALLIUM, SOLUBLE	3	14.23	9.99	29.96
THALLIUM, TOTAL	2	22.00	2.83	8.49
TIN, SOLUBLE	56	23.49	38.22	114.65
TIN, TOTAL	58	28.27	45.72	137.17
VANADIUM, SOLUBLE	58	13.02	5.66	16.98
VANADIUM, TOTAL	64	18.37	16.76	50.27
ZINC, SOLUBLE	19	65.64	88.48	265.43
ZINC, TOTAL	36	76.81	108.08	324.23
PESTICIDE / PCBs (µg/L)				
4,4'-DDD	1	2.90	–	–
4,4'-DDE	2	1.58	2.15	6.45
ALDRIN	1	1.80	–	–
ALPHA-BHC	1	3.70	–	–
BETA-BHC	1	3.60	–	–
DIELDRIN	1	0.74	–	–
ENDRIN	1	4.80	–	–
ENDRIN ALDEHYDE –	1	0.02	–	–
ENDRIN KETONE	1	0.03	–	–
GAMMA CHLORDANE	2	1.83	2.51	7.53
GAMMA-BHC (LINDANE)	1	0.01	–	–
HEPTACHLOR	1	0.50	–	–
HEPTACHLOR EPOXIDE	2	3.12	4.36	13.09
RADIONUCLIDES (pCi/L)				
AMERICIUM-241	33	0.12	0.13	0.40
PLUTONIUM-238	4	0.14	0.11	0.32
PLUTONIUM-239/240	30	0.13	0.05	0.16
POTASSIUM-40	2	159.50	43.13	129.40
RADIUM-226	48	1.36	2.01	6.03
STRONTIUM-90	17	1.23	0.98	2.94
THORIUM-228	34	0.79	0.92	2.76
THORIUM-230	39	0.77	0.89	2.68
THORIUM-232	28	0.41	0.72	2.17
TRITIUM	89	6701.06	17841.52	53524.57
URANIUM-234	88	0.72	1.51	4.52
URANIUM-235/236	6	0.14	0.11	0.32
URANIUM-238	83	0.46	0.78	2.33
SEMIVOLATILES (µg/L)				
1,2,4-TRICHLOROBENZENE	1	45.00	–	–

Table III.7. (page 3 of 3)

Chemical Name	Detections	Mean	STD DEV	3 STD DEV
1,2-DICHLOROBENZENE	2	29.00	2.83	8.49
1,3-DICHLOROBENZENE	1	43.00	–	–
1,4-DICHLOROBENZENE	1	44.00	–	–
2,4,5-TRICHLOROPHENOL	1	71.00	–	–
2,4,6-TRICHLOROPHENOL	1	58.00	–	–
2-CHLORONAPHTHALENE	1	63.00	–	–
2-METHYLPHENOL	1	28.00	–	–
2-NITROPHENOL	1	83.00	–	–
4-METHYLPHENOL	1	61.00	–	–
ACENAPHTHENE	1	3.00	–	–
ACENAPHTHYLENE	1	58.00	–	–
ANTHRACENE	1	46.00	–	–
BENZO(A)ANTHRACENE	1	25.00	–	–
BENZO(A)PYRENE	1	18.00	–	–
BENZOIC ACID	1	890.00	–	–
BIS(2-ETHYLHEXYL)PHTHALATE	9	34.94	81.11	243.32
BUTYL BENZYL PHTHALATE	2	26.00	35.36	106.07
CARBAZOLE	1	2.00	–	–
CHRYSENE	1	18.00	–	–
DI-N-BUTYL PHTHALATE	4	1.13	0.63	1.89
DI-N-OCTYL PHTHALATE	1	0.60	–	–
DIBENZOFURAN	1	72.00	–	–
DIETHYL PHTHALATE	5	1.92	1.32	3.95
FLUORANTHENE	1	26.00	–	–
NAPHTHALENE	1	68.00	–	–
PENTACHLOROPHENOL	1	120.00	–	–
PHENOL	12	1.25	0.80	2.41
PYRENE	1	45.00	–	–
VOLATILES (µg/L)				
1,1,1-TRICHLOROETHANE	16	5.31	7.93	23.80
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHA	8	5.16	2.41	7.22
1,1-DICHLOROETHANE	1	1.70	–	–
1,2-CIS-DICHLOROETHENE	19	13.42	42.88	128.63
1,2-DICHLOROETHANE	1	76.00	–	–
1,2-TRANS-DICHLOROETHENE	4	1.18	0.10	0.29
2-BUTANONE	1	12.00	–	–
4-METHYL-2-PENTANONE	1	92.00	–	–
ACETONITRILE	2	5.00	1.41	4.24
BENZENE	1	30.00	–	–
BROMODICHLOROMETHANE	1	37.00	–	–
BROMOFORM	1	38.00	–	–
CHLOROBENZENE	1	13.00	–	–
CHLOROETHENE (VINYL CHLORIDE)	1	1.80	–	–
DICHLOROMETHANE-METHYLENE CHLORIDE	3	45.63	64.40	193.21
ETHYLBENZENE	1	76.00	–	–
TETRACHLOROETHENE	20	16.23	31.56	94.69
TETRACHLOROMETHANE (CCL4)	10	6.79	12.77	38.31
TOLUENE	1	43.00	–	–
TOTAL XYLENES	1	77.00	–	–
TRICHLOROETHENE	30	10.17	14.80	44.41
TRICHLOROFLUOROMETHANE	2	2.70	0.71	2.12
TRICHLOROMETHANE (CHLOROFORM)	12	9.10	18.94	56.83

Table III.8. Spring 1994 Statistics

Chemical Name	Detections	Mean	STD DEV	3 STD DEV
CONVENTIONALS (mg/L)				
AMMONIA	44	2.35	5.66	16.98
CHLORIDE	110	413.02	1702.41	5107.24
FLUORIDE	110	0.41	0.71	2.14
NITRATE NITRITE	78	2.51	2.54	7.61
SULFATE	97	90.07	55.06	165.18
TOTAL ORGANIC CARBON	105	1.28	0.91	2.73
TOTAL DISSOLVED SOLIDS	110	1196.47	3081.02	9243.07
TOTAL KJELDAHL NITROGEN	60	2.01	4.10	12.31
TOTAL PHOSPHATE	40	0.42	0.54	1.62
TOTAL SUSPENDED SOLIDS	55	168.04	477.33	1432.00
EXPLOSIVES (µg/L)				
1,3,5-TRINITROBENZENE	3	1.40	0.79	2.37
2,4-DINITROTOLUENE	2	195.00	35.36	106.07
METALS (µg/L)				
ALUMINUM, SOLUBLE	13	3387.90	11224.33	33673.00
ALUMINUM, TOTAL	42	3820.72	9710.99	29132.97
ANTIMONY, SOLUBLE	58	2.85	6.92	20.77
ANTIMONY, TOTAL	6	1.69	1.77	5.32
ARSENIC, SOLUBLE	11	30.30	68.75	206.24
ARSENIC, TOTAL	16	12.99	16.18	48.54
BARIUM, SOLUBLE	112	119.54	80.89	242.68
BARIUM, TOTAL	110	124.40	86.12	258.36
BERYLLIUM, SOLUBLE	18	7.90	31.47	94.42
BERYLLIUM, TOTAL	21	0.69	0.65	1.94
BISMUTH, SOLUBLE	4	35.10	2.47	7.41
BISMUTH, TOTAL	6	38.97	10.72	32.17
CADMIUM, SOLUBLE	10	17.44	51.85	155.55
CADMIUM, TOTAL	3	1.70	0.75	2.26
CALCIUM, SOLUBLE	108	123936.11	125610.89	376832.68
CALCIUM, TOTAL	107	130838.32	144113.80	432341.41
CHROMIUM, SOLUBLE	14	679.69	2381.79	7145.36
CHROMIUM, TOTAL	52	223.14	668.85	2006.56
COBALT, SOLUBLE	16	39.60	102.34	307.02
COBALT, TOTAL	22	12.51	16.51	49.54
COPPER, SOLUBLE	43	11.97	32.34	97.02
COPPER, TOTAL	51	16.13	27.90	83.71
CYANIDE, SOLUBLE (METAL)	2	112.40	145.10	435.29
CYANIDE, TOTAL (METAL)	4	7.83	4.27	12.82
IRON, SOLUBLE	62	2123.92	7081.74	21245.22
IRON, TOTAL	96	4384.94	11479.02	34437.07
LEAD, SOLUBLE	20	22.27	72.59	217.76
LEAD, TOTAL	30	9.56	12.78	38.33
LITHIUM, SOLUBLE	29	270.51	850.21	2550.63
LITHIUM, TOTAL	27	289.54	821.70	2465.09
MAGNESIUM, SOLUBLE	111	45165.77	56930.60	170791.79
MAGNESIUM, TOTAL	110	47007.27	63652.40	190957.21
MANGANESE, SOLUBLE	105	117.65	291.95	875.84

Table III.8. (page 2 of 3)

Chemical Name	Detections	Mean	STD DEV	3 STD DEV
MANGANESE, TOTAL	107	162.93	361.28	1083.84
MERCURY, SOLUBLE	1	5.20	–	–
MERCURY, TOTAL	2	0.76	0.91	2.72
MOLYBDENUM	55	11.72	28.92	86.77
MOLYBDENUM, SOLUBLE	46	15.68	51.59	154.78
NICKEL, SOLUBLE	75	139.77	561.85	1685.56
NICKEL, TOTAL	80	74.67	115.29	345.88
POTASSIUM, SOLUBLE	111	7309.32	19012.51	57037.53
POTASSIUM, TOTAL	110	7988.36	21361.15	64083.44
SELENIUM, SOLUBLE	5	47.96	102.88	308.65
SELENIUM, TOTAL	9	2.47	0.79	2.37
SILVER, SOLUBLE	4	38.56	74.96	224.88
SILVER, TOTAL	3	2.10	0.82	2.46
SODIUM, SOLUBLE	101	194242.67	675164.49	2025493.47
SODIUM, TOTAL	100	205710.50	748018.86	2244056.59
THALLIUM, SOLUBLE	2	43.10	32.67	98.00
TIN, SOLUBLE	6	26.47	12.80	38.39
TIN, TOTAL	7	26.84	14.67	44.02
VANADIUM, SOLUBLE	51	24.46	44.68	134.04
VANADIUM, TOTAL	57	21.70	36.78	110.35
ZINC, SOLUBLE	15	74.05	122.17	366.50
ZINC, TOTAL	21	62.29	75.22	225.67
PESTICIDE / PCBs (µg/L)				
4,4'-DDD	1	2.20	–	–
4,4'-DDE	1	8.60	–	–
ALDRIN	1	0.94	–	–
ALPHA CHLORDANE	2	0.05	0.03	0.08
ALPHA-BHC	1	5.70	–	–
BETA-BHC	1	5.00	–	–
DIELDRIN	1	3.30	–	–
ENDRIN	1	8.30	–	–
HEPTACHLOR	1	2.20	–	–
HEPTACHLOR EPOXIDE	1	4.30	–	–
METHOXYCHLOR	1	2.60	–	–
RADIONUCLIDES (pCi/L)				
AMERICIUM-241	14	0.05	0.05	0.16
BISMUTH-210	1	16.00	–	–
PLUTONIUM-238	23	0.02	0.02	0.06
PLUTONIUM-239/240	21	0.005	0.003	0.007
POTASSIUM-40	3	192.67	69.29	207.87
RADIUM-226	67	1.27	4.83	14.50
STRONTIUM-90	2	7.55	2.05	6.15
THORIUM-228	83	0.30	0.96	2.87
THORIUM-230	82	0.21	0.34	1.03
THORIUM-232	27	0.16	0.25	0.76
TRITIUM	97	4943.71	8680.79	26042.38
URANIUM-234	111	0.46	0.68	2.03
URANIUM-235	44	0.04	0.03	0.08
URANIUM-238	108	0.32	0.33	1.00

Table III.8. (page 3 of 3)

Chemical Name	Detections	Mean	STD DEV	3 STD DEV
SEMIVOLATILES (µg/L)				
1,2,4-TRICHLOROBENZENE	1	64.00	–	–
1,2-DICHLOROBENZENE	2	60.50	47.38	142.13
1,3-DICHLOROBENZENE	1	110.00	–	–
2,4,5-TRICHLOROPHENOL	1	65.00	–	–
2,4,6-TRICHLOROPHENOL	1	100.00	–	–
2-CHLORONAPHTHALENE	1	64.00	–	–
2-METHYLNAPHTHALENE	1	17.00	–	–
2-METHYLPHENOL	1	45.00	–	–
4-CHLOROPHENYL-PHENYLETHER	1	77.00	–	–
4-METHYLPHENOL	2	61.00	69.30	207.89
ACENAPHTHYLENE	1	16.00	–	–
ANTHRACENE	1	16.00	–	–
BENZO(A)ANTHRACENE	1	71.00	–	–
BENZOIC ACID	1	1.00	–	–
BIS(2-ETHYLHEXYL)PHTHALATE	2	105.50	20.51	61.52
CHRYSENE	1	100.00	–	–
DIBENZOFURAN	1	49.00	–	–
DIETHYL PHTHALATE	5	19.02	40.24	120.73
DIMETHYL PHTHALATE	1	44.00	–	–
INDENO(1,2,3-CD)PYRENE	1	18.00	–	–
NAPHTHALENE	1	120.00	–	–
PENTACHLOROPHENOL	1	81.00	–	–
PHENOL	2	1.25	1.06	3.18
PYRENE	1	32.00	–	–
VOLATILES (µg/L)				
1,1,1-TRICHLOROETHANE	19	5.61	14.69	44.08
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHA	5	2.40	0.25	0.76
1,2-CIS-DICHLOROETHENE	17	40.94	116.58	349.75
1,2-DICHLOROETHANE	1	110.00	–	–
1,2-DICHLOROPROPANE	1	71.00	–	–
1,2-TRANS-DICHLOROETHENE	1	2.40	–	–
4-METHYL-2-PENTANONE	1	33.00	–	–
BENZENE	1	31.00	–	–
BROMODICHLOROMETHANE	1	54.00	–	–
BROMOFORM	1	44.00	–	–
CHLOROETHENE (VINYL CHLORIDE)	2	9.05	11.24	33.73
DICHLOROMETHANE-METHYLENE CHLORIDE	1	85.00	–	–
ETHYLBENZENE	1	32.00	–	–
TETRACHLOROETHENE	31	17.56	51.92	155.75
TETRACHLOROMETHANE (CCL4)	11	6.95	13.68	41.04
TOLUENE	1	80.00	–	–
TOTAL XYLENES	1	88.00	–	–
TRICHLOROETHENE	37	17.85	34.54	103.62
TRICHLOROFLUOROMETHANE	3	3.50	2.75	8.25
TRICHLOROMETHANE (CHLOROFORM)	9	13.21	27.96	83.88

These values were applied to the sweeps data as follows: find the average concentration of each radionuclide in each well or seep (using one-half the detection limit for any nondetects) and compare the average concentration to the relevant DCG.

Data for locations where a radionuclide concentration exceeds the DCGs are presented in Appendix C, Table C.2. In the case of well 0335, an offsite bedrock well, the dose comes from a single large value for radium-226. This single observation from the spring event is several times as large as the next largest radium-226 value and is not substantiated by a similar value from the fall. Thus, it may be a false positive.

3.1.4. Other Observations

The data presented in this report will support operable unit-specific studies. Most interpretive observations are deferred until those studies are completed. However, a limited number of comments can be made upon examination of the data.

1. There are sporadic occurrences of metals in the BVA above their respective MCLs. These occurrences are interspersed with clean wells and are at a sufficient distance from Mound Plant to suggest that they are unrelated to plant activities.

2. The background well 0327 contains tetrachloroethene and chromium above MCLs. These occurrences may be related to infiltration from the Great Miami River.

3. Trichloroethene is found above the MCL in wells 0312 and 0386, which are at and beyond the plant boundary, respectively. Well 0312 is completed in bedrock; 0386 is completed in the BVA.

4. The pattern of chemical occurrence revealed in this report is consistent with that reported in previous documents, such as the OU 1 Remedial Investigation Report. (DOE 1994e)

3.2. Background Water Quality

One of the purposes of the site-wide hydrogeologic study is to establish background water quality for the BVA. These background data can then be used in any subsequent study. Four monitoring wells (0328, 0330, 0333, and 0334) serve as background wells for the BVA. The data and observations from the hydrogeologic study indicate that they are suitable for this purpose; they are properly installed in the BVA, hydraulically upgradient from the Mound Plant, and do not display Mound Plant-related contaminants. Monitoring wells 0327 and 0329 also were installed in the vicinity of the background wells with the intention of sampling background. However, monitoring well 0327, which is a shallow well, may not be installed within the BVA but may be installed within a perched condition. Subsequent observations also showed monitoring well 0329 to be installed in a seasonal, perched system, not representative of the main BVA. They are, therefore, excluded from the data set.

Figure 3.3 shows the locations of these wells relative to the plant.

The background wells are located within the upper and lower zones of the BVA. These zones are described in the BVA Report (DOE 1994d). Groundwater samples from background well 0334 is from within the upper BVA zone. Groundwater samples from background wells 0328, 0330, and 0333 are from within the lower BVA zone.

3.2.1. Establishing Background

The field team sampled all wells for all parameters in both the fall and spring events, and sampled one well twice in the fall as a field duplicate. The duplicate and associated well sample were averaged to obtain a single data point. Taking both sets of data together, there are 8 sets of observations from which to draw data. Although there may be seasonal variations, these variations are not conclusively shown from a single year's observations, so data from both events are considered together.

The analytical results are presented in two sets. The first set consists of those constituents that were never detected (see Table III.9). The second set consists of those constituents for which at least some positive detections were recorded (see Table III.10). The table formats and contents follow the EPA risk assessment guidance document (EPA 1989).

For those constituents with no detections, Table III.9 shows the chemical, total number of samples, and the range of reported sample quantitation limits. For those chemicals with at least some detections, Table III.10 shows the chemical, the frequency of observation (number of detections divided by the number of analyses), the range of sample quantitation limits, the range of concentrations detected, and the mean of the data set. In forming the mean, the Team used one-half of the sample quantitation limit to incorporate nondetections. Constituents with only 1 or 2 detections (out of 11) are unlikely to be present at concentrations as high as shown. If further sampling of these wells does not confirm the detections, they should be discarded as false positives. Continued background sampling will be part of the ongoing groundwater monitoring program, so these issues will be resolved.

Since the reported background data are based on actual instrument performance, certain values for background concentrations are actually less than the relevant data quality objectives provided in the QAPP. The reporting of these "best available" data is not intended to establish a new, lower, action level.

The completeness goals established in the QAPP require 100 percent for collection and analysis of background samples. The collection of samples met the requirement, but individual analyses did not. The data validators rejected most analyses for specific explosive compounds in both fall and spring samples. Sufficient data on explosive compounds exist, however, to establish background. The Team rejected two fall samples for lithium (soluble and total), plutonium 239/240, and thorium-230. These should not impact the quality of

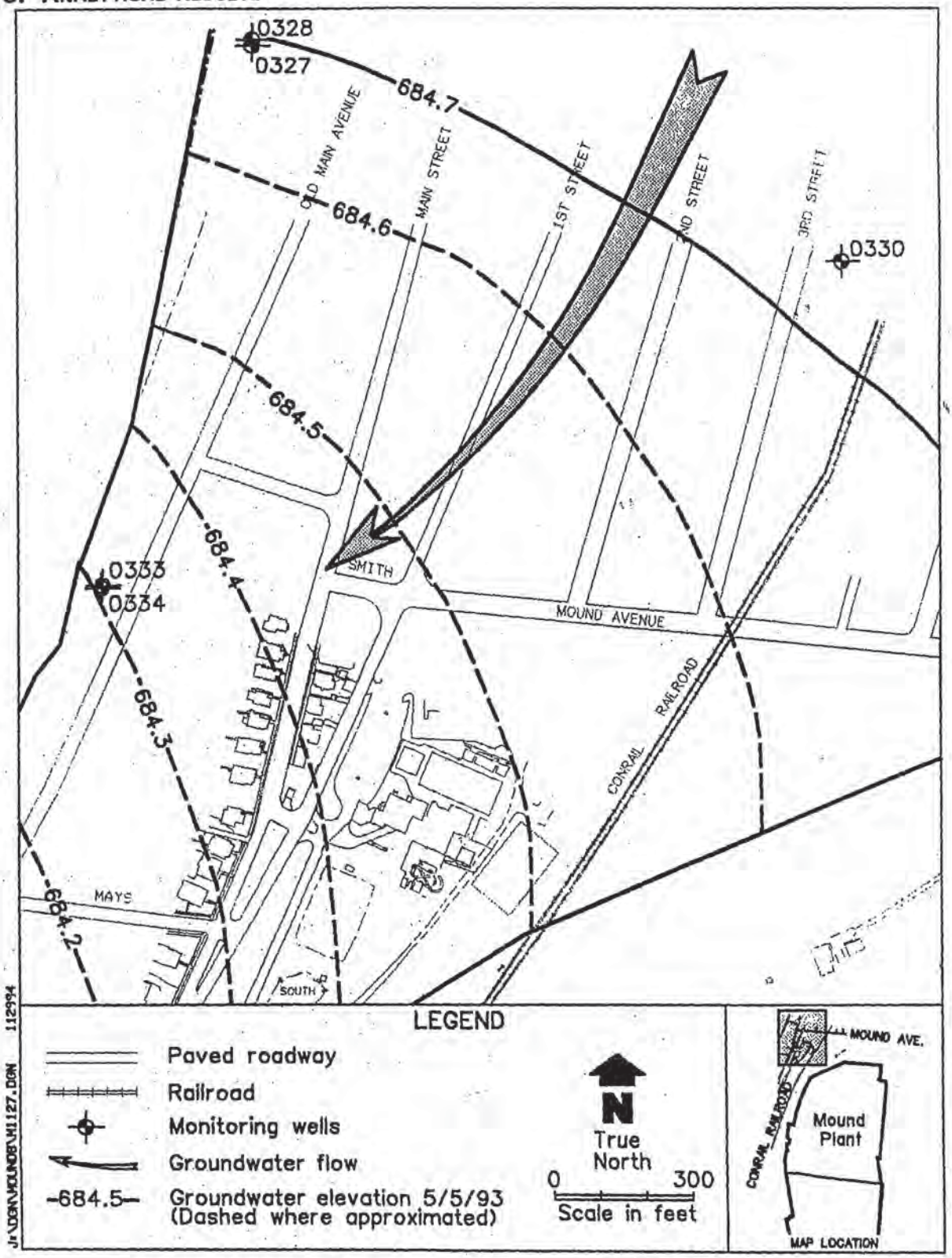

Figure 3.3. Location of Background Wells, Mound Plant, Miamisburg, Ohio

Table III.9. Constituents Not Detected in Background Wells

Chemical Name	Number of Samples	Range of Sample Quantitation Limits
EXPLOSIVES (µg/L)		
1,3,5-Trinitrobenzene	2	1.3 - 1.3
1,3-DNB	7	0.31 - 0.31
2,4,6-Trinitrotoluene	5	1.3 - 1.3
2,4-Dinitrotoluene	3	0.31 - 0.31
2,6-Dinitrotoluene	6	0.31 - 0.31
2-Amino-4,6-Dinitrotoluene	7	0.62 - 0.62
HMX	7	0.63 - 0.63
Nitrobenzene	7	0.31 - 0.31
PETN	8	1.00 - 1.00
RDX	6	0.63 - 0.63
Tetryl	7	3.0 - 3.0
METALS (µg/L)		
Aluminum, Soluble	8	5.4 - 18.0
Beryllium, Soluble	8	0.08 - 0.43
Beryllium, Total	8	0.08 - 0.43
Bismuth, Soluble	8	32.2 - 32.8
Bismuth, Total	8	32.2 - 32.8
Cadmium, Soluble	8	0.50 - 1.2
Cadmium, Total	8	0.50 - 1.2
Cobalt, Total	8	0.98 - 1.8
Cyanide, Soluble (Metal)	8	5.0 - 10.0
Cyanide, Total (Metal)	8	5.0 - 10.0
Lead, Total	8	0.60 - 2.0
Mercury, Soluble	8	0.10 - 0.10
Mercury, Total	8	0.10 - 0.10
Selenium, Soluble	8	1.0 - 2.6
Selenium, Total	8	1.0 - 2.6
Silver, Soluble	8	0.75 - 1.8
Silver, Total	8	0.75 - 1.8
Thallium, Soluble	8	1.6 - 2.0
Thallium, Total	8	1.6 - 2.0
PESTICIDE/PCBs (µg/L)		
4,4'-DDD	8	0.10 - 0.11
4,4'-DDE	8	0.10 - 0.11
4,4'-DDT	8	0.10 - 0.11
Aldrin	8	0.050 - 0.055
Alpha Chlordane	8	0.050 - 0.055

Table III.9. (Page 2 of 5)

Chemical Name	Number of Samples	Range of Sample Quantitation Limits
Alpha-BHC	8	0.050 - 0.055
Aroclor-1016	8	0.50 - 0.55
Aroclor-1221	8	0.50 - 0.55
Aroclor-1232	8	0.50 - 0.55
Aroclor-1242	8	0.50 - 0.55
Aroclor-1248	8	0.50 - 0.55
Aroclor-1254	8	0.50 - 0.55
Aroclor-1260	8	0.50 - 0.55
Beta-BHC	8	0.050-0.055
Delta-BHC	8	0.050 - 0.055
Dieldrin	8	0.10 - 0.11
Endosulfan I (Alpha)	8	0.050 - 0.055
Endosulfan II (Beta)	8	0.10 - 0.11
Endosulfan Sulfate	8	0.10 - 0.11
Endrin	8	0.10 - 0.11
Endrin Aldehyde	8	0.10 - 0.11
Endrin Ketone	8	0.10 - 0.11
Gamma Chlordane	8	0.050 - 0.055
Gamma-BHC (Lindane)	8	0.050 - 0.055
Heptachlor	8	0.050 - 0.055
Heptachlor Epoxide	8	0.050 - 0.055
Methoxychlor	8	0.50 - 0.55
Toxaphene	8	5.0 - 5.5
SEMIVOLATILES (µg/L)		
1,2,4-Trichlorobenzene	8	10. - 11.
1,2-Dichlorobenzene	8	1.5 - 1.5
1,3-Dichlorobenzene	8	3.2 - 3.2
1,4-Dichlorobenzene	8	2.4 - 2.4
2,4,5-Trichlorophenol	8	26. - 28.
2,4,6-Trichlorophenol	8	10. - 11.
2,4-Dichlorophenol	8	10. - 11.
2,4-Dimethylphenol	8	10. - 11.
2,4-Dinitrophenol	8	26. - 28.
2-Benzyl-4-Chlorophenol	8	10. - 11.
2-Chloronaphthalene	8	10. - 11.
2-chlorophenol	8	10. - 11.
2-Methylnaphthalene	8	10. - 11.
2-Methylphenol	8	10. - 11.

Table III.9. (Page 3 of 5)

Chemical Name	Number of Samples	Range of Sample Quantitation Limits
2-Nitroaniline	8	26. - 28.
2-Nitrophenol	8	10. - 11.
3,3-Dichlorobenzidine	8	10. - 11.
3-Nitroaniline	8	26. - 28.
4,6-Dinitro-O-Cresol	8	26. - 28.
4-Bromophenyl-Phenyl Ether	8	10. - 11.
4-Chloro-3-Methylphenol	8	10. - 11.
4-Chloroaniline	8	10. - 11.
4-Chlorophenyl-Phenylether	8	10. - 11.
4-Methylphenol	8	10. - 11.
4-Nitroaniline	8	26. - 28.
4-Nitrophenol	8	26. - 28.
Acenaphthene	8	10. - 11.
Acenaphthylene	8	10. - 11.
Anthracene	8	10. - 11.
Benzo(A)Anthracene	8	10. - 11.
Benzo(A)Pyrene	8	10. - 11.
Benzo(B)Fluoranthene	8	10. - 11.
Benzo(G,H,I)Perylene	8	10. - 11.
Benzo(K)Fluoranthene	8	10. - 11.
Benzoic Acid	8	52. - 56.
Benzyl Alcohol	8	10. - 11.
Bis(2-Chloroethoxy)Methane	8	10. - 11.
Bis(2-Chloroethyl)Ether	8	10. - 11.
Butyl Benzyl Phthalate	8	10. - 11.
Carbazole	8	10. - 11.
Chrysene	8	10. - 11.
Di-N-Butyl Phthalate	8	10. - 11.
Di-N-Octyl Phthalate	8	10. - 11.
Dibenz(A,H)Anthracene	8	10. - 11.
Dibenzofuran	8	10. - 11.
Diethyl Phthalate	8	10. - 11.
Dimethyl Phthalate	8	10. - 11.
Fluoranthene	8	10. - 11.
Fluorene	8	10. - 11.
Hexachlorobenzene	8	10. - 11.
Hexachlorobutadiene	8	10. - 11.
Hexachlorocyclopentadiene	8	10. - 11.

Table III.9. (Page 4 of 5)

Chemical Name	Number of Samples	Range of Sample Quantitation Limits
Hexachloroethane	8	10. - 11.
Indeno(1,2,3-CD)Pyrene	8	10. - 11.
Isophorone	8	10. - 11.
N-Nitroso-Di-N-Propylamine	8	10. - 11.
N-Nitrosodiphenylamine	8	10. - 11.
Naphthalene	8	10. - 11.
Pentachlorophenol	8	26. - 28.
Phenanthrene	8	10. - 11.
Pyrene	8	10. - 11.
VOLATILES (μg/L)		
1,1,1,2-Tetrachloroethane	8	1.0 - 1.0
1,1,2,2-Tetrachloroethane	8	0.30 - 0.30
1,1,2-Trichloro-1,2,2-Trifluoroetha	8	2.0 - 2.0
1,1,2-Trichloroethane	8	0.20 - 0.20
1,1-Dichloroethane	8	0.70 - 0.70
1,1-Dichloroethene	8	1.3 - 1.3
1,2,3-Trichloropropane	8	1.0 - 1.0
1,2-Dichloroethane	8	0.30 - 0.30
1,2-Dichloropropane	8	0.40 - 0.40
1,2-Diethylbenzene	8	1.0 - 1.0
1,2-Trans-Dichloroethene	8	1.0 - 1.0
1,3-Cis-Dichloropropene	8	3.4 - 3.4
1,3-Diethylbenzene	8	1.0 - 1.0
1,3-Trans-Dichloropropene	8	3.4 - 3.4
1,4-Diethylbenzene	8	1.0 - 1.0
1-Chlorohexane	8	1.0 - 1.0
2,2'-Oxybis (1-Chloropropane)	8	20. - 20.
2-Butanone	8	10. - 10.
2-Chlorotoluene	8	1.0 - 1.0
4-Chlorotoluene	8	1.0 - 1.0
4-Methyl-2-Pentanone	8	5.0 - 5.0
Acetone	8	20. - 20.
Acetonitrile	8	10. - 10.
Acrylonitrile	8	10. - 10.
Benzene	8	2.0 - 2.0
Bromobenzene	8	2.0 - 2.0
Bromodichloromethane	8	1.0 - 1.0
Bromoform	8	2.0 - 2.0

Table III.9. (Page 5 of 5)

Chemical Name	Number of Samples	Range of Sample Quantitation Limits
Carbon Disulfide	8	5.0 - 5.0
Chlorobenzene	8	2.0 - 2.0
Chloroethene (Vinyl Chloride)	8	1.0 - 1.0
Dibromochloromethane	8	0.90 - 0.90
Dibromomethane	8	2.0 - 2.0
Dichloromethane-Methylene Chloride	8	5.0 - 5.0
Ethylbenzene	8	2.0 - 2.0
Tetrachloroethene	8	0.30 - 0.30
Tetrachloromethane (CCL4)	8	1.2 - 1.2
Toluene	8	2.0 - 2.0
Total Xylenes	8	2.0 - 2.0
Trichloroethene	8	1.2 - 1.2
Trichlorofluoromethane	8	2.0 - 2.0
Vinyl Acetate	8	3.0 - 3.0
RADIONUCLIDES (pCi/L)		
Bismuth-207	8	4.18 - 11.0
Bismuth-210	8	5.11 - 13.5
Cesium-137	8	1.82 - 14.0
Cobalt-60	8	4.82 - 17.0
Plutonium-239/240	6	0.0027 - .089
Potassium-40	8	100. - 260.
Thorium-232	8	0.010 - 0.45
Uranium-235/236	4	0.06 - 0.072

Table III.10. Constituents Detected in Background Wells

Chemical Name	Frequency of Observations	Range of Sample Quantitation Limits	Range of Detected Concentrations	Mean of Concentrations
CONVENTIONALS (mg/L)				
Ammonia	2/8	0.10 - 0.10	0.14 - 0.15	0.074
Chloride	8/8	6.2 - 25.0	27.8 - 99.4	48.631
Fluoride	8/8	0.10 - 0.10	0.18 - 0.37	0.284
Nitrate Nitrite	2/8	0.020 - 0.20	4.5 - 4.6	1.145
Sulfate	7/8	5.0 - 5.0	16.1 - 126	62.919
Total Organic Carbon	7/8	0.50 - 0.50	0.63 - 2.1	0.921
Total Dissolved Solids	8/8	4.0 - 4.0	476 - 587	513.125
Total Kjeldahl Nitrogen	4/8	0.10 - 0.10	0.12 - 0.285	0.126
Total Phosphate	4/8	0.050 - 0.050	0.056 - 0.26	0.071
Total Suspended Solids	5/8	4.0 - 5.0	6.0 - 29.0	8.625
METALS (μg/L)				
Aluminum, Total	1/8	3.5 - 22.4	43.5 - 43.5	10.40
Antimony, Soluble	3/9	0.50 - 75	0.80 - 4.3	1.223
Antimony, Total	1/8	0.50 - 0.75	0.62 - 0.62	0.327
Arsenic, Soluble	5/8	2.0 - 4.3	2.2 - 35.4	9.400
Arsenic, Total	5/8	2.0 - 4.9	2.0 - 30.2	8.631
Barium, Soluble	8/8	0.75 - 1.5	117.0 - 248.0	184.875
Barium, Total	8/8	0.75 - 1.5	115.0 - 255.0	193.313
Calcium, Soluble	8/8	4.5 - 14.0	80300 - 113000	92912.50
Calcium, Total	8/8	4.5 - 14.0	86800 - 108000	96231.25
Chromium, Soluble	3/8	0.75 - 1.8	1.0 - 2.6	0.918
Chromium, Total	3/8	0.75 - 2.0	3.5 - 5.3	1.968
Cobalt, Soluble	1/8	0.98 - 1.8	0.99 - 0.99	0.645
Copper, Soluble	2/8	0.75 - 1.8	0.80 - 1.2	0.610
Copper, Total	3/8	0.82 - 1.8	0.88 - 0.90	0.651

Table III.10. Constituents Detected in Background Wells (Page 2 of 3)

Chemical Name	Frequency of Observations	Range of Sample Quantitation Limits	Range of Detected Concentrations	Mean of Concentrations
Iron, Soluble	8/8	1.3 - 4.5	17.5 - 2700	1467.638
Iron, Total	8/8	1.3 - 4.5	49.0 - 2880	1723.313
Lead, Soluble	1/8	0.60 - 2.0	11.9 - 11.9	2.113
Lithium, Soluble	3/7	2.6 - 90.2	4.0 - 4.0	19.579
Lithium, Total	2/7	2.6 - 90.2	4.0 - 4.0	19.579
Magnesium, Soluble	8/8	10.5 - 17.9	32500 - 38800	35518.750
Magnesium, Total	8/8	10.5 - 17.9	33200 - 39900	36206.250
Manganese, Soluble	8/8	0.33 - 0.75	3.2 - 152.0	96.675
Manganese, Total	8/8	0.33 - 0.75	3.8 - 163.0	101.538
Molybdenum	4/8	1.4 - 9.5	2.4 - 4.8	3.534
Molybdenum, Soluble	4/8	1.4 - 9.5	2.3 - 4.7	3.434
Nickel, Soluble	2/8	2.0 - 2.8	10.2 - 46.2	7.906
Nickel, Total	3/8	2.0 - 2.8	5.1 - 40.4	7.731
Potassium, Soluble	8/8	173 - 887	1390 - 3960	2658.750
Potassium, Total	8/8	173 - 887	1470 - 3910	2758.125
Sodium, Soluble	8/8	8.8 - 39.3	13500 - 57100	26062.50
Sodium, Total	8/8	8.8 - 39.3	14400 - 58300	26562.5
Tin, Soluble	3/8	4.5 - 35.5	16.0 - 25.45	11.188
Tin, Total	3/8	4.5 - 35.5	16.5 - 27.5	12.188
Vanadium, Soluble	3/8	0.75 - 17.05	9.4 - 14.0	8.363
Vanadium, Total	3/8	0.75 - 19.5	9.1 - 14.1	8.616
Zinc, Soluble	2/8	0.55 - 15.9	6.2 - 132.0	20.238
Zinc, Total	2/8	0.75 - 6.3	9.1 - 143.0	20.428
SEMIVOLATILES (μg/L)				
Bis(2-Ethylhexyl)Phthalate	1/8	10.0 - 11.0	9.0 - 9.0	5.688
Phenol	1/8	10.0 - 11.0	0.5 - 0.5	4.625

Table III.10. Constituents Detected in Background Wells (Page 3 of 3)

Chemical Name	Frequency of Observations	Range of Sample Quantitation Limits	Range of Detected Concentrations	Mean of Concentrations
VOLITILES (µg/L)				
1,1,1-Trichloroethane	2/8	0.30 - 0.30	0.46 - 0.69	0.256
1,2-Cis-Dichloroethene	1/8	1.0 - 1.0	1.1 - 1.1	0.575
Trichloromethane (Chloroform)	1/8	0.50 - 0.50	0.50 - 0.57	0.29
RADIONUCLIDES (pCi/L)				
Americium-241	2/8	0.007 - 0.1	0.055 - 0.151	0.043
Plutonium-238	1/8	0.005 - 0.12	0.003 - 0.003	0.030
Radium-226	4/8	0.25 - 0.83	0.34 - 0.997	0.470
Strontium-90	3/8	0.57 - 1.535	0.659 - 0.844	0.64
Thorium-228	5/8	0.083 - 0.93	0.033 - 0.628	0.294
Thorium-230	2/8	0.012 - 0.29	0.070 - 0.31	0.095
Tritium	8/8	200 - 477	330 - 1360	827.188
Uranium-234	8/8	0.021 - 0.17	0.26 - 0.748	0.453
Uranium-235	1/4	0.025 - 0.038	0.035 - 0.035	0.253
Uranium-238	7/8	0.021 - 0.12	0.13 - 0.56	0.322

the background. The Team looked at the data qualifiers (Appendix B) for the background sampling locations and determined that the use of estimated values (such as those for chromium) do not affect background concentrations.

3.2.2. Application of Background

The data presented in Table III.2 consist of hits determined to be above background levels in the BVA. To compare the environmental data, the background data are treated in the manner prescribed in the Ohio *How Clean is Clean Policy* (OEPA 1991). This document, in turn, references an EPA guidance document, *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities* (EPA 1989). The preferred method to determine if a value is above background is to compare the value to a tolerance limit. The concentration of constituents in each well is compared with the tolerance limit for each constituent. If concentrations do not fall within (below) the tolerance limit, this provides statistically significant evidence that they are, in fact, above background levels. The background data described in this report are explicitly for the BVA. Variations in some parameters may be attributed to variations in geological and geochemical setting. Samples from till or bedrock will naturally be different from samples from the alluvium of the BVA. Thus, observations above background are not automatically evidence of contamination. However, the presence of anthropogenic compounds in the Mound Plant groundwater background cannot be used to prejudice cleanup decisions in favor of the no-action alternative.

Any set of data can be characterized by a measure of its central tendency (in this case, the arithmetic mean or average - m) and a measure of its variability (such as the standard deviation - s). The tolerance limit, TL, is formed using data from the background wells by adding a measure of the variability to the mean. The appropriate parameter to describe variability in groundwater systems is the standard deviation times a "tolerance factor." The size of the tolerance factor, designated as k, varies inversely with the number of samples considered. For example, for a sample size of 5, k = 4.202; for a sample size of 50, k shrinks to 2.065, indicating less uncertainty in the data. For the relevant range of sample sizes, k approaches a value of 2 as the sample size increases.

Since the current background data consist of no more than 8 observations, the k value would be 3.188 or larger. However, as additional data are incorporated into background, k will shrink, approaching 2. Therefore, for the purposes of this data report, a value of 2 is assumed for k. This provides a more conservative estimate, as it provides lower background tolerance levels. Hence, the tolerance limits for background are calculated by the formula

$$TL = 2s + m$$

The tolerance limits for each parameter determined in this manner are shown in Table III.11.

The background data presented herein are based on all available data. If additional data become available, a better determination of background can be made. However, the current data set is sufficient to satisfy the goals of the sampling program. A more precise determination of a background value would only be important when a "no cleanup" or similar decision is being contemplated.

Table III.11. Calculated Tolerance Limits for Chemical Parameters in Background Wells

Chemical Name	Samples	Mean	STD DEV	Tol. Limit
CONVENTIONALS (mg/L)				
AMMONIA	8	0.0740	0.044	0.162
CHLORIDE	8	48.6310	28.595	105.821
FLUORIDE	8	0.2840	0.068	0.419
NITRATE NITRITE	8	1.1450	2.102	5.349
SULFATE	8	62.9190	39.868	142.655
TOTAL ORGANIC CARBON	8	0.9210	0.533	1.987
TOTAL DISSOLVED SOLIDS	8	513.1250	45.041	603.207
TOTAL KJELDAHL NITROGEN	8	0.126	0.099	0.324
TOTAL PHOSPHATE	8	0.0710	0.080	0.231
TOTAL SUSPENDED SOLIDS	8	8.6250	8.907	26.440
METALS (µg/L)				
ALUMINUM, TOTAL	8	10.4000	13.561	37.523
ANTIMONY, SOLUBLE	8	1.3440	1.636	4.616
ANTIMONY, TOTAL	8	0.3270	0.125	0.578
ARSENIC, SOLUBLE	8	9.4000	13.947	37.295
ARSENIC, TOTAL	8	8.6310	12.183	32.997
BARIUM, SOLUBLE	8	184.875	51.424	287.723
BARIUM, TOTAL	8	193.313	58.448	310.209
CALCIUM, SOLUBLE	8	92912.500	10552.378	114017.256
CALCIUM, TOTAL	8	96231.250	7439.707	111110.664
CHROMIUM, SOLUBLE	8	0.9180	0.751	2.419
CHROMIUM, TOTAL	8	1.9680	2.054	6.076
COBALT, SOLUBLE	8	0.6450	0.194	1.032
COPPER, SOLUBLE	8	0.6100	0.316	1.242
COPPER, TOTAL	8	0.6510	0.258	1.167
IRON, SOLUBLE	8	1467.6380	1086.938	3641.514
IRON, TOTAL	8	1723.3130	1170.788	4064.888
LEAD, SOLUBLE	8	2.1130	3.969	10.050
LITHIUM, SOLUBLE	7	19.5790	18.064	55.707
LITHIUM, TOTAL	7	19.5790	18.064	55.707
MAGNESIUM, SOLUBLE	8	35518.7500	2464.018	40446.786
MAGNESIUM, TOTAL	8	36206.2500	2110.930	40428.111
MANGANESE, SOLUBLE	8	96.6750	59.669	216.013
MANGANESE, TOTAL	8	101.5380	64.015	229.568
MOLYBDENUM	8	3.5340	1.031	5.597
MOLYBDENUM, SOLUBLE	8	3.4340	1.179	5.793
NICKEL, SOLUBLE	8	7.9060	15.795	39.496
NICKEL, TOTAL	8	7.7310	13.613	34.957
POTASSIUM, SOLUBLE	8	2658.7500	908.302	4475.354
POTASSIUM, TOTAL	8	2758.1250	851.469	4461.063
SODIUM, SOLUBLE	8	26062.5000	17791.727	61645.953
SODIUM, TOTAL	8	26562.5000	17931.531	62425.563
TIN, SOLUBLE	8	11.1880	9.776	30.740
TIN, TOTAL	8	12.1880	11.097	34.382

Table III.11. (page 2 of 2)

Chemical Name	Samples	Mean	STD DEV	Tol. Limit
VANADIUM, SOLUBLE	8	8.3630	4.222	16.807
VANADIUM, TOTAL	8	8.6160	4.230	17.076
ZINC, SOLUBLE	8	20.2380	45.220	110.678
ZINC, TOTAL	8	20.4280	49.594	119.617
RADIONUCLIDES (pCi/L)				
AMERICIUM-241	8	0.0430	0.048	0.139
PLUTONIUM-238	8	0.0300	0.029	0.087
PLUTONIUM-239/240	8	0.0360	0.044	0.125
RADIUM-226	8	0.4700	0.236	0.996
STRONTIUM-90	8	0.6400	0.168	0.975
THORIUM-228	8	0.2940	0.242	0.779
THORIUM-232	2	0.1030	0.106	0.314
TRITIUM	8	827.1880	329.143	1485.473
URANIUM-234	8	0.4530	0.169	0.792
URANIUM-235	4	0.2530	0.280	0.814
URANIUM-238	8	0.3220	0.183	0.688
SEMIVOLATILES (µg/L)				
BIS(2-ETHYLHEXYL)PHTHALATE	8	5.6880	1.361	8.410
PHENOL	8	4.6250	1.685	7.995
VOLATILES (µg/L)				
1,1,1-TRICHLOROETHANE	8	0.2560	0.206	0.668
1,2-CIS-DICHLOROETHENE	8	0.5750	0.212	0.999

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4. Conclusions

The objective of the groundwater sweeps investigation is to establish a baseline of groundwater quality for the Mound Plant area. As discussed below, this objective has been met. To accomplish this objective, the ER Program collected and analyzed samples to

1. Provide a snapshot of groundwater quality at all sampling locations.

2. Establish the chemicals most likely to be found in the groundwater at each location.

3. Establish whether water quality varies seasonally.

4. Establish background groundwater chemical quality.

These activities were established in accordance with the objectives of the OU 9 Site-Wide Work Plan to (1) obtain a current inventory of groundwater contaminants across the Site, and (2) prepare for the evaluation of the need for long-term sampling at the Site (DOE 1992b). The baseline can be used to establish a monitoring plan and as a basis for comparison of future changes. In addition to the project goals, the QAPP established criteria to measure the success of the OU 9 Work Plan objectives as they relate to completeness, accuracy, and precision.

The groundwater sampling and analysis program described in this report provides a quality baseline. Completeness goals established by the QAPP require 90 percent for field measurements and sample collection, 95 percent for laboratory analysis, and 100 percent for collection and analysis of background samples. Except for fall 1993, sample collection, field measurements, and laboratory analysis of the entire groundwater monitoring network exceeded these goals. Samples for explosives, SVOCs, and pesticides could not be collected due to dry fall conditions. Resampling for these parameters during the dry season is not recommended and may not be possible.

The chemicals most likely to be found at each location are summarized in this report. For the purposes of this report, a set of analytes of interest is described that includes toxic metals, VOCs, and radionuclides. Very local concentrations of total and soluble chromium and lead, tetrachloroethene, trichloroethene, and radium-226 exceed MCLs. For each of the alpha isotopic radioisotopes of plutonium and uranium, there is an increase in the number of detections per sampling location during the spring event. The Team attributes this increase to a change in laboratory reporting limits. The limit for plutonium was changed from 1 picocurie per liter (pCi/L) (fall) to 0.01 pCi/L (spring). Isolated, single detections in either the fall or spring sampling events are likely to be false positives. Additional sampling may be required to resolve this issue locally, if important decisions rely on those data.

Groundwater quality does appear to vary seasonally. In general, sample means and sample standard deviations are higher in the spring than in the fall, although there are local exceptions to this observation. This is consistent with other reports, such as the OU 1 Remedial Investigation Report (DOE 1994e).

This investigation provides a quality set of background groundwater chemical quality data. Collection of background samples met the completeness requirement, but individual analyses did not. In general, analyses for specific explosive compounds were commonly rejected in some fall and spring samples. These do not affect the quality of the baseline.

Overall goals for accuracy and precision met the QAPP requirements. The Team performed data assessment in accordance with QAPP requirements. The data assessment included examination of all data thought to be less than totally accurate and a decision as to whether or not the data were usable. The results of the data assessment indicate that 99 percent of the data collected were usable.

The data presented in this report, together with the information in the companion reports identified in Table I.1, will be used to design a long-term groundwater monitoring program for the Mound Plant Site. The information will also support operable unit-specific studies.

4. CONCLUSIONS

The objective of the groundwater sweeps investigation is to establish a baseline of groundwater quality for the Mound Plant area. To accomplish this objective, the ER Program collected and analyzed samples to

1. Provide a snapshot of groundwater quality at all sampling locations.

2. Establish the chemicals most likely to be found in the groundwater at each location.

3. Establish whether water quality varies seasonally.

4. Confirm or establish groundwater chemical quality background data.

The laboratories generally met the QAPP requirements. However, two types of differences from the QAPP requirements did occur during the investigation: (1) planned changes and (2) quality control checks not meeting program requirements. WESTON made plan changes because the QAPP requirement was incomplete or too exact. QCCs not meeting program requirements resulted in the data having to be labeled as perhaps not quite accurate (check whether this phrase is accurate), and sometimes not usable. The validators reported many QCC problems during data validation (see Appendix B.2); however, less than 1% of the data was unusable due to these problems.

During data validation, QuantaLex found that several data points for volatile organics, explosives, and radionuclides were lesser quality. QuantaLex found that the results for samples analyzed for volatile organics by Method 8021 were not precise. These results were estimated because the laboratory system did not meet the QAPP requirements for fine tuning or adjusting the laboratory instruments. During data validation, QuantaLex rejected many results for explosives and radionuclides. The rejections resulted from incorrect validation guidelines, and most of the results were usable.

WESTON performed data assessment following the QAPP requirements. The data assessment included judging all the data thought to be less than totally accurate and deciding whether the data were usable. Data assessment also included judging the differences from the quality assurance program. The results of the data assessment, outlined in Appendices B.1, B.2, and B.4 show that 99% of the data collected were usable.

Review of the analytical results indicates that low concentrations of metals, volatile organic compounds, and radionuclides are common. In general, sample means and sample standard deviations are higher in the spring than in the fall, although there are exceptions to this observation. This suggests that there may be widely varying sources of contaminants throughout the area. Very local concentrations of total and soluble chromium and lead, tetrachloroethene, and

trichloroethene exceed MCLs. For each of the alpha isotopic radioisotopes of plutonium and uranium there is an increase in the number of detections per sampling location during the spring event. WESTON attributes this increase to a change in laboratory reporting limits from 1 pCi/L (fall) to 0.01 pCi/L (spring). This change means that the fall and spring data are not directly comparable. Total and soluble chromium and arsenic, tetrachloroethene and 1,1,1-trichloroethane are common in the background wells sampled. Tetrachloroethene exceeds MCLs in one background well.

The groundwater sampling and analysis program described in this report provides a quality baseline. Completeness goals established by the QAPP require 90% for field measurements and sample collection, 95% for laboratory analysis, and 100% for collection and analysis of background samples. Except for fall 1993, sample collection, field measurements, and laboratory analysis of the entire groundwater monitoring network exceed these goals. Samples for explosives, semivolatiles and pesticides could not be collected due to dry conditions. Resampling for these parameters during the dry season is not recommended and may not be possible.

Additionally, analyses for isotopic plutonium and uranium are not comparable between the fall 1993 and spring 1994 sampling events because of the change in laboratory reporting requirements. Collection of background samples met the requirement, but individual analyses did not. In general, analyses for specific explosive compounds were commonly rejected in some fall and spring samples. These are not expected to impact the quality of the baseline, since continued background sampling will undoubtedly continue as part of a complete monitoring program.

5. References

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A.1. Water Level Observation

Tables A. 1.1 and A. 1.2 present the results of water level observations from the fall and spring sampling events, respectively. These tables present two sets of measurements. The first is from a round of synoptic measurements taken at the start of the event; the second is the water level measurement taken at the time of sampling.

At the start of the fall and spring sampling events, the field team collected water level measurements from each sampling location within a 2- to 3-day period. WESTON used these water level measurements to develop potentiometric maps. The field team also measured water levels prior to and after the purging of each sampling location. The following summary of Standard Operating Procedure (SOP) 3.1, Water Level Measurements, discusses the procedures used during the fall and spring sampling events:

1. Water Level Measurements—Obtained by using an electric sounder with an accuracy of 0.01 feet. The measurement of the water levels was from a reference point permanently indicated on the casing.

2. Water Level Documentation—Recorded on either the groundwater level data form, the surface water quality sampling form, or the groundwater quality sampling form.

3. Electric Sounder—Decontaminated following the procedures in SOP 1.6, General Equipment Decontamination.

Table A.1.1

Fall Groundwater Level Observations

STATIC GROUNDWATER LEVELS
SITE: SWP99 GROUNDWATER SWEEPS
REPORT DATE: 11/30/94

LOCATION ID	NORTH COORDINATE (FT)	EAST COORDINATE (FT)	FORMATION OF COMPLETION	FLOW CODE	CASING ELEVATION (FT MSL)	GROUND ELEVATION (FT MSL)	LOG DATE	LOG TIME	DEPTH FROM TOP OF CASING (FT)	DEPTH FROM GROUND (FT)	GROUNDWATER ELEVATION (FT MSL)
0005	597111.19	1494202.12	GW	D	692.36	694.70	09/10/93	10:50	13.28	15.62	679.08
0007	597079.87	1493605.72	AL	D	-	693.95	09/10/93	11:02	14.84	-	-
0020	597829.62	1495207.61	UW	D	749.18	748.46	09/09/93	15:46	12.28	11.56	736.90
0028	598108.72	1495264.28	UW	D	786.84	786.14	09/09/93	15:38	14.87	14.17	771.97
0033	597967.49	1496503.49	TI	O	776.74	775.28	09/10/93	09:31	19.90	18.44	756.84
0042	597834.49	1496351.36	UW	O	762.28	762.97	09/09/93	15:58	25.17	25.86	737.11
0046	597074.65	1495004.51	GC	D	706.84	706.25	09/09/93 10/13/93	16:59 15:10	27.94 28.15	27.35 27.56	678.90 678.69
0063	596573.68	1495055.91	GC	O	705.64	704.87	09/11/93 10/13/93	14:25 11:30	27.35 27.25	26.58 26.48	678.29 678.39
0071	596320.81	1495998.88	AL	D	-	703.00	10/11/93	10:10	-	-	-
0076	595863.23	1495077.46	AL	D	-	703.00	10/11/93	12:10	-	-	-
0101	597131.82	1494693.42	GW	D	708.34	707.90	09/10/93	11:36	26.58	26.14	681.76
0106	597106.77	1493904.02	GW	D	693.86	693.95	09/10/93	10:56	14.69	14.78	679.17
0108	597014.16	1493252.30	GW	D	688.27	687.23	09/10/93	11:05	8.85	7.81	679.42
0111	597970.72	1496733.76	AL	O	780.41	779.31	10/11/93	16:00	56.65	55.55	723.76
0112	597974.29	1496515.90	ML	O	773.84	774.05	09/09/93 09/25/93	16:06 10:05	28.42 28.45	28.63 28.66	745.42 745.39
0113	599083.16	1495916.58	SH	D	874.62	875.81	09/10/93	09:46	53.97	55.16	820.65
0114	598615.69	1495593.29	LS	D	872.14	874.38	09/09/93	13:50	52.34	54.58	819.80

FORMATION OF COMPLETION CODE:
GW - GRAVEL OR SANDY GRAVEL, WELL GRADED
AL - ALLUVIUM
UW - UNKNOWN
TI - TILL
GC - CLAYEY GRAVEL OR CLAYEY SANDY GRAVEL
ML - SILTS, SANDY OR GRAVELLY SILTS, DIATOMACEOUS SOILS
SH - SHALE
LS - LIMESTONE

FLOW RELATIONSHIP CODE:
D - DOWN GRADIENT
O - ON SITE

STATIC GROUNDWATER LEVELS
SITE: SWP99 GROUNDWATER SWEEPS
REPORT DATE: 11/30/94

LOCATION ID	NORTH COORDINATE (FT)	EAST COORDINATE (FT)	FORMATION OF COMPLETION	FLOW CODE	CASING ELEVATION (FT MSL)	GROUND ELEVATION (FT MSL)	LOG DATE	LOG TIME	DEPTH FROM TOP OF CASING (FT)	DEPTH FROM GROUND (FT)	GROUNDWATER ELEVATION (FT MSL)
0115	598602.38	1495604.15	LS	D	872.30	874.50	09/09/93 10/12/93	13:56 09:50	39.33 39.40	41.53 41.60	832.97 832.90
0116	598607.41	1495599.68	LS	D	871.66	874.38	09/09/93	13:54	63.16	65.88	808.50
0117	598073.89	1495765.36	SH	D	813.5	802.39	10/12/93	08:00	13.26	2.15	800.24
0118	600088.12	1495735.50	SM	U	704.94	707.10	09/14/93	14:55	24.51	26.67	680.43
0119	597543.93	1495848.91	ML	O	741.41	741.97	09/09/93 09/25/93	16:44 14:30	23.51 24.10	24.07 24.66	717.90 717.31
0120	598125.35	1495747.04	LS	O	821.03	821.62	09/09/93 10/14/93	15:10 10:00	23.06 21.85	23.65 22.44	797.97 799.18
0121	597999.85	1497792.97	LS	U	887.50	887.50	09/10/93	09:59	101.47	101.47	786.03
0123	597471.08	1494745.82	SM	D	705.10	705.35	09/10/93 09/22/93	11:29 13:05	26.03 26.53	26.28 26.78	679.07 678.57
0124	597345.57	1494710.93	SM	D	705.15	705.28	09/10/93 09/23/93	11:31 16:45	26.13 26.56	26.26 26.69	679.02 678.59
0125	597319.87	1495388.82	ML	O	721.47	721.80	09/09/93 09/14/93 09/23/93	16:52 12:00 12:00	16.08 16.15 29.28	16.41 16.48 29.61	705.39 705.32 692.19
0126	597159.58	1494700.09	SM	D	705.58	705.81	09/10/93 09/14/93	11:35 10:50	26.63 26.85	26.86 27.08	678.95 678.73
0127	597166.92	1493915.42	SW	D	694.12	693.93	09/10/93 09/13/93	10:55 10:00	14.96 15.14	14.77 14.95	679.16 678.98
0128	597105.98	1493916.75	SW	D	693.66	693.64	09/10/93 09/24/93	10:54 10:55	14.49 14.88	14.47 14.86	679.17 678.78
0129	596836.77	1494665.33	SM	D	699.49	701.90	09/10/93 09/14/93	10:33 11:45	20.77 21.00	23.18 23.41	678.72 678.49
0130	596460.03	1493662.34	SP	D	692.06	694.75	09/10/93	10:38	13.27	15.96	678.79

FORMATION OF COMPLETION CODE:
LS - LIMESTONE
SH - SHALE
SM - SILTY SAND OR SILTY GRAVELLY SAND
ML - SILTS, SANDY OR GRAVELLY SILTS, DIATOMACEOUS SOILS
SW - SAND OR GRAVELLY SAND WELL GRADED
SP - SAND OR GRAVELLY SAND, POORLY GRADED

FLOW RELATIONSHIP CODE:
D - DOWN GRADIENT
U - UP GRADIENT
O - ON SITE

STATIC GROUNDWATER LEVELS
SITE: SWP99 GROUNDWATER SWEEPS
REPORT DATE: 11/30/94

LOCATION ID	NORTH COORDINATE (FT)	EAST COORDINATE (FT)	FORMATION OF COMPLETION	FLOW CODE	CASING ELEVATION (FT MSL)	GROUND ELEVATION (FT MSL)	LOG DATE	LOG TIME	DEPTH FROM TOP OF CASING (FT)	DEPTH FROM GROUND (FT)	GROUNDWATER ELEVATION (FT MSL)
0130	596460.03	1493662.34	SP	D	692.06	694.75	09/27/93	14:35	13.51	16.20	678.55
0137	597337.47	1495070.12	GW	D	723.66	723.27	09/09/93 09/26/93	15:17 14:10	42.54 42.93	42.15 42.54	681.12 680.73
0138	599671.13	1495320.80	SP	U	697.83	700.35	09/23/93	17:00	17.78	20.30	680.05
0151	597273.77	1495544.31	SC	O	740.61	739.87	09/09/93 10/14/93	16:49 08:45	47.02 46.99	46.28 46.25	693.59 693.62
0152	596986.30	1494954.07	SP	D	704.94	704.62	09/09/93 09/12/93	17:01 10:10	26.00 26.35	25.68 26.03	678.94 678.59
0153	596692.39	1494952.09	CL	D	704.10	703.62	09/09/93 09/12/93	17:05 14:45	25.36 25.67	24.88 25.19	678.74 678.43
0154	596418.69	1494969.81	GM	D	702.67	702.93	09/09/93 09/11/93	11:33 13:02	24.30 48.83	24.56 49.09	678.37 653.84
0155	596407.55	1494971.72	GM	D	704.28	702.33	09/09/93 09/11/93	11:29 12:45	24.45 24.70	22.50 22.75	679.83 679.58
0156	596183.82	1494547.14	SM	D	689.91	692.56	09/10/93 09/16/93	10:27 11:00	12.08 11.85	14.73 14.50	677.83 678.06
0157	596173.53	1494548.21	GP	D	690.31	692.66	09/10/93 09/27/93	10:24 12:00	11.93 12.12	14.28 14.47	678.38 678.19
0158	594037.32	1495277.53	SP	D	702.06	702.05	09/09/93 09/23/93	10:10 15:00	23.97 23.40	23.96 23.39	678.09 678.66
0159	594038.51	1494169.57	SP	D	689.02	691.54	09/10/93 09/15/93	09:10 11:00	10.66 11.00	13.18 13.52	678.36 678.02
0160	594049.08	1494168.42	GP	D	689.40	691.61	09/10/93 09/15/93	10:13 16:00	11.01 11.24	13.22 13.45	678.39 678.16
0227	597909.38	1495689.53	SH	O	787.19	785.00	09/09/93	14:58	18.25	16.06	768.94

FORMATION OF COMPLETION CODE:
SP - SAND OR GRAVELLY SAND, POORLY GRADED
GW - GRAVEL OR SANDY GRAVEL, WELL GRADED
SC - CLAYEY SAND OR CLAYEY GRAVELLY SAND
CL - LEAN CLAYS, SANDY CLAYS, OR GRAVELLY CLAYS
GM - SILTY GRAVEL OR SILTY GRAVELLY SAND
SM - SILTY SAND OR SILTY GRAVELLY SAND
GP - GRAVEL OR SANDY GRAVEL, POORLY GRADED
SH - SHALE

FLOW RELATIONSHIP CODE:
D - DOWN GRADIENT
U - UP GRADIENT
O - ON SITE

STATIC GROUNDWATER LEVELS
SITE: SWP99 GROUNDWATER SWEEPS
REPORT DATE: 11/30/94

LOCATION ID	NORTH COORDINATE (FT)	EAST COORDINATE (FT)	FORMATION OF COMPLETION	FLOW CODE	CASING ELEVATION (FT MSL)	GROUND ELEVATION (FT MSL)	LOG DATE	LOG TIME	DEPTH FROM TOP OF CASING (FT)	DEPTH FROM GROUND (FT)	GROUNDWATER ELEVATION (FT MSL)
0242	597765.89	1496159.17	LS	O	754.56	752.80	09/09/93	15:55	15.12	13.36	739.44
0271	596154.56	1495028.58	AL	D	-	703.00	10/11/93	11:25	-	-	-
0301	597872.00	1494178.20	CL	D	692.48	694.76	09/10/93 09/24/93	11:46 16:10	12.82 13.21	15.10 15.49	679.66 679.27
0302	597099.47	1493921.81	GC	D	690.96	693.62	09/10/93 09/28/93	10:57 10:10	11.89 12.27	14.55 14.93	679.07 678.69
0303	597134.54	1494493.75	TI	D	694.78	696.89	09/10/93 09/23/93	10:44 10:55	15.93 16.30	18.04 18.41	678.85 678.48
0304	596179.38	1494546.74	CL	D	690.08	692.49	09/10/93 09/16/93	10:26 16:30	11.77 12.01	14.18 14.42	678.31 678.07
0305	596494.00	1495083.91	GC	N	709.86	709.61	09/09/93 09/11/93	11:41 17:16	31.45 37.33	31.20 37.08	678.41 672.53
0306	596673.28	1495083.91	GC	D	704.13	703.71	09/09/93 09/11/93	13:58 16:50	25.52 25.70	25.10 25.28	678.61 678.43
0307	596848.92	1495024.17	GW	D	716.16	717.93	09/09/93 09/13/93	14:10 15:30	37.39 37.71	39.16 39.48	678.77 678.45
0308	596647.02	1495223.33	GC	U	750.36	749.51	09/09/93 11/17/93	09:25 12:00	DRY DRY	DRY DRY	- -
0309	596503.70	1495097.74	SH	D	710.26	710.04	09/09/93 09/14/93	11:44 09:00	31.62 31.95	31.40 31.73	678.64 678.31
0310	596693.15	1494951.55	LS	D	703.66	703.58	09/09/93 09/14/93	13:56 17:00	24.98 25.30	24.90 25.22	678.68 678.36
0311	597872.58	1494186.02	SW	U	692.98	695.19	09/10/93 09/15/93	11:48 11:21	13.39 13.67	15.60 15.88	679.59 679.31

FORMATION OF COMPLETION CODE:
LS - LIMESTONE
AL - ALLUVIUM
CL - LEAN CLAYS, SANDY CLAYS, OR GRAVELLY CLAYS
GC - CLAYEY GRAVEL OR CLAYEY SANDY GRAVEL
TI - TILL
GW - GRAVEL OR SANDY GRAVEL, WELL GRADED
SH - SHALE
SW - SAND OR GRAVELLY SAND WELL GRADED

FLOW RELATIONSHIP CODE:
O - ON SITE
D - DOWN GRADIENT
N - NOT KNOWN
U - UP GRADIENT

STATIC GROUNDWATER LEVELS
SITE: SWP99 GROUNDWATER SWEEPS
REPORT DATE: 11/30/94

LOCATION ID	NORTH COORDINATE (FT)	EAST COORDINATE (FT)	FORMATION OF COMPLETION	FLOW CODE	CASING ELEVATION (FT MSL)	GROUND ELEVATION (FT MSL)	LOG DATE	LOG TIME	DEPTH FROM TOP OF CASING (FT)	DEPTH FROM GROUND (FT)	GROUNDWATER ELEVATION (FT MSL)
0312	597747.67	1495031.74	GC	U	731.30	731.04	09/09/93 09/24/93	15:28 16:30	31.01 31.17	30.75 30.91	700.29 700.13
0313	596850.42	1495021.50	CL	D	716.12	715.80	09/09/93 09/13/93	09:45 10:30	37.42 37.66	37.10 37.34	678.70 678.46
0314	597414.24	1495712.96	CL	U	742.71	742.77	09/10/93 09/14/93	09:23 08:15	41.53 41.77	41.59 41.83	701.18 700.94
0315	597341.80	1495078.77	SM	C	724.03	723.58	09/09/93 09/12/93	15:13 16:00	44.88 45.22	44.43 44.77	679.15 678.81
0316	597110.33	1495384.20	GW	U	725.11	724.61	09/09/93 11/17/93	14:56 12:00	32.00 DRY	31.50 DRY	693.11 -
0317	596207.32	1495022.91	GM	D	703.60	703.50	09/09/93 09/10/93	11:49 16:10	25.65 25.39	25.55 25.29	677.95 678.21
0318	598644.24	1497216.04	SH	D	810.53	809.97	09/09/93 09/12/93	16:31 10:30	17.56 18.10	17.00 17.54	792.97 792.43
0319	595512.74	1495147.81	SC	N	701.44	701.44	09/11/93 09/22/93	10:45 14:51	23.17 23.48	23.17 23.48	678.27 677.96
0320	595022.59	1495353.77	CL	N	704.28	704.16	09/09/93 09/23/93	10:15 10:30	26.04 26.34	25.92 26.22	678.24 677.94
0322	598865.46	1497201.16	SH	O	811.61	809.84	09/10/93 09/26/93	15:25 08:35	31.48 31.96	29.71 30.19	780.13 779.65
0323	597941.22	1495591.01	SH	O	785.65	786.12	09/09/93 11/17/93	14:45 12:00	DRY DRY	DRY DRY	- -
0324	597926.59	1495701.00	SH	O	784.69	784.87	09/09/93 09/15/93	14:50 09:45	13.60 13.71	13.78 13.89	771.09 770.98
0325	597270.67	1496570.83	SH	O	798.89	796.96	09/10/93	15:15	22.09	20.16	776.80

FORMATION OF COMPLETION CODE:
GC - CLAYEY GRAVEL OR CLAYEY SANDY GRAVEL
CL - LEAN CLAYS, SANDY CLAYS, OR GRAVELLY CLAYS
SM - SILTY SAND OR SILTY GRAVELLY SAND
GW - GRAVEL OR SANDY GRAVEL, WELL GRADED
GM - SILTY GRAVEL OR SILTY GRAVELLY SAND
SH - SHALE
SC - CLAYEY SAND OR CLAYEY GRAVELLY SAND

FLOW RELATIONSHIP CODE:
U - UP GRADIENT
D - DOWN GRADIENT
C - CROSS GRADIENT
N - NOT KNOWN
O - ON SITE

STATIC GROUNDWATER LEVELS
SITE: SWP99 GROUNDWATER SWEEPS
REPORT DATE: 11/30/94

LOCATION ID	NORTH COORDINATE (FT)	EAST COORDINATE (FT)	FORMATION OF COMPLETION	FLOW CODE	CASING ELEVATION (FT MSL)	GROUND ELEVATION (FT MSL)	LOG DATE	LOG TIME	DEPTH FROM TOP OF CASING (FT)	DEPTH FROM GROUND (FT)	GROUNDWATER ELEVATION (FT MSL)
0325	597270.67	1496570.83	SH	O	798.89	796.96	10/12/93	09:20	24.24	22.31	774.65
0326	597365.17	1497091.18	SH	O	877.58	875.52	09/11/93 09/15/93	10:20 14:00	19.70 17.49	17.64 15.43	857.88 860.09
0327	601687.99	1495166.93	GP	U	698.32	698.69	09/10/93 09/27/93	13:00 10:40	15.71 18.49	16.08 18.86	682.61 679.83
0328	601695.63	1495166.40	SP	U	698.57	698.65	09/10/93 09/27/93	13:02 15:52	16.00 15.72	16.08 15.80	682.57 682.85
0329	601231.83	1496413.66	GM	U	707.51	707.95	09/10/93 09/29/93	11:40 17:30	19.44 19.53	19.88 19.97	688.07 687.98
0330	601230.60	1496422.12	SP	U	707.43	707.97	09/10/93 09/30/93	11:35 10:30	24.66 24.62	25.20 25.16	682.77 682.81
0332	599505.71	1497447.41	BR	O	793.88	794.32	09/10/93 09/23/93	15:08 08:10	17.53 20.67	17.97 21.11	776.35 773.21
0333	600547.19	1494851.90	GP	D	699.55	700.34	09/10/93 10/11/93	13:06 14:45	17.47 17.60	18.26 18.39	682.08 681.95
0334	600540.81	1494850.09	GP	D	700.27	700.50	09/10/93 09/30/93	13:08 11:00	18.16 18.22	18.39 18.45	682.11 682.05
0335	598844.46	1494824.78	BR	D	705.43	705.92	09/11/93 09/30/93	10:45 13:00	24.15 24.72	24.64 25.21	681.28 680.71
0336	600380.42	1496202.19	GM	U	710.03	710.23	09/10/93 09/20/93	11:25 10:15	27.36 27.48	27.56 27.68	682.67 682.55
0337	600372.79	1496201.85	GM	U	709.74	710.10	09/10/93 09/29/93	11:28 15:15	27.11 27.19	27.47 27.55	682.63 682.55
0340	597650.90	1494723.50	GM	D	706.17	706.27	09/09/93	17:15	DRY	DRY	-
0341	597650.38	1494728.37	BR	D	705.99	706.40	09/09/93 09/24/93	17:20 10:37	25.22 25.72	25.63 26.13	680.77 680.27

FORMATION OF COMPLETION CODE:
SH - SHALE
GP - GRAVEL OR SANDY GRAVEL, POORLY GRADED
SP - SAND OR GRAVELLY SAND, POORLY GRADED
GM - SILTY GRAVEL OR SILTY GRAVELLY SAND
BR - UNDIFFERENTIATED BEDROCK

FLOW RELATIONSHIP CODE:
O - ON SITE
U - UP GRADIENT
D - DOWN GRADIENT

STATIC GROUNDWATER LEVELS
SITE: SWP99 GROUNDWATER SWEEPS
REPORT DATE: 11/30/94

LOCATION ID	NORTH COORDINATE (FT)	EAST COORDINATE (FT)	FORMATION OF COMPLETION	FLOW CODE	CASING ELEVATION (FT MSL)	GROUND ELEVATION (FT MSL)	LOG DATE	LOG TIME	DEPTH FROM TOP OF CASING (FT)	DEPTH FROM GROUND (FT)	GROUNDWATER ELEVATION (FT MSL)
0342	596168.63	1494550.20	SP	D	692.35	692.49	09/11/93 10/12/93	10:51 12:55	12.21 12.37	12.35 12.51	680.14 679.98
0343	597140.04	1494485.25	SP	D	696.57	696.70	09/10/93 09/28/93	13:19 15:40	15.98 16.20	16.11 16.33	680.59 680.37
0344	595521.96	1495145.72	SP	D	702.98	701.38	09/10/93 10/14/93	10:50 11:50	22.91 23.20	21.31 21.60	680.07 679.78
0345	597625.59	1496496.46	GM	U	756.09	753.80	09/10/93 09/14/93	14:18 15:00	29.64 29.75	27.35 27.46	726.45 726.34
0346	597626.90	1496107.04	GM	O	744.69	745.31	09/10/93 09/23/93	14:14 09:30	18.26 18.93	18.88 19.55	726.43 725.76
0347	597375.07	1495092.49	SW	N	726.99	724.89	09/10/93 09/30/93	14:58 15:30	46.30 48.49	44.20 46.39	680.69 678.50
0351	596433.35	1497050.28	LS	O	888.28	886.89	09/11/93 09/25/93	10:17 14:10	13.44 13.41	12.05 12.02	874.84 874.87
0353	596241.80	1495668.78	ML	U	747.07	744.95	09/10/93 09/16/93	14:43 15:35	5.75 6.01	3.63 3.89	741.32 741.06
0354	595602.10	1496322.15	ST	O	771.01	767.95	09/09/93 10/11/93	10:25 09:55	20.77 21.36	17.71 18.30	750.24 749.65
0356	595011.45	1495353.58	SP	O	706.24	704.07	09/09/93 09/25/93	10:17 13:40	26.21 26.58	24.04 24.41	680.03 679.66
0370	596829.64	1495100.73	AL	O	720.28	720.28	09/11/93 09/24/93	09:55 14:00	39.98 40.17	39.98 40.17	680.30 680.11
0372	596693.75	1495331.22	AL	D	-	756.46	09/09/93 09/24/93	15:17 14:35	43.71 44.02	- -	- -
0373	596690.56	1495128.52	AL	O	740.50	738.77	09/09/93	15:30	60.11	58.38	680.39

FORMATION OF COMPLETION CODE:
SP - SAND OR GRAVELLY SAND, POORLY GRADED
GM - SILTY GRAVEL OR SILTY GRAVELLY SAND
SW - SAND OR GRAVELLY SAND WELL GRADED
LS - LIMESTONE
ML - SILTS, SANDY OR GRAVELLY SILTS, DIATOMACEOUS SOILS
ST - SILTSTONE
AL - ALLUVIUM

FLOW RELATIONSHIP CODE:
D - DOWN GRADIENT
U - UP GRADIENT
O - ON SITE
N - NOT KNOWN

STATIC GROUNDWATER LEVELS
SITE: SWP99 GROUNDWATER SWEEPS
REPORT DATE: 11/30/94

LOCATION ID	NORTH COORDINATE (FT)	EAST COORDINATE (FT)	FORMATION OF COMPLETION	FLOW CODE	CASING ELEVATION (FT MSL)	GROUND ELEVATION (FT MSL)	LOG DATE	LOG TIME	DEPTH FROM TOP OF CASING (FT)	DEPTH FROM GROUND (FT)	GROUNDWATER ELEVATION (FT MSL)
0373	596690.56	1495128.52	AL	O	740.50	738.77	09/25/93	18:45	60.45	58.72	680.05
0374	596559.25	1495123.53	AL	O	708.10	706.19	09/10/93	13:32	28.02	26.11	680.08
0375	597074.08	1494980.33	AL	O	707.25	705.20	09/11/93 09/30/93	10:00 09:45	27.72 26.74	25.67 24.69	679.53 680.51
0376	596696.75	1494760.63	AL	O	701.89	700.19	09/09/93 09/26/93	16:55 10:00	21.47 21.75	19.77 20.05	680.42 680.14
0377	596522.25	1494774.87	AL	O	701.02	699.40	09/09/93 09/26/93	16:45 13:15	20.74 21.02	19.12 19.40	680.28 680.00
0378	596376.63	1494789.86	AL	O	701.61	701.61	09/09/93 09/26/93	16:35 17:30	21.31 21.65	21.31 21.65	680.30 679.96
0379	597179.70	1495153.92	AL	O	718.06	716.38	09/11/93 09/26/93	10:06 16:10	37.58 37.67	35.90 35.99	680.48 680.39
0380	597109.65	1495394.52	AL	O	727.10	725.02	09/11/93 09/27/93	10:12 19:00	46.61 46.77	44.53 44.69	680.49 680.33
0381	596982.13	1495399.69	AL	O	727.85	725.26	09/11/93 09/29/93	10:10 09:00	26.01 24.25	23.42 21.66	701.84 703.60
0382	596601.67	1495444.40	AL	O	740.50	738.25	09/10/93 09/26/93	14:53 10:00	8.03 8.36	5.78 6.11	732.47 732.14
0383	597138.34	1494477.15	GM	D	696.20	696.39	09/10/93 09/28/93	13:23 15:00	15.44 15.70	15.63 15.89	680.76 680.50
0385	597628.33	1494975.13	GP	D	724.88	725.61	09/09/93 11/17/93	17:30 12:00	DRY DRY	DRY DRY	- -
0386	597345.22	1494953.59	SP	O	726.57	726.82	09/09/93 09/29/93	17:33 10:50	45.83 46.17	46.08 46.42	680.74 680.40
0387	597210.50	1494897.38	SP	O	722.70	722.82	09/11/93 09/28/93	10:14 11:40	40.67 42.29	40.79 42.41	682.03 680.41
0388	596793.37	1494747.75	SP	D	702.88	700.35	09/09/93	17:01	22.40	19.87	680.48

FORMATION OF COMPLETION CODE:
AL - ALLUVIUM
GM - SILTY GRAVEL OR SILTY GRAVELLY SAND
GP - GRAVEL OR SANDY GRAVEL, POORLY GRADED
SP - SAND OR GRAVELLY SAND, POORLY GRADED

FLOW RELATIONSHIP CODE:
O - ON SITE
D - DOWN GRADIENT

STATIC GROUNDWATER LEVELS
SITE: SWP99 GROUNDWATER SWEEPS
REPORT DATE: 11/30/94

LOCATION ID	NORTH COORDINATE (FT)	EAST COORDINATE (FT)	FORMATION OF COMPLETION	FLOW CODE	CASING ELEVATION (FT MSL)	GROUND ELEVATION (FT MSL)	LOG DATE	LOG TIME	DEPTH FROM TOP OF CASING (FT)	DEPTH FROM GROUND (FT)	GROUNDWATER ELEVATION (FT MSL)
0388	596793.37	1494747.75	SP	D	702.88	700.35	09/26/93	10:45	22.75	20.22	680.13
0389	597337.46	1494949.43	GM	O	726.44	726.66	09/09/93 09/28/93	17:35 17:30	45.71 46.04	45.93 46.26	680.73 680.40
0390	597329.69	1494945.87	GM	O	726.37	726.54	09/09/93	17:37	DRY	DRY	-
0392	597204.85	1494896.11	SP	D	722.65	722.79	09/09/93	17:45	41.94	42.08	680.71
0393	596694.53	1495024.89	AL	O	708.65	706.79	09/10/93 09/25/93	13:38 15:30	28.25 28.85	26.39 26.99	680.40 679.80
0394	596489.48	1495003.44	AL	O	705.08	703.38	09/10/93 09/13/93	14:35 15:35	25.38 25.14	23.68 23.44	679.70 679.94
0395	598433.07	1496869.76	GM	O	802.94	803.25	09/10/93	15:16	68.64	68.95	734.30
0397	596702.12	1495024.40	TI	O	709.27	709.27	09/10/93 09/25/93	13:40 10:00	28.98 29.19	28.98 29.19	680.29 680.08
P016	597036.29	1493364.46	GW	D	689.03	689.09	09/10/93	11:37	7.98	8.04	681.05
P017	596476.71	1493381.03	GW	D	690.48	690.49	09/10/93	11:25	9.72	9.73	680.76
P018	596493.74	1494322.63	GM	D	692.28	692.58	09/10/93	09:30	11.76	12.06	680.52
P019	597930.12	1493017.44	SP	C	690.31	690.47	09/09/93	14:05	9.01	9.17	681.30
P020	597151.54	1492952.37	SP	N	690.86	691.26	09/09/93	13:50	9.76	10.16	681.10
P021	597693.93	1496001.61	SH	O	747.51	745.43	09/11/93	09:26	21.05	18.97	726.46
P022	597536.53	1495316.65	ST	O	730.69	730.66	09/11/93	09:35	49.94	49.91	680.75
P023	597529.54	1495319.45	SM	O	730.41	730.39	09/11/93	09:32	44.27	44.25	686.14
P024	597162.02	1495644.22	BR	N	744.17	741.60	09/11/93	09:23	14.41	11.84	729.76

FORMATION OF COMPLETION CODE:
SP - SAND OR GRAVELLY SAND, POORLY GRADED
GM - SILTY GRAVEL OR SILTY GRAVELLY SAND
AL - ALLUVIUM
TI - TILL
GW - GRAVEL OR SANDY GRAVEL, WELL GRADED
SH - SHALE
ST - SILTSTONE
SM - SILTY SAND OR SILTY GRAVELLY SAND
BR - UNDIFFERENTIATED BEDROCK

FLOW RELATIONSHIP CODE:
D - DOWN GRADIENT
O - ON SITE
C - CROSS GRADIENT
N - NOT KNOWN

STATIC GROUNDWATER LEVELS
SITE: SWP99 GROUNDWATER SWEEPS
REPORT DATE: 11/30/94

LOCATION ID	NORTH COORDINATE (FT)	EAST COORDINATE (FT)	FORMATION OF COMPLETION	FLOW CODE	CASING ELEVATION (FT MSL)	GROUND ELEVATION (FT MSL)	LOG DATE	LOG TIME	DEPTH FROM TOP OF CASING (FT)	DEPTH FROM GROUND (FT)	GROUNDWATER ELEVATION (FT MSL)
P025	596238.43	1494979.56	SW	D	703.77	703.77	09/10/93	11:00	23.71	23.71	680.06
P026	597182.81	1494719.96	SP	D	705.63	705.87	09/10/93	09:40	24.82	25.06	680.81
P027	596249.25	1495078.43	SP	O	705.72	703.39	09/11/93	09:38	26.36	24.03	679.36
P028	596075.26	1494969.93	SW	D	711.98	709.72	09/10/93	11:04	30.17	27.91	681.81
P029	595915.09	1494820.62	SP	O	703.75	703.75	09/09/93	17:20	23.61	23.61	680.14
P030	595909.84	1494821.45	GP	D	703.93	701.65	09/09/93	17:24	23.76	21.48	680.17
P031	596023.27	1495119.06	GP	O	703.35	700.97	09/11/93	09:40	24.04	21.66	679.31
P032	595682.77	1495043.91	SP	D	709.55	707.60	09/10/93	11:07	29.53	27.58	680.02
P033	595763.48	1495292.80	GM	D	704.20	701.73	09/09/93	10:35	24.31	21.84	679.89
P034	595669.77	1494661.74	GW	D	691.00	691.22	09/10/93	09:22	10.76	10.98	680.24
P035	597895.71	1493480.31	GP	D	688.05	688.16	09/10/93	10:53	6.78	6.89	681.27
P036	597912.82	1493479.50	GM	D	688.35	688.14	09/10/93	10:51	7.09	6.88	681.26
P037	597905.00	1493483.00	GM	D	688.28	688.43	09/10/93	10:50	7.20	7.35	681.08
P038	597900.80	1493475.39	SP	D	687.87	687.88	09/10/93	10:52	7.04	7.05	680.83
P039	595092.39	1493740.18	GP	D	689.22	689.35	09/10/93	11:11	8.82	8.95	680.40
P040	595089.24	1493748.05	GP	D	689.01	689.41	09/10/93	11:12	8.67	9.07	680.34
P041	595085.05	1493726.19	GM	D	689.08	689.30	09/10/93	11:10	8.59	8.81	680.49
P042	595080.86	1493743.77	ST	D	689.15	689.15	09/10/93	11:13	18.18	18.18	670.97

FORMATION OF COMPLETION CODE:
SW - SAND OR GRAVELLY SAND WELL GRADED
SP - SAND OR GRAVELLY SAND, POORLY GRADED
GP - GRAVEL OR SANDY GRAVEL, POORLY GRADED
GM - SILTY GRAVEL OR SILTY GRAVELLY SAND
GW - GRAVEL OR SANDY GRAVEL, WELL GRADED
ST - SILTSTONE

FLOW RELATIONSHIP CODE:
D - DOWN GRADIENT
O - ON SITE

DATA FILE: K:\DART\SWP\SWP99\GWL10001.DAT

FIELDS DISPLAYED WITH A DASH INDICATE THE DATA IS UNAVAILABLE

Table A.1.2

Spring Groundwater Level Observations

STATIC GROUNDWATER LEVELS
SITE: SWP99 GROUNDWATER SWEEPS
REPORT DATE: 11/30/94

LOCATION ID	NORTH COORDINATE (FT)	EAST COORDINATE (FT)	FORMATION OF COMPLETION	FLOW CODE	CASING ELEVATION (FT MSL)	GROUND ELEVATION (FT MSL)	LOG DATE	LOG TIME	DEPTH FROM TOP OF CASING (FT)	DEPTH FROM GROUND (FT)	GROUNDWATER ELEVATION (FT MSL)
0046	597074.65	1495004.51	GC	D	706.84	706.25	03/07/94 03/18/94	11:31 12:00	25.63 25.61	25.04 25.02	681.21 681.23
0063	596573.68	1495055.91	GC	O	705.64	704.87	03/07/94 03/18/94	11:55 12:00	24.71 24.64	23.94 23.87	680.93 681.00
0111	597970.72	1496733.76	AL	O	780.41	779.31	03/08/94 03/17/94	09:13 11:15	54.17 58.5	53.07 57.40	726.24 721.91
0112	597974.29	1496515.90	ML	O	773.84	774.05	03/07/94 03/15/94	13:32 08:25	28.19 28.0	28.40 28.21	745.65 745.84
0115	598602.38	1495604.15	LS	D	872.30	874.50	03/08/94 03/22/94	08:09 11:06	39.01 39.01	41.21 41.21	833.29 833.29
0117	598073.89	1495765.36	SH	D	813.5	802.39	04/14/94	09:27	11.55	0.44	801.95
0118	600088.12	1495735.50	SM	U	704.94	707.10	03/08/94 03/29/94	10:35 13:45	22.64 22.98	24.80 25.14	682.30 681.96
0119	597543.93	1495848.91	ML	O	741.41	741.97	03/07/94 03/14/94	13:21 14:50	23.67 23.3	24.23 23.86	717.74 718.11
0120	598125.35	1495747.04	LS	O	821.03	821.62	04/14/94	10:40	17.2	17.79	803.83
0123	597471.08	1494745.82	SM	D	705.10	705.35	03/08/94 03/21/94	09:54 12:00	23.83 24.34	24.08 24.59	681.27 680.76
0124	597345.57	1494710.93	SM	D	705.15	705.28	03/08/94 03/31/94	09:56 12:00	23.91 24.37	24.04 24.50	681.24 680.78
0125	597319.87	1495388.82	ML	O	721.47	721.80	03/07/94 03/16/94	11:43 08:45	15.63 15.8	15.96 16.13	705.84 705.67
0126	597159.58	1494700.09	SM	D	705.58	705.81	03/08/94 03/23/94	10:20 14:35	24.37 24.5	24.60 24.73	681.21 681.08
0127	597166.92	1493915.42	SW	D	694.12	693.93	03/07/94	15:35	12.75	12.56	681.37

FORMATION OF COMPLETION CODE:
GC - CLAYEY GRAVEL OR CLAYEY SANDY GRAVEL
AL - ALLUVIUM
ML - SILTS, SANDY OR GRAVELLY SILTS, DIATOMACEOUS SOILS
LS - LIMESTONE
SH - SHALE
SM - SILTY SAND OR SILTY GRAVELLY SAND
SW - SAND OR GRAVELLY SAND WELL GRADED

FLOW RELATIONSHIP CODE:
D - DOWN GRADIENT
O - ON SITE
U - UP GRADIENT

STATIC GROUNDWATER LEVELS
SITE: SWP99 GROUNDWATER SWEEPS
REPORT DATE: 11/30/94

LOCATION ID	NORTH COORDINATE (FT)	EAST COORDINATE (FT)	FORMATION OF COMPLETION	FLOW CODE	CASING ELEVATION (FT MSL)	GROUND ELEVATION (FT MSL)	LOG DATE	LOG TIME	DEPTH FROM TOP OF CASING (FT)	DEPTH FROM GROUND (FT)	GROUNDWATER ELEVATION (FT MSL)
0127	597166.92	1493915.42	SW	D	694.12	693.93	04/04/94	12:45	13.31	13.12	680.81
0128	597105.98	1493916.75	SW	D	693.66	693.64	03/07/94 04/04/94	15:33 10:30	12.29 12.87	12.27 12.85	681.37 680.79
0129	596836.77	1494665.33	SM	D	699.49	701.90	03/08/94 04/11/94	10:23 09:15	18.41 16.9	20.82 19.31	681.08 682.59
0130	596460.03	1493662.34	SP	D	692.06	694.75	03/07/94 04/06/94	15:23 10:05	11.12 11.61	13.81 14.30	680.94 680.45
0137	597337.47	1495070.12	GW	D	723.66	723.27	03/07/94 03/25/94	11:37 09:15	41.86 41.93	41.47 41.54	681.80 681.73
0138	599671.13	1495320.80	SP	U	697.83	700.35	03/08/94 03/29/94	10:30 12:00	15.75 16.05	18.27 18.57	682.08 681.78
0151	597273.77	1495544.31	SC	O	740.61	739.87	03/07/94 03/16/94	11:47 08:20	47.10 47.2	46.36 46.46	693.51 693.41
0152	596986.30	1494954.07	SP	D	704.94	704.62	03/07/94 03/25/94	11:28 08:05	23.85 24.1	23.53 23.78	681.09 680.84
0153	596692.39	1494952.09	CL	D	704.10	703.62	03/07/94 03/25/94	11:18 10:33	22.96 23.3	22.48 22.82	681.14 680.80
0154	596418.69	1494969.81	GM	D	702.67	702.93	03/07/94 03/09/94 03/24/94	11:36 12:00 13:40	21.80 21.83 22.1	22.06 22.09 22.36	680.87 680.84 680.57
0155	596407.55	1494971.72	GM	D	704.28	702.33	03/07/94 03/10/94	11:06 12:00	21.97 22.0	20.02 20.05	682.31 682.28
0156	596183.82	1494547.14	SM	D	689.91	692.56	03/07/94 04/06/94	17:17 14:00	09.17 9.81	11.82 12.46	680.74 680.10
0157	596173.53	1494548.21	GP	D	690.31	692.66	03/07/94	15:15	9.13	11.48	681.18

FORMATION OF COMPLETION CODE:
SW - SAND OR GRAVELLY SAND WELL GRADED
SM - SILTY SAND OR SILTY GRAVELLY SAND
SP - SAND OR GRAVELLY SAND, POORLY GRADED
GW - GRAVEL OR SANDY GRAVEL, WELL GRADED
SC - CLAYEY SAND OR CLAYEY GRAVELLY SAND
CL - LEAN CLAYS, SANDY CLAYS, OR GRAVELLY CLAYS
GM - SILTY GRAVEL OR SILTY GRAVELLY SAND
GP - GRAVEL OR SANDY GRAVEL, POORLY GRADED

FLOW RELATIONSHIP CODE:
D - DOWN GRADIENT
U - UP GRADIENT
O - ON SITE

STATIC GROUNDWATER LEVELS
SITE: SWP99 GROUNDWATER SWEEPS
REPORT DATE: 11/30/94

LOCATION ID	NORTH COORDINATE (FT)	EAST COORDINATE (FT)	FORMATION OF COMPLETION	FLOW CODE	CASING ELEVATION (FT MSL)	GROUND ELEVATION (FT MSL)	LOG DATE	LOG TIME	DEPTH FROM TOP OF CASING (FT)	DEPTH FROM GROUND (FT)	GROUNDWATER ELEVATION (FT MSL)
0157	596173.53	1494548.21	GP	D	690.31	692.66	04/11/94	11:15	7.61	9.96	682.70
0158	594037.32	1495277.53	SP	D	702.06	702.05	03/07/94 03/25/94	16:20 13:00	21.45 21.83	21.44 21.82	680.61 680.23
0159	594038.51	1494169.57	SP	D	689.02	691.54	03/07/94 04/01/94	17:29 08:45	08.30 9.0	10.82 11.52	680.72 680.02
0160	594049.08	1494168.42	GP	D	689.40	691.61	03/07/94 04/01/94	17:28 11:05	08.60 9.2	10.81 11.41	680.80 680.20
0271	596154.56	1495028.58	AL	D	-	703.00	04/07/94	09:40	-	-	-
0301	597872.00	1494178.20	CL	D	692.48	694.76	03/07/94 04/04/94	15:45 14:40	11.00 14.6	13.28 16.88	681.48 677.88
0302	597099.47	1493921.81	GC	D	690.96	693.62	03/07/94 04/05/94	15:37 09:45	09.64 10.33	12.30 12.99	681.32 680.63
0303	597134.54	1494493.75	TI	D	694.78	696.89	03/07/94 04/01/94	17:03 09:25	13.93 14.18	16.04 16.29	680.85 680.60
0304	596179.38	1494546.74	CL	D	690.08	692.49	03/07/94 04/05/94	17:19 14:15	09.31 9.9	11.72 12.31	680.77 680.18
0305	596494.00	1495083.91	GC	N	709.86	709.61	03/07/94 03/10/94	11:48 11:00	28.95 29.10	28.70 28.85	680.91 680:76
0306	596673.28	1495083.91	GC	D	704.13	703.71	03/07/94 03/10/94	13:23 12:00	23.10 23.21	22.68 22.79	681.03 680.92
0307	596848.92	1495024.17	GW	D	716.16	717.93	03/07/94 03/10/94	11:22 15:30	35.07 -	36.84 -	681.09 -
0308	596647.02	1495223.33	GC	U	750.36	749.51	03/31/94	15:29	DRY	DRY	-
0309	596503.70	1495097.74	SH	D	710.26	710.04	03/07/94	11:50	29.25	29.03	681.01

FORMATION OF COMPLETION CODE:
GP - GRAVEL OR SANDY GRAVEL, POORLY GRADED
SP - SAND OR GRAVELLY SAND, POORLY GRADED
AL - ALLUVIUM
CL - LEAN CLAYS, SANDY CLAYS, OR GRAVELLY CLAYS
GC - CLAYEY GRAVEL OR CLAYEY SANDY GRAVEL
TI - TILL
GW - GRAVEL OR SANDY GRAVEL, WELL GRADED
SH - SHALE

FLOW RELATIONSHIP CODE:
D - DOWN GRADIENT
N - NOT KNOWN
U - UP GRADIENT

STATIC GROUNDWATER LEVELS
SITE: SWP99 GROUNDWATER SWEEPS
REPORT DATE: 11/30/94

LOCATION ID	NORTH COORDINATE (FT)	EAST COORDINATE (FT)	FORMATION OF COMPLETION	FLOW CODE	CASING ELEVATION (FT MSL)	GROUND ELEVATION (FT MSL)	LOG DATE	LOG TIME	DEPTH FROM TOP OF CASING (FT)	DEPTH FROM GROUND (FT)	GROUNDWATER ELEVATION (FT MSL)
0309	596503.70	1495097.74	SH	D	710.26	710.04	03/09/94	12:00	-	-	-
0310	596693.15	1494951.55	LS	D	703.66	703.58	03/07/94 03/11/94	13:20 11:30	22.57 22.72	22.49 22.64	681.09 680.94
0311	597872.58	1494186.02	SW	U	692.98	695.19	03/07/94 03/30/94	16:57 12:00	11.50 11.88	13.71 14.09	681.48 681.10
0312	597747.67	1495031.74	GC	U	731.30	731.04	03/07/94 03/17/94 03/31/94	14:06 10:15 15:44	30.61 30.60 31.57	30.35 30.34 31.31	700.69 700.70 699.73
0313	596850.42	1495021.50	CL	D	716.12	715.80	03/07/94 03/17/94	11:25 14:30	35.06 35.0	34.74 34.68	681.06 681.12
0314	597414.24	1495712.96	CL	U	742.71	742.77	03/07/94 03/16/94	11:51 14:15	42.22 42.4	42.28 42.46	700.49 700.31
0315	597341.80	1495078.77	SM	C	724.03	723.58	03/07/94 03/25/94	13:59 10:00	42.80 43.13	42.35 42.68	681.23 680.90
0316	597110.33	1495384.20	GW	U	725.11	724.61	03/31/94 04/07/94	15:35 12:00	31.22 32.0	30.72 31.50	693.89 693.11
0317	596207.32	1495022.91	GM	D	703.60	703.50	03/07/94 03/16/94	11:03 12:20	22.97 23.0	22.87 22.90	680.63 680.60
0318	598644.24	1497216.04	SH	D	810.53	809.97	03/07/94 03/18/94	13:44 11:35	17.29 16.7	16.73 16.14	793.24 793.83
0319	595512.74	1495147.81	SC	N	701.44	701.44	03/07/94 03/21/94	15:00 12:00	20.85 20.97	20.85 20.97	680.59 680.47
0320	595022.59	1495353.77	CL	N	704.28	704.16	03/07/94 03/22/94	15:21 12:00	23.57 23.77	23.45 23.65	680.71 680.51

FORMATION OF COMPLETION CODE:
SH - SHALE
LS - LIMESTONE
SW - SAND OR GRAVELLY SAND WELL GRADED
GC - CLAYEY GRAVEL OR CLAYEY SANDY GRAVEL
CL - LEAN CLAYS, SANDY CLAYS, OR GRAVELLY CLAYS
SM - SILTY SAND OR SILTY GRAVELLY SAND
GW - GRAVEL OR SANDY GRAVEL, WELL GRADED
GM - SILTY GRAVEL OR SILTY GRAVELLY SAND
SC - CLAYEY SAND OR CLAYEY GRAVELLY SAND

FLOW RELATIONSHIP CODE:
D - DOWN GRADIENT
U - UP GRADIENT
C - CROSS GRADIENT
N - NOT KNOWN

STATIC GROUNDWATER LEVELS
SITE: SWP99 GROUNDWATER SWEEPS
REPORT DATE: 11/30/94

LOCATION ID	NORTH COORDINATE (FT)	EAST COORDINATE (FT)	FORMATION OF COMPLETION	FLOW CODE	CASING ELEVATION (FT MSL)	GROUND ELEVATION (FT MSL)	LOG DATE	LOG TIME	DEPTH FROM TOP OF CASING (FT)	DEPTH FROM GROUND (FT)	GROUNDWATER ELEVATION (FT MSL)
0322	598865.46	1497201.16	SH	O	811.61	809.84	03/07/94 03/15/94	14:26 08:30	33.00 32.90	31.23 31.13	778.61 778.71
0323	597941.22	1495591.01	SH	O	785.65	786.12	03/08/94	07:48	16.93	17.40	768.72
0324	597926.59	1495701.00	SH	O	784.69	784.87	03/08/94 03/22/94	07:43 08:10	14.08 14.0	14.26 14.18	770.61 770.69
0325	597270.67	1496570.83	SH	O	798.89	796.96	03/07/94 03/24/94	14:57 09:15	22.51 22.4	20.58 20.47	776.38 776.49
0326	597365.17	1497091.18	SH	O	877.58	875.52	03/07/94 03/18/94	13:52 09:20	17.00 15.5	14.94 13.44	860.58 862.08
0327	601687.99	1495166.93	GP	U	698.32	698.69	03/08/94 03/30/94	10:21 08:30	14.23 14.7	14.60 15.07	684.09 683.62
0328	601695.63	1495166.40	SP	U	698.57	698.65	03/07/94 03/31/94	16:37 08:46	14.44 14.9	14.52 14.98	684.13 683.67
0329	601231.83	1496413.66	GM	U	707.51	707.95	03/07/94 04/04/94	16:28 08:20	19.36 19.4	19.80 19.84	688.15 688.11
0330	601230.60	1496422.12	SP	U	707.43	707.97	03/08/94 04/06/94	10:04 08:30	23.06 23.6	23.60 24.14	684.37 683.83
0332	599505.71	1497447.41	BR	O	793.88	794.32	03/08/94 03/15/94	09:48 13:35	17.14 16.5	17.58 16.94	776.74 777.38
0333	600547.19	1494851.90	GP	D	699.55	700.34	03/08/94 03/31/94	10:10 13:08	16.06 16.4	16.85 17.19	683.49 683.15
0334	600540.81	1494850.09	GP	D	700.27	700.50	03/07/94 03/29/94	16:43 13:50	16.55 16.8	16.78 17.03	683.72 683.47
0335	598844.46	1494824.78	BR	D	705.43	705.92	03/08/94 03/30/94	09:17 12:40	22.04 22.43	22.53 22.92	683.39 683.00
0336	600380.42	1496202.19	GM	U	710.03	710.23	03/08/94	09:57	25.89	26.09	684.14

FORMATION OF COMPLETION CODE:
SH - SHALE
GP - GRAVEL OR SANDY GRAVEL, POORLY GRADED
SP - SAND OR GRAVELLY SAND, POORLY GRADED
GM - SILTY GRAVEL OR SILTY GRAVELLY SAND
BR - UNDIFFERENTIATED BEDROCK

FLOW RELATIONSHIP CODE:
O - ON SITE
U - UP GRADIENT
D - DOWN GRADIENT

STATIC GROUNDWATER LEVELS
SITE: SWP99 GROUNDWATER SWEEPS
REPORT DATE: 11/30/94

LOCATION ID	NORTH COORDINATE (FT)	EAST COORDINATE (FT)	FORMATION OF COMPLETION	FLOW CODE	CASING ELEVATION (FT MSL)	GROUND ELEVATION (FT MSL)	LOG DATE	LOG TIME	DEPTH FROM TOP OF CASING (FT)	DEPTH FROM GROUND (FT)	GROUNDWATER ELEVATION (FT MSL)
0336	600380.42	1496202.19	GM	U	710.03	710.23	03/30/94	10:45	26.3	26.50	683.73
0337	600372.79	1496201.85	GM	U	709.74	710.10	03/08/94 03/29/94	10:00 09:05	25.57 26.0	25.93 26.36	684.17 683.74
0341	597650.38	1494728.37	BR	D	705.99	706.40	03/08/94 03/30/94	09:49 12:00	23.02 23.45	23.43 23.86	682.97 682.54
0342	596168.63	1494550.20	SP	D	692.35	692.49	03/07/94 04/07/94	15:17 08:24	09.72 10.3	9.86 10.44	682.63 682.05
0343	597140.04	1494485.25	SP	D	696.57	696.70	03/07/94 04/05/94	15:31 12:00	13.69 14.31	13.82 14.44	682.88 682.26
0344	595521.96	1495145.72	SP	D	702.98	701.38	03/07/94 03/23/94	15:02 17:30	20.50 20.73	18.90 19.13	682.48 682.25
0345	597625.59	1496496.46	GM	U	756.09	753.80	03/07/94 03/11/94	13:26 13:40	28.98 28.90	26.69 26.61	727.11 727.19
0346	597626.90	1496107.04	GM	O	744.69	745.31	03/07/94 03/14/94	14:47 10:00	18.03 17.8	18.65 18.42	726.66 726.89
0347	597375.07	1495092.49	SW	N	726.99	724.89	03/07/94 03/24/94	13:57 09:00	44.00 44.4	41.90 42.30	682.99 682.59
0351	596433.35	1497050.28	LS	O	888.28	886.89	03/07/94 03/15/94	11:04 14:00	13.74 12.93	12.35 11.54	874.54 875.35
0353	596241.80	1495668.78	ML	U	747.07	744.95	03/07/94 04/12/94	11:12 14:42	2.00 0.7	-0.12 -1.42	745.07 746.37
0354	595602.10	1496322.15	ST	O	771.01	767.95	03/07/94 03/23/94	15:09 12:00	16.68 16.37	13.62 13.31	754.33 754.64
0356	595011.45	1495353.58	SP	O	706.24	704.07	03/07/94 03/22/94	15:19 12:00	23.83 24.0	21.66 21.83	682.41 682.24

FORMATION OF COMPLETION CODE:
GM - SILTY GRAVEL OR SILTY GRAVELLY SAND
BR - UNDIFFERENTIATED BEDROCK
SP - SAND OR GRAVELLY SAND, POORLY GRADED
SW - SAND OR GRAVELLY SAND WELL GRADED
LS - LIMESTONE
ML - SILTS, SANDY OR GRAVELLY SILTS, DIATOMACEOUS SOILS
ST - SILTSTONE

FLOW RELATIONSHIP CODE:
U - UP GRADIENT
D - DOWN GRADIENT
O - ON SITE
N - NOT KNOWN

STATIC GROUNDWATER LEVELS
SITE: SWP99 GROUNDWATER SWEEPS
REPORT DATE: 11/30/94

LOCATION ID	NORTH COORDINATE (FT)	EAST COORDINATE (FT)	FORMATION OF COMPLETION	FLOW CODE	CASING ELEVATION (FT MSL)	GROUND ELEVATION (FT MSL)	LOG DATE	LOG TIME	DEPTH FROM TOP OF CASING (FT)	DEPTH FROM GROUND (FT)	GROUNDWATER ELEVATION (FT MSL)
0370	596829.64	1495100.73	AL	O	720.28	720.28	03/07/94 03/08/94	13:33 12:00	37.34 37.4	37.34 37.40	682.94 682.88
0372	596693.75	1495331.22	AL	D	-	756.46	03/07/94 03/17/94	11:18 08:45	42.39 42.77	- -	- -
0373	596690.56	1495128.52	AL	O	740.50	738.77	03/07/94 03/16/94	11:24 16:30	57.73 57.79	56.00 56.06	682.77 682.71
0375	597074.08	1494980.33	AL	O	707.25	705.20	03/07/94 03/14/94	13:27 09:45	24.24 24.40	22.19 22.35	683.01 682.85
0376	596696.75	1494760.63	AL	O	701.89	700.19	03/08/94 03/28/94	08:58 13:10	19.12 18.2	17.42 16.50	682.77 683.69
0377	596522.25	1494774.87	AL	O	701.02	699.40	03/08/94 03/28/94	09:01 14:15	18.39 18.75	16.77 17.13	682.63 682.27
0378	596376.63	1494789.86	AL	O	701.61	701.61	03/08/94 03/28/94	09:05 09:40	19.00 19.38	19.00 19.38	682.61 682.23
0379	597179.70	1495153.92	AL	O	718.06	716.38	03/07/94 03/15/94	13:37 16:15	35.05 35.10	33.37 33.42	683.01 682.96
0380	597109.65	1495394.52	AL	O	727.10	725.02	03/07/94 03/24/94	13:48 14:50	44.15 44.45	42.07 42.37	682.95 682.65
0381	596982.13	1495399.69	AL	O	727.85	725.26	03/07/94 03/15/94 03/31/94	13:42 09:20 15:38	29.16 29.22 31.94	26.57 26.63 29.35	698.69 698.63 695.91
0382	596601.67	1495444.40	AL	O	740.50	738.25	03/17/94	15:00	7.05	4.80	733.45
0383	597138.34	1494477.15	GM	D	696.20	696.39	03/07/94 04/01/94	17:04 10:55	13.20 13.73	13.39 13.92	683.00 682.47
0385	597628.33	1494975.13	GP	D	724.88	725.61	03/08/94	08:42	DRY	DRY	-
0386	597345.22	1494953.59	SP	O	726.57	726.82	03/08/94 03/23/94	08:36 09:12	43.62 44.0	43.87 44.25	682.95 682.57

FORMATION OF COMPLETION CODE:
AL - ALLUVIUM
GM - SILTY GRAVEL OR SILTY GRAVELLY SAND
GP - GRAVEL OR SANDY GRAVEL, POORLY GRADED
SP - SAND OR GRAVELLY SAND, POORLY GRADED

FLOW RELATIONSHIP CODE:
O - ON SITE
D - DOWN GRADIENT

STATIC GROUNDWATER LEVELS
SITE: SWP99 GROUNDWATER SWEEPS
REPORT DATE: 11/30/94

LOCATION ID	NORTH COORDINATE (FT)	EAST COORDINATE (FT)	FORMATION OF COMPLETION	FLOW CODE	CASING ELEVATION (FT MSL)	GROUND ELEVATION (FT MSL)	LOG DATE	LOG TIME	DEPTH FROM TOP OF CASING (FT)	DEPTH FROM GROUND (FT)	GROUNDWATER ELEVATION (FT MSL)
0387	597210.50	1494897.38	SP	O	722.70	722.82	03/08/94	10:07	39.73	39.85	682.97
							04/05/94	08:30	43.5	43.62	679.20
0388	596793.37	1494747.75	SP	D	702.88	700.35	03/28/94	14:55	18.1	15.57	684.78
0389	597337.46	1494949.43	GM	O	726.44	726.66	03/08/94	10:10	43.52	43.74	682.92
							03/21/94	12:20	42.80	43.02	683.64
0393	596694.53	1495024.89	AL	O	708.65	706.79	03/07/94	11:58	25.81	23.95	682.84
							03/14/94	08:10	25.96	24.10	682.69
0394	596489.48	1495003.44	AL	O	705.08	703.38	03/07/94	11:08	22.36	20.66	682.72
							03/07/94	11:43	22.45	20.75	682.63
							03/11/94	09:00	22.63	20.93	682.45
0397	596702.12	1495024.40	TI	O	709.27	709.27	03/07/94	12:03	26.47	26.47	682.80
							03/11/94	15:45	26.63	26.63	682.64
P027	596249.25	1495078.43	SP	O	705.72	703.39	03/07/94	15:52	23.32	20.99	682.40
							03/21/94	08:40	23.83	21.50	681.89

FORMATION OF COMPLETION CODE:
SP - SAND OR GRAVELLY SAND, POORLY GRADED
GM - SILTY GRAVEL OR SILTY GRAVELLY SAND
AL - ALLUVIUM
TI - TILL

FLOW RELATIONSHIP CODE:
O - ON SITE
D - DOWN GRADIENT

DATA FILE: K:\DART\SWP\SWP99\GWL10000.DAT

FIELDS DISPLAYED WITH A DASH INDICATE THE DATA IS UNAVAILABLE

A.2. Summary of the Collection of Field Measurements

WESTON developed a sampling protocol for each location, monitoring well, production well, and seep in accordance with the SOPs in the Quality Assurance Project Plan (QAPP) (DOE 1993). This sampling protocol involved the collection of specific field measurements that included SOP 3. 1, Water Level Measurements, and SOP 2.2, Field Measurements on Ground and Surface Water Samples. Data Supplement A presents a table of water level measurements for each sampling location; Data Supplement B presents field parameter measurements. The following section summarizes the procedures used during the fall and spring sampling events.

The field team collected field measurements of groundwater chemistry during the evacuation of groundwater to determine if the sample was a representative groundwater sample. The field measurements, collected in accordance with SOP 2.2, included pH, temperature, electrical conductivity, alkalinity, dissolved oxygen, and oxidationreduction potential. In accordance with SOP 2.2, the field team used the following procedures:

1. Collected a water level measurement prior to and after purging of groundwater, as previously discussed.

2. Calibrated the pH probe by first immersing the probe in a calibration solution of 7.0, adjusting the standardization knob to achieve a reading of 7.0, and immersing the probe in calibration solutions of 4.0 and 10.0.

3. Calibrated the electrical conductivity probe by using three KCl solutions of known concentrations prior to the start of each field sampling event.

4. Calibrated a digital titration kit (Hach kit) by using a solution of known pH from which the sample titration was conducted and the alkalinity calculated.

5. Calibrated the dissolved oxygen probe by following the manufacturer's instructions.

6. Calibrated the oxidation-reduction probe by using a standardized solution.

7. Recorded each calibration on the groundwater quality sampling forms.

8. Either submersed the probes in a flow-through bath or placed them into a container filled with groundwater. Recorded the measurements every 0.5 well volume on the groundwater quality sampling forms.

9. Documented the calibration information and the field measurements on the groundwater quality sampling forms (see Data Supplement D).

10. Decontaminated the field measuring instruments by following the procedures in SOP 1.6, General Equipment Decontamination.

B. Introduction

The EG&G Mound Operable Unit (OU) 9, Site-Wide Quality Assurance Project Plan (QAPP), Revision 3, June 1993 (DOE 1993), describes both the administrative and quality assurance programs to be implemented during the OU 9 investigations. The OU 9 QAPP, implemented in accordance with the United States Environmental Protection Agency (EPA) QAMS-005/80 (EPA 1983), describes the procedures to obtain data of a specified quality during the OU 9 investigations. The OU 9 program objectives that have defined the level of quality for the data to be generated are

1. Assess the nature and extent of contamination.

2. Identify and evaluate the potential threats to human health and the environment.

3. Evaluate remedial action alternatives to reduce these threats to acceptable levels.

The OU 9 QAPP defines two aspects of the quality assurance program for the OU 9 groundwater sweeps investigation: quality control and quality assessment. Quality control is the system of procedures performed to control the quality of the product, usually with defined standards of performance for those procedures. Quality control procedures for this program include control checks for field and laboratory measurements with specified acceptance criteria and the corrective actions applied for noncompliance with these checks. Appendix B.1 describes the impact of various changes to or deviations from the QAPP that occurred during the groundwater investigation.

Quality assessment is a program of activities used to evaluate the performance of implemented quality control procedures and the quality of the product against established quality objectives. If the quality objectives are not met and the program has been followed, then the program may require modification. When variations from a program occur, the impact of the variations must be assessed. For example, if the OU 9 QAPP required the laboratory to add 2-benzyl-4-chlorophenol to the semivolatile matrix spike solution and the laboratory failed to implement this requirement, the impact of this noncompliance on the usability of the data would have to be evaluated before comparing the data to an action limit. Laboratory data affected by quality control deficiencies are qualified during data validation. Appendices B.2 and B.3 summarize the data qualifications and impacts on data usability for laboratory data generated from the fall sampling event. Appendices B.4 and B.5 summarize the data qualifications and impacts on data usability for laboratory data generated from the spring sampling event.

B.1. Quality Assurance Program

The following subsections discuss any deviations to applicable sections of the OU 9 QAPP during the groundwater sweeps investigation. The subsections are organized in the same order and numbered similarly to the sections in the QAPP. For the ease of the reader, the tables in each section of Appendix B are placed at the end of the text.

B.1.1. Introduction

There were no reportable events related to this section of the QAPP.

B.1.2. Project Organization and Responsibility

During the OU 9 groundwater investigation, there were two personnel changes to the list of original assignments presented in Section 2.1 of the QAPP (Revision 3). The EG&G OU 9 Environmental Restoration (ER) Program Manager, Ms. Katherine Koehler, was replaced by Mr. James Rigano, and the Roy F. Weston, Inc. (WESTON) Quality Assurance Officer, Ms. Martha Mitchell, was replaced by Mr. Jake Alexander. WESTON believes that these key personnel changes did not significantly affect the quality of the data produced during the groundwater investigation.

B.1.3. Quality Assurance Objectives in Terms of Accuracy, Precision, Completeness, Representativeness, and Comparability

B.1.3.1. Accuracy

Accuracy of measurement data is defined as the degree of comparability of a measurement, x, with an accepted reference or true value, T. It is the measure of how closely the analysis represents the true value. The accuracy is usually expressed as (x/T) x 100. For the groundwater investigation, accuracy was measured through the evaluation of performance evaluation (PE) samples, laboratory control samples (blank spikes), surrogates, calibration checks, and matrix spikes.

B.1.3.1.1. PE Samples

During the groundwater sweeps investigation, WESTON submitted two PE water samples to the WESTON Analytics Division. ERA Associates of Aurora, Colorado, prepared these samples as double-blind samples. ERA Associates labeled the double-blind PE samples as normal samples, not PE samples. One PE sample was submitted during the fall sampling event and one PE sample was submitted during the spring sampling event.

Fall PE Sample

In general, the PE sample results reported by the laboratory were acceptable, except for metal results that were below the acceptance limit. Table B.1.1 summarizes the results and the manufacturer-recommended acceptance limits by analyte. WESTON asked the laboratory to investigate all results that were

outside the acceptance criteria and take an appropriate corrective action. For the fall PE sample, the laboratory implemented corrective actions as described briefly below:

1. Selenium and antimony values outside the acceptance criteria were attributed to a laboratory manual calculation error. WESTON Analytics reviewed all of the OU 9 metals data packages to identify whether the error was recurrent and corrected the data as necessary.

2. Thallium and lead results, reported below the acceptance criteria, were attributed to a possible dilution error. All of the metals data packages were reviewed and the diluted vs. undiluted sample results for these two metals were evaluated. When significant differences were identified, the laboratory noted the discrepancy in the narrative and reported the undiluted value.

3. Potassium was present in the PE sample at approximately one-tenth of the required quantitation limit. Since potassium was so far below the quantitation limit, the laboratory's performance on potassium was not evaluated.

4. Seven inductively coupled plasma (ICP) analytes (beryllium, cadmium, cobalt, manganese, sodium, vanadium, and zinc) were below the minimum acceptance limit (77 to 82 percent of the certified value). A cause for the low results could not be determined during the laboratory's investigation of the fall PE results. The slightly low results during the fall response were attributed to a non-systematic variance.

In addition to these remedial corrective actions, the laboratory implemented several corrective actions incorporated in a checklist to prevent recurrence of these problems.

Spring PE Sample
The laboratory's performance on the second PE sample in the spring indicated problems with metals. The two performance data points with poor results for metals suggested a systematic metals analysis problem, and the laboratory performed extensive matrix testing in response to the deficiency. The laboratory determined that the PE sample matrix was significantly more acidic than samples submitted from the field. The highly acidic PE sample matrix, when concentrated four-fold per the QAPP, interfered with ICP analysis.

EG&G PE Sample
EG&G Mound submitted a third set of PE samples blind to the laboratory for analysis to verify the laboratory's ability to reliably quantitate metals and confirm the laboratory's conclusion regarding the cause of the low metal recoveries. The third set of PE samples was submitted in ampules instead of standard water sample containers. Because the laboratory quality control samples associated with the first two PE results were in control, the question of whether the quality control samples were accurately predicting performance became an issue. If the

laboratory quality control samples were accurately predicting system performance, then the PE results would have been accurate.

Because the PE results were not accurate, either the PE samples or the laboratory standards or calibration procedures were defective. By having the laboratory perform the analysis per the manufacturer's procedures, EG&G was able to compare the laboratory quality control sample results and the PE results and eliminate the potential error, an overly acidic matrix. An overly acidic PE sample matrix was identified through the laboratory's extensive performance investigation of the previous two PE results as the root cause of reported low results.

Table B.1.2 summarizes the metals results for the third set of PE samples. Considering the corrective actions performed by the laboratory, and attributing the low ICP metals recoveries to the PE sample matrix, the PE samples indicate that the data are usable.

B.1.3.1.2. Matrix Spike Trends

The matrix spike data are used to evaluate whether a sample matrix may interfere with the accurate and precise quantitation of selected target analytes. If the matrix spike is determined to have poor accuracy (evaluated as a percent recovery) or poor precision (evaluated as the relative percent difference between the spike and the spike duplicate), the sample results are qualified. If the selected sample's matrix is considered similar to other samples, then the other samples are often qualified similarly. In the case of the groundwater sweeps investigation, collecting the water samples from different locations may have resulted in dissimilar sample matrices. Because of the possible dissimilar matrices, poor matrix spike performance was not attributed to all the water samples in a sample batch. WESTON, however, reviewed the matrix spike data for poor performance trends.

A subset (20 percent) of the water samples collected for analysis was submitted with an additional request to the laboratory to perform a matrix spike. The data set showed no unexpected trends. The standard deviations for the fall sample matrix spike recoveries were greater than 30 percent for aluminum (total), antimony (total), iron (soluble and dissolved), manganese (soluble), potassium (total), sulfate, and nitrate/nitrite. The standard deviations for the spring sample matrix spike recoveries were greater than 30 percent for aluminum (total), bismuth (total), cadmium (total), chromium (total), cyanide (total), iron (total), lead (total), lithium (total), selenium (total), and silver (total). In many cases, a single matrix spike pair severely impacted the standard deviations. For example, one nitrate/nitrite matrix spike pair with a standard deviation of 41.3 had a percent recovery of 0. If the 0 percent recovery were excluded from the sample set, the standard deviation would be reduced to 22.0. Because these analytes are naturally abundant, WESTON attributed the variation resulting in the high standard deviations to the sample matrices.

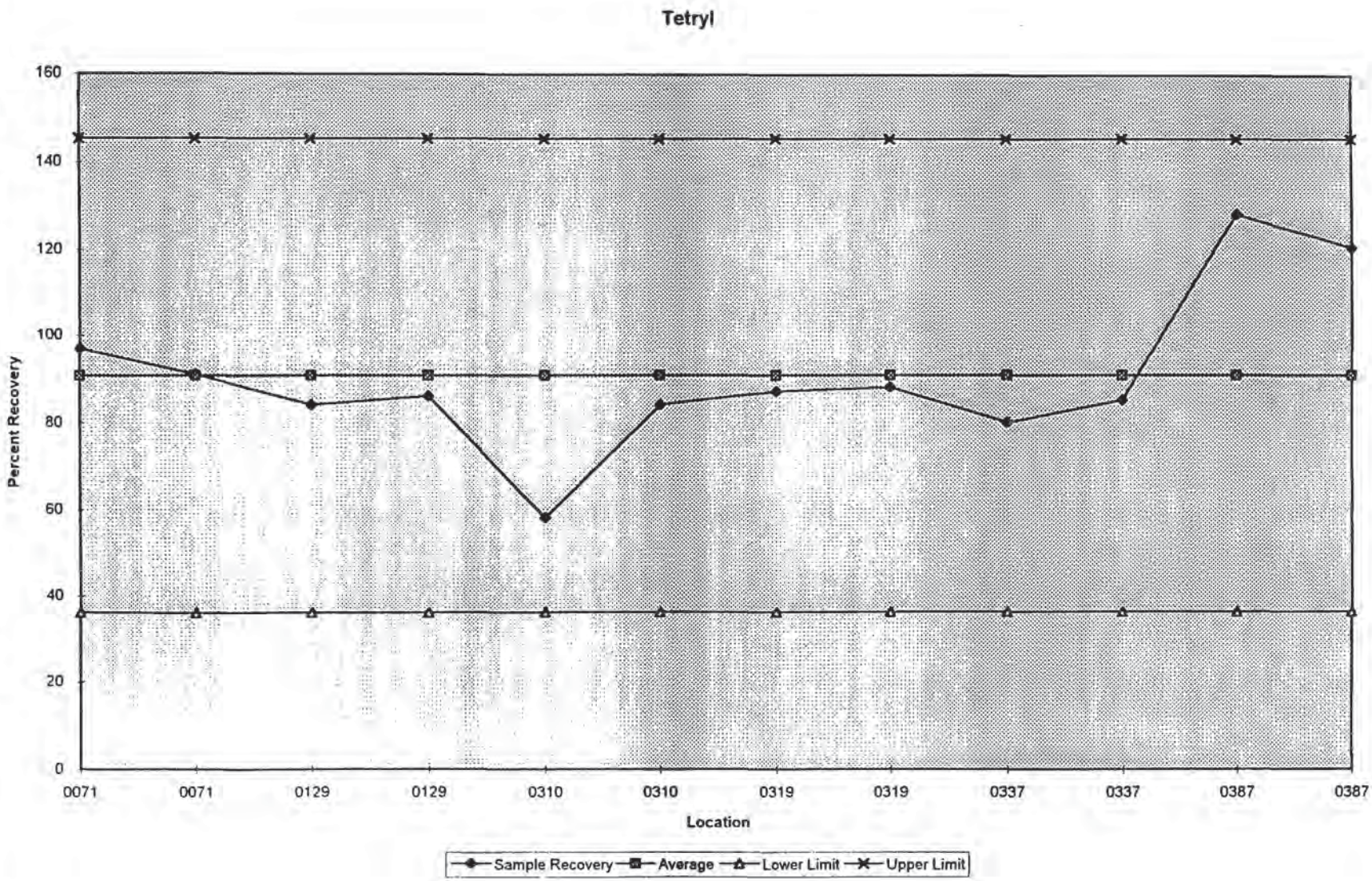

Figure B.1. Tetryl matrix spike control chart

Table B.1.3, Summary of Matrix Spike Performance (Fall 1993), and Table B.1.4, Summary of Matrix Spike Performance (Spring 1994), summarize the average matrix spike recoveries reported by the laboratory for the fall and spring sample data and the standard deviations for the spike recoveries. Figure B.1 is an example chart for tetryl. Large standard deviations indicate significantly variable spike recoveries.

High standard deviations were associated primarily with naturally occurring metals and anions. In the tables summarizing the standard deviations, some data points were selectively eliminated, as indicated in the footnotes. The eliminated data points represent isolated performance outliers and are not representative of the overall program. The elimination of the data points enabled the average and standard deviations for the majority of the spiked samples to be evaluated and used to evaluate the program performance.

The following observations describe the reported matrix spike data:

1. The spring matrix spike results generally had higher percent recoveries and smaller standard deviations than the fall samples.

2. The metals matrix spike performances were the worst of the analyte groups. To a large extent, the problems with the metals were usually the result of a few outlying points. If one eliminates these points from consideration, the matrix spike performance is greatly improved, as indicated by changes in the standard deviation.

3. The total metals concentrations typically were associated with the outlying matrix spike recoveries. This trend is expected since total metals analysis may include sediments within the water samples. Because sediments decrease the ability of the laboratory to obtain a homogeneous sample and the small amounts of sediment may contain relatively high amounts of metals and anions, it is expected that greater matrix spike recovery variation will be reported on the samples submitted for total analyses.

4. PETN matrix spike recovery in the fall samples was much poorer than in the spring samples.

5. Thallium recovery was generally poorer than the other metals. The analytical spike recovery results also show a poor recovery. Thallium is often a troublesome target for laboratories and the performance is not unexpected. The matrix spike recovery was generally better than the analytical spike recoveries.

The data show large standard deviations for naturally occurring metals, such as iron, aluminum, and manganese, or poor performing analyses, such as selenium, and thallium.

B.1.3.2. Precision

Precision is a measure of mutual agreement among individual measurements of the same property, usually under similarly prescribed conditions. It is a measure of how closely repeated analyses are to each other. Precision is expressed as the standard deviation among a group of measurements or as a relative percent difference between two measurements. For the groundwater sweeps investigation, precision was evaluated based on laboratory duplicates, field duplicates, and matrix spike pairs, and on relative standard deviations from calibration curves. Appendices B.2 and B.4 summarize the precision results for this investigation. The groundwater sweeps investigation included the QAPP-specified frequency of laboratory duplicates, field duplicates, and matrix spike pairs (see Table B.1.5).

B.1.3.3. Completeness

Completeness is a measure of the amount of data obtained from a measurement system that achieves the project goals, compared to the amount expected under normal conditions. Completeness is affected by unexpected conditions that may occur during the data collection process. For example, occurrences that reduce the amount of data collected include the following: a dry monitoring well, an instrument breakdown, or a loss of a sample extract. For the groundwater sweeps investigation, WESTON calculated completeness for sample collection, field measurements, and laboratory analyses according to the procedure outlined in Table III.4 in the OU 9 QAPP.

The laboratory analyzed and reported all the submitted samples. The total percent completeness was 97 percent for the fall analytical effort and 99 percent for the spring effort. Tables B.1.6 and B.1.7 summarize the completeness percentages by analysis and selected analytes for the fall and spring, respectively. Specific analytes that were repeatedly unusable or unreported by the laboratory are shown in the table as an indented entry under the appropriate analysis. Specifically, the laboratory did not report bis(2-chloroethyl)vinyl ether (0 percent complete), whereas the laboratory reported the volatiles data for Method 8021 at 100 percent complete. The volatile organic analyte, bis(2-chloroethyl)vinyl ether, deteriorated because of the required acid preservation and should be eliminated from the target list. In addition to the specific analytes, the fall analyses by Method 8021 fell short of the completeness goal of 95 percent by just 3 percent. Eight sample results for the fall investigation were determined unusable due to the associated continuing calibration checks. However, 100 percent of the spring volatiles data are usable, minimizing the impact of the unusable fall data. The percent completeness for volatiles for both fall and spring volatiles is 99 percent.

During the fall and spring field sampling efforts, WESTON did not collect 6 percent and 4 percent, respectively, of the planned samples because the wells and seeps were dry. Additionally, 5 percent of the fall and 2 percent of the spring

samples collected were submitted for a reduced analyte list because of limited sample volume. There were no unplanned samples collected during the fall sampling effort. EG&G Mound requested WESTON to collect four unplanned samples during the spring sampling. Samples P015, for volatile organic compound (VOC) analysis, and P027, for the complete analyte list, were collected in the spring sampling. Two samples, MND01-0374-001 and MND20-0392-0001, were collected in the fall of 1994. These samples are discussed in the spring data assessment (Appendix B.4) and the summary of data qualification (Appendix B.5). Table B.1.5 summarizes the planned and unplanned samples collected during the fall 1993 and spring 1994 investigations, excluding the two samples collected in fall 1994. WESTON collected all field quality control samples at the frequency specified in Table III.2 of the OU 9 QAPP.

Field measurements collected from wells and seeps during the fall sampling effort included water level measurements (wells only), pH, temperature, conductivity, dissolved oxygen, oxidation-reduction (redox), and alkalinity, as discussed in Section 2 and in Appendix A.2. Based on a total of 94 wells, 96 percent of the water level measurements, 84 percent of the temperature measurements, 86 percent of the conductivity, and 99 percent of the pH and alkalinity measurements were completed. The corrective actions initiated during the project summarize the causes for the incomplete field measurements. The corrective actions are discussed in Section B.1.13. The incompleteness from these field measurements does not significantly affect the quality of the fall event.

Field measurements were also collected from wells and seeps during the spring sampling effort, as discussed in Section 2 and in Appendix A.2. Based on a total of 94 monitor wells, 96 percent of the water level measurements were completed. Based on a total of 101 planned sampling locations (including production wells, seeps, and monitor wells), WESTON completed 100 percent of the temperature, pH, alkalinity, conductivity, dissolved oxygen, and reduction/oxidation measurements. Section B.1.13 summarizes the corrective actions taken as a result of incomplete field measurements. The incompleteness of these field measurements does not significantly affect the quality of the spring event.

B.1.3.4. Representativeness

Representativeness expresses the degree to which data accurately and precisely represent characteristics of a population, parameter, variation, sampling point, process condition, or environmental condition. Data representativeness for this project is achieved by implementing approved sampling procedures and analytical methods that will generate data representative of site conditions. Sampling and analysis were performed by the procedures described in the OU 9 QAPP with only minor deviations as noted in Table B.1.8, Plan Change Notification Summaries; Table B.1.9, Investigation-Specific Plan Change Notice Summaries; and Table B.1.10, Corrective Action Report Summaries. The tables summarize the impact of the program deviations.

B.1.3.5. Comparability

Comparability expresses the confidence with which one data set can be compared with another. Comparability of data sets generated from this investigation is obtained through implementation of specific protocols for sampling and analysis of samples, by the use of traceable reference materials for laboratory standards, by expressing results in comparable concentration units, and by participation of the laboratories in external PE programs. These protocols are defined in the OU 9 QAPP.

Several deviations to the OU 9 QAPP occurred during the analysis of the analytes and were recorded on either Planned Change Notifications or Corrective Action Reports. WESTON considers that none of the deviations affected the usability or future comparability of the data. Future data users should be aware, however, of the change in reporting limits of plutonium, uranium, and thorium from 1 pCi/L to 0.01 pCi/L in the fall and spring samples, respectively. Tables B.1.5 through B.1.8 summarize the deviations and any potential impacts.

B.1.4. Sampling Procedures

During the fall and spring sampling events, the field team followed the sampling procedures as specified in the OU 9 QAPP. WESTON quality assurance personnel observed and audited field sampling collection, handling, and shipping procedures for data quality assurance. Tables B.1.6 through B.1.8 summarize the deviations that occurred during specific sampling procedures.

B.1.5. Sample Chain-of-Custody Procedures

A few deviations from the sample custody procedures occurred during the program (e.g., entry errors on the chain-of-custody). WESTON, however, identified, documented, and corrected these durations so that they had no impact on the sample custody (see Table B.1.10, Corrective Action Report Summaries). WESTON conducted laboratory project assessments (i.e., site visits) to verify the implementation of the appropriate custody procedures in the laboratory.

B.1.6. Analytical Procedures

In general, the laboratory conformed systematically to the analytical procedures as prescribed in the OU 9 QAPP. However, laboratory nonconformance reports, project assessments, and the validation of the laboratory data indicated systematic exceptions. The deviations noted during the fall sampling event included

1. Total organic carbon (TOC) measurements not being made in quadruplicate per the OU 9 QAPP.
2. Chloride determinations being made from a calibration curve with a correlation coefficient less than 0.996.
3. Method 8021 confirmation performed by gas chromatography/mass spectrometry (GC/MS) instead of GC.
4. Some samples submitted for analysis by Method 8030 actually analyzed by GC/MS instead of GC.

5. Pesticide/polychlorinated biphenyl (PCB) analysis performed with a slight modification to the EPA Contract Laboratory Program (CLP) 3/90 method.

The analysis of the spring data showed no additional variations. Because WESTON identified the CLP pesticide deviation as a plan change during the spring sampling event, a corrective action was not required.

All of the cited method variations, except for the chloride calibration curve, had little impact on the data comparability or usability. Corrective action reports documented the total organic carbon, chloride, Method 8021, Method 8030, and pesticide/PCB variances. The validators identified the chloride calibration curve deficiency during data validation, and no corrective action report was generated. Appendix B.2 describes all the variances, except the pesticide/PCB variance, and their impact on the data. The pesticide/PCB variance was not applicable to Appendix B.2, since there were no variances for the fall event.

Additional method variations occurred during both the fall and spring sampling events; these changes (described in Table B.1.9, Investigation-Specific Plan Change Notice Summaries, and in Table B.1.8, Plan Change Notification Summaries) did not affect the usability of the data. For example, during the spring sampling event, the quantitation limit for plutonium-238 was lowered from 1.0 pCi/L to 0.01 pCi/L by ISPCN-017. For the purposes of this report, the contract-required detection limit (CRDL) and contract-required quantitation limit (CRQL) are used interchangeably to reference the QAPP-specified quantitation limits, to which the laboratory was contractually held.

B.1.7. Calibration Procedures

In general, the laboratories used the laboratory calibration procedures as required by the OU 9 QAPP. Appendices B.2 and B.4 describe the specific deviations from the calibration procedures for each analysis.

B.1.8. Internal Quality Control Checks (QCC)

There were no changes made to, nor deviations from, this section of the QAPP.

B.1.9. Data Reduction, Validation, and Reporting

In general, the laboratory correctly calculated results and organized the hard copy data reports. The laboratory failed on numerous occasions to provide an electronic deliverable and complete hard copy of the data with the correct values, as specified in the OU 9 QAPP. Both errors in the electronic-deliverable and hard-copy data were submitted to the laboratory for corrections. The laboratory corrected all data deliverables. Data validation was performed according to Appendix H of Revision 3 of the OU 9 QAPP.

B.1.10. Performance and System Audits

Table B.1.11 summarizes the performance and system audits conducted in support of the groundwater investigation. Prior to initiating subcontracts or agreements with the laboratories, a prequalification audit was performed at the laboratory facilities. When the laboratory audit findings and observations had been satisfactorily addressed, the laboratories were approved for participation in the EG&G Mound Program. During the investigations, four laboratories were used for sample analysis: WESTON Analytics, IT Analytical Services, Enseco - RMAL (Quanterra - Denver), and Bowser Morner. WESTON performed project assessments at three of the laboratories during the investigations. Because Bowser Morner was contracted to perform only nitrite analysis, a project assessment was determined to be unnecessary. In addition to the laboratory assessments, the WESTON Quality Assurance Officer conducted an audit of the field operations during each of the sampling events. WESTON also performed an audit of QuantaLex, the data validation subcontractor. The dates of audits are shown in the table.

Although several corrective actions were required as a result of these assessments, there was no significant impact on data usability.

B.1.11. Preventive Maintenance

During the prequalification assessment and subsequent project assessments of the laboratories, WESTON determined that the preventive maintenance program was acceptable.

B.1.12. Routine Procedures for Assessing Data Quality

WESTON assessed data quality based on the guidelines provided in Section 9.2 of Revision 3 of the OU 9 QAPP. Appendices B.2 and B.4 summarize the conclusions of the data assessment.

B.1.13. Corrective Actions

Table B.1.10 summarizes corrective actions required as a result of noncompliance to the OU 9 QAPP or the WESTON sampling and analysis plan. WESTON evaluated these deficiencies and determined that they had minimal impact on the data quality for the groundwater sweeps investigation. Appendices B.2 and B.4 of this report address laboratory-generated noncompliances and corrective actions.

B.1.14. Quality Assurance Reports to Management

WESTON provided quality assurance reports to EG&G Mound Applied Technologies' management in the form of weekly status reports, laboratory and field assessment reports, corrective action reports, and change notices to the OU 9 QAPP and Work Plan, as required in Revision 3 of the OU 9 QAPP. Appendices B.2 and B.4 provide a data quality assessment, which is also a specified element of a quality assurance report to management.

Table B.1.1. PE Sample Summary Result

Analytes	Fall Sampling Results			Spring Sampling Results		
	Certified Value µg/L	Acceptance Range µg/L	Reported Value µg/L	Certified Value µg/L	Acceptance Range µg/L	Reported Value µg/L
Aluminum	500	410 - 590	465	184	151 - 217	188
Antimony	250	188 - 295	44.2	62.5	47 - 74	52
Arsenic	125	94 - 148	138	232	174 - 274	234
Barium	250	205 - 295	230	419	344 - 494	348
Beryllium	103	84 - 122	78.9	176	144 - 208	134
Cadmium	50	41 - 59	38.5	206	169 - 243	165
Chromium	201	165 - 237	167	393	322 - 464	307
Cobalt	206	169 - 243	166	523	429 - 617	405
Copper	575	472 - 679	480	181	148 - 214	144
Iron	550	451 - 649	466	638	523 - 753	525
Lead	125	103 - 148	92	308	253 - 363	328
Manganese	510	418 - 602	409	172	141 - 203	128
Mercury	10.7	5.4 - 14	8.9	6.26	4.7 - 7.8	5.2
Molybdenum	101	83 - 119	86.7	205	168 - 242	161
Nickel	350	287 - 413	288	513	421 - 605	402
Selenium	104	78 - 123	183	244	183 - 288	232
Silver	70	57 - 83	64.1	194	159 - 229	151
Thallium	50	38 - 59	24	69	52 -119	66.2
Vanadium	151	124 - 178	121	288	236 - 340	224
Zinc	520	426 - 614	405	119	98 - 240	107

Table B.1.1. (page 2 of 5)

Analytes	Fall Sampling Results			Spring Sampling Results		
	Certified Value µg/L	Acceptance Range µg/L	Reported Value µg/L	Certified Value µg/L	Acceptance Range µg/L	Reported Value µg/L
Acenaphthylene	86.6	29 - 126	58	41.3	13.6 - 59.9	16
Anthracene	80.5	22 - 107	46	24.8	6.7 - 33	16
Benzo(a)anthracene	47.5	16 - 68	25	99.5	32.8 - 142	71
Benzo(a)pyrene	39.4	6.7 - 64	18	NA	NA	NA
Butylbenzylphthalate	60.6	9.1 - 92	51	NA	NA	NA
2-Chloronaphthalene	92.4	55 - 109	63	75.1	45.1 - 88.6	68
4-Chlorophenylphenyl ether	NA	NA	NA	89.5	22.4 - 141	77
Chrysene	29.8	5.1 - 50	18	152	25.8 - 255	100
Dibenzofuran	98.9	56 - 112	72	55.4	31.1 - 62.6	49
1,2-Dichlorobenzene	50.7	16 - 65	31	31.1	9.95 - 40.1	27
1,3-Dichlorobenzene	74.8	19 - 129	43	NA	NA	NA
Diethylphthalate	NA	NA	NA	92.1	14.7 - 105	91
Dimethylphthalate	NA	NA	NA	51.8	8.29 - 58	44
2,4-Dinitrotoluene	39.0	15 - 54	34	176	68.6 - 245	170
bis(2-ethylhexyl)phthalate	51.5	8.2 - 81	36	132	21.1 - 209	91
indeno(1,2,3)-pyrene	NA	NA	NA	40	6.0 - 68.4	18
Fluoranthene	30.8	18 - 42	26	NA	NA	NA
2-Methylnapthalene	NA	NA	NA	19.8	10.1 - 22.2	17
Napthalene	118	45 - 157	68	145	30.5 - 193	120
Nitrobenzene	150	53 - 270	120	NA	NA	NA

Table B.1.1. (page 3 of 5)

Analytes	Fall Sampling Results			Spring Sampling Results		
	Certified Value µg/L	Acceptance Range µg/L	Reported Value µg/L	Certified Value µg/L	Acceptance Range µg/L	Reported Value µg/L
Pyrene	57.5	30 - 66	45	37.2	19.3 - 42.8	32
1,2,4-Trichlorobenzene	68.1	30 - 97	45	76.1	33.7 - 109	64
2-Methylphenol	41.6	15 - 48	28	57.1	20.6 - 65.7	45
2- Nitrophenol	128	37 - 233	83	NA	NA	NA
Pentachlorophenol	122	17 - 215	120	91.7	12.8 - 161	81
2,4,5-Trichlorophenol	88.6	33 - 128	71	75.2	27.8 - 108	65
2,4,6-Trichlorophenol	78.1	29 - 112	58	109	40.3 - 157	100
Aldrin	2.88	1.2 - 3.5	1.8	0.997	0.42 - 1.2	0.94
alpha-BHC	4.24	1.6 - 5.7	3.7	7.28	2.7 - 9.8	5.7
beta-BHC	3.44	0.58 - 5.1	3.6	5.67	0.96 - 8.3	5.0
gamma-chlordane	4.78	2.2 - 5.7	3.6	2.63	0.82 - 3.7	2.2
4,4'-DDD	4.10	1.3 - 5.8	2.9	9.33	2.8 - 13.5	8.6
4,4'-DDE	6.33	1.9 - 9.2	3.1	3.95	1.4 - 5.8	3.3
Dieldrin	0.751	0.27 - 1.1	0.74	8.62	2.6 - 12.7	8.3
Heptachlor	0.793	0.27 - 0.88	0.5	2.69	0.92 - 2.99	2.2
Heptachlor epoxide	6.58	2.4 - 9.3	6.2	4.97	1.8 - 7.06	4.3
Arochlor 1260	0.950	0.15 - 1.2	ND	NA	NA	NA
Methoxychlor	NA	NA	NA	2.01	0.58 - 2.63	2.6
2,4-Dinitrotoluene	39	15 - 54	30	176	68.6 - 245	220
Nitrobenzene	150	53 - 270	100	NA	NA	NA

Table B.1.1. (page 4 of 5)

Analytes	Fall Sampling Results			Spring Sampling Results		
	Certified Value µg/L	Acceptance Range µg/L	Reported Value µg/L	Certified Value µg/L	Acceptance Range µg/L	Reported Value µg/L
Benzene	29	11 - 44	30	38	14.1 - 57.4	31
Bromodichloromethane	47.7	17 - 74	37	56.1	19.6 - 87	54
Bromoform	46.9	21 - 79	38	45.4	20.4 - 76.7	44
Carbon Tetrachloride	153	107 - 214	150	82.9	58 - 116	48
Chlorobenzene	17	6.3 - 27	13	31.5	11.7 - 50.4	26
Chloroform	101	52 - 139	97	NA	NA	NA
1,2-Dibromoethane	86.5	48 - 113	80	NA	NA	NA
1,2-Dichlorobenzene	35.3	20 - 55	27	99.8	58.9 - 156	94
1,3-Dichlorobenzene	NA	NA	NA	128	75.5 - 200	110
1,4-Dichlorobenzene	65.6	39 - 102	44	NA	51.5 - 163	110
1,2-Dichloroethane	101	49 - 157	76	105	32.9 - 117	71
1,2-Dichloropropane	NA	NA	NA	74.8	15.6 - 68.4	32
Ethylbenzene	83.3	31 - 135	76	42.2	15.6 - 68.4	32
Methylene Chloride	132	46 - 271	75	129	45.2 - 285	85
4-Methyl-2-pentanone	143	43 - 229	120	33.5	10.1 - 53.6	33
Tetrachloroethene	41.5	27 - 61	25	63.4	40.6 - 93.8	44
1,1,1-Trichloroethane	36.3	19 - 59	24	91.8	47.7 - 149	63
Trichloroethene	50.5	36 - 79	36	68.7	48.8 - 108	55
Toluene	44.5	21 - 67	43	104	48.9 - 156	80
p-Xylene	95	44 - 124	85	84.1	55.5 - 109	88

Table B.1.1. (page 5 of 5)

Analytes	Fall Sampling Results			Spring Sampling Results		
	Certified Value mg/L	Acceptance Range mg/L	Reported Value mg/L	Certified Value mg/L	Acceptance Range mg/L	Reported Value mg/L
Fluoride	13.1	11 - 15	13.6	6.59	5.6 - 7.6	6.8
Chloride	273	254 - 292	317	152	141 - 163	150
Total Nitrogen	16.3	14 - 18	14.2	18.2	16 - 20	18.2
Total Phosphorus	11.4	9.7 - 13	12	8.95	7.6 - 10	2.1
Ammonia	15.8	13 - 18	18	17.2	14 - 20	1.7
Sulfate	221	190 - 252	213	197	169 - 225	204
Cyanide	0.298	0.22 - 0.38	0.261	0.22	0.16 - 0.28	.215
Total Dissolved Solids	1320	1150 - 1490	1300			

Table B.1.2. EG&G Mound PE Sample Result Summary

Analytes	Certified Value mg/L	Acceptance Range mg/L	Reported Value mg/L
Aluminum	320	262 - 376	354
Antimony	183	137 - 216	190
Arsenic	149	112 - 176	99.3
Barium	530	436 - 626	564
Beryllium	74	60.7 - 87.3	74.9
Boron	178	134 - 212	217
Cadmium	79.7	65.4 - 94.0	85.1
Chromium	181	148 - 212	190
Cobalt	330	271- 389	359
Copper	377	309 - 446	NA
Iron	288	236 - 340	301
Lead	111	81 - 131	99.2
Manganese	121	99.2 - 143	127
Mercury	4.55	3.41 - 5.89	4.2
Molybdenum	260	221 - 317	280
Nickel	211	173 - 249	230
Selenium	147	110 - 173	142
Silver	109	89.4 - 129	125
Strontium	250	205 - 296	NA
Thallium	90.7	68.0 - 107	94.0
Vanadium	315	258 - 372	354
Zinc	324	256 - 382	347

Table B.1.3. Summary of Matrix Spike Performance (Fall 1993)

Analyte	Average Recovery (%)	Standard Deviation (%)	Analyte	Average Recovery (%)	Standard Deviation (%)
Volatiles - Method 8021					
1,1,1 - Trichloroethane	95.1	11.4	1,1 - Dichloroethene	92.1	11.1
1,2 - Dichloroethane	92.5	11.0	Benzene	110.0	10.0
Bromoform	92.2	11.7	Vinyl chloride	73.8	12.0
Dibromochloromethane	87.3	11.0	Tetrachloroethane	96.5	14.1
Bromodichloromethane	92.2	11.7	1,4-Dichlorobenzene	78.8	10.9
Trichloroethene	97.7	16.5	Chloroform	91.1	12.9
Volatiles - Method 8030					
Acetonitrile	80.1	26.7	Acrylonitrile	80.8	29.9
Semivolatiles - CLP 3/90					
1,2,4 - Trichlorobenzene	49.2	14.8	1,4 - Dichlorobenzene	43.2	14.7
2 - Chlorophenol	62.5	16.7	4 -Chloro-3-methylphenol	69.3	14.7
4 - Nitrophenol	79	18.9	Acenaphthene	65.2	15.5
n - Nitroso-diphenylamine	69.8	13.6	Pentachlorophenol	82.1	18.5
Phenol	58.4	15.1	Pyrene	71.5	19.6
2,4 - Dinitrotoluene	78.2	18.2			

Table B.1.3. (page 2 of 4)

Analyte	Average Recovery (%)	Standard Deviation (%)	Analyte	Average Recovery (%)	Standard Deviation (%)
Pesticides/PCBs - CLP 3/90					
Lindane	49.5	5.73	Endrin	62.4	6.1
Dieldrin	63.6	21.1	Aldrin	44.6	18.6
DDT	56.8	21.1	Heptachlor		
Explosives - Method 8330					
1,3,5 - TNB	68.5	9.5	1,3 - DNB	62.7	7.8
2,4,6 - TNT	70.9	9.1	2,4 - DNT	63.9	7.4
2,6 - DNT	63.7	7.1	HMX	79.9	11.5
Nitrobenzene	50.7	8.9	RDX	71.7	10.4
Tetryl	69.3	21.2	PETN	41.7	7.5
Anions					
Total Phosphorus	94.9	9.1	Total Kjeldahl Nitrogen	98.4	3.0
Nitrate-Nitrite[1]	84.8	41.3	Fluoride	96	4.7
Chloride	11.6	12.4	Ammonia	90.5	23.8
Cyanide (S)	92.8	7.6	Cyanide (T)	92.9	9.2
Total Organic Carbon	98	6.7	Sulfate [2]	104	50.3

Table B.1.3. (page 3 of 4)

Analyte	Average Recovery (%)	Standard Deviation (%)	Analyte	Average Recovery (%)	Standard Deviation (%)
Metals - CLP ILM3.0					
Aluminum (S)	108	22	Aluminum (T)[3]	112	218
Antimony (S)	100	16.6	Antimony (T)	103	37.4
Arsenic (S)	96.6	12.6	Arsenic (T)	84.6	15.5
Barium (S)	98.3	7.4	Barium (T)	90.2	13.5
Beryllium (S)	99.0	6.9	Beryllium (T)	91.2	10.5
Bismuth	96.0	3.8	Bismuth (T)	91.0	8.6
Cadmium (S)	88.9	9.6	Cadmium (T)	85.4	21.1
Chromium (S)	89.2	8.5	Chromium (T) [4]	93.8	24.5
Cobalt (S)	93.1	6.2	Cobalt (T)	85.0	10.1
Copper (S)	98.8	6.8	Copper (T)	90.2	29.7
Iron (S) [5]	118.2	54.7	Iron (T) [6]	88.4	102.0
Lead (S)	102.2	6.6	Lead (T)	90.0	25.2
Lithium (S)	88.1	9.6	Lithium (T)	83.0	10.3
Manganese (S)	96.0	10.7	Manganese (T) [7]	90.1	39.3
Mercury (S)	98.2	2.6	Mercury (T)	98.4	2.0
Molybdenum (S)	93.1	6.1	Molybdenum (T)	88.1	6.5

Table B.1.3. (page 4 of 4)

Analyte	Average Recovery (%)	Standard Deviation (%)	Analyte	Average Recovery (%)	Standard Deviation (%)
Metals - Cont'd					
Nickel (S)	92.2	6.4	Nickel (T)	91.5	22.6
Potassium (S)	100.3	2.5	Potassium (T) [8]	63.6	41.6
Selenium (S)	84.6	8.6	Selenium (T)	65.6	21.8
Silver (S)	91.6	10.4	Silver (T)	78.8	22.0
Thallium (S)	64.6	27.8	Thallium (T)	60.2	25.7
Tin (S)	93.4	4.8	Tin (T)	83.2	21.4
Vanadium (S)	98.5	6.2	Vanadium (T)	90.0	11.1
Zinc (S)	97.2	7.0	Zinc (T)	86.1	16.4

[1]The standard deviation was greater than 30 percent. The deviation was attributed to matrix interferences.
[2]Data points were eliminated from the reported average and standard deviation. The eliminated data points were greater than 300 percent.

S - Soluble (Dissolved) water samples. These samples were filtered in the field.
T - Total water samples. These samples were not filtered and complement the filtered samples.
CLP - Contract Laboratory Program
PCB - polychlorinated biphenyl

Table B.1.4. Summary of Matrix Spike Performance (Spring 1994)

Analyte	Average Recovery (%)	Standard Deviation (%)	Analyte	Average Recovery (%)	Standard Deviation (%)
Volatiles - Method 8021					
1,1,1 - Trichloroethane	92	5.6	1,1 - Dichloroethene	70.4	4.7
1,2 - Dichloroethane	104	6.2	Benzene	88.3	2.7
Bromoform	103	18.7	Vinyl chloride	94.6	6.7
Dibromochloromethane	95.7	11.1	Tetrachloroethane	93	5.5
Bromodichloromethane	98.5	7.5	1,4-Dichlorobenzene	92.7	5.6
Trichloroethene	97.4	5.0	Chloroform	97	5.8
Volatiles - Method 8030					
Acetonitrile	97.8	8.9	Acrylonitrile	91	10.1
Semivolatiles - CLP 3/90					
1,2,4 - Trichlorobenzene	61	12	1,4 - Dichlorobenzene	54.5	11.3
2 - Chlorophenol	78.6	9.1	4 -Chloro-3-methylphenol	80	8.2
4 - Nitrophenol	87.7	12	Acenaphthene	74.4	8.3
n - Nitroso-diphenylamine	79.1	9	Pentachlorophenol	81	18.2
Phenol	73.5	10	Pyrene	87.4	12.6
2,4 - Dinitrotoluene	86.9	7			

Table B.1.4. (page 2 of 4)

Analyte	Average Recovery (%)	Standard Deviation (%)	Analyte	Average Recovery (%)	Standard Deviation (%)
Pesticides/PCBs - CLP 3/90					
Lindane	70	10	Endrin	87.6	15.1
Dieldrin	79	12.4	Aldrin	66	12
DDT	77.9	14.5	Heptachlor	68.5	10
Explosives - Method 8330					
1,3,5 - TNB	95.9	13.9	1,3 - DNB	82.5	10.9
2,4,6 - TNT	93.5	13	2,4 - DNT	85.4	11.0
2,6 - DNT	95.9	12.9	HMX	101	15.6
Nitrobenzene	65.8	14.2	RDX	97.5	15.5
Tetryl	91	18.2	PETN	102	8.9
Anions					
Total Phosphorus	102	6.1	Total Kjeldahl Nitrogen	98	4.7
Nitrate-Nitrite	101	9.1	Fluoride	104	7.4
Chloride	94.6	3.3	Ammonia	107	10.4
Cyanide (S)	92.6	7.4	Cyanide (T)[1]	94.2	6.3
Total Organic Carbon	99.3	14.4	Sulfate	100	17.2

Table B.1.4. (page 3 of 4)

Analyte	Average Recovery (%)	Standard Deviation (%)	Analyte	Average Recovery (%)	Standard Deviation (%)
Metals - CLP ILM3.0					
Aluminum (S)	92.1	7.6	Aluminum (T)[2]	94.6	7.6
Antimony (S)	86.2	19.4	Antimony (T)[3]	85	19.5
Arsenic (S)	84.3	6.7	Arsenic (T)	81.1	14.8
Barium (S)	89.5	9.0	Barium (T)	89.3	8.8
Beryllium (S)	88.9	11.5	Beryllium (T)	88.4	9.1
Bismuth	99	5.9	Bismuth (T)[4]	95.1	5.4
Cadmium (S)	85.7	9.8	Cadmium (T)[5]	86.6	9.5
Chromium (S)	83.6	11.9	Chromium (T)[6]	84.6	8.4
Cobalt (S)	83.9	9.3	Cobalt (T)	82.9	8.7
Copper (S)	87.3	8.3	Copper (T)	89.3	7.9
Iron (S)	86.8	14.6	Iron (T) [7]	83.6	20.6
Lead (S)	87	10	Lead (T)[8]	87.9	25
Lithium (S)	92.6	14.1	Lithium (T)[9]	85.4	13.8
Manganese (S)	83.1	13.4	Manganese (T)	84.9	12
Mercury (S)	94	6.4	Mercury (T)	95.6	5.0
Molybdenum (S)	83.6	11.6	Molybdenum (T)	82.4	12.5
Nickel (S)	80.1	14.3	Nickel (T)	84.5	8.6
Potassium (S)	NA	NA	Potassium (T) [9]	NA	NA
Selenium (S)	88	31.6	Selenium (T)[10]	84.3	15.7
Silver (S)	83.2	13	Silver (T)[11]	81.2	9.2
Thallium (S)	70.9	29.7	Thallium (T)	55.4	26.1
Tin (S)	83.4	14.6	Tin (T)	83.6	10.3
Vanadium (S)	87.7	8.8	Vanadium (T)	86.4	10.9
Zinc (S)	87.3	9.9	Zinc (T)	84.7	7.4

Table B.1.4. (page 4 of 4)

[1] Cyanide: 1 of 15 points were eliminated due to a outlying percent recovery of 0%.

[2] Aluminum: 3 of 26 points were eliminated due to outlying percent recoveries of 193%, 608%, and 2048%.

[3] Antimony: 1 of 26 points were eliminated due to an outlying percent recovery of 20.8%.

[4] Bismuth: 2 of 26 points were eliminated due to outlying percent recoveries of 0% and 29%.

[5] Cadmium: 1 of 26 points was eliminated due to an outlying percent recovery of 0%.

[6] Chromium: 3 of 26 points were eliminated due to an outlying percent recovery of 0%, 1032%, and 148%.

[7] Iron: 4 of 26 points were eliminated due to outlying percent recoveries of 1485%, 4175%, 206%, and 229%.

[8] Lead: 1 of 26 points was eliminated due to an outlying percent recovery of 288%.

[9] Lithium: 2 of 26 points were eliminated due to an outlying percent recovery of 292% and 140%.

[10] Selenium: 2 of 26 points were eliminated due to an outlying percent recovery of 0% and 154%.

[11] Silver: 1 of 26 points were eliminated due to an outlying percent recovery of 0%.

S - Soluble (Dissolved) water samples. These samples were filtered in the field.

T - Total water samples. These samples were not filtered and complement the filtered samples.

CLP - Contract Laboratory Program

PCB - polychlorinated biphenyl

Table B.1.5. Summary of Sample Collection Completeness

Analysis	Planned Locations		Unplanned Locations	Total Samples	Field Blanks	Ambient Blanks	Trip Blanks	Field Duplicates	Matrix Spike
	Expected	Sampled							
Fall 1993 Sample Collection									
Radiological	104	97	0	97	0	0	0	10	6
Volatiles	104	98	0	98	0	6	41	10	6
Semivolatiles	104	93	0	93	0	0	0	10	6
Pesticides/PCB	104	93	0	93	0	0	0	10	6
Explosives	104	93	0	93	0	0	0	10	6
Inorganics	104	97	0	97	0	0	0	10	6
Anions	104	94	0	94	0	0	0	10	6
Spring 1994 Sample Collection									
Radiological	104	100	1	101	0	0	0	11	6
Volatiles	104	100	2	102	0	6	22	11	6
Semivolatiles	104	98	1	99	0	0	0	11	6
Pesticides/PCB	104	98	1	99	0	0	0	11	6
Explosives	104	98	1	99	0	0	0	11	6
Inorganics	104	100	1	101	0	0	0	11	6
Anions	104	98	1	99	0	0	0	11	6

Table B.1.6. Laboratory Analysis Completeness - Fall 1993 Analyses

Analysis	Number of Analytes	Number of Samples Collected	Number of Samples Rejected	Select Analytes Rejected	Percent Complete
Radiological	12	97	0	62	95
Volatiles	47	98	8	9	92
2-chlorovinylethyl ether[a]			98	98	0
Semivolatiles	67	93	0	11	99
Pesticides/PCBs	28	93	2	0	98
Explosives	11	93	1	12	98
Metals and Cyanide	28	194	0	23	100
Antimony			3		99
Arsenic			1		99
Calcium			2		99
Lead			1		99
Lithium			8		96
Selenium			4		98
Silver			2		99
Thallium			2		99
Anions	11	94	0	0	97
Chloride			25	25	74
Sulfate			1	1	99
Nitrate/Nitrite			1	1	99

[a]2-Chloroethylvinyl ether was not included in the volatiles percent completeness calculation and could not be quantitated or identified in the submitted samples by the laboratory. The compound deteriorates with the addition of hydrochloric acid as a preservative.

Table B.1.7. Laboratory Analysis Completeness - Spring 1994 Analyses

Analysis	Number of Analytes	Number of Samples Collected	Number of Samples Rejected	Select Analytes Rejected	Percent Complete
Radiological	12	101	0	0	100
Volatiles 2-chlorovinylether[1]	47	102	0 102	 102	100 0
Semivolatiles	67	99	1	0	98
Pesticides/PCBs	28	99	3	0	97
Explosives	11	99	7	1	95
Metals and Cyanide	28	202	0	15	99
Anions	11	99	0	0	100

[1] 2-Chloroethylvinyl ether was not included in the volatiles percent completeness calculation.
2-Chloroethylvinyl ether could not be quantitated or identified in the submitted samples by the laboratory. The compound deteriorates with the addition of hydrochloric acid as a preservative.

Table B.1.8. Plan Change Notification Summaries

Change Number	Date	Description	Impact
PCN-300	2 Sep 93	The chain-of-custody form used during the project was revised and was no longer identical to the QAPP specification. The plan change was implemented to document the use of the revised chain-of-custody form.	No impact to the data quality.
PCN-301	2 Sep 93	The QAPP-specified sample identification system was incorrect and not compatible with the WESTON electronic database. The revised sample identification system for the groundwater investigation was documented in this plan change.	No impact to the data quality.
PCN-302	25 Sep 93	Revision 3 of the QAPP specified the use of 4-nitrobutene as a PETN surrogate. However, in preparation for analyzing PETN, the laboratory was unable to obtain 4-nitrobutene. The laboratory recommended the use of nitroglycerin instead of 4-nitrobutene.	Since 4-nitrobutene had not been previously used as a PETN surrogate during the OU 9 program, the use of a nitroglycerin did not impact the data quality.
PCN-303	25 Sep 93	The worksheets specified in the QAPP for radiological analysis contained several deficiencies that were identified during the EG&G Mound Hydrogeologic Investigation data validation effort. The radiological worksheets were updated to correct these deficiencies and this plan change documents the implementation of the revised forms.	No impact to the data quality.
PCN-304	18 Oct 93	The method specified for explosives in the QAPP changed in Revision 3 from a USATHAMA method to an EPA method. However, some USATHAMA calibration requirements were accidentally left in the QAPP. This plan change documents the correction of the explosives calibration criteria to the EPA method criteria.	The error was corrected before the samples were analyzed and the data quality was not impacted.
PCN-305	28 Jan 94	Following the September 1993 assessment, the audit team identified the rigid checklist structure as a problem and recommended the checklist be revised. The QAPP laboratory audit checklist was modified per a quality assessment evaluation and is documented in the plan change.	No impact to the data quality.

Table B.1.8. (page 2 of 3)

Change Number	Date	Description	Impact
PCN-306	9 Feb 94	The data validation worksheets for explosives were not updated in Revision 3 of the QAPP to match EPA method 8330, nor were data validation worksheets for method 8021 and 8030 specified in the QAPP. This plan change documents the correction of the method 8330 worksheets, and the inclusion of the method 8021 and 8030 worksheets to the QAPP.	No impact to the data quality.
PCN-307	21 Feb 94	When acrolein was added as an 8030 surrogate through an investigation specific plan change, the recovery limits were not included. This plan change was implemented to extend the addition of the surrogate to the program and to specify the recovery limits for the surrogate recovery.	No impact to the data quality.
PCN-308	21 Feb 94	Laboratory data completeness forms for methods 8021 and 8030 were generated. Prior to developing these forms, the laboratory had to line out the inappropriate items listed on the CLP volatile organic analysis data completeness checklist.	No impact to the data quality.
PCN-309	3 Mar 94	Section 4.12 in Appendix H, data validation guidelines for method 8021, was modified to include surrogate qualification criteria. The surrogate guidelines had not been implemented prior to this investigation, and were found to be too general. This plan change documents the change of the surrogate qualification guidelines for method 8021.	No impact to the data quality.
PCN-310	9 Mar 94	Not applicable to groundwater investigation	
PCN-311	9 Mar 94	Not applicable to groundwater investigation	
PCN-312	30 Mar 94	Amended the WESTON Quality Assurance Management Plan to permit the use of Investigation-Specific Plan Change Notices and Plan Change Notices.	No impact to the data quality.
PCN-313	2 Mar 94	The Quality Assurance Officer, Marty Mitchell, specified in the OU 9 QAPP was replaced by Jake Alexander.	No impact to the data quality.

Table B.1.8. (page 3 of 3)

Change Number	Date	Description	Impact
PCN-314	9 Sep 93	Added data validation guidelines for use with laboratory control sample recoveries for organic CLP analyses.	No impact to the data quality.
PCN-315	23 Aug 94	The explosives data validation worksheets developed under PCN-306, included separate forms for nitroaromatic explosive compounds and PETN, a special explosive compound. While the use of two sets of forms did not impact the quality of the validation, it did result in two reports and was very inefficient. This plan change documents the inclusion of PETN on the nitroaromatic worksheets and the elimination of the PETN only worksheets.	No impact to the data quality.
PCN-316	21 Sep 94	Not applicable to program	NA
PCN-317	26 Aug 94	The blank data validation guidelines for radiological analyses were revised due to the rejection of usable data. See CAR C049.	No impact to the data quality.
PCN-318	01 Jul 94	Not applicable to program	NA
PCN-319	01 Sep 94	Not applicable to program	NA
PCN-320	14 Oct 94	Not applicable to program	NA
PCN-321	29 June 94	QAPP established an LCS validation which resulted in rejection of usable data. This PCN (321) revises the criteria. (See CAR C059.)	No impact to the data quality.

CLP - Contract Laboratory Program
EPA - U.S. Environmental Protection Agency
LCS - laboratory control sample
NA - not applicable
QAPP - Quality Assurance Program Plan
USATHAMA - U.S. Army Toxic and Hazardous Materials Agency
VOC - volatile organic compound

Table B.1.9. Investigation-Specific Plan Change Notice Summaries

Change Number	Date	Description	Impact
ISPCN-001	21 Feb 94	The laboratory contracted to perform the method 8021, 8030 and 8330 sample analysis could not generate calibration curve data based on response factors due to a software limitation. The laboratory could only evaluate data based on linear regression. Since both forms of quantitating analyte concentration are acceptable in SW-846, the calibration criteria were specified in terms of correlation coefficients for initial calibration criteria and percent recovery for continuing calibration checks.	The criteria change was consistent with established methods and did not directly impact the data quality or comparability.
ISPCN-002	21 Feb 94	The laboratory contracted to perform method 8021 requested the matrix spike solution concentration be reduced from 30 ppb to 10 ppb. The reduction was requested to ensure the spike level was near the middle of the laboratory's calibration curve. Since the spiking concentration is not critical to comparability, but having a spiking level near the calibration mid-point is critical, this plan change was implemented.	No impact to the data quality.
ISPCN-003	21 Feb 94	The laboratory contracted to perform explosives analysis identified the spiking concentrations in the QAPP were not appropriate for method 8330. The spiking concentrations were carried over from the USATHAMA specification in Revision 2 of the QAPP. This change notice was initiated to document the variance from the QAPP specification.	The change in the spiking concentration does not impact the data quality.
ISPCN-004	21 Feb 94	The laboratory requested additional sample volume be collected for inorganic analysis. The sample volume collected by the field team for inorganic analysis was increased from 1 to 2 liters.	No impact to the data quality.

Table B.1.9. (page 2 of 5)

Change Number	Date	Description	Impact
ISPCN-005	21 Feb 94	The quantitation limit for plutonium-238 was reduced from 1 pCi/L to 0.0001 pCi/L. This plan change was implemented at the request of EG&G Mound. Because IT Analytical Services in Oak Ridge was dis-qualified from the program (Corrective action: C016), the change was not implemented. Please also see ISPCN-017.	No impact. Plan change not implemented. Included herein for completeness, only.
ISPCN-006	14 Mar 94	The laboratory contracted to perform method 8021 requested permission to increase the sample purge volume from 5 mL to 10 mL. The change improved the ability of the laboratory to obtain sample results near the QAPP required quantitation limit.	The second round of sweeps data may provide slightly more reproducible and accurate results for sample concentrations near the quantitation limit.
ISPCN-007	21 Feb 94	The laboratory contracted to perform CLP Pesticide/PCB analysis requested permission to slightly modify the intermediate sample volume from 10 to xx mL and appropriately reduce the surrogate and matrix spike spiking levels. The reduced intermediate volume improved the laboratories' ability to meet the QAPP quantitation limits.	No impact to the data quality. The reduced concentration improved the laboratories' sensitivity to the target compounds.
ISPCN-008	14 Mar 94	The specific analytes in the PE sample were changed slightly from those specified in Appendix F. The change was required to adjust for analyte availability from Environmental Resource Associates, the supplier of the blind PE samples.	No impact since the PE samples is used as an indicator of laboratory performance.
ISPCN-009	21 Aug 93	Field samples were not tested for sulfide or residual chlorine as specified in ER SOP 1.4. The compounds were eliminated because the analytes are not suspected site contaminants.	No impact.
ISPCN-010	31 Aug 93	The flow-bath used during sample collection was decontaminated using deionized water between sample locations and not decontaminated as specified in ER SOP 1.4. Additional decontamination was not required since the Teflon inlet tube used in the flow-bath was dedicated to the specific well being sampled.	No impact.

Table B.1.9. (page 3 of 5)

Change Number	Date	Description	Impact
ISPCN-011	31 Aug 93	Because oil is not a suspected site contaminant, an oil indicator probe was not used during the investigation as specified in ER SOP 2.4 and 2.6.	No impact
ISPCN-012	31 Aug 93	Several changes from ER SOP 2.2 were adopted. (1) Calibration verification of the pH meter was performed as the last step of the alkalinity measurement rather than as an individual step. (2) Water temperature was recorded from the YSI-3500 rather than a Celsius thermometer. (3) The conductivity meter was calibrated with a single 1000 umhos standard. (4) A YSI Model 51B was used for dissolved oxygen and Redox.	
ISPCN-013	21 Feb 94	The analysis codes 12 and 13 were used together to indicate analysis by method 8021. The analysis code of 30 was used to indicate analysis for total phosphorus by method 365.2. The changes were made to resolve disagreements between the laboratory subcontract and the QAPP.	No impact to the data quality.
ISPCN-014	1 Sep 93	The 8021 target compound list included some nonspecific target names, i.e. chlorotoluene. The list was modified to specifically include the isomers of interest.	Since the change was applied to both groundwater investigations, the change does not impact the data quality.
ISPCN-015	1 Sep 93	A surrogate was specified for method 8030 analysis. No surrogate or recovery limit had been specified in the QAPP. Also see PCN - 307.	Since the change was applied to both groundwater investigations, the change does not impact the data quality.
ISPCN-016	29 Apr 94	Radium 226 was analyzed by EPA Method 903.1 instead of D2460-70.	The methods differ in both preparation and analysis, but since both methods are commonly used in the industry, the results should be comparable.

Table B.1.9. (page 4 of 5)

Change Number	Date	Description	Impact
ISPCN-017	29 Apr 94	The plutonium-238 quantitation limit was lowered from 1 pCi/L to 0.01 pCi/L. The reduced quantitation limit was requested by EG&G Mound. See also ISPCN - 005.	The change only impacted the second round of sweeps data. The greater sensitivity may result in incomparable plutonium results between the fall and spring sampling events.
ISPCN-018	1 Sep 93	Alkalinity data was not graphed on the water quality data collection form.	Graphing the data is not critical to the data quality.
ISCPN-019	10 Sep 94	The following method changes were made to accommodate CompuChem. CompuChem was contracted to perform chemical analysis for two groundwater samples collected after the spring event was completed. The changes were (1) Total Kjeldahl Nitrogen was performed by EPA Method 351.2 instead of EPA Method 351.3. (2) Total Phosphorus was performed by EPA Method 365.3 instead of EPA Method 365.1. (3) The surrogate 3,5-dinitroaniline was used in place of the explosives surrogate 4-nitrotoluene. (4) The surrogate nitroglycerin was used in place of the PETN surrogate 4-nitrobutene. (5) Acetonitrile/Acrylonitrile was analyzed by EPA SW-846 method 8260 instead of method 8030. (6) CLP volatiles was performed instead of method 8021.	The changes outlined in the plan change were made to accommodate CompuChem, which could not perform the methods used for the analysis of the other groundwater samples. Because the data are being used for well characterization and the changes only affected two well locations, the modifications do not significantly impact the program integrity.
ISPCN-020	27 Jun 94	When the calibration criteria for methods 8021 and 8030 were changed from %RSD to a correlation coefficient (ISPCN - 001), the quality control outlier forms in Appendix H, Attachment III, of the QAPP were not changed. During data validation of the fall data, QuantaLex, the data validation subcontractor, simply lined out the incorrect entries. But to eliminate the lineouts during the spring data validation efforts, the forms were modified to match the revised calibration requirements.	No impact to the data quality.

Table B.1.9. (page 5 of 5)

Change Number	Date	Description	Impact
1SPCN-021	06/29/94	CAR (C015) and ISPCN (001) issued to change validation criteria which caused significant rejection of explosive data. Another CAR and ISPCN created on 06/29/94 recognized this problem; however, original documentation is missing. This ISPCN (021) and CAR (C060) restate the missing info.	No impact to the data quality.
1SPCN-022	06/26/94	QAPP radiological data validation procedures rejected usable data. Blank criteria too restrictive. (Reference PCN-317 and CAR C049).	No impact to the data quality.

CLP	Contract Laboratory Program
EPA	U.S. Environmental Protection Agency
ER	Environmental Restoration (Program)
ISCPN	Investigation-Specific Plan Change Notice
PCB	polychlorinated biphenyl
PE	professional engineer
QAPP	Quality Assurance Program Plan
SOP	Standard Operating Procedure
USATHAMA	U.S. Army Toxic and Hazardous Materials Agency

Table B.1.10. Corrective Action Report Summaries

CAR Number	Date	Description	Project Impact
C001	14 Sep 93	Bottle label did not match chain-of-custody.	No impact. The error was corrected during laboratory sample login before the sample was processed.
C002	14 Sep 93	Field batch numbers were incorrectly assigned.	No impact. The error was corrected during laboratory sample login before the samples were reported by the laboratory.
C003	16 Sep 93	A nitrite sample was shipped to the incorrect laboratory.	No impact. The error was identified during laboratory sample login and corrected.
C004	6 Oct 93	The laboratory was found to be out of compliance with several aspects of the laboratory agreement.	No impact. Corrective actions were implemented as described in the audit response report.
C005	6 Oct 93	The laboratory agreement included inconsistent specifications for specifying sample analysis. Specifically, analysis codes 12 and 13 specify method 8010 and 8020, respectively. However the QAPP requires that method 8021 be performed. Also, analysis code 30 in the laboratory agreement does not specify the proper phosphate analysis method as amended in PCN - 3xx. See also ISPCN - 013.	No impact.
C006	6 Oct 93	A trip blank was not shipped with the samples in a cooler.	The impact from the missing trip blank cannot be assessed. Based on the levels of contaminants identified in the other trip blanks, the impact appears minimal.
C007	6 Oct 93	The laboratory reported a GC failure that precluded second column confirmation for method 8021. The laboratory was requested to perform the confirmation by GC/MS using a 25 mL purge volume.	A few compounds with detected quantities above the GC quantitation limit and below the GC/MS quantitation limit (1 ppb), may not be confirmed. Since the values will be reported from the GC, data quality should only be minimally impacted.

Table B.1.10. (page 2 of 9)

CAR Number	Date	Description	Project Impact
C008	28 Sep 93	Temperature blank was reported by the laboratory at 13.4 °C. The limit is 12 °C.	Because the variance was probably of minimal duration, the bottles were sealed, and the temperature criteria was only exceeded by 1.4 °C, the impact is believed to be minimal.
C009	13 Oct 93	The laboratory's method 8030 GC failed. To avoid exceeding holding times, the laboratory was instructed to analyze the acrylonitrile and acetonitrile by GC/MS.	While the data generated by GC will not be perfectly comparable to the data generated by GC/MS, the data will have similar quantitation limits and should be adequate for evaluating the concentration of the analytes present at the sampled locations.
C010	13 Oct 93	One sample for anion analysis and one sample for total organic carbon analysis were received by the laboratory unpreserved.	No impact. The samples were recollected and re-submitted to the laboratory for analysis.
C011	13 Oct 93	Several samples were analyzed outside the required holding time for method 8021 and 8030.	The impact will be evaluated during data assessment. (Appendix B2 and B4)
C012	2 Dec 93	Two samples MND20-0322-0001 and MND20-0325-0001 were mislabeled as MND01-0322-0001 and MND01-0325-0001, respectively.	No impact. The error was identified after sample analysis was completed. The error will be corrected during data assessment and electronic data entry.
C013	9 Feb 94	During data validation, it was recognized the surrogate, acrolein, which had been specified for use in method 8030, lacked performance limits. Performance limits were established through this corrective action and plan change PCN-307.	No impact. The QAPP does not require a surrogate for use in method 8030.
C014	2 Feb 94	During data validation, it was observed the laboratory had not performed total organic carbon analysis in quadruplicate as specified in the QAPP. No corrective action was possible.	The data generated using a single data point may be less accurate than data generated using four data points. However, water samples are typically more homogeneous than soils and the impact is expected to be minimal.

Table B.1.10. (page 3 of 9)

CAR Number	Date	Description	Project Impact
C015	15 Feb 94	A percent relative standard deviation (%RSD) and, consequently, average response factor must be determined and used for methods 8021, 8030, and 8330. The laboratory's data reduction software was only capable of performing linear regression. The validation criteria were amended to reflect comparable linear regression criteria. Also see ISPCN - 001 and ISPCN - 001	Since both response factors and linear regression are specified in the EPA methods, the impact is minimal.
C016	1 Mar 94	IT Analytical Services - Oak Ridge reported significant key staff and operational changes. The changes described by IT were determined to have the potential to impact the quality of the data produced by the laboratory, and the laboratory was dis-qualified from participation in the second groundwater sampling event. See also ISPCN - 016 and ISPCN - 017.	The comparability of the data collected during fall and spring may have been impacted by using two separate laboratories. The extent of the impact is immeasurable.
C017	3 Mar 94	The QAPP method 8021 surrogate data validation criteria in Appendix H, Section 4.12, is inadequate to ensure comparable data validation. The criteria were more specific. Also see PCN-309.	No impact. The data validation criteria were applied to both the fall and spring samples.
C018	3 Mar 94	The QAPP CLP data validation criteria in Appendix H did not address qualifications based on laboratory control spike recoveries. The qualification was specified as attached to the corrective action. Also see PCN - 314.	No impact. The requirement to perform laboratory control spikes was introduced in Revision 3 of the QAPP, which first impacted the fall groundwater samples. Since the guidelines were applied to all samples subsequent to the LCS requirement, the data were not impacted.
C019	14 Mar 94	The field team specified the incorrect sample identification on the chain-of-custody. The laboratory was instructed through this corrective action of the error and a revised chain-of-custody was issued by the field team.	No impact.

Table B.1.10. (page 4 of 9)

CAR Number	Date	Description	Project Impact
C020	14 Mar 94	A chain-of-custody failed to identify the date, time, and to whom the field team released custody of the samples. No corrective action was possible.	No significant impact.
C021	29 Mar 94	A sample submitted for organic volatile analysis by method 8021 was not acid preserved. A separate preserved sample fraction was analyzed by the laboratory.	No impact.
C022	21 Mar 94	The laboratory reported temperature blanks were received at 6.2 and 7.6 °C above the laboratory limit of 6 °C. However, the QAPP limit is 12 °C and the sample integrity was not impacted.	No impact.
C023	30 Mar 94	Changes to chain-of-custody forms were not made by using a single-line cross out, date, and initial with the correction written nearby. No remedial action was possible, but the intent was clear.	No impact.
C024	30 Mar 94	A chain-of-custody did not specify analysis by method 8030 using an analysis code. The laboratory was informed of the error.	No impact.
C025	1 Apr 94	A sample was received frozen in a broken vial. Since an additional sample was available, the deficiency did not impact the sample analysis	No impact.
C026	1 Apr 94	Changes to chain-of-custody forms were not made by using a single-line cross out, date, and initial with the correction written nearby. No remedial action was possible, but the intent was clear.	No impact.

Table B.1.10. (page 5 of 9)

CAR Number	Date	Description	Project Impact
C027	7 Apr 94	The daily calibration of the dissolved oxygen meter by the field team was not documented.	The data reliability was affected by the lack of the recorded calibration data. The significance of the lack of calibration data cannot be assessed.
C028	28 Mar 94	A alkalinity check standard is not analyzed in the field each day sample alkalinity is determined.	The data reliability was affected by the lack of a check standard. The significance of the lack of a check standard cannot be assessed.
C029	28 Mar 94	Duplicate field measurements for water levels, redox, pH, temperature, PID, and CGI not determined by the field team.	The precision of the field data cannot be assessed.
C030	28 Mar 94	The equipment checklists included in several ER SOPs were not used.	No impact to the data quality.
C031	28 Mar 94	Only one conductivity standard was used to calibrate the field conductivity meter. Additional standards were not available.	No impact on the data quality.
C032	28 Mar 94	Packers failed in some of the wells. Because the packers failed, it was not possible to purge three well volumes in 1 day as required by the SOP. The field team purged the affected wells for a minimum of 5 hours, and then collected a sample.	Even though three well volumes were not purged, stabilization of the field measurements (i.e., representative groundwater sample) was recorded prior to sampling. Minimal to no impact.
C033	7 Oct 93	The laboratory failed to inform the WESTON laboratory liaison of the sample discrepancy, broken sample bottles, and temperature variances within 72 hours of discovery. The samples that were lost due to breakage were recollected.	The laboratory was notified of the violation of the analytical agreement and instructed to correct their internal systems to prevent recurrence. No impact.
C034	5 May 94	The laboratory failed to implement corrective actions as specified in an audit response.	No impact.

Table B.1.10. (page 6 of 9)

CAR Number	Date	Description	Project Impact
C035	10 May 94	Field team incorrectly specified sample location on chain-of-custody and sample bottle labels for MND20-P027-0001 and MND20-P015-0001 as MND01-P027-0001 and MND01-P015-0001, respectively. The error will be corrected during electronic data entry.	No impact.
C036	14 Jun 94	The radiological chain-of-custody for sample MND01-0120-0001 did not specify the number of bottles shipped for each type of analysis. The laboratory was contacted and confirmed that sufficient sample volume had been shipped.	No impact.
C037	17 Jun 94	This corrective action was issued as a result of the Enseco project assessment. Seven findings were identified during the 20 May assessment. All findings were closed with only minimal impact on data quality.	Minimal impact.
C038	2 Aug 94	WESTON Analytics failed to report 80% of the metal results for the double-blind PE sample within the manufacturer advisory limit. The laboratory's investigation was very complete and identified the PE sample matrix as the probable source of the error. The PE performance is discussed in Appendix B.1 of the Groundwater Report.	No impact.
C039	7 Jul 94	Bowser Morner did not perform a matrix spike analysis on sample MND01-0129-0001 as requested in the field chain-of-custody. Bowser Morner did perform a matrix spike analysis on another sample in the laboratory batch.	No impact.

Table B.1.10. (page 7 of 9)

CAR Number	Date	Description	Project Impact
C040	1 Sept 94	(1) Dissolved oxygen and redox field parameters were not recorded for wells 115, 117, 120, 151, 312, 313, and 314 in accordance with SOPs 2.2 and 2.4 during the fall sampling event due to an oversight by the field crew. (2) Alkalinity field parameter was not recorded for well 76 in accordance with SOPs 2.2 and 2.7 during the fall sampling event due an oversight by the field crew. (3) Dissolved oxygen and redox field parameters were not recorded for seeps 601, 602, 607, and 608 in accordance with SOPs 2.2 and 2.9 during the fall sampling event due to an oversight by the field crew.	No impact.
C041	6 Sept 94	Initial water level measurements were not recorded at the start of the sampling event for wells 0117 and 0120.	No impact.
C042	6 Sept 94	Initial water level measurements were not recorded at the start of the sampling event for wells 0316 and 0382.	No impact.
C043	6 Sept 94	A pH field measurement was not recorded for well 0111 during the fall sampling event. The measurement was not collected because the pH meter failed in the field.	No impact.
C044	6 Sept 94	Wells 0115, 0117, 0309, 0312, 0137, and 0151 were not purged three well volumes during the fall sampling event due to a lack of water in the wells.	No impact.
C045	6 Sept 94	Wells 0125, 0111, 0322, 0325, 0393, and 0381 were not purged three well volumes during the fall sampling event due to a lack of water in the wells. Additionally, wells 0344 and 0342 were not purged three volumes due to sample team oversight.	No impact.

Table B.1.10. (page 8 of 9)

CAR Number	Date	Description	Project Impact
C046	6 Sept 94	Wells 0308, 0316, 0323, 0385, and seep 0605 were not sampled during the fall sample event. The wells were not sampled because they were dry. The field team did not properly document the reason the wells were not sampled.	No impact.
C047	6 Sept 94	Well 0329 was purged but not sampled during the fall sampling event. The well went dry during the purging process and never recovered.	No impact.
C048	6 Sept 94	Water level measurements were not recorded at the start of the fall sampling event for wells 0111, 0117, 0118, and 0138. The measurement could not be made because the field team was not provided a key for the wells.	No impact.
C049	10 Sep 94	Blank data validation guidelines for radiological parameters were revised due to the rejection of usable data points. Also see ISPCN 022 and PCN 321.	Rejected data during Sweeps I data validation. Data made usable during data assessment per Appendix B.2 of this report.
C050	6 Sep 94	During the preparation for the special sampling event to collect two well samples during Fall 1994, WESTON understood CompuChem could not perform method 8021 and submitted the samples for analysis by the QAPP CLP volatiles method. After the analysis was completed, WESTON determined CompuChem could perform analysis by method 8021.	Some data incomparability.
C051	6 Sep 94	Trip blanks were not submitted with samples for analysis by method 8030. The oversight was the result of a typographical error in the QAPP. See PCN-320.	Since the target compounds were virtually never identified in the samples, the deficiency does not greatly impact the data usability.
C052	19 Oct 94	WESTON Analytics reported the fall 1993 PE results with metals outside the acceptance criteria. A corrective action notice was not issued at the time of the incident (Feb 1994).	The low metals PE results were the result of a problem with the PE sample matrix and not attributable to the laboratory.

Table B.1.10. (page 9 of 9)

CAR Number	Date	Description	Project Impact
C053	08 Nov 94	Sample MND20-0334-0001 (soluble) misidentified as 013401S on Form I of the metals data package for laboratory batch 9403L026. The correct Form I identification is 034401S.	No impact.
C054	12 Nov 94	Well #316 was purged, but lacked sufficient volume for sampling.	No impact.
C055	12 Nov 94	Wells # 0308, 0323, and 0385 were not sampled during the spring effort. The wells were dry.	No impact.
C056	21 Oct 94	The chain-of-custody for samples MND01-0392-2001 and MND01-0374-0001 was incorrect. The date on the chain-of-custody for sample collection was recorded as 12/3/94 instead of 10/3/94.	No impact.
C057	12 Nov 94	Enseco - Denver reported spring sample radiological data values, which were below the MDA. For consistency with the database, all results less than the MDA should be reported as the MDA 'U' by the laboratory.	The database was corrected. No impact to data usability.
C058	23 Nov 94	Sample MND01-0312-0001 was not analyzed for total metals by the laboratory.	The data point is not recoverable.
C059	28 Nov 94	The explosives laboratory control sample rejection rule is too strict and not consistent with the other data validation policies.	No impact.
C060	28 Nov 94	CAR C015 reference: Explosives validation guidelines would actually result in the rejection of usable data.	No impact.
C061	08 Dec 94	Correction to validation report for laboratory batch 35184 (radiological).	No impact.
C062	09 Jan 95	Correction to validation report for radiological parameter collected during the spring.	No impact.
C063 to C084	13 Jan 95 to 01 Mar 95	Corrections to validation reports.	No impact.

CLP	Contract Laboratory Program	MS	mass spectrometry
GC	gas chromatograph	PCN	Plan Change Notice
ISPCN	Investigation-Specific Plan Change Notice	PE	professional engineer
CGI	combustible gas indicator	PID	photoionization detector
LCS	laboratory control sample	QAPP	Quality Assurance Program Plan
MOA	Memorandum of Agreement	RSD	relative standard deviation

Table B.1.11. Summary of Audits

Audit Number	Audited Activity	Purpose of Audit	Date of Audit
NA	WESTON Analytics - Lionville	Laboratory Pre-qualification Assessment	September 1992
NA	IT Analytical Services - Oak Ridge	Laboratory Pre-qualification Assessment	September 1992
93-2	Bowser Morner - Dayton	Laboratory Pre-qualification Assessment	September 7, 1993
NA	Field sampling Program	USEPA Assessment by Steve Gergely (CH2M Hill)	September 27 - 29, 1993
93-3	IT Analytical Services - Oak Ridge	Project Assessment	September 29 - 30, 1993
93-4	WESTON Analytics - Lionville	Project Assessment	September 22 - 23, 1993
94-1	Enseco - RMAL	Laboratory Pre-qualification Assessment	January 17 - 19, 1994
94-4	QuantaLex - Denver	Project Assessment	January 20, 1994
94-5	WESTON Analytics - Lionville	Project Assessment	April 7-8, 1994
96-6	WESTON - Cincinnati	Field Audit	April 12-14, 1994
94-7	Enseco - RMAL	Project Assessment	May 20, 1994

B.2. Data Quality Assessment: Fall

Appendix B.2 addresses assessment of data qualifications assigned during data validation. Although the validators qualified a large number of data points, 99 percent of the data are usable, as indicated in Appendix B.1.

Validators use QCCs to monitor sampling and analysis at a process level. When QCCs are outside specified criteria, a corrective action should be taken. When a corrective action is not possible or is not taken, the validators can often use QCCs to evaluate the possible error associated with the reported results. QCCs are typically evaluated during data validation and applied to the affected samples. Examples of QCCs include surrogate recoveries, matrix spike recoveries, and percent differences for calibration curves. When validators noted that QCCs were outside criteria, the validators applied the data qualifiers and subqualifiers following the guidelines presented in Appendix H of the OU 9 QAPP. Table B.2.1 summarizes the qualifiers used. The qualified data and the significance of the qualifications were then assessed to determine whether the qualification affects the use of the data for the intended purpose.

Separate subsections present the qualifications for each laboratory analysis. Appendix B.3 contains tables summarizing the qualifications. Although the summary tables are extensive and list many qualifiers for each analysis, actually only a few analytes have been affected. For example, semivolatiles include 67 individual analytes; when only one or two analytes are qualified, the percentage of qualified data is actually very small. In addition, many of the qualifications are minor and have a negligible impact on data usability.

The following assessment of data usability of qualified results is limited to the data usage described in this report. The validators used the deficient QCCs to estimate the potential bias. The estimate typically takes the form of a multiplication factor that is applied to the reported result. The assigned factor has been used to establish a probable upper limit to the sample concentration. If the upper limit should exceed an established action limit, then the data point is inconclusive and unusable. For other data uses, however, it may be inappropriate to accept all the QCCs as indicators of performance. For example, one of the continuing calibration checks for volatiles, which affected the blind PE sample, was very poor and probably would have resulted in the PE result being rejected. The associated PE sample results, however, were unaffected and the QCC was a false indicator.

The results of the data assessment and a discussion of the data validation qualifiers are presented in the following text. The text is subdivided to match the method of analysis performed and reported by the laboratory. For example, separate subsections discuss samples analyzed by Method 8021, a method for determining the concentration of a wide range of volatile organic analytes, and samples analyzed by Method 8330, a method used to determine the concentration of explosives in water.

B.2.1. Volatiles

The laboratory performed two types of analyses for volatiles: Method 8030 and Method 8021. Because the results showed different deficiencies for each method of analysis, the analyses are discussed separately below.

B.2.1.1. Organic Volatiles - Method 8030

During the validation of the VOCs by Method 8030, a gas chromatograph method, the validators identified the following three types of QCC deficiencies:

1. Exceeded holding times.
2. Ambient blank contamination.
3. One surrogate recovery below the acceptance criteria of 50 percent.

In addition to these QCC deficiencies, the laboratory experienced an instrument failure during the investigation and had to analyze some of the samples by Method 8240 or exceed holding times, as documented in Corrective Action Report C009. The use of Method 8240 is unlikely to significantly affect data comparison, and the data usage was not affected.

Holding Time

The holding times were exceeded by 1 to 2 days for five samples (see Table B.2.2, Exceeded Holding Times for Method 8030). The sample results for these five samples were qualified as estimated (UJ). In all cases, the target analytes were not detected. Since the holding time was exceeded by a maximum of only 2 days, the exceeded holding times probably do not affect the data usage.

Blank Contamination

Only the ambient blank associated with sample MND01-0128-0001 resulted in data qualification. The ambient blank was contaminated with acetonitrile at 3 μg/L. As a result of this contamination, the validators qualified as nondetect (U) the positive result in MND01-0128-0001. The data point is usable at the qualified value.

Surrogate Recovery

The laboratory reported one surrogate recovery slightly below 50 percent, and the validators qualified sample results as estimated (UJ). Although the data may be biased slightly low, the bias is minimal and should not affect comparison of the nondetected result to an action limit.

B.2.1.2. Organic Volatiles - Method 8021

During the validation of the organic volatiles by Method 8021, validators identified the following six types of QCC deficiencies:

1. 2-chloroethylvinyl ether deteriorated due to sample preservation.
2. Continuing calibration criteria not met.
3. Laboratory blanks contaminated with chloroform (trichloromethane).

4. The 14-day holding time requirement exceeded.
5. Unconfirmed analyte identifications.
6. The field duplicate criteria exceeded for one sample.
7. Surrogate recovery greater than acceptance criteria.

In addition to these QCC deficiencies, the laboratory also had to perform the confirmation analyses by GC/MS for several samples. The confirmation by GC/MS was required due to instrumentation failures per Corrective Action Report C007. The most significant impact from using GC/MS for confirmation is the possibility that target analytes could be detected by GC, but have a concentration below the GC/MS detection limit. During data validation, the validators noted that no data had positive detection by GC at a concentration below the GC/MS detection limit so that the data were not affected.

2-Chloroethylvinyl Ether Deterioration
The laboratory reported that 2-chloroethylvinyl ether hydrolyzed because of sample preservation and could not be qualitatively or quantitatively identified. Because the deficiency was the result of a required preservation step, the only impact was the loss of data for the compound. Appendix B.1 briefly describes the deficiency.

Continuing Calibration Checks
The laboratory analyzed continuing calibration checks after every 10 samples and at the end of an analytical sequence to confirm the continued stability of the calibration curve. The QAPP specifies that the percent difference calculated from the continuing calibration check must be equal to or less than 15 percent. For consistency with SW-846, the percent difference requirement is expressed as percent recovery. The comparable percent recovery requirement is 85 to 115 percent recovery. During the analysis of the volatile organic samples by Method 8021, the laboratory identified the following continuing calibration check deficiencies: the frequency of the continuing calibration checks were not met, and continuing calibration percent recoveries were outside QAPP criteria (DOE 1993).

Frequency of Continuing Calibration Check
Because the laboratory failed to meet the QAPP-specified continuing calibration check frequency, the validators qualified associated sample data as estimated (J,UJ). The validators compared the affected data points with the nearest continuing calibration check. Since continuing calibration data were available, the impact is believed to be minimal. However, a potential degree of bias cannot be calculated or assessed for this type of QCC deficiency.

Continuing Calibration Checks Outside Criteria
During data assessment, the continuing calibration check deficiencies were divided into three categories:

1. Continuing calibration check results that are outside the QAPP 85 to 115 percent recovery requirement, but within the USEPA SW-846 (1992) guidance for Method 8010 and 8020.

2. Continuing calibration check results that are outside the QAPP 85 to 115 percent recovery requirement and are not included in SW-846 (1992) guidance for Method 8010 and 8020.

3. Continuing calibration check results that are below the SW-846 (1992) guidance.

Continuing Calibration Results That Complied with USEPA SW-846 (1992)
The laboratory complied with USEPA SW-846 (1992) Methods 8010 and 8020 continuing calibration requirements (see Table B.2.3). By complying with current guidance, the laboratory systematically failed to comply with the QAPP continuing calibration percent difference requirement of 85 to 115 percent, which was derived from previous guidance, i.e., USEPA SW-846 (1986). The more current revision of SW-846 relaxed the continuing calibration requirements for both Methods 8010 and 8020, but not for Method 8021.

Method 8021, however, is a composite of Methods 8010 and 8020, and WESTON believes that the application of the 1992 criteria did not greatly affect data quality. The sample results qualified because of continuing calibration checks not meeting the 1992 guidance are not included in Appendix B.3, nor discussed individually in the following text. These qualified results, however, are usable.

Continuing Calibration Results Not Included in the SW-846 (1992) Guidance
In the revised 1992 guidance for Methods 8010 and 8020, several of the QAPP analytes were not included in the continuing calibration check recovery table. Table B.2.4, Range of Continuing Calibration Results Not Included in SW-846, summarizes the percent recovery range for analytes not included in the 1992 guidance and the analytes with percent recoveries outside the 1992 guidance. Appendix B.3 summarizes by sample the affect of the exceeded percent difference for the affected analytes. In all cases, where the criteria were exceeded for compounds not included in the SW-846 (1992), the reported results were nondetect. Since a positive shift or bias does not affect a nondetect, the continuing calibration check recoveries greater than 115 percent had no impact on the data usability.

Sample results associated with continuing calibration recoveries less than 85 percent may be biased low. Because the associated sample results were all reported nondetect, the possibility exists that near-detection-limit concentrations are suppressed. To compensate for the possible suppression of analyte concentrations, a factor based on the continuing calibration recovery can be applied to the data. If the factor raises the quantitation limit above an action level, then the data will be inconclusive and unusable. If the raised quantitation

limit is below an action limit, then the data are usable. The validators judged as usable the data results associated with continuing calibration recoveries equal to or greater than 50 percent, although the quantitation limit should be evaluated at twice the reported value.

Continuing Calibration Recoveries Below 1992 Guidance
Continuing calibration checks analyzed on 30 September and 7 and 12 October 1993 had many percent recoveries below the 1992 guidance affecting the samples summarized in Table B.2.5, Usability of Samples with Very Poor CCC Recoveries. Although these samples were only qualified estimated (J,UJ) the validators assessed eight of the samples as unusable due to the poor continuing calibration recoveries, which ranged as low as 0 percent. The validators judged as usable the remaining 11 samples associated with the same continuing calibration check. One of the 11 samples was the blind PE, submitted during the field program. Because the PE results were accurately quantitated, the validators judged the continuing calibration curve to be an anomaly and an invalid indicator of analytical performance for the other eight samples.

Blank Contamination
The validators qualified only three samples as a result of blank contamination: MND01-0063-0001, MND01-07803-3001, and MND01-0379-0001. All samples were qualified nondetect (U) because of chloroform contamination in the method blank at 6.8 and 6.5 μg/L, respectively. Since the only effect of the qualification is the raised quantitation limit, which can be compared to the action limit, the data are usable.

Holding Time
For 10 samples, the laboratory exceeded the holding time of 14 days by 1 to 3 days. The validators qualified the associated results as estimated (UJ,J). While the results may be biased low, WESTON believes that the small amount of time by which the sample holding times were exceeded did not greatly affect the sample results. Table B.2.6, Exceeded Holding Times for Method 8021, summarizes the affected samples. Holding times also were exceeded for confirmatory analysis, but no qualifications were made due to these exceeded holding times.

Unconfirmed Analyte Identifications
The validators rejected (R) eight compounds reported by the laboratory as positive results. The validators rejected these compounds because the compounds were outside the retention time window for the confirmation analysis. Because the presence of these compounds could not be confirmed, the analyte data are unusable.

Field Duplicate Relative Percent Difference
One field duplicate result was reported outside criteria for samples MND20-0343-0001 and MND20-0343-1001. The relative percent difference for 1,1,1-trichloroethane was 27 percent. The validators qualified the associated result as

estimated (UJ,J). Since only one compound in the sampling event was reported with an exceeded percent difference for a duplicate, no other data qualifications were necessary and the qualified data are usable.

Surrogate Recovery
Seven samples were reported with a surrogate recovery for bromochloromethane greater than the acceptance limit. The positive sample results associated with the surrogate recoveries were qualified as estimated (J) and may be biased high. If an affected result is at or above an established action limit, the result must be reevaluated for usability. The following seven samples were affected: MND01-0363-0001, MND01-7806-3001, MND01-0271-0001, MND01-0111-0001, MND01-0076,0001, MND01-0071-0001, and MND01-0347-0001.

B.2.2. Semivolatiles

During the validation of the semivolatiles data packages, the validators identified the following six types of QCC deficiencies:

1. Surrogate recoveries below the acceptance criteria for d6-phenol.
2. Method blank contamination with target analytes.
3. Continuing calibration checks greater than 35 percent for selected analytes.
4. Matrix spike recoveries outside recovery criteria.
5. Field duplicate relative percent differences greater than 25 percent.
6. Laboratory control sample recoveries outside acceptance criteria.

Surrogate Recoveries
The laboratory reported that the surrogate recovery for d6-phenol was below acceptance limits for several samples. Low surrogate recovery indicates that the sample results may be biased low. The laboratory noted in the case narrative that the d6-phenol had been converted to d2-phenol in many of these cases. The review of the laboratory data confirmed the conversion of d6-phenol to d2-phenol. Although the mechanism for the conversion was not identified, the sample results are not suspected of being affected and are usable. Appendix B.3 does not show the conversion of d6-phenol to d2-phenol. Sample MND01-0126-0001 had a d6-phenol recovery of 3 percent, and the low recovery could not be attributed to the conversion of d6-phenol to d2-phenol. The validators rejected (R) the nondetect sample acid analyte results associated with d6-phenol because of the low surrogate recovery, and the data are unusable.

Method Blank Contamination
Some method blanks were contaminated with phenol, diethylphthalate, di-n-butylphthalate, and bis(2-ethylhexyl)phthalate. The concentrations for these contaminants in all of the affected blanks and samples were less than the quantitation limit of 10 μg/L. Table B.2.7, Semivolatile Blank Contaminant Levels, summarizes the target analyte and the minimum detected and maximum detected blank concentration. The phthalate compounds are all common laboratory contaminants, and sample results less than 10 times the blank concentration were qualified nondetect (U). Affected sample results less than five

times the phenol concentration also were qualified nondetect (U). Because the contaminant levels were so low and the affected sample concentrations were below the CRQL, the sample results qualified nondetect (U) at the CRQL do not affect the data usability.

Continuing Calibration Checks
Laboratories use continuing calibration checks to verify the stability of the initial calibration curve. The response factors of target analytes included in the check solution must have a percent difference of less than or equal to 25 percent. When the percent difference is greater than 25, the change indicates a drift in the calibration curve for an individual analyte. A positive percent difference indicates a positive shift and, consequently, a positive sample result bias. A negative percent difference indicates a negative shift and, consequently, a negative sample result bias. The laboratory reported as nondetect all the sample analytes that may have been affected by the shift in calibration curves. Because a positive calibration curve bias does not affect nondetect results, all results associated with positive percent differences are usable. Table B.2.8, Summary of Semivolatiles Exceeding Continuing Calibration Criteria, summarizes the range of percent differences outside the criteria per analyte.

Only a few nondetect sample results were qualified estimated (UJ) due to negative percent differences. Table B.2.8 summarizes the continuing calibration checks, which ranged from -41 to -28 percent. The affected compounds were carbazole, 4-nitroaniline, and 2,2-oxybis(1-chloropropane). When action limits were determined, the analyte quantitation limit modified for the potential error was compared to the action limit to determine the usefulness of the data. If the modified quantitation limit exceeded the action limit, then the data were not usable.

Matrix Spike Recoveries
The laboratory reported only one matrix spike with recoveries outside criteria. Since only one incidence was observed, the effect is assumed to be specific to the sample and not to be representative of the sampling event. The validators qualified as estimated (UJ) the affected sample results for MND20-0356-0001 with low recoveries for 1,4-dichlorobenzene (29 percent) and 1,2,4-trichlorobenzene (35 percent). The associated sample results were reported nondetect in the sample and may be biased low. The worst-case degree of bias can be estimated at a factor of about 3.5 times the quantitation limits for the affected compounds.

Field Duplicate Results
The field duplicate results for the semivolatile compounds were acceptable with one exception. Bis(2-ethylhexyl)phthalate (samples MND20-0343-0001 and MND20-0343-1001) exceeded the percent difference criteria of ± 35 percent, and the validators qualified these samples as estimated (UJ,J). Since bis(2-ethylhexyl)phthalate was the only compound affected, and this compound is a common laboratory contaminant, the variance is not considered significant. For the purpose of evaluating the sample site, the larger of the two values should be used.

Laboratory Control Sample Recoveries
Laboratory control samples are used to evaluate target analyte performance per batch and to assist in assessing matrix spike performance. When matrix spike recoveries are outside acceptance limits and laboratory control sample recoveries are acceptable, the condition supports sample matrix interference. When both the matrix spike and laboratory control sample recoveries are low or high, the condition indicates a possible laboratory performance problem. Results associated with poor control sample recoveries were qualified estimated (J, UJ) to indicate a potential bias. However, the degree of correlation between a laboratory control sample and the sample data has not been determined. Because the degree of correlation between the samples and the laboratory control sample is indeterminate and the review of the laboratory control sample recoveries revealed no pattern, affected sample results are usable.

B.2.3. Pesticides/PCBs

The validators identified the following five types of QCC deficiencies during the validation of the pesticide/PCB data packages:

1. Surrogate recoveries below the acceptance criteria of 60 percent.
2. Initial calibration percent relative standard deviations greater than 20 percent.
3. Continuing calibration relative percent differences greater than 25 percent.
4. Matrix spike recoveries below acceptance limits.
5. Laboratory control spike recoveries below acceptance limits.

Of the five QCC deficiencies, two of the deficiencies indicated potential programmatic impact to the data interpretation: matrix spike recoveries and laboratory control spike recoveries.

Surrogate Recoveries
Surrogate recoveries below 60 percent resulted in the qualification of 54 samples. Of the 54 samples, the validators rejected (R) two (MND01-0156-0001 and MND01-0071-0001) because of surrogate recoveries below 10 percent for tetrachloro-m-xylene (TCMX) and/or decachlorobiphenyl (DCB). These rejected data are unusable.

Of the 54 samples, the validators qualified as estimated (J,UJ) 30 samples because of TCMX recoveries below 60 percent and DCB recoveries within acceptance limits. The TCMX surrogate recoveries in these 30 samples ranged from 45 to 55 percent. Since these 30 samples had only one surrogate outside the acceptance limit and the largest variance was only 15 percent, the data are usable. The decision to use these data is consistent with previous investigations that did not qualify data when only one of the surrogates was outside the criterion with a recovery greater than 10 percent.

The validators qualified as estimated (UJ) eight samples because of DCB recoveries below 60 percent and TCMX recoveries within acceptance criteria.

The DCB surrogate recoveries for these eight samples ranged from 20 to 50 percent. Because these eight samples had only one surrogate outside acceptance limits, the data are usable. The decision to use these data is consistent with previous investigations, which did not qualify data when one of the surrogates was outside the criterion with a recovery greater than 10 percent.

The validators qualified as estimated (UJ) the remaining 14 samples because both surrogate recoveries were below acceptance limits. The surrogate recoveries for TCMX ranged from 25 to 55 percent, and the recoveries for DCB ranged from 15 to 50 percent. Since both surrogates were below criteria, the data are probably biased low. Data are usable for comparison to an action limit, provided the action limit is greater than 2.5 times the quantitation limit for the specific analytes.

Initial Calibration (RSD)
The laboratory uses the percent relative standard deviation (RSD) to evaluate the linearity of a calibration curve. When the RSD exceeds 20 percent, the accuracy of the calibration curve may be affected. The RSD criterion was exceeded for three compounds, endosulfan I (20.3 percent), endrin (26.6 percent), and methoxychlor (21.1 percent), and affected 19 samples. The validators qualified as estimated (UJ) the three compounds in the affected samples. Because the analytes were reported nondetect in these samples, the decreased accuracy quantitating the sample results does not significantly affect the usability of the data.

Continuing Calibration Check (RPD)
The laboratory analyzes a continuing calibration check every 10 samples to verify the stability of the calibration curve. The laboratory evaluates the CCC by determining the relative percent difference (RPD). If the RPD is greater than ± 25 percent, then the accuracy of the analyte quantitations determined from the calibration curve is impacted. The RPD criterion was exceeded for three compounds: α-BHC (30 percent), γ-BHC (30 percent), and 4,4'-DDT (26 percent). Because the analytes were not detected in the affected samples and the resulting bias is positive, the calibration curve variance does not significantly affect the usability of the data.

Matrix Spike Recoveries
During the project, the laboratory analyzed six matrix spike pairs. The laboratory performed matrix spikes to determine whether a sample matrix interferes with the precise and accurate quantitation of sample analytes. When a repeated deficiency is observed in several matrix spikes, the deficiencies may indicate a batch-wide matrix interference. The laboratory reported percent recoveries less than the acceptance criteria for selected analytes in five of the spike pairs. The data validators, per the validation guidelines, qualified as estimated (UJ) the nondetect results for the corresponding analytes in the parent matrix spike pair sample. Table B.2.9, Pesticide/PCB Matrix Spike Recoveries Summary, lists the identified

matrix spike sample, the spiked compound, the spiked compound lower recovery limit, and the analyte recoveries per sample below the acceptance criteria.

In addition to the specific sample qualifications, the pattern of matrix spike recoveries below criteria indicates that lindane, heptachlor, and endrin may be systematically biased. Data for these analytes may be used; however, the minimum amount of analyte present should be evaluated at 2 to 2.5 times the reporting level for these analytes. Appendix B.1 discusses the matrix spike trend identified during the data assessment.

Laboratory Control Sample Recoveries
The laboratory uses laboratory control samples to evaluate target analyte performance per batch and to assist in assessing matrix spike performance. When matrix spike recoveries are outside acceptance limits and laboratory control sample recoveries are acceptable, the condition supports sample matrix interference. When both the matrix spike and laboratory control sample recoveries are low or high, the condition indicates a possible laboratory performance problem. Results associated with poor control sample recoveries were qualified estimated (J,UJ) to indicate a potential bias. However, the degree of correlation between a laboratory control sample and the sample data has not been determined. Because the degree of correlation between the samples and the laboratory control sample is indeterminate, affected sample results are usable. Table B.2.10, Pesticide/PCB Laboratory Control Sample Recoveries Summary, provides a summary of noncompliant laboratory control sample recoveries.

Laboratory control spike 93LE1758 corresponds to the matrix spike pair for MND01-0336-0001. Because the recoveries were low in both the laboratory control sample and matrix spike pair, a laboratory deficiency may have biased every analyte in the extraction batch. All analytes in the extraction batch associated with laboratory control spike 93LE1758 are suspected of being biased low. Although the results associated with laboratory control spike 93LE1758 are usable, the minimum amount of analyte present should be evaluated at 2 to 2.5 times the quantitation limit. The pattern of laboratory control sample recoveries also indicates that the laboratory procedures resulted in a general low bias for lindane. The minimum reportable limit for lindane in these samples should be raised to 2 to 2.5 times the quantitation limit or reported value when compared to action limits.

B.2.4. Explosives

Because the laboratory reported PETN and explosives separately, separate data validation reports were generated. This section presents the qualifications assigned to PETN separately from the qualifications assigned to the nitroaromatic explosives.

B.2.4.1. Explosives - PETN

Four types of QCC deficiencies were identified during the validation of the PETN data packages:

1. Poor PETN chromatography.
2. Surrogate recoveries below the acceptance criteria of 50 percent.
3. Continuing calibration percent differences greater than 15 percent.
4. Exceeded holding times.

Poor Chromatography
Poor chromatography did not directly result in the qualification of any of the data. However, the wavelength used to identify and quantitate PETN is subject to interferences. These interferences often take the form of interfering peaks. Although it is possible these peaks could mask PETN, our review of the chromatograms indicated it is more likely that a false-positive result could be reported for PETN. Comparison of results from the spring investigation suggests that PETN is indeed not present, and the full results are probably false-positive.

Surrogate Recovery
Surrogate recovery was below criteria for 48 samples. Of the 48 samples, 42 samples were qualified estimated due to surrogate recoveries ranging from 13 to 48 percent. A review of the data indicated that the resolution of the nitroglycerin surrogate was very poor, whereas the resolution of the PETN was acceptable. Because of the disparity in chromatographic resolution between the nitroglycerin and PETN, the nitroglycerin recovery may not be a good indicator of analytical performance. PETN results qualified estimated (UJ) due to poor surrogate recovery should be used without consideration for the surrogate performance. For the other six samples, surrogate recoveries could not be determined due to a matrix interference, which also may have affected PETN. The validators rejected (R) the results for these six samples.

Continuing Calibration
The laboratory performed continuing calibration checks to confirm the stability of the calibration curve. Table B.2.11, Summary of Samples Affected by Continuing Calibration Check, summarizes the continuing calibration checks that exceeded criteria twice and affected eight samples.

The laboratory reported sample MND01-0126-0001 and MND01-0394-0001 with positive results. The reported results may be biased high, based on the continuing calibration percent recovery by approximately 40 percent. The validators rejected (R) the other sample results, because the results for the other samples were nondetect (U); however, the positive bias does not affect the result and the data should be used as nondetect.

Holding Time
The holding time was exceeded for two samples: MND20-0345-0001 and MND01-7899-0001. The validators qualified the PETN results in these two samples as estimated (UJ). Since MND01-7899-0001 was the performance evaluation sample and did not include PETN as target analyte, the qualification for this sample was not assessed. The laboratory exceeded the holding time for

sample MND20-0345-0001 by 1 day; this exceedance probably did not cause significant data bias. The PETN result for MND20-0345-0001 is usable.

B.2.4.2. Explosives - Nitroaromatics

The validators identified the following five types of QCC deficiencies during the validation of the nitroaromatic explosives data packages:

1. Laboratory control sample recoveries below criteria.
2. Surrogate recoveries below criteria.
3. Matrix spike sample recoveries below criteria.
4. One sample holding time exceeded.
5. Chromatographic interferences.

Laboratory Control Sample Recoveries

The validators rejected (R) analyte results from nearly every data package because the laboratory control sample did not meet the required recovery criteria. The criteria established in Revision 3 of the QAPP were determined to be too stringent per Corrective Action Report C059 and plan change notice PCN-321. The criteria rejected sample data that were associated with laboratory control sample recoveries as high as 77 percent. WESTON revised the criteria as described in the corrective action and applied these criteria during data assessment. Because the deficiency was recognized after data validation was completed, and the data validation service had applied the qualifications according to the QAPP guidelines, WESTON did not revise the validation reports and electronic data base to remove the 'R' qualifier. The data assessment table in Appendix B.3 summarizes the usability of the data based on the revised criteria. Table B.2.12, Summary of Deficient Laboratory Control Sample Recoveries, summarizes the highest, lowest, and mean recoveries of the deficient laboratory control sample recoveries by analyte and also includes the QAPP Revision 3 acceptance limit.

Surrogate Recoveries

Surrogate recoveries for 15 samples were reported below the acceptance limit of 50 percent. The validators rejected (R) one of the 15 samples (MND01-0158-0001) due to a surrogate recovery of 0 percent, and this data point is unusable. The other 14 sample surrogate recoveries ranged from 36 to 49 percent. The validators qualified these samples as estimated (UJ). Because the surrogate recovery was below the acceptance limits, the target analytes may have been suppressed. However, since all associated results were nondetect, the data can be used by applying a factor of 2.5 to the quantitation limits. If the adjusted quantitation limit is below an action limit, then the data are usable. If the adjusted quantitation limit is above the action limit, then the data are inconclusive and may not be used.

Matrix Spike Recoveries

Matrix spike recoveries for four of the six specified matrix spike samples were below the acceptance limits. Table B.1.3, Summary of Matrix Spike Performance, summarizes the matrix spike performance. The matrix spike

recoveries and laboratory control sample recoveries indicate a general low bias for all sample results. The table also indicates how to estimate the bias. In summary, results for the nitroaromatic compounds may be biased low by up to a factor of two, which is equivalent to about 50 percent recovery. Once action limits have been assigned or selected, the impact of the bias can be evaluated.

Holding Time
Sample MND20-0345-0001 was extracted 1 day outside of holding time, and the validators qualified all analyte results as estimated (UJ). Because the holding time was exceeded by only 1 day, the data were probably not significantly affected and are usable.

Chromatographic Interference
The validators rejected the explosive analytes in one sample, MND01-7899-0001, due to chromatographic interference. Since the affected sample was the PE sample and none of the rejected analytes was a target, the interference is irrelevant.

B.2.5. Inorganics

Although cyanide is part of CLP inorganics, the data assessment of cyanide is discussed under anions. This section describes only the results for metals performed by CLP ILM3.0 and QAPP Modification A. The validators identified the following nine types of QCC deficiencies during the validation of the inorganic data packages:

1. Positive or negative blank results associated with sample results.
2. Analytical spike recoveries below the acceptance limit.
3. Mercury holding time exceeded.
4. Matrix spike recoveries below the acceptance limit.
5. Serial dilutions with percent differences greater than 10 percent or not performed as required by the method.
6. Unverifiable sample results.
7. No laboratory control sample analyzed for antimony.
8. Field duplicate percent differences greater than 25 percent.
9. ICP interference masking results.
10. Continuing calibration verification result greater than 120 percent.

Blank Contamination

Blank results caused the greatest number of data points to be qualified for metals. The reported blank results were both positive and negative. Positive blank results are indications of laboratory contamination, and negative blank results are indications of negative bias. Table B.2.13, Range of Blank Results for Metals, summarizes the reported blank results by analyte. The laboratory reported that aluminum, cadmium, lithium, molybdenum, potassium, vanadium, and zinc were most frequently found in the blanks as positive or negative results.
When positive results were reported in the blanks, associated positive sample results that were less than five times the blank concentration were qualified nondetect (U). The nondetect validation qualifier affects the data by raising the quantitation limit. Sample results qualified on the basis of blank contamination below the QAPP quantitation limit are usable. Since the QAPP specifies blanks must not contain target analytes greater than the practical quantitation limit (PQL), which is equivalent to the QAPP quantitation limit, any results associated with contaminant levels below the PQL will meet the project goals. The laboratory reported that, of the analytes with positive blank results, only six of the analytes had concentrations greater than the PQL during the investigation: aluminum, chromium, lead, molybdenum, vanadium, and zinc. Table B.2.14, Summary of Positive Blank Contaminants Above the PQL, summarizes the six analytes, number of samples qualified, number of samples qualified above the quantitation limit, and the QAPP quantitation limit for each of the analytes. Molybdenum is not listed since no samples were qualified above the QAPP quantitation limit.

Samples qualified as nondetect above the quantitation limit must be compared to an action limit. If the nondetect result is greater than an action limit, then the data are inconclusive and unusable. Action limits had not been assigned at the time of report preparation and the data were assumed usable. Samples qualified at concentration below the quantitation limit are usable.

When negative results are reported for blanks, validators qualify the associated sample results as estimated (UJ,J). Unlike positive results, it is not possible to assess the degree of bias associated with negative results. Negative results are often the result of positive instrument responses far below the functional calibration range of the instrument and represent an anomaly of the calibration curve. For the purposes of these data, results associated with negative blank concentrations are usable.

Analytical Spike Recoveries
Sample digestates analyzed by graphite furnace atomic absorption (GFAA) spectrometry must be spiked with the target analyte prior to analysis. The post-digestion spike or analytical spike is used to evaluate both laboratory performance and matrix suppression. The laboratory analyzed by GFAA arsenic, antimony, selenium, lead, and thallium. The analytical spike recoveries were outside the acceptance limits (85-115 percent) for 33 arsenic samples, 23 antimony samples, 127 selenium samples, 51 lead samples, and 107 thallium samples. The validators qualified the associated sample results as estimated (J,UJ). Only one

sample analyzed for antimony was reported with a spike recovery greater than the acceptance criteria. The other deficient spike recoveries for antimony were greater than 75 percent. The deficient spike recoveries for selenium, arsenic, and lead were greater than 48, 79, and 45 percent, respectively. All recoveries, except two deficient spike recoveries for thallium, were greater than 40 percent. Two thallium recoveries were reported at 31 and 38 percent. At the time of report preparation, action levels had not been established for the affected analytes. When action levels are identified, the laboratory-reported values should be adjusted by a bias factor based on the reported analytical spike recoveries outside criteria to identify whether the data are usable for comparison to the assigned action limit.

Mercury Holding Times
The holding time for mercury analysis was exceeded for eight samples by 1 day and the associated results were qualified estimated (UJ). Table B.2.15, Exceeded Holding Times for Mercury Analysis, summarizes the affected samples. Because the holding time was exceeded by only 1 day, the impact of the deficiency on the data usability is minimal and the data are usable.

Matrix Spikes
The laboratory uses matrix spikes to determine whether a sample matrix interferes with the precise and accurate quantitation of sample analytes. When a repeated deficiency is observed in several matrix spikes, the deficiencies may indicate a batch-wide matrix interference. Six matrix spike samples were submitted during the project for analysis. However, the laboratory actually performed additional matrix spike analyses using the groundwater samples. The additional matrix spike results were incorporated into the data validation and assessment procedures. The validators rejected only two analyte results, silver and thallium in sample MND01-0120-0001 (total), because of poor matrix spike recoveries. The validators qualified as estimated (J, UJ) all other results associated with low matrix spike recoveries, and the data are usable.

In addition to reviewing the matrix spike recoveries as individual data points, the validators evaluated programmatic matrix spike recovery. The average matrix spike recoveries for thallium (soluble) and thallium (total) were 64.6 and 60.2 percent, respectively, with a standard deviation of less than 30 percent. Table B.1.3 in Appendix B.1 summarizes the matrix spike recoveries and standard deviations. Considering the thallium matrix spike recoveries and the analytical spike recoveries for thallium, it is probable that a batch-wide bias is present. Based on the matrix spikes and analytical spikes, the reported concentration actually may represent half of the total thallium concentration in the samples. No other average matrix spike recoveries were below the acceptance limit for both soluble and total analysis.

Serial Dilutions
Serial dilutions indicate whether significant physical or chemical interference exists due to sample matrix effects. The check is performed when an analyte

concentration exceeds 50 times the instrument detection limit. The validators identified two types of serial dilution deficiencies during data validation: serial dilutions not performed at the required frequency and serial dilutions with percent differences greater than 10. In some cases, the serial dilutions were not performed at the frequency specified and the associated positive sample results were qualified as estimated (J). However, the lack of a serial dilution does not provide sufficient information to access the potential degree of error. The validators assumed that the data are usable based on the other serial dilutions performed during the program.

The validators qualified as estimated (J) the results associated with poor serial dilutions (percent differences greater than 10). A degree of bias may be estimated based on the percent difference presented with the qualifier in Appendix B.3. Laboratory batches 9309L070, 9309L990, 9309L098, 9309L929, 9309L992, 9309L920, 9309L921, 9309L964, 9309L119, 9309L120, 9310L282, 9310L311, 9310L166, 9309L898, and 9310L320 were affected by this deficiency. Varying combinations of aluminum, barium, calcium, chromium, copper, iron, magnesium, manganese, nickel, sodium, vanadium, and zinc were affected in the samples. Since aluminum, barium, calcium, iron, magnesium, manganese, and sodium are likely to have extremely high action limits, the inaccuracy probably does not significantly affect these reported analyte concentrations. The results for chromium, copper, nickel, vanadium and/or zinc in batches 9309L282, 9309L166, and 9309L320, 9309L990, 9309L929, and 9309L921 may be affected by this deficiency. However, until an action limit is assigned to which the data can be compared and the potential error further considered, the data are assumed usable.

Unverifiable Sample Results

The validators rejected sample results for calcium in samples MND01-0123-0001 (total and dissolved), MND20-0347-1001 (total and dissolved), MND20-0347-0001 (total and dissolved), and MND20-0325-0001 (total and dissolved) selenium in sample MND01-0602-0001 (dissolved), lithium in samples MND01-0311-0001 (total and dissolved) and MND01-0311-1001 (total and dissolved), cadmium in sample MND01-0130-0001 (dissolved), and silver in sample MND01-0120-0001 (total) because of unverifiable laboratory results. As part of the data validation process, the validators use the data that generated the sample results to recalculate reported sample results. If the recalculated result does not agree with the laboratory result, the validators reject (R) the data, and these data are unusable.

In addition, the validators rejected (R) nondetect results for two samples, MND01-0335-0001 (total and dissolved) for antimony, and positive results for two samples, MND20-0337-0001 (total and dissolved) for selenium, because the instrument detection limit could not be confirmed. Because the results were reported nondetect (U) by the laboratory, these data points were unusable.

Laboratory Control Sample

Results for samples MND20-0335-0001 (total and dissolved) were qualified estimated (J) for antimony due to the lack of a laboratory control sample. The data are assumed usable based on acceptable analyte recovery in laboratory control samples analyzed with other laboratory batches during the program.

Field Duplicate Relative Percent Differences
Field duplicates are introduced into the sample stream to evaluate the representativeness of both field sampling and laboratory analysis. When the percent difference between the results reported for field duplicates exceeds 25 percent for waters, it indicates there is a potential problem in achieving a representative sample. Of the 10 field duplicates submitted during the sampling event, the laboratory reported that 7 had analytes percent differences greater than 25. The validators qualified the affected analytes as estimated (J,UJ). Six field duplicates with analyte percent differences greater than the 25 percent had analyte concentrations below or near the quantitation limit. High variability between sample results reported near the quantitation limits is expected, and the assigned qualification does not affect data use. Only sample MND01-0607-0001/1001 (total and dissolved) exhibited a high degree of variance among analyte results above the quantitation limit. The validators assumed the sampling event precision to be acceptable since only field duplicate pair MND01-0601-0001/1001 was reported with percent differences outside acceptance limits for analyte concentrations clearly above the quantitation limit. Furthermore, because it is assumed analyte concentrations will eventually be compared to actions limits, the largest of the reported analyte concentrations for sample MND01-0601-0001/1001 (total and dissolved) should be used. The use of the largest values ensures the most conservative approach to evaluating the data. If the sample data are identified as a decision point, a second sample or the spring sampling data should be used.

Inductively Coupled Plasma (ICP) Interference
During ICP analysis, analyte concentrations are sometimes great enough to interfere with the analysis of other analytes. Since the sample interferant concentrations were below normal interference check sample (ICS) levels, any effects on the sample results would be minimal. The validators qualified as estimated (J,UJ) the data affected by ICP interference. Since the interference is inherent to the sample, the data are usable.

Continuing Calibration Verification
The positive result for antimony was qualified as estimated (J) due to a continuing calibration verification (CCV) that exceeded criteria. The CCV was reported at 136 percent with an acceptance limit of 120 percent. The reported result may be biased high. If the reported result does not exceed an assigned action limit, then the data point is usable. If the result does exceed an action limit, then the result must be reevaluated, taking into account a bias of up to 36 percent, to determine the usability of the data.

B.2.6. Anions

The validators identified the following six types of QCC deficiencies during the validation of the anion data packages:

1. Total organic carbon analyses were not performed in quadruplicate.
2. Holding times were exceeded for select analytes.
3. The chloride initial calibration correlation coefficient was less than 0.996.
4. Matrix spike recoveries were below 80 percent or above 120 percent.
5. Matrix spike/matrix spike duplicate relative percent differences were greater than 20 percent.
6. Blank contamination was above the quantitation limit.

Total Organic Carbon Not Analyzed in Quadruplicate
The laboratory did not perform total organic carbon analyses in quadruplicate as required by the QAPP. Appendix B.1 discusses this deficiency under systematic laboratory deficiencies. WESTON initiated Corrective Action Report C014 when this deficiency was identified. The lack of quadruplicate analysis probably does not affect the usability of the data because water samples are generally homogenous.

Holding Times
The laboratory exceeded the holding times for ammonia, cyanide, sulfate, total suspended solids (TSS), and total dissolved solids (TDS) during the analysis of selected samples. Table B.2-16, Ammonia Holding Time Summary, summarizes the holding time for ammonia analysis, which was exceeded for six samples and qualified estimated (UJ,J) during data validation.

Because the ammonia samples were preserved and refrigerated prior to analysis, the validators believe that the exceeded holding time did not significantly bias the data and the data are usable.

The holding time for cyanide was exceeded for 14 samples, as summarized in Table B.2.17, Cyanide Holding Time Summary, and the validators qualified the results as estimated (UJ,J).

The sample results associated with exceeded holding times of 1 to 5 days are unlikely to be significantly biased and are usable. The nondetect reported for sample MND01-0159-0001, which was analyzed 13 days outside the holding time, may be biased low. However, since the sample was preserved and refrigerated, even the additional 13 days probably does not significantly affect the intended data use.

The laboratory exceeded the holding time for sulfate for sample MND01-0137-0001 by 74 days. However, because the sulfate anion is fairly stable under most natural occurring conditions, the data are usable. The laboratory exceeded the holding time for TSS/TDS for 15 samples. One of the samples for which the criterion was exceeded was the PE sample, for which the laboratory accurately quantitated the dissolved solids content. Since TSS/TDS content is unlikely to change significantly when samples are properly stored at 4 °C, as indicated by the PE sample, the exceeded holding times for TSS/TDS do not significantly affect the use of the data.

Initial Calibration Correlation Coefficient
The chloride correlation coefficient used by the laboratory was less than the QAPP specification of 0.996. Correlation coefficients less than 0.996 may result in inaccurate data results. The laboratory quantitated 32 chloride samples, which were associated with a calibration correlation of 0.960. The validators qualified as estimated (J,UJ) the chloride results for the affected samples. One of the 32 samples included the blind PE sample. The PE sample was reported at 317 parts per million (ppm), which was above the upper acceptance limit of 292 ppm. However, the nature of the correlation coefficient does not allow the inaccuracy of individual measurements to be assessed. The data are usable as a general indicator of the presence of chloride. Comparison of the data to action limits may be unacceptable.

Matrix Spikes
Six matrix spike pairs were submitted during the project for analysis. In addition to these six field-specified matrix spikes, the laboratory initiated several matrix spike pairs using the EG&G Mound samples. The laboratory performs matrix spikes to determine whether a sample matrix interferes with the precise and accurate quantitation of sample analytes. When the laboratory observes a repeated deficiency in several matrix spikes, the deficiencies may indicate a batch-wide matrix interference. Matrix interference may be biased either positive or negative. Negative bias is indicated by matrix spike recoveries less than 80 percent, and positive bias is indicated by matrix spike recoveries greater than 120 percent.

Three samples exhibited low recoveries for sulfate, one sample exhibited low recovery for nitrate/nitrite, and one sample exhibited low recovery for ammonia. Of the three sulfate samples with recoveries below 80 percent, one sample, MND01-0303-0001, had 0 percent recovery and was rejected (R). The other two samples, MND20-0383-0001 and MND20-0336-0001, were qualified estimated (J) with recoveries of 53 and 32 percent, respectively. The sulfate data from these two samples are usable, but the bias should be considered when the values are compared to action limits. Sample MND01-0304-0001 had a nitrate/nitrite matrix spike recovery of 0 percent and was rejected (R). Sample MND01-0304-0001 also had a low ammonia matrix spike recovery of 33 percent. The ammonia result is usable, but the bias should be considered when the value is compared to an action limit.

Three anion samples exhibited positive matrix interference. Two samples, MND01-0304-0001 and MND01-0127-0001, had chloride matrix spike recoveries of 130 and 139 percent, respectively. For the purpose of comparing these values to an action limit, the data are usable as presented. The laboratory reported sample MND01-0046-0001 with a nitrate/nitrite matrix spike recovery of 142 percent. For the purpose of comparing the reported value to an action limit, the data are usable.

Matrix Spike Percent Difference
The laboratory reported only the matrix spike pair for sample MND01-0046-0001 with a percent difference greater than 20 percent. The percent difference was exceeded by ammonia by 2 percent. The small difference is insignificant and the data are usable.

Continuing Calibration Blank
One continuing calibration blank was reported with nitrate/nitrite contamination affecting two samples in batch 9310L282. The nitrate/nitrite contamination was reported at 0.023 μg/L and does not significantly impact the data usability.

B.2.7. Radionuclides

The validations identified the following two types of QCC deficiencies during the validation of the radiological data packages:

1. Blank contamination.

2. Relative percent differences between laboratory replicates greater than four standard deviations.

Blank Contamination
Three types of qualifications occurred as the result of blank contamination: reject (R), estimated (J), and estimated nondetect (UJ). Each of these assigned qualifications is described in detail. A significant portion of alpha-isotopics (plutonium, uranium, and thorium) data was rejected (R) due to the associated method blanks. During the review of the data validation results, WESTON determined that the validation service had accurately applied the data qualification guidelines, but that the guidelines were deficient. An investigation into the rejected data determined that the criteria had at least two significant weaknesses:

1. A background count of zero resulted in nearly all the method blanks being classified as greater than two times the minimum detectable activity (MDA). Once the blanks were classified as greater than the MDA, low sample results, including nondetects, were often less than three times the method blank activity and were rejected.

2. Theoretically, rejected data should not be assessed usable. Therefore, data values that may have been valuable for evaluating maximum concentrations were rejected.

Because these deficiencies were identified after the validation process was completed, and the validation service had applied the qualifications according to the guidelines, the rejected values have been not been changed in the report or the electronic database. Because the data validation service applied the rejection (R) qualifiers properly based on their subcontract with WESTON and the QAPP specification, WESTON decided that changing those qualifications in the electronic database or on the data validation reports could be construed as altering data. Rather than correcting the electronic database and validation reports, WESTON elected to use the data assessment cycle to identify select data as usable and to document the data usability with a corrective action report. However, as indicated in Table B.3.7, many of the rejected data points have been assessed usable and qualified nondetect (U). Appendix B.1 also discusses this systematic criteria deficiency. Corrective Action Report C049 and Plan Change PCN-317 document the criteria under which these data points were assessed.

The validators qualified as estimated (J) data for alpha-isotopics when the method blank activity was greater than two times the MDA, and the sample result was greater than three times the MDA. These data points were further assessed against the revised criteria during data assessment. As a result of this review, the data points were assessed usable, and a few were qualified nondetect (U).

The validators qualified as estimated (UJ) data for alpha-isotopics when the samples results were reported less than the MDA and the blank result was greater than two times the MDA. Actually, these data points should have been rejected according to the validation guidelines, but QuantaLex, the contracted data validation service, applied professional judgment and qualified the results as estimated (UJ). These results were reviewed against the revised criteria during assessment, and these data points are usable without qualification.

Relative Percent Difference for Laboratory Duplicates
The validators qualified as estimated (J) three samples due to laboratory duplicate relative percent differences greater than four standard deviations in laboratory duplicates. Table B.2.18, Summary of Laboratory Replicate Results for Radionuclides, summarizes the affected samples, nuclides, and degree of non-compliance.

The number of replicate samples affected with standard deviation factors outside the criteria do not indicate a systematic deficiency. Additionally, many of the standard deviation factors outside the criteria were calculated from sample results at or near the MDA. Because the qualified sample results were so near the MDA, the variance is expected and the data are usable.

Table B.2.1 - Data Validation Qualifiers

Qualifier	Description of Data Qualifier
U	Indicates that the analyte was analyzed for but not detected above the reported sample quantitation limit.
J	Indicates the associated value is an estimated quantity.
UJ	The analyte was not detected above the reported sample quantitation limit, however the reported sample quantitation limit is an approximate value.
REJECT	Sample results were rejected based on validation criteria.

Table B.2.2. Exceeded Holding Times for Method 8030

Sample Identification	Days Past Holding Time	Sample Identification	Days Past Holding Time
MND01-0123-0001RE	2	MND01-0138-0001RE	2
MND01-0320-0001RE	1	MND01-0319-0001	1
MND01-0319-3001	1		

Table B.2.3. USEPA SW-846 (1992) Continuing Calibration Limits for Method 8010/8020

Analyte	Range (%R)
Benzene	77 - 123
Bromodichloromethane	76 - 124
Bromoform	74 - 127
Bromomethane	59 - 142
Carbon tetrachloride	69 - 132
Chlorobenzene	72 - 128
2-Chloroethylvinyl ether	77 - 123
Chloroform	60 - 140
Chloromethane	75 - 125
Dibromochloromethane	60 -140
1,2 - Dichlorobenzene	66 - 135
1,3 - Dichlorobenzene	70 - 130
1,4 - Dichlorobenzene	50 - 151
1,1 - Dichloroethane	70 - 121
1,2 - Dichloroethane	84 - 116
1,1 - Dichloroethene	72 - 129
trans - 1,2 - Dichloroethene	63 - 137
1,2 - Dichloropropane	64 - 136
cis - 1,3 - Dichloropropene	78 - 123
trans - 1,3 - Dichloropropene	74 - 126
Ethylbenzene	63 - 137
Methylene chloride	64 - 136
1,1,2,2 - Tetrachloroethane	49 - 151
Tetrachloroethene	70 - 130
Toluene	78 - 123
1,1,1 - Trichloroethane	71 - 129
1,1,2 - Trichloroethane	79 - 122
Trichloroethene	77 - 123
Trichlorofluoromethane	67 - 134
Vinyl chloride	69 - 132

Table B.2.4. Continuing Calibration Check Results Not Included in 1992 Guidelines

Analyte	Upper Range (%R)	Lower Range (%R)
Dibromomethane	136.9	64.3
1-Chlorohexane	122.4	57
1,1,1,2-Tetrachloroethane	83.9	56
1,2,3-Trichloropropane	120	63
Bromobenzene	116	65
2-Chlorotoluene	68	49
4-Chlorotoluene	119	57
2,2-Oxybis(1-chloropropane)	82.9	58
Acetone	245	50.5
Carbon disulfide	168	65.8
Vinyl acetate	123	69
Methylethyl ketone	156	62.8
Methyl isobutyl ketone	119	61.8
Xylene	126	67
1,3-Diethylbenzene	126	67.1
1,4-Diethylbenzene	122	67
1,2-Diethylbenzene	124.9	69.3

Table B.2.5. Usability of Samples with Very Poor CCC Recoveries

Laboratory Batch	Sample Identification	Usability
9309L069	MND01-0158-0001	Unusable
9309L089	MND01-0601-0001	Unusable
9309L089	MND01-0370-0001	Unusable
9309L090	MND01-0312-0001	Unusable
9309L091	MND01-0301-0001	Unusable
9309L091	MND01-0128-0001	Unusable
9309L091	MND01-0128-1001	Unusable
9309L091	MND01-0125-0001	Unusable
9309L098	MND01-0372-0001	Usable
9309L098	MND20-0341-0001	Usable
9309L098	MND20-0332-0001	Usable
9309L929	MND01-0314-0001	Usable
9309L963	MND01-7899-0001	Usable
9309L964	MND01-0159-0001	Usable
9309L966	MND01-0311-0001	Usable
9309L966	MND01-0311-1001	Usable
9309L990	MND01-0160-0001	Usable
9309L990	MND01-0156-0001	Usable
9309L992	MND20-0326-0001	Usable

CCC - Continuing calibration check

Table B.2.6. Exceeded Holding Times for Method 8021

Laboratory Batch	Sample Identification	Days past Holding Time
9309L929	MND01-0314-2001	1
9309L929	MND01-0314-0001	1
9309L963	MND01-7899-0001	1
9309L963	MND01-7899-2001	3
9309L966	MND01-0311-2001	1
9309L966	MND01-0311-2002	1
9309L991	MND01-0602-2001	1
9309L965	MND01-0310-0001	1
9309L965	MND01-0310-2001	1
9309L965	MND01-0310-2002	1

Table B.2.7. Semivolatile Blank Contaminant Levels

Contaminant	Lowest Detected Concentration	Highest Detected Concentration (μg/L)
phenol	0.4 ug/L	0.4
diethylphthalate	0.4 ug/L	2
di-n-butylphthalate	0.5 ug/L	2
bis(2-ethylhexyl)phthalate	0.3 ug/L	5

Table B.2.8. Semivolatiles Exceeding Continuing Calibration Criteria

Analyte	Minimum Percent Differences < -25 percent	Maximum Percent Differences > 25 percent
Anthracene	NA	25.8
Benzo(k) Fluoranthene	NA	26.4
Benzoic Acid	NA	43.3
bis(2-Chloroethyl)Ether	NA	28
Carbazole	-32.1	25.4
Di-N-Butylphthalate	NA	26.3
4,6-Dinitro-2-Methylphenol	NA	28.3
2,4-Dinitrophenol	NA	38.5
Hexachlorocyclopentadiene	NA	42.8
2-Nitroaniline	NA	27.8
4-Nitroaniline	-28.9	35.2
2,2-Oxybis(1-Chloropropane)	-41.3	41.3
Pentachlorophenol	NA	31
Phenanthrene	NA	25.3

Table B.2.9. Pesticide/PCB Matrix Spike Recoveries Summary

Sample Identification	Lindane (56%)	Heptachlor (40%)	Endrin (56%)	Dieldrin (52%)	Aldrin (40%)	DDT (38%)
MND01-0124-0001	48	28	52		24	
MND20-0336-0001	34	26	40	38	20	35
MND01-0046-0001	52	36				
MND01-0304-0001	38			51		
MND20-0356-0001			36			

Table B.2.10. Pesticide/PCB Laboratory Control Sample Recoveries Summary

Sample Identification	Lindane (56%)	Heptachlor (40%)	Endrin (56%)	Dieldrin (52%)	Aldrin (40%)	DDT (38%)
93LE1791	54					
93LE1791	54					
93LE1699					28	
93LE1844	42					
93LE1758	40	38	50	50		
93LE1746					36	
93LE1814	42		51			

Table B.2.11. Summary of Samples Affected by Continuing Calibration Check

Sample Identification	Percent Recovery	Qualifier	Sample Identification	Percent Recovery	Qualifier
MND01-0126-0001	137	J-C	MND20-0346-0001	217	R-C
MND01-0394-0001	137	J-C	MND01-0124-0001	217	R-C
MND01-0601-0001	217	R-C	MND01-0319-0001	217	R-C
MND01-0370-0001	217	R-C	MND01-0303-0001	217	R-C

Table B.2.12. Summary of Deficient Laboratory Control Sample Recoveries

Analyte	Lowest Recovery	Highest Recovery	Mean	Acceptance Limit
1,3,5 - TNB	51	78	67	85
2,4,6 - TNT	54	75	68	78
2,4-DNT	48	71	62	74
2,6-DNT	45	65	56	66
RDX	56	59	58	62

Table B.2.13. Range of Blank Results for Metals

Analyte	QAPP Quantitation Limit (ug/L)	Range of Positive Values (ug/L)		Range of Negative Values (ug/L)	
		Maximum	Minimum	Minimum	Maximum
Aluminum	20	40.7	3.7	NA	NA
Antimony	10	4.0	2.9	-2.6	-2.0
Arsenic	10	4.0	2.8	-2.5	-2.5
Barium	200	NA	NA	NA	NA
Beryllium	1	NA	NA	NA	NA
Bismuth	150	140	140	NA	NA
Cadmium	5	3.5	2.2	-2.7	-2.2
Calcium	5000	NA	NA	NA	NA
Chromium	10	81	1.3	-4.6	-1.0
Cobalt	50	5.7	4.7	-6.2	-6.2
Copper	25	3.5	2	NA	NA
Iron	100	81	1.7	NA	NA
Lead	3	19.8	2.6	-2.8	-2.0
Lithium	100	65.8	5.3	-45.3	-33
Magnesium	5000	3.3	3.3	NA	NA
Manganese	15	3.7	3.9	-101.7	-3.1
Mercury	0.2	NA	NA	NA	NA
Molybdenum	20	42.5	1.9	NA	NA
Nickel	40	15.5	3.9	NA	NA
Potassium	5000	NA	NA	-2396	-339
Selenium	5	1.3	1.3	-1.1	-1.1
Silver	10	3.5	3.5	-3.6	-3.2
Sodium	5000	NA	NA	NA	NA
Thallium	10	2.0	2.0	-5.8	-1.3
Tin	50	24.3	6.1	-28.8	-2.6
Vanadium	10	20.1	2.7	-22	-5.2
Zinc	20	51.1	2.2	NA	NA

Table B.2.14. Summary of Positive Blank Contaminants Above the PQL

Analysis	Number of Samples Qualified	Number of Sample Results > PQL	Greatest Qualified Concentration (ug/L)	PQL (ug/L)
Aluminum (S)	70	11	36.3	20
Aluminum (T)	41	18	30.7	20
Chromium (S)	69	2	14.2	10
Lead (T)	3	3	29.1	3
Molybdenum (T)	1	0	<PQL	20
Vanadium (S)	32	25	70.1	10
Vanadium (T)	24	29	74.2	10
Zinc (S)	81	4	42.6	20
Zinc (T)	67	5	26.7	20

S - Soluble
T - Total
PQL - practical quantitation limit

Table B.2.15. Exceeded Holding Time for Mercury Analysis

Sample Identification	Qualifier	Number of Days Past Holding Time
MND01-0138-0001 (T)	UJ	1
MND01-0138-0001 (S)	UJ	1
MND01-0320-0001 (T)	UJ	1
MND01-0320-0001 (S)	UJ	1
MND20-0389-0001 (T)	UJ	1
MND20-0389-0001 (S)	UJ	1
MND20-0337-0001 (T)	UJ	1
MND20-0337-0001 (S)	UJ	1

Table B.2.16. Ammonia Holding Time Summary

Sample Identification	Qualifier	Number of Days Past Holding Time
MND01-0123-0001	J	1
MND01-0319-0001	J	1
MND01-7899-0001	UJ	9
MND01-0160-0001	J	8
MND01-0138-0001	UJ	1
MND01-0320-0001	UJ	1

Table B.2.17. Cyanide Holding Time Summary

Sample Identification	Qualifier	Number of Days Past Holding Time
MND01-0155-0001 (S)	UJ	2
MND01-0306-0001 (S)	UJ	2
MND01-0317-0001 (S)	UJ	3
MND01-0318-0001 (S)	UJ	1
MND01-0153-0001 (S)	UJ	1
MND01-0312-0001 (T)	UJ	1
MND01-0154-0001 (S)	UJ	2
MND01-0305-0001 (S)	UJ	5
MND01-0152-0001 (S)	UJ	4
MND01-0319-0001 (S)	UJ	1
MND01-0315-0001 (S)	UJ	1
MND01-0159-0001 (S)	UJ	13
MND20-0326-0001 (T)	J	1
MND20-0345-0001 (T)	J	2

Table B.2.18. Summary of Laboratory Replicate Results for Radionuclides

Sample Identification	Radionuclide	Standard Deviation
MND01-0304-0001	Uranium-235	6.8
MND20-0336-0001	Tritium	7.3
	Uranium-238	5.9
MND20-0383-0001	Americium-241	10.6
	Plutonium-238	20
	Thorium-230	10.9
	Thorium-232	13.3
	Uranium-238	8.5
	Uranium-235	20
	Uranium-234	6.3
	Radium-226	5.2

B.3. Summary of Validation Qualifiers: Fall

B.3.1. Summary of Appendix Purpose

Appendix B.3 contains a per sample data qualification summary (Tables B.3.1 through B.3.8). The summary provides a data user sufficient information to quickly reassess a qualified data point given a change to a data use or to an action limit. The appendix provides a list of qualified data points, the applied qualifier, the reason qualified, and a description of the impact on the probable data. WESTON derived the description of the probable impact on the data by assuming that the data point will be compared to an action limit. If the data use is changed, then the impact assessment will probable impact on the be invalid. Because specific action limits had not been assigned at the time the impact statements were developed, the statements are very general and provide only a description of the direction of bias indicated by the QCC standard. All of the tables are subject to final error checking.

B.3.2. Description of Appendix Use

When an action limit as been assigned to an analyte and an analyte value in one of the samples being evaluated is qualified, the data user can reference this table to better understand the effect on the data. For example, if an action limit for chloride was set at 4.0 mg/L and a sample result was qualified estimated (J) at 2.5 mg/L, the data user could check the qualification in the appendix and might find an entry such as:

9403L001	MND00-0000-0001	J MSR-Chloride (50%)	Low bias

This entry would indicate that the reported value may be biased low by 50 percent. To compare the result to an action limit, the data user would multiply the reported result (2.5 mg/L) by two resulting in 5 mg/L. Because the result is greater than the action limit, the data point is suspect and unsuitable for evaluating the extent of contamination. If the percent recovery had been 83 percent, the data point would have been considered usable.

Table B.3.1. Halogenated and Aromatic Volatiles by Gas Chromatography (Method 8021)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L051	MND01-0123-0001	UJ	CCC - Vinyl chloride (54)	Usable
			CCC - Trichlorofluoromethane (56)	
			CCC - Freon-113 (56)	
			CCC - 1,1-Dichloroethene (55)	
			CCC - Methylene chloride (64)	
			CCC - *trans*-1,2-Dichloroethene (55)	
			CCC - 1,1-Dichloroethane (57)	
			CCC - *cis*-1,2-Dichloroethene (58)	
			CCC - Trichloromethane (57)	
			CCC - 1,1,1-Trichloroethane (52)	
			CCC - Tetrachloromethane (54)	
			CCC - 1,2-Dichloroethane (62)	
			CCC - Trichloroethene (52)	
			CCC - 1,2-Dichloropropane (61)	
			CCC - Bromodichloropropane (58)	
			CCC - *trans*-1,3-Dichloropropene (60)	
			CCC - 1,1,2-Trichloroethane (63)	
			CCC - Tetrachloroethene (52)	
			CCC - Dibromochloromethane (63)	
			CCC - *trans*-1,3-Dichloropropane (19.3)	
			CCC - 1,1,1,2-Tetrachloroethane (62)	
			CCC - Bromobenzene (65)	
			CCC - 2-Butanone (74)	
			CCC - 2-Chlorotolune (61)	
			CCC - 4-Chlorotoluene (57)	
			CCC - 4-Methyl-2-pentanone (74)	
			CCC - Acetone (192)	
			CCC - Carbon disulfide (84)	
			CCC - Total xylenes (78)	
			CCC - 1,3-Dichloropropane (64)	

Table B.3.1. (page 2 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L051 (Continued)	MND01-0123-2001	UJ	CCC - Vinyl chloride (54) CCC - Trichlorofluoromethane (53) CCC - Freon-113 (56) CCC - 1,1-Dichloroethene (55) CCC - Tetrachloroethene (52) CCC - 2-Butanone (74) CCC - Acetone (192) CCC - Carbon disulfide (84) CCC - Dibromomethane (79) CCC - Total xylenes (78) CCC - 1,2,3-Trichloropropane CCC - 1,2-Diethylbenzene CCC - 1,3-Diethylbenzene CCC - 1,4-Diethylbenzene CCC - 1-Chlorohexane	Usable
9309L069	MND01-0138-2001 MND01-0138-3001 MND01-0320-0001	UJ	CCC - Dibromomethane (121) CCC - 1-Chlorohexane (116) CCC - 1,2,3-Trichloropropane (120) CCC - Acetone (196) CCC - Carbon disulfide (127) CCC - 2-Butanone (143) CCC - 1,3-Diethylbenzene (122) CCC - 1,4-Diethylbenzene (122) CCC - 1,2-Diethylbenzene (120) CCC - Freon-113 (116) CCC - Total xylenes (122)	Usable

Table B.3.1. (page 3 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L069 (Continued)	MND01-0138-0001 MND01-0158-1001 MND01-7800-3001	UJ	CCC - Vinyl chloride (54) CCC - Trichlorofluoromethane (56) CCC - Freon-113 (56) CCC - 1,1-Dichloroethene (55) CCC - Methylene chloride (64) CCC - *trans*-1,2-Dichloroethene (55) CCC - 1,1-Dichloroethane (57) CCC - *cis*-1,2-Dichloroethene (58) CCC - Trichloromethane (57) CCC - 1,1,1-Trichloroethane (52) CCC - Tetrachloromethane (54) CCC - 1,2-Dichloroethane (62)	Usable
			CCC - Trichloroethene (52) CCC - Bromobenzene (65) CCC - Total Total xyleness (122) CCC - 1,2-Dichloropropane (61) CCC - Bromodichloromethane (58) CCC - *trans*-1,3-Dichloropropene (60) CCC - 1,1,2-Trichloroethane (63) CCC - Tetrachloroethene (52) CCC - Dibromochloromethane (63) CCC - 1,1,1,2-Tetrachloroethane (56) CCC - 1,2,3-Trichloropropane (63) CCC - 2-Chloroetoluene (61) CCC - 4-Chlorotoluene (57) CCC - Acetone (192) CCC - Carbon disulfide (84) CCC - 2-Butanone (76) CCC - 4-Methyl-2-pentanone (74)	Usable
	MND01-0158-0001	UJ	CCC - ALL - %R<10%	Unusable
			CCC - Vinyl chloride (54)	Usable

Table B.3.1. (page 4 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L070	MND01-0303-0001 MND01-0319-0001 MND01-0124-0001 MND01-0319-3001	UJ	CCC - Trichlorofluoromethane (56) CCC - Freon-113 (56) CCC - 1,1-Dichloroethene (55) CCC - Methylene chloride (64) CCC - *trans*-1,2-Dichloroethene (55) CCC - 1,1-Dichloroethane (57) CCC - *cis*-1,2-Dichloroethene (58)	Usable
			CCC - 1,1,1-Trichloroethane (52) CCC - Tetrachloromethane (54) CCC - 1,2-Dichloroethane (62) CCC - Trichloroethene (52) CCC - 1,2-Dichloropropane (61) CCC - Bromodichloromethane (58) CCC - 1,1,2-Trichloroethane (63) CCC - Tetrachloroethene (52) CCC - Dibromochloromethane (63) CCC - *trans*-1,3-Dichloropropene (19.3) CCC - 1,1,1,2-Tetrachloroethane (62) CCC - Bromobenzene (65) CCC - Total xylenes (80) CCC - 2-Chlorotoluene (49) CCC - 4-Chlorotoluene (57) CCC - Acetone (192) CCC - Carbon disulfide (84) CCC - 2-Butanone (76) CCC - 4-Methyl-2-pentanone (74)	
			CCC - Trichloromethane (57)	Usable
	MND01-0319-3001	J	CCC - Trichloromethane (57)	Usable

Table B.3.1. (page 5 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L071	MND20-0346-0001	UJ	CCC - Vinyl chloride (54)	Usable
			CCC - Trichlorofluoromethane (56)	
			CCC - Freon-113 (56)	
			CCC - 1,1-Dichloroethene (55)	
			CCC - Methylene chloride (64)	
			CCC - *trans*-1,2-Dichloroethene (55)	
			CCC - 1,1-Dichloroethane (57)	
			CCC - *cis*-1,2-Dichloroethene (58)	
			CCC - Trichloromethane (57)	
			CCC - 1,1,1-Trichloroethane (52)	
			CCC - Tetrachloromethane (54)	
			CCC - 1,2-Dichloroethane (62)	
			CCC - Trichloroethene (52)	
			CCC - 1,2-Dichloropropane (61)	
			CCC - Bromodichloromethane (58)	
			CCC - *trans*-1,3-Dichloropropene (60)	
			CCC - 1,1,2-Trichloroethane (63)	
			CCC - Tetrachloroethene (52)	
			CCC - Dibromochloromethane (63)	
			CCC - *trans*-1,3-Dichloropropene (19.3)	
			CCC - 1,1,1,2-tetrachloroethane (62)	
			CCC - Bromobenzene (65)	
			CCC - 2-Chlorotoluene (49)	
			CCC - 4-Chlorotoluene (57)	
			CCC - Carbon disulfide (84)	
			CCC - 2-Butanone (76)	
			CCC - 4-Methyl-2-pentanone (74)	

Table B.3.1. (page 6 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L089	MND01-0601-0001	UJ	CCC - ALL - Analyte (%R<10)	Unusable
	MND01-0370-0001	J	CCC - Trichloroethene	Usable
		UJ	CCC - ALL - <10%R	Unusable
		R	Confirmation - Trichloroethene Confirmation - Tetrachloroethene	
	MND01-0370-2001	UJ	CCC - Dibromomethane (81) CCC - 1-Chlorohexane (66.3) CCC - 1,2,3-Trichloropropane (71) CCC - 2,2'-Oxybis (1-chloropropane) (69) CCC - Carbon disulfide (129) CCC - 4-Methyl-2-pentanone (119) CCC - 2-Chlorotoluene (68) CCC - 1,3-Diethylbenzene (84.6) CCC - 1,4-Diethylbenzene (83.6)	Usable
9309L090	MND01-0373-0001 MND01-0397-0001	UJ	CCC - Dibromomethane (81) CCC - *trans*-1,3-Dichloropropene (26) CCC - 1-Chlorohexane (66) CCC - 1,2,3-Trichloropropane (71) CCC - Bromobenzene (116) CCC - 2-Chlorotoluene (68) CCC - 4-Chlorotoluene (119) CCC - 2,2'-Oxybis (1-chloropropane) (69) CCC - Carbon disulfide (129) CCC - 1,3-Diethylbenzene (84.6) CCC - 1,4-Diethylbenzene (83.6) CCC - 1,1,1-Trichloroethane (66) CCC - 1,2-Dichloropropane (71) CCC - Bromodichloromethane (71) CCC - 1,1,2-Trichloroethane (77)	Usable

Table B.3.1. (page 7 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L090 (Continued)	MND01-0373-0001 MND01-0397-0001 (Continued)	J	CCC - Tetrachloroethene (61) CCC - Tetrachloroemethane (68) CCC - Trichloroethene (65)	Usable
	MND01-0376-0001 MND01-0377-0001 MND01-0377-1001	UJ	CCC - 1-Chlorohexane (58) CCC - 1,1,1,2-Tetrachloroethane (76) CCC - 1,2,3-Trichloropropane (67) CCC - Bromobenzene (73) CCC - 2-Chlorotoluene (52)	Usable
	MND01-0377-0001 MND01-0377-1001	UJ	CCC - 1,3-Dichlorobenzene (66) CCC - 1,4-Dichlorobenzene (70) CCC - 2,2'-Oxybis (1-chloropropane) (71) CCC - Carbon disulfide (84.9) CCC - 1,3-Diethylbenzene (75) CCC - 1,2-Diethylbenzene (76) CCC - Freon-113 (65) CCC - 1,4-Diethylbenzene (75) CCC - 4-Methyl-2-pentanone (84) CCC - Dibromomethane (68) CCC - Trichloromethane (69)	Usable
	MND01-0312-0001	UJ	CCC - Analyte results << 50	Unusable
	MND01-0376-2001	UJ	CCC - 1,1,1-Trichloroethane CCC - 1,1,2,2-Tetrachloroethane CCC - 1,2,3-Trichloropropane CCC - 1,2-Dichloropropane CCC - 1,2-Diethylbenzene CCC - *trans*-Dichloroethene CCC - *cis*-Dichloropropene CCC - 1,3-Diethylbenzene CCC - 1,3-*trans*-Dichloropropane CCC - 1,4-Diethylbenzene CCC - 1-Chlorohaxane	Usable

Table B.3.1. (page 8 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L090 (Continued)	MND01-0376-2001 (Continued)	UJ	CCC - 2,2'-oxybis (1-chloropropane) CCC - Benzene CCC - Bromodichloromethane CCC - Chlorobenzene CCC - Vinyl Chloride CCC - Dibromochloromethane CCC - Dibromomethane CCC - Tetrachloroethene CCC - Tetrachloromethane CCC - Toluene CCC - Trichloroethene CCC - 1,2-Dichlorobenzene CCC - 1,3-Dichlorobenzene CCC - 1,4-Dichlorobenzene	Usable
9309L091	MND01-0301-0001 MND01-0128-0001 MND01-0128-1001 MND01-0125-0001	UJ	CCC - Analyte results << 50	Unusable
	MND01-0119-0001 MND01-0112-0001 MND01-7801-3001	UJ	CCC - *trans*-1,3-Dichloropropene (26) CCC - Chlorobenzene (79) CCC - 1,2,3-Trichloropropane (82.2) CCC - 2-Chlorotoluene (67.5) CCC - 2,2'-Oxybis (1-chloropropane) (82.9) CCC - Carbon disulfide (129) CCC - Total xylenes (125) CCC - Dibromomethane (81) CCC - Trichloroethene (81) CCC - 1,2-*trans*-dichloroethene (83) CCC - 1,1-Dichloroethene (84) CCC - 1,2-Dichloropropane (82) CCC - 1,1,1-Trichloroethane (82)	Usable

Table B.3.1. (page 9 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L091 (Continued)	MND01-0119-0001 MND01-0112-0001 MND01-7801-3001 (Continued)	UJ	CCC - 1,4-Diethylbenzene (84) CCC - 1,1-Dichloroethane (83) CCC - 1,4-Diethylbenzene (83.6) CCC - Dibromomethane (81) CCC - Trichloroethene (81) CCC - 1,2-*trans*-Dichloroethene (83) CCC - 1,1-Dichlorethene (84) CCC - 1,2-Dichloropropane (82) CCC - 1,1,1-Trichloroethane (82) CCC - 1,4-Diethylbenzene (84) CCC - 1,1-Dichloroethane (83)	Usable
	MND01-0119-2001 MND01-0382-0001	UJ	CCC - Vinyl chloride (59) CCC - Freon-113 (65) CCC - Methylene chloride (78) CCC - 1,1-Dichloroethane (67) CCC - Trichloromethane (69) CCC - 1,1,1-Trichloroethane (66) CCC - Tetrachloromethane (68) CCC - Trichloroethene (65) CCC - 1,2-Dichloropropane (71) CCC - Bromodichloromethane (71) CCC - Dibromomethane (68) CCC - *trans*-1,3-Dichloropropene (23) CCC - 1,1,2-Trichloroethane (77) CCC - Tetrachloroethene (61) CCC - 1-Chlorohexane (57.5) CCC - Chlorobenzene (64.5) CCC - 1,1,1,2-Tetrachloroethane (76.3) CCC - 1,2,3-Trichloropropane (84.2) CCC - Bromobenzene (73.3) CCC - 2-Chlorotoluene (51.8)	

Table B.3.1. (page 10 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L091 (Continued)	MND01-0119-2001 MND01-0382-0001 (Continued)	UJ	CCC - 4-Chlorotoluene (66.6) CCC - 2,2'-Oxybis (1-chloropropane) (71.2) CCC - Carbon disulfide (84.9) CCC - 2-Butanone (83.9) CCC - 4-Methyl-2-pentanone (84.2) CCC - 1,3-Diethylbenzene (75) CCC - 1,2-Diethylbenzene (75) CCC - 1,4-Diethylbenzene (75)	Usable
9309L096	MND01-0379-0001 MND01-7803-3001	UJ	CCC - Vinyl chloride (59) CCC - Freon-113 (65) CCC - Methylene chloride (78) CCC - 1,1-Dichloroethane (67) CCC - 1,1,1-Trichloroethane (66) CCC - 1,2-Dichloropropane (71) CCC - Bromodichloromethane (71) CCC - Dibromomethane (68) CCC - *trans*-1,3-Dichloropropene (22) CCC - 1,1,2-Trichloroethane (77) CCC - 1-Chlorohexane (57.5) CCC - Chlorobenzene (64) CCC - 1,1,1,2-Tetrachloroethane (76.3) CCC - 1,2,3-Trichloropropane (67.4) CCC - Bromobenzene (73.3) CCC - 2-Chlorotoluene (58.1) CCC - 4-Chlorotoluene (66.6) CCC - 1,3-Dichlorobenzene (66) CCC - 1,3-*cis*-Dichloropropene (67) CCC - 2-Butanone (83) CCC - 4-Methyl-2-pentanone (84) CCC - 1,4-Dichlorobenzene (69) CCC - 2,2'-Oxybis (1-chloropropane) (71.2)	Usable

Table B.3.1. (page 11 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L096 (Continued)	MND01-0379-0001 MND01-7803-3001	UJ	CCC - Carbon disulfide (84.9) CCC - 1,3-Diethylbenzene (75) CCC - 1,4-Diethylbenzene (75) CCC - 1,2-Diethylbenzene (75)	Usable
	MND01-0379-0001	J	CCC - Tetrachloromethane (68) CCC - Trichloroethene (65) CCC - Tetrachloroethene (61)	Usable
	MND01-0389-0001	UJ	CCC - Tetrachloromethane (69)	Usable
	MND01-7803-3001	UJ	CCC - Tetrachloromethane (68) CCC - Trichloroethene (65) CCC - Tetrachloroethene (61)	Usable
		J	CCC - Trichloromethane (69)	
	MDN01-0379-0001 MND01-7803-3001	U	MB-Trichloromethane (6.5 μg/L)	
9309L098	MND01-0393-0001 MND20-0356-0001 MND01-7802-3001	UJ	CCC - Dibromomethane (83) CCC - 1-Chlorohexane (66) CCC - 1,2,3-Trichloropropane (82) CCC - 2,2'-Oxybis (1-chloropropane) (83) CCC - 1,4-Diethylbenzene (83.6) CCC - 1,2-Dichloroethane (83) CCC - 1,3-Diethylbenzene (117) CCC - 1,3-*trans*-Dichloropropene (81) CCC - 2-Chlorotoluene (84) CCC - Bromobenzene (84) CCC - Carbon disulfide (129) CCC - Total xylenes (120)	
	MND20-0351-0001	UJ	CCC - Chlorobenzene (79) CCC - 1,1,1,2-Tetrachloroethane (83.9) CCC - 1,2,3-Trichloropropane (82.2) CCC - Bromobenzene (84.2)	Usable

Table B.3.1. (page 12 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L098 (Continued)	MND20-0351-0001 (Continued)	UJ	CCC - 2-Chlorotoluene (82.3) CCC - 2,2'-Oxybis (1-chlorotoluene) (78.1) CCC - Carbon disulfide (122) CCC - 2-Butanone (83.9) CCC - 4-Methyl-2-pentanone (84) CCC - 1,1,1-Trichloroethane (66) CCC - Freon-113 (65) CCC - 1,2-*cis*-Dichloroethene (84) CCC - 1,3-Diethylbenzene (75) CCC - 1-Chlorohexane (58) CCC - 4-Chlorotoluene (67) CCC - Vinyl Chloride (59) CCC - Dibromochloromethane (58) CCC - 1,3-Dichlorobenzene (77) CCC - 1,4-Dichlorobenzene (80) CCC - 1,2-Dichlorobenzene (77) CCC - Tetrachloroethene (61) CCC - Tetrachloromethane (68) CCC - Trichloroethene (65)	Usable
	MND20-0341-0001 MND01-0372-0001 MND20-0332-0001	UJ	CCC - ALL - <<50%	Usable
	MND20-0388-0001	UJ	CCC - Bromobenzene (83.9) CCC - 2-Chlorotoluene (79.1) CCC - 4-Chlorotoluene (83.4) CCC - Total xylenes (115.7) CCC - 1,2,3-Trichloropropane (NA) CCC - 1,2-Diethylbenzene (NA) CCC - 1,3-Diethylbenzene (NA) CCC - 1-Chlorohexane (NA)	Usable

Table B.3.1. (page 13 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L106	MND01-0157-0001 MND01-0378-0001	UJ	CCC - 1-Chlorohexane (84.6) CCC - Bromobenzene (83.9) CCC - 2-Chlorotoluene (63.3) CCC - 4-Chlorotoluene (83.4) CCC - 1,2-*cis*-Dichloroethene (81)	Usable
	MND01-7804-3001	UJ	CCC - Methylene chloride (72) CCC - 1,1-Dichloroethene (76) CCC - Trichloromethane (74) CCC - 1,1,1-Trichloroethane CCC - Dibromomethane (77.7) CCC - 1-Chlorohexane CCC - Chlorobenzene (71) CCC - 1,1,1,2-Tetrachloroethane (72) CCC - 1,2,3-Trichloropropane (79) CCC - Bromobenzene (78) CCC - 2-Chlorotoluene (73) CCC - 4-Chlorotoluene (76) CCC - Freon-113 (83) CCC - 1,2-*cis*-Dichloroethene (72) CCC - 1,2-Dichloroethane (73) CCC - 1,2-*trans*-Dichloroethene (74) CCC - 1,3-*cis*-Dichloropropene (72) CCC - Vinyl Acetate (77) CCC - Tribromomethane (72) CCC - Carbon disufide (66) CCC - 2,2'-Oxybis (1-chloropropane) (80) CCC - Acetone (50) CCC - Vinyl acetate (77) CCC - 2-Butanone (67) CCC - 4-Methyl-2-pentanone (62) CCC - 1,3-Diethylbenzene (67)	Usable

Table B.3.1. (page 14 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L106 (Continued)	MND01-7804-3001 (Continued)	UJ	CCC - 1,4-Diethylbenzene (67) CCC - 1,4-Diethylbenzene (69)	Usable
9309L107	MND020-0322-0001 MND020-0327-0001 MND020-0327-2001	UJ	CCC - 1,2,3-Trichloropropane (73) CCC - 1,2-*cis*-Dichloroethene (81) CCC - 1,2-Diethylbenzene (80) CCC - 1,3-Diethylbenzene (78) CCC - 1,4-Diethylbenzene (77) CCC - 1-Chlorohexane (65) CCC - 2,2'-Oxybis (1-chloropropane) (73) CCC - 2-Chlorotoluene (63) CCC - 4-Chlorotoluene (83) CCC - Bromobenzene (84) CCC - Total xylenes (79)	
9309L108	MND01-0137-0001	UJ	CCC - Bromobenzene (84) CCC - 2-Chlorotoluene (79.1) CCC - 4-Chlorotoluene (83.4) CCC - 1,3-Diethylbenzene (78.1) CCC - 1,4-Diethylbenzene (77.4) CCC - 1,2-Diethylbenzene (79.2) CCC - 1,2,3-Trichloropropane (72) CCC - 1-Chlorohexane (65)	Usable
9309L119	MND01-0380-0001	UJ	CCC - Dibromomethane (76) CCC - *trans*-1,3-Dichloropropene (26) CCC - 1-Chlorohexane (65) CCC - 1,2,3-Trichloropropane (73) CCC - 2,2'-Oxybis (1-chloropropane) (80) CCC - 1,3-Diethylbenzene (78) CCC - 1,4-Diethylbenzene (77) CCC - 1,2-Diethylbenzene (79) CCC - 1,2-*cis*-Dichloroethene (82) CCC - 2-Chlorotoluene (79)	Usable

Table B.3.1. (page 15 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L119 (Continued)	MND01-0380-0001 (Continued)	UJ	CCC - 4-Chlorotoluene (83) CCC - Bromobenzene (84)	Usable
	MND20-0383-0001 MND01-7805-3001	UJ	CCC - 1,1-Dichloroethane (79) CCC - Dibromomethane (78) CCC - *trans*-1,3-Dichloropropene (24) CCC - 1-Chlorohexane (57) CCC - Chlorobenzene (70) CCC - 1,1,1,2-Tetrachloroethane (77) CCC - 1,2,3-Trichloropropane (79) CCC - Bromobenzene (78) CCC - 2-Chlorotoluene (61) CCC - 4-Chlorotoluene (78) CCC - 2,2'-Oxybis (1-chloropropane) (81) CCC - Acetone (79) CCC - Carbon disulfide (66) CCC - 2-Butanone (82) CCC - 4-Methyl-2-pentanone (80) CCC - 1,3-Diethylbenzene (67) CCC - 1,4-Diethylbenzene (67) CCC - 1,2-Diethylbenzene (69) CCC - Freon-113 (76) CCC - 1,2-*cis*-Dichloroethene (74) CCC - Dichloromethane (82)	Usable
	MND20-0387-0001 MND01-0380-0001	UJ	CCC - Methylene chloride (132) CCC - Dibromomethane (72.6) CCC - 1-Chlorohexane (58.4) CCC - 1,2,3-Trichlorpropane (72.3) CCC - 2,2'-Oxybis (1-chloropropane) (69.2) CCC - Total xylenes (82.8) CCC - 1,3-Diethylbenzene (68.9)	Usable

Table B.3.1. (page 16 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L119 (Continued)	MND20-0387-0001 MND01-0380-3001 (Continued)	UJ	CCC - 1,4-Diethylbenzene (68.6) CCC - 1,2-Diethylbenzene (69.9)	Usable
9309L120	MND20-0328-0001	UJ	CCC - 1,1-Dichloroethane (79) CCC - Trichloroethene (76) CCC - Dibromomethane (78) CCC - *trans*-1,3-Trichloropropene (24) CCC - 1-Chlorohexane (57) CCC - Chlorobenzene (70) CCC - 1,2,3-Trichloropropane (79) CCC - Bromobenzene (78) CCC - 2-Chlorotoluene (61) CCC - 4-Chlorotoluene (78) CCC - 2,2'-Oxybis (1-chloropropane) (81) CCC - Acetone (79) CCC - Carbon disulfide (66) CCC - 4-Methyl-2-pentanone (80) CCC - Total xylenes (76) CCC - 1,3-Diethylbenzene (67) CCC - 1,4-Diethylbenzene (67) CCC - 1,1,2,2-Tetrachloroethane (77) CCC - Freon-113 (76) CCC - 2-Butanone (81) CCC - Dibromomethane (78) CCC - 1,2-Diethylbenzene (69)	Usable
9309L121	MND20-0343-0001 MND20-0343-1001	J	FRPD-1,1,1-Trichloroethane (27)	Usable
	MND01-0130-0001	UJ	CCC - 1,1-Dichloroethane (79) CCC - Trichloroethene (75) CCC - Dibromethane (78) CCC - *trans*-1,3-Dichloropropene (24)	Usable

Table B.3.1. (page 17 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L121 (Continued)	MND01-0130-0001 (Continued)	UJ	CCC - 1-Chlorohexane (57) CCC - Chlorobenzene (70) CCC - 1,1,1,2-Tetrachlorohexane (77) CCC - 1,2,3-Trichloropropane (79) CCC - Bromobenzene (78) CCC - 2-Chlorotoluene (61) CCC - 4-Chlorotoluene (78) CCC - 2,2'-Oxybis (1-chloropropane) (81) CCC - Acetone (79) CCC - Carbon disulfide (66) CCC - 2-Butanone (82) CCC - 4-Methyl-2-pentanone(80) CCC - Total xylenes (76) CCC - 1,3-Diethylbenzene (67) CCC - 1,4-Diethylbenzene (67) CCC - 1,2-Diethylbenzene (69) CCC - Freon-113 (76) CCC - 1,2-*cis*-Dichloroethene (74)	Usable
	MND01-0302-0001 MND20-0343-0001 MND20-0343-1001	UJ	CCC - Methylene chloride (132) CCC - Dibromomethane (73) CCC - 1-Chlorohexane (58) CCC - 1,2,3-Trichlorpropane (72) CCC - 2,2'-Oxybis (1-chloropropane) (70) CCC - Total xylenes (83) CCC - 1,3-Diethylbenzene (69) CCC - 1,4-Diethylbenzene (69) CCC - 1,2-Diethylbenzene (70)	Usable
		UJ,J	CCC - Not performed at required frequency	

Table B.3.1. (page 18 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9310L142	MND20-0389-0001 MND20-0389-3001 MND20-0386-0001	UJ	CCC - Methylene chloride (132) CCC - Dibromomethane (72.6) CCC - 1-Chlorohexane (58.4) CCC - 1,2,3-Trichloropropane (72.3) CCC - 2,2'-Oxybis (1-chloropropane) (69.2) CCC - 1,3-Diethylbenzene (68.9) CCC - 1,4-Diethylbenzene (68.6) CCC - 1,2-Diethylbenzene (69.9) CCC - Not performed at required frequency	Usable
	MND20-0389-2001	UJ, J	CCC - << 50	Usable
9310L143	MND20-0337-0001	UJ	CCC - Methylene chloride (132) CCC - Dibromomethane (72.6) CCC - 1-Chlorohexane (58.4) CCC - 1,2,3-Trichloropropane (72.3) CCC - 2,2'-Oxybis (1-chloropropane) (69.2) CCC - 1,4-Diethylbenzene (68.6) CCC - 1,3-Diethylbenzene (68.6) CCC - 1,2-Diethylbenzene (69.9) CCC - Not performed at required frequency	Usable
9310L144	MND01-0381-0001 MND01-0608-0001	UJ	CCC - Bromobenzene (116) CCC - 4-Chlorotoluene (118.5) CCC - Acetone (137.9) CCC - Carbon disulfide (123.4) CCC - Total xylenes (120) CCC - 1,2-*cis*-Dichloroethene (117) CCC - 1,3-Dichlorobenzene (117) CCC - 1,4-Dichlorobenzene (117) CCC - 1,2-Dichlorobenzene (115)	Usable

Table B.3.1. (page 19 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L165	MND20-0335-0001	UJ	CCC - Dibromomethane (128) CCC - 1-Chlorohexane (128) CCC - 1,2,3-Trichloropropane (116) CCC - 1-Chlorohexane (118) CCC - Acetone (132.9) CCC - Carbon disulfide (123.4) CCC - Not performed at required frequency	Usable
	MND20-0334-0001	UJ	CCC - 1,1,1,2-Tetrachloroethane (115) CCC - Not performed at required frequency	
9309L166	MND20-0336-0001	UJ	CCC - Acetone (138) CCC - Carbon disulfide (123) CCC - Total xylenes (120) CCC - Not performed at required frequency	Usable
	MND01-0375-2001		CCC - Dibromoethane (128) CCC - 1-Chlorohexane (128) CCC - 1,1,1,2-Tetrachloroethane (115) CCC - 1,2,3-Trichloropropane (116) CCC - Not performed at required frequency	Usable
	MND01-0375-0001 MND01-0347-0001	UJ	CCC - Dibromomethane (136) CCC - 1-Chlorohexane (130)	Usable
			CCC - Acetone (133) CCC - Vinyl acetate (74) CCC - 2-Butanone (81) CCC - 4-Methyl-2-pentanone (63.6)	
	MND01-0347-0001	J	SR - Bromodichloromethane (136)	Slight positive bias
9310L167	MND20-0330-0001 MND20-0330-1001	UJ	CCC - Dibromomethane (128) CCC - 1-Chlorohexane (128) CCC - 1,1,1,2-Tetrachloroethane (115) CCC - 1,2,3-Trichloropropane (116) CCC - Not performed at required frequency	Usable

Table B.3.1. (page 20 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9310L265	MND01-0071-0001 MND01-0076-0001	J	SR - Bromochloromethane (124) SR - Bromochlormethane (129)	Positive bias
	MND01-0111-0001 MND01-0271-0001	J	SR - Bromochloromethane (123) SR - Bromochloromethane (128)	Positive bias
	MND01-0071-0001 MND01-0076-0001 MND20-0354-0001	UJ	CCC - Vinyl chloride (136) CCC - Trichlorofluoromethane (146) CCC - *trans*-1,2-Dichloroethene (127) CCC - *cis*-1,2-Dichloroethene (79) CCC - Freon-113 (118) CCC - 1,2-Dichloroethane (81) CCC - 1,4-Dichloroethane (115) CCC - 1,2-Dichloroethane (75) CCC - Vinyl acetate (73) CCC - 2-Butanone (122) CCC - 4-Methyl-2-pentanone CCC - 1,4-Diethylbenzene (85) CCC - Dibromomethane (123.4) CCC - *trans*-1,3-Dichloropropene (27) CCC - 1-Chlorohexane (122) CCC - 1,1,1,2-Tetrachloroethane (81) CCC - Bromobenzene (83) CCC - 2-Chlorotoluene (59) CCC - 4-Chlorotoluene (73) CCC - 1,3-Dichlorobenzene (71) CCC - Acetone (170) CCC - Carbon disulfide (79)	Usable
	MND01-0071-0001 MND01-0076-0001	J	CCC - Trichloroethene (74)	Usable
	MND20-0354-0001	UJ	CCC - Trichloroethene (74)	

Table B.3.1. (page 21 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9310L265 (Continued)	MND01-0076-2001 MND01-0111-0001 MND01-0271-0001	UJ	CCC - 1-Chlorohexane (79) CCC - 1,1,1,2-Tetrachloroethane (84) CCC - 2-Chlorotoluene (68) CCC - 4-Chlorotoluene (88) CCC - Acetone (80) CCC - Carbon disulfide (124) CCC - 2-Butanone (77.8) CCC - 4-Methyl-2-pentanone (77.1) CCC - Freon-113 (80) CCC - 1,2-*cis*Dichloroethene CCC - 1,3-Dichlorobenzene (121) CCC - 1,3-Diethylbenzene (80.8) CCC - 1,4-Diethylbenzene (79.7) CCC - 1,2-Diethylbenzene (81.8)	Usable
9310L282	MND01-0115-0001 MND01-0342-0001	UJ	CCC - Trichlorofluoromethane (146) CCC - 1,1-Dichloroethane (124) CCC - Dibromomethane (123) CCC - 1-Chlorohexane (122) CCC - 1,1,1,2-Tetrachloroethane (81) CCC - Bromobenzene (83) CCC - 2-Chlorotoluene (59) CCC - 4-Chlorotoluene (73) CCC - 1,3-Dichlorobenzene (71) CCC - Acetone (123) CCC - Vinyl acetate (73) CCC - 2-Butanone (65) CCC - Benzene (74) CCC - 4-Methyl-2-pentanone (63) CCC - Toluene (75) CCC - Vinyl chloride (136) CCC - Freon-113 (148)	

Table B.3.1. (page 22 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9310L282 (Continued)	MND01-0115-0001 MND01-0342-0001 (Continued)	UJ	CCC - 1,2-*cis*-Dichloroethene (119) CCC - 1,2-Dichloroethane (83) CCC - 1,3-*trans*-Dichloropropene (27) CCC - Chlorobenzene (69) CCC - 1,4-Dichlorobenzene (72) CCC - 1,2-Dichlorobenzene (75) CCC - Total xylenes (126)	Usable
	MND20-0333-0001 MND01-0342-2001	UJ	CCC - 1-Chlorohexane (80) CCC - 2-Chlorotoluene (68) CCC - 4-Chlorotoluene (83) CCC - Freon-113 (80) CCC - 1,2-*cis*-Dichloroethene (118) CCC - 1,3-Dichlorobenzene (121) CCC - Carbon disulfide (124) CCC - Total Xylenes (81) CCC - 2,2'-Oxybis (1-chloropropane) (122) CCC - Acetone (128) CCC - 2-Butanone (78) CCC - 4-Methyl-2-pentanone (77) CCC - 1,3-Diethylbenzene (81) CCC - 1,4-Diethylbenzene (80) CCC - 1,2-Diethylbenzene (82)	Usable
	MND20-0342-1001	UJ	CCC - Methylene chloride (130)	Usable
			CCC - 1-Chlorohexane (123) CCC - 2-Chlorotoluene (84) CCC - 2,2'-Oxybis (1-chloropropane) (79) CCC - Acetone (155) CCC - Carbon disulfide (124) CCC - 4-Methyl-2-pentanone (82) CCC - Total xylenes (116)	Usable

Table B.3.1. (page 23 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9310L282 (Continued)	MND01-0117-0001	UJ	CCC - 1,2,3-Trichloropropane (119) CCC - 2,2'-Oxybis (1-chloropropane) (118)	Usable
9310L311	MND01-0046-3001 MND01-0063-0001 MND01-7806-3001 MND20-0325-2001	UJ	CCC - 1-Chlorohexane (79.6) CCC - 1,1,1,2-Tetrachloroethane (84.5) CCC - 2-Chlorotoluene (84.6) CCC - 4-Chlorotoluene (82.7) CCC - Acetone (79.8) CCC - Carbon disulfide (127.6) CCC - Freon-113 (80) CCC - 1,3-Dichlorobenzene (121) CCC - Total xylenes (82) CCC - 2-Butanone (77.8) CCC - 4-Methyl-2-pentanone (77.1) CCC - 1,3-Diethylbenzene (80.8) CCC - 1,4-Diethylbenzene (79.7) CCC - 1,2-Diethylbenzene (81.8)	Usable
	MND01-0046-0001	UJ	CCC - Trichlorofluoromethane (136) CCC - Dibromomethane (137) CCC - 1-Chlorohexane (79) CCC - 1,2,3-Trichloropropane (84) CCC - 2,2'-Oxybis (1-chloropropane) (83) CCC - Acetone (164) CCC - Carbon disulfide (128) CCC - 4-Methyl-2-pentanone (78) CCC - Total xylenes (70) CCC - 1,3-Diethylbenzene (70) CCC - 1,4-Diethylbenzene (72) CCC - 1,2-Diethylbenzene (70) CCC - Freon-113 (117)	Usable
	MND20-0325-0001	UJ	CCC - Acetone (168) CCC - 2-Butanone (84) CCC - 1,2,3-Trichloropropane (84)	Usable

Table B.3.1. (page 24 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9310L320	MND01-0063-0001	U	MB - Trichloromethane (6.8 μg/L)	Usable
	MND01-0063-0001	J	SR - Bromochlormethane (121)	Positive bias
	MND01-7806-3001	J	SR - Bromochloromethane (119)	Positive bias
	MND01-0120-0001 MND01-0344-0001 MND01-0607-0001 MND01-0607-1001 MND01-0344-2001	UJ	CCC - Methylene chloride (130) CCC - Dibromomethane (73) CCC - 1-Chlorohexane (66) CCC - 1,2,3-Trichloropropane (61) CCC - 2,2'-Oxybis (1-chloropropane) (58) CCC - Acetone (155) CCC - Carbon disulfide (124) CCC - Total xylenes (67)	Usable
9309L898	MND01-0317-0001 MND01-0318-0001 MND01-0153-0001 MND01-0306-0001	UJ	CCC - *trans*-1,3-Dichloropropene (67) CCC - 1-Chlorohexane (83) CCC - Bromoform (72) CCC - 1,2,3-Trichloropropane (81) CCC - Bromobenzene (81) CCC - 2-Chlorotoluene (81) CCC - 2,2'-Oxybis (1-chloropropane) (54) CCC - Acetone (182) CCC - Carbon disulfide (151) CCC - Vinyl acetate (56) CCC - 2-Butanone (117) CCC - 4-Methyl-2-pentanone (78) CCC - Not performed at required frequency	Usable
	MND01-0317-2001 MND01-0155-0001 MND01-0155-2001	UJ	CCC - *trans*-1,3-Trichloropropene (53) CCC - 1,2,3-Trichloropropane (81) CCC - 2-Chlorotoluene (76) CCC - Acetone (190) CCC - Carbon disulfide (168) CCC - 2-Butanone (%D=38)	Usable

Table B.3.1. (page 25 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L898 (Continued)	MND01-0317-2001 MND01-0155-0001 MND01-0155-2001 (Continued)	UJ	CCC - Benzene (136) CCC - Toluene (136)	Usable
	MND01-0153-0001	R	Confirmation - Tetrachloroethene	Unusable
	MND01-0155-0001 MND01-0306-0001 MND01-0317-0001 MND01-0318-0001	R	Confirmation - 1,2-Dichloroethane	Unusable
	MND01-0155-0001	R	Confirmation - Carbon disulfide	Unusable
	MND01-0153-2001 MND01-0306-2001 MND01-0318-2001	UJ	CCC - 1,1-Dichloroethene (145) CCC - Methylene chloride (138) CCC - Bromobenzene (%D=26) CCC - 2-Chlorotoluene (80) CCC - Carbon disulfide (162) CCC - Vinyl acetate (123) CCC - Benzene (135) CCC - Toluene (134) CCC - Freon-113 (83) CCC - Total Xylenes (131) CCC - Vinyl acetate (77) CCC - Not performed at required frequency	Usable
9309L904	MND01-0152-0001	UJ	CCC - (67.5-122)	Usable
	MND01-0154-0001 MND01-0154-2001 MND01-0305-2001	UJ	CCC - 1,1-Dichloroethene (145) CCC - Methylene chloride (138) CCC - Carbon disulfide (162) CCC - Vinyl acetate (118) CCC - Freon-113 (118) CCC - Chlorobenzene (129) CCC - Benzene (133)	Usable

Table B.3.1. (page 26 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L904 (Continued)	(Continued)	UJ	CCC - Toluene (132) CCC - Ethylbenzene (131)	Usable
	MND01-0305-0001	UJ	CCC - 1,2,3-Trichloropropane (81) CCC - 2,2'-oxybis (1-chloropropane) CCC - Acetone (190) CCC - Carbon disulfide (168) CCC - 2-Butanone (125) CCC - Benzene (136) CCC - Toluene (136) CCC - Ethylbenzene (134)	Usable
	MND01-0152-2001	UJ	CCC - 2-Chlorotoluene (69) CCC - 2,2'-Oxybis (1-chloropropane) (84) CCC - Acetone (245) CCC - Carbon disulfide (148) CCC - 2-Butanone (156) CCC - 1,3-Diethylbenzene (119) CCC - 1,2-Diethylbenzene (119) CCC - 1,3-*trans*-Dichloropropene (25) CCC - Benzene (122) CCC - Toluene (12) CCC - Ethylbenzene (120)	Usable
9309L920	MND01-0307-0001 MND01-0313-0001 MND01-0313-2001	UJ	CCC - Methylene chloride (132) CCC - Dibromomethane (64.3) CCC - 1-Chlorohexane (56.9) CCC - 1,2,3-Trichloropropane (67.8) CCC - 2,2'-Oxybis (1-chloropropane)(58.5) CCC - Acetone (245) CCC - Carbon disulfide (144) CCC - 2-Butanone (155) CCC - Benzene (130) CCC - Toluene (129)	Usable

Table B.3.1. (page 27 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L920 (Continued)	MND01-0307-0001 MND01-0313-0001 MND01-0313-2001 (Continued)	UJ	CCC - 1,3-Diethylbenzene (73) CCC - 1,4-Diethylbenzene (75) CCC - 1,2-Diethylbenzene (79)	Usable
	MND01-0307-2001	UJ	CCC - 1,2,3-Trichloropropane (84) CCC - 2-Chlorotoluene (79) CCC - 1,3-Dichlorobenzene (72) CCC - 2,2'-Oxybis (1-chloropropane) (69) CCC - Acetone (195) CCC - Carbon disulfide (152) CCC - 2-Butanone (84) CCC - 4-Methyl-2-pentanone (83) CCC - 1,3-Diethylbenzene (126) CCC - 1,4-Diethylbenzene (120.9) CCC - 1,2-Diethylbenzene (124.9) CCC - 1,2-*cis*-Dichloroethene (79) CCC - 1,2-Dichloroethane (78) CCC - 1,3-*cis*-Dichloropropene (75) CCC - 1,1,2-Trichloroethane (77) CCC - 4-Chlorotoluene (84) CCC - 1,4-Dichlorobenzene (79) CCC - 1,2-Dichlorobenzene (79)	Usable
9309L921	MND01-0315-0001	UJ	CCC - 1,1-Dichloroethene (145) CCC - Methylene chloride (138) CCC - 2-Chlorotoluene (80) CCC - Carbon disulfide (162) CCC - Vinyl acetate (123) CCC - Benzene (133) CCC - Toluene (134) CCC - Freon-113 (119)	Usable

Table B.3.1. (page 28 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L921 (Continued)	MND01-0315-0001 (Continued)	UJ	CCC - 1,3-Dichlorobenzene (84) CCC - 1,4-Dichlorobenzene (84)	Usable
	MND01-0315-2001 MND01-0127-0001 MND01-0127-2001	UJ	CCC - Dibromomethane (65) CCC - 1-Chlorohexane (57) CCC - 1,2,3-Trichloropropane (69) CCC - 1,3-Dichlorobenzene (83) CCC - 2-Butanone (156) CCC - 2,2'-Oxybis (1-chloropropane) (58) CCC - Acetone (245) CCC - Carbon disulfide (148) CCC - Benzene (130) CCC - Toluene (129) CCC - 1,3-Diethylbenzene (78) CCC - 1,4-Diethylbenzene (75) CCC - 1,2-Diethylbenzene (79)	Usable
9309L927	MND01-0309-0001 MND01-0129-0001	UJ	CCC - Methylene chloride (132) CCC - Dibromomethane (64) CCC - 1-Chlorohexane (57) CCC - 1,2,3-Trichloropropane (68) CCC - 2,2'-Oxybis (1-chloropropane) (58) CCC - Acetone (245) CCC - Carbon disulfide (144) CCC - 2-Butanone (155) CCC - Benzene (130) CCC - Toluene (129) CCC - 1,3-Diethylbenzene (73) CCC - 1,4-Diethylbenzene (95)	Usable
	MND01-0309-0001 MND01-0129-0001	UJ	CCC - 1,2-Diethylbenzene (79) CCC - 1,2,3-Trichloropropane (84) CCC - 2-Chlorotoluene (79)	Usable

Table B.3.1. (page 29 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L927 (Continued)	MND01-0129-0001 (Continued)	UJ	CCC - 2,2'-oxybis (1-chloropropane) (69) CCC - Acetone (195) CCC - Carbon disulfide (152) CCC - 2-Butanone (84) CCC - 4-Methyl-2-pentanone (83) CCC - 1,3-Diethylbenzene (126) CCC - 1,4-Diethylbenzene (121) CCC - 1,2-Diethylbenzene (125)	Usable
	MND01-0129-0001	R	Confirmation - 1,1,1-Trichloroethane	Unusable
	MND01-0129-2001 MND01-0309-2001	UJ	CCC - << 50	Unusable
9309L928	MND01-0126-0001 MND01-0126-2001 MND01-0118-0001 MND01-0394-2001 MND01-0118-2001	UJ	CCC - 1,2,3-Trichloropropane (72) CCC - 2-Chlorotoluene (80) CCC - 4-Chlorotoluene (84) CCC - Oxybis (1-chloropropane) (75) CCC - Carbon disulfide (144) CCC - 2-Butanone (75) CCC - 1,3-Diethylbenzene (74) CCC - 1,4-Diethylbenzene (79) CCC - 1,1-Dichloroethene (68) CCC - 1,2-*cis*-Dichloroethene (80) CCC - 1,2-Dichloroethane (82) CCC - 1,1,1,2-Tetrachloroethane (84) CCC - 1,3-Dichlorobenzene (76) CCC - 1,4-Dichlorobenzene (80) CCC - 1,2-Dichlorobenzene (77) CCC - Acetone (195) CCC - 1,2-Diethylbenzene (75)	Usable

Table B.3.1. (page 30 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L928 (Continued)	MND01-0394-0001	UJ	CCC - 1,2-*cis*-Dichloroethene (80) CCC - 1-Dibromomethane (65) CCC - Chlorohexane (57) CCC - 1,2,3-Trichloropropane (84) CCC - Bromobenzene (84) CCC - 2-Chlorotoluene (82) CCC - 4-Chlorotoluene (84) CCC - 1,3-Dichlorobenzene (77) CCC - 1,2-Dichlorobenzene (77) CCC - 2,2'-oxybis (1-chloropropane) (75) CCC - Acetone (245) CCC - Carbon disulfide (148) CCC - 2-Butanone (44) CCC - Benzene (78) CCC - 1,3-Diethylbenzene (78) CCC - 1,4-Diethylbenzene (75) CCC - 1,2-Diethylbenzene (79)	Usable
9309L929	MND01-0314-0001 MND01-0314-2001	UJ	CCC - << 50	Usable
	MND01-0314-2001 MND01-0314-0001	UJ	HT - 1 day	Usable
9309L963	MND01-7899-0001 PE MND01-7899-2001	UJ, J	HT - 1 day HT - 3 days	Usable
	MND01-7899-0001 PE	J, UJ	CCC - << 50	Usable
	MND01-7899-2001	UJ	CCC - 1-Chlorohexane (82) CCC - 2-Chlorotoluene (72) CCC - 2,2'-Oxybis (1-chloropropane) (84) CCC - Carbon disulfide (72) CCC - 2-Butanone (69) CCC - Total xylenes (126) CCC - 1,3-Diethylbenzene (74)	Usable

Table B.3.1. (page 31 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L963 (Continued)	MND01-7899-2001 (Continued)	UJ	CCC - 1,4-Diethylbenzene (72) CCC - 1,2-Diethylbenzene (72)	Usable
9309L964	MND01-0159-0001	UJ	CCC - <<50	Usable
	MND01-0159-2001	UJ	CCC - *trans*-1,3-Trichloropropene (26) CCC - 2-Chlorotoluene (72) CCC - 2,2'-Oxybis (1-chloropropane) (84) CCC - Carbon disulfide (72) CCC - 2-Butanone (69) CCC - Freon-113 (84) CCC - Acetone (177) CCC - Tribromomethane (77) CCC - 4-methyl-2-pentanone (70) CCC - Benzene (70) CCC - Total xylenes (126) CCC - 1,3-Diethylbenzene (74) CCC - 1,4-Diethylbenzene (72) CCC - 1,2-Diethylbenzene (72)	Usable
9309L965	MND01-0310-0001 MND01-0310-2001 MND01-0310-2002	UJ	HT - 1 day	Usable
	MND01-0310-0001	UJ	CCC - Vinyl chloride (53) CCC - Freon-113 (68) CCC - 1,1-Dichloroethene (63) CCC - 1,2-*trans*-Dichloroethene (59) CCC - 1,1-Dichloroethane (63) CCC - 1,2-*cis*-Dichloroethene (67) CCC - 1,1,1-Trichloroethane (61) CCC - Tetrachloromethane (58) CCC - 1,2-Dichloroethane (78) CCC - Trichloroethene (60) CCC - Bromodichloromethane (75)	Usable

Table B.3.1. (page 32 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L965 (Continued)	MND01-0310-0001 (Continued)	UJ	CCC - 1,3-*cis*-Dichloropropene (70) CCC - Tetrachloroethene (58) CCC - Chlorobenzene (71) CCC - 1,1,1,2-Tetrachloeoethane (74) CCC - Bromobenzene (78) CCC - 2-Chlorotoluene (69) CCC - 4-Chlorotoluene (65) CCC - 1,3-Dichlorobenzene (69) CCC - 1,4-Dichlorobenzene (67) CCC - 1,2-Dichlorobenzene (73) CCC - 2,2'-Oxybis (1-chloropropane) (84) CCC - Acetone (156) CCC - Carbon disulfide (57) CCC - 2-Butanone (84) CCC - 4-methyl-2-pentanone (84) CCC - 1,3-Diethylbenzene (82) CCC - 1,4-Diethylbenzene (84) CCC - 1,2-Diethylbenzene (84)	Usable
	MND01-0310-2001	UJ	CCC - Freon-113 (84) CCC - 1,1-Dichloroethene (70) CCC - 1-Chlorohexane (70) CCC - 1,3-Dichlorobenzene (84) CCC - 1,4-Dichlorobenzene (82) CCC - 1,2-Dichlorobenzene (82) CCC - 2,2'-oxybis (1-chloropropane) (84) CCC - Acetone (128) CCC - Carbon disulfide (147) CCC - 2-Butanone (70) CCC - 4-methyl-2-pentanone (70) CCC - 1,3-Diethylbenzene (75)	Usable

Table B.3.1. (page 33 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L965 (Continued)	MND01-0310-2001 (Continued)	UJ	CCC - 1,4-Diethylbenzene (82) CCC - 1,2-Diethylbenzene (77)	Usable
	MND01-0310-2002	UJ	CCC - 1,2-*cis*-Dichloroethene (84) CCC - 1,2,3-Trichloropropane (80) CCC - 2-Chlorotoluene (79) CCC - 4-Chlorotoluene (80) CCC - 1,3-Dichlorobenzene (78) CCC - 1,4-Dichlorobenzene (78) CCC - 1,2-Dichlorobenzene (80) CCC - 2,2'-Oxybis (1-chloropropane) (79) CCC - Acetone (140) CCC - Carbon disulfide (82) CCC - Vinyl acetate (69) CCC - 2-Butanone (63) CCC - Benzene (73) CCC - 4-Methyl-2-pentanone (67) CCC - Toluene (72) CCC - Ethylbenzene (72) CCC - 1,4-Diethylbenzene (84)	Usable
	MND01-0310-1001	UJ	CCC - 1,2-*cis*-Dichloroethene (79) CCC - 1,2-Dichloroethane (78) CCC - 1,3-*cis*-Dichloropropene (75) CCC - 1,1,2-Trichloroethane (74) CCC - 1,1,1,2-Tetrachloroethane (84) CCC - 2-Chlorotoluene (64) CCC - 1,3-Dichlorobenzene (73) CCC - 1,4-Dichlorobenzene (72) CCC - 1,2-Dichlorobenzene (71) CCC - 2,2'-oxybis (1-chloropropane) (69) CCC - Acetone (194) CCC - Carbon disulfide (152)	Usable

Table B.3.1. (page 34 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L965 (Continued)	MND01-0310-1001 (Continued)	UJ	CCC - 2-Butanone (75) CCC - 4-methyl-2-pentanone (84) CCC - 1,3-Diethylbenzene (74) CCC - 1,4-Diethylbenzene (79) CCC - 1,2-Diethylbenzene (75)	Usable
9309L966	MND01-0311-0001 MND01-0311-1001	UJ	CCC - << 50	Usable
	MND01-0311-2001 MND01-0311-2002	UJ	CCC - 1,2,3-Trichloropropane (120) CCC - 2-Chlorotoluene (63) CCC - 4-Chlorotoluene (80) CCC - 2,2'-Oxybis (1-chloropropane) (122) CCC - Acetone (62) CCC - Carbon disulfide (82) CCC - Vinyl acetate (69) CCC - 2-Butanone (63) CCC - 4-Methyl-2-pentanone(67) CCC - 1,4-Diethylbenzene (84)	Usable
	MND01-0311-2001 MND01-0311-2002	UJ	HT-1 day	Usable
9309L990	MND01-0160-0001 MND01-0156-0001	UJ	CCC - << 50	Usable
	MND01-0304-0001	UJ	CCC - *trans*-1,3-Trichloropropene (26) CCC - 1-Chlorohexane (82) CCC - Freon-113 (84) CCC - 1,2-*trans*-Dichloroethene (83) CCC - 4-methyl-2-pentanone (70) CCC - Acetone (73) CCC - 2,2'-Oxybis (1-chloropropane) (84) CCC - Carbon disulfide (72.3) CCC - 2-Butanone (69) CCC - 1,3-Diethylbenzene (74)	Usable

Table B.3.1. (page 35 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L990 (Continued)	MND01-0304-0001 (Continued)	UJ	CCC - 1,4-Diethylbenzene (72) CCC - 1,2-Diethylbenzene (77) CCC - 1,3-Dichlorobenzene (75) CCC - 1,4-Dichlorobenzene (72) CCC - 1,2-Dichlorobenzene (71)	Usable
9309L991	MND01-0602-0001	UJ	CCC - *trans*-1,3-Dichloropropene (26) CCC - 1-Chlorohexane (82) CCC - 2-Chlorotoluene (72) CCC - Carbon disulfide (72) CCC - 4-Methyl-2-pentanone (70) CCC - 2-Butanone (69) CCC - Benzene (70) CCC - Total xylenes (126) CCC - 1,2-Diethylbenzene (77) CCC - 1,3-Diethylbenzene (74) CCC - 1,4-Diethylbenzene (72) CCC - 1,3-Dichlorobenzene (85) CCC - 1,4-Dichlorobenzene (82) CCC - 1,2-Dichlorobenzene (81) CCC - 2,2'-Oxybis (1-chloropropane) (84)	
	MND01-0602-2001	UJ	CCC - *trans*-1,3-Trichloropropene (25) CCC - 1,2,3-Trichloropropane (120) CCC - 2-Chlorotoluene (63) CCC - 4-Chlorotoluene (80) CCC - Acetone (62) CCC - Carbon disulfide (82) CCC - 1,2-Dichlorobenzene (130) CCC - 1,3-Dichlorobenzene (78) CCC - 1,4-Dichlorobenzene (80) CCC - 1,2-*cis*-Dichloroethene (84) CCC - 2,2'-oxybis (1-chloropropane) (122)	

Table B.3.1. (page 36 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L991 (Continued)	MND01-0602-2001 (Continued)	UJ	CCC - Vinyl acetate (69) CCC - 2-Butanone (63) CCC - Benzene (72) CCC - 4-Methyl-2-pentanone (67) CCC - Toluene (72) CCC - 1,4-Diethylbenzene (84)	Usable
	MND01-0602-2001	UJ	HT-1 day	Minimal impact
9309L992	MND20-0326-0001	UJ	CCC - <<50	Usable
	MND20-0324-0001 MND20-0353-0001 MND20-0353-1001 MND20-0353-2001 MND20-0353-3001	UJ	CCC - Methylene chloride (20) CCC - *trans*-1,3-Dichloropropene (26) CCC - 1-Chlorohexane (82) CCC - 2-Chlorotoluene (72) CCC - 2,2'-Oxybis (1-chloropropane) (84) CCC - Carbon disulfide (72) CCC - 2-Butanone (70) CCC - 4-Methyl-2-pentanone (70) CCC - Total xylenes (74) CCC - 1,3-Diethylbenzene (74) CCC - 1,4-Diethylbenzene (72) CCC - 1,2-Diethylbenzene (77) CCC - 1,3-Dichlorobenzene (84) CCC - 1,4-Dichlorobenzene (82) CCC - 1,2-Dichlorobenzene (81)	Usable
	MND20-0345-0001	UJ	CCC - 1,2,3-Trichloropropane (84) CCC - 2-Chlorotoluene (64) CCC - 4-Chlorotoluene (84) CCC - 1,3-Dichlorobenzene (72) CCC - 1,4-Dichlorobenzene (72) CCC - 2,2'-Oxybis (1-chloropropane) (69) CCC - Acetone (195) CCC - Carbon disulfide (152)	Usable

Table B.3.1. (page 37 of 37)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L992 (Continued)	MND20-0345-0001 (Continued)	UJ	CCC - 4-Methyl-2-pentanone (83) CCC - Total xylenes (125) CCC - 1,3-Diethylbenzene (126) CCC - 1,4-Diethylbenzene (121) CCC - 1,2-Diethylbenzene (125) CCC - 2-Butanone (125) CCC - 1,2-Dichlorobenzene (71) CCC - 1,2-*cis*-Dichloroethene (79) CCC - 1,2-Dichloroethane (82) CCC - 1,3-*cis*-Dichloropropene (75) CCC - 1,3-*trans*-Dichloropropene (24) CCC - 1,1,2-Trichloroethane (73) CCC - 1,1,1,2-Tetrachloroethane (84) CCC - Tribromomethane (76)	Usable
	MND20-0326-0001	UJ	CCC - 2-Chlorotoluene (71.6) CCC - 2,2'-Oxybis (1-chloropropane) (81.7) CCC - Acetone (237) CCC - Carbon disulfide (143.8) CCC - 2-Butanone (150) CCC - 1,3-Diethylbenzene (118.4) CCC - 1,2-Diethylbenzene (118.6)	Usable
	MND20-0326-0001	R	Confirmation - Acetone	Unusable

CCC - Continuing Calibration Check
SR-Surrogate Recovery
MB-Method Blank Contamination
HT-Holding Time

Table B.3.2. Acrylonitrile and Acetonitrile by Gas Chromatography (Method 8030)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L051	MND01-0123-0001 RE	UJ	HT=2 Days	Minimal impact
9309L067	MND01-0320-0001 RE MND01-0138-3001 RE MND01-0138-0001 RE	J J UJ	HT=1 Day HT=2 Days HT=2 Days	Minimal impact
9309L070	MND01-0319-3001 MND01-0319-0001	UJ	HT=1 Day	Minimal impact
9309L091	MND01-0128-0001	U	AB=Acetonitrile (3 μg/L)	Raised Quantitation Limit

Table B.3.3. Semivolatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS) (Method 8270)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L051	MND01-0123-0001	U	MB - di-n-butylphthalate (0.7 μg/L) MB - *bis*(2-ethylexyl phthalate (2 μg/L)	Raised quantitation limit
9309L069	MND01-0138-0001 MND01-0158-0001 MND01-0158-1001 MND01-0320-0001	U	MB - di-n-butylphthalate (0.5 μg/L)	Raised quantitation limit
	MND01-0138-0001 MND01-0158-0001 MND01-0158-1001 MND01-0320-0001	UJ	CCC - 2,2'-oxybis (1-chloropropane) (-41.3) CCC - 4-nitroaniline (-28.9) CCC - carbazole (-32.1)	Negative bias
9309L070	MND01-0319-0001	U	MB - di-n-butylphthalate (0.5 μg/L) MB - *bis*(2-ethylhexyl)phthalate (0.3 μg/L)	Raised quantitation limit
	MND01-0124-0001 MND01-0303-0001 MND01-0319-0001	UJ	CCC - 2,2'-oxybis (1-chloropropane) (-41.3) CCC - carbazole (-32.1) CCC - 4-nitroaniline (-28.9)	Slightly negative bias
9309L071	MND20-0346-0001	UJ	CCC - 4-nitroaniline (-28.9) CCC - 2,2-oxybis (1-chloropropane) (-41.3)	Slightly positive bias
9309L089	MND01-0601-0001	UJ	CCC - benzoic acid (25.2) CCC - 4,6-dinitro-2-methylphenol (28.3) CCC - 2,4-dinitrophenol (38.5)	Slightly positive bias
	MND01-0370-0001 MND01-0601-0001	U	MB - di-n-butylphthalate (.9 μg/l) MB - *bis*(2-ethylhexyl)phthalate (0.4 μg/L)	Raised quantitation limit
	MND01-0370-0001 MND01-0601-0001	UJ	LCS - 1,4-Dichlorobenzene (23%) LCS - 1,2,4-Trichlorobenzene (28%) Affects similar compounds	Possible low bias

Table B.3.3. (page 2 of 9)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L090	MND01-0373-0001	U	MB - di-n-butylphthalate (0.9 μg/L)	Raised quantitation limit
	MND01-0376-0001 MND01-0377-0001 MND01-0377-1001 MND01-0397-0001	U	MB - di-n-butylphthalate (0.9 μg/L) MB - *bis*(2-ethylhexyl) phthalate (0.4 μg/L)	Raised quantitation limit
	ALL	UJ	CCC - benzoic acid (25.2) CCC - 2,4-dinitrophenol (38.5) CCC - 4,6-dinitro-2-methylphenol (28.3)	Slightly positive bias
	ALL	UJ	LCS - 1,4-Dichlorobenzene (23%) LCS - 1,2,4-Trichlorobenzene (28%) Affects similar compounds	Possible low bias
9309L091	MND01-0301-0001	UJ	CCC - benzoic acid (25.2) CCC - 2,4-dinitrophenol (38.5) CCC - 4,6-dinitro-2-methyphenyl (28.3)	Slightly positive bias
	MND01-0119-0001 MND01-0128-1001 MND01-0301-0001 MND01-0382-0001	U	MB - di-n-butylphthalate (0.9 μg/L) MB - *bis*(2-ethylhexyl)phthalate (0.4 μg/L)	Raised quantitation limit
	MND01-0112-0001 MND01-0128-0001	U	MB - di-n-butylphthalate (0.9 μg/L)	Raised quantitation limit
	ALL	UJ	LCS - 1,4-Dichlorobenzene (23%) LCS - 1,2,4-Trichlorobenzene (28%) Affects similar compounds	Possible low bias
9309L096	MND01-0379-0001	UJ	CCC - *bis*(2-chloroethyl)ether - (27.4) CCC - 2,4-dinitrophenol - (37.5) CCC - benzoic acid - (30.9)	Slightly positive bias
		U	MB - di-n-butylphthalate (4 μg/L) MB - *bis*(2-ethylhexyl)phthalate (2 μg/L)	Raised quantitation limit

Table B.3.3. (page 3 of 9)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L098	MND20-0332-0001 MND20-0341-0001 MND20-0351-0001 MND20-0356-0001 MND20-0388-0001 MND01-0393-0001	U	MB - di-n-butylphthalate (0.9 μg/L) MB - *bis*(2-ethylhexyl)phthalate (0.4 μg/L)	Raised quantitation limit
	MND20-0356-0001	UJ	MSR - 1,4-dichlorobenzene (29) MSR - 1,2,4-trichlorobenzene (35)	Possible low bias
	MND20-0332-0001 MND20-0351-0001 MND20-0388-0001	UJ	CCC - anthracene (25.8)	Slightly positive bias
	ALL	UJ	LCS - 1,4-Dichlorobenzene (23%) LCS - 1,2,4-Trichlorobenzene (28%) Affects similar compounds	Possible low bias
9309L106	MND01-0157-0001 MND01-0378-0001	U	MB - di-n-butylphthalate (4 μg/L) MB - *bis*(2-ethylhexyl) phthalate (2 μg/L)	Raised quantitation limit
	MND01-0157-0001 MND01-0378-0001	UJ	CCC - benzoic acid (30.9) CCC - 2,4-dinitrophenol (37.5) CCC - *bis*(2-chloroethyl) ether (27.4)	Slightly positive bias
9309L107	MND20-0322-0001 MND20-0327-0001	UJ	CCC - *bis*(2-chloroethyl) ether (27.4) CCC - 2-nitrophenol (37.5) CCC - benzoic acid (30.9)	Slightly positive bias
	MND20-0327-0001	U	MB - di-n-butylphthalate (4 μg/L) MB - *bis*(2-ethylhexyl) phthalate (2 μg/L)	Raised quantitation limit
9309L108	MND01-0137-0001	UJ	CCC - *bis*(2-chloroethyl) ether (27.4) CCC - Benzoic acid (30.9) CCC - 2,4-dinitrophenol (37.5)	Slightly positive bias
	MND01-0137-0001	U	MB - di-n-butylphthalate (4 μg/L) MB - *bis*(2-ethylhexyl) phthalate (2 μg/L)	Raised quantitation limit

Table B.3.3. (page 4 of 9)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L119	MND20-0383-0001 MND20-0387-0001	U	MB - *bis*(2-ethylhexyl) phthalate (0.6 μg/L)	Raised quantitation limit
9309L120	MND20-0328-0001	UJ	CCC - *bis*(2-chloroethyl) ether (27) CCC - benzoic acid (31) CCC - 2,4-dinitrophenol (38)	Slightly positive bias
9309L121	MND01-0130-0001 MND01-0302-0001 MND20-0343-0001	U	MB - *bis*(2-ethylhexyl) phthalate. (0.6 μg/L)	Raised quantitation limit
	MND01-0302-0001 MND20-0343-0001	UJ	CCC - hexachlorocyclopentadiene (42.8)	Slightly positive bias
	MND20-0343-0001 MND20-0343-1001	UJ/J	FDRPD - *bis*(2-ethylhexyl)phthalate (200)	Inaccuracy
9309L898	ALL	UJ	CCC - benzoic acid (30) CCC - 2,4-dinitrophenol (31) CCC - pentachlorophenol (31)	Slightly positive bias
		U	MB - Di-n-butylphthalate (0.6 μg/L) MB - *bis*(2-ethylhexyl) phthalate (3 μg/L)	Raised quantitation limit
	MND01-0306-0001	J	LCS - Diethylphthalate	Possible bias
9309L904	ALL	UJ	CCC - benzoic acid (27.3)	Slightly positive bias
		U	MB - Di-n-butylphthalate (0.6 μg/L) MB - *bis*(2-ethylhexyl) phthalate (3 μg/L)	Raised quantitation limit
9309L920	ALL	UJ	CCC - benzoic acid (26.8) CCC - Hexachlorocyclopentadiene (26)	Slightly positive bias
		U	MB - diethylphthalate, (0.4 μg/L) MB - di-n-butylphthalate, and (0.4 μg/L) MB - *bis*(2-ethylhexyl) phthalate (0.6 μg/L)	Raised quantitative limit

Table B.3.3. (page 5 of 9)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L921	MND01-0127-0001 MND01-0315-0001	UJ	CCC - benzoic acid (26.8) CCC - hexachlorocyclopentadiene (26)	Slightly positive bias
		U	MB - phenol, (0.6 μg/L) MB - diethylphthalate, (0.6 μg/L) MB - di-n-butylphthalate (0.7 μg/L) MB - *bis*(2-ethylhexyl)phthalate (0.4 μg/L)	Raised quantitation limit
9309L927	MND01-0129-0001 MND01-0309-0001	UJ	CCC - benzoic acid (26.8) CCC - hexachlorocyclopentadiene (26)	Slightly positive bias
		U	MB - diethylphthalate (0.5 μg/L)	Raised quantitation limit
	ALL	UJ	LCS - 1,4-Dichlorobenzene (25%) LCS - 1,2,4-Trichlorobenzene (29%) LCS - Acenaphthene (44%) Affects similar compounds	Possible low bias
9309L928	ALL	UJ	CCC - benzoic acid (29.9)	Slightly positive bias
	MND01-0126-0001	R	SR - Phenol (6) Affects similar compounds	Unusable
	ALL	UJ	LCS - 1,4-Dichlorobenzene (25%) LCS - 1,2,4-Trichlorobenzene (29%) LCS - Acenaphthene (44%) Affects similar compounds	Possible low bias
9309L929	MND01-0314-0001	UJ	CCC - benzoic acid (26.3) CCC - hexachlorocyclopentadiene (26)	Slightly positive bias
	MND01-0314-0001	U	MB - diethylphthalate (0.5 μg/L)	Raised quantitation limit
	ALL	UJ	LCS - 1,4-Dichlorobenzene (25%) LCS - 1,2,4-Trichlorobenzene (29%) LCS - Acenaphthene (44%) Affects similar compounds	Possible low bias

Table B.3.3. (page 6 of 9)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L963	MND01-7899-0001	UJ	CCC - benzo(k) fluoranthene (26.4)	Slightly positive bias
		U	MB - *bis*(2-ethylhexyl) phthalate (0.2 μg/L)	Raised quantitation limit
		UJ	LCS - 1,4-Dichlorobenzene (27%) LCS - 1,2,4-Trichlorobenzene (34%) Affects similar compounds	Possible low bias
9309L964	MND01-0159-0001	UJ	CCC - benzo(k) fluoranthene (26.4)	Slightly positive bias
		U	MB - *bis*(2-ethylhexyl) phthalate (0.2 μg/L)	Raised quantitation limit
		UJ	LCS - 1,4-Dichlorobenzene (27%) LCS - 1,2,4-Trichlorobenzene (34%) Affects similar compounds	Possible low bias
9309L965	MND01-0310-0001	UJ	CCC - benzo(k) fluoranthene (26.4)	Slightly positive bias
	MND01-0310-1001	U	MB - *bis*(2-ethylhexyl)phthalate (0.2 μg/L)	Raised quantitation limit
	MND01-0310-0001 MND01-0310-1001	UJ	LCS - 1,4-Dichlorobenzene (27%) LCS - 1,2,4-Trichlorobenzene (34%) Affects similar compounds	Possible low bias
	MND01-0310-0001 MND01-0310-1001	UJ/J	FDRPd - Phenol (200)	Inaccuracy
9309L966	ALL	UJ	CCC - benzo(k) fluoranthene (26.4)	Slightly positive bias
		U	MB - *bis*(2-ethylhexyl) phthalate (0.2 μg/L)	Raised quantitation limit
		UJ	LCS - 1,4-Dichlorobenzene (27%) LCS - 1,2,4-Trichlorobenzene (34%) Affects similar compounds	Possible low bias
9309L990	ALL	UJ	CCC - benzo(k) fluoranthene (26.4)	Slightly positive bias
		U	MB - *bis*(2-ethylhexyl) phthalate (0.2 μg/L)	Raised quantitation limit

Table B.3.3. (page 7 of 9)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L990 (Continued)	ALL	UJ	LCS - 1,4-Dichlorobenzene (27%) LCS - 1,2,4-Trichlorobenzene (34%) Affects similar compounds	Possible low bias
9309L991	MND01-0602-0001	UJ	CCC - benzo(k) fluoranthene (26.4)	Slightly positive bias
		U	MB - *bis*(2-ethylhexyl) phthalate (0.2 μg/L)	Raised quantitation limit
		UJ	LCS - 1,4-Dichlorobenzene (27%) LCS - 1,2,4-Trichlorobenzene (34%) Affects similar compounds	Possible low bias
9309L992	MND20-0324-0001 MND20-0345-0001 MND20-0353-1001 MND20-0353-0001	U	MB - *bis*(2-ethylhexyl) phthalate (2 μg/L)	Raised quantitation limit
	MND20-0324-0001	UJ	CCC - benzo(k) fluoranthene (26.4)	Slightly positive bias
	MND20-0326-0001 MND20-0345-0001 MND20-0353-0001 MND20-0353-1001	UJ	CCC - 2,4-dinitrophenol (30.4) CCC - 4-nitrophenol (35.2)	Slightly positive bias
	ALL	UJ	LCS - 1,4-Dichlorobenzene (27%) LCS - 1,2,4-Trichlorobenzene (34%) Affects similar compounds	Possible low bias
9310L142	MND20-0386-0001 MND20-0389-0001	UJ	CCC - Benzoic acid (43.3) CCC - Carbazole (25.4) CCC - Di-n-butylphthalate (25.8)	Slightly positive bias
		U	MB - *bis*(2-ethylhexyl) phthalate (2 μg/L)	Raised quantitation limit
9310L143	MND20-0337-0001	U	MB - di-n-butylphthalate (1 μg/L) MB - *bis*(2-ethylhexyl phthalate) (2 μg/L)	Raised quantitation limit

Table B.3.3. (page 8 of 9)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9310L143 (Continued)	MND20-0337-0001 (Continued)	UJ	CCC - Benzoic acid (43.3) CCC - 2-nitroaniline (27.7) CCC - carbazole (25.4) CCC - di-n-butylphthalate (25.8)	Slightly positive bias
9310L144	MND01-0608-0001	U	MB - di-n-butylphthalate (1 μg/L) MB - *bis*(2-ethylhexylphthalate (2 μg/L)	Raised quantitation limit
		UJ	CCC - benzoic acid (43.3) CCC - 2-nitroaniline (27.7) CCC - carbazole (25.4) CCC - di-n-butylphthalate (25.8)	Slightly positive bias
9310L165	MND20-0334-0001 MND20-0335-0001	U	MB - di-n-butylphthalate (1 μg/L) MB - *bis*(2-ethylhexyl)phthalate (2 μg/L)	Raised quantitation limit
		UJ	CCC -*bis*(2-chloroethyl)ether (28) CCC - 2,2'-oxybis (1-chloropropane) (28.6)	Slightly positive bias
9310L166	MND20-0336-0001 MND20-0347-0001	UJ	CCC - *bis*(2-chloroethyl)ether (28) CCC - 2,2'-oxybis (1-chloropropane) (28.6)	Slightly positive bias
	MND20-0336-0001 MND20-0347-0001	U	MB - *bis*(2-ethylhexyl)phthalate (2 μg/L)	Raised quantitation limit
	MND20-0336-0001	U	MB - di-n-butylphthalate (1 μg/L)	Raised quantitation limit
9310L167	MND20-0330-0001 MND20-0330-1001	UJ	CCC - *bis*(2-chloroethyl)ether (28) CCC - 2,2'-oxybis (1-chloropropane) (28.6)	Slightly positive bias
		U	MB - *bis*(2-ethylhexyl)phthalate (2 μg/L)	Raised quantitation limit
	MND20-0330-1001	U	MB - di-n-butylphthalate (1 μg/L)	
9310L265	MND01-0011-0001 MND01-0071-0001 MND01-0076-0001 MND01-0271-0001 MND20-0354-0001	UJ	CCC - 2-nitroaniline (27.8) CCC - 2,4-dinitrophenol (31.8) CCC - 4-nitrophenol (28.4) CCC - phenanthrene (25.3) CCC - di-n-butylphthalate (26.3)	Slightly positive bias

Table B.3.3. (page 9 of 9)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9310L282	MND01-0117-0001	UJ	CCC - 4,6-dinitro-2-methylphenol (25.8)	Slightly positive bias
	MND01-0115-0001 MND20-0333-0001 MND20-0342-0001 MND20-0342-1001	UJ	CCC - hexachlorocyclopentadiene (32.6)	Slightly positive bias
	MND01-0115-0001 MND20-0333-0001 MDN20-0342-0001 MND20-0342-1001	U	MB - diethylphthalate (0.3 μg/L) MB - di-n-butylphthalate (0.4 μg/L) MB - *bis*(2-ethylhexyl)phthalate (0.5 μg/L)	Raised quantitation limit
	MND01-0117-0001	U	MB - diethylphthalate (2 μg/L) MB - di-n-butylphthalate (2 μg/L) MB - *bis*(2-ethylhexyl)phthalate (1 μg/L)	Raised quantitation limit
9310L311	MND01-0046-0001 MND01-0063-0001	U	MB - di-n-butylphthalate (0.4 μg/L) MB - *bis*(2-ethylhexyl)phthalate (5 μg/L)	Raised quantitation limit
	MND20-0325-0001	U	MB - di-n-butylphthalate (2 μg/L) MB - *bis*(2-ethylhexyl)phthalate (1 μg/L)	Raised quantitation limit
	MND01-0046-0001 MND01-0063-0001	UJ	CCC - 4-Nitroaniline (25.8)	Slightly positive bias
	MND20-0325-0001	UJ	CCC - 4,6-dinitro-2-methylphenol (25.8)	
9310L320	ALL	UJ	LCS - 1,4-dichlorobenzene (23) LCS - 1,2,4-trichlorobenzene (27)	Possible low bias
		UJ	LCS - 1,4-Dichlorobenzene (31%) LCS - 1,2,4 - Trichlorobenzene (37%) Affects similar compounds	Possible low bias

Table B.3.4. Radionuclides

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
S3-09-022	MND01-0152-0001 MND01-0153-0001 MND01-0154-0001 MND01-0155-0001 MND01-0318-0001	R	Th-228 ≥2x≤3xMB Th-230 ≥2x≤3xMB Pu-239/240 ≥2x≤3xMB	Usable
	MND01-0305-0001 MND01-0317-0001	R	Th-228 ≥2x≤3xMB Pu-239/240 ≥2x≤3xMB	Usable
	MND01-0305-0001	J	Th-230 ≥2x≤3xMB	Usable
	MND01-0306-0001	R	Th-228 ≥2x≤3xMB Th-230 ≥2x≤3xMB	Usable
		UJ	Pu-239/240 ≥2x≤3xMB	Usable
	MND01-0317-0001	UJ	Th-230 ≥2x≤3xMB	Usable
S3-09-023	MND01-0127-0001 MND01-0307-0001 MND01-0313-0001 MND01-0315-0001	R	Th-228 ≥2x≤3xMB	Unusable
S3-09-02	MND01-0118-0001 MND01-0129-0001 MND01-0309-0001 MND01-0314-0001 MND01-0394-0001	R	Th-228 ≥2x≤3xMB	Unusable
	MND01-0126-0001	UJ	Th-228 activity < MDA	Usable
S3-09-028	MND01-0159-0001 MND01-0310-0001 MND01-0310-1001 MND01-0311-1001 MND01-0311-0001	R	Th-228 ≥2x≤3xMB Th-230 ≥2x≤3xMB	Unusable
S3-09-032	MND01-0304-0001	R	Th-230 ≥2x≤3xMB	Unusable
	MND01-0304-0001	UJ	Th-228 activity < 3X MB	Usable
	MND01-0304-0001	J	U-235/236 RSD (6.8)	Usable

Table B.3.4. (page 2 of 5)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
S3-09-032 (Continued)	MND01-0353-0001 MND01-0353-1001	R	Th-230 RSD (4.5)	Unusable
	MND20-0324-0001	R	Th-228 ≥2x≤3xMB	Unusable
	MND20-0324-0001	UJ	Th-230 activity < MDA	Usable
	MND01-0156-0001 MND01-0160-0001 MND20-0326-0001 MND20-0345-0001 MND20-0353-0001 MND20-0353-1001 MND01-0602-0001	R	Th-228 ≥2x≤3xMB Th-230 ≥2x≤3xMB	Unusable
S3-09-040	MND01-0123-0001	UJ	Th-228 activity < MDA	Usable
S3-09-046	MND01-0158-1001 MND01-0320-0001	R	Pu-239/240 ≥2x≤3xMB	Usable
	MND01-0158-0001	R	Pu-238 ≥2x≤3xMB	Usable
	MND01-0124-0001 MND01-0138-0001 MND01-0158-0001 MND01-0303-0001 MND20-0346-0001	R	Pu-239/240 ≥2x≤3xMB Th-228 ≥2x≤3xMB Th-230 ≥2x≤3xMB	Usable
	MND01-0124-0001 MND01-0138-0001 MND01-0158-1001 MND01-0303-0001 MND01-0319-0001 MND01-0320-0001 MND20-0346-0001	UJ	Pu-238 activity < MDA	Usable
	MND01-0319-0001	UJ	Pu-239/240 ≥2x≤3xMB	Usable
	MND01-0158-1001 MND01-0320-0001	J	Th-230 ≥2x≤3xMB	Usable
	MND01-0319-0001	R	Th-230 ≥2x≤3xMB Th-228 ≥2x≤3xMB	Unusable
	MND01-0158-1001 MND01-0320-0001	R	Th-228 ≥2x≤3xMB	Unusable

Table B.3.4. (page 3 of 5)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
S3-09-049	MND01-0125-0001 MND01-0128-0001 MND01-0128-1001 MND01-0301-0001 MND01-0332-0001 MND20-0341-0001 MND01-0372-0001 MND01-0393-0001 MND01-0397-0001	R	Am - 241 ≥2x≤3xMB Pu - 239/240 ≥2x≤3xMB Th - 228 ≥2x≤3xMB Th - 230 ≥2x≤3xMB	Usable
S3-09-050	MND01-0119-0001 MND01-0370-0001	R	Pu-239/240 ≥2x≤3xMB	Usable
	MND01-0112-0001	R	Th-230 ≥2x≤3xMB	Usable
	MND01-0112-0001	UJ	Pu-239/240 < MDA	Usable
	MND01-0119-0001 MND01-0122-0001 MND01-0370-0001	R	Th-228 ≥2x≤3xMB	Usable
	MND01-0119-0001 MND01-0370-0001	J	Th-230 > 3xMB	Usable
	MND01-0601-0001	UJ	Th-230 < MDA	
	MND01-0112-0001 MND01-0119-0001 MND01-0370-0001 MND01-0601-0001	UJ	Pu-238 < MDA	Usable
S3-09-052	MND20-0351-0001 MND20-0356-0001 MND01-0373-0001 MND01-0376-0001 MND01-0379-0001	R	Am-241 ≥2x≤3xMB Pu-239/240 ≥2x≤3xMB Th-228 ≥2x≤3xMB Th-230 ≥2x≤3xMB	Usable
	MND01-0388-0001	UJ	Am-241 ≥2x≤3xMB Pu-239/240 ≥2x≤3xMB	Usable
		R	Th-228 ≥2x≤3xMB Th-230 ≥2x≤3xMB	Usable

Table B.3.4. (page 4 of 5)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
S3-10-006	MND20-0383-0001	J UJ J J J UJ J UJ	Am-241 RPD>4xSD Pu-238 RPD>4xSD Th-230 RPD>4xSD Th-232 RPD>4xSD U-238 RPD>4xSD U-235 RPD>4xSD U-234 RPD>4xSD Ra-226 RPD>4xSD	Usable
	MND20-0328-0001 MND20-0383-0001 MND20-0389-0001 MND01-0608-0001	R	Pu-239/240 ≥2x≤3xMB	Unusable
	MND20-0386-0001	UJ	Pu-239/240 activity < MDA	Usable
S3-10-008	MND20-0336-0001	J	Tritium-RPD>4xSD	Usable
	MND20-0336-0001	J	U-238 RPD>4xSD	Usable
	MND20-0330-0001 MND20-0336-0001 MND20-0347-0001	R	Th-230≥2x≤3xMB	Usable
	MND20-0330-1001 MND20-0334-0001 MND20-0335-0001	UJ	Th-230 ≥2x≤3xMB	Usable
S3-10-028	MND01-0071-0001 MND01-0076-0001 MND01-0111-0001 MND01-0271-0001 MND20-0354-0001	R UJ UJ R UJ	Th-230 ≥2x≤3xMB	Usable
S3-10-029	MND20-0333-0001 MND20-0342-0001 MND20-0342-1001	R	Pu-239/240 ≥2x≤3xMB	Usable
	MND20-0342-0001	R	Am-241 ≥2x≤3xMB	Usable
	MND20-0333-0001 MND20-0342-1001	UJ	Am-241 ≥2x≤3xMB	Usable

Table B.3.4. (page 5 of 5)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
S3-10-035	MND01-0063-0001	UJ R UJ	Am-241 ≥2x≤3xMB Pu-239/240 ≥2x≤3xMB Th-228 ≥2x≤3xMB	Usable
	MND01-0046-0001 MND01-0115-0001 MND01-0325-0001 MND01-0375-0001	R	Am-241 ≥2x≤3xMB Pu-239/240 ≥2x≤3xMB Th-228 ≥2x≤3xMB	Unusable
	MND01-0177-0001	J	Th-228 ≥2x≤3xMB	Usable
		R	Am-241 ≥2x≤3xMB Pu-239/240 ≥2x≤3xMB	Usable
S3-10-038	MND01-0607-0001	R	Pu-239/240 ≥2x≤3xMB	Unusable
	MND01-0607-0001	UJ	Am-241 activity < MDA Th-228 activity < MDA	Usable
	MND01-0607-1001	R	Pu-239/240 ≥2x≤3xMB Th-228 ≥2x≤3xMB	Unusable
	MND01-0607-1001	UJ	Am-241 activity < MDA	Usable
	MND01-0120-0001	R	Am-241 ≥2x≤3xMB Pu-239/240 ≥2x≤3xMB Th-228 ≥2x≤3xMB	Usable
	MND01-0344-0001	R	Pu-239/240 ≥2x≤3xMB Th-228 ≥2x≤3xMB	Unusable
	MND01-0344-0001	UJ	Am-241 activity < MDA	Usable

Qualification due to blank contamination criteria
RSD - Replicate Standard Deviation
>3XMB - Qualification due to blank contamination criteria

Table B.3.5. Pesticides/PCBs (Method 8080)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L051	MND01-0123-0001	UJ	SR - TCMX (50)	None
9309L069	MND01-0158-1001	UJ	SR - TCMX (55)	None
	MND01-0320-0001		SR - TCMX (55)	
	MND01-0138-0001		SR - TCMX (45)	
	MND01-0158-0001		SR - TCMX (50)	
9309L070	MND01-0319-0001	UJ	SR - TCMX (35) DCB (50)	Low bias
	MND01-0303-0001		SR - TCMX (50) DCB (15)	
	MND01-0124-0001		SR - TCMX (50)	None
	MND01-0124-0001	UJ	MSR - Lindane (48) MSR - Heptachlor (28) MSR - Aldrin (24) MSR - Endrin (52)	Low bias
9309L071	MND20-0346-0001	UJ	SR - TCMX (50)	None
9309L089	MND01-0370-0001	UJ	SR - TCMX (55)	None
	MND01-0601-0001		SR - TCMX (50)	
	ALL	UJ	LCS - Aldrin (28)	Low bias
9309L090	MND01-0373-0001	UJ	SR - TCMX (50)	None
	MND01-0376-0001			
	MND01-0373-0001 MND01-0376-0001 MND01-0377-0001 MND01-0377-1001 MND01-0397-0001	UJ	LCS - Aldrin (28)	Low bias
9309L091	MND01-0301-0001 MND01-0119-0001 MND01-0128-0001 MND01-0128-1001 MND01-0382-0001 MND01-0112-0001	UJ	LCS - Aldrin (28)	Low bias
9309L096	MND01-0379-0001	UJ	SR - TCMX (40)	None

Table B.3.5. (page 2 of 5)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L098	MND20-0388-0001	UJ	SR - TCMX (55)	None
	MND20-0356-0001		SR - DCB (55)	
	MND01-0372-0001		SR - TCMX (50)	
	All Samples except MND20-0393-0001	UJ	CCC - Gamma BHC (30% RPD)	Inaccuracy
	MND01-0393-0001	UJ	SR - DCB (25)	None
	MND20-0356-0001	UJ	MSR - Endrin (36)	Low bias
	All Samples except MND20-0393-0001	UJ	CCC - Alpha BHC (30% RPD)	Inaccuracy
9309L107	MND20-0327-0001	UJ	SR - TCMX (55)	None
	MND20-0322-0001			
9309L108	MND01-0137-0001	UJ	SR - TCMX (40) SR - DCB (35)	Low bias
9309L119	MND01-0380-0001	UJ	SR - DCB (40)	None
9309L121	MND20-0343-0001	UJ	SR - DCB (50)	None
	MND02-0343-1001		SR - DCB (35)	
9309L920	MND01-0313-0001	UJ	SR - DCB (30)	None
	MND01-0307-0001 MND01-0313-0001	UJ	RSD - Methoxychlor (21.1) RSD - Endosulfan I (20.3) RSD - Endrin (26.6)	Slight inaccuracy
9309L921	MND01-0315-0001 MND01-0127-0001	UJ	RSD - Methoxychlor (21.1) RSD - Endosulfan (20.3) RSD - Endrin (26.6)	Slight inaccuracy
9309L928	MND01-0394-0001	UJ	SR - DCB (55)	None
9309L929	MND01-0314-0001	UJ	SR - DCB (45)	None
9309L963	MND01-7899-0001	UJ	RSD - Endosulfan I (20.3) RSD - Methoxychlor (21.1)	Inaccuracy
	MND01-7899-0001	UJ	LCS - Lindane (54) LCS - Endrin (51)	Low bias

Table B.3.5. (page 3 of 5)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L964	MND01-0159-0001	UJ	LCS - Lindane (54)	Low bias
	MND01-0159-0001	UJ	RSD - Endrin (26.6) RSD - Endosulfan I (20.3) RSD - Methoxychlor (21.1)	Inaccuracy
9309L965	MND01-0310-0001 MND01-0310-1001	UJ	LCS - Lindane (54)	Low bias
	MND01-0310-0001 MND01-0310-1001	UJ	RSD - Endrin (26.6) RSD - Endosulfan I (20.3) RSD - Methoxychlor (21.1)	Inaccuracy
9309L966	MND01-0311-0001 MND01-0311-1001	UJ	SR - TCMX (50) SR - TCMX (55)	None
	MND01-0311-0001 MND01-0311-1001	UJ	RSD - Endosulfan (20.3) RSD - Endrin (26.6)	Inaccuracy
9309L990	MND01-0156-0001	R	SR - < 10% for TCMX	Reject
	MND01-0160-0001	UJ	SR - TCMX (55)	None
	MND01-0160-0001 MND01-0304-0001	UJ	RSD - Endosulfan I (20.3) RSD - Endrin (26.6)	Inaccuracy
	MND01-0304-0001	UJ	MSR - Lindane (38) MSR - Aldrin (48) MSR - Dieldrin (51)	Low bias
	MND01-0160-0001 MND01-0304-0001	UJ	LCS - Lindane (46) LCS - Endrin (51)	Inaccuracy
9309L991	MND01-0602-0001	UJ	RSD - Endosulfan I (20.3) RSD - Endrin (26.6) RSD - Methoxychlor (21.1)	Inaccuracy
	MND01-0602-0001	UJ	LCS - Lindane (46) LCS - Endrin (51)	Low bias
9309L992	MND20-0353-0001	UJ	SR - TCMX (45)	None
	MND20-0345-0001		SR - TCMX (55)	
	MND20-0353-1001		SR - TCMX (45)	
	MND20-0324-0001		SR - TCMX (50)	
	MND20-0326-0001		SR - TCMX (50)	

Table B.3.5. (page 4 of 5)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L992 (Continued)	ALL	UJ	RSD - Endosulfan I (20.3) RSD - Endrin (26.6) RSD - Methoxychlor (21.1)	Inaccuracy
	ALL	UJ	LCS - Lindane (54) LCS - Endrin (51)	Low bias
9310L142	MND20-0389-0001	UJ	SR - TCMX (55)	None
	MND20-0386-0001		SR - TCMX (50)	
9310L143	ALL	UJ	LCS - Aldrin (36)	Low bias
	MND20-0337-0001	UJ	SR - TCMX (55)	None
9310L144	MND01-0608-0001	UJ	SR - TCMX (55)	None
9310L165	All Samples	UJ	LCS - Lindane (40) LCS - Heptachlor (38) LCS - Dieldrin (50) LCS - Endrin (50)	Low bias
	MND20-0335-0001	UJ	SR - TCMX (25) SR - DCB (35)	
	MND20-0334-0001		SR - TCMX (35) SR - DCB (45)	
9310L166	MND20-0336-0001	UJ	SR - TCMX (25) SR - DCB (55)	Low bias
	MND20-0347-0001		SR - TCMX (25) SR - DCB (40)	
	All Samples	UJ	LCS - Lindane (40) LCS - Heptachlor (38) LCS - Dieldrin (50) LCS - Endrin (50)	
	MND20-0336-0001	UJ	MSR - Lindane (34,28) MSR - Heptachlor (26,22) MSR - Aldrin (20,19) MSR - Endrin (40,30) MSR - Dieldrin (38,33) MSR - DDT (—,35)	

Table B.3.5. (page 5 of 5)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9310L167	MND20-0330-0001 MND20-0330-1001	UJ	SR - TCMX (35), DCB (40) SR - TCMX (20), DCB (30)	Low bias
	MND20-0330-0001 RE MND20-0330-1001 RE	R	HT	Reject
	MND20-0330-1001	UJ	CCC - DDT (26% RPD)	Inaccuracy
9310L265	MND01-0071-0001	UJ	SR - TCMX (0)	Reject
	MND01-0076-0001	UJ	SR - TCMX (55)	None
9310L282	All Samples	UJ	LCS - Lindane (42)	Low bias
	MND20-0342-0001	UJ	SR - TCMX (50) SR - DCB (55)	Low bias
	MND20-0333-0001		SR - TCMX (55)	None
	MND01-0115-0001		SR - TCMX (55) SR - DCB (30)	Low bias
	MND01-0117-0001	UJ	SR - TCMX (50)	None
	MND20-0342-1001		SR - TCMX (45) SR - DCB (40)	Low bias
9310L311	MND01-0046-0001	UJ	MSR - Lindane (44,52) MSR - Heptachlor (36)	Low bias
	MND20-0325-0001	UJ	SR - TCMX (45) SR - DCB (55	
	MND01-0046-0001		SR - TCMX (50) SR - DCB (50)	
	MND01-0063-0001		SR - TCMX (55) SR - DCB (55)	
9310L320	MND01-0120-0001	UJ	SR - DCB (20)	None

Table B.3.6. Explosives

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L051	MND01-0123-0001	R	LCS - 1,3,5-TNB (67) LCS - 2,4,6-TNT (72) LCS - 2,4-DNT (66)	Usable, low bias
9309L069	MND01-0138-0001 MND01-0158-0001 MND01-0320-0001	R	LCS - 1,3,5-TNB (67) LCS - 2,4,6-TNT (72) LCS - 2,4-DNT (66)	Usable, low bias
	MND01-0158-1001	R	SR - 0 - All except PETN	Unusable
9309L070	MND01-0319-0001	UJ	SR - 1,3-DNB (48) SR - 2,6-DNT (48) SR - 2-A-4,6-DNT (48) SR - HMX (48) SR - Nitrobenzene (48) SR - RDX (48) SR - Tetryl (48)	Low bias
	MND01-0124-0001	UJ	MSR - 1,3,5-TNB (68) MSR - 2,4,6-TNT (71) MSR - 2,4-DNT (61) MSR - 2,6-DNT (62)	Usable, low bias
	MND01-0124-0001 MND01-0303-0001 MND01-0319-0001	R	LCS - 1,3,5-TNB (67) LCS - 2,4,6-TNT (72) LCS - 2,4-DNT (66)	Usable, low bias
	MND01-0124-0001 MND01-0303-0001 MND01-0319-0001	R	PETN - SR (34), CC (117%)	Unusable
9309L071	MND20-0346-0001	UJ	SR - 1,3-DNB (49) SR - 2,6-DNT (49) SR - 2-A-4,6-DNT (49) SR - HMX (49) SR - Nitrobenzene (49) SR - RDX (49) SR - Tetryl (49)	Usable, low bias
	MND20-0346-0001	R	PETN - SR (46), CC (117%)	Unusable

Table B.3.6. (page 2 of 8)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L071 (Continued)	MND20-0346-0001	R	LCS - 1,3,5-TNB (67) LCS - 2,4,6-TNT (72) LCS - 2,4-DNT (66)	Usable, low bias
9309L089	MND01-0370-0001 MND01-0601-0001	R	LCS - 1,3,5-TNB (66) LCS - 2,4,6-TNT (69) LCS - 2,4,-DNT (66)	Usable, low bias
	MND01-0370-0001	R	PETN - SR (46)	Unusable
	MND01-0601-0001	R	PETN - CC (117 %D)	Usable
9309L090	MND01-0373-0001 MND01-0376-0001 MND01-0377-0001 MND01-0377-1001 MND01-0397-0001	R	LCS - 1,3,5-TNB (66) LCS - 2,4,6-TNT (69) LCS - 2,4-DNT (66)	Usable, low bias
	MND01-0373-0001 MND01-0376-0001 MND01-0377-0001 MND01-0377-1001 MND01-0397-0001	UJ	PETN - SR (44) PETN - SR (36) PETN - SR (30) PETN - SR (18) PETN - SR (33)	Low bias
9309L091	MND01-0112-0001 MND01-0119-0001 MND01-0128-0001 MND01-0128-1001 MND01-0301-0001 MND01-0382-0001	R	LCS - 1,3,5-TNB (66) LCS - 2,4,6-TNT (69) LCS - 2,4-DNT (66)	Usable, low bias
	MND01-0112-0001 MND01-0119-0001 MND01-0128-0001 MND01-0128-1001 MND01-0301-0001 MDN01-0382-0001	UJ	PETN - SR (48) PETN - SR (37) PETN - SR (37) PETN - SR (34) PETN - SR (22) PETN - SR (39)	Low bias
9309L096	MND01-0379-0001	R	LCS - 1,3,5-TNB (70) LCS - 2,4,6-TNT (74) LCS - 2,4-DNT (64)	Usable, low bias

Table B.3.6. (page 3 of 8)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L098	MND20-0332-0001 MND20-0341-0001 MND20-0351-0001 MND20-0356-0001 MND01-0372-0001 MND20-0388-0001 MND01-0393-0001	R	LCS - 1,3,5-TNB (70) LCS - 2,4,6-TNT (74) LCS - 2,4-DNT (67)	Usable, low bias
	MND01-0393-0001	UJ	SR - 1,3-DNB (49) SR - 2,6-DNT (49) SR - 2-A-4,6-DNT (49) SR - HMX (49) SR - RDX (49) SR - Tetryl (49)	Low bias
9309L106	MND01-0157-0001 MND01-0378-0001	R	LCS - 1,3,5-TNB (68) LCS - 2,4-DNT (66) LCS - 2,4,6-TNT (71)	Usable, low bias
	MND01-0157-0001	UJ	PETN - SR (48)	Low bias
9309L107	MND20-0322-0001 MND20-0327-0001	R	LCS - 1,3,5-TNB (68) LCS - 2,4-DNT (66) LCS - 2,4,6-TNT (71)	Usable, low bias
	MND20-0322-0001	UJ	SR - PETN (37)	Usable
9309L108	MND01-0137-0001	R	LCS - 1,3,5-TNB (68) LCS - 2,4,6-TNT (66) LCS - 2,4-DNT (71)	Usable, low bias
9309L119	MND01-0380-0001 MND20-0383-0001 MND20-0387-0001	R	LCS - 1,3,5-TNB (69) LCS - 2,4,6-TNT (70) LCS - 2,6-DNT (63) LCS - 2,4-DNT (63)	Usable, low bias
9309L120	MND20-0328-0001	R	LCS - 1,3,5-TNB (69) LCS - 2,4,6-TNT (70) LCS - 2,6-DNT (63) LCS - 2,4-DNT (63)	Usable, low bias
9309L121	MND01-0130-0001 MND01-0302-0001 MND20-0343-0001 MND20-0343-1001	R	LCS - 1,3,5-TNB (69) LCS - 2,4,6-TNT (70) LCS - 2,6-DNT (63) LCS - 2,4-DNT (63)	Usable, low bias

Table B.3.6. (page 4 of 8)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L121 (Continued)	MDN20-0343-0001 MDN20-0343-1001	R	PETN - SR (I)	Unusable
9309L898	MND01-0153-0001 MND01-0155-0001 MND01-0306-0001 MND01-0317-0001 MND01-0318-0001	R	LCS - 1,3,5-TNB (62) LCS - 2,4,6-TNT (62) LCS - 2,6-DNT (49) LCS - 2,4-DNT (50)	Usable, low bias
9309L904	MND01-0152-0001 MND01-0154-0001 MND01-0305-0001	R	LCS - 1,3,5-TNB (62) LCS - 2,4,6-TNT (62) LCS - 2,6-DNT (50) LCS - 2,4-DNT (49)	Usable, low bias
9309L920	MND01-0301-0001 MND01-0313-0001	R	LCS - 1,3,5-TNB (62) LCS - 2,4,6-TNT (62) LCS - 2,6-DNT (49) LCS - 2,4-DNT (50)	Usable, low bias
	MND01-0313-0001	UJ	PETN - SR (40)	Low bias
9309L921	MND01-0127-0001 MND01-0315-0001	R	LCS - 1,3,5-TNB (62) LCS - 2,4,6-TNT (62) LCS - 2,6-DNT (49) LCS - 2,4-DNT (50)	Usable, low bias
9309L927	MND01-0129-0001 MND01-0309-0001	R	LCS - 1,3,5-TNB (51) LCS - 2,4,6-TNT (54) LCS - RDX (56) LCS - 2,6-DNT (45) LCS - 2,4-DNT (48)	Usable, low bias
9309L928	MND01-0118-0001 MND01-0126-0001 MND01-0394-0001	R	LCS - RDX (56) LCS - 1,3,5-TNB (51) LCS - 2,4,6-TNT (54) LCS - 2,6-DNT (45) LCS - 2,4-DNT (48)	Usable, low bias
	MND01-0126-0001	J	PETN - CC (37 %D)	Bias
	MND01-0394-0001	J	PETN - CC (37 %D), SR (42)	Low bias

Table B.3.6. (page 5 of 8)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L929	MND01-0314-0001	R	LCS - RDX (56) LCS - 1,3,5-TNB (51) LCS - 2,4,6-TNT (54) LCS - 2,6 - DNT (45) LCS - 2,4 - DNT (48)	Usable, low bias
9309L963	MND01-7899-0001	J	LCS - 2,4-DNT (65)	Low bias
	MND01-7899-0001	R	LCS - 2,6-DNT (65) LCS - 2,4,6-TNT (70)	Usable, low bias
	MND01-7899-0001	R	I - 2,6-DNT I - Tetryl I - 2,4,6-TNT	Reject
	MND01-7899-0001	UJ	PETN - SR (I) PETN - HT (12 days)	No impact
9309L964	MND01-0159-0001	R	LCS - 1,3,5-TNB (68) LCS - 2,4,6-TNT (70) LCS - 2,4-DNT (65) LCS - 2,6-DNT (65)	Usable, low bias
		UJ	PETN - SR (36)	Low bias
9309L965	MND01-0310-0001 MND01-0310-1001	R	LCS - 1,3,5-TNB (68) LCS - 2,4,6-TNT (70) LCS - 2,6-DNT (65) LCS - 2,4-DNT (65)	Usable, low bias
9309L966	MND01-0311-0001 MND01-0311-1001	R	LCS - 1,3,5-TNB (68) LCS - 2,4,6-TNT (70) LCS - 2,6-DNT (65) LCS - 2,4-DNT (65)	Usable, low bias
9309L990	MND01-0156-0001 MND01-0160-0001 MND01-0304-0001	R	LCS - 1,3,5-TNB (70) LCS - 2,4,6-TNT (74) LCS - 2,4-DNT (70)	Usable, low bias
	MND01-0304-0001	UJ	MSR - RDX (49) MSR - 1,3,5-TNB (48) MSR - 2,4,6-TNT (51) MSR - 2,6-DNT (47) MSR - 2,4-DNT (47)	Low bias
	MND01-0304-0001	UJ	SR - 39 - All except PETN	Usable
	MND01-0304-0001	UJ	PETN - SR (13)	Low bias

Table B.3.6. (page 6 of 8)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L991	MND01-0602-0001	R	LCS - 1,3,5-TNB (70) LCS - 2,4-DNT (70)	Usable, low bias
	MND01-0602-0001	J	LCS - 2,4,6-TNT (74)	Low bias
9309L992	MND20-0324-0001 MND20-0326-0001 MND20-0345-0001 MND20-0353-0001 MND20-0353-1001	R	LCS - 1,3,5-TNB (70) LCS - 2,4,6-TNT (74) LCS - 2,4-DNT (70)	Usable, low bias
	MND20-0326-0001	UJ	SR - 36 - All except PETN	Low bias
	MND20-0345-0001	UJ	HT - 1 Day - All except PETN	Minimal impact
9310L142	MND20-0386-0001 MND20-0389-0001	R	LCS - 1,3,5-TNB (69) LCS - 2,4,6-TNT (70) LCS - 2,6-DNT (63) LCS - 2,4-DNT (63)	Usable, low bias
9310L143	MND20-0337-0001	R	LCS - 1,3,5-TNB (69) LCS - 2,4,6-TNT (70) LCS - 2,6-DNT (63) LCS - 2,4-DNT (63)	Usable low bias
9310L144	MND01-0608-0001	R	LCS - 1,3,5-TNB (69) LCS - 2,4,6-TNT (70) LCS - 2,6-DNT (63) LCS - 2,4-DNT (63)	Usable, low bias
9310L165	MND20-0334-0001 MND20-0335-0001	R	LCS - 1,3,5-TNB (77) LCS - 2,4-DNT (73)	Usable, low bias
	MND20-0334-0001	UJ	PETN - SR (41)	Low bias
	MDN20-0335-0001	R	PETN - SR (I)	Unusable
9310L166	MND20-0336-0001 MND20-0347-0001	R	LCS - 1,3,5-TNB (77) LCS - 2,4-DNT (73)	Usable, low bias
	MND20-0336-0001	UJ	MSR - 1,3,5-TNB (74) MSR - 2,4,6-TNT (75) MSR - 2,4-DNT (68)	Low bias
9310L167	MND20-0330-0001 MND20-0330-1001	R	LCS - 1,3,5-TNB (77) LCS - 2,4-DNT (73)	Usable, low bias
	MND20-0330-1001	UJ	SR - 46 - All except PETN	Low bias

Table B.3.6. (page 7 of 8)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9310L265	MND01-0071-0001 MND01-0076-0001 MND01-0111-0001 MND01-0271-0001 MND20-0354-0001	R	LCS - 1,3,5-TNB (62) LCS - 2,4,6-TNT (64) LCS - 2,6-DNT (55) LCS - 2,4-DNT (56)	Usable, low bias
	MND01-0071-0001	UJ	SR - 42 - All except PETN	Low bias
	MND01-0076-0001	UJ	SR - 41 - All except PETN	Low bias
	MND01-0271-0001	UJ	SR - 37 - All except PETN	Low bias
	MND20-0354-0001	UJ	SR - 45	Low bias
	MND01-0071-0001 MND01-0111-0001 MND01-0271-0001 MND20-0354-0001	UJ	PETN - SR (40) PETN - SR (42) PETN - SR (27) PETN - SR (44)	Low bias
	MND01-0076-0001	R	PETN - SR (I)	Unusable
9310L282	MND01-0115-0001	UJ	SR - 43 - All except PETN	Low bias
	MND01-0115-0001 MND20-0333-0001 MND20-0342-0001 MND20-0342-1001	R	LCS - RDX (59) LCS - 1,3,5-TNB (54) LCS - 2,4,6-TNT (55) LCS - 2,4-DNT (48) LCS - 2,6-DNT (48)	Usable, low bias
	MND01-0117-0001	R	LCS - 1,3,5-TNB (54) LCS - 2,4,6-TNT (55) LCS - 2,4-DNT (48) LCS - 2,6-DNT (48)	Usable, low bias
		UJ	LCS-RDX (59)	
	MND01-0117-0001	UJ	SR - 44 - All except PETN	Low bias
	MND20-0333-0001 MDN20-0342-1001	UJ	SR - 40 - All except PETN	Low bias
	MND01-0115-0001 MND01-0117-0001 MND20-0333-0001 MND20-0342-0001 MDN20-0342-1001	UJ	PETN - SR (22) PETN - SR (21) PETN - SR (39) PETN - SR (33) PETN - SR (40)	Low bias

Table B.3.6. (page 8 of 8)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9810L311	MND01-0046-0001 MND01-0063-0001	R	LCS - RDX (59) LCS - 1,3,5-TNB (54) LCS - 2,4,6-TNT (55) LCS - 2,6-DNT (48) LCS - 2,4-DNT (48)	Usable, low bias
	MND01-0063-0001 MND20-0325-0001	UJ	SR - (39) - All except PETN SR - (38) - All except PETN	Low bias
	MDN01-0063-0001 MND20-0325-0001	UJ	PETN - SR (37) PETN - SR (22)	Low bias
	MND01-0046-0001	UJ	MSR - 1,3,5-TNB (65) MSR - 2,4,6-TNT (64) MSR - 2,6-DNT (59) MSR - 2,4-DNT (58)	Low bias
	MND20-0325-0001	R	LCS - 1,3,5-TNB (54) LCS - 2,4,6-TNT (55) LCS - 2,6-DNT (48) LCS - 2,4-DNT (48)	Usable, low bias
		UJ	LCS - RDX (59)	
9310L320	MND01-0120-0001 MND01-0344-0001 MND01-0607-0001 MND01-0607-1001	R	LCS - 1,3,5-TNB (59) LCS - 2,4,6-TNT (58) LCS - 2,6-DNT (59) LCS - 2,4-DNT (55)	Usable, low bias
	MND01-0120-0001 MND01-0344-0001	UJ	SR - (45) - All except PETN SR - (39) - All except PETN	Low bias
	MND01-0120-0001 MND01-0344-0001 MND01-0607-0001	UJ	PETN - SR (35) PETN - SR (35) PETN - SR (30)	Low bias

LCS - Laboratory Control Sample
MSR - Matrix Spike Recovery
SR - Surrogate
I - Chromatographic Interference
HT - Holding Time

Table B.3.7. Anions

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9310L051	MND01-0123-0001	J	HT - Ammonia 1 Day	Minimal impact
9309L069	MND01-0138-0001 MND01-0320-0001	UJ	HT - Ammonia 1 Day	Minimal impact
9309L070	MND01-0319-0001	UJ	HT - Ammonia 1 Day HT - Cyanide (soluble) 1 Day	Minimal impact
	MND01-0303-0001	R	MSR - Sulfate (0)	Unusable
9309L090	MND01-0312-0001	UJ	HT - Cyanide (Total) 1 Day	Minimal impact
9309L108	MND01-0137-0001	J	HT - Sulfate 74 Days	Low bias
9309L119	MND20-0383-0001	J	MSR - Sulfate (52.7)	
9309L898	MND01-0153-0001	UJ	HT - Cyanide (soluble) 1 Day	Slightly low bias
	MND01-0155-0001		HT - Cyanide (soluble) 2 Days	Slightly low bias
	MND01-0306-0001		HT - Cyanide (soluble) 2 Days	Slightly low bias
	MND01-0317-0001		HT - Cyanide (soluble) 3 Days	Slightly low bias
	MND01-0318-0001		HT - Cyanide (Total) 1 Day	Slightly low bias
	MND01-0153-0001 MND01-0155-0001 MND01-0306-0001 MND01-0317-0001 MND01-0318-0001	J	CC - Chloride (0.960)	Inaccuracy
	MND01-0317-0001	J	HT - TSS/TDS 1 Day	Minimal impact
9309L904	MND01-0152-0001 MND01-0154-0001 MND01-0305-0001	J	CC - Chloride (0.960)	Inaccuracy
	MND01-0152-0001	UJ	HT - Cyanide (soluble) 4 Days	Slightly low bias
	MND01-0154-0001		HT - Cyanide (soluble) 2 Days	Slightly low bias
	NMD01-0305-0001		HT - Cyanide (soluble) 5 Days	Slightly low bias
9309L920	MND01-0307-0001 MND01-0313-0001	J	CC - Chloride (0.960)	Inaccuracy
9309L921	MND01-0127-0001 MND01-0315-0001	J	CC - Chloride (0.960)	Inaccuracy

Table B.3.7. (page 2 of 4)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L921 (Continued)	MND01-0315-0001	UJ	HT - Cyanide (soluble) 1 Day	Slightly low bias
	MND01-0127-0001	J	MSR - Chloride (139%)	High bias
9309L927	MND01-0129-0001 MND01-0309-0001	J	CC - Chloride (0.960)	Inaccuracy
9309L928	MND01-0118-0001 MND01-0126-0001 MND01-0394-0001	J	CC - Chloride (0.960)	Inaccuracy
9309L929	MND01-0314-0001	J	CC - Chloride (0.960)	Inaccuracy
9309L963	MND01-7899-0001	J	HT - Ammonia 9 Days	Low bias
		J	HT - TDS 1 Day	Minimal impact
		J	CC - Chloride (0.960)	Inaccuracy
		UJ	HT - TSS 1 Day	Slightly low bias
9309L964	MND01-0159-0001	J	CC - Chloride (0.960)	Inaccuracy
		J	HT - TDS/TSS 1 Day	Minimal impact
		UJ	HT - Cyanide (soluble) 13 Days	Low bias
9309L965	MND01-0310-0001 MND01-0310-1001	J	CC - Chloride (0.960)	Inaccuracy
	MND01-0310-0001 MND01-0310-1001	J	HT - TDS 1 Day	Minimal impact
	MND01-0310-0001 MND01-0310-1001	UJ	HT - TSS 1 Day	Minimal impact
9309L966	MND01-0311-0001 MND01-0311-1001	J	CC - Chloride (0.960)	Inaccuracy
	MND01-0311-0001 MND01-0311-1001	J	HT - TDS 1 Day	Minimal impact
	MND01-0311-0001 MND01-0311-1001	UJ	HT - TSS 1 Day	Minimal impact

Table B.3.7. (page 3 of 4)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L990	MND01-0160-0001	J	HT - Ammonia 8 Days	Low bias
	MND01-0156-0001 MND01-0160-0001	J	HT - TDS 1 Day	Minimal impact
	MND01-0156-0001	UJ	HT - TSS 1 Day	Minimal impact
	MND01-0160-0001	J	HT - TSS 1 Day	Minimal impact
	MND01-0156-0001 MND01-0160-0001 MND01-0304-0001	J	CC - Chloride (0.960)	Inaccuracy
	MND01-0304-0001	J	MSR - Ammonia (33)	Low bias
	MND01-0304-0001	R	MSR - NO_3/NO_2 (0)	Reject
	MND01-0304-0001	J	MSR - Chloride (130)	High bias
9309L991	MN001-0602-0001	J	CC - Chloride (0.960)	Inaccuracy
9309L992	MND20-0324-0001 MND20-0326-0001 MND20-0345-0001 MND20-0353-0001 MND20-0353-1001	J	CC - Chloride (0.960)	Inaccuracy
	MND20-0326-0001	UJ	HT - Cyanide (Total) 1 Day	Slightly low bias
	MND20-0345-0001		HT - Cyanide (Total) 2 Day	Slightly low bias
	MND20-0345-0001	J	HT - TOC 1 Day	Slightly low bias
	MND20-0326-0001 MND20-0345-0001	J	HT - TDS 1 Day	Slightly low bias
	MND20-0326-0001 MND20-0345-0001	J UJ	HT - TSS 1 Day HT - TSS 1 Day	Slightly low bias
9310L166	MND20-0336-0001	J	MSR - Sulfate (32)	Low bias
9310L282	MND01-0117-0001	J	HT - TDS/TSS 14 Days	Inaccuracy
	MND01-0117-0001 MND01-0342-1001	U	CCB - NO_3/NO_2 (0.023 mg/L)	Raised quantitation limit

Table B.3.7. (page 4 of 4)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9310L311	MND01-0046-0001 MND01-0063-0001 MND20-0325-0001	J	HT - TDS/TSS 7 Days	Inaccuracy
	MND01-0046-0001	J	MSR - NO_3/NO_2 (142)	High bias
	MND01-0046-0001	UJ	MRPD - Ammonia (22.2)	Inaccuracy

HT - Holding Time
CC - Correlation Coefficient
MSR - Matrix Spike Recovery
MRPD - Matrix Spike Percent Difference

Table B.3.8. Metals

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L051	MND01-0123-0001 (T) MND01-0123-0001 (D)	J	No SD-Calcium No SD-Magnesium No SD-Manganese No SD-Sodium	Inaccuracy
	MND01-0123-0001 (D)	J	ASR-Antimony (76)	Slightly low bias
	MND01-0123-0001 (T)	J	ASR-Selenium (66)	Slightly low bias
	MND01-0123-0001 (D)	UJ	ASR-Selenium (79)	Slightly low bias
	MND01-0123-0001 (T)	UJ	ASR-Thallium (54)	Low bias
	MND01-0123-0001 (D)	UJ	ASR-Thallium (46)	Low bias
	MND01-0123-0001 (T) MND01-0123-0001 (D)	U	PB-Vanadium (8.2 μg/L)	Raised quantitation limit
	MND01-0123-0001 (T) MND01-0123-0001 (D)	U	PB-Zinc (16.4 μg/L)	Raised quantitation limit
	MND01-0123-0001 (D)	U	PB-Chromium (0.97 μg/L)	Raised quantitation limit
	MND01-0123-0001 (T)	UJ	PB-Antimony (-2.2 μg/L)	Inaccuracy
	MND01-0123-0001 (D)	UJ	PB-Tin (-24.3 μg/L)	Inaccuracy
	MND01-0123-0001 (D)	J	PB-Antimony (-2.2 μg/L)	Inaccuracy
	MND01-0123-0001 (T) MND01-0123-0001 (D)	R	Calcium not verifiable	Unusable
9309L069	MND01-0138-0001 (T) MND01-0138-0001 (D) MND01-0320-0001 (T) MND01-0320-0001 (D)	UJ	HT-Mercury 1 day	Slightly low bias
	MND01-0158-0001 (T) MND01-0320-0001 (D)	U	PB-Chromium (0.97 μg/L)	Raised quantitation limit

Table B.3.8. (page 2 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L069 (Continued)	MND01-0138-0001 (T) MND01-0138-0001 (D) MND01-0158-0001 (T) MND01-0158-0001 (D) MND01-0158-1001 (T) MND01-0158-1001 (D) MND01-0320-0001 (D)	U	PB-Zinc (3.1 μg/L)	Raised quantitation limit
	ALL	U	PB-Lithium (16.4 μg/L)	Raised quantitation limit
	MND01-0138-0001 (D) MND01-0158-0001 (T) MND01-0158-0001 (D)	U	PB-Nickel (9.8 μg/L)	Raised quantitation limit
	ALL	U	PB-Vanadium (8.2 μg/L)	Raised quantitation limit
	MND01-0138-0001 (T) MND01-0138-0001 (D) MND01-0158-0001 (D) MND01-0158-1001 (D) MND01-0320-0001 (T) MND01-0320-0001 (D)	UJ	PB-Antimony (-2.2 μg/L)	Raised quantitation limit
	MND01-0138-0001 (D) MND01-0158-0001 (T) MND01-0158-0001 (D) MND01-0158-1001 (T) MND01-0158-1001 (D)	J	PB-Manganese (-3.1 μg/L)	Raised quantitation limit
	MND01-0320-0001 (T) MND01-0320-0001 (D)	J	PB-Potassium (-339)	Raised quantitation limit
	MND01-0158-0001 (T)	UJ	CCB-Tin (-24.3)	Raised quantitation limit
	MND01-0138-0001 (T)	J	MSR-Iron (64) MSR-Selenium (69)	Slightly low bias
	MND01-0138-0001 (T)	UJ	MSR-Thallium (31)	Low bias
	MND01-0138-0001 (D)	UJ	ASR-Antimony (79)	Slightly low bias

Table B.3.8. (page 3 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L069 (Continued)	MND01-0158-0001 (T)	UJ	ASR-Antimony (83)	Slightly low bias
	MND01-0158-0001 (D)	UJ	ASR-Antimony (78)	Slightly low bias
	MND01-0158-1001 (T)	J	ASR-Antimony (83)	Slightly low bias
	MND01-0138-0001 (T)	UJ	ASR-Arsenic (82)	Slightly low bias
	MND01-0138-0001 (D)	UJ	ASR-Arsenic (82)	Slightly low bias
	MND01-0138-0001 (T)	UJ	ASR-Thallium (82)	Slightly low bias
	MND01-0138-0001 (D)		ASR-Selenium (76), Thallium (82)	Slightly low bias
	MND01-0158-0001 (T)		ASR-Selenium (79), Thallium (79)	Slightly low bias
	MND01-0158-0001 (D)		ASR-Selenium (78), Thallium (79)	Slightly low bias
	MND01-0158-1001 (T)		ASR-Selenium (79), Thallium (84)	Slightly low bias
	MND01-0158-1001 (D)		ASR-Selenium (72), Thallium (40)	Slightly low bias/low bias
	MND01-0320-0001 (T)		ASR-Selenium (81), Thallium (43)	Slightly low bias/low bias
	MND01-0320-0001 (D)		ASR-Selenium (80)	Slightly low bias
	MND01-0138-0001 (T)	J	ASR-Selenium (84)	Slightly low bias
	ALL	J	SD-Magnesium (10.6)	Inaccuracy
	MND01-0158-0001 (T) MND01-0158-1001 (T)	J	FRPD-Manganese (49.3)	Inaccuracy
9309L070	MND01-0124-0001 (T)	J	ASR-Selenium (76)	Slighly low bias
	MND01-0124-0001 (T)	R	MSR-Thallium (29.4)	Low bias
	MND01-0124-0001 (T) MND01-0124-0001 (D)	U	CCB-Nickel (9.0 μg/L)	Raised quantitation limit
	MND01-0319-0001 (T)	UJ	HT-Mercury 1 day	Slightly low bias
	MND01-0303-0001 (T)	U	CCB-Nickel (9.0 μg/L)	Raised quantitation limit
	MND01-0124-0001 (D) MND01-0124-0001 (T) MND01-0303-0001 (T) MND01-0303-0001 (D) MND01-0319-0001 (D) MND01-0319-0001 (T)	UJ	Cadmium ICP interference	Inaccuracy
	MND01-0303-0001 (T)	J	Cobalt ICP interference	Inaccuracy

Table B.3.8. (page 4 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L070 (Continued)	MND01-0303-0001 (D)	J	Vanadium/Zinc ICP interference	Inaccuracy
	MND01-0124-0001 (T) MND01-0124-0001 (D)	J	Manganese ICP interference	Inaccuracy
	ALL	J	SD-Magnesium (21.1)	Inaccuracy
	MND01-0124-0001 (T)	U	PB-Chromium (3.34 μg/L)	Raised quantitation limit
	MND01-0319-0001 (D)	J	Vanadium ICP interference	Inaccuracy
	MND01-0319-0001 (T)	J	Vanadium ICP interference	Inaccuracy
	MND01-0303-0001 (D) MND01-0319-0001 (T)	J	PB-Tin (-19.2 μg/L)	Raised quantitation limit
	MND01-0319-0001 (T)	U	PB-Chromium (3.34 μg/L)	Raised quantitation limit
	MND01-0303-0001 (T)	UJ	ASR-Thallium (48)	Low bias
	MND01-0303-0001 (T)	J	Tin-Interference	Inaccuracy
	MND01-0319-0001 (D)	UJ	CCB-Thallium (-2.7 μg/L)	Raised quantitation limit
	MND01-0124-0001 (D)	UJ	ASR-Thallium (31)	Low bias
	MND01-0124-0001 (D) MND01-0303-0001 (D) MND01-0319-0001 (D)	J	SD-Barium (18.8)	Inaccuracy
	ALL	J	SD-Calcium (25.9)	Inaccuracy
	MND01-0124-0001 (D) MND01-0303-0001 (D) MND01-0319-0001 (D)	J	SD-Sodium (16.4)	Inaccuracy
	MND01-0319-0001 (D)	UJ	HT-Mercury 1 day	Slightly low bias
	MND01-0319-0001 (T)	UJ	ASR-Thallium (64)	Slightly low bias
	MND01-0303-0001 (T)	R	Lead not verifiable	Unusable
	MND01-0319-0001 (T)	U	PB-Iron (66.7 μg/L)	Raised quantitation limit
	MND01-0319-0001 (D)	UJ		
	MND01-0319-0001 (D)	UJ	CCB-Arsenic (-3.2 μg/L)	Raised quantitation limit
	MND01-0319-0001 (D)	UJ	ASR-Thallium (67.5 μg/L)	
	MND01-0124-0001 (T)	UJ	PB-Iron (66.7 μg/L)	Raised quantitation limit
	MND01-0303-0001 (D)	J	CCB-Thallium (-2.7 μg/L)	Raised quantitation limit

Table B.3.8. (page 5 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L070 (Continued)	MND01-0124-0001 (T)	J	CCB-Thallium (-2.7 μg/L)	Raised quantitation limit
	MND01-0124-0001 (T) MND01-0124-0001 (D) MNDo1-0319-0001 (D)	U	PB-Aluminum (40.9 μg/L)	Raised quantitation limit
	MND01-0124-0001 (D)	U	PB-Iron (66.7)	Raised quantitation limit
	MND01-0124-0001 (T) MND01-0124-0001 (D)	J	PB-Tin (-19.2 μg/L)	Raised quantitation limit
	MND01-0319-0001 (D)	J	PB-Tin (-19.2 μg/L)	Raised quantitation limit
	MND01-0124-0001 (D)	J	Vanadium ICP interference	Inaccuracy
	MND01-0303-0001 (D)	J	ASR-Thallium (57)	Slightly low bias
	ALL	J	PB-Vanadium (-22.2 μg/L)	Raised quantitation limit
	MND01-0303-0001 (D)	U	PB-Aluminum (40.9 μg/L)	Raised quantitation limit
	MND01-0303-0001 (T)	UJ	ASR-Selenium (83)	Slightly low bias
	MND01-0319-0001 (T)	U	PB-Aluminum (40.9 μg/L)	Raised quantitation limit
	MND01-0319-0001 (D)	UJ	ASR-Arsenic (83.5)	Slightly low bias
	ALL	U	PB-Zinc (33.8 μg/L)	Raised quantitation limit
	MND01-0319-0001 (D)	U	PB-Chromium (3.34 μg/L)	Raised quantitation limit
	MND01-0124-0001 (T)	J	Vanadium ICP interference	Inaccuracy
9309L071	MND20-0346-0001 (D)	U	PB-Aluminum (10.2 ug/L)	Raised quantitation limit
	MND20-0346-0001 (D)	U	PB-Chromium (0.8 ug/L)	Raised quantitation limit
	MND20-0346-0001 (D) MND20-0346-0001 (T)	J	No SD-Calcium No SD-Magnesium No SD-Sodium	NA NA NA
	MND20-0346-0001 (D) MND20-0346-0001 (T)	J	PB-Vanadium (-5.5 μg/L)	Inaccuracy
	MND20-0346-0001 (D) MND20-0346-0001 (T)	U	PB-Zinc (8.4 μg/L)	Raised quantitation limit
	MND20-0346-0001 (T)	J	PB-Tin (-4.8 μg/L)	Inaccuracy
	MND01-0346-0001 (D)	UJ	ASR-Selenium (76) ASR-Thallium (64)	Slightly low bias

Table B.3.8. (page 6 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L071 (Continued)	MND20-0346-0001 (T)	UJ	ASR-Selenium (74) ASR-Thallium (53) ASR-Arsenic (83)	Slightly low bias
9309L089	MND01-0370-0001 (T)	U	PB-Chromium (2.0 μg/L)	Raised quantitation limit
	MND01-0601-0001 (T) MND01-0601-0001 (D)	U	PB-Iron (19.8 μg/L)	Raised quantitation limit
	MND01-0601-0001 (T) MND01-0601-0001 (D)	U	PB-Nickel (4.8 μg/L)	Raised quantitation limit
	MND01-0370-0001 (T) MND01-0370-0001 (D) MND01-0601-0001 (T)	U	PB-Zinc (5.0 μg/L)	Raised quantitation limit
	MND01-0601-0001 (T) MND01-0601-0001 (D)	U	PB-Cadmium (2.2 μg/L)	Raised quantitation limit
	ALL	U	PB-Lithium (47.8 mg\L)	Raised quantitation limit
	MND01-0601-0001 (D)	U	PB-Manganese (8.4 μg/L)	Raised quantitation limit
	MND01-0370-0001 (D)	U	PB-Molybdenum (6.8 μg/L)	Raised quantitation limit
	ALL	J	PB-Potassium (-1102 μg/L)	Raised quantitation limit
	ALL	J	ICP Copper Interference	Inaccuracy
	MND01-0370-0001 (T) MND01-0370-0001 (D)	U	CCB-Cobalt (5.2 μg/L)	Raised quantification limit
	MND01-0601-0001 (T) MND01-0601-0001 (D)	J	ICP Manganese Interference	Inaccuracy
	MND01-0601-0001 (T)	J	ASR-Lead (81)	Inaccuracy
	MND01-0601-0001 (T)	J	ASR-Selenium (73)	Slightly low bias
	MND01-0370-0001 (T)	UJ	ASR-Selenium (80)	Slightly low bias
	MND01-0370-0001 (D)	UJ	ASR-Selenium (79)	Slightly low bias
	MND01-0601-0001 (T)	UJ	ASR-Thallium (49)	Low bias
	MND01-0601-0001 (D)	UJ	ASR-Thallium (51)	

Table B.3.8. (page 7 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L089 (Continued)	MND01-0370-0001 (D)	UJ	ASR-Thallium (40)	Low bias
	MND01-0370-0001 (D) MND01-0370-0001 (T) MND01-0601-0001 (D) MND01-0601-0001 (T)	J	No SD-Calcium No SD-Magnesium No SD-Barium	NA
	MND01-0370-0001 (D) MND01-0370-0001 (T) MND01-0601-0001 (D)	J	No SD-Sodium	NA
	MND01-0370-0001 (T) MND01-0370-0001 (D)	J	No SD-Manganese	NA
	MND01-0370-0001 (D)	J	No SD-Nickel	NA
	MND01-0601-0001 (D)	J	No SD-Zinc	NA
9309L090	MND01-0312-0001 (T)	UJ	HT=Cyanide 1 day	Slight low bias
	ALL except: MND01-0312-0001 (T) MND01-0377-0001 (T) MND01-0377-1001 (D)	U	PB-Aluminum (5.2 μg/L)	Raised quantitation limit
	MND01-0312-0001 (D) MND01-0373-0001 (T&D) MND01-0376-0001 (T) MND01-0377-1001 (D) MND01-0397-0001 (T&D)	U	PB-Chromium (20 μg/L)	Raised quantitation limit
	MND01-0376-0001 (D)	U	PB-Iron (20 μg/L)	Raised quantitation limit
	ALL except: MND01-0312-0001 (T) MND01-0373-0001 (D)	U	PB-Lithium (5.3 μg/L)	Raised quantitation limit
	MND01-0373-0001 (D) MND01-0373-0001 (T) MND01-0377-1001 (D) MND01-0397-0001 (D)	U	CCB-Cadmium (2.7 μg/L)	Raised quantitation limit

Table B.3.8. (page 8 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L090 (Continued)	MND01-0373-0001 (T&D) MND01-0376-0001 (T&D)	U	PB-Zinc (3.5 μg/L)	Raised quantitation limit
	MND01-0377-0001 (T&D) MND01-0377-1001 (D)	UJ	PB-Zinc (3.5 μg/L)	Raised quantitation limit
	MND01-0377-0001 (T&D) MND01-0377-1001 (T) MND01-0397-0001 (T&D)	U	CCB-Cobalt (5.2 μg/L)	Raised quantitation limit
	MND01-0377-1001 (D)	UJ	CCB-Cobalt (5.2 μg/L)	Inaccuracy
	MND01-0376-0001 (T&D)	U	CCB-Manganese (8.4 μg/L)	Raised quantitation limit
	MND01 0312-0001 (T)	U	CCB-Silver (3.5 μg/L)	Raised quantitation limit
	MND01-0373-0001 (D) MND01-0377-0001 (T) MND01-0377-1001 (T)	U	CCB-Molybdenum (6.8 μg/L)	Raised quantitation limit
	MND01-0377-0001 (D) MND01-0377-1001 (D)	UJ	CCB-Molybdenum (6.8 μg/L)	Raised quantitation limit
	ALL except: MND01-0312-0001 (T)	J	CCB-Potassium (-1102 μg/L)	Raised quantitation limit
	MND01-0373-0001 (T)	UJ	MSR-Thallium (43.4)	Potential low bias
	MND01-0373-0001 (D) MND01-0377-1001 (D)	UJ	ASR-Arsenic (82) ASR-Arsenic (83)	Slightly low bias
	MND01-0397-0001 (D)	J	ASR-Antimony (80)	Slightly low bias
	MND01-0312-0001 (D)	J	ASR-Lead (84)	Slightly low bias
	MND01-0373-0001 (T)	UJ	ASR-Selenium (80), Thallium (40)	Low bias
	MND01-0377-0001 (T)	UJ	ASR-Selenium (84), Thallium (42)	Low bias
	MND01-0312-0001 (T)	UJ	ASR-Selenium (72), Thallium (56)	Low bias
	MND01-0312-0001 (D)	UJ	ASR-Selenium (70), Thallium (59)	Low bias
	MND01-0376-0001 (T)	UJ	ASR-Thallium (45)	Low bias
	MND01-0376-0001 (D)	UJ	ASR-Thallium (50)	Low bias
	MND01-0377-0001 (D) MND01-0377-1001 (D)	UJ	ASR-Thallium (44)	Low bias
	MND01-0377-1001 (T)	UJ	ASR-Thallium (43)	Low bias
	ALL	J	SD-Calcium (14)	Possible inaccuracy

Table B.3.8. (page 9 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L090 (Continued)	MND01-0377-1001 (D)	UJ	RPD-Zinc (112)	Possible inaccuracy
	MND01-0377-1001 (T)	J	RPD-Zinc (112)	Possible inaccuracy
	MND01-0377-0001 (T&D)	UJ	RPD-Zinc (68)	Possible inaccuracy
	MND01-0377-1001 (D) MND01-0377-0001 (D)	J	FDRPD-Copper (33) FDRPD-Lead (60)	Possible inaccuracy
	MND01-0377-1001 (D) MND01-0377-0001 (D)	UJ	FDRPD-Cobalt (26) FDRPD-Molybdenum (27)	Possible inaccuracy
9309L091	MND01-0301-0001 (D) MND01-0119-0001 (T) MND01-0119-0001 (D) MND01-0128-0001 (T) MND01-0128-0001 (D) MND01-0128-1001 (T&D) MND01-0112-0001 (D) MND01-0382-0001 (D)	U	CCB-Aluminum (19.8 ug/L)	Raised quantitation limit
	MND01-0301-0001 (D) MND01-0119-0001 (T) MND01-0128-0001 (T) MND01-0128-0001 (D) MND01-0382-0001 (T) MND01-0382-0001 (D) MND01-0125-0001 (T)	U	PB-Chromium (3.1 ug/L)	Raised quantitation limit
	MND01-0301-0001 (D) MND01-0119-0001 (T) MND01-0119-0001 (D) MND01-0128-0001 (T) MND01-0128-0001 (D) MND01-0128-1001 (T) MND01-0128-1001 (D)	U	PB-Copper (3.5 ug/L)	Raised quantitation limit

Table B.3.8. (page 10 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L091 (Continued)	MND01-0382-0001 (T) MND01-0382-0001 (D) MND01-0112-0001 (T) MND01-0112-0001 (D) MND01-0125-0001 (T)	U	PB-Copper (3.5 ug/L)	Raised quantitation limit
	MND01-0301-0001 (D) MND01-0119-0001 (T) MND01-0119-0001 (D) MND01-0125-0001 (T) MND01-0128-0001 (T) MND01-0128-0001 (D) MND01-0128-1001 (T) MND01-0128-1001 (D) MND01-0382-0001 (T) MND01-0382-0001 (D) MND01-0112-0001 (T) MND01-0112-0001 (D)	U	PB-Zinc (12.2 ug/L)	Raised quantitation limit
	MND01-0128-0001 (T) MND01-0128-0001 (D) MND01-0128-1001 (T) MND01-0128-1001 (D)	U	PB-Iron (80.9 μg/L)	Raised quantitation limit
	MND01-0301-0001 (D) MND01-0128-0001 (D) MND01-0128-1001 (D) MND01-0128-1001 (T)	U	CCB-Vanadium (8.6 μg/L)	Raised quantitative limit
	MND01-0301-0001 (T) MND01-0119-0001 (D) MND01-0128-1001 (T) MND01-0112-0001 (D)	U	PB-Lead (2.6 ug/L)	Raised quantitation limit
	MND01-0125-0001 (T)	U	CCB-Manganese (3.3 ug/L)	Raised quantitation limit

Table B.3.8. (page 11 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L091 (Continued)	MND01-0301-0001 (T) MND01-0301-0001 (D) MND01-0119-0001 (T)	J	CCB-Potassium (-455.8 ug/L)	Inaccuracy
	MND01-0301-0001 (T)	UJ	CCB-Selenium (-1.1 ug/L)	Inaccuracy
	MND01-0301-0001 (T) MND01-0301-0001 (D) MND01-0119-0001 (T) MND01-0128-0001 (D)	UJ	CCB-Thallium (-2.4 ug/L)	Inaccuracy
	MND01-0301-0001 (T) MND01-0125-0001 (T) MND01-0119-0001 (T) MND01-0119-0001 (D) MND01-0112-0001 (T)	J	CCB-Lithium (-45.3 ug/L)	Inaccuracy
	MND01-0112-0001 (D)	UJ	CCB-Thallium (-2.7 ug/L)	Inaccuracy
	MND01-0125-0001 (T)	UJ	CCB-Thallium (2.0 ug/L)	Raised quantitation limit
	MND01-0301-0001 (T)	UJ	MSR-Selenium (50) MSR-Thallium (36)	Positive bias
	MND01-0112-0001 (T)	J	MSR-Antimony (62.3) MSR-Chromium (154.4) MSR-Manganese (214.6)	
	MND01-0128-0001 (D) MND01-0128-1001 (D)	J	FDRPD-Lead (103)	Inaccuracy
	MND01-0128-0001 (D) MND01-0128-1001 (D)	J	FDRPD-Nickel (40)	
	MND01-0128-0001 (D) MND01-0128-1001 (T) MND01-0128-1001 (D) MND01-0128-0001 (T)	UJ	PB-Lithium (-45.3 ug/L)	Raised quantitation limit
	MND01-0128-0001 (D)	UJ	ASR-Selenium (77)	Slightly low bias
	MND01-0128-1001 (T)		ASR-Selenium (78)	
	MND01-0128-1001 (D)		ASR-Selenium (69)	

Table B.3.8. (page 12 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L091 (Continued)	MND01-0301-0001 (T)	UJ	ASR-Selenium (74)	Slightly low bias
	MND01-0301-0001 (D)		ASR-Selenium (79)	
	MND01-0119-0001 (T)		ASR-Selenium (74)	
	MND01-0119-0001 (D)		ASR-Selenium (69)	
	MND01-0128-0001 (T)		ASR-Selenium (75)	
	MND01-0382-0001 (T)		ASR-Selenium (63)	
	MND01-0382-0001 (D)		ASR-Selenium (66)	
	MND01-0112-0001 (T)		ASR-Selenium (59)	
	MND01-0112-0001 (D)		ASR-Selenium (64)	
	MND01-0125-0001 (T)		ASR-Selenium (77)	
	MND01-0119-0001 (D)	UJ	ASR-Thallium (67)	
	MND01-0128-0001 (D)		ASR-Thallium (77)	
	MND01-0382-0001 (T)		ASR-Thallium (69)	
	MND01-0382-0001 (D)		ASR-Thallium (76)	
	MND01-0112-0001 (T&D)		ASR-Thallium (83)	Slightly low bias
9309L096	MND01-0379-0001 (T) MND01-0379-0001 (D)	U	PB-Aluminum (19.8 μg/L) PB-Zinc (3.0 μg/L)	Raised quantitation limit
	MND01-0379-0001 (T) MND01-0379-0001 (D)	J	PB-Lithium (-45.3 μg/L)	Raised quantitation limit
	MND01-0379-0001 (T) MND01-0379-0001 (D)	UJ	Silver and cadmium ICSA interference	Inaccuracy
	MND01-0379-0001 (D)	UJ	ICP Chromium ICSA interference	Inaccuracy
	MND01-0379-0001 (T)	UJ	ASR-Selenium (53)	Slightly low bias
	MND01-0379-0001 (D)		ASR-Selenium (63)	
	MND01-0379-0001 (T) MND01-0379-0001 (D)	U	ICB-Copper (3.1 μg/L)	Raised quantitation limit
	MND01-0379-0001 (T)	UJ	ASR-Thallium (73)	Slightly low bias
	MND01-0379-0001 (D)		ASR-Thallium (77)	
	MND01-0379-0001 (T) MND01-0379-0001 (D)	J	No SD-Calcium No SD-Magnesium No SD-Sodium	Inaccuracy

Table B.3.8. (page 13 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L096 (Continued)	MND01-0379-0001 (T) MND01-0379-0001 (D)	J	No SD-Chromium	Inaccuracy
	MND01-0379-0001 (T)	J	No SD-Iron	Inaccuracy
9309L098	MND01-0393-0001 (D)	J	CCV-Antimony (136)	Usable
	MND20-0332-0001 (D) MND20-0341-0001 (T&D) MND20-0351-0001 (D) MND20-0356-0001 (D) MND01-0372-0001 (D) MND20-0388-0001 (D)	U	PB-Aluminum (6.4 μg/L)	Raised quantitation limit
	MND20-0332-0001 (T) MND20-0341-0001 (T&D) MND20-0351-0001 (T) MND20-0356-0001 (D) MND01-0393-0001 (T)	U	PB-Chromium (1.3 μg/L)	Raised quantitation limit
	MND20-0341-0001 (T&D) MND20-0351-0001 (T&D) MND20-0356-0001 (T&D) MND01-0372-0001 (T&D) MND20-0388-0001 (T&D) MND01-0393-0001 (T)	U	PB-Zinc (2.1 μg/L)	Raised quantitation limit
	MND20-0332-0001 (T&D) MND20-0356-0001 (T&D) MND20-0388-0001 (T&D)	U	CCB-Lithium (65.8 μg/L)	Raised quantitation limit
	MND20-0332-0001 (T&D) MND20-0341-0001 (T) MND20-0356-0001 (T&D) MND20-0388-0001 (T&D) MND01-0393-0001 (T)	U	CCB-Molybdenum (7.3 μg/L)	Raised quantitation limit

Table B.3.8. (page 14 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L098 (Continued)	MND20-0341-0001 (D) MND20-0356-0001 (D) MND20-0372-0001 (D)	J	CCB-Antimony (-2.2 μg/L)	Raised quantitation limit
	MND20-0322-001 (T&D) MND20-0341-0001 (T&D) MND20-0351-0001 (T) MND20-0356-0001 (T&D) MND20-0372-0001 (T&D) MND20-0388-0001 (T) MND01-0393-0001 (D)	UJ	ICB-Thallium (-4.1 μg/L)	
	MND01-0393-0001(T)	J	CCB-Selenium (-1.1 μg/L)	
	MND20-0356-0001 (D)	J/UJ	DUP-Lead (200)	Inaccuracy
	MND20-0356-0001 (D)	UJ	MSR-Selenium (71.0)	
	MND20-0356-0001 (T)	UJ	MSR-Antimony (69.6)	
	MND20-0341-0001 (T)	J	ASR-Antimony	
	MND20-0356-0001 (D)	UJ		
	MND20-0332-0001 (T&D) MND20-0351-0001 (T&D) MND20-0356-0001 (T) MND20-0392-0001 (T&D) MND20-0388-0001 (T&D) MND01-0393-0001 (D)	J/UJ	ASR-Arsenic	
	All	J/UJ	ASR-Selenium ASR-Thallium	
	All (D)	J	SD-Calcium (12.4) SD-Iron (11.5) SD-Magnesium (10.5) SD-Manganese (14.4)	Inaccuracy
	All (T)	J	SD-Calcium (14.5) SD-Aluminum (16.2) SD-Iron (14.6)	Inaccuracy

Table B.3.8. (page 15 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L098 (Continued)	All (T)	J	SD-Magnesium (11.8) SD-Manganese (15.0)	Inaccuracy
9309L106	MND01-0378-0001 (T)	J	ASR-Selenium (71)	Slightly low bias
	ALL	J	No SD-Calcium	Inaccuracy
	MND01-0157-0001 (T)	UJ	ASR-Selenium (74)	Slightly low bias
	ALL	J	No SD-Magnesium	Inaccuracy
	ALL	J	No SD-Sodium	Inaccuracy
	MND01-0378-0001 (T)	J	No SD-Manganese	Inaccuracy
	MND01-0157-0001 (D)	J	No SD-Manganese	Inaccuracy
	MND01-0157-0001 (T)	J	No SD-Manganese	Inaccuracy
	ALL	U	PB-Aluminum (25.7 μg/L)	Raised quantitation limit
	ALL	U	PB-Vanadium (36.1 μg/L)	Raised quantitation limit
	MND01-0378-0001 (T) MND01-0378-0001 (D)	J	CCB-Selenium (-1.1 μg/L)	Inaccuracy
	MND01-0157-0001 (T) MND01-0157-0001 (D)	U	PB-Chromium (5.2 μg/L)	Raised quantitation limit
	MND01-0157-0001 (T)	UJ	ASR-Thallium (50)	Slightly low bias
	MND01-0378-0001 (T)	UJ	ASR-Thallium (55)	Slightly low bias
	MND01-0378-0001 (T)	J	No SD-Iron	Inaccuracy
	MND01-0157-0001 (D) MND01-0378-0001 (D)	UJ	CCB-Thallium (-3.9 μg/L)	Inaccuracy
	ALL	J	No SD-Barium	Inaccuracy
	MND01-0378-0001 (D)	J	ASR-Selenium (63)	Slightly low bias
	MND01-0157-0001 (D)	UJ	ASR-Thallium (66)	Slightly low bias
	MND01-0157-0001 (D)	U	CCB-Molybdenum (7.3 μg/L)	Raised quantitation limit
	MND01-0378-0001 (D)	UJ	ASR-Thallium (47)	Low bias
	MND01-0157-0001 (D)	UJ	ASR-Selenium (77)	Slightly low bias
9309L107	MND20-0327-0001 (D)	U	PB-Aluminum (3.7 μg/L)	Raised quantitation limit
	MND20-0327-0001 (D) MND20-0322-0001 (D)	U	PB-Chromium (3.9 μg/L)	Raised quantitation limit
	MND20-0322-0001 (T)	U	PB-Nickel (3.9 μg/L)	Raised quantitation limit

Table B.3.8. (page 16 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L107 (Continued)	ALL except: MND20-0322-0001 (T)	U	PB-Zinc (3.6 μg/L)	Raised quantitation limit
	ALL	J	PB-Vanadium (-4.4 μg/L)	Inaccuracy
	MND20-0327-0001 (T&D)	UJ	PB-Thallium (-2.7 μg/L)	Raised quantitation limit
	MND20-0327-0001 (T&D)	U	CCB-Arsenic (3.3 μg/L)	Raised quantitation limit
	MND20-0327-0001 (T&D)	U	CCB-Lithium (15.2 μg/L)	Inaccuracy
	MND20-0322-0001 (T&D)	UJ/J	CCB-Antimony (-2 μg/L)	Inaccuracy
	MND20-0322-0001 (T)	UJ	CCB-Thallium (-3.9 μg/L)	Raised quantitation limit
	MND20-0327-0001 (T&D)	J	CCB-Potassium (-1178 μg/L)	Inaccuracy
	MND20-0322-0001 (D)	J	ASR-Antimony (80)	Slightly low bias
	MND20-0322-0001 (D)	UJ	ASR-Lead (84)	Slightly low bias
	MND20-0322-0001 (T) MND20-0322-0001 (D) MND20-0327-0001 (T) MND20-0327-0001 (D)	UJ	ASR-Selenium (73) ASR-Selenium (67) ASR-Selenium (75) ASR-Selenium (83)	Slightly low bias
	MND20-0327-0001 (T)	UJ	ASR-Thallium (45)	Low bias
	MND20-0327-0001 (D)		ASR-Thallium (74)	Slightly low bias
	ALL	J	No SD-Calcium No SD-Magnesium No SD-Sodium	NA
	MND20-0322-0001 (T)	J	No SD-Aluminum No SD-Iron No SD-Manganese No SD-Zinc	NA
	MND20-0327-0001 (T)	J	No SD-Chromium No SD-Iron No SD-Nickel	NA
9309L108	MND01-0137-0001 (D)	U	PB-Aluminum (3.7 μg/L)	Raised quantitation limit
	MND01-0137-0001 (T)	U	PB-Arsenic (4.0 μg/L)	Raised quantitation limit
	MND01-0137-0001 (D)	U	PB-Chromium (1.9 μg/L)	Raised quantitation limit
	ALL	U	PB-Lithium (15.2 μg/L)	Raised quantitation limit
	ALL	U	PB-Nickel (3.9 μg/L)	Raised quantitation limit

Table B.3.8. (page 17 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L108 (Continued)	MND01-0137-0001 (D)	U	PB-Zinc (3.6 μg/L)	Raised quantitation limit
	MND01-0137-0001 (T) MND01-0137-0001 (D)	J	PB-Potassium (-1178 μg/L)	Inaccuracy
	MND01-0137-0001 (D)	UJ	PB-Antimony (-2.0 μg/L)	Inaccuracy
	MND01-0137-0001 (T) MND01-0137-0001 (D)	UJ	PB-Thallium (-3.0 μg/L)	Inaccuracy
	MND01-0137-0001 (D)	UJ	ASR-Arsenic (84)	Slightly low bias
	All	J	No SD-Calcium No SD-Iron No SD-Magnesium No SD-Sodium	
	MND01-0137-0001 (T)	J	No SD-Managenese	
	MND01-0137-0001 (D)	UJ	ASR-Lead (84)	
	MND01-0137-0001 (D)	UJ	ASR-Selenium (48)	
	MND01-0137-0001 (T)	UJ	ASR-Selenium (54)	
09309L119	MND20-0383-0001 (T&D) MND20-0387-0001 (D)	U	PB-Aluminum (14.86 μg/L)	Raised quantitation limit
	MND01-0380-0001 (T&D) MND20-0383-0001 (T) MND20-0387-0001 (T&D)	U	PB-Chromium (7.52 μg/L)	Raised quantitation limit
	MND20-0383-0001 (T&D)	U	PB-Manganese (3.74 μg/L)	Raised quantitation limit
	MND01-0380-0001 (T) MND20-0383-0001 (T&D) MND20-0397-001 (T&D)	U	PB-Nickel (15.5 μg/L)	Raised quantitation limit
	ALL	U	PB-Zinc (14.26 μg/L)	Raised quantitation limit
	MND20-0383-0001 (T&D) MND20-0397-0001 (T&D)	J	CCB-Potassium (-1178 μg/L)	
	MND01-0380-0001 (T)	UJ	ICB-Thallium (-5.8 μg/L)	
	ALL	J	CCB-Vanadium (-5.9 μg/L)	
	MND01-0380-0001 (D) MND20-0383-0001 (D)	U	CCB-Arsenic (4.0 μg/L)	Raised quantitation limit

Table B.3.8. (page 18 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
09309L119 (Continued)	MND20-0387-0001 (T&D)	U	CCB-Arsenic (4.0 μg/L)	Raised quantitation limit
	MND20-0383-0001 (T&D) MND20-0387-0001 (T&D)	U	CCB-Lithium (15.2 μg/L)	Raised quantitation limit
	MND20-0383-0001 (D)	UJ	Dup. - Lead	Inaccuracy
	ALL	J	SD-Sodium (24, 26.3)	
	MND01-0380-0001 (T)	J	ASR-Lead (80)	Slightly low bias
		UJ	ASR-Selenium (56)	
		UJ	ASR-Thallium (47)	
	MND01-0380-0001 (D)	J	ASR-Antimony (82)	
		J	ASR-Lead (84)	
		UJ	ASR-Selenium (58)	
		UJ	ASR-Thallium (44)	
	MND20-0383-0001 (T)	UJ	ASR-Selenium (75)	
	MND20-0383-0001 (D)	UJ	ASR-Selenium (77)	
		UJ	ASR-Thallium (73)	
	MND20-0387-0001 (T)	UJ	ASR-Selenium (64)	
		UJ	ASR-Thallium (63)	
	MND20-0387-0001 (D)	UJ	ASR-Selenium (60)	
9309L120	MND20-0328-0001 (T) MND20-0328-0001 (D)	J	SD-Barium (12.6) SD-Calcium (18.5) SD-Iron (18.1) SD-Magnesium (15.4) SD-Manganese (21.3) SD-Sodium (11)	Inaccuracy
	MND20-0328-0001 (T)	J	ASR-Arsenic (83)	Slightly low bias
	MND20-0328-0001 (T)	UJ	ASR-Selenium (71)	Slightly low bias
	MND20-0328-0001 (D)		ASR-Selenium (76)	
	MND20-0328-0001 (T)	UJ	ASR-Thallium (73)	Slightly low bias
	MND20-0328-0001 (D)		ASR-Thallium (83)	

Table B.3.8. (page 19 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L120 (Continued)	MND20-0328-0001 (T) MND20-0328-0001 (D)	U	PB-Aluminum (33.7 μg/L) PB-Chromium (16.8 μg/L) PB-Zinc (8.8 μg/L)	Raised quantitation limit
	MND20-0328-0001 (T) MND20-0328-0001 (D)	J	PB-Vanadium (-15.9 μg/L)	Inaccuracy
	MND20-0328-0001 (T) MND20-0328-0001 (D)	UJ	CCB-Thallium (-3.0 μg/L)	Inaccuracy
9309L121	ALL	U	PB-Chromium (81 ug/L)	Raised quantitative limit
	ALL	J	No SD Barium No SD Calcuim No SD Magnesium No SD Manganese	Inaccuracy
	MND01-0302-0001 (T) MND20-0343-0001 (T) MND20-0343-1001 (T) MND01-0130-0001 (D)	U	PB-Nickel (10.2 μg/L)	Raised quantitation limit
	MND01-0130-0001 (T)	U	PB-Nickel (10.2 μg/L)	Raised quantitation limit
	MND20-0343-0001 (T)	UJ	CCB-Cadmium (-2.2 ug/L)	Inaccuracy
	MND20-0130-0001 (D) MND20-0343-1001 (D) MND20-0343-0001 (D)	U	PB-Iron (81 ug/L)	Raised quantitation limit
	MND01-0302-0001 (D)	J	PB-Potassium (-488 ug/L)	Inaccuracy
	MND20-0343-0001 (T)	UJ	CCB-Thallium (-3.0 ug/L)	Inaccuracy
	MND01-0302-0001 (T)	J	No SD-Zinc	Inaccuracy
	MND01-0130-0001 (D)	UJ	ASR-Arsenic (84)	Slight low bias
	MND01-0130-0001 (D)	J	ASR-Lead (83)	Slight low bias
	MND01-0130-0001 (D)	UJ	ASR-Selenium (83)	Slight low bias
	MND01-0302-0001 (T)	UJ	ASR-Selenium (63)	Slight low bias
	MND20-0343-0001 (T) MND20-0343-1001 (T)	J	FRPD-Antimony (38)	

Table B.3.8. (page 20 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L121 (Continued)	MND20-0343-0001 (D) MND20-0343-1001 (D)	J	FRPD-Antimony (38)	Slightly low bias
	MND01-0130-0001 (D)	R	Cadmium not verifiable	
	MND01-0130-0001 (T) MND01-0130-0001 (D) MND01-0302-0001 (D) MND20-0343-1001 (T) MND20-0343-1001 (D)	UJ	ASR-Thallium (73) ASR-Thallium (72) ASR-Thallium (54) ASR-Thallium (45) ASR-Thallium (52)	Slight low bias Low bias
	MND01-0302-0001 (T)	J	No SD-Iron	Inaccuracy
	MND01-0302-0001 (D)	J		
	MND20-0343-0001 (T)	U		
	MND20-0343-1001 (T)	J		
	MND01-0302-0001 (T) MND20-0343-0001 (T) MND20-0343-1001 (T)	J	No SD-Aluminum	Inaccuracy
	MND01-0130-0001 (T) MND01-0130-0001 (D) MND01-0302-0001 (T) MND01-0302-0001 (D)	J	PB-Vanadium (-16 ug/L)	Inaccuracy
	MND20-0343-0001 (T) MND20-0343-0001 (D) MND20-0343-1001 (T) MND20-0343-1001 (D)	U	CCB-Vanadium (3.7 ug/L)	Raised quantitation limit
9309L898	MND01-0153-0001 (D) MND01-0155-0001 (T) MND01-0155-0001 (D)	UJ	PB-Lead (-2.0 ug/L)	Raised quantitation limit
	MND01-0306-0001 (T) MND01-0306-0001 (D)	J	PB-Lead (-2.0 μg/L)	Raised quantitation limit
	MND01-0317-0001 (T) MND01-0317-0001 (D) MND01-0318-0001 (T)	UJ	PB-Lead (-2.0 μg/L)	Raised quantitation limit

Table B.3.8. (page 21 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L898 (Continued)	MND01-0155-0001 (T) MND01-0153-0001 (T&D) MND01-0155-0001 (D) MND01-0306-0001 (T) MND01-0306-0001 (D) MND01-0317-0001 (D)	U	PB-Zinc (7.4 ug/L)	Raised quantitation limit
	MND01-0318-0001 (T&D)	U	PB-Zinc (7.4 μg/L)	Raised quantitation limit
	MND01-0155-0001 (D) MND01-0153-0001 (T&D) MND01-0317-0001 (D) MND01-0318-0001 (T&D) MND01-0155-0001 (T)	U	PB-Aluminum (5.3 ug/L)	Raised quantitation limit
	MND01-0155-0001 (D)	U	PB-Chromium (-1.0 ug/L)	Raised Quantitation Limit
	MND01-0155-0001 (D) MND01-0153-0001 (T) MND01-0306-0001 (T) MND01-0317-0001 (T&D) MND01-0318-0001 (T&D) MND01-0155-0001 (T)	U	CCB-Molybdenum (1.9 ug/L)	Raised Quantitation Limit
	MND01-0155-0001 (D) MND01-0306-0001 (T&D) MND01-0153-0001 (D) MND01-0318-0001 (D) MND01-0317-0001 (D)	J	CCB-Antimony (-2.6 ug/L)	Raised quantitation limit
	MND01-0317-0001 (T) MND01-0155-0001 (T) MND01-0153-0001 (T) MND01-0306-0001 (T) MND01-0318-0001 (T)	UJ	CCB-Antimony (-2.6 μg/L)	Raised quantitation limit

Table B.3.8. (page 22 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L898 (Continued)	MND01-0153-0001 (T&D) MND01-0155-0001 (D) MND01-0306-0001 (T&D) MND01-0317-0001 (D) MND01-0318-0001 (D) MND01-0155-0001 (T) MND01-0317-0001 (T) MND01-0318-0001 (T)	U	CCB-Tin (6.1 ug/L)	Raised qantitation limit
	MND01-0317-0001 (D)	U	CCB-Vanadium (2.7 ug/L)	Raised quantitation limit
	MND01-0155-0001 (T&D) MND01-0153-0001 (T) MND01-0306-0001 (D) MND01-0317-0001 (T)	UJ	ASR-Arsenic (NA)	Inaccuracy
	MND01-0155-0001 (T&D) MND01-0153-0001 (T&D) MND01-0317-0001 (T&D) MND01-0318-0001 (T&D)	UJ	ASR-Lead (NA)	Inaccuracy
	MND01-0306-0001 (T&D)	J	ASR-Lead (NA)	Inaccuracy
	MND01-0155-0001 (T) MND01-0306-0001 (D) MND01-0317-0001 (T)	J	ASR-Selenium (NA)	Inaccuracy
	MND01-0153-0001 (T&D) MND01-0155-0001 (D) MND01-0306-0001 (T) MND01-0317-0001 (D) MND01-0318-0001 (T&D)	UJ	ASR-Selenium (NA)	Inaccuracy
	MND01-0318-0001 (T&D)	UJ	ASR-Thallium (NA)	
	MND01-0153-0001 (T&D) MND01-0155-0001 (T&D) MND01-0306-0001 (T&D) MND01-0317-0001 (T&D)	J	SD-Ca (11.8) SD-Fe (10.9)	

Table B.3.8. (page 23 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L898 (Continued)	MND01-0318-0001 (T)	J	(Continued)	Inaccuracy
	MND01-0317-0001 (T)	J	MSR-Barium (72) MSR-Chromium (66) MSR-Cobalt (67) MSR-Copper (72) MSR-Manganese (64)	Slightly low bias
	MND01-0317-0001 (T)	J	MSR-Nickel (67) MSR-Vanadium (75) MSR-Zinc (57)	Slightly low bias
	MND01-0317-0001 (T)	UJ	MSR-Beryllium (72)	
9309L904	ALL	U	PB-Aluminum (21.3 mg\L)	Raised quantitation limit
	MND01-0154-0001 (T)	J	PB-Chromium (-4.2 μg/L)	Inaccuracy
	MND01-0154-0001 (D)	J	PB-Antimony (-2.5 μg/L)	Inaccuracy
	MND01-0305-0001 (T) MND01-0152-0001 (D)	UJ	PB-Antimony (-2.5 μg/L)	Inaccuracy
	MND01-0305-0001 (T)	J	No SD-Nickel	
	MND01-0305-0001 (T) MND01-0152-0001 (T)	J	No SD-Manganese No SD-Chromium No SD-Iron	
	MND01-0152-0001 (T) MND01-0154-0001 (T)	U	CCB-Molybdenum (7.5 μg/L)	Raised quantitation limit
	MND01-0152-0001 (T&D) MND01-0154-0001 (T&D) MND01-0305-0001 (D)	U	CCB-Tin (24.3 μg/L)	
	ALL	U	PB-Zinc (29.6 μg/L)	Raised quantitation limit
	MND01-0154-0001 (D)	J	ASR-Antimony (140)	Raised quantitation limit
	MND01-0305-0001 (T)	UJ	ASR-Thallium (75)	Raised quantitation limit
	MND01-0152-0001 (D)	J	ASR-Thallium (82)	Raised quantitation limit
	ALL	J	No SD-Calcium No SD-Magnesium No SD-Sodium	Inaccuracy

Table B.3.8. (page 24 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L904 (Continued)	MND01-0152-0001 (T)	UJ	ASR-Arsenic (82)	Slight low bias
	MND01-0152-0001 (D)		ASR-Arsenic (84)	
	MND01-0154-0001 (T)		ASR-Arsenic (82.5)	
	MND01-0305-0001 (D)		ASR-Arsenic (82.5)	
	MND01-0305-0001 (T)		ASR-Arsenic (82)	
	MND01-0154-0001 (T)	UJ	ASR-Arsenic (84)	Slight low bias
	MND01-0154-0001 (T)	UJ	ASR-Lead (65)	Slight low bias
	MND01-0154-0001 (D)		ASR-Lead (68)	
	MND01-0305-0001 (T)	UJ	ASR-Lead (72)	Slightly low bias
	MND01-0305-0001 (T)		ASR-Lead (68)	
	MND01-0152-0001 (T)		ASR-Lead (66)	
	MND01-0152-0001 (D)		ASR-Lead (60)	
	MND01-0305-0001 (T)	UJ	ASR-Selenium (72)	Slightly low bias
	MND01-0152-0001 (D)	UJ	ASR-Selenium (70)	
	MND01-0152-0001 (T)	UJ	ASR-Selenium (74)	
	MND01-0154-0001 (D)	J	ASR-Selenium (75)	
	MND01-0154-0001 (T)	J	ASR-Selenium (73)	
	MND01-0305-0001 (D)	UJ	ASR-Selenium (71)	
9309L920	MND01-0313-0001 (D)	UJ	PB-Iron (6.4) μg/L	Raised quantitation limit
	ALL	U	PB-Vanadium (5.3) μg/L PB-Zinc (14.7) μg/L	Raised quantitation limit
	MND01-0307-0001 (T&D) MND01-0313-0001 (T)	U	PB-Tin (8.7) μg/L	Raised quantitaion limit
	MND01-0307-0001 (T) MND01-0313-0001 (T)	U	CCB-Arsenic (2.8) μg/L ICB-Molybdenum (11.1) μg/L	Raised quantitation limit
	MND01-0307-0001 (T) MND01-0313-0001 (D)	U	ICB-Cobalt (4.7) μg/L	Raised quantitation limit
	MND01-0313-0001 (T)	UJ	MSR-Bismuth (73.3)	Slightly low bias
	MND01-0307-0001 (T)	UJ	MSR-Selenium (65) MSR-Thallium (52.8)	Low bias

Table B.3.8. (page 25 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L920 (Continued)	MND01-0307-0001 (T)	UJ	ASR-Lead (80) ASR-Selenium (64)	Slightly low bias
	MND01-0307-0001 (D)	UJ	ASR-Lead (45) ASR-Selenium (73)	Low bias
	MND01-0313-0001 (D)	UJ	ASR-Lead (74.5) ASR-Selenium (62)	Slightly low bias
	MND01-0313-0001 (T)	J UJ	ASR-Lead (56) ASR-Selenium (54)	Low bias
	ALL	J	SD-Calcium (14.8) SD-Iron (12.6) SD-Magnasium (14.2) SD-Maganese (16.8) SD-Sodium (10.8)	Inaccuracy
9309L921	ALL	U	PB-Aluminum (30.9 ug/L)	Raised quantitation limit
	MND01-0315-0001 (T&D)	UJ	CCB-Silver (-3.2 ug/L)	Inaccuracy
	ALL	J	PB-Vanadium (-17.2 ug/L)	
	MND01-0127-0001 (T) MND01-0315-0001 (D)	U	PB-Antimony (2.9 ug/L)	Raised quantitation limit
	MND01-0315-0001 (T)	UJ	PB-Cobalt (-6.2 ug/L)	Inaccuracy
	MND01-0315-0001 (T&D) MND01-0127-0001 (D)	U	PB-Zinc (3.8 ug/L)	Raised quantitation limit
	MND01-0315-0001 (D) MND01-0127-0001 (D)	J	CCB-Lithium (-11.2 ug/L)	Inaccuracy
	MND01-0127-0001 (T)	UJ	CCB-Lithium (-11.2 ug/L)	Inaccuracy
	MND01-0315-0001 (T) MND01-0315-0001 (D)	U	CCB-Bismuth (140.3 ug/L)	Raised quantitation limit
	ALL	J	SD-Calcium (10.9)	Inaccuracy
	ALL	J	SD-Nickel (10.9)	
	MND01-0315-0001 (T)	J	SD-Chromium (10.7)	
	MND01-0315-0001 (D)	UJ		
	MND01-0315-0001 (T)	J	MSR-Lead (52)	Low bias

Table B.3.8. (page 26 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L921 (Continued)	(Continued)	UJ	MSR-Silver (71)	Slightly low bias
		UJ	MSR-Thallium (38)	Low bias
	MND01-0127-0001 (D)	UJ	ASR-Arsenic (82)	Slightly low bias
	MND01-0315-0001 (D)	UJ	ASR-Thallium (66)	
	MND01-0315-0001 (T)	UJ	ASR-Selenium (64)	
	MND01-0315-0001 (T&D)	UJ	LCA-Cadmium (-2.9)	
	MND01-0315-0001 (D)	UJ	LCA-Copper (-6.9)	
	MND01-0315-0001 (T)	J		
	MND01-0315-0001 (D)	J	ASR-Selenium (72)	
	MND01-0315-0001 (T)	UJ	ASR-Selenium (64)	
	MND01-0315-0001 (T&D)	UJ	ICB-Silver (-3.2) μg/L	
	MND01-0315-0001 (T&D)	J	LCA-Tin (63.6)	
	MND01-0315-0001 (T&D)	J	LCA-Vanadium (-13.5)	
	MND01-0315-0001 (D)	UJ	LCA-Zinc (-11.0)	
9309L927	MND01-0129-0001 (T)	UJ	ASR-Selenium (79)	Slightly low bias
	MND01-0129-0001 (D)	J	ASR-Selenium (83)	
	MND01-0129-0001 (T)	UJ	ASR-Lead (82)	Slightly low bias
	MND01-0129-0001 (D)		ASR-Lead (84)	
	MND01-0309-0001 (D)	U	PB - Bismuth (140.3 μg/L)	Raised quantitation limit
	ALL	J	No SD-Magnesium No SD-Calcium No SD-Barium No SD-Sodium No SD-Aluminum	Inaccuracy
	MND01-0309-0001 (T)	J	No SD-Manganese	
	MND01-0309-0001 (D)			
	MND01-0309-0001 (D) MND01-0129-0001 (T)	U	PB-Zinc (3.8 μg/L)	Raised quantitation limit
	ALL	U	PB-Aluminum (30.9 μg/L)	Raised quantitation limit

Table B.3.8. (page 27 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L927 (Continued)	MND01-0129-0001 (T) MND01-0129-0001 (D)	J	CCB-Potassium (-588.5)	Inaccuracy
	MND01-0129-0001 (D)	J	PB-Manganese (-2.3 μg/L)	Inaccuracy
	MND01-0129-0001 (T)	J	ASR-Thallium (78)	Slightly low bias
	MND01-0129-0001 (T) MND01-0129-0001 (D)	J	CCB-Lithium (-11.2 μg/L)	Inaccuracy
	MND01-0129-0001 (T) MND01-0129-0001 (D) MND01-0309-0001 (T)	U	PB-Antimony (2.9 μg/L)	Raised quantitation limit
	ALL	J	PB-Vanadium (-17.2 μg/L)	Inaccuracy
	MND01-0129-0001 (T) MND01-0129-0001 (D)	UJ	CCB-Silver (-3.2 μg/L)	Inaccuracy
9309L928	MND01-0126-0001 (T)	UJ	MSR-Cobalt (74)	Inaccuracy
		J	MSR-Lead (61)	
		J	MSR-Potassium (74)	
		UJ	MSR-Silver (74)	
		UJ	MSR-Thallium (73)	
	All	J	SD-Barium (10.9)	Inaccuracy
		J	SD-Calcium (14.9)	
		J	SD-Magnesium (12.5)	
		U	PB-Vanadium (18.5 ug/L)	Raised Quantitation Limit
		U	PB-Zinc (19 ug/L)	
		UJ	CCB-Lithium (-11.4 ug/L)	Inaccuracy
	MND01-0118-0001 (T)	U	CCB-Cobalt (5.7 ug/L)	Raised Quantitation Limit
	MND01-0118-0001 (T) MND01-0118-0001 (D) MND01-0126-0001 (T) MND01-0126-0001 (D) MND01-0394-0001 (D)	U	PB-Aluminum (18.5 ug/L)	Raised Quantitation Limit

Table B.3.8. (page 28 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L928 (Continued)	MND01-0126-0001 (T) MND01-0126-0001 (D) MND01-0394-0001 (T) MND01-0394-0001 (D)	J	PB-Lead (-2.8 ug/L)	Raised Quantitation Limit
	MND01-0118-0001 (D)	UJ	ASR-Arsenic (83)	Slightly low bias
	MND01-0126-0001 (T)	UJ	ASR-Arsenic (80)	
	MND01-0126-0001 (D)	UJ	ASR-Arsenic (78)	
	MND01-0394-0001 (D)	UJ	ASR-Arsenic (80)	
	MND01-0118-0001 (T)	UJ	ASR-Lead (78)	
	MND01-0118-0001 (D)	UJ	ASR-Lead (80)	
	MND01-0126-0001 (T)	J	ASR-Lead (84)	
	MND01-0126-0001 (D)	UJ	ASR-Lead (84)	
	MND01-0118-0001 (T)	UJ	ASR-Selenium (84)	
	MND01-0126-0001 (T)	J	ASR-Selenium (75)	
	MND01-0394-0001 (T)	UJ	ASR-Selenium (81)	
	MND01-0118-001 (T&D) MND01-0126-0001 (T&D) MND01-0394-0001 (D)	J	CCB-Potassium (-2396 μg/L)	Raised quantitation limit
	MND01-0394-0001 (S)	UJ	ASR-Selenium (83)	Slightly low bias
	MND01-0118-0001 (T)	UJ	ASR-Thallium (48)	
	MND01-0118-0001 (D)	UJ	ASR-Thallium (52)	
	MND01-0126-0001 (T)	UJ	ASR-Thallium (54)	
	MND01-0126-0001 (D)	UJ	ASR-Thallium (55)	
	MND01-0118-0001 (T&D) MND01-0394-0001 (D)	U	PB-Tin (19.0 μg/L)	Raised quantitation limit
	MND01-0118-0001 (T&D) MND01-0126-0001 (T) MND01-0394-0001 (T&D)	U	CCB-Molybdenum (7.8 ug/L)	
9309L929	MND01-0314-0001 (T&D)	J	PB-Potassium (-2396 μg/L)	Inaccuracy
		U	PB-Manganese (168.2 μg/L)	Raised quantitation limit
		U	PB-Vanadium (18.5 μg/L)	Raised quantitation limit

Table B.3.8. (page 29 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L929 (Continued)	MND01-0314-0001 (T)	UJ	ASR-Thallium (42)	Low bias
	MND01-0314-0001 (D)	J	ASR-Lead (84)	Slightly low bias
	MND01-0314-0001 (T)	UJ	ASR-Selenium (63)	Slightly low bias
	MND01-0314-0001 (T&D)	J	Calcium interference	Inaccuracy
		J	PB-Lithium (-19.0)	Inaccuracy
		J	No SD-Barium No SD-Calcium	NA
	MND01-0314-0001 (D)	UJ	ASR-Selenium (60)	Low bias
	MND01-0314-0001 (D)	UJ	ASR-Arsenic (80.5)	Slightly low bias
	MND01-0314-0001 (D)	J	PB-Lead (-2.8 μg/L)	Inaccuracy
	MND01-0314-0001 (T)	U	PB-Lead (-2.8 μg/L)	Inaccuracy
	MND01-0314-0001 (T&D)	J	Interference - Copper	
		J	Interference - Molybdenum	
		UJ	Interference - Silver	
		J	SD-Magnesium (NA) SD-Sodium (NA) SD-Zinc (NA)	
		J	Interference - Tin	
	MND01-0314-0001 (T)	J	Interference - Chromium	
	MND01-0314-0001 (D)	UJ	Interference - Chromium	
	MND01-0314-0001 (T)	J	SD-Aluminum (NA) SD-Iron (NA)	
9309L963	MND01-7899-0001 (T)	J	No SD-Aluminum No SD-Barium No SD-Beryllium No SD-Chromium No SD-Copper No SD-Manganese No SD-Zinc	NA

Table B.3.8. (page 30 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L963 (Continued)	MND01-7899-0001 (T)	J	ASR-Lead (125)	Slightly positive bias
	MND01-7899-0001 (T)	UJ	PB-Magnesium (55.6 μg/L)	Raised quantitative limit
		U	PB-Calcium (50.8 μg/L)	
		J	PB-Sodium (13.3 μg/L)	
		J	PB-Potassium (-665.1 μg/L)	Inaccuracy
	MND01-7899-0001 (T)	UJ	ICB-Lithium (-13.3 μg/L)	
	MND01-7899-0001 (T)	R	Antimony not verifiable Arsenic not verifiable Selenium not verifiable	Unusable
9309L964	MND01-0159-0001 (T)	UJ	MSR-Thallium (64.8)	Slightly low bias
	MND01-0159-0001 (D)	UJ	ASR-Thallium (78)	
	MND01-0159-0001 (T)	J	PB-Lithium (-13.3 μg/L)	Inaccuracy
	MND01-0159-0001 (T)	UJ	ASR-Antimony (32)	Slightly low bias
	MND01-0159-0001 (T)	U	PB-Chromium (5.6 μg/L)	Inaccuracy
	MND01-0159-0001 (T)	U	PB-Selenium (1.2 μg/L)	
	MND01-0159-0001 (T&D)	U	PB-Vanadium (-10.5 μg/L)	
	MND01-0159-0001 (D)	J	PB-Lithium (-13.3 μg/L)	
	MND01-0159-0001 (T)	U	PB-Aluminum (20.5 μg/L)	Raised quantitation limit
	MND01-0159-0001 (T&D)	J	SD-Magnesium (35.2)	Inaccuracy
	MND01-0159-0001 (D)	J	PB-Arsenic (-2.5 μg/L)	Inaccuracy
	MND01-0159-0001 (D)	J	MSR-Arsenic (82)	Slightly low bias
	MND01-0159-0001 (D)	J	MSR-Antimony (69)	
	MND01-0159-0001 (T&D)	J	SD-Calcium (46)	Inaccuracy
	MND01-0159-0001 (T&D)	U	PB-Zinc (-11.5 μg/L)	Inaccuracy
	MND01-0159-0001 (T&D)	J	SD-Iron (33)	Inaccuracy
	MND01-0159-0001 (T&D)	U	PB-Tin (21.7 μg/L)	Raised quantitation limit
	MND01-0159-0001 (T&D)	J	SD-Barium (21)	Inaccuracy
	MND01-0159-0001 (T&D)	J	SD-Manganese (39)	Inaccuracy
	MND01-0159-0001 (T)	UJ	ASR-Thallium (58)	Low bias
	MND01-0159-0001 (T&D)	U	PB-Molybdenum (7.4 μg/L)	Raised quantitation limit

Table B.3.8. (page 31 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L964 (Continued)	MND01-0159-0001 (T)	J	RPD-Arsenic (47.5)	Inaccuracy
	MND01-0159-0001 (T&D)	J	SD-Sodium (21)	Inaccuracy
9309L965	ALL	U	PB-Aluminum (5.1 μg/L) PB-Zinc (2.9 μg/L) CCB-Vanadium CCB-Tin (21.7 ug/L)	Raised quantitation limit
	MND01-0310-0001 (T) MND01-0310-1001 (D)	U	CCB-Chromium	Raised quantitation limit
	MND01-0310-0001 (T&D) MND01-0310-1001 (T)	UJ	CCB-Arsenic (2.2 ug/L)	Raised quantitation limit
	MND01-0310-0001 (T)	UJ	ASR-Antimony (80)	Slightly low bias
	MND01-0310-0001 (T)	UJ	ASR-Thallium (62)	Slightly low bias
	MND01-0310-1001 (D)	J	ASR-Lead (82)	Slightly low bias
	MND01-0310-0001 (T)	UJ	ASR-Selenium (70)	Slightly low bias
	MND01-0310-0001 (D)		ASR-Selenium (67)	
	MND01-0310-1001 (T)		ASR-Selenium (71)	
	MND01-0310-1001 (D)		ASR-Selenium (68)	
	ALL	J	No SD-Calcium No SD-Magnesium No SD-Sodium	Inaccuracy
	MND01-0310-0001 (T) MND01-0310-1001 (T)	J	FRPD = Iron (31)	Inaccuracy
	MND01-0310-0001 (T&D) MND01-0310-1001 (T&D)	J/UJ	FRPD = Lead (200)	Inaccuracy
	MND01-0310-0001 (T&D) MND01-0310-1001 (T&D)	J	FRPD = Nickel (39) FRPD = Manganese (39)	Inaccuracy
9309L966	MND01-0311-0001 (T&D) MND01-0311-1001 (D)	U	PB-Aluminum (20.6 μg/L)	Raised quantitation limit
	MND01-0311-1001 (T)	U	PB-Chromium (5.6 μg/L)	Raised quantitation limit

Table B.3.8. (page 32 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L966 (Continued)	ALL	U	PB-Manganese (3.9 µg/L) PB-Zinc (11.6 µg/L)	Raised quantitation limit
	MND01-0311-0001 (T) MND01-0311-1001 (T&D)	U	CCB-Selenium (1.3 µg/L)	Raised quantitation limit
	ALL	UJ/J	CCB-Arsenic (-2.5 µg/L)	Inaccuracy
	MND01-0311-0001 (T)	UJ	ASR-Antimony (80)	Slightly low bias
	MND01-0311-0001 (D)		ASR-Antimony (77)	
	MND01-0311-1001 (T)		ASR-Antimony (81)	
	MND01-0311-1001 (D)		ASR-Antimony (79)	
	MND01-0311-0001 (T)	UJ	ASR-Selenium (64)	Slightly low bias
	MND01-0311-0001 (D)		ASR-Selenium (72)	
	MND01-0311-1001 (T)		ASR-Selenium (58)	
	MND01-0311-1001 (D)		ASR-Selenium (59)	
	MND01-0311-0001 (T)	J	ASR-Arsenic (79) ASR-Lead (84)	Slightly low bias
	ALL	J	No SD-Calcium No SD-Magnesium No SD-Sodium	NA
	ALL	R	Lithium result could not be verified	Unusable
	MND01-0311-0001 (T) MND01-0311-1001 (T)	J, UJ	FRPD-Arsenic (200) FRPD-Chromium (200) FRPD-Copper (200) FRPD-Lead (200) FRPD-Zinc (44)	Inaccuracy
	MND01-0311-0001 (D) MND01-0311-1001 (D)	J, UJ	FRPD-Copper (200) FRPD-Selenium (200) FRPD-Zinc (29.4)	
9309L990	MND01-0156-0001 (T) MND01-0156-0001 (D) MND01-0304-0001 (T) MND01-0304-0001 (D)	U	PB-Arsenic (3.4 µg/L)	Raised quantitation limit

Table B.3.8. (page 33 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L990 (Continued)	MND01-0160-0001 (T) MND01-0160-0001 (D) MND01-0156-0001 (D) MND01-0304-0001 (D)	U	PB-Aluminum (41.78 μg/L)	Raised quantitation limit
	MND01-0160-0001 (T) MND01-0160-0001 (D) MND01-0304-0001 (D) MND01-0156-0001 (D)	U	CCB-Nickel (9.6 μg/L)	
	MND01-0160-0001 (D)	UJ	ASR-Lead (80)	Slightly low bias
	MND01-0156-0001 (T)	UJ	ASR-Lead (83)	
	MND01-0160-0001 (T)	UJ	ASR-Lead (81)	
	MND01-0156-0001 (D)	UJ	ASR-Lead (75.5)	
	MND01-0304-0001 (D)	UJ	ASR-Lead (82)	
	ALL except: MND01-0304-0001 (T)	J	CCB-Tin (-28.8 μg/L)	Inaccuracy
	MND01-0304-0001 (T)	J	MSR-Thallium (53.4)	Slightly low bias
			MSR-Zinc (46.7)	Low bias
	MND01-0156-0001 (T) MND01-0156-0001 (D)	U	PB-Zinc (12.36 μg/L)	Raised quantitation limit
	ALL except: MND01-0304-0001 (T)	U	PB-Vanadium (20.06 μg/L)	Raised quantitation limit
	MND01-0160-0001 (T)	UJ	ASR-Thallium (54)	Slightly low bias
	MND01-0160-0001 (D)	UJ	ASR-Thallium (44)	Low bias
	MND01-0304-0001 (T)	UJ	ASR-Selenium (43)	Low bias
	MND01-0160-0001 (D)	UJ	ASR-Selenium (78)	Slightly low bias
	MND01-0160-0001 (D)	U	MSR-Aluminum (146.8)	Slightly positive bias
	MND01-0160-0001 (T) MND01-0160-0001 (D)	UJ	PB-Lithium (-25.4 μg/L)	Inaccuracy

Table B.3.8. (page 34 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L990 (Continued)	MND01-0156-0001 (T) MND01-0156-0001 (D) MND01-0304-0001 (D)	UJ	PB-Lithium (-25.4 μg/L)	Inaccuracy
	MND01-0156-0001 (T)	UJ	PB-Chromium (-4.63 μg/L)	Inaccuracy
	MND01-0160-0001 (T)	U	CCB-Arsenic (3.1 μg/L)	Raised quantitation limit
	MND01-0304-0001 (D)	UJ	ASR-Thallium (45)	Low bias
	MND01-0156-0001 (T)	UJ	ASR-Thallium (55)	Slightly low bias
	MND01-0160-0001 (T)	UJ	ASR-Selenium (80)	Slightly low bias
	MND01-0304-0001 (T)	J	MSR-Barium (55.4) MSR-Cadmium (72.2) MSR-Copper (-6.1) MSR-Lead (21.1) MSR-Nickel (65.1) MSR-Selenium (36) MSR-Silver (63.9) MSR-Thallium (53.4)	
	MND01-0304-0001 (T)	UJ	ASR-Thallium (58)	Slightly low bias
	MND01-156-0001 (D)	UJ	ASR-Thallium (52)	
	MND01-0304-0001 (D)	J	RPD-Lead (21.1)	Inaccuracy
	MND01-0304-0001 (D)		MSR-Barium (55.4) MSR-Copper (-6.1) MSR-Nickel (68.1) MSR-Thallium (65.6) MSR-Arsenic (63.9)	Low bias
	MND01-0160-0001 (T)	J	SD-Barium (13.6) SD-Calcium (11.3) SD-Copper (12.2) SD-Iron (22.7) SD-Magnesium (15.2) SD-Manganese (20.9) SD-Sodium (11.6)	Inaccuracy

Table B.3.8. (page 35 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L990 (Continued)	MND01-0160-0001 (T)	J	SD-Zinc (21.5)	Inaccuracy
	MND01-0160-0001 (D)	J	SD-Barium (13.6) SD-Calcium (11.3) SD-Iron (22.7) SD-Magnesium (15.2) SD-Manganese (20.9) SD-Sodium (11.6) SD-Zinc (21.5)	
	MND01-0156-0001 (T)	J	SD-Aluminum (12.2) SD-Barium (13.6) SD-Calcium (11.3) SD-Copper (12.2) SD-Iron (22.7) SD-Magnesium (15.2) SD-Manganese (20.9) SD-Sodium (11.6) SD-Zinc (21.5)	
	MND01-0156-0001 (D) MND01-0304-0001 (D)	J	SD-Barium (136) SD-Calcium (11.3) SD-Copper (12.2) SD-Iron (22.7) SD-Magnesium (15.2) SD-Manganese (20.9) SD-Sodium (11.6)	
9309L991	MND-1-0602-0001 (D)	R	Selenium can not be verified	Unusable
	MND01-0602-0001 (D)	U	PB-Aluminum (41.8 μg/L) PB-Arsenic (3.4 μg/L) PB-Vanadium (20.1 μg/L) PB-Zinc (12.4 μg/L)	Raised quantitation limit
	MND01-0602-0001 (T)	U	PB-Arsenic (3.4 μg/L)	Raised quantitation limit
	MND01-0602-0001 (T)	J	PB-Chromium (-4.63 μg/L)	Inaccuracy

Table B.3.8. (page 36 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L991 (Continued)	MND01-0602-0001 (D)	UJ	PB-Lithium (-33 μg/L)	Inaccuracy
	MND01-0602-0001 (D)	U	CCB-Nickel (9.6 μg/L)	Raised quantitation limit
	MND01-0602-0001 (D)	J	CCB-Tin (-28.8 μg/L)	Inaccuracy
	MND01-0602-0001 (D)	UJ	ASR-Arsenic (69)	Slightly low bias
			ASR-Lead (76)	
		UJ	ASR-Thallium (74)	
	MND01-0602-0001 (T)	U	ASR-Arsenic (81)	Slightly low bias
		UJ	ASR-Selenium (65)	
		UJ	ASR-Thallium (41)	Low bias
	ALL	J	No SD-Calcium No SD-Magnesium No SD-Sodium	NA
	MND01-0602-0001 (T)	J	No SD-Zinc No SD-Manganese No SD-Iron No SD-Copper No SD-Aluminum	NA
9309L992	MND20-0353-1001 (T) MND20-0353-1001 (D)	J,UJ	CCB-Lead (-2.2 μg/L)	Inaccuracy
	MND20-0353-1001 (T)	UJ	ASR-Lead (78)	Slightly low bias
	MND20-0353-0001 (T)	UJ	ASR-Lead (82)	Slightly low bias
	MND20-0345-0001 (D)	UJ	ASR-Lead (82)	Slightly low bias
	MND20-0324-0001 (T)	R	ASR-Thallium (0)	Unusable
	MND20-0353-1001 (D)	UJ	ASR-Lead (84)	Slightly low bias
	MND20-0353-1001 (T)	UJ	CCB-Thallium (-4.8 μg/L)	Inaccuracy
	MND20-0345-0001 (T) MND20-0345-0001 (D)	UJ	CCB-Thallium (-4.8 μg/L)	Inaccuracy
	MND20-0345-0001 (D) MND20-0324-0001 (T) MND20-0326-0001 (D)	U	CCB-Copper (3.8 μg/L)	Raised quantitation limit

Table B.3.8. (page 37 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L992 (Continued)	MND20-0324-0001 (D) MND20-0326-0001 (D)	U	CCB-Aluminum (58.6 μg/L)	Raised quantitation limit
	MND20-0324-0001 (T)	U	CCB-Cobalt (7.1 μg/L)	Raised quantitation limit
	MND20-0345-0001 (T)	U	CCB-Chromium (6.9 μg/L)	Raised quantitation limit
	MND20-0353-0001 (D) MND20-0353-1001 (D) MND20-0345-0001 (T) MND20-0345-0001 (D)	U	CCB-Aluminum (58.6 μg/L)	Raised quantitation limit
	MND20-0324-0001 (T)	J	CCB-Lead (-2.2 μg/L)	Inaccuracy
	MND20-0324-0001 (D)	UJ	CCB-Lead (-2.2 μg/L)	Inaccuracy
	MND20-0353-0001 (D) MND20-0353-1001 (D)	J	FRPD-Lithium (26.7)	Inaccuracy
	MND20-0326-0001 (T) MND20-0326-0001 (D)	U	CCB-Nickel (23.5 μg/L)	Raised quantitation limit
	MND20-0324-0001 (D)	UJ	CCB-Thallium (-4.8 μg/L)	Inaccuracy
	MND20-0345-0001 (T) MND20-0345-0001 (D)	U	CCB-Nickel (23.5 μg/L)	Raised quantitation limit
	MND01-0345-0001 (T)	UJ	CCB-Lead (-2.2 μg/L)	Inaccuracy
	MND01-0326-0001 (T)	J	CCB-Lead (-2.2 μg/L)	Inaccuracy
	MND01-0326-0001 (D)	UJ	CCB-Lead (-2.2 μg/L)	Inaccuracy
	MND01-0353-0001 (T) MND01-0353-0001 (D)	UJ	CCB-Lead (-2.2 μg/L)	Inaccuracy
	MND01-0353-0001 (T)	UJ	ASR-Thallium (64)	Slightly low bias
	MND01-0353-0001 (D)		ASR-Thallium (67)	
	MND01-0324-0001 (T) MND01-0324-0001 (D)	U	CCB-Nickel (23.5 μg/L)	Raised quantitation limit
	MND01-0353-1001 (T)	UJ	ASR-Thallium (74.5)	Slightly low bias
	MND01-0353-1001 (D)		ASR-Thallium (64)	
	MDD01-0353-0001 (D) MND01-0353-0001 (T)	U	PB-Molybdenum (18.1 μg/L)	Raised quantitation limit

Table B.3.8. (page 38 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L992 (Continued)	MND02-0324-0001 (D)	UJ	ASR-Arsenic (83.3)	Slightly low bias
	MND01-0353-0001 (T)	UJ	ASR-Selenium (62)	Slightly low bias
	MND01-0353-0001 (D)		ASR-Selenium (57)	Low bias
	MND01-0345-0001 (T)	UJ	ASR-Thallium (72)	Slightly low bias
	MND01-0345-0001 (D)		ASR-Thallium (81)	
	MND01-0326-0001 (T)	UJ	ASR-Thallium (42)	Low bias
	MND01-0326-0001 (D)		ASR-Thallium (43)	
	MND01-0345-0001 (T)	UJ	ASR-Selenium (79)	Slightly low bias
	MND01-0345-0001 (D)		ASR-Selenium (81)	
	MND01-0324-0001 (D)	UJ	ASR-Selenium (42)	Low bias
	MND01-0326-0001 (D)	UJ	ASR-Selenium (83)	Slightly low bias
	MND01-0326-0001 (T)	UJ	ASR-Selenium (84)	Slightly low bias
	MND01-0324-0001 (D)	UJ	ASR-Thallium (34)	Low bias
	MND01-0353-1001 (T)	UJ	ASR-Selenium (62)	Slightly low bias
	MND01-0353-1001 (D)		ASR-Selenium (59)	Low bias
	MND01-0353-0001 (T)	UJ	CCB-Thallium (-4.8 μg/L)	Slightly low bias
	MND01-0353-0001 (D)			
	MND01-0324-0001 (T&D)	J	CCB-Lithium (-26.6 μg/L)	
	MND01-0345-0001 (T&D			
	MND01-0353-0001 (T&D)			
	MND01-0353-1001 (T&D)			
	MND01-0326-0001 (T&D)	UJ	CCB-Lithium (-26.6 μg/L)	Slightly low bias
	All	U	CCB-Tin (40.1 μg/L)	Raised quantitation limit
		U	ICS-Tin (79.5)	Inaccuracy
		J	SD-Barium (14.6)	Inaccuracy
			SD-Calcium (39.4)	
			SD-Iron (20.8)	
			SD-Magnesium (481)	
			SD-Manganese (13.6)	

Table B.3.8. (page 39 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L992 (Continued)	All	UJ	MSR-Selenium (43.0)	Low bias
	All except MND01-0324-0001 (T)		MSR-Thallium (39.4)	
	MND01-0324-0001 (T) MND01-0326-0001 (T) MND01-0383-0001 (T) MND01-0353-1001 (T)	J	SD-Aluminum (342.4) RPD-Aluminum (51.3)	Inaccuracy
	MND20-0324-0001 (T)	J	ASR-Selenium (57)	Low bias
	MND01-0345-0001 (T)	UJ	ASR-Arsenic (82)	Slightly low bias
	MND01-0326-0001 (T)	UJ	ASR-Lead (71)	
	MND01-0326-0001 (T) MND01-0326-0001 (D) MND01-0324-0001 (T) MND01-0324-0001 (D)	U	PB-Molybdenum (18.1 μg/L)	Raised quantitation limit
	MND01-0345-0001 (T)	UJ	ASR-Lead (73)	Slightly low bias
	MND01-0353-0001 (T) MND01-0353-1001 (T)	J	FRPD-Zinc (43.8)	Inaccuracy
	MND01-0353-0001 (D) MND01-0353-1001 (D)	J	FRPD-Antimony (110)	Inaccuracy
	MND01-0353-0001 (T) MND01-0353-1001 (T)	J	FRPD-Aluminum (113)	Inaccuracy
	MND01-0326-0001 (D)	UJ	CCB-Thallium (-4.8 μg/L)	
	MND01-0324-0001 (T)	J	ASR-Lead (84)	Slightly low bias
	MND01-0345-0001 (D)	UJ	ASR-Arsenic (82)	Slightly low bias
	MND01-0324-0001 (D)	UJ	ASR-Lead (84)	Slightly low bias
	MND01-0353-0001 (D) MND01-0326-0001 (D) MND01-0353-1001 (D)	U	PB-Zinc (3.3 μg/L)	Raised quantitation limit
	MND01-0345-0001 (T) MND01-0345-0001 (D)	U	PB-Molybdenum (18.1 μg/L)	Raised quantitation limit
	MND01-0353-0001 (D)	J	FRPD-Calcium (24.7)	Inaccuracy

Table B.3.8. (page 40 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9309L992	MND01-0353-1001 (D)	J	FRPD-Calcium (24.7)	Inaccuracy
(Continued)	MND01-0353-0001 (T)	U	CCB-Chromium (6.9 μg/L)	Raised quantitation limit
9310L142	MND20-0389-0001 (T&D)	UJ	HT-Mercury (1 day)	Slightly low bias
	ALL	U	PB-Aluminum (8.4 μg/L) PB-Zinc (2.2 μg/L)	Raised quantitation limit
	MND20-0389-0001 (T) MND20-0386-0001 (T&D)	U	PB-Chromium (4.2 μg/L)	Raised quantitation limit
	MND20-0389-0001 (T&D)	U	PB-Iron (20.2 μg/L)	Raised quantitation limit
	ALL	J	PB-Vanadium (-6.1 μg/L)	Inaccuracy
	MND20-0389-0001 (T)	UJ	ASR-Selenium (79)	Slightly low bias
	MND20-0386-0001 (T)	J	ASR-Selenium (71)	
	MND20-0386-0001 (D)	UJ	ASR-Selenium (74)	
	MND20-0389-0001 (T)	UJ	ASR-Thallium (61)	Slightly low bias
	MND20-0389-0001 (D)		ASR-Thallium (60)	
	MND20-0386-0001 (T)		ASR-Thallium (59)	
	MND20-0386-0001 (D)		ASR-Thallium (67)	
	ALL	J	No SD-Calcium No SD-Magnesium No SE-Sodium	NA
9310L143	MND01-0337-0001 (T&D)	U	PB-Aluminum (33.7 μg/L)	Raised quantitation limit
		U	PB-Chromium (16.8 μg/L)	Raised quantitation limit
		U	PB-Iron (80.8 μg/L)	Raised quantitation limit
		U	PB-Zinc (8.8 μg/L)	Raised quantitation limit
		U	PB-Manganese (-101.7)	Inaccuracy
		U	PB-Vanadium (-15.9 μg/L)	Inaccuracy
		J	No SD-Calcium	NA
		J	No SD-Magnesium	NA
		J	No SD-Sodium	NA
		UJ	HT-Mercury (1 day)	Slightly low bias

Table B.3.8. (page 41 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9310L143 (Continued)	MND20-0337-0001 (T)	UJ	ASR-Thallium (62)	Slightly low bias
	MND20-0337-0001 (T)	U	PB-Nickel (10.2 μg/L)	Raised quantitation limit
		UJ	CCB-Thallium (-3.0 μg/L)	Inaccuracy
	MND20-0337-0001 (T&D)	R	Selenium result could not be verified	Unusable
9310L144	MND01-0608-0001 (T) MND01-0608-0001 (D)	J	No SD-Barium No SD-Calcium No SD-Magnesium No SD-Sodium	NA
	MND01-0608-0001 (T)	J	No SD-Aluminum	NA
	MND01-0608-0001 (T)	J	ASR-Selenium (76)	Slightly low bias
	MND01-0608-0001 (D)		ASR-Selenium (75)	
	MND01-0608-0001 (T)	J	ASR-Thallium (84)	Slightly low bias
	MND01-0608-0001 (D)	U	PB-Aluminum (14.9 μg/L)	Raised quantitation limit
	MND01-0608-0001 (T) MND01-0608-0001 (D)	U	PB-Zinc (12.8 μg/L)	Raised quantitation limit
9310L165	ALL	U	PB-Zinc (12.8 μg/L) PB-Vanadium (4.9 μg/L)	Raised quantitation limit
	MND20-0334-0001 (T&D)	U	Pb-Aluminum (14.9 μg/L)	Raised quantitation limit
	MND20-0334-0001 (T&D) MND20-0335-0001 (D)	U	PB-Molybdenum (8.5 μg/L)	Raised quantitation limit
	MND20-0335-0001 (T&D)	UJ	PB-Cadmium (-2.7 μg/L)	Raised quantitation limit
	MND20-0335-0001 (T&D)	J	ASR-Thallium (54)	Slightly low bias
			ASR-Thallium (58)	
	MND20-0335-0001 (T&D)	J	No SD-Barium	NA
			No SD-Manganese	
	MND20-0335-0001 (D)	UJ	ASR-Lead (66)	low bias
	ALL	J	No antimony LCS analyzed	NA
	MND20-0335-0001 (T&D)	R	Antimony IDL not verifiable	Unusable

Table B.3.8. (page 42 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9310L165 (Continued)	ALL	J	No SD-Calcium No SD-Magnesium No-SD-Sodium	NA
9310L166	ALL	U	PB-Vanadium (19.4 µg/L)	Raised quatitation limit
	ALL	U	PB-Zinc (51.07 µg/L)	
	ALL	U	CCB-Molybdenum (8.5 µg/L)	
	MND01-0336-0001 (T&D) MND01-0347-0001 (T&D)	J	ICB-Aluminum (-14.9 µg/L)	Inaccuracy
	MND01-0336-0001 (D)	UJ	ASR-Selenium (79) ASR-Thallium (82)	Slighly low bias
	MND01-0347-0001 (D)	UJ	ASR-Selenium (79) ASR-Thallium (83)	
	MND01-0347-0001 (T)	UJ	ASR-Selenium (69) ASR-Thallium (42)	
	MND01-0375-0001 (T)	UJ	ASR-Selenium (84) ASR-Thallium (81)	
	ALL	J	SD-Calcium (14.9) SD-Magnesium (11.8)	Inaccuracy
	MND01-0336-0001 (T) MND01-0347-0001 (T) MND01-0375-0001 (T)	J	SD-Chromium (10.5) SD-Nickel (19.6)	
9310L167	ALL	J	No SD-Barium No SD-Calcium No SD-Magnesium No SD-Manganese No SD-Sodium	NA
	MND20-0330-0001 (T)	UJ	ASR-Selenium (77)	Slightly low bias
	MND20-0330-0001 (D)		ASR-Selenium (80)	
	MND20-0330-1001 (T)		ASR-Selenium (75)	
	MND20-0330-1001 (D)		ASR-Selenium (82)	

Table B.3.8. (page 43 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9310L167 (Continued)	ALL	J	No SD-Iron	NA
	ALL	J	No SD-Zinc	NA
	ALL	R	Not verifiable-Lithium	Unusable
	MND20-0330-0001 (D) MND20-0330-1001 (D)	U	CCB-Aluminum (14.9 μg/L)	Raised quantitation limit
	MND20-0330-0001 (D) MND20-0330-1001 (T) MND20-0330-1001 (D)	U	PB-Zinc (12.8 μg/L)	Raised quantitation limit
	ALL	U	CCB-Molybdenum (8.5 μg/L)	Raised quantitation limit
	MND20-0330-0001 (T) MND20-0330-1001 (T)	J	FRPD-Aluminum (55)	Inaccuracy
	ALL	U	CCB-Vanadium (6.6 μg/L)	
	MND20-0330-0001 (T) MND20-0330-1001 (T)	J	FRPD-Chromium (74)	Inaccuracy
	MND20-0330-0001 (D)	J	FRPD-Chromium (200)	Inaccuracy
	MND20-0330-1001 (D)	UJ		
	MND20-0330-0001 (T)	J	FRPD-Copper (200)	Inaccuracy
	MND20-0330-1001 (T)	UJ		
	MND20-0330-0001 (T)	J	FRPD-Nickel (200)	Inaccuracy
	MND20-0330-1001 (T)	UJ		
9310L265	MND01-0071-0001 (T) MND01-0071-0001 (D) MND01-0076-0001 (T) MND01-0076-0001 (D) MND01-0111-0001 (T) MND01-0111-0001 (D) MND01-0271-0001 (T) MND01-0271-0001 (D)	J	SD-Ba (14.2) SD-Ca (20.6) SD-Mg (16.6) SD-Na (11.6)	Inaccuracy

Table B.3.8. (page 44 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9310L265 (Continued)	MND01-0354-0001 (T) MND01-0354-0001 (D)	J	(Continued)	Inaccuracy
	MND01-0071-0001 (T)	UJ	ASR-Thallium (57)	Slightly low bias
	MND01-0076-0001 (T) MND01-0076-0001 (D) MND01-0111-0001 (T) MND01-0111-0001 (D) MND01-0271-0001 (D) MND01-0354-0001 (T) MND01-0354-0001 (D)		ASR-Arsenic (84)	
	MND01-0071-0001 (T) MND01-0111-0001 (T) MND01-0354-0001 (D)		ASR-Lead (84)	
	MND01-0354-0001 (T)		ASR-Lead (76)	
	MND01-0071-0001 (T)	UJ	ASR-Selenium (81), Thallium (57)	Slightly low bias
	MND01-0071-0001 (D)		ASR-Selenium (79), Thallium (52)	
	MND01-0076-0001 (T)		ASR-Selenium (75), Thallium (62)	
	MND01-0076-0001 (D)		ASR-Selenium (73), Thallium (59)	
	MND01-0111-0001 (T)		ASR-Selenium (68), Thallium (42)	
	MND01-0111-0001 (D)		ASR-Selenium (71), Thallium (54)	
	MND01-0271-0001 (T)		ASR-Selenium (74), Thallium (38)	
	MND01-0271-0001 (D)		ASR-Selenium (70), Thallium (44)	
	MND01-0354-0001 (T)		ASR-Selenium (58), Thallium (68)	
	MND01-0354-0001 (D)		ASR-Selenium (56), Thallium (70)	
	ALL except: MND01-0354-0001 (T)	U	PB-Aluminum (18.9 ug/L) PB-Molybdenum (6.6 ug/L)	Raised quantitation limit
	ALL	U	PB-Zinc (4.0 μg/L)	Raised quantitation limit
	MND01-0271-0001 (D)	UJ	CCB-Cadmium (3.5 μg/L)	Raised quantitation limit
	MND01-0354-0001 (T)	U	PB-Chromium (1.9 μg/L)	Raised quantitation limit

Table B.3.8. (page 45 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9310L265 (Continued)	MND01-0071-0001 (T) MND01-0076-0001 (T) MND01-0111-0001 (D) MND01-0271-0001 (T) MND01-0271-0001 (D)	U	PB-Chromium (1.9 μg/L)	Raised quantitation limit
	MND01-0071-0001 (T) MND01-0071-0001 (D) MND01-0076-0001 (T) MND01-0076-0001 (D) MND01-0271-0001 (T) MND01-0354-0001 (T)	UJ	PB-Silver (-3.6 μg/L)	Inaccuracy
	MND01-0071-0001 (T) MND01-0076-0001 (T) MND01-0076-0001 (D) MND01-0271-0001 (T) MND01-0354-0001 (T) MND01-0354-0001 (D)	UJ	PB-Vanadium (-5.2 μg/L)	Inaccuracy
	MND01-0111-0001 (T)	UJ	CCB-Vandium (-5.2 μg/L)	Negative bias
9310L282	MND01-0117-0001 (D)	U	PB-Iron (16.8 μg/L)	Raised quantitation limit
	ALL except: MND01-0342-1001 (D) MND01-0117-0001 (T&D) MND01-0342-0001 (D)	U	CCB-Lithium (21.1 μg/L)	Raised quantitation limit
	ALL except: MND01-0117-0001 (T)	J	CCB-Potassium (-1388 μg/L)	Inaccuracy
	MND01-0115-0001 (D) MND01-0117-0001 (D) MND01-0342-1001 (D)	U	PB-Zinc (4.85 ug/L)	Raised quantitation limit
	MND01-0115-0001 (T&D)	J/UJ	ASR-Lead (77, 83)	Slightly low bias
	MND01-0117-0001 (D)	J	ASR-Lead (80)	
	MND20-0333-0001 (T)		ASR-Lead (83)	
	MND20-0342-0001 (D)		ASR-Lead (80)	

Table B.3.8. (page 46 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9310L282 (Continued)	MND20-0342-1001 (T&D)	J	ASR-Lead (81)	Slightly low bias
	MND01-0117-0001 (T)	UJ	ASR-Selenium (51)	Slightly low bias
	MDN20-0333-0001 (T)		ASR-Selenium (84)	
	MND01-0117-0001 (T)	J	ASR-Antimony (76)	Slightly low bias
	MND20-0333-0001 (T&D)		ASR-Antimony (84)	
	ALL	J	SD-Calcium (20.2) SD-Magnesium (18) SD-Manganese (21.3) SD-Sodium (16.4)	Inaccuracy
	ALL except: MND01-0117-0001-0001 (D) MND01-0342-0001-0001 (D) MND01-0342-0001-0001 (D)	J	SD-Chromium (21.6)	Inaccuracy
	ALL except: MND01-0117-0001 (D)	J	SD-Iron (22.4)	
	All except: MND01-0333-0001 (T) MND01-0342-0001 (T&D)	J	SD-Nickel (25.6)	
	MND20-0342-0001 (T)	UJ	FRPD-Lead (200)	Inaccuracy
	MND20-0342-1001 (T)	J		
	MND01-0115-0001 (T)	J	MSR-Antimony (70.3)	Slightly low bias
		UJ	MSR-Arsenic (65.8)	
		J	MSR-Barium (67)	
		UJ	MSR-Beryllium (64.7)	
		UJ	MSR-Bismuth (142)	
		J	MSR-Cobalt (64)	
		J	MSR-Copper (74.4)	
		J	MSR-Lead (72.5)	
		J	MSR-Manganese (69.1)	
		J	MSR-Molybdenum (72.7)	
		UJ	MSR-Selenium (37)	
		UJ	MSR-Silver (62.7)	

Table B.3.8. (page 47 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9310L282 (Continued)	MND01-0115-0001 (T)	UJ	MSR-Thallium (41)	Slightly low bias
		UJ	MSR-Tin (45.9)	
		UJ	MSR-Vanadium (59.8)	
		J	MSR-Zinc (67.2)	
	MND01-0115-0001 (D)	UJ	ASR-Thallium (44)	Low bias
	MND01-0117-0001 (D)		ASR-Thallium (48)	
	MND20-0333-0001 (T)		ASR-Thallium (61)	
	MND20-0342-0001 (T)		ASR-Thallium (56)	
	MND20-0342-0001 (D)		ASR-Thallium (55)	
	MND20-0342-1001 (T)		ASR-Thallium (56)	
	MND20-0342-1001 (D)		ASR-Thallium (54)	
	MND20-0333-0001 (D)		ASR-Thallium (54)	
	MND01-0115-0001 (T)	J	SD-Aluminum	NA
	MND01-0117-0001 (D)	J	SD-Aluminum	
	MND01-0117-0001 (T)	J	SD-Aluminum	
	MND01-0342-0001 (D)	J	SD-Aluminum	
	MND01-0117-0001 (T)	J	SD-Chromium (22.4)	Inaccuracy
	MND01-0333-0001 (D&T)	J	SD-Chromium (21.6)	
	MND01-0342-0001 (T)	J	SD-Chromium (22.4)	
	MND01-0333-0001 (D&T)	J	SD-Iron (22.4)	
9310L311	MND01-0046-0001 (T&D) MND01-0063-0001 (T) MND20-0325-0001 (D)	U	PB-Chromium (1.8 μg/L)	Raised quantitation limit
	MND20-0325-0001 (D)	U	PB-Iron (4.4 μg/L), SD (19.2)	Raised quantitation limit
	MND01-0046-0001 (T) MND01-0063-0001 (T&D)	J	PB-Potassium (-875 μg/L)	Inaccuracy
	MND20-0325-0001 (T)	UJ	PB-Thallium (-1.3 μg/L)	Inaccuracy
	ALL	UJ	CBI-Bismuth CBI-Cadmium CBI-Molybdenum	Inaccuracy
	MND01-0063-0001 (T)	J	CBI-Copper	Inaccuracy

Table B.3.8. (page 48 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9310L311 (Continued)	MND20-0325-0001 (D)	J	CBI-Copper	Inaccuracy
	MND01-0046-0001 (D) MND01-0063-0001 (D)	UJ	CBI-Copper	Inaccuracy
	MND01-0046-0001 (T&D) MND01-0063-0001 (D) MND01-0325-0001 (D)	J	CBI-Vanadium	Inaccuracy
	MND01-0046-0001 (T)	J	MSR-Copper (159)	Positive bias
	MND01-0046-0001 (T)	J	MSR-Lithium (73.5)	Low bias
	MND01-0046-0001 (D)	UJ	No MSR-Arsenic, Beryllium, Cobalt, Selenium, Silver, Thallium, Tin	No impact
		J	No MSR-Barium, Lithium, Manganese, Nickel, Zinc	No impact
	MND20-0325-0001 (D)	UJ	ASR-Lead (73)	Low bias
	MND20-0325-0001 (D)	UJ	ASR-Selenium (78)	Low bias
	MND20-0325-0001 (T)	UJ	ASR-Selenium (67)	Low bias
	ALL except: MND20-0325-0001 (D)	J	LBI-Zinc	Inaccuracy
	MND01-0046-0001 (T)	J	RPD-Lead (72)	
	MND01-0046-0001 (D)	J	ASR-Antimony (84)	Slightly low bias
	MND20-0325-0001 (T)	UJ	ASR-Antimony (84)	
	MND01-0046-0001 (D)	UJ	ASR-Lead (79)	Slightly low bias
	MND01-0063-0001 (T&D)	UJ	ASR-Lead (80, 72)	Slightly low bias
	MND01-0046-0001 (T)	J	ASR-Selenium (67)	Slightly low bias
	MND01-0063-0001 (D)	UJ	ASR-Selenium (83)	
	MND01-0063-0001 (T&D)		ASR-Thallium (71, 74)	
	MND20-0325-0001 (D)		ASR-Thallium (77)	
	ALL	J	SD-Calcium (11.9)	Inaccuracy
	ALL except MND20-0325-0001 (D)	J	SD-Iron (19.2)	
	MND01-0046-0001 (T&D) MND01-0063-0001 (T) MND20-0325-0001 (T)	J	SD-Aluminum (25.1)	Inaccuracy
	MND20-0325-0001 (D)	UJ	SD-Zinc (15.5), PB (1.7 μg/L)	Inaccuracy, raised quantitation limit

Table B.3.8. (page 49 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9310L320	MND01-0120-0001 (T)	J	ASR-Antimony (68), MSR (55)	Slightly low bias
	MND01-0120-0001 (S)	J	ASR-Antimony (83)	
	MND01-0344-0001 (T)	UJ	ASR-Antimony (82)	
	MND01-0607-1001 (T)	J	ASR-Antimony (84)	Slightly low bias
	MND01-0344-0001 (T)	UJ	ASR-Lead (81)	Slightly low bias
	MND01-0344-0001 (S)		ASR-Lead (76)	
	MND01-0151-0001 (S)		ASR-Lead (78)	
	ALL except MND01-0344-0001 (D)	J	SD-Aluminum (28)	Inaccuracy
	All	J	SD-Chromium (27) SD-Iron (27)	
	MND01-0344-0001 (D)	UJ	SD-Aluminum (28)	
	MND01-0120-0001 (T)	R	Silver result not verifiable	Unusable
	MND01-0607-0001 (T)	UJ	FRPD-Antimony (200)	Inaccuracy
	MND01-0607-1001 (T)	J		
	MND01-0607-0001 (T)	J	FRPD-Bismuth (200)	
	MND01-0607-1001 (T)	UJ		
	MND01-0607-0001 (D)	UJ	FRPD-Aluminum (200)	
	MND01-0607-1001 (D)	J		
	MND01-0607-0001 (D) MND01-0607-1001 (D)	J	FRPD-Antimony (57)	
	MND01-0607-0001 (D) MND01-0607-1001 (D)	J	FRPD-Iron (61)	
	MND01-0607-0001 (D) MND01-0607-1001 (D)	J	FRPD-Manganese (40)	
	MND01-0607-0001 (D) MND01-0607-1001 (D)	J	FRPD-Nickel (200)	
	MND01-0344-0001 (D) MND01-0607-1001 (T) MND01-0607-1001 (D) MND01-0151-0001 (D)	U	PB Copper (2 ug/L)	Raised quantitation limit
	MND01-0344-0001 (T)	J	CB-Potassium (-1253 ug/L)	Raised quantitation limit

Table B.3.8. (page 50 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9310L320 (Continued)	MND01-0344-0001 (D)	J	CB-Potassium (-1253 μg/L)	Raised quantitation limit
	MND01-0151-0001 (T) MND01-0151-0001 (D)	J	CB-Potassium (-1253 μg/L)	Raised quantitation limit
	MND01-0120-0001 (T)	J	RPD-Selenium (200)	Inaccuracy
		J	MSR-Antimony (55)	Low bias
		J	MSR-Arsenic (70)	Slightly low bias
		J	MSR-Cadmium (21)	Probable low bias
		J	MSR-Lead (31)	Probable low bias
		J	MSR-Lithium (74)	Slightly low bias
		J	MSR-Selenium (8)	Unusable
		R	MSR-Thallium (19.2)	
		R	MSR-Silver (0)	
	MND01-0344-0001 (T) MND01-0344-0001 (D) MND01-0607-0001 (T) MND01-0607-0001 (D) MND01-0607-1001 (T) MND01-0607-1001 (D) MND01-0151-0001 (D)	U	PB-Zinc (2.4 ug/L)	Raised quantitation limit
	MND01-0344-0001 (T) MND01-0344-0001 (D) MND01-0607-0001 (T) MND01-0607-0001 (D) MND01-0607-1001 (T) MND01-0607-1001 (D) MND01-0151-0001 (D)	U	CCB-Vanadium (4.7 ug/L)	Raised Quantitation Limit
	MND01-0344-0001 (T) MND01-0344-0001 (D) MND01-0607-0001 (T) MND01-0607-0001 (D) MND01-0607-1001 (T)	U	CCB-Lithium (26.6 ug/L)	Raised quantitation limit

Table B.3.8. (page 51 of 51)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9310L320 (Continued)	MND01-0607-1001 (D)	U	CCB-Lithium (26.6 μg/L)	Raised quantitation limit
	MND01-0151-0001 (T)			
	MND01-0151-0001 (D)			
	MND01-0120-0001 (D)	UJ	ASR-Thallium (50)	Slightly low bias
	MND01-0344-0001 (T)		ASR-Thallium (71)	
	MND01-0344-0001 (D)		ASR-Thallium (71)	
	MND01-0607-0001 (T)		ASR-Thallium (71)	
	MND01-0607-1001 (D)		ASR-Thallium (69)	
	MND01-0607-1001 (T)		ASR-Thallium (72)	
	MND01-0607-1001 (D)		ASR-Thallium (69)	
	MND01-0607-0001 (D)		ASR-Thallium (84)	
	MND01-0344-0001 (T)	UJ	ASR-Selenium (76)	
	MND01-0344-0001 (D)		ASR-Selenium (72)	
	MND01-0607-0001 (T)		ASR-Selenium (84)	
	MND01-0607-0001 (D)		ASR-Selenium (84)	
	MND01-0607-1001 (D)		ASR-Selenium (83)	
	MND01-0151-0001 (T)		ASR-Selenium (73)	
	MND01-0151-0001 (T)	UJ	Thallium - Poor spike recovery	
	MND01-0151-0001 (D)		ASR-Selenium (78)	

B.4. Data Quality Assessment: Spring

Appendix B.4 addresses assessment of data qualifications assigned during data validation of the spring sample results and the two samples collected during the fall of 1994. Although the validators qualified a large number of data points, 99 percent of the data are usable, as indicated in Appendix B.1.

Validators use QCCs to monitor sampling and analysis at a process level. When QCCs are outside a specified criteria, a corrective action should be taken in the process. When a corrective action is not possible or is not taken, validators can often use QCCs to evaluate the possible error associated with the reported results. QCCs are typically evaluated during data validation and applied to the affected samples. Examples of QCCs include surrogate recoveries, matrix spike recoveries, and percent differences for calibration curves. When validators noted QCCs outside criteria, the validators applied data qualifiers and subqualifiers following the guidelines presented in Appendix H of the OU9 QAPP. Table B.4.1 summarizes the qualifiers used. Because the validation subqualifiers are not used in the report, they are not discussed. The qualified data and the significance of the qualifications are then assessed to determine whether the qualification affects the use of the data for the intended purpose.

Separate subsections present the qualifications for each laboratory analysis. Appendix B.5 contains tables summarizing the qualifications. Although the summary tables are extensive and list many qualifiers for each analysis, actually only a few analytes have been affected. For example, semivolatiles include 67 individual analytes; when only one or two analytes are qualified, the percentage of qualified data is actually very small. In addition, many of the qualifications are minor and have a negligible impact on the data usability.

The following assessment of data usability of qualified results is limited to the data usage described in this report. The validators used the deficient QCCs to estimate the potential bias. The estimate typically takes the form of a multiplication factor that is applied to the reported result. The assigned factor has been used to establish a probable upper limit to the sample concentration. If the upper limit should exceed an established action limit, then the data point is inconclusive and unusable. For other data uses, however, it may be inappropriate to accept all the QCCs as indicators of performance. For example, one of the continuing calibration checks (CCC) for volatiles, which affected the blind PE sample, was very poor and probably would have resulted in the PE result being rejected. The associated PE sample, however, was unaffected and the QCC was a false indicator.

The following sections present the results of the data assessment and a discussion of the data validation qualifiers for each type of analysis.

B.4.1. Volatiles

For the spring 1994 samples, the laboratory performed two types of analyses for volatiles: Method 8030 and Method 8021. The laboratory that conducted the analysis of samples collected in fall 1994 could not perform the QAPP-specified analyses for volatiles. Instead, the laboratory used Method 8260 for acetonitrile/acrylonitrile and the CLP SOW OLM01.8 for volatile analysis.

Because different deficiencies were reported for each method of analysis, the analyses are discussed separately below.

B.4.1.1. Organic Volatiles - Method 8030

During the validation of the organic volatiles by Method 8030, the validators identified the following two types of QCC deficiencies:

1. CCC outside acceptance criteria.
2. End of calibration check standards not analyzed.

Continuing Calibration Checks
The laboratory analyses included CCC after every 10 samples to confirm the continued stability of the calibration curve. The QAPP specifies that the percent difference calculated from the CCC must be less than or equal to 15 percent for each analyte. For consistency with SW-846, the percent difference requirement is expressed as percent recovery. The comparable percent recovery requirement is 85 to 115 percent recovery.

A total of 24 samples was affected by CCC out of criteria. Six of these samples were affected by recoveries below the acceptance criteria of 85 percent. Two samples (MND01-0370-1001 and MND01-0306-0001) were affected by an acrylonitrile recovery of 83.8 percent and four samples (MND01-0314-0001, MND01-0710-3001, MND201-0322-0001, and MND20-0326-0001) were affected by recoveries of 51 percent for acrylonitrile and 52 percent for acetonitrile. The validators qualified these analytes as estimated (UJ), and they may be biased low. Since all the associated sample results were reported nondetect, it is possible that near-detection-limit concentrations are suppressed. To compensate for the possible suppression of analytes concentrations, a factor, based on the continuing calibration recovery, can be applied to the data. If the factor raises the adjusted quantitation limit above an action level, then the data will be inconclusive and unusable. If the adjusted quantitation limit is below an action limit, then the data are usable. Data results associated with continuing calibration recoveries equal to or greater than 50 percent have been judged usable, although the quantitation limit should be evaluated at twice the reported value.

Eighteen samples were affected by CCC above acceptance criteria of 115 percent. The recoveries ranged from 115 percent to 120 percent. The validators qualified the associated analytes as estimated (UJ) during validation and they may be biased high. Since all reported results were nondetect and a positive bias does not affect a nondetect, the CCC recoveries above 115 percent had no impact on the data usability.

End-of-Calibration-Check Standard
A calibration check is also analyzed at the end of an analytical sequence to confirm the continued stability of the calibration curve. Nine samples were affected by an end-of-calibration-check standard being lost due to hardware failure. The validators qualified all samples as estimated (UJ). The laboratory analyzed a continuing calibration standard the following day. Since linearity was met the following day and all reported values were nondetect, WESTON believes

the impact to be minimal. A potential degree of bias, however, cannot be calculated or assessed for this type of QCC deficiency.

B.4.1.2. Organic Volatiles - Method 8021

During the validation of the organic volatiles by Method 8021, the validators identified seven types of QCC deficiencies:

1. 2-chloroethylvinyl ether deteriorated due to sample preservation.
2. Continuing calibration criteria outside acceptance criteria.
3. The field duplicate criteria exceeded (one sample).
4. One surrogate recovery below the acceptance criteria.
5. One result above the linear range of the calibration.
6. One result outside the retention time window.
7. Twenty-three detected results exceeded the percent difference requirement of 25 percent between the primary and confirmation columns.

2 - Chloroethylvinyl Ether Deterioration

The laboratory reported that 2 - chloroethylvinyl ether hydrolyzed due to sample preservation and could not be qualitatively or quantitatively identified. Appendix B.1 discusses the compound deterioration. The deficiency is the result of a required preservation step and affected all but one sample. The only impact is the loss of data for the compound. The validators did not reject (R) sample MND20-0354-2001 because it was not preserved with acid. Since the sample is a trip blank, there is little effect on the data.

Continuing Calibration Checks Outside Criteria

The laboratory analyzed CCC after every 10 samples and at the end of an analytical sequence to confirm the continued stability of the calibration curve. The QAPP specifies that the percent difference calculated from the CCC must be less than or equal to 15 percent. For consistency with SW-846, the percent difference requirement will be expressed as percent recovery. The comparable percent recovery requirement is 85 to 115 percent recovery. During the analysis of the volatile organic samples by Method 8021, the continuing calibration percent recoveries were outside QAPP criteria (DOE 1993). The CCC deficiencies can be divided into three categories:

1. CCC results that were outside the QAPP 85 to 115 percent recovery requirement, but within the USEPA SW-846 (1992) guidance for Methods 8010 and 8020.

2. CCC results that were outside the QAPP 85 to 115 percent recovery requirement and are not included in SW-846 (1992) guidance for Methods 8010 and 8020.

3. CCC results that were below the SW-846 (1992) guidance.

Continuing Calibration Results That Complied with USEPA SW-846
The laboratory appears to have complied with USEPA SW-846 (1992) Methods 8010 and 8020 continuing calibration requirements summarized in Table B.4.2. The laboratory thus systematically failed to comply with the QAPP continuing calibration percent difference requirement of 85 to 115 percent, which was derived from earlier guidance, i.e., USEPA SW-846 (1986). The more current revision of SW-846 relaxed the continuing calibration requirement for both Methods 8010 and 8020, but not for Method 8021. However, Method 8021 is a composite of Methods 8010 and 8020, and WESTON believes that the application of the 1992 criteria did not greatly affect the data quality. The sample results qualified because of CCC not meeting the 1992 guidance are not included in Appendix B.5 nor discussed individually in the following text. These qualified results, however, are usable.

Continuing Calibration Results Not Included in SW-846 (1992) Guidance
In the revised 1992 guidance for Methods 8010 and 8020, several of the QAPP analytes were not included in the CCC recovery table. Table B.4.3, Range of Continuing Calibration Results Not in SW-846, presents the percent recovery range for analytes not included in the 1992 guidance. Appendix B.5 summarizes by sample the impact of the exceeded percent difference for the affected analytes. The validators qualified the affected analytes as estimated (J/UJ) during validation. Since a positive shift or bias does not affect a nondetect and results in a conservative value for detected analytes, the CCC recoveries greater than 115 percent had little impact on the data usability.

Sample results associated with continuing calibration recoveries less than 85 percent may be biased low. For nondetect results near detection limit, concentrations may be suppressed. To compensate for the possible suppression of analyte concentrations, a factor, based on the continuing calibration recovery, can be applied to the data. If the factor raises the quantitation limit or the detected value above an action level, then the data will be inconclusive and unusable. If the raised value is below an action limit, then the data are usable. Data results associated with continuing calibration recoveries greater than or equal to 50 percent have been judged usable, though the quantitation limit should be evaluated at twice the reported value.

Continuing Calibration Recoveries Outside 1992 Guidance Acceptance Limits
Some of the qualified results were associated with CCC that were outside the limits specified in the SW-846 1992 guidance table. Appendix B.5 summarizes these results by sample. In all cases, where the criteria were exceeded for compounds included in the SW-846 (1992), the reported results were nondetect.

Since a positive bias does not affect a nondetect result, the CCC recoveries greater than the 1992 guidance had no impact on the data usability.

Sample results associated with continuing calibration recoveries less than the 1992 guidance may be biased low. Since the associated sample results were all reported nondetect, the possibility exists that near-detection-limit concentrations are suppressed. These data can be evaluated using a factor based on the continuing calibration recovery just like the analyses that were not included in the 1992 guidance. Data results associated with continuing calibration recoveries greater than or equal to 50 percent have been judged usable, though the quantitation limit should be evaluated at twice the reported value.

Field Duplicate Relative Percent Difference
The laboratory reported one field duplicate result outside the criteria for samples MND20-0347-0001 and MND20-0347-1001. The relative percent difference for trichloroethene was 35 percent. The validators qualified the associated result estimated (J) in the samples. Since only one compound in the sampling event was reported with an exceeded percent difference for a duplicate, no other data qualifications were necessary and the qualified data are usable.

Surrogate Recovery
The laboratory reported one surrogate recovery outside criteria for the sample MND01-0155-2001. The surrogate 1,4-dichlorobutane was reported at a recovery of 59 percent, which is slightly outside the acceptance range of 60 to 140 percent. The validators qualified the sample results as estimated (UJ) and the data may be biased low. Because this sample is a trip blank and the bias is minimal, the low surrogate recovery should not affect the data usability.

Calibration Range
The result for trichloroethene for sample MND01-0305-0001 slightly exceeded the linear calibration range and a dilution was not performed. The validators qualified the value as estimated (J) during validation. Since the top of the calibration range was 25 μg/L and the result for this sample was 26 μg/L, the impact is believed to be minimal. A potential degree of bias, however, cannot be calculated or assessed for this type of QCC deficiency.

Retention Time
The result for o-xylene in sample MND01-0701-0001 exceeded the retention time window criteria on the confirmation analysis. Because xylenes are reported as total and the contribution of the ortho isomer was in question, the validators qualified the value as estimated during validation. This sample was the blind PE sample and the result was accurately quantitated for xylenes. Therefore, WESTON believes that the impact from this QCC deficiency is minimal and the data are usable.

Confirmation Analysis Percent Difference
A second analysis is run for all samples with detected compounds for qualitative confirmation. If a compound is qualitatively confirmed, then a value is calculated for the confirmation analysis and compared to the primary analysis. Validation includes calculating the percent difference between the two analyses. The validators qualified as estimated (J) any analyte with a percent difference greater than 25 percent. Twenty-six results in 22 samples were qualified because of percent differences up to 90 percent. Three of these results were in the blind PE sample, MND01-0701-0001, and quantitation was not affected by the increased percent difference. For the remaining samples, the true value for the qualified analytes probably lies somewhere between the two results. The higher of the two values should be used when comparing results to an action limit (Table B.4.4, Method 8021 Confirmation Results Summary).

B.4.1.3. Organic Volatiles - Method 8260

The laboratory used to analyze the two samples collected in the fall of 1994 could not perform method 8030 for acetonitrile and acrylonitrile. Per ISCPN-019, the laboratory was permitted to use Method 8260 for the analyses. Since the quality control imposed was consistent and the reporting limits were comparable with those obtained in the spring 1994 sampling results, the results of the Method 8260 analyses are considered comparable for the program.

The only QCC deficiency identified during the validation of the organic volatiles by Method 8260 was exceeded holding time. The analyses exceeded holding time by three days. This deficiency may affect the sample results, which were nondetect and biased slightly low; the bias should be considered when comparing the quantitation limit to action limits. The degree of the bias cannot be determined from this QCC deficiency.

B.4.1.4. Organic Volatiles - CLP SOW OLM01.8

The laboratory that conducted the analysis of the two samples collected in the fall of 1994 could not perform Method 8021 for volatile organic compounds. Per ISCPN-019, the laboratory was permitted to use CLP SOW OLM01.8 for the analyses. Since the quality control imposed was slightly different and the reporting limits were higher than those obtained with Method 8021, the volatile results for the two additional samples may not be comparable with the spring 1994 sampling results. However, because the data are being used only for well characterization, overall data impact should be minimal.

During the validation of the two samples for organic volatiles by CLP SOW OLM01.8, the validators identified three QCC deficiencies:

1. Initial calibration criteria outside of acceptance criteria.
2. Continuing calibration criteria outside of acceptance criteria.
3. Trip blank contamination.

Initial Calibration Results Outside of Criteria
The initial calibration criteria of <30% RSD was exceeded for acetone and 2-butanone. Four sample results were affected as detailed in Appendix Table B.5.1. Because the associated results were non-detect, the data is minimally impacted and data are usable.

Continuing Calibration Criteria
Continuing calibration check samples are required to be within +/- 25% difference of the true value. This criteria was exceeded for three compounds: chloromethane (-68.5%), chloroethene (-36.1%), and acetone (30.6%). The results for chloromethane and chloroethene may be negatively biased and the bias should be considered when comparing the reported quantitation limits to action limits. A positive percent difference has no significant impact on data quality when associated with a non-detect result. Therefore, for acetone, the data quality was not impacted.

Trip Blank Contamination
Positive results for dichloromethane and trichloromethane were qualified non-detect (U) in sample MND01-0374-0001, due to trip blank contamination. The qualified results reported were less than the CRQL, therefore the data usability is minimally impacted.

B.4.2. Semivolatiles

During the validation of the semivolatile data packages, the validators identified the following seven types of QCC deficiencies:

1. Method blank contamination with target analytes.
2. Surrogate recoveries below the acceptance criteria.
3. Holding time exceeded (one sample).
4. Laboratory control sample recoveries outside acceptance criteria.
5. Field duplicate relative percent difference greater than 25 percent.
6. Initial calibration percent relative standard deviations greater than 25 percent.
7. Continuing calibration relative percent differences greater than 25 percent.

Method Blank Contamination
Some method blanks were contaminated with phenol, di-n-butylphthalate and bis (2-ethylhexyl) phthalate. The concentrations for these contaminants in all of the affected blanks were less than the quantitation limit of 10 μg/L. Table B.4.5, Semivolatile Blank Contaminant Levels, summarizes the minimum and maximum detected blank concentration. The phthalate compounds are common laboratory contaminants, and the validators qualified the sample results less than 10 times the blank concentration as nondetect (U). Also, the validators qualified affected sample results less than five times the phenol concentration as nondetect (U). Because the contaminant levels were so low and the affected sample

concentrations were below the Contract Required Detection Limits (CRQLs), sample results the validators qualified as nondetect (U) at the CRQL do not impact the data usability.

Surrogate Recoveries
One sample, MND01-0130-0001, had surrogate recoveries below acceptance limits for all surrogates. The sample was reextracted outside the holding time, and the surrogate recoveries were within acceptance criteria, indicating the low surrogate recovery was due to laboratory handling. The original sample was rejected (R) during validation and the data are unusable. The reextracted sample data are usable as qualified for holding time.

Holding Time
The reextraction for sample MND01-0130-0001 exceeded the holding time by 8 days, and all results were qualified estimated (UJ). The results may be biased low and the bias should be considered when comparing the quantitation limit to action limits. The degree of the bias cannot be determined from this QCC deficiency.

Laboratory Control Sample Recoveries
Laboratory control samples are used to evaluate target analyte performance per batch and to assist in assessing matrix spike performance. When matrix spike recoveries are outside acceptance limits and laboratory control sample recoveries are acceptable, the condition supports sample matrix interference. When both matrix spike and laboratory control sample recoveries are low or high, the condition indicates a possible laboratory performance problem. One laboratory control sample had a low recovery for 1,4-dichlorobenzene (35 percent) affecting three samples (MND01-0156-0001, MND01-0156-1001, and MND20-0330-0001). Results associated with the poor control sample recovery were qualified estimated (UJ) to indicate a potential bias. However, the degree of correlation between a laboratory control sample and the sample data has not been determined. Because the degree of correlation between the samples and the laboratory control sample is indeterminate and the review of the laboratory control sample recoveries revealed no pattern, affected sample results are usable.

Field Duplicate Results
The field duplicate results for the semivolatile compounds were acceptable with one exception. Because samples MND20-0386-0001 and MND20-0386-1001 for benzoic acid exceeded the percent difference criteria of ± 25 percent, the validators qualified these samples as estimated (UJ, J). Since benzoic acid was the only compound affected and the results were at or below the CRQL, the variance is not considered significant. For the purpose of evaluating the sample location, the larger of the two values should be used.

Initial Calibration
The percent RSD is used to evaluate the linearity of a calibration curve. When the RSD exceeds 25 percent, the accuracy of the calibration curve may be affected. The RSD criteria were exceeded for nine compounds - benzoic acid (27.8 percent), bis (2-ethylhexyl) phthalate (41.8 percent), butylbenzylphthalate

(39.2 percent), carbazole (39.1 percent), 3,3'-dichlorobenzidine (37.4 percent), di-n-butylphthalate (33.9 percent), 4-chloroaniline (55.7 percent), N-nitrosodiphenylamine (40.1 percent), and di-n-octylphthalate (49.4 percent) – and affected 17 samples. The nine compounds were qualified estimated (UJ) in the affected samples. Because the analytes were reported nondetected in the samples, the decreased accuracy quantitating the sample results does not significantly affect the usability of the data.

Continuing Calibration Checks
Laboratories use CCC to verify the stability of the initial calibration curve. The response factors of target analytes included in the check solution must have a percent difference of less than or equal to 25 percent. When the percent difference is greater than 25 percent, the change indicates a drift in calibration curve for an individual analyte. Table B.4.6, Semivolatiles Exceeding Continuing Calibration Criteria, summarizes the range of percent differences outside the criteria per analyte. A positive percent difference indicates a positive shift and, consequently, a positive sample result bias. A negative percent difference indicates a negative shift and, consequently, a negative sample result bias. All the sample analytes that may have been affected by the shift in calibration curves were reported by the laboratory as nondetect. Because a positive calibration curve bias does not affect nondetect results, all results associated with positive percent differences are usable.

The validators qualified some nondetect samples as estimated (UJ) because of negative percent differences. As summarized in Table B.4.6, the CCC ranged from -90.6 to -26.0 percent. When action limits are determined, the analyte quantitation limit modified for the potential error can be compared to the action limit to determine the usefulness of the data. If the modified quantitation limit exceeds the action limit, then the data are not usable.

B.4.3. Pesticides/PCBs

The validators identified the following three types of QCC deficiencies during the validation of the pesticide/PCB data packages:

1. Surrogate recoveries below the acceptance criteria of 60 percent.

2. Initial calibration percent relative standard deviations greater than 20 percent.

3. Continuing calibration relative percent differences greater than 25 percent.

Surrogate Recoveries
Surrogate recoveries below 60 percent resulted in the qualification of 35 samples. The validators rejected (R) three of these samples (MND01-0115-0001, MND01-0304-0001, and MND01-0120-0001) because of surrogate recoveries below 10 percent for DCB. The laboratory reextracted all three samples with similar results, indicating the possibility of matrix interference. The data are unusable, but resampling and analysis by the same method are unlikely to yield better results.

The validators qualified eight samples as estimated (UJ) because of TCMX surrogate recoveries below 60 percent and DCB surrogate recoveries within acceptance limits. The surrogate recoveries for TCMX in these samples ranged from 50 to 55 percent. Since these samples had only one surrogate outside the acceptance criteria and the largest variance from the acceptance criteria was only 10 percent, the data are usable. The decision to use these data is consistent with previous investigations that did not qualify data when only one of the surrogates was outside the criteria with a recovery greater than 10 percent.

The PE sample (MND01-0701-0001) also had surrogate recovery outside the criterion for TCMX. It was low (40 percent) on one column and high (130 percent) on the other column. This appeared to have no effect on the sample since all reported compound concentrations were within the recommended acceptance ranges for the PE sample.

The validators qualified another 10 samples as estimated (J, UJ) because of DCB recoveries below 60 percent and TCMX recoveries within acceptance criteria. The DCB recoveries for these samples ranged from 35 to 55 percent. Since these 10 samples had only one surrogate outside acceptance criteria, the data are usable. The decision to use these data is consistent with previous investigations that did not qualify the data when only one of the surrogates was outside the criteria with a recovery greater than 10 percent.

The validators qualified the other 14 samples as estimated (UJ) because of surrogate recoveries being below the 60 percent acceptance limit. The surrogate recoveries for TCMX ranged from 40 to 55 percent and from 10 to 55 percent for DCB. Since both surrogates were below criteria, the data are probably biased low. Data are usable for comparison to an action limit provided the action limit is greater than 2.5 times the quantitation limit for the specific analytes.

Initial Calibration
The laboratory uses the percent RSD to evaluate the linearity of a calibration curve. When the RSD exceeds 20 percent, the accuracy of the calibration curve may be affected. The RSD criterion was exceeded for 3 compounds: α-BHC (21 percent), 4,4'-DDE (22, 24, and 26 percent), and 4,4,'-DDT (26 percent) and affected 26 samples. The three compounds were qualified estimated (UJ) in all but one sample. Sample MND01-0701-0001 (PE sample) had a positive result for 4,4',-DDE which was qualified estimated (J). Because the PE sample had a known quantity of 4,4',-DDE and the recovery was well within the acceptable range, it can be seen this sample was not affected by the decreased accuracy. The other analytes in the affected samples were reported nondetected and the decreased accuracy quantitating the sample results does not significantly affect the usability of the data.

Continuing Calibration Check
The laboratory analyzes a CCC every 10 samples to verify the stability of the calibration curve. The laboratory evaluates the CCC by determining the RPD. If the RPD is greater than ± 25 percent, then the accuracy of the analyte quantitations determined from the calibration curve may be affected. The RPD

criteria were exceeded for β-BHC (33 percent). Eight samples were affected; however, because the analyte was not detected in these samples and the RPD indicates a positive bias, the calibration curve variance does not significantly affect the usability of the data.

B.4.4. Explosives

During the validation of the explosives data packages, the validators identified the following six types of QCC deficiencies:

1. Continuing calibration percent recoveries less than 85 percent.
2. Continuing calibration percent differences greater than 115 percent.
3. Laboratory control sample recoveries less than criteria.
4. Surrogate recoveries less than criteria.
5. Exceeded holding times.
6. Method blank contamination.

CCCs Less Than 85 Percent
CCCs are performed to confirm the stability of the calibration curve. The CCC was evaluated based on percent recovery. When the percent recovery is less than 85 percent for an analyte, the associated analyte results may be biased low. Five sample results were qualified estimated (UJ) for 2A-DNT because of a CCC percent recovery of 77 percent. The results for these five samples may be biased slightly low. The data results for 2A-DNT in these samples are usable, although the quantitation limit should be evaluated at 1.3 times the reported value.

CCC Recoveries Greater than 115 Percent
When the CCC recovery for an analyte is greater than 115 percent, the check indicates the analyte result in associated samples may be biased high. Three analytes were reported with CCC recoveries greater than 115 percent. The recoveries ranged between 116 percent and 137 percent. Samples results associated with these recoveries were qualified estimated (UJ). Since the associated results were reported nondetect, the data are unaffected by the potential positive bias and are usable.

Laboratory Control Sample
LCSs are used to evaluate target analyte performance per batch and to assist in assessing matrix spike performance. When matrix spike recoveries are outside acceptance limits and laboratory control sample recoveries are acceptable, the condition supports sample matrix interference. When both matrix spike and laboratory control sample recoveries are low or high, the condition indicates a possible laboratory performance problem. Table B.4.7 - Laboratory Control Sample Recoveries, provides a summary of the noncompliant laboratory control sample recoveries by laboratory control sample identification. Appendix B.5 summarizes the samples affected by the noncompliant recoveries.

As indicated in the table, all noncompliant recoveries were below criteria and indicate samples in the associated laboratory batch may be biased low for the analyte. Since the associated sample results were reported nondetect and qualified estimated (UJ), the reported quantitation limit should be evaluated taking into account the potential negative bias. The negative bias is not expected to impact data use.

Surrogate Recoveries
Two surrogates are used for evaluating explosives: nitroglycerin and 4-nitrotoluene. 4-nitrotoluene is used to evaluate the nitroaromatic explosive compound and nitroglycerin is used to evaluate PETN.

The laboratory reported four 4-nitrotoluene surrogate recoveries below criteria. The validators rejected (R) the nitroaromatic results for MND20-0333-0001 because of a surrogate recovery less than 10 percent. The other three surrogate recoveries were reported at 45 percent, 30 percent, and 46 percent in samples MND01-P027-0001, MND20-0328-0001, and MND20-0332-0001, respectively, and the validators qualified the associated results as estimated (UJ).

These two recoveries indicate a potential negative bias. The data are usable; however, the quantitation limits should be evaluated at two times the reported value for comparison to the action limits.

The laboratory reported six nitroglycerin surrogate recoveries as below criteria, indicating a potential negative bias. Of the six, one recovery was reported at 0 percent and resulted in the rejection (R) of the PETN result for MND01-0701-0001. Because MND01-0701-0001 was the PE sample and did not contain PETN, the poor recovery does not affect the data. The other five nitroglycerin surrogate recoveries ranged between 14 and 26 percent, summarized by sample in Table B.4.8. The validators qualified these results as estimated (UJ). Because these recoveries are very low, the associated nondetect data may be severely negatively biased. Furthermore, these samples represent a single laboratory preparation batch, and the poor recoveries may be attributable to poor laboratory technique. For these two reasons, the data are unusable.

Holding Times
The laboratory exceeded the holding time for two samples, the PE sample and the reextract of sample MND20-0322-0001. Because the PE result was reported within the recommended acceptance criteria, the exceeded holding time does not appear to have affected the result. The holding time for MND20-0322-0001 was exceeded by 24 days and was rejected (R). The original result for MND20-0322-0001 was reported.

Method Blank
Two samples were affected by positive method blank concentrations of RDX (0.92 μg/L) and 2,6-dinitrotoluene (5.9 μg/L).

The positive results for these two analytes for samples MND01-0374-0001 and MND20-0392-0001 were qualified as non-detect and the associated detection limit is equivalent to the CRQL.

B.4.5. Inorganics

Although cyanide is part of CLP inorganics, the data assessment of cyanide is discussed under anions. This section discusses only the results for metals performed by CLP ILM3.0 and QAPP Modification A. The validators identified the following eight types of QCC deficiencies during the validation of the inorganic data packages:

1. Positive or negative blank results associated with sample results.
2. Analytical spike recoveries outside acceptance limits.
3. Matrix spike recoveries below the acceptance limit.
4. Method of standard addition correlation less than acceptance limit.
5. Serial dilutions with percent differences greater than 10 percent or not performed as required by the method.
6. Unverifiable analytical spike recovery.
7. Unverifiable sample result.
8. Field duplicate percent differences outside criteria.
9. Laboratory duplicate percent differences outside criteria.
10. ICP interference masking results.

Blank Contamination

Blank results caused the greatest number of data points to be qualified for metals. The reported blank results were both positive and negative. Positive blank results are indications of laboratory contamination, and negative blank results are indications of negative bias. Table B.4.9, Range of Blank Results for Metals, summarizes the reported blank results by analyte. The laboratory reported that aluminum, beryllium, iron, lithium, vanadium, and zinc were most frequently found in the blanks as positive or negative results.

When positive results were reported in the blanks, associated positive sample results that were less than five times the blank concentration were qualified nondetect (U). The nondetect validation qualifier affects the data by raising the quantitation limit. Sample results qualified on the basis of blank contamination below the QAPP quantitation limit are usable. Since the QAPP specifies blanks must not contain target analytes greater than the PQL, which is equivalent to the QAPP quantitation limit, any results associated with contaminant levels below the PQL will meet the project goals. Of the analytes with positive blank results, only five analytes were reported with concentrations greater than the PQL during the

investigation: aluminum, lithium, tin, vanadium, and zinc. Table B.4.10 summarizes the five analytes, number of samples qualified, number of samples qualified above the quantitation limit, and the QAPP quantitation limit for each of the analytes.

Samples qualified as nondetect above the quantitation limit must be compared to an action limit. If the nondetect result is greater than an action limit, then the data are inconclusive and unusable. Action limits had not been assigned when this report was drafted and the data were assumed usable. Samples qualified at concentrations below the quantitation limit are usable.

When negative results are reported for blanks, associated sample results are qualified estimated (UJ,J) during data validation. Unlike positive results, it is not possible to assess the degree of bias associated with negative results. Negative results are often the result of positive instrument responses far below the functional calibration range of the instrument and represent an anomaly of the calibration curve. For the purposes of these data, results associated with negative blank concentrations are usable.

Analytical Spike Recoveries
Sample digestates analyzed by GFAA spectrometry must be spiked with the target analyte prior to analysis. The post-digestion spike or analytical spike is used to evaluate both laboratory performance and matrix suppression. Arsenic, antimony, selenium, lead, and thallium were analyzed by GFAA. The analytical spike recoveries were outside the acceptance limits (85 to 115 percent) for 55 arsenic samples, 13 antimony samples, 101 selenium samples, 30 lead samples, and 125 thallium samples, and validators qualified the associated sample results as estimated (J,UJ). The validators qualified two positive antimony sample results and two positive lead sample results as estimated (J) because of exceeded criteria (recovery greater than 115 percent). Because the antimony recovery criteria were exceeded by less than 3 percent, this exceedance probably does not indicate a significant positive bias. The lead recovery criteria were exceeded by 1 and 31 percent. The exceeded lead spike recovery of 1 percent does not significantly affect the sample result. If the lead sample result associated with the 31 percent recovery is near ($\pm$30 percent) an action limit, the value will need to be more closely evaluated taking into account the positive bias identified by the analytical spike.

The remaining spike recoveries were all below criteria (less than 85 percent). Results associated with recoveries greater than 70 percent but less than 85 percent indicate the possibility of a slight low bias. The bias, however, is probably too small to significantly affect data use. The results associated with recoveries less than 70 percent indicate a greater negative bias. At the time of report preparation, action levels had not been established for the affected analytes. When action levels are identified, the laboratory-reported values should be adjusted by a bias factor based on the reported analytical spike recoveries outside criteria to identify whether the data are usable for comparison with the assigned action limit.

Matrix Spikes
The laboratory uses matrix spikes to determine whether a sample matrix interferes with the precise and accurate quantitation of sample analytes. When the laboratory observes a repeated deficiency in several matrix spikes, the deficiencies may indicate a batch-wide matrix interference. Six matrix spike samples were submitted during the project for analysis; however, the laboratory actually performed additional matrix spike analyses using the groundwater samples. The additional matrix spike results were incorporated into the data validation and assessment procedures. The laboratory rejected (R) only 12 analyte results because of poor matrix spike recoveries (see Table B.4.11). The validators qualified as estimated (U, UJ) all other results associated with low matrix spike recoveries, and the data are usable.

In addition to reviewing the matrix spike recoveries as individual data points, the validators evaluated programmatic matrix spike recovery for the spring sampling event. The average matrix spike recoveries for thallium (soluble) and thallium (total) were 71 and 55.4 percent, respectively, with a standard deviation of less than 30 percent. Table B.1.4 in Appendix B.1 summarizes matrix spike recoveries and standard deviations. Considering the thallium matrix spike recoveries and the analytical spike recoveries for thallium, it is probable that a batch-wide bias is present. Based on the matrix spikes and analytical spikes, the reported concentration actually may represent about half of the total thallium concentration in the samples. No other average matrix spike recoveries were below 80 percent for both soluble and total analysis.

Method of Standard Addition
Laboratories use the method of standard addition to verify the concentration of an analyte when matrix interferences are suspected. The correlation coefficient determined through the method of standard addition must be greater than 0.995. When the coefficient requirement is not met, it indicates the reported result may be inaccurate due to matrix interferences. The method of standard addition requirement was not met for antimony in samples MND20-0326-0001 (soluble), MND01-0137-0001 (total), and MND01-0307-0001 (soluble). The degree of inaccuracy cannot be predicted from this type of QCC deficiency. If the reported values are near an action limit (factor of two), the results should be very closely reevaluated.

Serial Dilutions
Serial dilutions provide an indication of whether significant physical or chemical interference exists due to sample matrix effects. The laboratory performs this check when an analyte concentration exceeds 50 times the instrument-detection limit. The diluted sample result must be within 10 percent of the undiluted sample result. The validators qualified as estimated results associated with poor serial dilutions (percent differences greater than 10 percent). A degree of bias may be estimated, based on the percent difference presented with the qualifier in Appendix B.5. Table B.4.12 summarizes the affected laboratory batches and the affected analytes. Varying combinations of aluminum, barium, calcium, chromium, iron, magnesium, manganese, nickel, potassium, sodium, vanadium,

and zinc were affected in the samples. Since aluminum, barium, calcium, iron, magnesium, manganese, potassium, and sodium are likely to have extremely high action limits, the inaccuracy probably does not significantly affect these reported analyte concentrations. The results for other metals may be affected by this deficiency; however, until an action limit is assigned to which the data can be compared and the potential error further considered, the data are assumed usable.

Unverifiable Analytical Spike Recovery
For one sample, MND20-0320-0001 (soluble), the reported lead analytical spike recovery could not be confirmed, so the validators qualified the lead result as estimated. The potential bias associated with this QCC deficiency cannot be determined; however, the lack of the analytical spike data is inadequate justification for the rejection of the data point.

Unverifiable Sample Results
The validators rejected the sample result for lead in sample MND01-0117-0001 (total) because of an unverifiable laboratory result. As part of the data validation process, the data used to generate the sample results are used to recalculate reported sample results. If the recalculated result does not agree with the laboratory result, the validators reject the data. The data point is unusable.

Field Duplicate RPDs
Field duplicates are used to evaluate the representativeness of both field sampling and laboratory analysis. When the percent difference between the results reported for field duplicates exceeds 25 percent for waters, it indicates a potential problem achieving a representative sample. Of the 22 field duplicates submitted during the sampling event, the laboratory reported 20 of 22 duplicates with analyte percent differences greater than 25 percent. The validators qualified the affected analytes as estimated (J,UJ). Nearly all the percent differences were associated with sample analyte concentrations below or near the quantitation limit. Table B.4.13 summarizes the reported duplicate results that exceeded the percent difference criteria and also includes the QAPP quantitation limits. High variability between sample results reported near the quantitation limits is expected, and the assigned qualification does not affect data use. Furthermore, because it is assumed that analyte concentrations will eventually be compared to actions limits, the largest of the reported analyte concentrations for each affected sample should be used. The use of the largest values ensures the most conservative approach to evaluating the data. If the sample data are identified as a decision point, a second sample or the spring sampling data should be used.

Laboratory Duplicate Percent Difference
Validators use laboratory replicate percent differences to evaluate the precision of the laboratory. When the percent difference criteria are exceeded, the exceeded value indicates a problem with the precision of the reported value. When a criterion is exceeded for a large number of analytes in a large number of samples, then the check indicates that the laboratory handling practices are poor and all the data in the sampling event may be affected by the poor precision. During the second round of groundwater sweeps analyses, the validators qualified six samples because of exceeded replicate criteria. Table B.4.14, Table of Laboratory

Replicates, summarizes the instances of exceeded criteria for specific analytes. As indicated in the table, the criterion for aluminum was exceeded four times, and the criteria for antimony, copper, and zinc were only exceeded once. Because aluminum is a very common element and was frequently a laboratory blank contaminant, the higher incidence of poor replicate performance for this compound is not unexpected. Because fewer than 50 percent of the laboratory replicates for aluminum, antimony, zinc, and copper were reported with an exceeded criteria, the precision for the program probably is not affected.

ICP Interference
During ICP analysis, analyte concentrations are sometimes great enough to interfere with the analysis of other analytes. Whether the interference is positive or negative, the degree of the interference cannot be evaluated. The validators qualified as estimated (J, UJ) the data affected by ICP interference. Since the interference is inherent to the sample, the data are usable.

B.4.6. Anions

The validators identified four types of QCC deficiencies during the validation of the anion data packages:

1. Holding times were exceeded for select analytes.
2. Matrix spike recoveries were below 80 percent or above 120 percent.
3. Matrix spike/matrix spike duplicate relative percent differences were greater than 20 percent.
4. The field duplicate criteria were exceeded for select analytes.

Holding Times
The holding time for TDS was exceeded for two samples. Sample MND01-0123-0001 was analyzed 1 day outside the holding time and sample MND01-0607-0001 was analyzed 3 days outside the holding time. These samples were qualified estimated (J) during validation. Since TDS content is unlikely to change significantly when samples are properly stored at 4 °C and the holding times are not grossly exceeded, the usability of the data is not significantly affected.

Matrix Spikes
During the project, the laboratory analyzed six matrix spike pairs. In addition to these six field-specified matrix spikes, the laboratory initiated several matrix spike pairs on various analytes using the EG&G Mound samples. Laboratories perform matrix spikes to determine whether a sample matrix interferes with the precise and accurate quantitation of samples analytes. When a laboratory observes a repeated deficiency in several matrix spikes, the deficiencies may indicate a batch-wide matrix interference. Matrix interference may be biased either positive or negative. Negative bias is indicated by matrix spike recoveries less than 80 percent, and positive bias is indicated by matrix spike recoveries greater than 120 percent.

One sample, MND01-0071-0001, exhibited a low recovery for sulfate. The validators qualified as estimated (J) sample MND01-0071-0001, which had a recovery of 55.6 percent. The data from this sample are usable, but the bias should be considered when the value is compared to the action limit.

One sample, MND01-0310-0001, exhibited a high recovery for ammonia. The validators qualified as estimated (J) sample MND01-0310-0001, which had a recovery of 130 percent. For the purpose of comparing the reported value to an action limit, the data are usable.

Matrix Spike Percent Difference
The laboratory reported only the matrix spike pair for sample MND01-0071-0001 with a percent difference greater than 20. The percent difference for sulfate was 55.4 percent. The validators qualified the associated sample as estimated (J). Since only one incidence was observed, the effect is assumed to be specific to the sample and not to be representative of the sampling event. The sulfate result is usable as qualified.

Field Duplicate RPD
During the project, the laboratory analyzed eleven field duplicates. As many as four samples per method exceeded the relative percent difference criteria of 25 percent for a total of 18 out-of-criteria results. Eight of these results (one ammonia, one total cyanide, two nitrate/nitrite, two total phosphate, and two total soluble solids results) were outside of criteria because one of the two samples in the duplicate pair was a nondetect. Another eight results (four total organic carbon, one fluoride, one total Kjeldahl nitrogen, one total phosphate, and one sulfate have one or both results within five times the detection limit. The validators qualified all associated analytes as estimated (J, UJ). The inconsistency in results between the duplicate pairs can be attributed to limitations associated with the proximity of the results to the method detection limit. The use of the data is not significantly affected.

Two analytes from one field duplicate pair were outside criteria, and the results were not close to the detection limit. For the pair MND20-0346-0001 and MND20-0346-1001, the chloride results had a relative percent difference of 54.6 percent and total dissolved solids results had an RPD of 50.8 percent. The validators qualified the analytes as estimated (J). Since only one duplicate pair was affected, the results could be attributed to the difficulty in collecting identical samples for a field duplicate pair and the qualified data are usable.

B.4.7. Radionuclides

During the validation of the radiological data packages, the validators identified the following three types of QCC deficiencies:

1. Blank contamination.

2. Field duplicate percent differences greater than four times the standard deviation.

3. Laboratory duplicate percent differences greater than four times the standard deviation.

Blank Contamination
The laboratory reported blank contamination for thorium-228, thorium-230, thorium-232, uranium-234, uranium-238, and americium-241. The validators qualified as estimated (J) the results associated with these contaminants, which were greater than the sample MDA and less than five times the activity reported for the blank. In all cases, the qualified results were below the QAPP-required quantitation limit, and the qualifications do not affect the usability of the data.

Field Duplicate Percent Differences
The field duplicate percent difference requirement was exceeded for many alpha isotopic nuclides. Table B.4.15 summarizes the reported sample activities and the multiple of standard deviation. The validators qualified as estimated (J, UJ) the associated results in both the field sample and its duplicate. All the reported results except plutonium-239 were below the QAPP quantitation limit, and the qualification does not significantly affect the intended data use. Because the plutonium results were very close to the requested quantitation limit of 0.01 pCi/L, the variability among the results is not unexpected and the data are usable. The plutonium-239 result should be evaluate at the highest reported concentration to provide a conservative estimate of the concentration of plutonium at the sample location.

Laboratory Percent Differences
The laboratory reported only sample MND20-0387-00001 with a laboratory duplicate standard deviation multiplier greater than four times the standard deviation for thorium-230 (see Table B.4.16). The associated value was qualified estimated (J) during validation. Since the reported result is far below the QAPP-required quantitation limit, the qualification does not affect the data and the data for the isotope is usable. In addition, sample MND20-0392-0001 exceeded duplicate criteria for potassium-40. The result was qualified as estimated (J) during validation and the qualification was extended to MND01-0374-0001 of the same batch. The data are usable.

Table B.4.1. Data Validation Qualifiers

Qualifier	Description of Data Qualifier
U	Indicates that the analyte was analyzed for but not detected above the reported sample quantitation limit.
J	Indicates the associated value is an estimated quantity.
UJ	The analyte was not detected above the reported sample quantitation limit, however the reported sample quantitation limit is an approximate value.
REJECT	Sample results were rejected based on validation criteria.

Table B.4.2. USEPA SW-846 (1992) Continuing Calibration Limits for Method 8010/8020

Analyte	Range (%R)
Benzene	77 - 123
Bromodichloromethane	76 - 124
Bromoform	74 - 127
Bromomethane	59 - 142
Carbon tetrachloride	69 - 132
Chlorobenzene	72 - 128
2-Chloroethylvinyl ether	77 - 123
Chloroform	60 - 140
Chloromethane	75 - 125
Dibromochloromethane	60 -140
1,2 - Dichlorobenzene	66 - 135
1,3 - Dichlorobenzene	70 - 130
1,4 - Dichlorobenzene	50 - 151
1,1 - Dichloroethane	70 - 121
1,2 - Dichloroethane	84 - 116
1,1 - Dichloroethene	72 - 129
trans - 1,2 - Dichloroethene	63 - 137
1,2 - Dichloropropane	64 - 136
cis - 1,3 - Dichloropropene	78 - 123
trans - 1,3 - Dichloropropene	74 - 126
Ethylbenzene	63 - 137
Methylene chloride	64 - 136
1,1,2,2 - Tetrachloroethane	49 - 151
Tetrachloroethene	70 - 130
Toluene	78 - 123
1,1,1 - Trichloroethane	71 - 129
1,1,2 - Trichloroethane	79 - 122
Trichloroethene	77 - 123
Trichlorofluoromethane	67 - 134
Vinyl chloride	69 - 132

Table B.4.3. Range of Continuing Calibration Results Not in SW-846

Analyte	Lower Range (% R)	Upper Range (% R)
Freon - 113	71	84.2
cis - 1,2 - Dichloroethene	117.4	118.2
Dibromomethane	77.0	115.5
1 - Chlorohexane	78.4	85
1,1,1,2 - Tetrachloroethane	115.5	115.5
1,2,3 - Trichloropropane	77.2	121
Bromobenzene	77.0	84.9
2 - Chlorotoluene	82.1	84.0
4 - Chlorotoluene	83.0	83.2
2,2' - Oxybis (1 - chloropropane)	64.3	135.4
Acetone	32.3	132.4
Carbon disulfide	50.2	142.6
Vinyl acetate	49.0	81.8
Methylethyl ketone	75.8	126.7
Methylisobutyl ketone	42.7	132.8
1,3 - Diethylbenzene	83.4	83.4
1,4 - Diethylbenzene	81.5	81.5

Table B.4.4. Method 8021 Confirmation Result Summary

Sample ID	Analyte	Primary (μg/L)	Confirm (μg/L)	% D
MND20-0388-0001	1,1,1-Trichloroethane	0.43	0.54	26
MND01-0370-0001	Chloroform	85	130	53
MND01-0370-1001	Chloroform	87	120	38
MND01-0397-0001	Trichloroethene	9.5	6.6	30
MND01-0306-0001	Trichloroethene	12	8.3	31
NMD01-0155-0001	1,1,1 - Trichloroethane	0.32	0.46	44
MND01-0305-0001	Carbon Tetrachloride	1.4	2.2	57
MND01-0375-0001	Trichloroethene	3.4	2.5	26
MND01-0701-0001	Benzene	31	19	39
MND01-0701-0001	Methylisobutyl ketone	33	20	39
MND01-0701-0001	Ethylbenzene	32	23	28
MND01-0111-0001	Chloroform	2.4	3.1	29
MND01-P027-0001	1,1,1 - Trichloroethane	0.30	0.48	60
MND01-0271-1001	Freon - 113	2.6	4.6	77
MND01-0271-1001	Trichloroethene	1.2	0.85	29
MND01-0071-0001	1,1,1 - Trichloroethane	1.0	1.9	90
MND01-0071-0001	Trichloroethene	2.7	2.0	26
MND01-0608-0001	Trichloroethene	5.3	3.6	32
MND01-0271-0001	Trichloroethene	1.3	0.83	36
MND01-0607-0001	Trichlorethene	1.4	1.0	29
MND01-0076-0001	Trichlorethene	1.6	1.1	31
MND01-0605-0001	Trichlorethene	5.7	3.7	35
MND01-0601-0001	Trichlorethene	3.5	2.3	34

Table B.4.5. Semivolatile Blank Contaminant Levels

Contaminant	Lowest Detected Concentration (μg/L)	Highest Detected Concentration (μg/L)
Phenol	0.8	0.8
Bis (2-ethylhexyl) phthalate	0.3	5.0
Di-n-butylphthalate	0.3	4.0

Table B.4.6. Semivolatiles Exceeding Continuing Calibration Criteria

Analyte	Minimum Percent Difference <-25 Percent	Maximum Percent Difference >25 Percent
Butylbenzylphthalate	-60.9	NA
4-Chloroaniline	NA	64.7
3,3'-Dichlorobenzidine	-51.4	64.2
Bis(2-ethylhexyl) phthalate	-83.6	25.2
Di-n-octylphthalate	-90.6	30.5
Carbazole	-68.6	NA
4-Nitroaniline	-39.3	NA
Benzoic Acid	-30.0	36.1
4-Nitrophenol	-28.7	30.8
2,4-Dinitrophenol	28.7	43.2
4,6-Dinitro-2-methylphenol	NA	30.6
2,2'-oxybis (1-chloropropane)	NA	28.9
Benzo(k)fluoroanthene	-29.6	NA
2-Nitroaniline	-28.6	NA
3-Nitroaniline	-26.0	44.6
Di-n-butylphthalate	-29.1	NA
Pyrene	-37.9	NA
2-Benzyl-4-chlorophenol	-32.5	NA
N-Nitrosodiphenylamine	NA	40.1

Table B.4.7. Explosives Laboratory Control Sample Deficiency Summary

Affected Lab Batches	LCS Id	TNT (%)	2,4-DNT (%)	1,3,5-TNB (%)	2A-DNT (%)
9403L801 9403L811	94LE0458-MB1	63	NA	NA	NA
9403L883 9403L884	94LE0514-MB1	NA	73	NA	NA
9404L036	94LE0630-MB1	73	NA	83	NA
9404L155 9404L174 9404L187	94LE0742-MB1	71	NA	61	68

Table B.4.8. Summary of Nitroglycerin Surrogate Recovery

Sample ID	Nitroglycerin (%)
MND01-0152-0001	20
MND01-0380-0001	22
MND20-0347-1001	26
MND20-0347-0001	22
MND20-0344-0001	14

Table B.4.9. Range of Blank Results for Metals

Analyte	QAPP Quantitation Limit (ug/L)	Range of Positive Values (ug/L)		Range of Negative Values (ug/L)	
		Maximum	Minimum	Minimum	Maximum
Aluminum	20	165	4.3	-67	-17
Antimony	10	3.5	3.5	-3.1	-2.4
Arsenic	10	3.4	1.1	-6.5	-2.1
Barium	200	NA	NA	NA	NA
Beryllium	1	0.8	0.2	-0.09	-0.09
Bismuth	150	NA	NA	NA	NA
Cadmium	5	4.4	2.7	NA	NA
Calcium	5000	39	0.87	NA	NA
Chromium	10	3.6	0.95	-6.0	-0.87
Cobalt	50	6.4	0.54	-5.1	-0.6
Copper	25	6.3	0.60	-4.6	-0.5
Iron	100	63	0.12	NA	NA
Lead	3	1.6	1.6	-2.3	-1.0
Lithium	100	140	13	-29	-12
Magnesium	5000	26	26	NA	NA
Manganese	15	5.6	3.1	-2.0	-1.0
Mercury	0.2	NA	NA	NA	NA
Molybdenum	20	12	6.1	-7.6	-7.6
Nickel	40	12	2.8	-18	-11
Potassium	5000	NA	NA	-739	-346
Selenium	5	NA	NA	-2.1	-0.9
Silver	10	NA	NA	-4.3	-1.2
Sodium	5000	177	177	NA	NA
Thallium	10	NA	NA	-10	-2.5
Tin	50	57	5.0	-24	-24
Vanadium	10	21	2.6	-2.3	-1.9
Zinc	20	45	0.9	-4.4	-4.4

Table B.4.10. Summary of Positive Blank Contaminants Above the PQL

Analysis	Number of Samples Qualified	Number of Sample Results > PQL	Greatest Qualified Concentration (μg/L)	PQL (μg/L)
Aluminum (S)	85	7	40.3	20
Aluminum (T)	62	14	62.6	20
Lithium (S)	65	3	271	100
Lithium (T)	65	6	271	100
Tin (S)	11	0	39.4	50
Tin (T)	16	0	37.1	50
Vanadium (S)	44	38	25.2	10
Vanadium (T)	40	33	21.9	10
Zinc (S)	82	2	37	20
Zinc (T)	75	4	34.8	20

S - Soluble
T - Total

PQL - Practical quantitation limit

Table B.4.11. Summary of Reject Values due to Matrix Spike Performance

Sample Id	Analyte	Matrix Spike Recovery (%R)
MND01-0314-0001 (T)	Thallium	12
MND20-0335-0001 (T)	Bismuth	0
MND20-0335-0001 (T)	Calcium	0
MND20-0335-0001 (T)	Chromium	0
MND20-0335-0001 (T)	Selenium	0
MND20-0335-0001 (T)	Silver	0
MND20-0335-0001 (T)	Thallium	0
MND01-0120-0001 (T)	Thallium	27
MND01-0381-0001 (S)	Thallium	20
MND01-0304-0001 (T)	Antimony	21
MND20-0392-0001 (T)	Selenium	0
MND20-0392-0001 (T)	Thallium	22

Table B.4.12. Summary of Batches Affected by Serial Dilution Errors

Laboratory Batch	Al	Ba	Ca	Cr	Fe	Mg	Mn	Ni	Na	V	Zn	K
9403L025			X	X	X							
9403L026			X			X						
9403L081		X	X		X	X	X					
9403L811		X	X		X	X	X					
9403L826									X			
9403L883	X	X	X		X	X	X		X			
9403L884		X				X	X					
9403L901		X			X	X	X		X			
9403L935			X				X					
9403L962									X			
9403L963									X			
9403L974		X	X		X	X						
9404L036		X	X				X					
9404L096	X	X		X	X	X	X			X	X	
9404L111			X			X						
9404L124		X	X			X						
9404L155		X	X						X			
9404L174			X			X						
9404L175			X		X	X	X	X	X			
9404L187				X	X		X	X			X	
94117			X									X

Table B.4.13. Field Duplicate Summary

Batch	Sample Id	Duplicate Sample Id	Analyte	Sample Result	Duplicate Result	Percent Difference	CRQL
9403L026	MND01-0138-0001 (T)	-1001 (T)	Copper	1.1 B	0.82 U	200	25
			Zinc	23.3	43.3	60	20
			Molybdenum	1.4 U	1.6 B	200	20
	MND01-0138-0001(S)	-1001(S)	Zinc	32.6	4.3 B	153	20
			Molybdenum	1.4 U	1.4 B	200	20
9403L081	MND01-0370-0001(T)	-1001(T)	Selenium	2.1 B	2.0 U	200	5
	MND01-0370-0001(S)	-1001(S)	Antimony	1.4 B	0.75 U	200	10
			Iron	80 B	153	62	100
9403L857	MND20-0346-0001(T)	-1001(T)	Aluminum	21	3.8 U	200	20
			Barium	47 B	127 B	92	200
			Calcium	150000	8300	57	5000
			Chromium	28	21	29	10
			Copper	0.50 U	1.0 B	200	25
			Iron	1300	220	200	100
			Lead	2.0 U	2.2 B	200	3
			Nickel	62	16	116	40
			Potassium	4900	2200	126	5000
			Sodium	220000	110000	65	5000
			Lithium	54 B	120	75	100
			Molybdenum	4.2 B	1.8 U	200	20
	MND20-0346-0001(S)	-1001(S)	Aluminum	10 B	3.8 U	200	20
			Barium	45 B	110 B	87.5	200
			Calcium	150000	7400	66.8	5000
			Copper	5.6 B	1.2 B	129	25
			Iron	1000	65 B	176	100
			Magnesium	52000	38000	31.4	5000
			Potassium	4900	19000	117	5000

Table B.4.13. (page 2 of 3)

Batch	Sample Id	Duplicate Sample Id	Analyte	Sample Result	Duplicate Result	Percent Difference	CRQL
9403L026	MND01-0138-0001 (T)	-1001 (T)	Copper	1.1 B	0.82 U	200	25
			Selenium	2.3	2.0 U	200	5
			Sodium	21000	95000	64.6	5000
			Vanadium	24	18	28.4	10
			Zinc	1.1 B	2.7 B	84	20
			Lithium	62 B	110	56.4	100
9403L884	MND01-0317-0001(T)	-1001(T)	Antimony	1.0 B	0.75 U	200	10
			Arsenic	2.0 U	2.6 B	200	10
			Copper	7.8 B	10 B	27.6	25
			Lead	5.9	24	122	3
			Bismuth	28 B	27 U	200	150
	MND01-0317-0001(S)	-1001(S)	Copper	0.69 B	0.50 U	200	25
			Molybdenum	1.8 U	1.8 B	200	20
			Vanadium	11.1	14.9	29	10
9403L962	MND20-0386-0001(T)	-1001(T)	Arsenic	2.3 B	2.0 U	200	10
			Chromium	1.1 B	3.7 B	200	10
	MND20-0386-0001(S)	-1001(S)	Antimony	1.1 B	0.75 U	200	10
			Beryllium	0.61 B	0.41 B	39	1
			Arsenic	2.7 B	2.0 U	200	10
9403L974	MND20-0347-0001(T)	-1001(T)	Chromium	19	7.2 B	90	10
			Copper	0.84 B	0.50 U	200	25
			Iron	124	85 B	38	100
			Nickel	61	44	31	40
			Cyanide	5.3 B	5.0 U	200	10
			Manganese	15	11 U	200	15

Table B.4.13. (page 3 of 3)

Batch	Sample Id	Duplicate Sample Id	Analyte	Sample Result	Duplicate Result	Percent Difference	CRQL
9403L974 (Continued)	MND20-0347-0001(S)	-1001(S)	Potassium	2600 B	4000 B	45	5000
			Silver	0.75 U	1.1 B	200	10
9404L053	MND01-0123-0001(S)	-1001(S)	Lead	1.7 B	0.6 U	200	100
			Tin	23 B	19 U	200	50
			Vanadium	16 B	12 U	200	10
	MND01-0123-0001(T)	-1001(T)	Nickel	12 B	10 B	140	40
9404L074	MND01-0128-0001(T)	-1001(T)	Copper	3.5 B	0.82 U	200	25
			Iron	40 B	29 U	200	100
			Lead	0.8 U	44	200	3
9404L111	MND01-0156-0001(T)	-1001(T)	Aluminum	150	220	39	20
			Iron	166	231	32.7	100
	MND01-0156-0001(S)	-1001(S)	Lead	4.0	0.8U	200	3
9404L124	MND01-0271-0001(T)	-1001(T)	Molybdenum	1.6 B	1.4 U	200	20
			Tin	8.7	4.8 U	200	50
9404L135	MND01-0157-0001(T)	-1001(T)	Bismuth	32 U	34.7	200	150
			Cobalt	1.1 B	0.98 U	200	50
			Copper	1.5 B	0.85 B	55	25
			Iron	10 B	17 B	49	100
			Nickel	2.3 U	3.2 B	200	40
	MND01-0157-0001(S)	-1001(S)	Antimony	0.6 B	0.58 U	200	10
			Copper	1.3 B	1.9 B	38	25
			Iron	7.8 B	32 B	122	100

Table B.4.14. Table of Laboratory Replicates

Batch	Sample Id	Analyte	Percent Difference
9403L811	-0309-0001	Aluminum	67
9403L901	-0318-0001	Aluminum	92
9404L053	-0335-0001 (T)	Aluminum	200
9404L111	-0156-0001 (T)	Aluminum	56
9404L053	-0335-0001 (T)	Zinc	200
9404L096	-0304-0001 (T)	Copper	25
94117	-0392-0001 (T)	Antimony	48

Table B.4.15. Radiological Field Duplicates Outside Criteria

Sample ID	Isotope	Initial Result	Replicate Result	Standard Deviation	Batch
MND01-0157-0001	Thorium-230	0.084	0.009	10.7	34994
MND01-0156-0001	Uranium-238	0.103	0.159	4.3	35017
MND01-0156-0001	Americium-241	0.008	0.019	5.4	35017
MND01-0271-0001	Plutonium-239	0.006	0.011	5.9	35017
MND01-0271-0001	Americium-241	0.001	0.025	12.3	35017
NMD01-0123-0001	Thorium-228	.051	.23	8.5	35056
MND01-0123-0001	Uranium-228	.074	.038	6.4	35056
MND01-0370-0001	Thorium-228	.056	-.01	19.1	35228
MND01-0370-0001	Thorium-230	.032	.38	11.3	35228
MND01-0386-0001	Thorium-228	0.154	0.035	8.4	35184
MND01-0386-0001	Thorium-230	0.050	0.097	4.3	35184
MND01-0386-0001	Thorium-232	0.305	-0.95	25.9	35184
MND20-0386-0001	Thorium-228	0.049	0.975	12.1	35184
MND20-0386-0001	Thorium-230	0.049	0.948	12	35184
MND20-0317-0001	Thorium-232	0.036	0.589	12	35184

Table B.4.16. Radiological Laboratory Duplicates Outside Criteria

Sample ID	Isotope	Initial Result	Replicate Result	Standard Deviation	Batch
MND20-0387-0001	Thorium-230	-0.039	0.030	10.2	35056
MND20-0392-0001	Potassium-40	366.0	102.0	113% RPD	3591

RPD - relative percent difference

B.5 Summary of Validation Qualifiers: Spring

B.5.1. Summary of Appendix Purpose

Appendix B.5 contains a per sample data qualification summary (Tables B.5.1 through B.5.8) of spring sample results and the two samples collected during the fall of 1994. The summary provides a data user sufficient information to quickly reassess a qualified data point, given a change to a data use or to an action limit. The appendix provides a list of qualified data points, the applied qualifier, the reason qualified, and a description of the probable data impact. WESTON derived the description of the probable data impact on the assumption that the data point will be compared to an action limit. If the data use is changed, then the impact assessment will probably be invalid. Because specific action limits had not been assigned at the time the impact statements were developed, the statements are very general and provide only a description of the direction of bias indicated by the QCC standard. All of the tables are subject to final error checking.

B.5.2. Description of Appendix Use

When an action limit has been assigned to an analyte and an analyte value in one of the samples being evaluated is qualified, the data user can reference this table to better understand the effect on the data. For example, if an action limit for chloride was set at 4.0 mg/L and a sample result was qualified estimated (J) at 2.5 mg/L, the data user could check the qualification in the appendix and might find an entry such as

9403L001 MND00-0000-0001 J MSR-Chloride (50%) Low bias

This entry indicates that the reported value may be biased low by 50 percent. To compare the result to an action limit, the data user would multiply the reported result (2.5 mg/L) by 2, resulting in 5 mg/L. Because the result is greater than the action limit, the data point is suspect and unsuitable for evaluating the extent of contamination. If the percent recovery had been 83 percent, the data point would have been considered usable.

Table B.5.1. Halogenated and Aromatic Volatiles by Gas Chromatography (Method 8021)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L010	MND20-0388-0001 MND01-0377-0001	UJ	CCC - 4-Methyl-2-pentanone (115%) CCC - Freon-113 (71) CCC - Vinyl acetate (77) CCC - Bromobenzene (84%) CCC - 2-Chlorotoluene (84%) CCC - Carbon disulfide (78%)	No significant impact
	MND01-0376-0001 MND01-0137-0001 MND01-0378-0001 MND20-0388-2001 MND01-0712-3001	UJ	CCC - Freon 113 (79%) CCC - Vinyl acetate (75.8%)	Possible negative bias
	MND20-0388-0001	J	CON - 1,1,1-Trichloroethane (>25%)	Inaccuracy
	MND01-0137-0001	J	CON - Trichloroethene (>25%)	Inaccuracy
9403L025	MND01-0118-0001	UJ	CCC - Freon-113 (74.7%)	Possible negative bias
			CCC - Bromoform (117.5%)	No significant impact
			CCC - Vinyl acetate (75.8%)	Possible negative bias
	MND01-0118-2001	UJ	CCC - Freon-113 (74.4%) CCC - Dibromomethane (84.9%) CCC - 1,2,3-Trichloropropane (80.3%)	Possible negative bias
			CCC - Bromobenzene (84.3) CCC - 2,2'-Oxybis (1-chloropropane) (84.8%) CCC - Vinyl acetate (75.3%) CCC - 2-Butanone (82.7%) CCC - 4-Methyl-2-pentanone (47.0%)	Possible negative bias
9403L026	MND01-0138-0001 MND01-0138-1001 MND20-0334-0001	UJ	CCC - Freon-113 (74.4%) CCC - Dibromomethane (84.9%) CCC - 1,2,3-Trichloropropane (80.3%) CCC - Bromobenzene (84.3%) CCC - 2,2'-Oxybis (1-chloropropane (84.8%) CCC - Vinyl acetate (73.3%) CCC - 2-Butanone (82.7%)	Possible negative bias

Table B.5.1. (page 2 of 15)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L026 (Continued)	(Continued)	UJ	CCC - 4-Methyl-2-pentanone (47.0%)	
	MND20-0337-0001 MND20-0334-3001	UJ	CCC - Acetone (117.6%)	No significant impact
			CCC - Freon-113 (76.6%) CCC - Dibromomethane (83.0%) CCC - 1,2,3,-Trichloropropane (77.2%) CCC - Bromobenzene (84.2%) CCC - 2,2'-Oxybis (1-chloropropane) (65.8%)	Possible negative bias
			CCC - Carbon disulfide (142.6%)	No significant impact
			CCC - Vinyl acetate (64.7%) CCC - 2-Butanone (75.8%) CCC - 4-Methyl-2-pentanone (50.1%)	Possible negative bias
9403L801	MND01-0370-0001 MND01-0370-1001 MND01-0370-2001	UJ	CCC - Vinyl chloride (64.7%) CCC - Trichlorofluoromethane (63.1%) CCC - Freon-113 (75.1%) CCC - Methylene chloride (60.6%)	Possible negative bias
		J	CCC - 1,2-Dichloroethane (128.8%) CCC - 1,1,2-Trichloroethane (123.6%) CCC - 2,2'-Oxybis (1-chloropropane) (118.8%)	No significant impact
	MND01-0370-0001 MND01-0370-1001	J	CCC - 1,2-*cis*-Dichloroethene (118)	Slight positive bias
	MND01-0370-2001	UJ	CCC - 1,2-*cis*-Dichloroethene (118)	No impact
	MND01-0370-0001 MND01-0370-1001		CCC - Carbon disulfide (66.8%)	Possible negative bias
			CCC - 2-Butanone (126.7%) CCC - 4-Methyl-2-pentanone (127.7%)	No significant impact
	MND01-0370-0001	J	CON - Trichloromethane (53%)	Inaccuracy
	MND01-0370-1001	J	CON - Trichloromethane (38%)	Inaccuracy
9403L811	MND01-0309-0001	UJ	CCC - Vinyl chloride (64.2%) CCC - Trichlorofluoromethane (63.1%) CCC - Freon-113 (75.1%) CCC - Methylene chloride (60.6%)	Possible negative bias

Table B.5.1. (page 3 of 15)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L811 (Continued)	(Continued)	UJ	CCC - 1,2-Dichloroethane (125.3%) CCC - 1,1,2-Trichloroethane (123.6%) CCC - 2,2'-Oxybis (1-chloropropane) (118.8%)	No significant impact
			CCC - Carbon disulfide (66.8%)	Possible negative bias
			CCC - 2-Butanone (126.7%) CCC - 4-Methyl-2-pentanone (127.7%)	No significant impact
9403L826	MND01-0397-0001	J	CON - Trichloroethene (30%)	Inaccuracy
	MND01-0306-0001	J	CON - Trichloroethene (31%)	Inaccuracy
	MND01-0155-2011	UJ	SR - 1,4-Dichlorobutane (59%)	Possible negative bias
	MND01-0155-0001	J	CON - 1,1,1-Trichloroethane (44%)	Inaccuracy
	MND01-0305-0001	J	EXC - Trichloroethene CON - Tetrachloromethane (57%)	Inaccuracy
	MND01-0345-0001 MND01-0310-0001 MND01-0155-0001 MND01-0305-0001	UJ	CCC - Vinyl chloride (64.7%) CCC - Trichlorofluoromethane (63.1%) CCC - Freon-113 (75.1%) CCC - Methylene chloride (60.6%)	Possible negative bias
			CCC - 1,2-Dichloroethane (125.3%) CCC - 1,1,2-Trichloroethane (123.6%) CCC - 2,2'-Oxybis (1-chloropropane) (118.8%)	No significant impact
			CCC - Carbon disulfide (66.8%)	Possible negative bias
			CCC - 2-Butanone (126.7%) CCC - 4-Methyl-2-pentanone (127.7%)	No significant impact
	MND01-0394-0001 MND01-0307-0001 MND01-0397-0001 MND01-0306-0001	UJ	CCC - Freon-113 (79.6%) CCC - Methylene chloride (61.0%)	Possible negative bias
			CCC - 1,2-Dichloroethane (121.1%) CCC - 1,2,3-Trichloropropane (116.8%)	No significant impact
			CCC - 2,2'-Oxybis (1-chloropropane) (77.9%) CCC - Acetone (79.6%)	Possible negative bias
			CCC - Carbon disulfide (115.6%) CCC - 2-Butanone (123.2%)	Possible negative bias

Table B.5.1. (page 4 of 15)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L826 (Continued)	(Continued)	UJ	CCC - 4-Methyl-2-pentanone (127.5%)	(Continued)
	MND01-0155-2001	UJ	CCC - Freon-113 (78.4%) CCC - 1-Chlorohexane (84.8%) CCC - Bromobenzene (83.6%0 CCC - 2,2'-Oxybis (1-chloropropane) (75.4%)	Possible negative bias
	MND01-0155-2001	UJ	CCC - Carbon disulfide (115.8%) CCC - 4-Methyl-2-pentanone (120%)	No significant impact
9403L857	MND20-0346-0001 MND20-0346-1001 MND20-0375-0001	UJ	CCC - Freon-113 (79.6%) CCC - Methylene chloride (61.0%) CCC - 1,1-Dichloroethene (67.3%)	Possible negative bias
			CCC - 1,2-Dichloroethane (121.1%) CCC - 1,2,3-Trichloropropane (116.8%)	No significant impact
			CCC - 2,2'-Oxybis (1-chloropropane) (77.9%) CCC - Acetone (79.6%)	Possible negative bias
			CCC - Carbon disulfide (115.6%) CCC - 2-Butanone (123.2%) CCC - 4-Methyl-2-pentanone (127.5%)	No significant impact
	MND01-0119-0001 MND01-0393-0001 MND01-0019-2001	UJ	CCC - Freon-113 (77.6%)	Possible negative bias
			CCC - 1,1,1,2-Tetrachlorethene (115.5%)	No significant impact
			CCC - Bromobenzene (84.7%)	Possible negative bias
			CCC - 4-Methyl-2-pentanone (124.8%) CCC - Acetone (121.8%) CCC - 2-Butanone (115.4%)	No significant impact
	MND01-0375-0001	J	CON - Trichloroethene (26%)	Inaccuracy
9403L869	MND01-0379-2001 MND20-0332-0001	UJ	CCC - Bromobenzene (84.2%)	Possible negative bias
			CCC - Acetone (121.8%) CCC - 2-Butanone (115.4%) CCC - 4-Methyl-2-pentanone (124.8%)	No significant impact
	MND01-0379-0001		CCC - Freon-113 (77.6%)	Possible negative bias
	MND01-0701-0001		CCC - 1,1,1,2-Tetrachloroethane (115.5%)	No significant impact

Table B.5.1. (page 5 of 15)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L869 (Continued)	MND01-0701-0001	J	CON - Benzene (39%) CON - 4-Methyl-2-pentanone (39%) CON - Ethylbenzene (28%)	Inaccuracy
	MND01-0701-0001	J	RET - Xylenes (total)	Inaccuracy
	MND20-0351-0001 MND01-0112-0001 MND01-0701-0001 MND20-0332-3001	UJ/J	CCC - Freon-113 (78.4%) CCC - 2,2'-Oxybis (1-chloropropane) (75.4%)	Possible negative bias
			CCC - Carbon disulfide (115.8%)	No significant impact
			CCC - 1-Chlorohexane (84.8%) CCC - Bromobenzene (83.6%)	Possible negative bias
			CCC - 4-Methyl-2-pentanone (120%)	No significant impact
9403L883	MND01-0314-0001 MND01-0322-0001 MND01-0701-3001	UJ	CCC - Freon-113 (78.1%) CCC - Dibromomethane (77%) CCC - 1-Chlorohexane (83.6%) CCC - 1,2,3-Trichloropropane (78.9%) CCC - Bromobenzene (83.4%)	Possible negative bias
			CCC - Carbon disulfide (126.6%)	No significant impact
			CCC - Vinyl acetate (79.5%) CCC - 2-Butanone (80.5%) CCC - 4-Methyl-2-pentanone (49.1%)	Possible negative bias
9403L884	MND01-0317-0001 MND01-0373-2001	UJ	CCC - Freon-113 (78.4%) CCC - 1-Chlorohexane (84.8%) CCC - Bromobenzene (83.6%) CCC - 2,2'-Oxybis (1-chloropropane) (75.4%)	Possible negative bias
			CCC - Carbon disulfide (115.8%) CCC - 4-Methyl-2-pentanone (120%)	No significant impact
	MND01-0317-1001 MND01-0373-0001	UJ	CCC - 2,2'-Oxybis (1-chloropropane) (83.9%) CCC - Dibromomethane (77%) CCC - 1-Chlorohexane (83.6%)	Possible negative bias

Table B.5.1. (page 6 of 15)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L884 (Continued)	(Continued)	UJ	CCC - 1,2,3-Trichloropropane (78.9%) CCC - Bromobenzene (83.4%)	(Continued)
			CCC - Carbon disulfide (126.5%)	No significant impact
			CCC - Vinyl acetate (79.5%) CCC - 2-Butanone (80.5%) CCC - 4-Methyl-2-pentanone (49.1%)	Possible negative bias
	MND01-0317-1001	UJ	CCC - Freon-113 (78.1%)	Possible negative bias
	MND01-0373-0001	J	CCC - Freon-113 (78.1%)	Possible negative bias
9403L901	MND01-0318-0001 MND20-0326-0001 MND01-0151-0001 MND01-0382-0001	UJ	CCC - Freon-113 (78.1%) CCC - Dibromomethane (77%) CCC - 1-Chlorohexane (83.6%) CCC - 1,2,3-Trichloropropane (78.9%) CCC - Bromobenzene (83.4%) CCC - 2,2'-Oxybis (1-chloropropane) (64.3%)	Possible negative bias
			CCC - Carbon disulfide (126.5%)	NIS
			CCC - Vinyl acetate (79.5%) CCC - 2-Butanone (80.5%) CCC - 4-Methyl-2-pentanone (49.1%)	Possible negative bias
	MND01-0125-0001	UJ	CCC - Vinyl chloride (134.8%)	No significant impact
	MND01-0111-0001		CCC - Freon-113 (83.7%)	Possible negative bias
	MND01-0046-0001		CCC - 1,2--Dichloroethane (121.1%)	No significant impact
	MND01-0063-0001		CCC - 2,2'-Oxybis (1-chloropropane) (70.4%)	Possible negative bias
	MND01-0313-0001		CCC - Acetone (78.8%)	
	MND01-0313-2001		CCC - Carbon disulfide (116.3%)	No significant impact
			CCC - Vinyl acetate (81.8%)	Possible negative bias
			CCC - 2-Butanone (122.5%) CCC - 4-Methyl-2-pentanone (130.6%)	No significant impact
	MND01-0111-0001	J	CON - Trichloromethane (29%)	Inaccuracy
9403L935	MND01-0319-0001	UJ	CCC - Vinyl chloride (134.8%)	No significant impact
	MND01-0372-0001		CCC - Freon-113 (75.8%)	Possible negative bias

Table B.5.1. (page 7 of 15)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L935 (Continued)	(Continued)	UJ	CCC - 1,2-Dichloroethane (121.1%)	No significant impact
			CCC - Acetone (78.8%)	Possible negative bias
			CCC - Carbon disulfide (116.3%)	No significant impact
			CCC - Vinyl acetate (81.8%)	Possible negative bias
			CCC - 2-Butanone (122.5%) CCC - 4-Methyl-2-pentanone (130.6%)	No significant impact
	MND01-P027-0001 MND20-0389-0001 MND01-0711-3001 MND20-0389-2001	UJ	CCC - Freon-113 (76.4%)	Possible negative bias
			CCC - 1,2-Dichloroethane (122%) CCC - Bromoform (133%)	No significant impact
			CCC - 1-Chlorohexane (84.6%) CCC - 1,2,3-Trichloropropane (84.8%) CCC - Bromobenzene (81.6%) CCC - 2-Chlorotoluene (82.1%) CCC - 4-Chlorotoluene (83.0%)	Possible negative bias
			CCC - Acetone (132.4%)	No significant impact
			CCC - Vinyl acetate (76.6%)	Possible negative bias
			CCC - 4-Methyl-2-pentanone (118.8%)	No significant impact
	MND01-P027-0001	J	CON - 1,1,1-Trichloroethane (60%)	Inaccuracy
9403L942	MND01-0320-0001	UJ	CCC - Vinyl chloride (67.5%) CCC - Freon-113 (74.7%)	Possible negative bias
			CCC - 2,2'-Oxybis (1-chloropropane) (125.6%)	No significant impact
			CCC - Acetone (32.3%) CCC - Carbon disulfide (72.6%) CCC - Vinyl acetate (81.0%)	Possible negative bias
	MND01-0320-0001	UJ	CCC - 2-Butanone (124.9%) CCC - 4-Methyl-2-pentanone (125.5%)	No significant impact
	MND20-0356-0001 MND20-0324-0001 MND01-0115-0001 MND20-0356-2001	UJ	CCC - Freon-113 (75.4%)	Possible negative bias
			CCC - 1,2,3-Trichloropropane (118.2%)	No significant impact
			CCC - 2,2'-Oxybis (1-chloropropane) (135.4%)	
			CCC - Acetone (83.3%)	Possible negative bias

Table B.5.1. (page 8 of 15)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L942 (Continued)	(Continued)	UJ	CCC - Carbon disulfide (71.8%)	(Continued)
			CCC - 2-Butanone (125.5%) CCC - 4-Methyl-2-pentanone (132.8%)	No significant impact
9403L962	MND20-0386-0001 MND20-0386-1001 MND20-0354-3001	UJ	CCC - Freon-113 (75.4%)	Possible negative bias
			CCC - 1,2,3-Trichloropropane (118.2%) CCC - 2,2'-Oxybis (1-chloropropane) (135.4%)	No significant impact
			CCC - Acetone (83.3%) CCC - Carbon disulfide (71.8%)	Possible negative bias
			CCC - 2-Butanone (125.5%) CCC - 4-Methyl-2-pentanone (132.8%)	No significant impact
9403L963	MND01-0126-0001 MND01-0354-0001 MND01-0354-2001	UJ	CCC - Vinyl chloride (67.5%) CCC - Freon-113 (74.7%) CCC - 1,1-Dichloroethene (70.3%) CCC - Dibromomethane (98%) CCC - 1-Chlorohexane (87%) CCC - 1,2,3-Trichloropropane (76%) CCC - Bromobenzene (81%)	Possible negative bias
			CCC - 2,2'-Oxybis (1-chloropropane) (125.6%)	No significant impact
			CCC - Acetone (32.3%) CCC - Carbon disulfide (72.6%) CCC - Vinyl acetate (81.0%)	Possible negative bias
			CCC - 2-Butanone (124.9%) CCC - 4-Methyl-2-pentanone (125.5%)	No significant impact
9403L974	MND01-0315-0001 MND01-0152-0001 MND01-0158-0001 MND01-0153-0001	UJ	CCC - Freon-113 (71.0%) CCC - 1-Chlorohexane (85.0%) CCC - Bromobenzene (83.8%) CCC - 2-Chlorotoluene (84.0%) CCC - Carbon disulfide (78.0%)	Possible negative bias
			CCC - 4-Methyl-2-pentanone (115.1%)	No significant impact

Table B.5.1. (page 9 of 15)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L974 (Continued)	MND20-0347-0001 MND20-0347-1001	J	FDRPD - Trichloroethene (35%)	Inaccuracy
	MND01-0325-0001 MND01-P015-0001	UJ/J	CCC - Freon-113 (71.0%) CCC - 1-Chlorohexane (85%) CCC - Bromobenzene (83.8%) CCC - 2-Chlorotoluene (84.0%) CCC - Carbon disulfide (78.0%) CCC - Vinyl acetate (75.8%)	Possible negative bias
	MND01-0380-0001 MND20-0347-1001 MND20-0347-0001 MND20-0154-0001 MND20-0344-0001	UJ	CCC - Freon-113 (71.7%) CCC - 1-Chlorohexane (83.3%)	Possible negative bias
			CCC - 1,2,3-Trichloropropane (118.2%)	No significant impact
			CCC - 2-Chlorotoluene (82.6%) CCC - 4-Chlorotoluene (83.2%)	Possible negative bias
			CCC - 2,2'-Oxybis (1-chloropropane) (135.4%) CCC - 1,2-Dichlorobenzene (123%)	No significant impact
			CCC - Acetone (83.3%) CCC - Carbon disulfide (71.8%) CCC - Vinyl acetate (81.7%)	Possible negative bias
			CCC - 2-Butanone (125.5%) CCC - 4-Methyl-2-pentanone (132.8%)	No significant impact
9404L036	MND20-0341-0001 MND20-0336-0001 MND01-0311-0001 MND01-0327-0001	UJ	CCC - Freon-113 (76.6%) CCC - Dibromomethane (82.5%) CCC - 1,2,3-Trichloropropane (77.2%) CCC - Bromobenzene (84.2%) CCC - 2,2'-Oxybis (1-chloropropane) (65.8%)	Possible negative bias
	MND20-0336-0001 MND01-0311-0001 MND01-0327-0001 MND20-0341-0001	UJ	CCC - Acetone (117.6%) CCC - Carbon disulfide (142.6%)	No significant impact
			CCC - Vinyl acetate (64.7%) CCC - 2-Butanone (75.8%) CCC - 4-Methyl-2-pentanone (50.1%)	Possible negative bias

Table B.5.1. (page 10 of 15)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L036 (Continued)	MND20-0327-2001	UJ	CCC - Freon-113 (84.2%) CCC - Dibromomethane (81.4%) CCC - 1-Chlorohexane (81.9%) CCC - 1,2,3-Trichloropropane (79.4%) CCC - Bromobenzene (77.0%) CCC - 2-Chlorotoluene (82.9%) CCC - 4-Chlorotoluene (83.0%) CCC - 2,2'-Oxybis (1-chloropropane) (82.1%)	Possible negative bias
			CCC - Acetone (117.6%)	No significant impact
			CCC - Carbon disulfide (84.9%) CCC - Vinyl acetate (58.7%) CCC - 4-Methyl-2-pentanone (42.7%)	Possible negative bias
9404L053	MND20-0335-0001 MND20-0383-0001	UJ	CCC - Freon-113 (84.2%) CCC - Dibromomethane (81.4%) CCC - 1-Chlorohexane (81.9%) CCC - 1,2,3-Trichloropropane (79.4%) CCC - Bromobenzene (77.0%) CCC - 2-Chlorotoluene (82.9%) CCC - 4-Chlorotoluene (83.0%) CCC - 2,2'-Oxybis (1-chloropropane) (82.1%)	Possible negative bias
			CCC - Acetone (117.6%)	No significant impact
			CCC - Carbon disulfide (84.9%) CCC - Vinyl acetate (58.7%) CCC - 4-Methyl-2-pentanone (42.7%)	Possible negative bias
	MND01-0303-0001 MND20-0328-0001 MND01-0123-1001 MND01-0159-0001 MND01-0160-0001 MND20-0333-0001	UJ	CCC - Vinyl chloride (64.4%) CCC - Trichlorofluoromethane (65.7%) CCC - Freon-113 (79.4%) CCC - Methylene chloride (59.3%) CCC - 1-Chlorohexane (83.7%) CCC - Carbon disulfide (77.6%)	Possible negative bias

Table B.5.1. (page 11 of 15)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L053 (Continued)	(Continued)	UJ	CCC - Vinyl acetate (57.2%) CCC - 1,2,3-Trichloropropane (84.4%) CCC - Bromobenzene (84.9%) CCC - 2,2'-Oxybis (1-chloropropane) (84.0%)	(Continued)
	MND01-0123-0001 MND01-0124-0001	UJ	CCC - Freon-113 (72.2%) CCC - 1,1-Dichloroethene (70.2%) CCC - Methylene chloride (63.4%) CCC - 2,2'-Oxybis (1-chloropropane) (82.8%) CCC - Acetone (80.0%) CCC - Carbon disulfide (74.3%) CCC - Vinyl acetate (73.2%) CCC - 2-Butanone (81.0%)	Possible negative bias
9404L074	MND20-0329-0001 MND01-0128-0001 MND01-0127-0001 MND01-0301-0001 MND01-0128-1001 MND01-0301-2001 MND01-0713-3001 MND01-0127-3001	UJ	CCC - Freon-113 (72.2%) CCC - 1,1-Dichloroethene (70.2%) CCC - Methylene chloride (63.4%) CCC - 2,2'-Oxybis (1-chloropropane) (82.8%) CCC - Acetone (80.0%) CCC - Carbon disulfide (74.3%) CCC - Vinyl acetate (73.2%) CCC - 2-Butanone (81.0%)	Possible negative bias
9404L095	MND20-0343-0001 MND20-0387-0001	UJ	CCC - Trichlorofluoromethane (68.6%) CCC - Freon-113 (81.6%) CCC - 1,1-Dichloroethene (73.9%) CCC - Methylene chloride (61.2%) CCC - 1,2,3-Trichloropropane (84.8%) CCC - Acetone (81.2%) CCC - Carbon disulfide (79.6%) CCC -Vinyl acetate (70.6%) CCC - 2-Butanone (82.1%)	Possible negative bias

Table B.5.1. (page 12 of 15)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L096	MND01-0304-0001 MND01-0302-0001 MND01-0302-2001	UJ	CCC - Freon-113 (81.6%) CCC - Methylene chloride (61.2%) CCC - 1,2,3-Trichloropropane (84.8%) CCC - Acetone (81.2%) CCC - Carbon disulfide (79.6%) CCC - Vinyl acetate (70.6%) CCC - 2-Butanone (82.1%)	Possible negative bias
9404L111	MND01-0156-1001 MND01-0156-0001 MND01-0130-0001	UJ	CCC - Freon-113 (81.6%) CCC - Methylene chloride (61.2%) CCC - 1,2,3-Trichloropropane (84.8%) CCC - Acetone (81.2%) CCC - Carbon disulfide (79.6%) CCC - Vinyl acetate (70.6%) CCC - 2-Butanone (82.1%)	Possible negative bias
	MND20-0330-2001	UJ	CCC - Freon-113 (81.7%)	Possible negative bias
			CCC - *cis*-1,2-Dichloroethene (117.4%) CCC - 1,2-Dichloroethane (130%)	No significant impact
			CCC - Acetone (82.8%) CCC - Carbon disulfide (75.9%) CCC - Vinyl acetate (65.5%) CCC - 2-Butanone (79.1%)	Possible negative bias
			CCC - Bromodichloromethane (127.4%) CCC - 1,1,2-Trichloroethane (136.6%) CCC - Bromoform (155.6%)	No significant impact
			CCC - 1,1,2,2-Tetrachloroethane (156.4%) CCC - 2,2'-Oxybis (1-chloropropane) (117.2%) CCC - 1,3-Dichlorobenzene (117%) CCC - 1,4-Dichlorobenzene (121%) CCC - 1,2-Dichlorobenzene (117%)	No significant impact

Table B.5.1. (page 13 of 15)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L111 (Continued)	MND20-0330-0001	UJ	CCC - Carbon disulfide (78.8%) CCC - Vinyl acetate (49.0%) CCC - 2-Butanone (77.2%) CCC - 4-Methyl-2-pentanone (83.6%)	Possible negative bias
9404L124	MND01-0608-0001 MND01-0271-0001 MND01-0607-0001 MND20-0342-0001	UJ	CCC - 1,2-Dichloroethene (130.0%) CCC - Bromochloromethane (127.4%) CCC - 1,1,2-Trichloroethane (136.6%)	No significant impact
			CCC - 1-Chlorohexane (78.4%)	Possible negative bias
			CCC - Bromoform (155.6%) CCC - 1,1,2,2-Tetrachloroethane (156.4%) CCC - 2,2'-Oxybis (1-chloropropane) (117.2%) CCC - 1,3-Dichlorobenzene (117%) CCC - 1,4-Dichlorobenzene (121%) CCC - 1,2-Dichlorobenzene (117%)	No significant impact
			CCC - Carbon disulfide (82.1%) CCC - Vinyl acetate (71.1%) CCC - 1,3-Diethylbenzene (83.4%) CCC - 1,4-Diethylbenzene (81.5%)	Possible negative bias
	MND01-0271-0001	J	CCC - Freon-113 (72.5%)	Possible negative bias
	MND01-0608-0001 MND01-0607-0001 MND20-0342-0001	UJ	CCC - Freon-113 (72.5%)	
	MND01-0271-0001 MND01-0608-0001	J	CCC - 1,2-*cis*-Dichloroethene	Possible negative bias
	MND01-0607-0001 MND20-0342-0001	UJ	CCC - 1,2-*cis*-Dichloroethene	No significant impact
	MND01-0271-1001 MND01-0071-0001 MND01-0602-0001 MND01-0076-0001	UJ	CCC - Carbon disulfide (78.8%) CCC - Vinyl acetate (49.0%) CCC - 2-Butanone (77.2%) CCC - 4-Methyl-2-pentanone (83.6%)	Possible negative bias

Table B.5.1. (page 14 of 15)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L124 (Continued)	MND01-0381-0001 MND01-0714-3001 MND20-0342-2001 MND01-0608-3001	UJ	(Continued)	(Continued)
	MND01-0312-0001	UJ	CCC - 1,2-Dichloroethene (124.7%)	No significant impact
	MND01-0312-0001		CCC - Carbon disulfide (81.7%) CCC - Vinyl acetate (71.3%)	Possible negative bias
			CCC - Bromoform (134.5%) CCC - 2,2'-Oxybis (1-chloropropane) (117.8%) CCC - Acetone (122.2%)	No significant impact
	MND01-0608-0001	J	CON - Trichloroethene (32%)	Inaccuracy
	MND01-0271-0001		CON - Trichloroethene (36%)	
	MND01-0607-0001		CON - Trichloroethene (29%)	
	MND01-0076-0001		CON - Trichloroethene (31%)	
	MND01-0271-1001	J	CON - Freon-113 (77%) CON - Trichloroethene (29%)	Inaccuracy
	MND01-0071-0001	J	CON - 1,1,1-Trichloroethane (90%) CON - Trichloroethene (26%)	Inaccuracy
9404L155	MND01-0157-0001 MND01-0129-0001 MND01-0157-1001 MND01-0157-2001	UJ	CCC - 1,2-Dichloroethene (124.7%) CCC - Bromoform (134.5%) CCC - 2,2'-Oxybis (1-chloropropane) (117.8%)	No significant impact
			CCC - Carbon disulfide (81.7%) CCC - Vinyl acetate (71.3%)	Possible negative bias
			CCC - Acetone (122.2%)	No significant impact
9404L174	MND01-0605-0001 MND01-0601-0001 MND20-0353-0001	UJ	CCC -1,2-Dichloroethene (118.8%) CCC - 2,2'-Oxybis (1-chloropropane) (126.9%)	No significant impact
	MND01-0605-2001 MND20-0353-3001 MND01-0715-3001		CCC - Carbon disulfide (78.1%) CCC - Vinyl acetate (52.1%)	Possible negative bias

Table B.5.1. (page 15 of 15)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L174 (Continued)	MND01-0605-0001	J	CON - Trichloroethene (35%)	Inaccuracy
	MND01-0601-0001		CON - Trichloroethene (34%)	
9404L187	MND01-0120-0001	UJ	CCC - Freon-113 (84.8%)	Possible negative bias
	MND01-0117-0001		CCC - 1,2-Dichloroethene (118%)	No significant impact
	MND01-0120-2001		CCC - 2,2'-Oxybis (1-chloropropane) (126.9%)	
			CCC - Carbon disulfide (50.2%)	Possible negative bias
			CCC - Vinyl acetate (52.1%)	

CCC - Continuing Calibration Check
SR - Surrogate Recovery
MB - Method Blank Contamination
HT - Holding Time

Table B.5.2. Acrylonitrile and Acetonitrile by Gas Chromatography (Method 8030)

Laboratory Batch	Sample Identification	Validation Qualified	Reason Qualified	Impact
9403L801	MND01-0370-1001	UJ	CCC - Acrylonitrile (83.8%)	Insignificant Impact
9403L826	MND01-0306-0001	UJ	CCC - Acrylonitrile (83.8%)	Insignificant Impact
9403L883	MND01-0314-0001 MND20-0322-0001 MND01-0710-3001	UJ	CCC - Acrylonitrile (51.1%) CCC - Acetonitrile (52.5%)	Possible low bias
9403L884	MND01-0373-0001	UJ	CCC - Acrylonitrile (117%)	No Impact
9403L901	MND20-0326-0001	UJ	CCC - Acetonitrile (52%) CCC - Acrylonitrile (51%)	Possible low bias
9404L074	MND01-0128-0001 MND01-0128-1001 MND01-0127-0001 MND01-0301-0001 MND01-0713-3001 MND01-0127-3001	UJ	CCC - Acrylonitrile (117.7%) CCC - Acetonitrile (115.2%)	No Impact
9404L124	MND01-0071-0001 MND01-0608-0001 MND01-0271-0001 MND01-0607-0001 MND20-0342-0001 MND01-0076-0001	UJ	No continuing calibration at end of sequence.	NA
	MND01-0312-0001 MND01-0381-0001 MND01-0714-3001 MND01-0608-3001	UJ	CCC - Acetonitrile (117%) CCC - Acrylonitrile (116%)	No Impact
9404L155	MND01-007-0001 MND01-0129-0001 MND01-0157-1001	UJ	No continuing calibration at end of sequence - percent recoveries can not be verified. All compounds.	NA

Table B.5.2. (page 2 of 2)

Laboratory Batch	Sample Identification	Validation Qualified	Reason Qualified	Impact
9403L801	MND01-0370-1001	UJ	CCC - Acrylonitrile (83.8%)	Insignificant Impact
9404L174	MND01-0605-0001 MND01-0601-0001 MND20-0353-0001 MND20-0353-3001 MND01-0715-3001	UJ	CCC - Acrylonitrile (120%)	No Impact
9404L187	MND01-0120-0001 MND01-0117-0001	UJ	CCC - Acrylonitrile (120%)	No Impact

Table B.5.3. Semivolatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS) (Method 8270)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L010	MND01-0137-0001 MND01-0377-0001 MND01-0378-0001 MND20-0388-0001	U	MB - *bis*(2-ethylhexyl)phthalate (0.8 μg/L)	Raised quantitation limit
	MND01-0137-0001 MND01-0377-0001 MND01-0378-0001	U	MB - Di-n-butylphthalate (0.8 μg/L)	Raised quantitation limit
	MND01-0137-0001 MND01-0377-0001 MND01-0376-0001	UJ	CCC - 4-Chloroaniline (30.5) CCC - 3,3'-Dichlorobenzidine (28.5)	No significant impact
	MND01-0378-0001	UJ	CCC - *bis*(2-Ethylhexyl)phthalate (28.8) CCC - Di-n-octylphthalate (42.2)	Raised quantitation limit
9403L025	MND01-0118-0001	U	MB - Di-n-butylphthalate (0.4 μg/L) MB - *bis*(2-ethylhexyl)phthalate (0.4 μg/L)	Raised quantitation limit
9403L026	MND20-0334-0001	U	MB - Di-n-butylphthalate (0.4 μg/L)	Raised quantitation limit
	MND01-0138-1001 MND20-0334-0001 MND20-0337-0001	U	MB - *bis*(2-Ethylhexyl)phthalate (0.4 μg/L)	Raised quantitation limit
9403L801	MND01-0370-0001 MND01-0370-1001	U	MB - Di-n-butylphthalate (2 μg/L) MB - *bis*(2-Ethylhexyl)phthalate (3 μg/L)	Raised quantitation limit
9403L811	MND01-0309-0001	U	MB - Di-n-butylphthalate (2 μg/L) MB - *bis*(2-Ethylhexyl)phthalate (3 μg/L)	Raised quantitation limit
9403L826	MND01-0155-0001 MND01-0305-0001 MND01-0307-0001 MND01-0310-0001 MND01-0345-0001 MND01-0394-0001 MND01-0397-0001	UJ	CCC - 3,3'-Dichlorobenzidine (46.4%)	No significant impact

Table B.5.3. (page 2 of 8)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L826 (Continued)	MND01-0155-0001 MND01-0305-0001 MND01-0307-0001 MND01-0310-0001 MND01-0345-0001 MND01-0394-0001 MND01-0397-0001	UJ	CCC - Carbazole (27.4%) CCC - 4-Nitroaniline (35.8%)	No significant impact
	MND01-0306-0001	UJ	CCC - Benzoic acid (36.1%) CCC - 3,3'-Dichlorobenzidine (30.6%)	No significant impact
	MND01-0155-0001 MND01-0305-0001 MND01-0306-0001 MND01-0307-0001 MND01-0310-0001 MND01-0345-0001 MND01-0394-0001 MND01-0397-0001	U	MB - *bis*(2-Ethylhexyl)phthalate (0.7 μg/L)	No significant impact
	MND01-0155-0001 MND01-0305-0001 MND01-0306-0001 MND01-0307-0001 MND01-0310-0001 MND01-0345-0001 MND01-0394-0001	U	MB - Di-n-butylphthalate (0.3 μg/L)	Raised quantitation limit
9403L857	MND01-0393-0001	UJ	CCC - Benzoic acid (30%)	No impact
	MND20-0346-0001 MND01-0393-0001	U	MB - Di-n-butylphthalate (2 μg/L)	Raised quantitation limit
	MND01-0119-0001 MND01-0393-0001 MND20-0346-0001	U	MB - *bis*(2-Ethylhexyl)phthalate (2 μg/L)	Raised quantitation limit
9403L869	MND01-0112-0001 MND01-0379-0001 MND01-0701-0001 MND20-0332-0001 MND20-0351-0001	U	MB - di-n-Butylphthalate (2 μg/L)	Raised quantitation limit

Table B.5.3. (page 3 of 8)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L869 (Continued)	MND01-0112-0001 MND01-0379-0001 MND20-0332-0001 MND20-0351-0001	U	MB - *bis*(2-Ethylhexyl)phthalate (2 μg/L)	Raised quantitation limit
9403L883	MND01-0314-0001 MND20-0322-0001	U	MB - Di-n-butylphthalate (4 μg/L) MB - *bis*(2-Ethylhexyl)phthalate (4 μg/L)	Raised quantitation limit
	MND01-0314-0001 MND20-0322-0001	UJ	RSD - Benzoic acid (27.8%) CCC - 4-Nitrophenol (30.8%)	No significant impact
9403L884	MND01-0317-0001 MND01-0317-1001 MND01-0373-0001	U	MB - Di-n-butylphthalate (4 μg/L) MB - *bis*(2-Ethylhexyl)phthalate (4 μg/L)	Raised quantitation limit
	MND01-0317-0001 MND01-0317-1001 MND01-0373-0001	UJ	RSD - Benzoic acid (27.8%) CCC - 4-nitrophenol (30.8%)	No significant impact
9403L901	MND01-0046-0001 MND01-0063-0001 MND01-0111-0001 MND01-0125-0001 MND01-0151-0001 MND01-0313-0001 MND01-0318-0001 MND01-0382-0001 MND20-0326-0001	U	MB - *bis*(2-Ethylhexyl)phthalate (4 μg/L)	Raised quantitation limit
	MND01-0046-0001 MND01-0063-0001 MND01-0125-0001 MND01-0151-0001 MND01-0313-0001 MND01-0318-0001 MND01-0382-0001 MND20-0326-0001	U	MB - Di-n-butylphthalate (4 μg/L)	Raised quantitation limit

Table B.5.3. (page 4 of 8)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L935	MND01-0319-0001 MND01-0372-0001 MND01-P027-0001 MND20-0389-0001	UJ	RSD - Carbazole (39.1%) RSD - *bis*(2-Ethylhexyl)phthalate (32.1%) RSD - Di-n-octylphthalate (30.2%) CCC - 2,4-Dinitrophenol (43.2%) CCC - 4-Chloroaniline (28%) CCC - 4,6-Dinitro-2-methylphenol (30.6%) CCC - Carbazole (68.6%)	No significant impact
9403L942	MND01-0320-0001 MND20-0115-0001 MND20-0324-0001 MND20-0356-0001	U	MB - Di-n-butylphthalate (3 μg/L) MB - *bis*(2-Ethylhexyl)phthalate (3 μg/L)	Raised quantitation limit
	MND01-0320-0001 MND20-0115-0001 MND20-0324-0001 MND20-0356-0001	UJ	CCC - 2,2'-Oxybis(1-chloropropane) (28.9%) CCC - Carbazole (35.2%) CCC - 3,3'-Dichlorobenzidine (51.4%) CCC - 4-Nitrophenol (29.9%) CCC - 4-Nitroaniline (39.3%)	No significant impact
9403L962	MND20-0386-0001 MND20-0386-1001	U	MB - Di-n-butylphthalate (3 μg/L) MB - *bis*(2-Ethylhexyl)phthalate (3 μg/L)	Raised quantitation limit
	MND20-0386-0001 MND20-0386-1001	J/UJ	FRPD - Benzoic acid (200%)	No significant impact
	MND20-0386-0001 MND20-0386-1001	UJ	CCC - 2,2'-Oxybis(1-chloropropane) (28.9%) CCC - 4-Nitrophenol (29.9%) CCC - 4-Nitroaniline (39.3%) CCC - Carbazole (35.2%) CCC - 3,3'-Dichlorobenzidine (51.4%)	No significant impact
9403L963	MND01-0126-0001 MND20-0354-0001	U	MB - Di-n-butylphthalate (3 μg/L) MB - *bis*(2-Ethylhexyl)phthalate (3 μg/L)	Raised quantitation limit
	MND01-0126-0001 MND20-0354-0001	UJ	CCC - 2,2'-Oxybis(1-chloropropane) (28.9%) CCC - 4-Nitrophenol (29.9%) CCC - 4-Nitroaniline (39.3%) CCC - Carbazole (35.2%) CCC - 3,3'-Dichlorobenzidine (51.4%)	No significant impact

Table B.5.3. (page 5 of 8)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L974	MND01-0152-0001 MND01-0153-0001 MND01-0154-0001 MND01-0158-0001 MND01-0315-0001 MND01-0380-0001 MND20-0325-0001 MND20-0347-1001	U	MB - *bis*(2-Ethylhexyl)phthalate (0.3 μg/L) MB - Di-n-butylphthalate (0.3 μg/L)	Raised quantitation limit
	MND01-0152-0001 MND01-0153-0001 MND01-0158-0001 MND01-0315-0001 MND01-0380-0001 MND20-0325-0001 MND20-0347-1001	UJ	CCC - *bis*(2-Ethylhexyl)phthalate (25.2%) CCC - Di-n-octylphthalate (30.5%) CCC - Benzo(k) fluoranthene (29.6)	No significant impact
9404L036	MND20-0336-0001 MND20-0341-0001	U	MB - Di-n-butylphthalate (0.4 μg/L)	Raised quantitation limit
	MND20-0327-0001 MND20-0341-0001	U	MB - *bis*(2-Ethylhexyl)phthalate (0.4 μg/L)	Raised quantitation limit
9404L053	MND01-0123-0001 MND01-0123-1001 MND01-0160-0001	U	MB - *bis*(2-Ethylhexyl)phthalate (0.9 μg/L)	Raised quantitation limit
	MND01-0123-1001 MND01-0159-0001 MND01-0160-0001 MND20-0335-0001	U	MB - Di-n-butylphthalate (0.9 μg/L)	Raised quantitation limit
	MND01-0303-0001 MND20-0328-0001	UJ	RSD - Butylbenzylphthalate (39%) RSD - *bis*(2-Ethylhexyl)phthalate (42%) RSD - 3,3'-Dichlorobenzidine (37%) RSD - Di-n-octylphthalate (49%)	No significant impact
	MND01-0123-0001 MND01-0124-0001	UJ	RSD - 3,3'-Dichlorobenzidine (30%) RSD - *bis*(2-Ethylhexyl)phthalate (35%) RSD - Di-n-octylphthalate (38%)	No significant impact

Table B.5.3. (page 6 of 8)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L053 (Continued)	MND01-0123-1001 MND01-0159-0001 MND01-0160-0001 MND20-0333-0001 MND20-0335-0001 MND20-0383-0001	UJ	CCC - Butylbenzylphthalate (27%) CCC - *bis*(2-Ethylhexyl)phthalate (46%) CCC - Di-n-octylphthalate (44%)	No significant impact
9404L074	MND01-0127-0001 MND01-0128-0001 MND01-0128-1001 MND01-0301-0001 MND20-0329-0001	U	MB - Di-n-butylphthalate (2 μg/L) MB - *bis*(2-Ethylhexyl)phthalate (4 μg/L)	Raised quantitation limit
	MND01-0128-0001 MND01-0128-1001 MND01-0301-0001 MND20-0329-0001	U	MB - Phenol (0.8 μg/L)	Raised quantitation limit
	MND01-0127-0001 MND01-0128-0001 MND01-0128-1001 MND01-0301-0001 MND20-0329-0001	UJ	CCC - 4-Chloroaniline (65%) CCC - 2-Nitroaniline (27.6%) CCC - 3-Nitroaniline (44.6%) CCC - 4-Nitrophenol (26.7%) CCC - Di-n-butylphthalate (28.6%) CCC - Pyrene (37.9%) CCC - Butylbenzylphthalate (60.9%) CCC - 3,3'-Dichlorobenzidine (64.2%) CCC - *bis*(2-Ethylhexyl)phthalate (83.6%) CCC - Di-n-octylphthalate (90.6%) CCC - 2-Benzyl-4-chlorophenol (32.5%)	No significant impact
9404L095	MND20-0343-0001 MND20-0387-0001	U	MB - Di-n-butylphthalate (4 μg/L) MB - *bis*(2-Ethylhexyl)phthalate (5 μg/L)	Raised quantitation limit
9404L096	MND01-0302-0001 MND01-0304-0001	U	MB - Di-n-butylphthalate (4 μg/L) MB - *bis*(2-Ethylhexyl)phthalate (5 μg/L)	Raised quantitation limit
9404L111	MND01-0130-0001	R	SR <10%	Unusable
	MND01-0130-0001 RE	UJ	HT - (8 days)	Possible low bias

Table B.5.3. (page 7 of 8)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L111 (Continued)	MND01-0156-0001 MND01-0156-1001 MND20-0330-0001	UJ	LCS - 1,4 Dichlorobenzene (35%)	Inaccuracy
	MND01-0156-0001 MND01-0156-1001 MND20-0330-0001	U	MB - Di-n-butylphthalate MB - Bis(2-ethylhexyl)phthalate	Raised quantitation limit
	MND01-0156-0001 MND01-0156-1001	UJ	CCC - 3,3'-Dichlorobenzidine (32.7%) CCC - Di-n-octylphthalate (27.9%)	No significant impact
	MND01-0130-0001 (RE)	U	MB - *bis*(2-Ethylhexyl)phthalate (1 μg/L)	Raised quantitation limit
9404L124	MND01-0071-0001 MND01-0076-0001 MND01-0271-1001 MND01-0271-0001 MND01-0602-0001 MND01-0607-0001 MND01-0608-0001 MND20-0342-0001	UJ	CCC - 4-Nitroaniline (27.4%) CCC - *bis*(2-Ethylhexyl)phthalate (33.8%) CCC - Di-n-octylphthalate (44%)	No significant impact
	MND01-0071-0001 MND01-0076-0001 MND01-0271-0001 MND01-0271-1001 MND01-0602-0001 MND01-0607-0001 MND01-0608-0001 MND20-0342-0001	U	MB - *bis*(2-Ethylhexyl)phthalate (2 μg/L) MB - Di-n-butylphthalate (1 μg/L)	Raised quantitation limit
9404L155	MND01-0129-0001 MND01-0157-0001 MND01-0157-1001	UJ	CCC - 2-Nitroaniline (28.6%) CCC - 3-Nitroaniline (25.4%) CCC - 4-Nitroaniline (34.2%) CCC - Carbazole (26.6%) CCC - Butylbenzylphthalate (38.1%) CCC - Di-n-octylphthalate (58.5%) CCC - 2-Benzyl-4-chlorophenol (29.2%) CCC - *bis*(2-Ethylhexyl)phthalate (57.2%) CCC - Di-n-butylphthalate (29.1%)	No significant impact

Table B.5.3. (page 8 of 8)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L155 (Continued)	MND01-0129-0001 MND01-0157-0001 MND01-0157-1001	U	MB - Di-n-butylphthalate (2 μg/L) MB - *bis*(2-Ethylhexyl)phthalate (2 μg/L)	Raised quantitation limit
9404L174	MND01-0601-0001 MND01-0605-0001 MND20-0353-0001	UJ	CCC - 2-Nitroaniline (28.6%) CCC - 3-Nitroaniline (25.4%) CCC - 4-Nitroaniline (34.2%) CCC - Carbazole (26.6%) CCC - Di-n-butylphthalate (29.1%) CCC - Butylbenzylphthalate (38.1%) CCC - *bis*(2-Ethylhexyl)phthalate (57.2%) CCC - Di-n-octylphthalate (58.5%) CCC - 2-Benzyl-4-chlorophenol (29.2%)	No significant impact
	MND01-0601-0001 MND01-0605-0001 MND20-0353-0001	U	MB - Di-n-butylphthalate (2 μg/L)	Raised quantitation limit
	MND20-0353-0001	U	MB - *bis*(2-Ethylhexyl)phthalate (1 μg/L)	Raised quantitation limit
9404L187	MND01-0117-0001 MND01-0120-0001	UJ	RSD - Di-n-butylphthalate (33.9%)	No significant impact
	MND01-0117-0001 MND01-0120-0001	U	MB - Di-n-butylphthalate (1 μg/L) MB - *bis*(2-Ethylhexyl)phthalate (0.7 μg/L)	Raised quantitation limit

Table B.5.4. Radionuclides

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
34994	MND01-0117-0001 MND01-0120-0001 MND01-0129-0001 MND01-0157-0001 MND20-0353-0001 MND01-0601-0001 MND01-0605-0001	J	MB - Thorium-230	False positive
	MND01-0157-0001 MND01-0157-1001	UJ	FDRPD - Thorium-230	No impact
35017	MND01-0156-0001 MND01-0156-1001	J	FDRPD - Uranium-238	No impact
	MND01-0156-0001 MND01-0156-1001	UJ/J	FDRPD - Americium-241	No impact
	MND01-0271-0001 MND01-0271-1001	J	FDRPD - Plutonium-239	No impact
	MND01-0271-0001 MND01-0271-1001	UJ/J	FDRPD - Americium-241	No impact
35056	MND01-0128-0001 MND01-0159-0001 MND01-0301-0001 MND20-0329-0001 MND20-0336-0001	J	MB - Thorium-228	False positive
	MND01-0128-0001 MND01-0159-0001 MND01-0301-0001 MND01-0311-0001 MND20-0329-0001 MND20-0336-0001	J	MB - Thorium-230	False positive
	MND01-0123-0001 MND01-0123-1001	J	FDRPD - Uranium-238	No impact
	MND01-0123-1001 MND20-0123-1001	J	FDRPD - Thorium-228	No impact

Table B.5.4. (page 2 of 4)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
35120	MND01-0137-0001 MND01-0153-0001 MND20-0347-1001	J	MB - Americium-241	False positive
	MND01-0138-0001 MND01-0315-0001 MND20-0344-0001 MND20-0354-0001 MND01-0376-0001 MND01-0378-0001	J	MB - Thorium-228	False positive
	MND01-0138-0001 MND20-0354-0001 MND01-0378-0001	J	MB - Thorium-230	False positive
	MND01-0126-0001 MND01-0137-0001 MND01-0138-0001 MND01-0138-1001 MND01-0152-0001 MND01-0153-0001 MND01-0154-0001 MND01-0158-0001 MND01-0315-0001 MND01-0376-0001 MND01-0377-0001 MND01-0378-0001 MND01-0380-0001 MND20-0325-0001 MND20-0334-0001 MND20-0337-0001 MND20-0344-0001 MND20-0354-0001 MND20-0388-0001	J	MB - Uranium-234	False positive

Table B.5.4. (page 3 of 4)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
35120 (Continued)	MND01-0138-0001 MND01-0138-1001 MND01-0315-0001 MND01-0376-0001 MND01-0378-0001 MND20-0334-0001 MND20-0344-0001 MND20-0354-0001 MND20-0388-0001	J	MB - Uranium-238	False positive
35184	MND01-0318-0001 MND01-0320-0001 MND01-0372-0001 MND01-0382-0001 MND20-0324-0001 MND20-0386-0001	J	MB - Uranium-234	False positive
	MND01-0320-0001 MND01-0324-0001 MND01-0372-0001 MND20-0386-0001	J	MB - Uranium-238	False positive
	MND01-0317-0001 MND01-0318-0001 MND20-0356-0001	J	MB - Thorium-228	False positive
	MND01-0063-0001 MND01-0111-0001 MND01-0115-0001 MND01-0151-0001 MND01-0317-0001 MND01-0318-0001 MND01-0319-0001 MND01-0320-0001 MND01-0382-0001 MND01-P027-0001 MND20-0324-0001 MND20-0326-0001 MND20-0356-0001 MND20-0386-0001	J	MB - Thorium-230	False positive

Table B.5.4. (page 4 of 4)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
35184 (Continued)	MND01-0317-0001 MND01-P027-0001 MND20-0356-0001	J	MB - Thorium-232	False positive
	MND01-0317-0001 MND01-0317-1001	J	FDRPD - Thorium-228	No impact
	MND01-0317-0001 MND01-0317-1001	J	FDRPD - Thorium-230	No impact
	MND01-0317-0001 MND01-0317-1001	J	FDRPD - Thorium-232	No impact
	MND20-0386-0001 MND01-0386-1001	J/UJ	FDRPD - Thorium-228	No impact
	MND20-0386-0001 MND01-0386-1001	J	FDRPD - Thorium-230	No impact
35228	MND01-0112-0001 MND01-0119-0001 MND01-0306-0001 MND01-0346-0001 MND01-0370-0001 MND01-0310-0001	J	MB - Thorium-230	False positive
	MND01-0112-0001 MND01-0309-0001	J	MB - Uranium-238	False positive
	MND01-0370-0001 MND01-0370-1001	J/UJ	FDRPD - Thorium-228	No impact
		J	FDRPD - Thorium-230	No impact
3591	MND01-0374-0001 MND20-0392-0001	J	DUP - Potassium-40	Inaccuracy

Table B.5.5. Pesticides/PCBs (Method 8080)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L010	MND20-0388-0001	UJ	SR - ALL - TCMX (50) SR - ALL - DCB (55)	Possible low bias
	MND01-0377-0001	UJ	SR - ALL - TCMX (45) SR - ALL - DCB (40)	Possible low bias
	MND01-0376-0001	UJ	SR - ALL - TCMX (55)	No significant impact
	MND01-0137-0001	UJ	SR - ALL - TCMX (55) SR - ALL - DCB (55)	Possible low bias
	MND01-0378-0001	UJ	SR - ALL - DCB (55)	No significant impact
9403L026	MND01-0138-0001	UJ	SR - ALL - TCMX (55)	No significant impact
9403L801	MND01-0370-0001 MND01-0370-1001	UJ	RSD - 4,4'-DDE (22)	No significant impact
9403L811	MND01-0309-0001	UJ	RSD - 4,4'-DDE (22)	No significant impact
9403L826	MND01-0345-0001 MND01-0310-0001 MND01-0155-0001 MND01-0305-0001 MND01-0394-0001 MND01-0307-0001 MND01-0397-0001 MND01-0306-0001	UJ	RSD - 4,4'-DDE (26) RPD - β-BHC (33)	No significant impact
9403L857	MND01-0119-0001	UJ	SR - ALL - DCB (55)	No significant impact
9403L869	MND20-0351-0001 MND20-0332-0001 MND01-0379-0001 MND01-0112-0001	UJ	RSD - 4,4'-DDE (22)	No significant impact
	MND01-0701-0001	UJ/J	SR - ALL - TCMX (40, 130)	No significant impact
	MND01-0112-0001	UJ	SR - ALL - DCB (40)	No significant impact
	MND01-0701-0001	J	RSD - 4,4'-DDE (22)	No significant impact

Table B.5.5. (page 2 of 3)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L883	MND01-0314-0001	UJ	SR - ALL - TCMX (50) SR - ALL - DCB (10)	Possible low bias
	MND01-0314-0001 MND20-0322-0001	UJ	RSD - α-BHC (21)	No significant impact
	MND01-0314-0001 RE	R	HT - 11 Days	Unusable
9403L884	MND01-0317-0001 MND01-0317-1001 MND01-0373-0001	UJ	RSD - α-BHC (21)	No significant impact
	MND01-0317-0001	UJ	SR - ALL - DCB (45)	No significant impact
	MND01-0317-1001	UJ	SR - ALL - TCMX (55) SR - ALL - DCB (40)	Possible low bias
	MND01-0317-1001 RE	R	HT - 11 Days	Unusable
9403L901	MND01-0318-0001	J, UJ	SR - ALL - DBC (55)	No significant impact
	MND01-0151-0001	UJ	SR - ALL - TCMX (50) SR - ALL - DBC (15)	Possible low bias
	MND01-0125-0001	UJ	SR - ALL - DBC (55)	No significant impact
	MND01-0111-0001	UJ	SR - ALL - TCMX (55)	No significant impact
	MND01-0063-0001	UJ	SR - ALL - TCMX (55)	No significant impact
	MND01-0313-0001	UJ	SR - ALL - TCMX (45) SR - ALL - DBC (30)	Possible low bias
	MND01-0318-0001 RE	R	HT - 9 Days	Unusable
	MND01-0382-0001 RE	R	HT - 10 Days	Unusable
9403L935	MND01-P027-0001	UJ	SR - ALL - TCMX (40) SR - ALL - DCB (10)	Possible low bias
9403L942	MND01-0115-0001 RE	UJ	SR - ALL - TCMX (55) SR - ALL - DCB (10) RSD - 4,4'-DDE (24)	Possible low bias
	MND01-0115-0001	R	SR - ALL - TCMX (55) SR - ALL - DCB (5)	Unusable
9403L963	MND20-0354-0001	UJ	SR - ALL - TCMX (50)	No significant impact

Table B.5.5. (page 3 of 3)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L974	MND01-0153-0001	UJ	SR - ALL - TCMX (55)	No significant impact
	MND20-0325-0001	UJ	SR - ALL - DCB (35)	No significant impact
9404L036	MND01-0311-0001	UJ	SR - ALL - TCMX (55) SR - ALL - DCB (55)	Possible low bias
	MND20-0336-0001	UJ	SR - ALL - TCMX (50)	No significant impact
9404L053	MND20-0335-0001	UJ	SR - ALL - DCB (50)	No significant impact
	MND01-0303-0001 RE	UJ	SR - ALL - DCB (45)	No significant impact
	MND01-0124-0001	UJ	SR - ALL - TCMX (50)	No significant impact
	MND01-0159-0001	UJ	SR - ALL - DCB (45)	No significant impact
9404L096	MND01-0304-0001	R	SR - ALL - DCB (5) SR - ALL - TCMX (30)	Unusable
9404L111	MND01-0156-0001	UJ	SR - ALL - TCMX (55) SR - ALL - DCB (59)	Possible low bias
9404L124	MND01-0608-0001	UJ	SR - ALL - TCMX (55) SR - ALL - DCB (55)	Possible low bias
9404L174	MND01-0605-0001 MND01-0601-0001 MND20-0353-0001	UJ	RSD - 4,4'-DDT (26)	No significant impact
9404L187	MND01-0120-0001	R	SR - ALL - TCMX (45) SR - ALL - DCB (5)	Unusable
	MND01-0117-0001	UJ	RSD - 4,4'-DDT (26)	No significant impact
	MND01-0117-0001	UJ	SR - ALL - TCMX (50) SR - ALL - DCB (10)	Possible low bias

Table B.5.6. Explosives

Laboratory Batch	Sample Batch	Validation Qualifier	Reason Qualified	Impact
9403L010	MND01-0137-0001 MND01-0376-0001 MND01-0377-0001 MND01-0378-0001 MND20-0388-0001	UJ	CCC - 2-A-4,6-DNT (%R=77%)	Low bias
9403L025	MND01-0118-0001	UJ	CCC - Tetryl %D>15% (%D=23%) (123%) CCC - 2-A-4,6-DNT (%R=130%)	No impact
	MND01-0118-0001	UJ	LCS - 1,3,5-TNB (%R=83%)	Minimal impact
9403L026	MND01-0138-0001	UJ	CCC - Tetryl (%R=77%) CCC - 2-A-4,6-DNT (%R=130%)	No impact
	MND01-0138-1001		CCC - Tetryl (%R=77%) CCC - 2-A-4,6-DNT (%R=130%)	No impact
	MND20-0334-0001		CCC - Tetryl (%R=63%) CCC - 2-A-4,6-DNT (%R=135%)	No impact
	MND20-0337-0001		CCC - Tetryl (%R=63%) CCC - 2-A-4,6-DNT (%R=135%)	No impact
9403L801	MND01-0370-0001 MND01-0370-1001	UJ	LCS - 2,4,6-TNT (%R=63%)	Low bias
	MND01-0370-0001 MND01-0370-1001	J UJ	FD - 1,3,5-TNB (FDRPD=200)	Inaccuracy
9403L811	MND01-0309-0001	UJ	LCS - 2,4,6-TNT (%R=65%)	Low bias
9403L869	MND01-0701-0001(PE)	R	SR - PETN (0%) interference	Unusable
	MND01-0701-0001(PE)	UJ J	HT all except PETN—8 days	No impact
	MND20-0332-0001	UJ	SR all - 4-Nitrotoluene (46)	Low bias
	MND20-0332-0001(RE)	R	HT all - 24 days	Unusable
9403L883	MND01-0314-0001	UJ	LCS - 2,4-DNT (%R=73%)	Low bias
	MND20-0322-0001		LCS - 2,4-DNT (%R=73%)	Low bias
9403L884	MND01-0317-0001 MND01-0317-1001 MND01-0373-0001	UJ	LCS - 2,4-DNT (%R=73%)	Low bias

Table B.5.6. (page 2 of 3)

Laboratory Batch	Sample Batch	Validation Qualifier	Reason Qualified	Impact
9403L935	MND01-PO27-0001	UJ	SR all except PETN—4-Nitrotoluene (45%)	Low bias
9403L963	MND20-0354-0001	UJ	CCC - 2-A-4,6-Dinitrotoluene (%R=116%)	No impact
9403L974	MND01-0154-0001 MND01-0315-0001 MND20-0325-0001 MND20-0344-0001 MND20-0347-0001 MND20-0347-1001 MND01-0380-0001	UJ	CCC - 2-A-4,6-DNT (124%)	No impact
	MND01-0152-0001 MND01-0153-0001 MND01-0158-0001	UJ	CCC - 2-A-4,6-DNT (120%)	No impact
	MND01-0152-0001	UJ	SR all except PETN (20%)	Unusable
	MND01-0380-0001	UJ	SR all except PETN (22%)	Unusable
	MND20-0347-1001	UJ	SR all except PETN (26%)	Unusable
	MND20-0347-0001	UJ	SR all except PETN (22%)	Unusable
	MND20-0344-0001	UJ	SR all except PETN (14%)	Unusable
9404L036	MND20-0336-0001 MND20-0341-0001	UJ	CCC - Tetryl (%R=123%) CCC - 2-A-4,6-DNT (%R=130%)	No impact
	MND01-0311-0001 MND20-0327-0001		LCS - 1,3,5-TNB (83%) LCS - 2,4,6-TNT (73%)	Low bias
9404L053	MND01-0123-0001 MND01-0124-0001 MND01-0303-0001 MND20-0328-0001 MND20-0335-0001 MND20-0383-0001	UJ	CCC - 2-A-4,6-DNT (118%)	No impact
	MND20-0328-0001	UJ	SR all except PETN	Unusable
	MND01-0123-1001 MND01-0160-0001	UJ	CCC - Tetryl (76%) CCC - 2-A-4,6-DNT (135%)	No impact
	MND20-0333-0001	R	SR - All except PETN—4-Nitrotoluene (6%)	Unusable

Table B.5.6. (page 2 of 3)

Laboratory Batch	Sample Batch	Validation Qualifier	Reason Qualified	Impact
9404L074	MND01-0128-0001 MND01-0128-1001 MND01-0301-0001 MND20-0329-0001	UJ	CCC - 2-A-4,6-DNT (118%)	No impact
9404L095	MND20-0343-0001 MND20-0387-0001	UJ	CCC - Tetryl (118%) CCC - 2-A-4,6-DNT (132%)	No impact
9404L096	MND01-0302-0001 MND01-0304-0001	UJ	CCC - Tetryl (118%) CCC - 2-A-4,6-DNT (132%)	No impact
9404L111	MND01-0130-0001 MND01-0156-0001 MND01-0156-1001 MND20-0330-0001	UJ	CCC - Tetryl (82%) CCC - 2-A-4,6-DNT (132%)	No impact
9404L124	MND01-0076-0001 MND01-0271-0001 MND20-0342-0001 MND01-0607-0001 MND01-0608-0001	UJ	CCC - Nitrobenzene (82%)	No impact
9404L155	MND01-0129-0001 MND01-0157-0001 MND01-0157-1001	UJ	LCS - 1,3,5-TNB (61%) LCS - 2,4,6-TNT (71%) LCS - 2,4-DNT (68%)	Low bias
	MND01-0129-0001 MND01-0157-0001 MND01-0157-1001	UJ	CCC - Nitrobenzene (118%)	No impact
9404L174	MND20-0353-0001 MND01-0601-0001 MND01-0605-0001	UJ	CCC - Nitrobenzene (118%)	No impact
	MND20-0353-0001 MND01-0601-0001 MND01-0605-0001	UJ	LCS - 1,3,5-TNB (61%) LCS - 2,4,6-TNT (71%) LCS - 2,4-DNT (68%)	Low bias
9404L187	MND01-0117-0001 MND01-0120-0001	UJ	LCS - 1,3,5-TNB (61%) LCS - 2,4,6-TNT (71%) LCS - 2,4-DNT (68%)	Low bias

Table B.5.7. Anions

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L026	MND01-0138-0001 MND01-0138-1001	J	FDRPD - TOC (87.2)	No significant impact
	MND01-0138-0001 MND01-0138-1001	UJ U	FDRPD - TSS (200)	
9403L826	MND01-0310-0001	J	MSR - Ammonia (130)	No Significant Impact
9403L857	MND20-0346-0001 MND20-0346-1001	J/UJ	FDRPD - Chloride (54.6) FDRPD - Sulfate (135) FDRPD - Nitrate/Nitrite (200) FDRPD - Fluoride (89.5) FDRPD - TOC (41.2) FDRPD - Ammonia (200) FDRPD - TKN (160) FDRPD - TDS (50.8) FDRPD - TSS (200)	No significant impact
9403L884	MND01-0317-0001 MND01-0317-1001	J	FDRPD - Phosphate (45.4)	Inaccuracy
9403L962	MND20-0386-0001 MND20-0386-1001	J	FDRPD - TOC (144)	Inaccuracy
9403L974	MND01-0347-1001 MND01-0347-0001	J/UJ	FDRPD - Cyanide (T) (200) FDRPD - TOC (37.6)	No significant impact
9404L053	MND01-0123-0001	J	HT - TDS (1 day)	No Significant Impact
	MND01-0123-0001 MND01-0123-1001	J/UJ	FDRPD - Nitrate/Nitrite (200)	No significant impact
9404L111	MND01-0156-1001 MND01-0156-0001	J/UJ	FDRPD - Total Phosphate (200)	No significant impact
9404L124	MND01-0071-0001	J	MSR - Sulfate (56)	Inaccuracy
	MND01-0271-0001 MND01-0271-1001	J/UJ	FDRPD - Sulfate (45.4) FDRPD - Total Phosphate (200)	No significant impact
	MND01-0607-0001	J	HT - TDS (3 Days)	No significant impact

Table B.5.8. Metals and Cyanide

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L010	MND20-0388-0001 (T)	J	MSR = Cr (148%)	High bias
	MND20-0388-0001 (T)	UJ	MSR = Pb (59%)	Low bias
	MND20-0388-0001 (T)	UJ	MSR = Tl (40%)	Low bias
	MND01-0376-0001 (T)	UJ	ASR = Sb (83%)	Slightly low bias
	MND01-0376-0001 (S)	J	ASR = Sb (84%)	Slightly low bias
	MND01-0137-0001 (T)	J	MSA = Sb (0.9658)	Inaccuracy
	MND20-0388-0001 (T)	UJ	ASR = As (82%)	Slightly low bias
	MND01-0388-0001 (S)	UJ	ASR = As (73%)	
	MND01-0377-0001 (T)	J	ASR = As (75%)	
	MND01-0377-0001 (S)	UJ	ASR = As (72%)	
	MND01-0376-0001 (T)	UJ	ASR = As (75%)	
	MND01-0376-0001 (S)	UJ	ASR = As (79%)	
	MND01-0137-0001 (T)	UJ	ASR = As (80%)	
	MND01-0137-0001 (S)	UJ	ASR = As (73%)	
	MND01-0378-0001 (T)	UJ	ASR = As (72%)	
	MND01-0378-0001 (S)	UJ	ASR = As (74%)	
	MND01-0377-0001 (T)	UJ	ASR = Pb (81%)	Slightly low bias
	MND01-0137-0001 (S)	UJ	ASR = Pb (84%)	Slightly low bias
	MND20-0388-0001 (T)	UJ	ASR = Tl (80%)	Slightly low bias
	MND01-0388-0001 (S)	UJ	ASR = Tl (42%)	Low bias
	MND01-0377-0001 (T)	UJ	ASR = Tl (59%)	Low bias
	MND01-0377-0001 (S)	UJ	ASR = Tl (49%)	Low bias
	MND01-0376-0001 (S)	UJ	ASR = Tl (41%)	Low bias
	MND01-0137-0001 (T)	UJ	ASR = Tl (84%)	Slightly low bias
	MND01-0378-0001 (T)	UJ	ASR = Tl (41%)	Low bias
	MND20-0388-0001 (T) MND20-0388-0001 (S) MND01-0377-0001 (T) MND01-0377-0001 (S)	U	MB = Al (17.0 μg/L)	Raised quantitation limit

Table B.5.8. (page 2 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L010 (Continued)	MND01-0376-0001 (T) MND01-0376-0001 (S) MND01-0137-0001 (S) MND01-0378-0001 (S)	U	MB = Al (17.0 μg/L)	Raised quantitation limit
	MND20-0388-0001 (S) MND01-0376-0001 (S) MND01-0378-0001 (S)	U	MB = Fe (62.7 μg/L)	Raised quantitation limit
	MND20-0388-0001 (T) MND20-0388-0001 (S) MND01-0377-0001 (T) MNDO1-0377-0001 (S) MND01-0376-0001 (T) MND01-0376-0001 (S) MND01-0137-0001 (S) MND01-0378-0001 (T) MND01-0378-0001 (S)	U	MB = V (4.4 μg/L)	Raised quantitation limit
	MND20-0388-0001 (T) MND20-0388-0001 (S) MND01-0377-0001 (T) MND01-0376-0001 (T) MND01-0376-0001 (S) MND01-0137-0001 (S) MND01-0378-0001 (T) MND01-0378-0001 (S)	U	MB = Zn (2.7 μg/L)	Raised quantitation limit
	MND01-0376-0001 (S)	UJ	MB = Cr (-2.0 μg/L)	Low bias
	MND01-0137-0001 (T) MND01-0378-0001 (S)	U	CCB = Cr (0.95 μg/L)	Raised quantitation limit
	MND01-0376-0001 (T) MND01-0376-0001 (S) MND01-0378-0001 (S)	U	CCB = Cu (0.63 μg/L)	Raised quantitation limit

Table B.5.8. (page 3 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L010 (Continued)	MND01-0137-0001 (T) MND01-0137-0001 (S)	U	CCB = Ni (2.8 μg/L)	Raised quantitation limit
	MND01-0137-0001 (T)	U	CCB = Sn (5.8 μg/L)	Raised quantitation limit
	MND20-0388-0001 (T)	J	CCB = Co (-2.5 μg/L)	Low bias
	MND20-0388-0001 (S)	UJ		
	MND01-0377-0001 (S)	J		
	MND01-0376-0001 (T)	J		
	MND01-0376-0001 (S)	J		
	MND01-0137-0001 (T)	J		
	MND01-0137-0001 (S)	UJ		
	MND01-0378-0001 (S)	J		
	MND20-0388-0001 (T) MND01-0137-0001 (S)	UJ	CCB = Tl (-2.0 μg/L)	Low bias
9403L025	MND01-0118-0001 (T) MND01-0118-0001 (S)	U	MB = Al (12 μg/L) MB = V (3.8 μg/L) MB = Zn (4.1 μg/L)	Raised quantitation limit
	MND01-0118-0001 (T)	J	MB = Fe (0.1 μg/L)	Raised quantitation limit
	MND01-0118-0001 (T) MND01-0118-0001 (S)	J	SD = Ca (11%) SD = Cr (11%) SD = Fe (11%)	Inaccuracy
	MND01-0118-0001 (T)	J	ASR = Se (78%)	Slightly low bias
	MND01-0118-0001 (T) MND01-0118-0001 (S)	UJ	ASR = Tl (75%)	Slightly low bias
9403L026	MND01-0138-0001 (T) MND01-0138-0001 (S) MND01-0138-1001 (T) MND01-0138-1001 (S) MND20-0334-0001 (T) MND20-0334-0001 (S) MND20-0337-0001 (T)	U	MB = Al (17 μg/L)	Raised quantitation limit

Table B.5.8. (page 4 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L026 (Continued)	MND20-0337-0001 (S)	U	MB = Al (17 μg/L)	Raised quantitation limit
	MND20-0337-0001 (S)	U	MB = Fe (6.0 μg/L)	Raised quantitation limit
	MND01-0138-0001 (T) MND01-0138-0001 (S) MND01-0138-1001 (T) MND01-0138-1001 (S) MND20-0334-0001 (T) MND20-0334-0001 (S) MND20-0337-0001 (T) MND20-0337-0001 (S)	U	MB = V (3.6 μg/L)	Raised quantitation limit
	MND01-0138-1001 (S)	U	MB = Zn (1.8 μg/L)	Raised quantitation limit
	MND20-0334-0001 (T)	UJ	MB = Cr (-1.2 μg/L)	Low bias
	MND20-0337-0001 (T)	J		
	MND20-0337-0001 (S)	J		
	MND01-0138-1001 (S)	UJ		
	MND20-0334-0001 (T)	UJ		
	MND20-0337-0001 (T)	J		
	MND20-0337-0001 (S)	J		
	MND01-0138-1001 (T) MND01-0138-1001 (S) MND20-0334-0001 (T) MND20-0334-0001 (S) MND20-0337-0001 (T) MND20-0337-0001 (S)	U	CCB = As (3.4 μg/L)	Raised quantitation limit
	MND01-0138-0001 (T) MND01-0138-0001 (S) MND01-0138-1001 (T) MND01-0138-1001 (S) MND20-0334-0001 (T) MND20-0334-0001 (S)	U	CCB = Li (46 μg/L)	Raised quantitation limit

Table B.5.8. (page 5 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L026 (Continued)	MND20-0337-0001 (T) MND20-0337-0001 (S)	U	CCB = Li (46 μg/L)	Raised quantitation limit
	MND02-0337-0001 (S)	J	RLD = Pb (200%) near d.l.	Minimal impact
	MND01-0138-0001 (T) MND01-0138-0001 (S) MND01-0138-1001 (T) MND01-0138-1001 (S) MND20-0334-0001 (T) MND20-0334-0001 (S) MND20-0337-0001 (T) MND20-0337-0001 (S)	UJ	ASR = Tl (75%) ASR = Tl (83%) ASR = Tl (65%) ASR = Tl (68%) ASR = Tl (63%) ASR = Tl (65%) ASR = Tl (78%) ASR = Tl (76%)	Slightly low bias
	MND01-0138-0001 (T) MND01-0138-0001 (S) MND01-0138-1001 (T) MND01-0138-1001 (S) MND20-0334-0001 (T) MND20-0334-0001 (S) MND20-0337-0001 (T) MND20-0337-0001 (S)	J	SD = Ca (13%) SD = Mg (12%)	Inaccuracy
	MND01-0138-0001 (T)	J	FDRPD = Cu (200%) near d.l.	Minimal impact
	MND01-0138-1001 (T)	UJ		
	MND01-0138-0001 (T)	UJ	FDRPD = Mo (200%) near d.l.	Minimal impact
	MND01-0138-1001 (T)	J		
	MND01-0138-0001 (S)	J	FDRPD = Zn (60%, 153%) near d.l.	Minimal impact
	MND01-0138-1001 (S)	UJ		
9403L801	MND01-0370-0001 (T) MND01-0370-0001 (S) MND01-0370-1001 (T) MND01-0370-1001 (S)	J	SD = Ba (16%) SD = Ca (19%) SD = Fe (20%) SD = Mg (18%) SD = Mn (21%)	Inaccuracy
	MND01-0370-0001 (T)	UJ	MSR = Tl (45%)	Low bias

Table B.5.8. (page 6 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L801 (Continued)	MND01-0370-0001 (S)	UJ	ASR = Pb (83%)	Slightly low bias
	MND01-0370-0001 (T) MND01-0370-0001 (S) MND01-0370-1001 (T) MND01-0370-1001 (S)	UJ	ASR = Tl (45%) ASR = Tl (45%) ASR = Tl (51%) ASR = Tl (49%)	Slightly low bias
	MND01-0370-0001 (T) MND01-0370-0001 (S) MND01-0370-1001 (T) MND01-0370-1001 (S)	U	CCB = Al (4.3 μg/L)	Raised quantitation limit
	MND01-0370-0001 (T)	UJ	MB = Cr (-0.87 μg/L)	Negative bias
	MND01-0370-0001 (T) MND01-0370-0001 (S) MND01-0370-1001 (T) MND01-0370-1001 (S)	U	CCB = Co (0.54 μg/L)	Raised quantitation limit
	MND01-0370-0001 (T) MND01-0370-0001 (S) MND01-0370-1001 (T) MND01-0370-1001 (S)	U	MB = V (6.0 μg/L)	Raised quantitation limit
	MND01-0370-0001 (T) MND01-0370-0001 (S) MND01-0370-1001 (T) MND01-0370-1001 (S)	U	MB = Zn (2.8 μg/L)	Raised quantitation limit
	MND01-0370-0001 (T) MND01-0370-0001 (S) MND01-0370-1001 (T) MND01-0370-1001 (S)	U	CCB = Li (32.8 μg/L)	Raised quantitation limit
	MND01-0370-0001 (S)	J	FDRPD = Sb (200%) near d.l.	Minimal impact
	MND01-0370-1001 (S)	UJ		
	MND01-0370-0001 (S)	J	FDRPD = Fe (62%)	Inaccuracy
	MND01-0370-1001 (S)	J		

Table B.5.8. (page 7 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L801 (Continued)	MND01-0370-0001 (T)	J	FDRPD = Se (200%) near d.l.	Minimal impact
	MND01-0370-1001 (T)	UJ		
9403L811	MND01-0309-0001 (T) MND01-0309-0001 (S)	J	SD = Ba (19%) SD = Ca (21%) SD = Fe (21%) SD = Mg (20%) SD = Mn (21%) SD = Na (10%)	Inaccuracy
	MND01-0309-0001 (T)	UJ	MSR = Tl (42%)	Low bias
			MSR = Zn (71%)	Slightly low bias
	MND01-0309-0001 (T)	UJ	ASR = Tl (43%)	Low bias
	MND01-0309-0001 (S)	UJ	ASR = Tl (43%)	Low bias
	MND01-0309-0001 (S) MND01-0309-0001 (T) MND01-0309-0001 (S)	U	MB = Al (31 μg/L) MB = V (21 μg/L)	Raised quantitation limit
	MND01-0309-0001 (T) MND01-0309-0001 (S)	U	MB = Zn (45 μg/L)	Raised quantitation limit
	MND01-0309-0001 (S)	U	MB = Sn (25 μg/L)	Raised quantitation limit
	MND01-0309-0001 (T) MND01-0309-0001 (S)	UJ	CCB = Cu (-4.6 μg/L)	Negative bias
	MND01-0309-0001 (S)	UJ	CCB = Ag (-3.2 μg/L)	Negative bias
	MND01-0309-0001 (T)	J	RLD = Al (67%)	Inaccuracy
9403L826	MND01-0345-0001 (T) MND01-0345-0001 (S) MND01-0310-0001 (T) MND01-0155-0001 (T) MND01-0155-0001 (S) MND01-0305-0001 (T) MND01-0305-0001 (S) MND01-0394-0001 (S)	U	MB = Al (14.9 μg/L)	Raised quantitation limit

Table B.5.8. (page 8 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L826 (Continued)	MND01-0307-0001 (T) MND01-0307-0001 (S) MND01-0397-0001 (T) MND01-0306-0001 (T) MND01-0306-0001 (S)	U	MB = Al (14.9 μg/L)	Raised quantitation limit
	MND01-0155-0001 (S) MND01-0305-0001 (S) MND01-0394-0001 (T) MND01-0397-0001 (T) MND01-0397-0001 (S) MND01-0306-0001 (S)	U	MB = Cu (0.86 μg/L)	Raised quantitation limit
	MND01-0345-0001 (T) MND01-0345-0001 (S)	U	MB = Fe (11.5 μg/L)	Raised quantitation limit
	MND01-0345-0001 (T) MND01-0345-0001 (S) MND01-0310-0001 (T) MND01-0310-0001 (S) MND01-0155-0001 (T) MND01-0155-0001 (S) MND01-0305-0001 (T) MND01-0305-0001 (S) MND01-0394-0001 (T) MND01-0394-0001 (S) MND01-0307-0001 (T) MND01-0307-0001 (S) MND01-0397-0001 (T) MND01-0397-0001 (S) MND01-0306-0001 (T) MND01-0306-0001 (S)	U	MB = Zn (4.6 μg/L)	Raised quantitation limit
	MND01-0310-0001 (S) MND01-0155-0001 (S)	U	CCB = Cd (4.4 μg/L)	Raised quantitation limit

Table B.5.8. (page 9 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L826 (Continued)	MND01-0305-0001 (S) MND01-0307-0001 (T) MND01-0306-0001 (S)	U	CCB = Cd (4.4 μg/L)	Raised quantitation limit
	MND01-0345-0001 (T) MND01-0345-0001 (S) MND01-0310-0001 (T) MND01-0310-0001 (S) MND01-0155-0001 (T) MND01-0155-0001 (S) MND01-0305-0001 (T) MND01-0305-0001 (S) MND01-0394-0001 (T) MND01-0394-0001 (S) MND01-0307-0001 (T) MND01-0307-0001 (S) MND01-0397-0001 (T) MND01-0397-0001 (S) MND01-0306-0001 (T) MND01-0306-0001 (S)	U	CCB = Co (6.4 μg/L)	Raised quantitation limit
	MND01-0306-0001 (S)	U	CCB = Mn (5.6 μg/L)	Raised quantitation limit
	MND01-0345-0001 (T) MND01-0345-0001 (S) MND01-0310-0001 (T) MND01-0310-0001 (S)	U	CCB = Ni (12.0 μg/L)	Raised quantitation limit
	MND01-0345-0001 (T) MND01-0345-0001 (S) MND01-0310-0001 (T) MND01-0310-0001 (S) MND01-0155-0001 (T) MND01-0155-0001 (S) MND01-0305-0001 (T)	U	CCB = Li (136 μg/L)	Raised quantitation limit

Table B.5.8. (page 10 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L826 (Continued)	MND01-0305-0001 (S)	U	CCB = Li (136 μg/L)	Raised quantitation limit
	MND01-0394-0001 (T)			
	MND01-0394-0001 (S)			
	MND01-0307-0001 (T)			
	MND01-0307-0001 (S)			
	MND01-0397-0001 (T)			
	MND01-0397-0001 (S)			
	MND01-0306-0001 (T)			
	MND01-0306-0001 (S)			
	MND01-0345-0001 (T)	UJ	CCB = Tl (-10 μg/L)	Negative bias
	MND01-0310-0001 (S)			
	MND01-0345-0001 (T)	UJ	CCB = Cr (-6.0 μg/L)	Negative bias
	MND01-0310-0001 (T)	UJ		
	MND01-0155-0001 (T)	J		
	MND01-0155-0001 (S)	UJ		
	MND01-0305-0001 (S)	UJ		
	MND01-0307-0001 (T)	J		
	MND01-0307-0001 (S)	J		
	MND01-0306-0001 (T)	J		
	MND01-0310-0001 (T)	J	MSR = K (60%)	Slightly low bias
		UJ	MSR = Ag (72%)	
	MND01-0310-0001 (S)	UJ	MSR = Se (45%)	Low bias
	MND01-0310-0001 (T)	UJ	MSR = Tl (54%)	Low bias
	MND01-0310-0001 (S)		MSR = Tl (50%)	
	MND01-0310-0001 (S)	UJ	ASR = Pb (84%)	Slightly low bias
	MND01-0310-0001 (T)	UJ	ASR = Se (80%)	Slightly low bias
	MND01-0310-0001 (S)		ASR = Se (84%)	
	MND01-0394-0001 (T)		ASR = Se (80%)	
	MND01-0394-0001 (S)		ASR = Se (76%)	
	MND01-0307-0001 (S)		ASR = Se (77%)	

Table B.5.8. (page 11 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L826 (Continued)	MND01-0345-0001 (T)	UJ	ASR = Tl (63%)	Slightly low bias
	MND01-0345-0001 (S)		ASR = Tl (65%)	
	MND01-0310-0001 (T)	UJ	ASR = Tl (44%)	Low bias
	MND01-0155-0001 (S)		ASR = Tl (42%)	
	MND01-0305-0001 (T)		ASR = Tl (46%)	
	MND01-0305-0001 (S)		ASR = Tl (46%)	
	MND01-0394-0001 (T)		ASR = Tl (48%)	
	MND01-0394-0001 (S)		ASR = Tl (46%)	
	MND01-0307-0001 (T)		ASR = Tl (44%)	
	MND01-0307-0001 (S)		ASR = Tl (48%)	
	MND01-0397-0001 (S)		ASR = Tl (48%)	
	MND01-0306-0001 (S)		ASR = Tl (51%)	
	MND01-0345-0001 (T)	J	SD = Na (20%)	Inaccuracy
	MND01-0345-0001 (S)			
	MND01-0310-0001 (S)			
	MND01-0155-0001 (T)			
	MND01-0155-0001 (S)			
	MND01-0305-0001 (T)			
	MND01-0305-0001 (S)			
	MND01-0394-0001 (T)			
	MND01-0394-0001 (S)			
	MND01-0307-0001 (T)			
	MND01-0307-0001 (S)			
	MND01-0397-0001 (T)			
	MND01-0397-0001 (S)			
	MND01-0306-0001 (T)			
	MND01-0306-0001 (S)			
	MND01-0307-0001 (S)	J	MSA = Sb (0.982)	Inaccuracy
9403L857	MND20-0346-0001 (T)	U	MB = V (5.1 μg/L)	Raised quantitation limit
	MND20-0346-0001 (S)			
	MND20-0346-1001 (T)			

Table B.5.8. (page 12 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L857 (Continued)	MND20-0346-1001 (S) MND01-0119-0001 (T) MND01-0393-0001 (S)	U	MB = V (5.1 μg/L)	Raised quantitation limit
	MND20-0346-0001 (S) MND20-0346-1001 (S)	U	MB = Zn (0.90 μg/L)	Raised quantitation limit
	MND01-0375-0001 (T) MND01-0375-0001 (S) MND01-0119-0001 (T) MND01-0119-0001 (S) MND01-0393-0001 (S)	UJ	MB = Cr (-1.7 μg/L)	Negative bias
	MND20-0346-1001 (T)	U	CCB = Sn (27 μg/L)	Raised quantitation limit
	MND20-0346-0001 (T) MND20-0346-0001 (S) MND20-0346-1001 (T) MND20-0346-1001 (S) MND01-0375-0001 (T) MND01-0375-0001 (S) MND01-0119-0001 (T) MND01-0119-0001 (S) MND01-0393-0001 (T) MND01-0393-0001 (S)	UJ/J	CCB = Cu (-4.6 μg/L)	Negative bias
	MND20-0346-0001 (T) MND20-0346-0001 (S) MND20-0346-1001 (T) MND20-0346-1001 (T) MND01-0375-0001 (T) MND01-0375-0001 (S) MND01-0119-0001 (S) MND01-0393-0001 (T) MND01-0393-0001 (S)	UJ/J	CCB = Al (-67 μg/L) CCB = Co (-5.1 μg/L)	Negative bias
	MND20-0346-0001 (T)	UJ	CCB = Pb (-2.3 μg/L)	Negative bias

Table B.5.8. (page 13 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L857 (Continued)	MND20-0346-0001 (T) MND20-0346-0001 (S) MND20-0346-1001 (T) MND01-0119-0001 (T) MND01-0119-0001 (S) MND01-0393-0001 (T) MND01-0393-0001 (S)	UJ/J	CCB = Mo (-7.6 μg/L)	Negative bias
	MND01-0119-0001 (S)	UJ	CCB = Ni (-11 μg/L)	Negative bias
	MND20-0346-0001 (T) MND20-0346-1001 (T) MND01-0375-0001 (T) MND01-0119-0001 (S)	UJ	CCB = Zn (-4.4 μg/L)	Negative bias
	MND20-0346-0001 (T)	J	MSR = K (72%)	Slightly low bias
		UJ	MSR = Tl (40%)	Low bias
	MND01-0375-0001 (T)	UJ	ASR = Pb (80%)	Slightly low bias
	MND20-0346-0001 (S)	J	ASR = Se (70%)	Slightly low bias
	MND20-0346-0001 (T) MND01-0119-0001 (T) MND01-0119-0001 (S) MND01-0393-0001 (T) MND01-0393-0001 (S)	UJ	ASR = Tl (46%) ASR = Tl (44%) ASR = Tl (44%) ASR = Tl (46%) ASR = Tl (40%)	Low bias
	MND20-0346-0001 (S) MND20-0346-1001 (S)	U	CCB = Zn (-4.4 μg/L)	Negative bias
	MND20-0346-0001 (T)	UJ	CCB = Ag (-3.6 μg/L)	Negative bias
	MND20-0346-0001 (T) MND20-0346-1001 (T)	UJ/J	FDRPD = Al (200%) FDRPD = Ba (92%) FDRPD = Ca (57%) FDRPD = Cr (29%) FDRPD = Co (200%) near d.l. FDRPD = Fe (144%) FDRPD = Pb (200%) near d.l.	Inaccuracy

Table B.5.8. (page 14 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L857 (Continued)	(Continued)	UJ/J	FDRPD = Ni (116%) FDRPD = K (126%) FDRPD = Na (65%) FDRPD = Li (75%) FDRPD = Mo (200%)	Inaccuracy
	MND20-0346-0001 (S) MND20-0346-1001 (S)	UJ/J	FDRPD = Al (200%) FDRPD = Ba (88%) FDRPD = Ca (67%) FDRPD = Co (129%) FDRPD = Fe (176%) FDRPD = Mg (31%) FDRPD = Ni (98.5%) FDRPD = K (117%) FDRPD = Se (200%) near d.l. FDRPD = Na (77%) FDRPD = Li (56%)	Inaccuracy
9403L869	MND20-0351-0001 (T) MND20-0332-0001 (S) MND01-0379-0001 (T) MND01-0379-0001 (S) MND01-0112-0001 (S)	U	MB = Al (11 μg/L)	Raised quantitation limit
	MND01-0701-0001 (S)	U	MB = Na (177 μg/L)	Raised quantitation limit
	MND01-0701-0001 (S)	U	CCB = Sn (7.9 μg/L)	Raised quantitation limit
	MND20-0332-0001 (T) MND20-0332-0001 (S) MND01-0379-0001 (T) MND01-0379-0001 (S) MND01-0112-0001 (T) MND01-0112-0001 (S)	U	MB = V (4.4 μg/L)	Raised quantitation limit
	MND20-0332-0001 (S) MND01-0379-0001 (T)	U	MB = Zn (2.2 μg/L)	Raised quantitation limit

Table B.5.8. (page 15 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L869 (Continued)	MND01-0379-0001 (S) MND01-0112-0001 (T) MND01-0112-0001 (S)	U	MB = Zn (2.2 μg/L)	Raised quantitation limit
	MND01-0701-0001 (S)	U	CCB = Ca (39 μg/L)	Raised quantitation limit
	MND20-0332-0001 (T)	U	MB = Cr (1.0 μg/L)	Raised quantitation limit
	MND20-0332-0001 (T) MND01-0379-0001 (T)	U	CCB = Co (1.6 μg/L)	Raised quantitation limit
	MND20-0332-0001 (T) MND20-0332-0001 (S) MND01-0379-0001 (T)	U	CCB = Cu (1.1 μg/L)	Raised quantitation limit
	MND20-0332-0001 (S)	U	MB = Fe (5.8 μg/L)	Raised quantitation limit
	MND01-0701-0001 (S)	U	CCB = Mg (26 μg/L)	Raised quantitation limit
	MND20-0332-0001 (T) MND20-0332-0001 (S)	J	CCB = Ni (-2.7 μg/L)	Negative bias
	MND01-0379-0001 (T) MND01-0379-0001 (S)		CCB = K (-739 μg/L)	
	MND01-0701-0001 (S)	UJ	CCB = K (-739 μg/L)	Negative bias
	MND20-0351-0001 (T)	J/UJ	MSR = Cr (73%) MSR = Co (73%) MSR = Fe (73%) MSR = Ni (74%) MSR = Li (69%) MSR = Ag (75%) MSR = Tl (36%)	Inaccuracy
	MND20-0351-0001 (T)	J	ASR = Pb (82%)	Slightly low bias
	MND01-0112-0001 (T)		ASR = Se (73%)	Slightly low bias
	MND01-0379-0001 (T) MND01-0379-0001 (S)	UJ	ASR = Tl (63%) ASR = Tl (81%)	Slightly low bias
	MND01-0112-0001 (T) MND01-0112-0001 (S)	UJ	ASR = Tl (52%) ASR = Tl (50%)	Low bias

Table B.5.8. (page 16 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L883	MND01-0314-0001 (S)	U	MB = Al (11 μg/L)	Raised Quantitative Limit
	MND20-0322-0001 (S)	U	MB = Fe (8.8 μg/L)	Raised Quantitative Limit
	MND01-0314-0001 (T) MND01-0314-0001 (S) MND20-0322-0001 (T) MND20-0322-0001 (S)	U	MB = Zn (20 μg/L)	Raised Quantitative Limit
	MND01-0314-0001 (T) MND20-0322-0001 (T)	U	CCB = Co (3.9 μg/L)	Raised Quantitative Limit
	MND01-0314-0001 (S) MND20-0322-0001 (T) MND20-0322-0001 (S)	U	CCB = Cu (3.7 μg/L)	Raised Quantitative Limit
	MND20-0322-0001 (T) MND20-0322-0001 (S)	U	CCB = Sn (21 μg/L) CCB = V (9.3 μg/L)	Raised Quantitative Limit
	MND20-0322-0001 (T)	J	CCB = Cr (-4.7 μg/L)	Negative bias
	MND20-0322-0001 (S) CCB = V (9.3 μg/L)	UJ	CCB = Tl (-2.6 μg/L)	Negative bias
	MND01-0314-0001 (S)	J	Fe, Mg = LBI	Inaccuracy
	MND01-0314-0001 (T)	J/UJ	MSR = As (47%) MSR = Pb (23%) MSR = Li (66%) MSR = Se (73%)	Low bias
	MND01-0314-0001 (T)	R	MSR = Tl (12%)	Unusable
	MND20-0322-0001 (T)	UJ	ASR = As (82%)	Slightly low bias
	MND20-0322-0001 (S)		ASR = As (76%)	
	MND01-0314-0001 (T)	J	ASR = Tl (42%)	Low bias
	MND20-0314-0001 (S)		ASR = Tl (74%)	Slightly low bias
	MND20-0322-0001 (S)		ASR = Tl (56%)	Low bias
	MND20-0322-0001 (S)	UJ	ASR = Pb (63%)	Slightly low bias
	MND01-0314-0001 (S)	UJ	ASR = Se (80%)	Slightly low bias
	MND20-0322-0001 (T)		ASR = Se (84%)	

Table B.5.8. (page 17 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L883 (Continued)	MND01-0314-0001 (T) MND01-0314-0001 (S) MND20-0322-0001 (T) MND20-0322-0001 (S)	J	SD = Ba (16%) SD = Ca (19%) SD = Mg (15%) SD = Mn (12%) SD = Na (16%)	Inaccuracy
	MND01-0314-0001 (T) MND01-0314-0001 (S) MND20-0322-0001 (T)	J	SD = Fe (12%)	Inaccuracy
	MND01-0314-0001 (T) MND20-0322-0001 (T) MND20-0322-0001 (S)	J	SD = Al (18%)	Inaccuracy
9403L884	MND01-0317-0001 (S) MND01-0317-0001 (S)	U	MB = Al (18 μg/L) MB = Fe (11 μg/L)	Raised quantitation limit
	MND01-0317-0001 (T) MND01-0317-0001 (S) MND01-0317-1001 (T) MND01-0317-1001 (S) MND01-0373-0001 (T) MND01-0373-0001 (S)	U	MB = Li (14 μg/L)	Raised quantitation limit
	MND01-0317-0001 (S) MND01-0317-1001 (S) MND01-0373-0001 (T) MND01-0373-0001 (S)	U	MB = Zn (5.0 μg/L)	Raised quantitation limit
	MND01-0317-0001 (T) MND01-0317-0001 (S) MND01-0317-1001 (T) MND01-0373-0001 (T) MND01-0373-0001 (S)	U	CCB = Co (1.7 μg/L)	Raised quantitation limit
	MND01-0317-0001 (T)	U	CCB = Sn (5.5 μg/L)	Raised quantitation limit
	MND01-0317-0001 (T)	UJ	MSR = As (74%)	Slightly low bias
	MND01-0317-0001 (T)	J	MSR = Pb (287%)	Significant positive bias

Table B.5.8. (page 18 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L884 (Continued)	(Continued)	UJ	MSR = Se (74%) MSR = Tl (68%)	Slightly low bias
	MND01-0317-0001 (T)	J	ASR = Sb (78%)	Slightly low bias
	MND01-0317-1001 (T)	J	ASR = As (78%)	Slightly low bias
	MND01-0373-0001 (T)	UJ	ASR = As (83%)	
	MND01-0317-0001 (T)	UJ	ASR = Tl (55%)	Low bias
	MND01-0317-0001 (S) MND01-0317-1001 (T) MND01-0317-1001 (S) MND01-0373-0001 (T) MND01-0373-0001 (S)	UJ	ASR = Tl (74%) ASR = Tl (62%) ASR = Tl (71%) ASR = Tl (77%) ASR = Tl (76%)	Slightly low bias
	MND01-0317-0001 (T) MND01-0317-0001 (S) MND01-0317-1001 (T) MND01-0317-1001 (S) MND01-0373-0001 (T) MND01-0373-0001 (S)	J	SD = Ba (21%) SD = Mg (18%) SD = Mn (16%)	Inaccuracy
	MND01-0317-0001 (T) MND01-0317-1001 (T)	UJ/J	FDRPD = Sb (200%) FDRPD = As (200%) FDRPD = Cu (28%) FDRPD = Pb (122%) FDRPD = Bi (200%)	Inaccuracy
	MND01-0317-0001 (S) MND01-0317-1001 (S)	UJ/J	FDRPD = Cu (200%) FDRPD = Mo (200%) FDRPD = V (29%)	Inaccuracy
9403L901	MND01-0318-0001 (T) MND01-0318-0001 (S) MND20-0326-0001 (T) MND20-0326-0001 (S) MND01-0151-0001 (T) MND01-0382-0001 (T)	J	SD = Ba (42%) SD = Cd (42%) SD = Fe (42%) SD = Mg (42%) SD = Mn (35%) SD = Na (42%)	Inaccuracy

Table B.5.8. (page 19 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L901 (Continued)	MND01-0382-0001 (S)	J	SD = Ba (42%)	Inaccuracy
	MND01-0125-0001 (T)		SD = Cd (42%)	
	MND01-0125-0001 (S)		SD = Fe (42%)	
	MND01-0111-0001 (T)		SD = Mg (42%)	
	MND01-0111-0001 (S)		SD = Mn (35%)	
	MND01-0046-0001 (T)		SD = Na (42%)	
	MND01-0046-0001 (S)			
	MND01-0063-0001 (T)			
	MND01-0063-0001 (S)			
	MND01-0313-0001 (T)			
	MND01-0313-0001 (S)			
	MND01-0151-0001 (S)	J	SD = Mn (17%)	Inaccuracy
	MND01-0318-0001 (T)	UJ	MSR = Tl (27%)	Low bias
	MND01-0318-0001 (T)	J	RLD = Al (92%)	Inaccuracy
	MND20-0326-0001 (S)	J	MSA = Sb (0.9845)	Inaccuracy
	MND20-0326-0001 (T)	UJ	ASR = Sb (76%)	Slightly low bias
	MND01-0125-0001 (T)	UJ	ASR = As (80%)	Slightly low bias
	MND01-0125-0001 (S)		ASR = As (74%)	
	MND01-0111-0001 (T)		ASR = As (83%)	
	MND01-0111-0001 (S)		ASR = As (80%)	
	MND01-0046-0001 (T)		ASR = As (81%)	
	MND01-0046-0001 (S)		ASR = As (74%)	
	MND01-0063-0001 (T)		ASR = As (76%)	
	MND01-0063-0001 (S)		ASR = As (82%)	
	MND01-0313-0001 (S)		ASR = As (82%)	
	MND01-0063-0001 (T)	J	ASR = Pb (82%)	Slightly low bias
	MND01-0313-0001 (T)		ASR = Pb (84%)	
	MND01-0318-0001 (S)	UJ	ASR = Se (78%)	Slightly low bias
	MND01-0326-0001 (T)		ASR = Se (61%)	
	MND20-0326-0001 (S)		ASR = Se (58%)	Low bias

Table B.5.8. (page 20 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L901 (Continued)	MND01-0151-0001 (S)	UJ	ASR = Se (81%)	Slightly low bias
	MND01-0125-0001 (T)		ASR = Se (81%)	
	MND01-0125-0001 (S)		ASR = Se (81%)	
	MND01-0111-0001 (T)		ASR = Se (80%)	
	MND01-0111-0001 (S)		ASR = Se (80%)	
	MND01-0046-0001 (T)		ASR = Se (81%)	
	MND01-0046-0001 (S)		ASR = Se (76%)	
	MND01-0063-0001 (T)		ASR = Se (80%)	
	MND01-0063-0001 (S)		ASR = Se (80%)	
	MND01-0313-0001 (T)		ASR = Se (76%)	
	MND01-0313-0001 (S)		ASR = Se (82%)	
	MND01-0318-0001 (T)	UJ	ASR = Tl (42%)	Low bias
	MND01-0318-0001 (S)		ASR = Tl (52%)	
	MND20-0326-0001 (T)		ASR = Tl (71%)	Slightly low bias
	MND20-0326-0001 (S)		ASR = Tl (78%)	
	MND01-0151-0001 (T)		ASR = Tl (77%)	
	MND01-0125-0001 (T)		ASR = Tl (78%)	
	MND01-0125-0001 (S)		ASR = Tl (52%)	Low bias
	MND01-0111-0001 (T)		ASR = Tl (72%)	Slightly low bias
	MND01-0111-0001 (S)		ASR = Tl (77%)	
	MND01-0046-0001 (T)		ASR = Tl (66%)	
	MND01-0046-0001 (S)		ASR = Tl (66%)	
	MND01-0063-0001 (S)	UJ	ASR = Tl (48%)	Low bias
	MND01-0313-0001 (S)		ASR = Tl (48%)	
	MND01-0318-0001 (S)	U	MB = Al (16.0 μg/L)	Raised quantitation limit
	MND20-0326-0001 (S)			
	MND01-0382-0001 (S)			
	MND01-0111-0001 (S)			
	MND01-0063-0001 (T)			
	MND01-0063-0001 (S)			
	MND01-0318-0001 (T)	U	MB = Cr (2.4 μg/L)	Raised quantitation limit

Table B.5.8. (page 21 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L901 (Continued)	MND01-0382-0001 (T) MND01-0125-0001 (T) MND01-0125-0001 (S) MND01-0046-0001 (T) MND01-0063-0001 (T)	U	MB = Cr (2.4 μg/L)	Raised quantitation limit
	MND01-0125-0001 (S) MND01-0111-0001 (S)	U	MB = Fe (9.0 μg/L)	Raised quantitation limit
	MND01-0318-0001 (T) MND01-0318-0001 (S) MND20-0326-0001 (T) MND20-0326-0001 (S) MND01-0382-0001 (T) MND01-0382-0001 (S) MND01-0125-0001 (T) MND01-0125-0001 (S) MND01-0111-0001 (T)	U	MB = Zn (3.3 μg/L)	Raised quantitation limit
	MND01-0318-0001 (T) MND01-0318-0001 (S) MND20-0326-0001 (T) MND20-0326-0001 (S) MND01-0151-0001 (T) MND01-0382-0001 (T) MND01-0382-0001 (S) MND01-0125-0001 (T) MND01-0125-0001 (S) MND01-0111-0001 (T) MND01-0111-0001 (S) MND01-0046-0001 (T) MND01-0046-0001 (S) MND01-0063-0001 (T) MND01-0063-0001 (S)	U	CCB = Li (53 μg/L)	Raised quantitation limit

Table B.5.8. (page 22 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L901 (Continued)	MND01-0313-0001 (T) MND01-0313-0001 (S)	U	CCB = Li (53 μg/L)	Raised quantitation limit
	MND01-0318-0001 (T) MND01-0151-0001 (T) MND01-0151-0001 (S) MND01-0046-0001 (S) MND01-0063-0001 (T) MND01-0313-0001 (S)	U	CCB = Co (4.2 μg/L)	Raised quantitation limit
	MND01-0318-0001 (T) MND01-0318-0001 (S) MND20-0326-0001 (T) MND20-0326-0001 (S) MND01-0382-0001 (T) MND01-0382-0001 (S) MND01-0125-0001 (T) MND01-0125-0001 (S) MND01-0111-0001 (T) MND01-0111-0001 (S) MND01-0063-0001 (S) MND01-0313-0001 (S)	U	CCB = Cu (6.3 μg/L)	Raised quantitation limit
	MND01-0318-0001 (T) MND20-0326-0001 (T) MND01-0111-0001 (S)	U	CCB = V (6.2 μg/L)	Raised quantitation limit
	MND01-0318-0001 (T) MND01-0318-0001 (S) MND20-0326-0001 (T) MND20-0326-0001 (S) MND01-0151-0001 (T) MND01-0382-0001 (T) MND01-0382-0001 (S) MND01-0125-0001 (T)	U	CCB = Sn (57 μg/L)	Raised quantitation limit

Table B.5.8. (page 23 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L901 (Continued)	MND01-0125-0001 (S) MND01-0111-0001 (T) MND01-0111-0001 (S) MND01-0046-0001 (T) MND01-0046-0001 (S) MND01-0063-0001 (T) MND01-0063-0001 (S) MND01-0313-0001 (T) MND01-0313-0001 (S)	U	CCB = Sn (57 μg/L)	Raised quantitation limit
	MND01-0318-0001 (T) MND01-0318-0001 (S) MND01-0151-0001 (T) MND01-0151-0001 (S) MND01-0111-0001 (S) MND01-0046-0001 (S) MND01-0063-0001 (S) MND01-0313-0001 (T)	UJ	CCB = As (-2.1 μg/L)	Negative bias
	MND01-0111-0001 (T) MND01-0111-0001 (S)	J	CCB = K (-470 μg/L)	Negative bias
9403L935	MND01-0319-0001 (T) MND01-0319-0001 (S) MND01-0372-0001 (S) MND01-P027-0001 (S) MND20-0389-0001 (T) MND20-0389-0001 (S)	U	MB = Al (16 μg/L)	Raised quantitation limit
	MND01-0319-0001 (T) MND01-0319-0001 (S) MND01-0372-0001 (S) MND01-P027-0001 (S)	U	MB = Cu (1.1 μg/L)	Raised quantitation limit
	MND01-0319-0001 (S) MND01-0372-0001 (S)	U	MB = Fe (14 μg/L)	Raised quantitation limit

Table B.5.8. (page 24 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L935 (Continued)	MND01-P027-0001 (S) MND20-0389-0001 (T) MND20-0389-0001 (S)	U	MB = Fe (14 μg/L)	Raised quantitation limit
	MND01-P027-0001 (T) MND01-P027-0001 (S) MND20-0389-0001 (T)	J/UJ	MB = Ag (-1.2 μg/L)	Negative bias
	MND01-0319-0001 (T)	U	CCB = Cr (3.6 μg/L)	Raised quantitation limit
	MND01-P027-0001 (S) MND20-0389-0001 (T) MND20-0389-0001 (S)	U	CCB = Mn (5.2 μg/L)	Raised quantitation limit
	MND01-0319-0001 (T) MND01-0319-0001 (S) MND01-P027-0001 (T) MND20-0389-0001 (S)	U	CCB = Mo (7.4 μg/L)	Raised quantitation limit
	MND01-0319-0001 (S) MND01-0372-0001 (T) MND01-P027-0001 (T) MND01-P027-0001 (S) MND20-0389-0001 (T) MND20-0389-0001 (S)	J/UJ	CCB = As (-3.1 μg/L)	Negative bias
	MND01-0319-0001 (S) MND01-0372-0001 (S) MND01-P027-0001 (S) MND20-0389-0001 (T)	J/UJ	CCB = Zn (-4.4 μg/L)	Negative bias
	MND01-P027-0001 (T)	J	ASR = As (78%)	Slightly low bias
	MND01-0319-0001 (T) MND01-0372-0001 (T)	J/UJ	ASR = Se (73%) ASR = Se (75%)	Slightly low bias
	MND01-P027-0001 (T)		ASR = Se (53%)	Low bias
	MND01-0319-0001 (T)	UJ	ASR = Tl (76%)	Slightly low bias
	MND01-0372-0001 (T)		ASR = Tl (57%)	Low bias

Table B.5.8. (page 25 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L935 (Continued)	MND01-0372-0001 (S) MND01-P027-0001 (T)	UJ	ASR = Tl (62%) ASR = Tl (74%)	Slightly low bias
	MND01-P027-0001 (S)	UJ	ASR = Tl (57%)	Low bias
	MND20-0389-0001 (T) MND20-0389-0001 (S)		ASR = Tl (78%) ASR = Tl (75%)	Slightly low bias
	MND01-0319-0001 (T) MND01-0372-0001 (T) MND01-P027-0001 (T) MND20-0389-0001 (T)	J	SD = Ca (11%)	Inaccuracy
	MND01-0319-0001 (T) MND01-0319-0001 (S) MND01-0372-0001 (T) MND01-0372-0001 (S) MND01-P027-0001 (T)	J	SD = Mn (17%)	Inaccuracy
9403L942	MND20-0356-0001 (T) MND20-0356-0001 (S) MND20-0324-0001 (S) MND20-0115-0001 (S) MND20-0320-0001 (T) MND20-0320-0001 (S)	U	MB = Al (13 μg/L)	Raised quantitation limit
	MND20-0356-0001 (T) MND20-0356-0001 (S) MND20-0324-0001 (S) MND20-0115-0001 (T)	UJ/J	CCB = As (-2.5 μg/L)	Negative bias
	MND20-0356-0001 (T) MND20-0356-0001 (S) MND20-0324-0001 (T) MND20-0324-0001 (S) MND20-0115-0001 (T) MND20-0115-0001 (S)	U	MB = Be (0.32 μg/L)	Raised quantitation limit

Table B.5.8. (page 26 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L942 (Continued)	MND20-0320-0001 (T) MND20-0320-0001 (S)	U	MB = Be (0.32 μg/L)	Raised quantitation limit
	MND20-0324-0001 (T) MND20-0115-0001 (S)	U	CCB = Cr (3.4 μg/L)	Raised quantitation limit
	MND20-0356-0001 (T) MND20-0324-0001 (T) MND20-0320-0001 (T)	U	CCB = Co (3.7 μg/L)	Raised quantitation limit
	MND20-0356-0001 (T) MND20-0356-0001 (S) MND20-0324-0001 (T) MND20-0320-0001 (T)	U	MB = Cu (0.64 μg/L)	Raised quantitation limit
	MND20-0115-0001 (S) MND20-0320-0001 (S)	U	MB = Fe (11 μg/L)	Raised quantitation limit
	MND20-0115-0001 (T)	UJ	MB = As (-0.6 μg/L)	Low bias
	MND20-0356-0001 (T) MND20-0356-0001 (S) MND20-0115-0001 (S) MND20-0320-0001 (T) MND20-0320-0001 (S)	U	MB = V (4.4 μg/L)	Raised quantitation limit
	MND20-0356-0001 (T) MND20-0356-0001 (S) MND20-0324-0001 (S) MND20-0115-0001 (S) MND20-0320-0001 (T) MND20-0320-0001 (S)	U	MB = Zn (2.1 μg/L)	Raised quantitation limit
	MND20-0356-0001 (T) MND20-0356-0001 (S) MND20-0324-0001 (T) MND20-0324-0001 (S) MND20-0115-0001 (T) MND20-0115-0001 (S)	U	CCB = Li (36 μg/L)	Raised quantitation limit

Table B.5.8. (page 27 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L942 (Continued)	MND20-0320-0001 (T) MND20-0320-0001 (S)	U	CCB = Li (36 μg/L)	Raised quantitation limit
	MND20-0356-0001 (T) MND20-0356-0001 (S)	U	CCB = Mo (10 μg/L)	Raised quantitation limit
	MND20-0356-0001 (T)	U/UJ	MSR = As (74%)	Slightly low bias
			MSR = Fe (59%)	Low bias
	MND20-0356-0001 (T)	J/UJ	MSR = Mn (67%) MSR = Ni (75%) MSR = Tl (73%) MSR = Li (76%)	Slightly low bias
	MND20-0356-0001 (S) MND20-0324-0001 (S) MND20-0115-0001 (T)	UJ/J	ASR = Pb (82%) ASR = Pb (80%) ASR = Pb (50%)	Slightly low bias
	MND20-0324-0001 (T) MND20-0115-0001 (T)	UJ	ASR = Se (81%) ASR = Se (83%)	Slightly low bias
	MND20-0356-0001 (T) MND20-0356-0001 (S)	UJ	ASR = Tl (56%) ASR = Tl (46%)	Low bias
	MND20-0324-0001 (T) MND20-0324-0001 (S) MND20-0115-0001 (T)		ASR = Tl (78%) ASR = Tl (75%) ASR = Tl (84%)	Slightly low bias
	MND20-0115-0001 (S)		ASR = Tl (42%)	Low bias
	MND20-0320-0001 (T) MND20-0320-0001 (S)		ASR = Tl (74%) ASR = Tl (72%)	Slightly low bias
	MND20-0320-0001 (S)	UJ	ASR = Pb (not verifiable)	Immeasurable
9403L962	MND20-0386-0001 (T) MND20-0386-0001 (S) MND20-0386-1001 (T) MND20-0386-1001 (S)	U	MB = Al (17 μg/L) MB = Li (13 μg/L) MB = V (4.5 μg/L)	Raised quantitation limit
	MND20-0386-0001 (T)	J	MB = Cr (-2.2 μg/L)	Negative bias

Table B.5.8. (page 28 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L962 (Continued)	MND20-0386-1001 (T)	J	MB = Cr (-2.2 μg/L)	Negative bias
	MND20-0386-0001 (T) MND20-0386-1001 (S)	UJ	MB = Cu (-0.83 μg/L)	Negative bias
	MND20-0386-0001 (T)	U	CCB = Co (0.82 μg/L)	Raised quantitation limit
	MND20-0386-0001 (T) MND20-0386-1001 (T) MND20-0386-1001 (S)	U	CCB = Zn (1.8 μg/L)	Raised quantitation limit
	MND20-0386-0001 (T)	UJ	MSR = Tl (28%)	Low bias
	MND20-0386-0001 (T) MND20-0386-0001 (S) MND20-0386-1001 (T) MND20-0386-1001 (S)	J	SD = Na (18%)	Inaccuracy
	MND20-0386-0001 (T) MND20-0386-1001 (T)	UJ/J	FDRPD = As (200%) near d.l. FDRPD = Cr (108%) below d.l.	Minimal impact
	MND20-0386-0001 (S) MND20-0386-1001 (S)	UJ/J	FDRPD = Sb (200%) near d.l. FDRPD = As (200%) near d.l. FDRPD = Be (39.2%) near d.l.	Minimal impact
9403L963	MND01-0126-0001 (S) MND20-0354-0001 (S)	U	MB = Fe (5.8 μg/L)	Raised quantitation limit
	MND01-0126-0001 (T) MND01-0126-0001 (S) MND20-0354-0001 (S)	U	MB = Al (9.5 μg/L)	Raised quantitation limit
	MND01-0126-0001 (T) MND01-0126-0001 (S) MND20-0354-0001 (S)	U	MB = Zn (2.2 μg/L)	Raised quantitation limit
	MND01-0126-0001 (T) MND01-0126-0001 (S) MND20-0354-0001 (S)	J	MB = V (-2.3 μg/L)	Negative bias
	MND20-0354-0001 (T)	U	CCB = Cr (3.2 μg/L) CCB = Co (2.3 μg/L)	Raised quantitation limit
	MND01-0126-0001 (T) MND20-0354-0001 (T)	UJ	CCB = Tl (-2.5 μg/L)	Negative bias

Table B.5.8. (page 29 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L962 (Continued)	MND20-0354-0001 (T) MND20-0354-0001 (S)	J	CCB = Li (-12 μg/L)	Negative bias
	MND01-0126-0001 (T)	UJ	MSR = Tl (49%)	Low bias
	MND01-0126-0001 (S)	UJ	ASR = As (79%)	Slightly low bias
9403L963	MND01-0126-0001 (S) MND20-0354-0001 (T) MND20-0354-0001 (S)	UJ	ASR = Se (76%) ASR = Se (75%) ASR = Se (77%)	Slightly low bias
	MND20-0354-0001 (T) MND20-0354-0001 (S)	UJ	ASR = Tl (75%) ASR = Tl (84%)	Slightly low bias
	MND01-0126-0001 (T) MND01-0126-0001 (S) MND20-0354-0001 (T) MND20-0354-0001 (S)	J	SD = Na (18%)	Inaccuracy
9403L974	MND01-0156-0001 (T) MND01-0156-0001 (S) MND01-0158-0001 (T) MND01-0158-0001 (S) MND01-0153-0001 (T) MND01-0153-0001 (S) MND01-0380-0001 (S) MND01-0315-0001 (T) MND01-0315-0001 (S) MND20-0347-1001 (T) MND20-0347-1001 (S) MND20-0347-0001 (T) MND20-0347-0001 (S) MND01-0154-0001 (T) MND01-0154-0001 (S) MND20-0344-0001 (S) MND20-0325-0001 (S)	U	MB = Al (47 μg/L)	Raised quantitation limit
	MND01-0158-0001 (T)	U	MB = Fe (9.7 μg/L)	Raised quantitation limit

Table B.5.8. (page 30 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L974 (Continued)	MND01-0158-0001 (S) MND01-0153-0001 (S) MND01-0380-0001 (S) MND01-0315-0001 (S) MND20-0347-1001 (S) MND20-0347-0001 (S) MND01-0154-0001 (S) MND20-0325-0001 (S)	U	MB = Fe (9.7 μg/L)	Raised quantitation limit
	MND01-0156-0001 (T) MND01-0156-0001 (S) MND01-0158-0001 (T) MND01-0158-0001 (S) MND01-0153-0001 (T) MND01-0153-0001 (S) MND01-0315-0001 (T) MND01-0315-0001 (S) MND20-0347-1001 (T) MND20-0347-1001 (S) MND20-0347-0001 (T) MND20-0347-0001 (S) MND01-0154-0001 (T) MND01-0154-0001 (S) MND20-0344-0001 (T) MND20-0344-0001 (S)	U	MB = Li (28 μg/L)	Raised quantitation limit
	MND01-0152-0001 (T) MND01-0152-0001 (S) MND01-0158-0001 (T) MND01-0158-0001 (S) MND01-0153-0001 (T) MND01-0153-0001 (S) MND01-0380-0001 (T)	U	MB = Zn (30 μg/L)	Raised quantitation limit

Table B.5.8. (page 31 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L974 (Continued)	MND01-0380-0001 (S) MND01-0315-0001 (T) MND01-0315-0001 (S) MND20-0347-1001 (T) MND20-0347-1001 (S) MND20-0347-0001 (T) MND20-0347-0001 (S) MND01-0154-0001 (T) MND01-0154-0001 (S) MND20-0344-0001 (T) MND20-0344-0001 (S) MND20-0325-0001 (T)	U	MB = Zn (30 μg/L)	Raised quantitation limit
	MND01-0380-0001 (T) MND01-0380-0001 (S) MND01-0315-0001 (S) MND01-0154-0001 (T)	U	CCB = Cr (1.4 μg/L)	Raised quantitation limit
	MND01-0380-0001 (T) MND01-0380-0001 (S)	U	CCB = V (-2.0 μg/L)	Negative bias
	MND01-0156-0001 (T) MND01-0156-0001 (S) MND01-0380-0001 (T) MND20-0347-1001 (T) MND20-0347-1001 (S) MND20-0347-0001 (T) MND20-0347-0001 (S)	UJ	CCB = Co (-0.6 μg/L)	Negative bias
	MND20-0325-0001 (S)	J	CCB = Co (-0.6 μg/L)	Negative bias
	MND01-0158-0001 (T) MND20-0347-1001 (T) MND01-0154-0001 (T)	UJ	CCB = Cu (-0.5 μg/L)	Negative bias
	MND01-0152-0001 (T) MND01-0158-0001 (S)	J	CCB = Cu (-0.5 μg/L)	Negative bias

Table B.5.8. (page 32 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L974 (Continued)	MND01-0153-0001 (T)	J	CCB = Cu (-0.5 μg/L)	Negative bias
	MND01-0153-0001 (S)			
	MND01-0380-0001 (T)			
	MND01-0315-0001 (T)			
	MND20-0347-1001 (S)			
	MND20-0347-0001 (T)			
	MND20-0347-0001 (S)			
	MND01-0154-0001 (S)			
	MND20-0344-0001 (T)			
	MND20-0344-0001 (S)			
	MND20-0325-0001 (S)			
	MND01-0158-0001 (S)	UJ	CCB = Sn (-4.9 μg/L)	Negative bias
	MND01-0158-0001 (T)	J	CCB = V (-1.9 μg/L)	Negative bias
	MND01-0158-0001 (S)			
	MND20-0344-0001 (T)			
	MND20-0344-0001 (S)			
	MND01-0152-0001 (T)	UJ	MSR = Tl (59%)	Low bias
	MND01-0152-0001 (T)	J/UJ	ASR = Se (66%)	Slightly low bias
	MND01-0158-0001 (T)		ASR = Se (84%)	
	MND01-0380-0001 (T)		ASR = Se (72%)	
	MND01-0380-0001 (S)		ASR = Se (76%)	
	MND01-0315-0001 (T)		ASR = Se (77%)	
	MND01-0315-0001 (S)		ASR = Se (82%)	
	MND20-0347-1001 (T)		ASR = Se (77%)	
	MND20-0347-1001 (S)		ASR = Se (79%)	
	MND20-0347-0001 (T)		ASR = Se (80%)	
	MND20-0347-0001 (S)		ASR = Se (75%)	
	MND01-0154-0001 (S)		ASR = Se (84%)	
	MND20-0344-0001 (T)		ASR = Se (80%)	
	MND20-0344-0001 (S)		ASR = Se (81%)	
	MND20-0325-0001 (T)		ASR = Se (77%)	

Table B.5.8. (page 33 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L974 (Continued)	MND20-0325-0001 (S)	J/UJ	ASR = Se (71%)	Low bias
	MND01-0152-0001 (T)	UJ	ASR = Tl (44%)	Low bias
	MND01-0156-0001 (S)		ASR = Tl (53%)	
	MND01-0158-0001 (T)		ASR = Tl (45%)	
	MND01-0158-0001 (S)		ASR = Tl (52%)	
	MND01-0153-0001 (T)		ASR = Tl (43%)	
	MND01-0153-0001 (S)		ASR = Tl (45%)	
	MND01-0380-0001 (T)		ASR = Tl (67%)	Slightly low bias
	MND01-0380-0001 (S)		ASR = Tl (67%)	
	MND01-0154-0001 (T)		ASR = Tl (44%)	Low bias
	MND01-0154-0001 (S)		ASR = Tl (48%)	
	MND20-0344-0001 (T)		ASR = Tl (52%)	
	MND20-0325-0001 (T)		ASR = Tl (62%)	Slightly low bias
	MND20-0325-0001 (S)		ASR = Tl (72%)	
	MND01-0152-0001 (T)	J	SD = Ba (14%)	Inaccuracy
	MND01-0152-0001 (S)		SD = Ca (22%)	
	MND01-0158-0001 (T)		SD = Mg (19%)	
	MND01-0158-0001 (S)			
	MND01-0153-0001 (T)			
	MND01-0153-0001 (S)			
	MND01-0380-0001 (T)			
	MND01-0380-0001 (S)			
	MND01-0315-0001 (T)			
	MND01-0315-0001 (S)			
	MND01-0154-0001 (T)			
	MND01-0154-0001 (S)			
	MND20-0344-0001 (T)			
	MND20-0344-0001 (S)			
	MND20-0347-1001 (T)	J	SD = Ba (14%)	Inaccuracy
	MND20-0347-1001 (S)		SD = Mg (19%)	
	MND20-0347-0001 (T)			

Table B.5.8. (page 34 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9403L974 (Continued)	MND20-0347-0001 (S) MND20-0325-0001 (T) MND20-0325-0001 (S)	J	SD = Ba (14%) SD = Mg (19%)	Inaccuracy
	MND20-0347-1001 (T) MND20-0347-1001 (S) MND20-0347-0001 (T) MND20-0347-0001 (S) MND20-0325-0001 (T) MND20-0325-0001 (S)	R	Calcium - Not verifiable	Unusable
	MND01-0153-0001 (T) MND01-0380-0001 (T) MND01-0315-0001 (T) MND20-0347-1001 (T) MND20-0347-0001 (T) MND01-0154-0001 (T) MND20-0344-0001 (T) MND20-0344-0001 (S) MND20-0325-0001 (T)	J	SD = Fe (22%)	Inaccuracy
	MND20-0347-1001 (T) MND20-0347-0001 (T)	J	FDRPD = Cr (90%)	Inaccuracy
	MND20-0347-1001 (T) MND20-0347-0001 (T)	UJ	FDRPD = Cu (200%) near d.l.	Minimal impact
	MND20-0347-1001 (T) MND20-0347-0001 (T)	J/UJ	FDRPD = Fe (37.6%) FDRPD = Mn (33.2%) FDRPD = Ni (31%) FDRPD = Cn (200%) near d.l	Inaccuracy
	MND20-0347-1001 (S) MND20-0347-0001 (S)	J	FDRPD = K (45%)	Inaccuracy
	MND20-0347-1001 (S)	J	FDRPD = Ag (200%) near d.l.	Minimal impact
	MND20-0347-0001 (S)	UJ		

Table B.5.8. (page 35 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L036	MND20-0341-0001 (T) MND20-0341-0001 (S) MND20-0336-0001 (T) MND20-0336-0001 (S) MND01-0311-0001 (T) MND01-0311-0001 (S) MND20-0327-0001 (T) MND20-0327-0001 (S)	J	SD = Ba (11%)	Inaccuracy
	MND20-0341-0001 (T) MND20-0341-0001 (S) MND20-0336-0001 (T) MND20-0336-0001 (S) MND01-0311-0001 (T) MND01-0311-0001 (S) MND20-0327-0001 (T) MND20-0327-0001 (S)	J	SD = Ca (88%)	Inaccuracy
	MND20-0341-0001 (T) MND20-0341-0001 (S) MND20-0336-0001 (T) MND01-0311-0001 (T) MND20-0327-0001 (T) MND20-0327-0001 (S)	J	SD = Fe (13%)	Inaccuracy
	MND20-0341-0001 (T) MND20-0341-0001 (S) MND20-0336-0001 (T) MND20-0336-0001 (S) MND01-0311-0001 (T) MND01-0311-0001 (S) MND20-0327-0001 (T) MND20-0327-0001 (S)	J	SD = Mn (12%)	Inaccuracy

Table B.5.8. (page 36 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L036 (Continued)	MND20-0341-0001 (T)	UJ	MSR = Sb (69%) MSR = Tl (69%)	Slightly low bias
	MND20-0341-0001 (T)	J	MSR = Li (66%)	Slightly low bias
	MND20-0341-0001 (S)	J	ASR = Sb (78%)	Slightly low bias
	MND01-0311-0001 (S)	UJ	ASR = As (81%)	Slightly low bias
	MND20-0341-0001 (T)	J	ASR = Pb (76%)	Slightly low bias
	MND20-0341-0001 (T)	UJ	ASR = Se (75%)	Slightly low bias
	MND20-0341-0001 (S)	UJ	ASR = Se (49%)	Low bias
	MND20-0327-0001 (T)	J	ASR = Se (79%)	
	MND20-0327-0001 (S)	J	ASR = Se (81%)	Slightly low bias
	MND20-0341-0001 (T) MND20-0341-0001 (S) MND20-0336-0001 (S)	UJ	ASR = Tl (66%) ASR = Tl (65%) ASR = Tl (84%)	Slightly low bias
	MND20-0327-0001 (T) MND20-0327-0001 (S)		ASR = Tl (52%) ASR = Tl (50%)	Low bias
	MND20-0341-0001 (T) MND20-0341-0001 (S) MND20-0336-0001 (T) MND20-0336-0001 (S) MND01-0311-0001 (T) MND01-0311-0001 (S) MND20-0327-0001 (T) MND20-0327-0001 (S)	U	MB = Al (11 μg/L)	Raised quantitation limit
	MND20-0341-0001 (T) MND20-0341-0001 (S) MND20-0336-0001 (T) MND20-0336-0001 (S) MND01-0311-0001 (T) MND01-0311-0001 (S) MND20-0327-0001 (T)	U	MB = Be (0.31 μg/L)	Raised quantitation limit

Table B.5.8. (page 37 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L036 (Continued)	MND20-0327-0001 (S)	U	MB = Be (0.31 μg/L)	Raised quantitation limit
	MND20-0336-0001 (S) MND01-0311-0001 (S)	U	MB = Fe (5.2 μg/L)	Raised quantitation limit
	MND20-0336-0001 (T) MND20-0336-0001 (S) MND01-0311-0001 (T) MND01-0311-0001 (S) MND20-0327-0001 (S)	U	MB = V (3.2 μg/L)	Raised quantitation limit
	MND20-0341-0001 (S) MND01-0311-0001 (T) MND20-0327-0001 (T)	U	MB = Zn (2.0 μg/L)	Raised quantitation limit
	MND20-0341-0001 (S)	UJ	MB = As (-2.4 μg/L)	Negative bias
	MND20-0341-0001 (T) MND20-0336-0001 (T) MND01-0311-0001 (T) MND20-0327-0001 (S)	U	CCB = Cd (2.7 μg/L)	Raised quantitation limit
	MND20-0327-0001 (T)	U	CCB = Cu (4.9 μg/L)	
	MND20-0336-0001 (T) MND20-0336-0001 (S) MND01-0311-0001 (T) MND01-0311-0001 (S) MND20-0327-0001 (T) MND20-0327-0001 (S)	U	CCB = Li (16 μg/L)	Raised quantitation limit
	MND20-0336-0001 (T) MND20-0336-0001 (S) MND01-0311-0001 (T) MND01-0311-0001 (S) MND20-0327-0001 (T) MND20-0327-0001 (S)	U	CCB = Mo (7.2 μg/L)	Raised quantitation limit
	MND20-0341-0001 (T)	U	CCB = Sn (27 μg/L)	Raised quantitation limit
	MND20-0341-0001 (S)	UJ	CCB = Se (-0.9 μg/L)	Negative bias

Table B.5.8. (page 38 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L036 (Continued)	MND20-0336-0001 (T)	UJ	CCB = Se (-0.9 μg/L)	Negative bias
	MND20-0336-0001 (T) MND01-0311-0001 (T) MND01-0311-0001 (S) MND20-0327-0001 (T) MND20-0327-0001 (S)	UJ	CCB = As (-3.1 μg/L)	Negative bias
9404L053	MND20-0383-0001 (T) MND20-0383-0001 (S) MND01-0303-0001 (S) MND20-0328-0001 (T) MND20-0328-0001 (S) MND01-0124-0001 (T) MND01-0124-0001 (S) MND01-0123-1001 (T) MND01-0159-0001 (T) MND01-0159-0001 (S) MND01-0160-0001 (T) MND01-0160-0001 (S) MND20-0333-0001 (T) MND20-0333-0001 (S)	U	MB = Al (10 μg/L)	Raised quantitation limit
	MND20-0383-0001 (S) MND01-0123-0001 (S)	U	MB = Fe (4.5 μg/L)	Raised quantitation limit
	MND20-0383-0001 (T) MND20-0383-0001 (S) MND01-0303-0001 (T) MND01-0303-0001 (S) MND20-0328-0001 (T) MND20-0328-0001 (S) MND01-0124-0001 (T) MND01-0124-0001 (S) MND01-0123-0001 (T)	U	MB = Be (0.2 μg/L)	Raised quantitation limit

Table B.5.8. (page 39 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L053 (Continued)	MND01-0123-1001 (T) MND01-0159-0001 (T) MND01-0159-0001 (S) MND01-0160-0001 (T) MND01-0160-0001 (S) MND20-0333-0001 (T) MND20-0333-0001 (S)	U	MB = Be (0.2 μg/L)	Raised quantitation limit
	MND01-0303-0001 (T) MND01-0303-0001 (S) MND01-0123-1001 (S) MND01-0159-0001 (T) MND01-0159-0001 (S) MND01-0160-0001 (T) MND01-0160-0001 (S) MND20-0333-0001 (T) MND20-0333-0001 (S)	U	MB = V (2.6 μg/L)	Raised quantitation limit
	MND20-0383-0001 (T) MND20-0383-0001 (S) MND01-0303-0001 (T) MND01-0303-0001 (S) MND20-0328-0001 (T) MND20-0328-0001 (S) MND01-0124-0001 (T) MND01-0124-0001 (S) MND01-0123-0001 (T) MND01-0123-0001 (S) MND01-0123-1001 (T) MND01-0123-1001 (S) MND01-0159-0001 (T) MND01-0159-0001 (S) MND01-0160-0001 (T)	U	MB = Zn (2.3 μg/L)	Raised quantitation limit

Table B.5.8. (page 40 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L053 (Continued)	MND01-0160-0001 (S) MND20-0333-0001 (T) MND20-0333-0001 (S)	U	MB = Zn (2.3 μg/L)	Raised quantitation limit
	MND20-0383-0001 (T) MND20-0383-0001 (S) MND01-0303-0001 (T) MND01-0303-0001 (S) MND20-0328-0001 (T) MND20-0328-0001 (S) MND01-0124-0001 (T) MND01-0124-0001 (S) MND01-0123-0001 (T) MND01-0123-0001 (S) MND01-0123-1001 (T) MND01-0123-1001 (S) MND01-0159-0001 (T) MND01-0159-0001 (S) MND01-0160-0001 (T) MND01-0160-0001 (S) MND20-0333-0001 (T) MND20-0333-0001 (S)	U	CCB = Li (83 μg/L)	Raised quantitation limit
	MND20-0383-0001 (T)	U	CCB = Mn (3.1 μg/L)	Raised quantitation limit
	MND20-0335-0001 (T) MND20-0335-0001 (S) MND01-0123-0001 (T) MND01-0123-0001 (S) MND01-0123-1001 (S)	UJ	CCB = Al (-17 μg/L)	Negative bias
	MND20-0383-0001 (S) MND01-0303-0001 (S) MND20-0328-0001 (T) MND20-0328-0001 (S)	UJ/J	CCB = Sb (-3.1 μg/L)	Negative bias

Table B.5.8. (page 41 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L053 (Continued)	MND01-0124-0001 (T) MND01-0124-0001 (S) MND01-0123-0001 (T) MND01-0123-0001 (S) MND01-0123-1001 (S) MND01-0159-0001 (S) MND01-0160-0001 (T) MND01-0160-0001 (S) MND20-0333-0001 (T)	UJ/J	CCB = Sb (-3.1 μg/L)	Negative bias
	MND01-0303-0001 (T) MND01-0303-0001 (S) MND20-0328-0001 (T) MND20-0328-0001 (S) MND01-0124-0001 (T) MND01-0124-0001 (S) MND01-0123-0001 (T) MND01-0123-0001 (S) MND01-0123-1001 (T) MND01-0159-0001 (T) MND01-0159-0001 (S) MND20-0333-0001 (T)	UJ/J	CCB = As (-5.3 μg/L)	Negative bias
	MND01-0303-0001 (T) MND01-0303-0001 (S) MND20-0328-0001 (T) MND01-0124-0001 (T) MND01-0124-0001 (S) MND01-0123-0001 (S) MND01-0123-1001 (S) MND01-0159-0001 (T) MND01-0159-0001 (S) MND01-0160-0001 (T)	UJ/J	CCB = Pb (-1.2 μg/L)	Negative bias

Table B.5.8. (page 42 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L053 (Continued)	MND01-0160-0001 (S) MND20-0333-0001 (T) MND20-0333-0001 (S)	UJ/J	CCB = Pb (-1.2 μg/L)	Negative bias
	MND20-0383-0001 (S)	UJ	CCB = Mn (-1.5 μg/L)	Negative bias
	MND01-0124-0001 (T) MND01-0124-0001 (S) MND01-0123-1001 (S) MND01-0159-0001 (S) MND01-0160-0001 (T) MND20-0333-0001 (T) MND20-0333-0001 (S)	UJ	CCB = Sn (-24 μg/L)	Negative bias
	MND20-0335-0001 (T)	UJ	RLD = Al (200%)	Inaccuracy
		J	RLD = Zn (200%)	
	MND20-0335-0001 (T)	R	MSR = Bi (0%) MSR = Ca (0%) MSR = Cr (0%)	Unusable
		UJ	MSR = Co (65%) MSR = Cu (62%)	Slighty low bias
		J	MSR = Mn (55%)	Low bias
		R	MSR = Se (0%) MSR = Ag (0%) MSR = Tl (0%)	Unusable
	MND20-0335-0001 (T)	J	MSR = V (51%)	Low bias
	MND01-0124-0001 (S)	J	ASR = Sb (116%)	Minimal impact
	MND20-0383-0001 (T) MND20-0383-0001 (S) MND01-0123-0001 (S) MND01-0123-1001 (T) MND01-0124-0001 (T)	UJ	ASR = As (78%) ASR = As (82%) ASR = As (79%) ASR = As (81%) ASR = As (84%)	Slightly low bias
	MND01-0303-0001 (S) MND01-0123-0001 (S)	J	ASR = Pb (116%) ASR = Pb (131%)	Positive bias

Table B.5.8. (page 43 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L053 (Continued)	MND01-0303-0001 (T)	UJ	ASR = Se (84%)	Slightly low bias
	MND20-0328-0001 (T)		ASR = Se (82%)	
	MND01-0123-0001 (S)		ASR = Se (82%)	
	MND01-0159-0001 (T)		ASR = Se (82%)	
	MND01-0160-0001 (S)		ASR = Se (79%)	
	MND20-0333-0001 (T)		ASR = Se (84%)	
	MND20-0333-0001 (S)		ASR = Se (83%)	
	MND20-0335-0001 (T)	UJ	ASR = Tl (47%)	Low bias
	MND20-0335-0001 (S)	UJ	ASR = Tl (83%)	Slightly low bias
	MND20-0383-0001 (T)		ASR = Tl (80%)	
	MND01-0303-0001 (T)		ASR = Tl (60%)	
	MND01-0303-0001 (S)	UJ	ASR = Tl (52%)	Low bias
	MND20-0328-0001 (T)	UJ	ASR = Tl (78%)	Slightly low bias
	MND20-0328-0001 (S)		ASR = Tl (76%)	
	MND01-0124-0001 (T)		ASR = Tl (79%)	
	MND01-0124-0001 (S)		ASR = Tl (79%)	
	MND01-0123-0001 (T)		ASR = Tl (76%)	
	MND01-0123-0001 (S)		ASR = Tl (74%)	
	MND01-0123-1001 (T)		ASR = Tl (74%)	
	MND01-0123-1001 (S)		ASR = Tl (67%)	
	MND01-0159-0001 (T)	UJ	ASR = Tl (55%)	Low bias
	MND01-0159-0001 (S)	UJ	ASR = Tl (76%)	Slightly low bias
	MND01-0160-0001 (T)		ASR = Tl (82%)	
	MND01-0160-0001 (S)		ASR = Tl (83%)	
	MND20-0333-0001 (T)		ASR = Tl (80%)	
	MND20-0333-0001 (S)		ASR = Tl (77%)	
	MND01-0123-0001 (S)	UJ/J	FDRPD = Pb (200%)	Inaccuracy
	MND01-0123-1001 (S)		FDRPD = Sn (200%)	
			FDRPD = V (200%)	
	MND01-0123-0001 (T)	J	FDRPD = Ni (140%)	Inaccuracy
	MND01-0123-1001 (T)			

Table B.5.8. (page 44 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L074	MND20-0329-0001 (T) MND20-0329-0001 (S) MND01-0128-0001 (T) MND01-0128-0001 (S) MND01-0127-0001 (T) MND01-0127-0001 (S) MND01-0301-0001 (S) MND01-0128-1001 (T) MND01-0128-1001 (S)	U	MB = Al (11 μg/L)	Raised quantitation limit
	MND01-0127-0001 (S) MND01-0128-1001 (T)	U	MB = Fe (7.2 μg/L)	Raised quantitation limit
	MND20-0329-0001 (T) MND20-0329-0001 (S) MND01-0128-0001 (T) MND01-0128-0001 (S) MND01-0127-0001 (T) MND01-0127-0001 (S) MND01-0301-0001 (S) MND01-0128-1001 (T) MND01-0128-1001 (S)	U	MB = V (3.5 μg/L)	Raised quantitation limit
	MND20-0329-0001 (T) MND20-0329-0001 (S) MND01-0128-0001 (T) MND01-0128-0001 (S) MND01-0127-0001 (T) MND01-0127-0001 (S) MND01-0301-0001 (T) MND01-0301-0001 (S) MND01-0128-1001 (T) MND01-0128-1001 (S)	U	MB = Zn (9.5 μg/L)	Raised quantitation limit
	MND20-0329-0001 (T)	U	CCB = Be (0.4 μg/L)	Raised quantitation limit

Table B.5.8. (page 45 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L074 (Continued)	MND20-0329-0001 (S) MND01-0128-0001 (T) MND01-0128-0001 (S) MND01-0127-0001 (T) MND01-0127-0001 (S) MND01-0301-0001 (S) MND01-0128-1001 (T) MND01-0128-1001 (S)	U	CCB = Be (0.4 μg/L)	Raised quantitation limit
	MND20-0329-0001 (T) MND20-0329-0001 (S) MND01-0128-0001 (T) MND01-0128-0001 (S) MND01-0127-0001 (T) MND01-0127-0001 (S) MND01-0301-0001 (T) MND01-0301-0001 (S) MND01-0128-1001 (T) MND01-0128-1001 (S)	U	CCB = Li (27 μg/L)	Raised quantitation limit
	MND20-0329-0001 (T) MND01-0128-0001 (T) MND01-0128-0001 (S) MND01-0127-0001 (T) MND01-0127-0001 (S) MND01-0301-0001 (T) MND01-0301-0001 (S) MND01-0128-1001 (T) MND01-0128-1001 (S)	U	CCB = Mo (10 μg/L)	Raised quantitation limit
	MND20-0329-0001 (T) MND20-0329-0001 (S) MND01-0128-0001 (S) MND01-0127-0001 (S)	UJ/J	CCB = Sb (-2.8 μg/L)	Negative bias

Table B.5.8. (page 46 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L074 (Continued)	MND01-0301-0001 (T) MND01-0301-0001 (S) MND01-0128-1001 (T) MND01-0128-1001 (S)	UJ/J	CCB = Sb (-2.8 μg/L)	Negative bias
	MND20-0329-0001 (T) MND20-0329-0001 (S) MND01-0128-0001 (T) MND01-0128-0001 (S) MND01-0301-0001 (T) MND01-0301-0001 (S) MND01-0127-1001 (T)	UJ/J	CCB = As (-3.2 μg/L)	Negative bias
	MND20-0329-0001 (T) MND20-0329-0001 (S) MND01-0128-0001 (S) MND01-0127-0001 (T) MND01-0127-0001 (S) MND01-0301-0001 (T) MND01-0128-1001 (S)	UJ/J	CCB = Pb (-1.4 μg/L)	Negative bias
	MND20-0329-0001 (T)	UJ/J	MSR = Sb (61%) MSR = Cd (70%) MSR = Cr (71%) MSR = Co (72%) MSR = Mn (75%) MSR = Ni (72%) MSR = Ag (70%) MSR = Sn (72%)	Slightly low bias
	MND20-0329-0001 (S)	J	ASR = Sb (83%)	Slightly low bias
	MND01-0128-0001 (S)	UJ	ASR = Sb (83%)	
	MND01-0128-1001 (T)	UJ	ASR = Sb (84%)	
	MND20-0329-0001 (S)	UJ	ASR = As (73%)	Slightly low bias

Table B.5.8. (page 47 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L074 (Continued)	MND01-0128-0001 (T)	UJ	ASR = As (76%)	Slightly low bias
	MND01-0128-0001 (S)		ASR = As (78%)	
	MND01-0127-0001 (S)		ASR = As (76%)	
	MND01-0128-1001 (T)		ASR = As (83%)	
	MND01-0128-1001 (S)		ASR = As (74%)	
	MND20-0329-0001 (T)	UJ/J	ASR = Pb (81%)	Slightly low bias
	MND20-0329-0001 (S)		ASR = Pb (82%)	
	MND01-0128-0001 (T)		ASR = Pb (82%)	
	MND01-0128-0001 (S)		ASR = Pb (84%)	
	MND01-0127-0001 (T)		ASR = Pb (72%)	
	MND01-0127-0001 (S)		ASR = Pb (77%)	
	MND01-0301-0001 (T)		ASR = Pb (71%)	
	MND01-0128-1001 (S)		ASR = Pb (73%)	
	MND01-0128-0001 (T)	UJ	ASR = Se (80%)	Slightly low bias
	MND01-0128-0001 (S)		ASR = Se (82%)	
	MND01-0127-0001 (S)		ASR = Se (82%)	
	MND01-0301-0001 (T)		ASR = Se (84%)	
	MND01-0301-0001 (S)		ASR = Se (72%)	
	MND01-0128-1001 (T)		ASR = Se (77%)	
	MND01-0128-1001 (S)		ASR = Se (71%)	
	MND01-0128-0001 (T)	UJ	ASR = Tl (62%)	Slightly low bias
	MND01-0128-0001 (S)		ASR = Tl (58%)	Low bias
	MND01-0127-0001 (T)		ASR = Tl (69%)	Slightly low bias
	MND01-0127-0001 (S)		ASR = Tl (71%)	
	MND01-0301-0001 (T)		ASR = Tl (49%)	
	MND01-0301-0001 (S)		ASR = Tl (84%)	
	MND01-0128-1001 (T)		ASR = Tl (58%)	Low bias
	MND01-0128-1001 (S)		ASR = Tl (62%)	Slightly low bias
	MND01-0128-0001 (T) MND01-0128-1001 (T)	UJ/J	FDRPD = Cu (200%)	Inaccuracy
	MND01-0128-0001 (T)	J/UJ	FDRPD = Fe (200%)	Inaccuracy

Table B.5.8. (page 48 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L074 (Continued)	MND01-0128-1001 (T)	J/UJ	FDRPD = Fe (200%)	Inaccuracy
	MND01-0128-0001 (T) MND01-0128-1001 (T)	UJ/J	FDRPD = Pb (200%)	Inaccuracy
9404L095	MND20-0387-0001 (T) MND20-0387-0001 (S) MND20-0343-0001 (T) MND20-0343-0001 (S)	U	MB = Al (14 μg/L) MB = V (3.6 μg/L) MB = Zn (3.8 μg/L)	Raised quantitation limit
	MND20-0387-0001 (T) MND20-0387-0001 (S)	U	MB = Fe (10 μg/L)	Raised quantitation limit
	MND20-0387-0001 (T) MND20-0387-0001 (S) MND20-0343-0001 (T) MND20-0343-0001 (S)	J	MB = Be (-0.10 μg/L)	Negative bias
	MND20-0343-0001 (S)	UJ	CCB = Pb (-1.4 μg/L)	Negative bias
	MND20-0343-0001 (T) MND20-0343-0001 (S)	J	CCB = K (-350 μg/L)	Negative bias
	MND20-0387-0001 (T) MND20-0387-0001 (S)	UJ	CCB = Li (-20 μg/L) CCB = Se (-1.8 μg/L)	Negative bias
	MND20-0343-0001 (T)	UJ	CCB = Sn (-24 μg/L)	Negative bias
	MND20-0387-0001 (S)	UJ/J	MSR = Cu (72%) MSR = Zn (70%)	Slightly low bias
	MND20-0387-0001 (T)	UJ/J	MSR = Be (72%) MSR = Cd (68%) MSR = Cr (66%) MSR = Co (67%) MSR = Fe (74%) MSR = Mn (67%) MSR = Ni (65%) MSR = Ag (60%) MSR = Tl (50%) MSR = V (72%)	Slightly low bias

Table B.5.8. (page 49 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L095 (Continued)	(Continued)	UJ/J	MSR = Sn (64%) MSR = Zn (70%) MSR = Mo (65%)	Slightly low bias
	MND20-0387-0001 (S)	UJ/J	MSR = Be (73%) MSR = Cd (70%) MSR = Cr (66%) MSR = Co (68%) MSR = Fe (74%) MSR = Mn (70%) MSR = Ni (67%) MSR = Ag (57%) MSR = Tl (57%) MSR = V (73%) MSR = Sn (65%) MSR = Zn (70%) MSR = Mo (64%)	Slightly low bias
	MND20-0387-0001 (T)	J	MSR = As (72%)	Slightly low bias
	MND20-0343-0001 (T)	UJ/J	ASR = As (78%) ASR = Pb (81%)	Slightly low bias
	MND20-0343-0001 (T)	UJ/J	ASR = Tl (53%)	Low bias
	MND20-0387-0001 (T)	UJ/J	ASR = As (82%) ASR = Pb (84%) ASR = Se (84%)	Slightly low bias
			ASR = Tl (45%)	Low bias
9404L096	MND01-0302-0001 (S)	U	MB = Al (15 μg/L)	Raised quantitation limit
	MND01-0304-0001 (S) MND01-0302-0001 (S)	UJ	CCB = Sb (-2.7 μg/L)	Negative bias
	MND01-0302-0001 (T)	U	CCB = Be (0.8 μg/L)	Raised quantitation limit
	MND01-0302-0001 (T)	J	CCB = Pb (-1.1 μg/L)	Negative bias
	MND01-0302-0001 (S)	UJ		
	MND01-0302-0001 (T) MND01-0302-0001 (S)	U	MB = V (3.1 μg/L)	Raised quantitation limit

Table B.5.8. (page 50 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L096 (Continued)	MND01-0302-0001 (S)	U	MB = Zn (3.0 μg/L)	Raised quantitation limit
	MND01-0304-0001 (T) MND01-0304-0001 (S) MND01-0302-0001 (T) MND01-0302-0001 (S)	J/UJ	CCB = Li (-29 μg/L)	Negative bias
	MND01-0304-0001 (T) MND01-0304-0001 (S)	J	SD = Al (11%) SD = Ba (10%) SD = Cr (12%) SD = Fe (19%) SD = Mg (12%) SD = Mn (17%) SD = V (50%) SD = Zn (20%)	Inaccuracy
	MND01-0302-0001 (S) MND01-0302-0001 (T)	J	SD = Ba (10%) SD = Fe (19%) SD = Mg (12%) SD = Mn (17%)	Inaccuracy
		UJ	SD = Cr (12%)	
	MND01-0302-0001 (T)	J	SD = Al (11%) SD = Zn (20%)	
	MND01-0304-0001 (T)	J/UJ	MSR = As (41%) MSR = Ba (72%) MSR = Be (69%) MSR = Cd (69%) MSR = Co (69%)	Slightly low bias
	MND01-0304-0001 (T)	R	MSR = Sb (21%)	Unusable
	MND01-0304-0001 (T)	J/UJ	MSR = Pb (38%) MSR = Ni (73%) MSR = Se (49%) MSR = Ag (70%) MSR = Tl (33%)	Low bias

Table B.5.8. (page 51 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L096 (Continued)	MND01-0304-0001 (T)	J/UJ	MSR = V (73%) MSR = Mo (49%) MSR = Sn (60%)	Low bias
	MND01-0304-0001 (T) MND01-0304-0001 (S) MND01-0302-0001 (S)	UJ	ASR = Se (61%) ASR = Se (64%) ASR = Se (84%)	Slightly low bias
	MND01-0304-0001 (S) MND01-0302-0001 (T) MND01-0302-0001 (S)	UJ	ASR = Tl (48%) ASR = Tl (52%) ASR = Tl (42%)	Low bias
	MND01-0304-0001 (T)	J	RLD = Cu (25%)	Inaccuracy
9404L111	MND01-0156-1001 (S) MND01-0156-0001 (S) MND01-0130-0001 (T) MND01-0330-0001 (T) MND01-0330-0001 (S)	U	MB = Al (4.3 μg/L)	Raised quantitation limit
	MND01-0130-0001 (S)	U	MB = Fe (6.4 μg/L)	Raised quantitation limit
	MND01-0156-1001 (T) MND01-0156-1001 (S) MND01-0156-0001 (T) MND01-0156-0001 (S) MND01-0130-0001 (T) MND01-0130-0001 (S) MND01-0330-0001 (T) MND01-0330-0001 (S)	U	MB = Li (23 μg/L) MB = Zn (10 μg/L)	Raised quantitation limit
	MND01-0156-1001 (T) MND01-0156-1001 (S) MND01-0156-0001 (T) MND01-0156-0001 (S)	U	CCB = Sb (3.5 μg/L)	Raised quantitation limit
	MND01-0156-1001 (T) MND01-0156-1001 (S) MND01-0130-0001 (S)	U	CCB = Be (0.5 μg/L)	Raised quantitation limit

Table B.5.8. (page 52 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L111 (Continued)	MND01-0330-0001 (S)	U	CCB = Be (0.5 μg/L)	Raised quantitation limit
	MND01-0130-0001 (T) MND01-0130-0001 (S) MND01-0330-0001 (T) MND01-0330-0001 (S)	U	CCB = Mo (12 μg/L)	Raised quantitation limit
	MND01-0156-1001 (T)	UJ	CCB = Pb (-1.3 μg/L)	Negative bias
	MND01-0156-1001 (S)	J		
	MND01-0130-0001 (S)	UJ	CCB = Sb (-2.5 μg/L)	Negative bias
	MND01-0156-1001 (T)	J	RLD = Al (56%)	Inaccuracy
	MND01-0156-1001 (T)	UJ	MSR = As (68%) MSR = Pb (66%)	Slightly low bias
	MND01-0330-0001 (S)	J	ASR = As (81%)	Slightly low bias
	MND01-0156-1001 (T) MND01-0330-0001 (T) MND01-0330-0001 (S)	UJ	ASR = Pb (83%) ASR = Pb (78%) ASR = Pb (84%)	Slightly low bias
	MND01-0156-1001 (S) MND01-0156-0001 (T) MND01-0156-0001 (S) MND01-0130-0001 (T) MND01-0130-0001 (S) MND01-0330-0001 (T) MND01-0330-0001 (S)	UJ	ASR = Tl (80%) ASR = Tl (80%) ASR = Tl (84%) ASR = Tl (80%) ASR = Tl (68%) ASR = Tl (70%) ASR = Tl (75%)	Slightly low bias
	MND01-0156-1001 (T) MND01-0156-1001 (S) MND01-0156-0001 (T) MND01-0156-0001 (S) MND01-0130-0001 (T) MND01-0130-0001 (S) MND01-0330-0001 (T) MND01-0330-0001 (S)	J	SD = Ca (12%) SD = Mg (11%)	Inaccuracy

Table B.5.8. (page 53 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L111 (Continued)	MND01-0156-1001 (T) MND01-0156-0001 (T)	J	FDRPD = Al (39%) FDRPD = Fe (28%)	Inaccuracy
	MND01-0156-1001 (S)	J	FDRPD = Pb (200%)	Inaccuracy
	MND01-0156-0001 (S)	UJ		
	MND01-0156-0001 (T) MND01-0156-0001 (S)	J	SD = Fe (22%)	Inaccuracy
9404L124	MND01-0271-1001 (T) MND01-0271-1001 (S) MND01-0071-0001 (T) MND01-0071-0001 (S) MND01-0602-0001 (S) MND01-0608-0001 (S) MND01-0271-0001 (T) MND01-0271-0001 (S) MND01-0607-0001 (T) MND01-0607-0001 (S) MND20-0342-0001 (T) MND20-0342-0001 (S) MND01-0076-0001 (T) MND01-0076-0001 (S)	U	MB = Al (12.8 μg/L)	Raised quantitation limit
	MND01-0071-0001 (S)	U	MB = Cr (1.1 μg/L)	Raised quantitation limit
	MND01-0271-1001 (T) MND01-0271-1001 (S) MND01-0071-0001 (T) MND01-0071-0001 (S) MND01-0602-0001 (S) MND01-0608-0001 (S) MND01-0271-0001 (T) MND01-0271-0001 (S) MND01-0607-0001 (T)	U	MB = Fe (30 μg/L)	Raised quantitation limit

Table B.5.8. (page 54 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L124 (Continued)	MND01-0607-0001 (S) MND01-0076-0001 (T) MND01-0076-0001 (S)	U	MB = Fe (30 μg/L)	Raised quantitation limit
	MND01-0071-0001 (T) MND01-0608-0001 (T) MND01-0608-0001 (S)	U	MB = Li (16.86 μg/L)	Raised quantitation limit
	MND01-0076-0001 (S)	U	MB = Li (39.8 μg/L)	
	MND01-0271-1001 (T) MND01-0271-1001 (S) MND01-0071-0001 (T) MND01-0071-0001 (S) MND01-0602-0001 (T) MND01-0602-0001 (S) MND01-0608-0001 (T) MND01-0608-0001 (S) MND01-0271-0001 (T) MND01-0271-0001 (S) MND01-0607-0001 (T) MND01-0607-0001 (S) MND20-0342-0001 (T) MND20-0342-0001 (S) MND01-0076-0001 (T) MND01-0076-0001 (S) MND01-0381-0001 (T)	U	MB = Zn (14 μg/L)	Raised quantitation limit
	MND01-0071-0001 (T) MND01-0071-0001 (S) MND01-0608-0001 (T) MND01-0608-0001 (S) MND01-0607-0001 (T)	UJ/J	MB = Mn (-1.0 μg/L)	Negative bias

Table B.5.8. (page 55 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L124 (Continued)	MND20-0342-0001 (T) MND20-0342-0001 (S)	U	CCB = V (6.6 μg/L)	Raised quantitation limit
	MND20-0342-0001 (S)	J	CCB = Sb (-2.4 μg/L)	Negative bias
	MND01-0271-1001 (T) MND01-0271-1001 (S) MND01-0071-0001 (T) MND01-0071-0001 (S) MND01-0602-0001 (T) MND01-0602-0001 (S) MND01-0608-0001 (T) MND01-0271-0001 (T) MND01-0271-0001 (S) MND01-0607-0001 (T) MND01-0607-0001 (S) MND20-0342-0001 (T) MND20-0342-0001 (S) MND01-0076-0001 (T) MND01-0381-0001 (T)	UJ/J	CCB = Pb (-1.8 μg/L)	Negative bias
	MND01-0271-1001 (T) MND01-0271-1001 (S) MND01-0071-0001 (S) MND01-0602-0001 (T) MND01-0602-0001 (S) MND01-0271-0001 (T) MND01-0271-0001 (S) MND01-0607-0001 (T) MND01-0607-0001 (S) MND20-0342-0001 (T) MND20-0342-0001 (S)	UJ	CCB = Li (41 μg/L)	Raised quantitation limit

Table B.5.8. (page 56 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L124 (Continued)	MND01-0271-1001 (S) MND01-0071-0001 (T) MND01-0071-0001 (S) MND01-0602-0001 (T)	UJ/J	CCB = Ni (-17.6 μg/L)	Negative bias
	MND01-0271-1001 (T) MND01-0071-0001 (T) MND01-0071-0001 (S) MND01-0271-0001 (T)	UJ	CCB = Se (-1.3 μg/L)	Negative bias
	MND01-0071-0001 (T) MND01-0071-0001 (S)	UJ	MSR = Cr (74%) MSR = Cr (74%)	Slightly low bias
	MND01-0071-0001 (T) MND01-0071-0001 (S)	UJ	MSR = Sn (72%) MSR = Sn (74%)	Slightly low bias
	MND01-0071-0001 (T)	UJ/J	MSR = Ni (64%) MSR = Mo (70%)	Slightly low bias
	MND01-0071-0001 (S)	J	ASR = Sb (80%)	Slightly low bias
	MND01-0271-0001 (T)	UJ	ASR = Sb (48%)	Low bias
	MND01-0381-0001 (T)	UJ	ASR = Sb (80%)	Slightly low bias
	MND01-0271-1001 (T) MND01-0271-1001 (S) MND01-0071-0001 (S)	UJ	ASR = As (78%) ASR = As (84%) ASR = As (84%)	Slightly low bias
	MND01-0271-0001 (T)		ASR = As (55%)	Low bias
	MND01-0271-0001 (S) MND01-0607-0001 (T) MND01-0607-0001 (S) MND01-0342-0001 (T) MND01-0076-0001 (S) MND01-0381-0001 (T)	UJ	ASR = As (83%) ASR = As (82%) ASR = As (80%) ASR = As (82%) ASR = As (80%) ASR = As (78%)	Slightly low bias
	MND01-0071-0001 (T) MND01-0071-0001 (S) MND01-0602-0001 (S) MND01-0608-0001 (S)	UJ/J	ASR = Pb (82%) ASR = Pb (84%) ASR = Pb (82%) ASR = Pb (82%)	Slightly low bias

Table B.5.8. (page 57 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L124 (Continued)	MND01-0271-0001 (T)	UJ	ASR = Pb (58%)	Low bias
	MND20-0342-0001 (T)	UJ	ASR = Pb (84%)	Slightly low bias
	MND01-0271-1001 (S)	UJ	ASR = Se (84%)	Slightly low bias
	MND01-0071-0001 (T)		ASR = Se (81%)	
	MND01-0071-0001 (S)		ASR = Se (81%)	
	MND01-0602-0001 (T)		ASR = Se (60%)	
	MND01-0602-0001 (S)		ASR = Se (57%)	Low bias
	MND01-0608-0001 (T)		ASR = Se (58%)	
	MND01-0608-0001 (S)		ASR = Se (65%)	Slightly low bias
	MND01-0271-0001 (T)		ASR = Se (61%)	
	MND01-0607-0001 (T)		ASR = Se (56%)	Low bias
	MND01-0607-0001 (S)		ASR = Se (56%)	
	MND20-0342-0001 (T)		ASR = Se (79%)	Slightly low bias
	MND20-0342-0001 (S)		ASR = Se (73%)	
	MND01-0076-0001 (T)		ASR = Se (75%)	
	MND01-0076-0001 (S)		ASR = Se (83%)	
	MND01-0381-0001 (T)		ASR = Se (70%)	
	MND01-0271-1001 (T)	J	SD = Ba (13%)	Inaccuracy
	MND01-0271-1001 (S)			
	MND01-0071-0001 (T)			
	MND01-0071-0001 (S)			
	MND01-0602-0001 (T)			
	MND01-0602-0001 (S)			
	MND01-0608-0001 (T)			
	MND01-0608-0001 (S)			
	MND01-0271-0001 (T)			
	MND01-0271-0001 (S)			
	MND01-0607-0001 (T)			
	MND01-0607-0001 (S)			
	MND20-0342-0001 (T)			
	MND20-0342-0001 (S)			

Table B.5.8. (page 58 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L124 (Continued)	MND01-0076-0001 (T) MND01-0076-0001 (S) MND01-0381-0001 (T)	J	SD = Ba (13%)	Inaccuracy
	MND01-0271-1001 (S) MND01-0071-0001 (S) MND01-0602-0001 (S) MND01-0608-0001 (S) MND01-0271-0001 (S) MND01-0607-0001 (S) MND20-0342-0001 (S) MND01-0076-0001 (S)	J	SD = Mg (11%)	Inaccuracy
	MND01-0271-0001 (T) MND01-0271-1001 (T)	UJ/J	FDRPD = Mo (200%) near d.l. FDRPD = Sn (200%) near d.l.	Minimal impact
9404L155	MND01-0157-0001 (T) MND01-0157-0001 (S) MND01-0129-0001 (T) MND01-0129-0001 (S) MND01-0157-1001 (T) MND01-0157-1001 (S)	U	MB = Al (160 μg/L)	Raised quantitation limit
	MND01-0157-0001 (T) MND01-0157-0001 (S) MND01-0129-0001 (T) MND01-0129-0001 (S) MND01-0157-1001 (T) MND01-0157-1001 (S)	U	MB = Zn (5.9 μg/L)	Raised quantitation limit
	MND01-0157-0001 (T) MND01-0157-0001 (S) MND01-0129-0001 (T) MND01-0129-0001 (S) MND01-0157-1001 (T) MND01-0157-1001 (S)	U	CCB = Li (44 μg/L)	Raised quantitation limit

Table B.5.8. (page 59 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L155 (Continued)	MND01-0157-0001 (S) MND01-0129-0001 (T)	UJ	CCB = As (-2.8 µg/L)	Negative bias
	MND01-0157-0001 (T) MND01-0157-0001 (S) MND01-0129-0001 (T) MND01-0129-0001 (S) MND01-0157-1001 (T) MND01-0157-1001 (S)	J	CCB = K (-700 µg/L)	Negative bias
	MND01-0157-0001 (T) MND01-0129-0001 (T) MND01-0129-0001 (S)	UJ	CCB = Se (-2.1 µg/L)	Negative bias
	MND01-0129-0001 (S)	J	MSR = Sb (67%) MSR = Pb (74%)	Slightly low bias
	MND01-0129-0001 (T)	UJ	MSR = Bi (29%)	Very low bias
			MSR = Ag (67%) MSR = Sn (73%)	Slightly low bias
	MND01-0157-0001 (T) MND01-0157-0001 (S) MND01-0129-0001 (T) MND01-0129-0001 (S) MND01-0157-1001 (T)	UJ	ASR = Se (71%) ASR = Se (65%) ASR = Se (68%) ASR = Se (76%) ASR = Se (71%)	Slightly low bias
	MND01-0157-1001 (S)		ASR = Se (58%)	Low bias
	MND01-0157-0001 (T) MND01-0157-0001 (S) MND01-0129-0001 (S) MND01-0157-1001 (T) MND01-0157-1001 (S)	J	SD = Ba (42%)	Inaccuracy
	MND01-0157-0001 (T) MND01-0157-0001 (S) MND01-0129-0001 (T) MND01-0157-1001 (T) MND01-0157-1001 (S)	J	SD = Na (96%)	Inaccuracy

Table B.5.8. (page 60 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L155 (Continued)	MND01-0157-0001 (T) MND01-0157-1001 (T)	UJ/J	FDRPD = Bi (200%) near d.l. FDRPD = Co (200%) near d.l. FDRPD = Cu (55%) near d.l. FDRPD = Fe (49%) below d.l. FDRPD = Ni (200) near d.l.	Minimal impact
	MND01-0157-0001 (S) MND01-0157-1001 (S)	UJ/J	FDRPD = Sb (200%) near d.l. FDRPD = Cu (38%) below d.l. FDRPD = Fe (122%) below d.l.	Minimal impact
9404L174	MND01-0605-0001 (S) MND01-0601-0001 (S) MND01-0353-0001 (S)	U	MB = Al (11 μg/L)	Raised quantitation limit
	MND01-0605-0001 (S) MND01-0601-0001 (S)	U	MB = Fe (8.0 μg/L)	Raised quantitation limit
	MND01-0605-0001 (T) MND01-0605-0001 (S) MND01-0601-0001 (T) MND01-0601-0001 (S) MND20-0353-0001 (T) MND01-0353-0001 (S)	U	MB = Zn (3.9 μg/L)	Raised quantitation limit
	MND01-0601-0001 (T)	U	CCB = As (2.3 μg/L)	Raised quantitation limit
	MND01-0605-0001 (T) MND01-0605-0001 (S) MND01-0601-0001 (T) MND01-0601-0001 (S) MND20-0353-0001 (T) MND01-0353-0001 (S)	U	CCB = Li (21 μg/L)	Raised quantitation limit
	MND01-0605-0001 (T) MND01-0605-0001 (S) MND01-0601-0001 (T) MND01-0601-0001 (S) MND20-0353-0001 (T) MND01-0353-0001 (S)	UJ/J	CCB = Sb (-2.5 μg/L) CCB = Pb (-1.1 μg/L)	Negative bias

Table B.5.8. (page 61 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L174	MND01-0605-0001 (S)	J	CCB = Mn (-2.0 μg/L)	Negative bias
	MND01-0605-0001 (T)	UJ	MSR = Mo (74%)	Slightly low bias
			MSR = Tl (52%)	Low bias
			MSR = Sn (73%)	Slightly low bias
	MND01-0601-0001 (S)	J	ASR = Sb (118%)	Slightly high bias
	MND01-0605-0001 (T) MND20-0353-0001 (T) MND01-0353-0001 (S)	J/UJ	ASR = Pb (81%) ASR = Pb (81%) ASR = Pb (81%)	Slightly low bias
	MND20-0353-0001 (T) MND01-0353-0001 (S)	UJ	ASR = Se (75%) ASR = Se (77%)	Low bias
	MND01-0605-0001 (T) MND01-0605-0001 (S) MND01-0601-0001 (T) MND01-0601-0001 (S)	UJ	ASR = Tl (45%) ASR = Tl (43%) ASR = Tl (54%) ASR = Tl (54%)	Low bias
	MND01-0605-0001 (T) MND01-0605-0001 (S) MND01-0601-0001 (T) MND01-0601-0001 (S) MND20-0353-0001 (T) MND01-0353-0001 (S)	J	SD = Ca (12.3%) SD = Mg (10.2%)	Inaccuracy
9404L175	MND01-0381-0001 (S) MND01-0312-0001 (S)	J	SD = Ca (14%) SD = Fe (15%) SD = Mg (11%) SD = Mn (14%) SD = Ni (17%) SD = Na (12%)	Inaccuracy
	MND01-0381-0001 (S) MND01-0312-0001 (S)	UJ/J	LBI = Sn	Inaccuracy
	MND01-0381-0001 (S)	UJ	MSR = Sb (58%)	Low bias
			MSR = Se (70%)	Slightly low bias
	MND01-0381-0001 (S)	R	MSR = Tl (20%)	Low bias

Table B.5.8. (page 62 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L175 (Continued)	MND01-0381-0001 (S)	UJ	MSR = Mo (74%) MSR = Sn (69%)	Slightly low bias
	MND01-0381-0001 (S)	UJ	ASR = Se (71%)	Slightly low bias
	MND01-0312-0001 (S)	UJ	ASR = Se (42%)	Low bias
	MND01-0312-0001 (S) MND01-0381-0001 (S)	UJ	ASR = Tl (48%) ASR = Tl (41%)	Low bias
	MND01-0312-0001 (S)	J	CCB = Li (-14 μg/L)	Negative bias
	MND01-0381-0001 (S)	U	MB = Al (14 μg/L) MB = Cu (1.2 μg/L)	Raised quantitation limit
	MND01-0381-0001 (S) MND01-0312-0001 (S)	U	MB = Pb (1.6 μg/L)	Raised quantitation limit
	MND01-0381-0001 (S)	U	MB = Zn (2.0 μg/L)	Raised quantitation limit
	MND01-0381-0001 (S) MND01-0312-0001 (S)	UJ	MB = As (-6.5 μg/L)	Negative bias
9404L187	MND01-0120-0001 (S) MND01-0117-0001 (S)	U	MB = Al (18 μg/L) MB = Fe (10 μg/L) MB = Zn (5.0 μg/L)	Raised quantitation limit
	MND01-0120-0001 (T)	J	MB = Li (-14 μg/L)	Negative bias
	MND01-0120-0001 (T) MND01-0120-0001 (S) MND01-0117-0001 (T) MND01-0117-0001 (S)	U	CCB = As (2.7 μg/L)	Raised quantitation limit
	MND01-0120-0001 (S) MND01-0117-0001 (S)	U	CCB = Be (0.5 μg/L)	Raised quantitation limit
	MND01-0120-0001 (S)	UJ	CCB = Pb (-1.2 μg/L)	Negative bias
	MND01-0120-0001 (T)	UJ	MSR = Sb (57%)	Low bias
			MSR = As (60%) MSR = Cd (71%) MSR = Mo (72%)	Slightly low bias
			MSR = Se (40%)	Low bias
	MND01-0120-0001 (T)	R	MSR = Tl (27%)	Low bias

Table B.5.8. (page 63 of 63)

Laboratory Batch	Sample Identification	Validation Qualifier	Reason Qualified	Impact
9404L187 (Continued)	MND01-0120-0001 (S) MDN01-0117-0001 (S)	UJ	ASR = Pb (73%) ASR = Pb (74%)	Slightly low bias
	MND01-0120-0001 (T) MND01-0120-0001 (S) MND01-0117-0001 (T) MND01-0117-0001 (S)	UJ	ASR = Se (41%) ASR = Se (55%) ASR = Se (46%) ASR = Se (46%)	Low bias
	MND01-0120-0001 (T) MND01-0120-0001 (S) MND01-0117-0001 (T) MND01-0117-0001 (S)	UJ	ASR = Tl (44%) ASR = Tl (44%) ASR = Tl (38%) ASR = Tl (42%)	Low bias
	MND01-0120-0001 (T) MND01-0120-0001 (S) MND01-0117-0001 (T) MND01-0117-0001 (S)	J	SD = Cr (13%) SD = Fe (13%) SD = Mn (12%) SD = Ni (15%) SD = Zn (14%)	Inaccuracy
	MND01-0117-0001 (T)	R	Pb - not verifiable	Unusable
	MND01-0120-0001 (S)	U	CCB = Mo (6.1 μg/L)	Raised quantitation limit

C. Summary of Analytical Data

This appendix presents the analytical data from the sweeps sampling. These data were displayed graphically in Section 3. Table C.1 presents the analytical results for constituents above their respective maximum contaminant levels and Table C.2 presents constituents above the DOE ingested water derived concentration guides.

Table C.3 presents all positive detections ("hits") for the fall event; Table C.4 presents the spring event. Entries are by location.

Table C.1. Detections Above Maximum Contaminant Levels

Parameter (μg/L)[a]	Location	Log Date	Result	MCL
1,2-cis-Dichloroethene	0370-0001	09/24/93	190.	70
	0370-1001	03/08/94	J 480.	70
	P015-0001	03/25/94	120.	70
Arsenic, total	0335-0001	04/01/94	58.0	50
Cadmium, total	0120-0001	10/14/93	J 13.1	5
Chloroethene (vinyl chloride)	P015-0001	03/25/94	17.	2
Chromium, soluble	0312-0001	04/13/94	8950.	100
	0373-0001	03/16/94	115.	100
Chromium, total	0115-0001	10/12/93	J 6060.	100
	0115-0001	03/22/94	2950.	100
	0117-0001	10/13/93	J 2870.	100
	0117-0001	04/14/94	J 2980.	100
	0120-0001	10/14/93	J 15100.	100
	0120-0001	04/14/94	J 2600.	100
	0152-0001	09/12/93	J 374.	100
	0301-0001	09/24/93	104.	100
	0305-0001	09/11/93	J 494.	100
	0305-0001	03/10/94	273.	100
	0306-0001	09/11/93	122.	100
	0312-0001	09/24/93	8190.	100
	0313-0001	09/13/93	258.	100
	0313-0001	03/17/94	820.	100
	0327-0001	09/27/93	J 177.	100
	0373-0001	03/16/94	228.	100
	0377-0001	09/26/93	174.	100
	0377-1001	09/26/93	191.	100
	0377-0001	03/28/94	415.	100
	0379-0001	03/15/94	104.	100
	0388-0001	03/28/94	J 171.	100
Lead, soluble	0128-1001	09/24/93	J 43.9	15
	0304-0001	04/05/94	23.7	15
	0382-0001	03/17/94	40.4	15
Lead, total	0046-0001	10/13/93	J 15.8	15
	0120-0001	10/14/93	J 26.4	15
	0125-0001	09/24/93	J 17.8	15
	0128-1001	04/04/94	J 44.4	15
	0137-0001	09/27/93	23.8	15
	0137-0001	03/28/94	18.4	15
	0151-0001	10/15/93	17.2	15
	0304-0001	09/16/93	J 43.0	15
	0304-0001	04/05/94	J 51.0	15
	0314-0001	03/16/94	J 22.4	15
	0317-1001	03/16/94	J 24.4	15

Table C.1. (page 2 of 3)

Parameter (μg/L)[a]	Location	Log Date	Result	MCL
Lead, total (Continued)	0379-0001	09/26/93	16.0	15
	0602-0001	09/16/93	36.9	15
	P027-0001	03/21/94	29.0	15
Radium-226 (pCi/L)	0335-0001	04/01/94	39.47	20
Tetrachloroethene	0046-0001	10/13/93	5.1	5
	0046-0001	03/18/94	5.6	5
	0063-0001	10/13/93	J 27.	5
	0063-0001	03/18/94	23.	5
	0152-0001	03/25/94	5.1	5
	0153-0001	03/25/94	8.2	5
	0305-0001	09/11/93	16.	5
	0305-0001	03/10/94	22.	5
	0306-0001	03/10/94	7.9	5
	0307-0001	09/13/93	J 10.	5
	0307-0001	03/10/94	10.	5
	0313-0001	09/13/93	J 7.5	5
	0313-0001	03/17/94	11.	5
	0327-0001	09/27/93	J 12.	5
	0327-0001	03/30/94	11.	5
	0370-0001	09/24/93	140.	5
	0370-1001	03/08/94	J 290.	5
	0373-0001	09/25/93	J 49.	5
	0373-0001	03/16/94	48.	5
	0375-0001	03/14/94	8.9	5
	0397-0001	09/25/93	J 14.	5
	0397-0001	03/11/94	16.	5
	0601-0001	04/12/94	J 11.	5
	P015-0001	03/25/94	5.3	5
Trichloroethene	0063-0001	10/13/93	J 21.	5
	0063-0001	03/18/94	30.	5
	0152-0001	03/25/94	6.5	5
	0153-0001	09/12/93	5.9	5
	0153-0001	03/25/94	12.	5
	0305-0001	09/11/93	23.	5
	0305-0001	03/10/94	J 26.	5
	0306-0001	09/11/93	J 6.0	5
	0306-0001	03/10/94	J 12.	5
	0307-0001	09/13/93	6.7	5
	0307-0001	03/10/94	6.1	5
	0312-0001	09/24/93	J 22.	5
	0312-0001	04/08/94	46.	5
	0315-0001	09/12/93	8.6	5
	0315-0001	03/25/94	7.8	5

Table C.1. (page 3 of 3)

Parameter (μg/L)[a]	Location	Log Date	Result	MCL
Trichloroethene (Continued)	0347-0001	09/30/93	J 9.2	5
	0347-0001	03/24/94	J 11.	5
	0347-1001	03/24/94	J 8.5	5
	0370-0001	09/24/93	J 72.	5
	0370-0001	03/08/94	J 140.	5
	0370-1001	03/08/94	J 160.	5
	0373-0001	09/25/93	J 31.	5
	0373-0001	03/16/94	32.	5
	0386-0001	03/23/94	6.8	5
	0386-1001	03/23/94	6.6	5
	0397-0001	09/25/93	J 11.	5
	0397-0001	03/11/94	J 9.5	5
	0605-0001	04/12/94	J 5.7	5
	0608-0001	04/08/94	J 5.3	5
	P015-0001	03/25/94	28.	5
	P027-0001	03/21/94	5.4	5
Tritium (pCi/L)	0115-0001	10/12/93	46500.	20000
	0120-0001	10/14/93	33500.	20000
	0324-0001	09/16/93	23200.	20000
	0601-0001	09/25/93	158000.	20000
	0601-0001	04/12/94	76500.	20000
	0602-0001	04/08/94	20700.	20000
	0607-0001	10/14/93	25200.	20000
	0607-1001	10/14/93	25100.	20000
	0608-0001	04/08/94	20200.	20000

[a]All units in μg/L except as shown for radium-226 and tritium (pCi/L).
MCL - maximum contaminant level

Table C.2. Detections above DOE Ingested Water Derived Concentration Guides

Location	Parameter (pCi/L)	# Samples	Mean	DCG
0304	Radium-226	2	9.320	4.0
0304	Thorium-232	2	2.065	2.0
0335	Radium-226	1	39.470	4.0
0341	Radium-226	2	4.855	4.0
0601	Tritium	2	117,250	80,000

DCG - derived concentration guides

Table C.3.

Fall Hits Table

Laboratory Qualifier Codes	
U	Indicates analyte was analyzed for but not detected; the associated value is reporting limit or sample quantitation limit.
J	Indicates an estimated value; for organic compounds, J often signifies a value less than the Contract Required Quantitation Limit (CRQL) but greater than zero.
B	For inorganic analyses, the reported value is less than the Contract Required Detecting Limit (CRDL) but greater than the Instrument Detection Limit (IDL). For organic analyses, indicates the analyte was found in the associated blank.
E	For organic analyses, identifies compounds whose concentrations exceeded the calibration range of the instrument for that specific analysis.
D	For organic analyses, indicates the compounds were identified in an analysis performed at a secondary dilution factor.
JB	For organic analyses, indicates that the reported analyte concentration was estimated and that the analyte was found in the associated blank.
BD	For organic analyses, indicates the compounds were identified in an analysis performed at a secondary dilution factor and were found in the associated blank.
*	For inorganic analyses, the laboratory duplicate analysis was not within control limits.
NR	For inorganic analyses, the analyte is not required to be analyzed.
NC	Not calculated.
NS	For organic matrix spike analyses, indicates the analyte was not spiked for the analysis.

SURFACE WATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0601
NORTH COORDINATE: 48426. FT
EAST COORDINATE: 46200. FT
09/14/93 TO 10/14/93
REPORT DATE: 04/03/95

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, SOLUBLE	09/24/93	0001	UG/L	B	10.5	B	10.5	I
ALUMINUM, TOTAL	09/24/93	0001	UG/L		43.2		43.2	I
AMERICIUM-241	09/25/93	0001	PCI/L		.0975		.0975	I
BARIUM, SOLUBLE	09/24/93	0001	UG/L	B	54.3	J	54.3	I
BARIUM, TOTAL	09/24/93	0001	UG/L	B	53.1	J	53.1	I
CALCIUM, SOLUBLE	09/24/93	0001	UG/L		144000.	J	144000.	I
CALCIUM, TOTAL	09/24/93	0001	UG/L		142000.	J	142000.	I
CHLORIDE	09/24/93	0001	MG/L		247.		247.	I
COPPER, SOLUBLE	09/24/93	0001	UG/L	B	1.2	J	1.2	I
COPPER, TOTAL	09/24/93	0001	UG/L	B	0.80	J	0.80	I
FLUORIDE	09/24/93	0001	MG/L		0.21		0.21	I
IRON, TOTAL	09/24/93	0001	UG/L	B	58.0		58.0	I
LEAD, SOLUBLE	09/24/93	0001	UG/L	B	2.3	B	2.3	I
LEAD, TOTAL	09/24/93	0001	UG/L		6.2	J	6.2	I
MAGNESIUM, SOLUBLE	09/24/93	0001	UG/L		37400.	J	37400.	I
MAGNESIUM, TOTAL	09/24/93	0001	UG/L		36900.	J	36900.	I
MANGANESE, TOTAL	09/24/93	0001	UG/L		16.2	J	16.2	I
NITRATE NITRITE	09/24/93	0001	MG/L		4.8		4.8	I
PLUTONIUM-239/240	09/25/93	0001	PCI/L		.209		REJECT	I
POTASSIUM, SOLUBLE	09/24/93	0001	UG/L	B	1210.	J	1210.	I
POTASSIUM, TOTAL	09/24/93	0001	UG/L	B	1260.	J	1260.	I
SELENIUM, TOTAL	09/24/93	0001	UG/L	B	1.6	J	1.6	I
SODIUM, SOLUBLE	09/24/93	0001	UG/L		131000.	J	131000.	I
SODIUM, TOTAL	09/24/93	0001	UG/L		128000.		128000.	I
STRONTIUM-90	09/25/93	0001	PCI/L		2.25		2.25	I
SULFATE	09/24/93	0001	MG/L		73.2		73.2	I
THORIUM-228	09/25/93	0001	PCI/L		.235		REJECT	I
TOTAL DISSOLVED SOLIDS	09/24/93	0001	MG/L		978.		978.	I
TOTAL ORGANIC CARBON	09/24/93	0001	MG/L		1.1		1.1	I
TOTAL PHOSPHATE	09/24/93	0001	MG/L		0.12		0.12	I

SURFACE WATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0601
NORTH COORDINATE: 48426. FT
EAST COORDINATE: 46200. FT
09/14/93 TO 10/14/93
REPORT DATE: 04/03/95

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL SUSPENDED SOLIDS	09/24/93	0001	MG/L		7.0		7.0	I
TRITIUM	09/25/93	0001	PCI/L		158000.		158000.	I
URANIUM-234	09/25/93	0001	PCI/L		12.5		12.5	I
URANIUM-238	09/25/93	0001	PCI/L		.231		.231	I
VANADIUM, SOLUBLE	09/24/93	0001	UG/L		18.3		18.3	I
VANADIUM, TOTAL	09/24/93	0001	UG/L		18.2		18.2	I
ZINC, SOLUBLE	09/24/93	0001	UG/L		79.9	J	79.9	I

SURFACE WATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0602
NORTH COORDINATE: 47640. FT
EAST COORDINATE: 46956. FT
09/14/93 TO 10/14/93
REPORT DATE: 04/03/95

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1-DICHLOROETHANE	09/16/93	0001	UG/L		1.7		1.7	I
1,2-CIS-DICHLOROETHENE	09/16/93	0001	UG/L		2.9		2.9	I
2,4,6-TRINITROTOLUENE	09/16/93	0001	UG/L	J	0.70	J	0.70	I
ALUMINUM, TOTAL	09/16/93	0001	UG/L		8270.	J	8270.	I
AMMONIA	09/16/93	0001	MG/L		0.18		0.18	I
ANTIMONY, SOLUBLE	09/16/93	0001	UG/L	B	2.5	B	2.5	I
BARIUM, SOLUBLE	09/16/93	0001	UG/L	B	10.7	B	10.7	I
BARIUM, TOTAL	09/16/93	0001	UG/L	B	170.	B	170.	I
BERYLLIUM, TOTAL	09/16/93	0001	UG/L		1.3		1.3	I
CALCIUM, SOLUBLE	09/16/93	0001	UG/L		17400.	J	17400.	I
CALCIUM, TOTAL	09/16/93	0001	UG/L		177000.	J	177000.	I
CHLORIDE	09/16/93	0001	MG/L		122.	J	122.	I
CHROMIUM, TOTAL	09/16/93	0001	UG/L	B	5.2	J	5.2	I
COBALT, TOTAL	09/16/93	0001	UG/L	B	21.9	B	21.9	I
COPPER, SOLUBLE	09/16/93	0001	UG/L	B	11.2	B	11.2	I
COPPER, TOTAL	09/16/93	0001	UG/L		947.	J	947.	I
FLUORIDE	09/16/93	0001	MG/L		0.16		0.16	I
IRON, SOLUBLE	09/16/93	0001	UG/L	B	24.1	B	24.1	I
IRON, TOTAL	09/16/93	0001	UG/L		12900.	J	12900.	I
LITHIUM, TOTAL	09/16/93	0001	UG/L	B	12.7	B	12.7	I
MAGNESIUM, SOLUBLE	09/16/93	0001	UG/L		5570.	J	5570.	I
MAGNESIUM, TOTAL	09/16/93	0001	UG/L		30800.	J	30800.	I
MANGANESE, SOLUBLE	09/16/93	0001	UG/L	B	14.1	B	14.1	I
MANGANESE, TOTAL	09/16/93	0001	UG/L		2020.	J	2020.	I
MERCURY, TOTAL	09/16/93	0001	UG/L		0.86		0.86	I
MOLYBDENUM	09/16/93	0001	UG/L	B	2.6	B	2.6	I
MOLYBDENUM, SOLUBLE	09/16/93	0001	UG/L	B	2.2	B	2.2	I
NICKEL, TOTAL	09/16/93	0001	UG/L	B	23.6	B	23.6	I
NITRATE NITRITE	09/16/93	0001	MG/L		2.0		2.0	I
PLUTONIUM-239/240	09/16/93	0001	PCI/L		.151		.151	I

SURFACE WATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0602
NORTH COORDINATE: 47640. FT
EAST COORDINATE: 46956. FT
09/14/93 TO 10/14/93
REPORT DATE: 04/03/95

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
POTASSIUM, SOLUBLE	09/16/93	0001	UG/L	B	1480.	B	1480.	I
POTASSIUM, TOTAL	09/16/93	0001	UG/L	B	2080.	B	2080.	I
SODIUM, SOLUBLE	09/16/93	0001	UG/L		220000.	J	220000.	I
SODIUM, TOTAL	09/16/93	0001	UG/L		229000.	J	229000.	I
SULFATE	09/16/93	0001	MG/L		51.4		51.4	I
THORIUM-228	09/16/93	0001	PCI/L		.51		REJECT	I
THORIUM-230	09/16/93	0001	PCI/L		.217		REJECT	I
TIN, SOLUBLE	09/16/93	0001	UG/L	B	9.3	J	9.3	I
TIN, TOTAL	09/16/93	0001	UG/L	B	41.6	B	41.6	I
TOTAL DISSOLVED SOLIDS	09/16/93	0001	MG/L		672.		672.	I
TOTAL KJELDAHL NITROGEN	09/16/93	0001	MG/L		0.13		0.13	I
TOTAL ORGANIC CARBON	09/16/93	0001	MG/L		1.5		1.5	I
TOTAL PHOSPHATE	09/16/93	0001	MG/L		0.54		0.54	I
TOTAL SUSPENDED SOLIDS	09/16/93	0001	MG/L		30.0		30.0	I
TRICHLOROETHENE	09/16/93	0001	UG/L		4.0		4.0	I
TRITIUM	09/16/93	0001	PCI/L		2110.		2110.	I
URANIUM-234	09/16/93	0001	PCI/L		.535		.535	I
URANIUM-238	09/16/93	0001	PCI/L		.377		.377	I
VANADIUM, TOTAL	09/16/93	0001	UG/L		25.2		25.2	I
ZINC, TOTAL	09/16/93	0001	UG/L		297.	J	297.	I

SURFACE WATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0607
NORTH COORDINATE: 49245. FT
EAST COORDINATE: 47660. FT
09/14/93 TO 10/14/93
REPORT DATE: 04/03/95

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,2-CIS-DICHLOROETHENE	10/14/93	0001	UG/L		4.2		4.2	I
	10/14/93	1001	UG/L		3.9		3.9	I
ALUMINUM, SOLUBLE	10/14/93	1001	UG/L	B	16.2	J	16.2	I
ALUMINUM, TOTAL	10/14/93	0001	UG/L		153.	J	153.	I
	10/14/93	1001	UG/L		162.	J	162.	I
ANTIMONY, SOLUBLE	10/14/93	0001	UG/L	B	1.4	J	1.4	I
	10/14/93	1001	UG/L	B	0.78	J	0.78	I
ANTIMONY, TOTAL	10/14/93	1001	UG/L	B	0.65	J	0.65	I
BARIUM, SOLUBLE	10/14/93	0001	UG/L	B	87.9	B	87.9	I
	10/14/93	1001	UG/L	B	88.6	B	88.6	I
BARIUM, TOTAL	10/14/93	0001	UG/L	B	85.3	B	85.3	I
	10/14/93	1001	UG/L	B	84.9	B	84.9	I
BISMUTH, TOTAL	10/14/93	0001	UG/L	B	38.6	J	38.6	I
CALCIUM, SOLUBLE	10/14/93	0001	UG/L		158000.		158000.	I
	10/14/93	1001	UG/L		160000.		160000.	I
CALCIUM, TOTAL	10/14/93	0001	UG/L		153000.		153000.	I
	10/14/93	1001	UG/L		154000.		154000.	I
CHLORIDE	10/14/93	0001	MG/L		730.		730.	I
	10/14/93	1001	MG/L		735.		735.	I
CHROMIUM, SOLUBLE	10/14/93	0001	UG/L	B	2.6	J	2.6	I
	10/14/93	1001	UG/L	B	2.2	J	2.2	I
CHROMIUM, TOTAL	10/14/93	0001	UG/L	B	3.2	J	3.2	I
	10/14/93	1001	UG/L	B	3.4	J	3.4	I
FLUORIDE	10/14/93	0001	MG/L		0.25		0.25	I
	10/14/93	1001	MG/L		0.25		0.25	I
IRON, SOLUBLE	10/14/93	0001	UG/L	B	14.7	J	14.7	I
	10/14/93	1001	UG/L	B	7.8	J	7.8	I
IRON, TOTAL	10/14/93	0001	UG/L		212.	J	212.	I
	10/14/93	1001	UG/L		210.	J	210.	I
MAGNESIUM, SOLUBLE	10/14/93	0001	UG/L		55700.		55700.	I
	10/14/93	1001	UG/L		56100.		56100.	I
MAGNESIUM, TOTAL	10/14/93	0001	UG/L		53600.		53600.	I
	10/14/93	1001	UG/L		54400.		54400.	I
MANGANESE, SOLUBLE	10/14/93	0001	UG/L	B	1.2	J	1.2	I
	10/14/93	1001	UG/L	B	0.80	J	0.80	I
MANGANESE, TOTAL	10/14/93	0001	UG/L	B	4.6	B	4.6	I
	10/14/93	1001	UG/L	B	4.5	B	4.5	I
NICKEL, SOLUBLE	10/14/93	0001	UG/L	B	9.7	J	9.7	I

SURFACE WATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0607
NORTH COORDINATE: 49245. FT
EAST COORDINATE: 47660. FT
09/14/93 TO 10/14/93
REPORT DATE: 04/03/95

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
NICKEL, TOTAL	10/14/93	0001	UG/L	B	3.1	B	3.1	I
	10/14/93	1001	UG/L	B	2.7	B	2.7	I
NITRATE NITRITE	10/14/93	0001	MG/L		9.5		9.5	I
	10/14/93	1001	MG/L		6.8		6.8	I
PLUTONIUM-239/240	10/14/93	0001	PCI/L		.343		REJECT	I
	10/14/93	1001	PCI/L		.237		REJECT	I
POTASSIUM, SOLUBLE	10/14/93	0001	UG/L		6920.		6920.	I
	10/14/93	1001	UG/L	B	6700.	B	6700.	I
POTASSIUM, TOTAL	10/14/93	0001	UG/L	B	6810.	B	6810.	I
	10/14/93	1001	UG/L		6540.		6540.	I
SODIUM, SOLUBLE	10/14/93	0001	UG/L		389000.		389000.	I
	10/14/93	1001	UG/L		399000.		399000.	I
SODIUM, TOTAL	10/14/93	0001	UG/L		388000.		388000.	I
	10/14/93	1001	UG/L		380000.		380000.	I
SULFATE	10/14/93	0001	MG/L		184.		184.	I
	10/14/93	1001	MG/L		176.		176.	I
THORIUM-228	10/14/93	1001	PCI/L		.306		REJECT	I
THORIUM-230	10/14/93	1001	PCI/L		.518		.518	I
TOTAL DISSOLVED SOLIDS	10/14/93	0001	MG/L		1970.		1970.	I
	10/14/93	1001	MG/L		1630.		1630.	I
TOTAL KJELDAHL NITROGEN	10/14/93	0001	MG/L		0.15		0.15	I
TOTAL ORGANIC CARBON	10/14/93	0001	MG/L		2.3		2.3	I
	10/14/93	1001	MG/L		1.5		1.5	I
TOTAL PHOSPHATE	10/14/93	0001	MG/L		0.21		0.21	I
	10/14/93	1001	MG/L		0.13		0.13	I
TOTAL SUSPENDED SOLIDS	10/14/93	0001	MG/L		25.0		25.0	I
	10/14/93	1001	MG/L		29.0		29.0	I
TRICHLOROETHENE	10/14/93	0001	UG/L		3.4		3.4	I
	10/14/93	1001	UG/L		3.4		3.4	I
TRITIUM	10/14/93	0001	PCI/L		25200.		25200.	I
	10/14/93	1001	PCI/L		25100.		25100.	I
URANIUM-234	10/14/93	0001	PCI/L		.694		.694	I
	10/14/93	1001	PCI/L		.463		.463	I
URANIUM-238	10/14/93	0001	PCI/L		.313		.313	I
	10/14/93	1001	PCI/L		.21		.21	I

SURFACE WATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0608
NORTH COORDINATE: 49372. FT
EAST COORDINATE: 46865. FT
09/14/93 TO 10/14/93
REPORT DATE: 04/03/95

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	09/29/93	0001	UG/L		821.	J	821.	I
AMERICIUM-241	09/29/93	0001	PCI/L		.0655		.0655	I
ANTIMONY, SOLUBLE	09/29/93	0001	UG/L	B	0.72	B	0.72	I
BARIUM, SOLUBLE	09/29/93	0001	UG/L	B	60.7	J	60.7	I
BARIUM, TOTAL	09/29/93	0001	UG/L	B	72.4	J	72.4	I
CALCIUM, SOLUBLE	09/29/93	0001	UG/L		165000.	J	165000.	I
CALCIUM, TOTAL	09/29/93	0001	UG/L		146000.	J	146000.	I
CHLORIDE	09/29/93	0001	MG/L		351.		351.	I
CHROMIUM, SOLUBLE	09/29/93	0001	UG/L	B	1.0	B	1.0	I
CHROMIUM, TOTAL	09/29/93	0001	UG/L	B	1.4	B	1.4	I
COPPER, SOLUBLE	09/29/93	0001	UG/L	B	1.2	B	1.2	I
COPPER, TOTAL	09/29/93	0001	UG/L	B	0.87	B	0.87	I
FLUORIDE	09/29/93	0001	MG/L		0.13		0.13	I
IRON, TOTAL	09/29/93	0001	UG/L		661.		661.	I
LITHIUM, SOLUBLE	09/29/93	0001	UG/L	B	30.5	B	30.5	I
LITHIUM, TOTAL	09/29/93	0001	UG/L	B	30.5	B	30.5	I
MAGNESIUM, SOLUBLE	09/29/93	0001	UG/L		62200.	J	62200.	I
MAGNESIUM, TOTAL	09/29/93	0001	UG/L		59700.	J	59700.	I
MANGANESE, SOLUBLE	09/29/93	0001	UG/L	B	1.3	B	1.3	I
MANGANESE, TOTAL	09/29/93	0001	UG/L	B	9.4	B	9.4	I
NICKEL, TOTAL	09/29/93	0001	UG/L	B	2.3	B	2.3	I
NITRATE NITRITE	09/29/93	0001	MG/L		2.5		2.5	I
PLUTONIUM-239/240	09/29/93	0001	PCI/L		.28		REJECT	I
POTASSIUM, SOLUBLE	09/29/93	0001	UG/L	B	4790.	B	4790.	I
POTASSIUM, TOTAL	09/29/93	0001	UG/L	B	4930.	B	4930.	I
SODIUM, SOLUBLE	09/29/93	0001	UG/L		121000.	J	121000.	I
SODIUM, TOTAL	09/29/93	0001	UG/L		114000.	J	114000.	I
SULFATE	09/29/93	0001	MG/L		198.		198.	I
THORIUM-228	09/29/93	0001	PCI/L		.554		.554	I
THORIUM-230	09/29/93	0001	PCI/L		.116		.116	I

SURFACE WATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0608
NORTH COORDINATE: 49372. FT
EAST COORDINATE: 46865. FT
09/14/93 TO 10/14/93
REPORT DATE: 04/03/95

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TIN, SOLUBLE	09/29/93	0001	UG/L	B	30.4	B	30.4	I
TIN, TOTAL	09/29/93	0001	UG/L	B	28.0	B	28.0	I
TOTAL DISSOLVED SOLIDS	09/29/93	0001	MG/L		1020.		1020.	I
TOTAL KJELDAHL NITROGEN	09/29/93	0001	MG/L		0.16		0.16	I
TOTAL ORGANIC CARBON	09/29/93	0001	MG/L		1.0		1.0	I
TOTAL SUSPENDED SOLIDS	09/29/93	0001	MG/L		6.0		6.0	I
TRITIUM	09/29/93	0001	PCI/L		19200.		19200.	I
URANIUM-234	09/29/93	0001	PCI/L		.436		.436	I
URANIUM-238	09/29/93	0001	PCI/L		.254		.254	I

SURFACE WATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 7899
NORTH COORDINATE: UNKNOWN
EAST COORDINATE: UNKNOWN
09/14/93 TO 10/14/93
REPORT DATE: 04/03/95

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	09/14/93	0001	UG/L		24.	J	24.	I
1,2,4-TRICHLOROBENZENE	09/14/93	0001	UG/L		45.	J	45.	I
1,2-DICHLOROBENZENE	09/14/93	0001	UG/L		31.	J	31.	I
	09/14/93	0001	UG/L		27.	J	27.	I
1,2-DICHLOROETHANE	09/14/93	0001	UG/L		76.	J	76.	I
1,3,5-TRINITROBENZENE	09/14/93	0001	UG/L	J	1.0	J	1.0	I
1,3-DICHLOROBENZENE	09/14/93	0001	UG/L		43.	J	43.	I
1,4-DICHLOROBENZENE	09/14/93	0001	UG/L		44.	J	44.	I
2,4,5-TRICHLOROPHENOL	09/14/93	0001	UG/L		71.	J	71.	I
2,4,6-TRICHLOROPHENOL	09/14/93	0001	UG/L		58.	J	58.	I
2,4-DINITROTOLUENE	09/14/93	0001	UG/L		34.	J	34.	I
	09/14/93	0001	UG/L		30.	J	30.	D1
2-BUTANONE	09/14/93	0001	UG/L		12.	J	12.	I
2-CHLORONAPHTHALENE	09/14/93	0001	UG/L		63.	J	63.	I
2-METHYLPHENOL	09/14/93	0001	UG/L		28.	J	28.	I
2-NITROPHENOL	09/14/93	0001	UG/L		83.	J	83.	I
4,4'-DDD	09/14/93	0001	UG/L	J	2.9	J	2.9	D1
4,4'-DDE	09/14/93	0001	UG/L	J	3.1	J	3.1	D1
4-METHYL-2-PENTANONE	09/14/93	0001	UG/L		92.	J	92.	D1
ACENAPHTHENE	09/14/93	0001	UG/L	J	3.	J	3.	I
ACENAPHTHYLENE	09/14/93	0001	UG/L		58.	J	58.	I
ALDRIN	09/14/93	0001	UG/L	J	1.8	J	1.8	D1
ALPHA-BHC	09/14/93	0001	UG/L	J	3.7	J	3.7	D1
ALUMINUM, TOTAL	09/14/93	0001	UG/L		465.	J	465.	I
AMMONIA	09/14/93	0001	MG/L		18.0	J	18.0	I
ANTHRACENE	09/14/93	0001	UG/L		46.		46.	I
ANTIMONY, TOTAL	09/14/93	0001	UG/L		44.2		REJECT	I
ARSENIC, TOTAL	09/14/93	0001	UG/L	B	138.		REJECT	I
BARIUM, TOTAL	09/14/93	0001	UG/L		230.	J	230.	I
BENZENE	09/14/93	0001	UG/L		30.	J	30.	I
BENZO(A)ANTHRACENE	09/14/93	0001	UG/L		25.		25.	I

SURFACE WATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 7899
NORTH COORDINATE: UNKNOWN
EAST COORDINATE: UNKNOWN
09/14/93 TO 10/14/93
REPORT DATE: 04/03/95

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
BENZO(A)PYRENE	09/14/93	0001	UG/L		18.		18.	I
BERYLLIUM, TOTAL	09/14/93	0001	UG/L		78.9	J	78.9	I
BETA-BHC	09/14/93	0001	UG/L	J	3.6	J	3.6	D1
BROMODICHLOROMETHANE	09/14/93	0001	UG/L		37.	J	37.	I
BROMOFORM	09/14/93	0001	UG/L		38.	J	38.	I
BUTYL BENZYL PHTHALATE	09/14/93	0001	UG/L		51.		51.	I
CADMIUM, TOTAL	09/14/93	0001	UG/L		38.5		38.5	I
CARBAZOLE	09/14/93	0001	UG/L	J	2.	J	2.	I
CHLORIDE	09/14/93	0001	MG/L		317.	J	317.	I
CHLOROBENZENE	09/14/93	0001	UG/L		13.	J	13.	I
CHROMIUM, TOTAL	09/14/93	0001	UG/L		167.	J	167.	I
CHRYSENE	09/14/93	0001	UG/L		18.		18.	I
COBALT, TOTAL	09/14/93	0001	UG/L		166.		166.	I
COPPER, TOTAL	09/14/93	0001	UG/L		480.	J	480.	I
CYANIDE, TOTAL (METAL)	09/14/93	0001	UG/L		261.		261.	I
DI-N-BUTYL PHTHALATE	09/14/93	0001	UG/L	J	2.	J	2.	I
DIBENZOFURAN	09/14/93	0001	UG/L		72.	J	72.	I
DICHLOROMETHANE-METHYLENE CHLORIDE	09/14/93	0001	UG/L		120.	J	120.	D1
DIELDRIN	09/14/93	0001	UG/L	J	0.74	J	0.74	D1
ENDRIN	09/14/93	0001	UG/L	J	4.8	J	4.8	D1
ENDRIN ALDEHYDE	09/14/93	0001	UG/L	J	0.015	J	0.015	I
ENDRIN KETONE	09/14/93	0001	UG/L	J	0.034	J	0.034	I
ETHYLBENZENE	09/14/93	0001	UG/L		76.	J	76.	I
FLUORANTHENE	09/14/93	0001	UG/L		26.		26.	I
FLUORIDE	09/14/93	0001	MG/L		13.6		13.6	I
GAMMA CHLORDANE	09/14/93	0001	UG/L	J	3.6	J	3.6	D1
GAMMA-BHC (LINDANE)	09/14/93	0001	UG/L	J	0.010	J	0.010	I
HEPTACHLOR	09/14/93	0001	UG/L	J	0.50	J	0.50	D1
HEPTACHLOR EPOXIDE	09/14/93	0001	UG/L		6.2		6.2	D1
IRON, TOTAL	09/14/93	0001	UG/L		466.		466.	I

SURFACE WATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 7899
NORTH COORDINATE: UNKNOWN
EAST COORDINATE: UNKNOWN
09/14/93 TO 10/14/93
REPORT DATE: 04/03/95

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
LEAD, TOTAL	09/14/93	0001	UG/L		92.0	J	92.0	I
MANGANESE, TOTAL	09/14/93	0001	UG/L		409.	J	409.	I
MERCURY, TOTAL	09/14/93	0001	UG/L		8.9		8.9	I
MOLYBDENUM	09/14/93	0001	UG/L		86.7		86.7	I
NAPHTHALENE	09/14/93	0001	UG/L		68.	J	68.	I
NICKEL, TOTAL	09/14/93	0001	UG/L		288.		288.	I
NITRATE NITRITE	09/14/93	0001	MG/L		14.2		14.2	I
NITROBENZENE	09/14/93	0001	UG/L		100.		100.	D1
PYRENE	09/14/93	0001	UG/L		45.		45.	I
SELENIUM, TOTAL	09/14/93	0001	UG/L		366.		REJECT	I
SILVER, TOTAL	09/14/93	0001	UG/L		64.1		64.1	I
SODIUM, TOTAL	09/14/93	0001	UG/L	B	57.3	J	57.3	I
SULFATE	09/14/93	0001	MG/L		213.		213.	I
TETRACHLOROETHENE	09/14/93	0001	UG/L		25.	J	25.	I
TETRACHLOROMETHANE (CCL4)	09/14/93	0001	UG/L		43.	J	43.	D1
THALLIUM, TOTAL	09/14/93	0001	UG/L	B	24.0	B	24.0	I
TOLUENE	09/14/93	0001	UG/L		43.	J	43.	I
TOTAL DISSOLVED SOLIDS	09/14/93	0001	MG/L		1300.	J	1300.	I
TOTAL KJELDAHL NITROGEN	09/14/93	0001	MG/L		12.5		12.5	I
TOTAL PHOSPHATE	09/14/93	0001	MG/L		12.0		12.0	I
TOTAL XYLENES	09/14/93	0001	UG/L		77.	J	77.	D1
TRICHLOROETHENE	09/14/93	0001	UG/L		36.	J	36.	I
TRICHLOROMETHANE (CHLOROFORM)	09/14/93	0001	UG/L		65.	J	65.	D1
VANADIUM, TOTAL	09/14/93	0001	UG/L		121.		121.	I
ZINC, TOTAL	09/14/93	0001	UG/L		405.	J	405.	I

DATA FILE NAME: K:\DART\SWP\SWP98\SWQ10002.DAT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0046 46-1
NORTH COORDINATE: 597074.65 FT
EAST COORDINATE: 1495004.51 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: CLAYEY GRAVEL OR CLAYEY SANDY GRAVEL (GC)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, SOLUBLE	10/13/93	0001	UG/L	B	13.6	J	13.6	I
ALUMINUM, TOTAL	10/13/93	0001	UG/L		856.	J	856.	I
AMERICIUM-241	10/13/93	0001	PCI/L		.0989		REJECT	I
ANTIMONY, SOLUBLE	10/13/93	0001	UG/L	B	1.3	J	1.3	I
BARIUM, SOLUBLE	10/13/93	0001	UG/L	B	104.	J	104.	I
BARIUM, TOTAL	10/13/93	0001	UG/L	B	93.5		93.5	I
BUTYL BENZYL PHTHALATE	10/13/93	0001	UG/L	J	1.	J	1.	I
CALCIUM, SOLUBLE	10/13/93	0001	UG/L		133000.	J	133000.	I
CALCIUM, TOTAL	10/13/93	0001	UG/L		122000.	J	122000.	I
CHLORIDE	10/13/93	0001	MG/L		98.9		98.9	I
COPPER, TOTAL	10/13/93	0001	UG/L		137.	J	137.	I
DI-N-OCTYL PHTHALATE	10/13/93	0001	UG/L	J	0.6	J	0.6	I
FLUORIDE	10/13/93	0001	MG/L		0.15		0.15	I
IRON, SOLUBLE	10/13/93	0001	UG/L	B	54.0	J	54.0	I
IRON, TOTAL	10/13/93	0001	UG/L		1360.	J	1360.	I
LEAD, TOTAL	10/13/93	0001	UG/L		15.8	J	15.8	I
LITHIUM, SOLUBLE	10/13/93	0001	UG/L	B	6.6	J	6.6	I
LITHIUM, TOTAL	10/13/93	0001	UG/L	B	5.0	J	5.0	I
MAGNESIUM, SOLUBLE	10/13/93	0001	UG/L		40300.		40300.	I
MAGNESIUM, TOTAL	10/13/93	0001	UG/L		36700.		36700.	I
MANGANESE, SOLUBLE	10/13/93	0001	UG/L	B	11.8	J	11.8	I
MANGANESE, TOTAL	10/13/93	0001	UG/L		16.1		16.1	I
NICKEL, SOLUBLE	10/13/93	0001	UG/L	B	7.7	J	7.7	I
NICKEL, TOTAL	10/13/93	0001	UG/L	B	12.1		12.1	I
NITRATE NITRITE	10/13/93	0001	MG/L		2.0	J	2.0	I
PLUTONIUM-239/240	10/13/93	0001	PCI/L		.227		REJECT	I
POTASSIUM, TOTAL	10/13/93	0001	UG/L	B	2280.	J	2280.	I
SELENIUM, TOTAL	10/13/93	0001	UG/L	B	2.4	J	2.4	I
SODIUM, SOLUBLE	10/13/93	0001	UG/L		67200.		67200.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0046 46-1
NORTH COORDINATE: 597074.65 FT
EAST COORDINATE: 1495004.51 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: CLAYEY GRAVEL OR CLAYEY SANDY GRAVEL (GC)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SODIUM, TOTAL	10/13/93	0001	UG/L		60700.		60700.	I
SULFATE	10/13/93	0001	MG/L		102.		102.	I
TETRACHLOROETHENE	10/13/93	0001	UG/L		5.1		5.1	I
THORIUM-228	10/13/93	0001	PCI/L		.825		REJECT	I
THORIUM-230	10/13/93	0001	PCI/L		.194		.194	I
TOTAL DISSOLVED SOLIDS	10/13/93	0001	MG/L		763.	J	763.	I
TOTAL KJELDAHL NITROGEN	10/13/93	0001	MG/L		0.16		0.16	I
TOTAL ORGANIC CARBON	10/13/93	0001	MG/L		1.3		1.3	I
TOTAL PHOSPHATE	10/13/93	0001	MG/L		0.092		0.092	I
TOTAL SUSPENDED SOLIDS	10/13/93	0001	MG/L		12.0	J	12.0	I
TRICHLOROETHENE	10/13/93	0001	UG/L		2.6		2.6	I
TRITIUM	10/13/93	0001	PCI/L		5720.		5720.	I
URANIUM-234	10/13/93	0001	PCI/L		.689		.689	I
URANIUM-238	10/13/93	0001	PCI/L		.808		.808	I
VANADIUM, SOLUBLE	10/13/93	0001	UG/L	B	0.99	J	0.99	I
VANADIUM, TOTAL	10/13/93	0001	UG/L	B	1.4	J	1.4	I
ZINC, SOLUBLE	10/13/93	0001	UG/L		35.5	J	35.5	I
ZINC, TOTAL	10/13/93	0001	UG/L		102.	J	102.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0063 63-1
NORTH COORDINATE: 596573.68 FT
EAST COORDINATE: 1495055.91 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: CLAYEY GRAVEL OR CLAYEY SANDY GRAVEL (GC)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,2-CIS-DICHLOROETHENE	10/13/93	0001	UG/L		3.1	J	3.1	I
ALUMINUM, TOTAL	10/13/93	0001	UG/L		24.2	J	24.2	I
ANTIMONY, SOLUBLE	10/13/93	0001	UG/L	B	1.7		1.7	I
BARIUM, SOLUBLE	10/13/93	0001	UG/L	B	139.		139.	I
BARIUM, TOTAL	10/13/93	0001	UG/L	B	161.		161.	I
CALCIUM, SOLUBLE	10/13/93	0001	UG/L		128000.	J	128000.	I
CALCIUM, TOTAL	10/13/93	0001	UG/L		145000.	J	145000.	I
CHLORIDE	10/13/93	0001	MG/L		226.		226.	I
COPPER, TOTAL	10/13/93	0001	UG/L	B	2.7	J	2.7	I
FLUORIDE	10/13/93	0001	MG/L		0.20		0.20	I
IRON, SOLUBLE	10/13/93	0001	UG/L		121.	J	121.	I
IRON, TOTAL	10/13/93	0001	UG/L		348.	J	348.	I
LITHIUM, SOLUBLE	10/13/93	0001	UG/L	B	11.3		11.3	I
LITHIUM, TOTAL	10/13/93	0001	UG/L	B	11.3		11.3	I
MAGNESIUM, SOLUBLE	10/13/93	0001	UG/L		43400.		43400.	I
MAGNESIUM, TOTAL	10/13/93	0001	UG/L		49800.		49800.	I
MANGANESE, SOLUBLE	10/13/93	0001	UG/L	B	12.4		12.4	I
MANGANESE, TOTAL	10/13/93	0001	UG/L		15.3		15.3	I
NITRATE NITRITE	10/13/93	0001	MG/L		2.0		2.0	I
PLUTONIUM-239/240	10/13/93	0001	PCI/L		.326		REJECT	I
POTASSIUM, SOLUBLE	10/13/93	0001	UG/L	B	2230.	J	2230.	I
POTASSIUM, TOTAL	10/13/93	0001	UG/L	B	2690.	J	2690.	I
SODIUM, SOLUBLE	10/13/93	0001	UG/L		94500.		94500.	I
SODIUM, TOTAL	10/13/93	0001	UG/L		103000.		103000.	I
SULFATE	10/13/93	0001	MG/L		194.		194.	I
TETRACHLOROETHENE	10/13/93	0001	UG/L		27.	J	27.	I
TETRACHLOROMETHANE (CCL4)	10/13/93	0001	UG/L		2.7	J	2.7	I
THORIUM-230	10/13/93	0001	PCI/L		.451		.451	I
THORIUM-232	10/13/93	0001	PCI/L		.15		.15	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0063 63-1
NORTH COORDINATE: 596573.68 FT
EAST COORDINATE: 1495055.91 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: CLAYEY GRAVEL OR CLAYEY SANDY GRAVEL (GC)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL DISSOLVED SOLIDS	10/13/93	0001	MG/L		954.	J	954.	I
TOTAL KJELDAHL NITROGEN	10/13/93	0001	MG/L		0.12		0.12	I
TOTAL ORGANIC CARBON	10/13/93	0001	MG/L		0.87		0.87	I
TOTAL PHOSPHATE	10/13/93	0001	MG/L		0.094		0.094	I
TOTAL SUSPENDED SOLIDS	10/13/93	0001	MG/L		13.0	J	13.0	I
TRICHLOROETHENE	10/13/93	0001	UG/L		21.	J	21.	I
TRITIUM	10/13/93	0001	PCI/L		4540.		4540.	I
URANIUM-234	10/13/93	0001	PCI/L		.523		.523	I
URANIUM-238	10/13/93	0001	PCI/L		.471		.471	I
VANADIUM, SOLUBLE	10/13/93	0001	UG/L	B	1.6	J	1.6	I
ZINC, SOLUBLE	10/13/93	0001	UG/L		236.	J	236.	I
ZINC, TOTAL	10/13/93	0001	UG/L		280.	J	280.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0071 71-1
NORTH COORDINATE: 596320.81 FT
EAST COORDINATE: 1495998.88 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	10/11/93	0001	UG/L		2.2	J	2.2	I
1,2-CIS-DICHLOROETHENE	10/11/93	0001	UG/L		2.3	J	2.3	I
AMMONIA	10/11/93	0001	MG/L		0.11		0.11	I
ANTIMONY, SOLUBLE	10/11/93	0001	UG/L		6.6		6.6	I
BARIUM, SOLUBLE	10/11/93	0001	UG/L	B	90.7	J	90.7	I
BARIUM, TOTAL	10/11/93	0001	UG/L	B	85.7	J	85.7	I
CALCIUM, SOLUBLE	10/11/93	0001	UG/L		109000.	J	109000.	I
CALCIUM, TOTAL	10/11/93	0001	UG/L		105000.	J	105000.	I
CHLORIDE	10/11/93	0001	MG/L		121.		121.	I
COPPER, SOLUBLE	10/11/93	0001	UG/L	B	3.8		3.8	I
COPPER, TOTAL	10/11/93	0001	UG/L	B	2.8		2.8	I
FLUORIDE	10/11/93	0001	MG/L		0.16		0.16	I
IRON, TOTAL	10/11/93	0001	UG/L	B	44.8		44.8	I
LITHIUM, SOLUBLE	10/11/93	0001	UG/L	B	4.7		4.7	I
LITHIUM, TOTAL	10/11/93	0001	UG/L	B	4.7		4.7	I
MAGNESIUM, SOLUBLE	10/11/93	0001	UG/L		34000.	J	34000.	I
MAGNESIUM, TOTAL	10/11/93	0001	UG/L		32600.	J	32600.	I
MANGANESE, SOLUBLE	10/11/93	0001	UG/L	B	8.1		8.1	I
MANGANESE, TOTAL	10/11/93	0001	UG/L	B	7.2		7.2	I
NITRATE NITRITE	10/11/93	0001	MG/L		1.8		1.8	I
POTASSIUM, SOLUBLE	10/11/93	0001	UG/L	B	2630.		2630.	I
POTASSIUM, TOTAL	10/11/93	0001	UG/L	B	2780.		2780.	I
SODIUM, SOLUBLE	10/11/93	0001	UG/L		68700.	J	68700.	I
SODIUM, TOTAL	10/11/93	0001	UG/L		71600.	J	71600.	I
SULFATE	10/11/93	0001	MG/L		104.		104.	I
TETRACHLOROETHENE	10/11/93	0001	UG/L		0.69	J	0.69	I
THORIUM-228	10/11/93	0001	PCI/L		.814		.814	I
THORIUM-230	10/11/93	0001	PCI/L		.216		REJECT	I
THORIUM-232	10/11/93	0001	PCI/L		.108		.108	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0071 71-1
NORTH COORDINATE: 596320.81 FT
EAST COORDINATE: 1495998.88 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL DISSOLVED SOLIDS	10/11/93	0001	MG/L		615.		615.	I
TOTAL ORGANIC CARBON	10/11/93	0001	MG/L		0.87		0.87	I
TOTAL PHOSPHATE	10/11/93	0001	MG/L		0.098		0.098	I
TRICHLOROETHENE	10/11/93	0001	UG/L		2.8	J	2.8	I
TRITIUM	10/11/93	0001	PCI/L		1580.		1580.	I
URANIUM-234	10/11/93	0001	PCI/L		.394		.394	I
URANIUM-238	10/11/93	0001	PCI/L		.313		.313	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0076 76-1
NORTH COORDINATE: 595863.23 FT
EAST COORDINATE: 1495077.46 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	10/11/93	0001	UG/L		0.36	J	0.36	I
1,2-CIS-DICHLOROETHENE	10/11/93	0001	UG/L		1.1	J	1.1	I
AMMONIA	10/11/93	0001	MG/L		0.39		0.39	I
ANTIMONY, SOLUBLE	10/11/93	0001	UG/L		2.8		2.8	I
BARIUM, SOLUBLE	10/11/93	0001	UG/L	B	84.9	J	84.9	I
BARIUM, TOTAL	10/11/93	0001	UG/L	B	82.1	J	82.1	I
CALCIUM, SOLUBLE	10/11/93	0001	UG/L		99600.	J	99600.	I
CALCIUM, TOTAL	10/11/93	0001	UG/L		96600.	J	96600.	I
CHLORIDE	10/11/93	0001	MG/L		88.6		88.6	I
COPPER, SOLUBLE	10/11/93	0001	UG/L	B	1.6		1.6	I
COPPER, TOTAL	10/11/93	0001	UG/L	B	1.6		1.6	I
FLUORIDE	10/11/93	0001	MG/L		0.18		0.18	I
IRON, TOTAL	10/11/93	0001	UG/L	B	28.8		28.8	I
LITHIUM, SOLUBLE	10/11/93	0001	UG/L	B	2.9		2.9	I
LITHIUM, TOTAL	10/11/93	0001	UG/L	B	2.9		2.9	I
MAGNESIUM, SOLUBLE	10/11/93	0001	UG/L		31900.	J	31900.	I
MAGNESIUM, TOTAL	10/11/93	0001	UG/L		30900.	J	30900.	I
MANGANESE, SOLUBLE	10/11/93	0001	UG/L	B	11.3		11.3	I
MANGANESE, TOTAL	10/11/93	0001	UG/L	B	12.2		12.2	I
NICKEL, TOTAL	10/11/93	0001	UG/L	B	2.1		2.1	I
NITRATE NITRITE	10/11/93	0001	MG/L		1.9		1.9	I
POTASSIUM, SOLUBLE	10/11/93	0001	UG/L	B	2530.		2530.	I
POTASSIUM, TOTAL	10/11/93	0001	UG/L	B	2530.		2530.	I
SODIUM, SOLUBLE	10/11/93	0001	UG/L		50400.	J	50400.	I
SODIUM, TOTAL	10/11/93	0001	UG/L		49300.	J	49300.	I
SULFATE	10/11/93	0001	MG/L		81.0		81.0	I
TETRACHLOROETHENE	10/11/93	0001	UG/L		0.38	J	0.38	I
TOTAL DISSOLVED SOLIDS	10/11/93	0001	MG/L		518.		518.	I
TOTAL KJELDAHL NITROGEN	10/11/93	0001	MG/L		0.62		0.62	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0076 76-1
NORTH COORDINATE: 595863.23 FT
EAST COORDINATE: 1495077.46 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL ORGANIC CARBON	10/11/93	0001	MG/L		1.1		1.1	I
TOTAL PHOSPHATE	10/11/93	0001	MG/L		0.10		0.10	I
TRICHLOROETHENE	10/11/93	0001	UG/L		1.7	J	1.7	I
TRITIUM	10/11/93	0001	PCI/L		649.		649.	I
URANIUM-234	10/11/93	0001	PCI/L		.463		.463	I
URANIUM-238	10/11/93	0001	PCI/L		.152		.152	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0111
NORTH COORDINATE: 597970.72 FT
EAST COORDINATE: 1496733.76 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ANTIMONY, SOLUBLE	10/11/93	0001	UG/L		3.7		3.7	I
BARIUM, SOLUBLE	10/11/93	0001	UG/L	B	96.9	J	96.9	I
BARIUM, TOTAL	10/11/93	0001	UG/L	B	94.6	J	94.6	I
BIS(2-ETHYLHEXYL)PHTHALATE	10/11/93	0001	UG/L	J	0.7	J	0.7	I
CALCIUM, SOLUBLE	10/11/93	0001	UG/L		113000.	J	113000.	I
CALCIUM, TOTAL	10/11/93	0001	UG/L		113000.	J	113000.	I
CHLORIDE	10/11/93	0001	MG/L		113.		113.	I
CHROMIUM, TOTAL	10/11/93	0001	UG/L		46.0		46.0	I
COPPER, SOLUBLE	10/11/93	0001	UG/L	B	1.4		1.4	I
COPPER, TOTAL	10/11/93	0001	UG/L	B	0.85		0.85	I
FLUORIDE	10/11/93	0001	MG/L		0.15		0.15	I
IRON, SOLUBLE	10/11/93	0001	UG/L	B	16.0		16.0	I
IRON, TOTAL	10/11/93	0001	UG/L		212.		212.	I
LITHIUM, SOLUBLE	10/11/93	0001	UG/L	B	13.7		13.7	I
LITHIUM, TOTAL	10/11/93	0001	UG/L	B	13.7		13.7	I
MAGNESIUM, SOLUBLE	10/11/93	0001	UG/L		29600.	J	29600.	I
MAGNESIUM, TOTAL	10/11/93	0001	UG/L		29400.	J	29400.	I
MANGANESE, SOLUBLE	10/11/93	0001	UG/L	B	0.85		0.85	I
MANGANESE, TOTAL	10/11/93	0001	UG/L	B	1.9		1.9	I
NICKEL, SOLUBLE	10/11/93	0001	UG/L	B	25.0		25.0	I
NICKEL, TOTAL	10/11/93	0001	UG/L	B	24.2		24.2	I
NITRATE NITRITE	10/11/93	0001	MG/L		0.92		0.92	I
POTASSIUM, SOLUBLE	10/11/93	0001	UG/L	B	1700.		1700.	I
POTASSIUM, TOTAL	10/11/93	0001	UG/L	B	1660.		1660.	I
SODIUM, SOLUBLE	10/11/93	0001	UG/L		93500.	J	93500.	I
SODIUM, TOTAL	10/11/93	0001	UG/L		94100.	J	94100.	I
SULFATE	10/11/93	0001	MG/L		148.		148.	I
THORIUM-228	10/11/93	0001	PCI/L		.355		.355	I
TOTAL DISSOLVED SOLIDS	10/11/93	0001	MG/L		671.		671.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0111
NORTH COORDINATE: 597970.72 FT
EAST COORDINATE: 1496733.76 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL ORGANIC CARBON	10/11/93	0001	MG/L		1.5		1.5	I
TOTAL PHOSPHATE	10/11/93	0001	MG/L		0.094		0.094	I
TRICHLOROMETHANE (CHLOROFORM)	10/11/93	0001	UG/L		2.2	J	2.2	I
TRITIUM	10/11/93	0001	PCI/L		1630.		1630.	I
URANIUM-234	10/11/93	0001	PCI/L		.22		.22	I
URANIUM-238	10/11/93	0001	PCI/L		.293		.293	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0112
NORTH COORDINATE: 597974.29 FT
EAST COORDINATE: 1496515.90 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTS, SANDY OR GRAVELLY SILTS, DIATOMACEOUS SOILS (ML)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	09/25/93	0001	UG/L		408.		408.	I
AMMONIA	09/25/93	0001	MG/L		0.11		0.11	I
ANTIMONY, SOLUBLE	09/25/93	0001	UG/L	B	2.1		2.1	I
ANTIMONY, TOTAL	09/25/93	0001	UG/L	B	1.2	J	1.2	I
BARIUM, SOLUBLE	09/25/93	0001	UG/L	B	65.9		65.9	I
BARIUM, TOTAL	09/25/93	0001	UG/L	B	65.2		65.2	I
CALCIUM, SOLUBLE	09/25/93	0001	UG/L		102000.		102000.	I
CALCIUM, TOTAL	09/25/93	0001	UG/L		97300.		97300.	I
CHLORIDE	09/25/93	0001	MG/L		41.4		41.4	I
CHROMIUM, TOTAL	09/25/93	0001	UG/L	B	5.8	J	5.8	I
FLUORIDE	09/25/93	0001	MG/L		0.54		0.54	I
IRON, SOLUBLE	09/25/93	0001	UG/L		101.		101.	I
IRON, TOTAL	09/25/93	0001	UG/L		864.		864.	I
LITHIUM, SOLUBLE	09/25/93	0001	UG/L	B	60.0		60.0	I
LITHIUM, TOTAL	09/25/93	0001	UG/L	B	45.2	J	45.2	I
MAGNESIUM, SOLUBLE	09/25/93	0001	UG/L		49300.		49300.	I
MAGNESIUM, TOTAL	09/25/93	0001	UG/L		46300.		46300.	I
MANGANESE, SOLUBLE	09/25/93	0001	UG/L		41.5		41.5	I
MANGANESE, TOTAL	09/25/93	0001	UG/L		46.8	J	46.8	I
MOLYBDENUM	09/25/93	0001	UG/L	B	3.0		3.0	I
MOLYBDENUM, SOLUBLE	09/25/93	0001	UG/L	B	1.9		1.9	I
NICKEL, SOLUBLE	09/25/93	0001	UG/L	B	4.3		4.3	I
NICKEL, TOTAL	09/25/93	0001	UG/L	B	4.4		4.4	I
NITRATE NITRITE	09/25/93	0001	MG/L		0.059		0.059	I
POTASSIUM, SOLUBLE	09/25/93	0001	UG/L		13000.		13000.	I
POTASSIUM, TOTAL	09/25/93	0001	UG/L	B	11000.		11000.	I
RADIUM-226	09/25/93	0001	PCI/L		1.11		1.11	I
SODIUM, SOLUBLE	09/25/93	0001	UG/L		35500.		35500.	I
SODIUM, TOTAL	09/25/93	0001	UG/L		32700.		32700.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0112
NORTH COORDINATE: 597974.29 FT
EAST COORDINATE: 1496515.90 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTS, SANDY OR GRAVELLY SILTS, DIATOMACEOUS SOILS (ML)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SULFATE	09/25/93	0001	MG/L		147.		147.	I
THORIUM-228	09/25/93	0001	PCI/L		.31		REJECT	I
THORIUM-230	09/25/93	0001	PCI/L		.394		REJECT	I
THORIUM-232	09/25/93	0001	PCI/L		.0843		.0843	I
TIN, SOLUBLE	09/25/93	0001	UG/L	B	19.2		19.2	I
TIN, TOTAL	09/25/93	0001	UG/L	B	21.1		21.1	I
TOTAL DISSOLVED SOLIDS	09/25/93	0001	MG/L		771.		771.	I
TOTAL KJELDAHL NITROGEN	09/25/93	0001	MG/L		1.3		1.3	I
TOTAL PHOSPHATE	09/25/93	0001	MG/L		0.13		0.13	I
TOTAL SUSPENDED SOLIDS	09/25/93	0001	MG/L		16.0		16.0	I
TRITIUM	09/25/93	0001	PCI/L		3080.		3080.	I
URANIUM-234	09/25/93	0001	PCI/L		.182		.182	I
URANIUM-238	09/25/93	0001	PCI/L		.114		.114	I
VANADIUM, SOLUBLE	09/25/93	0001	UG/L		17.6		17.6	I
VANADIUM, TOTAL	09/25/93	0001	UG/L		13.7		13.7	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0115
NORTH COORDINATE: 598602.38 FT
EAST COORDINATE: 1495604.15 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LIMESTONE (LS)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	10/12/93	0001	UG/L		0.83	J	0.83	I
1,2-CIS-DICHLOROETHENE	10/12/93	0001	UG/L		1.7	J	1.7	I
ALUMINUM, TOTAL	10/12/93	0001	UG/L		905.	J	905.	I
AMERICIUM-241	10/12/93	0001	PCI/L		.217		REJECT	I
AMMONIA	10/12/93	0001	MG/L		0.31		0.31	I
ANTIMONY, SOLUBLE	10/12/93	0001	UG/L		3.1		3.1	I
ANTIMONY, TOTAL	10/12/93	0001	UG/L	B	0.62	J	0.62	I
BARIUM, SOLUBLE	10/12/93	0001	UG/L	B	83.5		83.5	I
BARIUM, TOTAL	10/12/93	0001	UG/L	B	71.0	J	71.0	I
CADMIUM, SOLUBLE	10/12/93	0001	UG/L	B	1.5		1.5	I
CALCIUM, SOLUBLE	10/12/93	0001	UG/L		142000.	J	142000.	I
CALCIUM, TOTAL	10/12/93	0001	UG/L		97500.	J	97500.	I
CHLORIDE	10/12/93	0001	MG/L		267.		267.	I
CHROMIUM, SOLUBLE	10/12/93	0001	UG/L	B	6.1	J	6.1	I
CHROMIUM, TOTAL	10/12/93	0001	UG/L		6060.	J	6060.	I
COBALT, TOTAL	10/12/93	0001	UG/L	B	14.2	J	14.2	I
COPPER, TOTAL	10/12/93	0001	UG/L		67.5	J	67.5	I
FLUORIDE	10/12/93	0001	MG/L		0.16		0.16	I
IRON, SOLUBLE	10/12/93	0001	UG/L	B	90.9	J	90.9	I
IRON, TOTAL	10/12/93	0001	UG/L		18100.	J	18100.	I
LEAD, TOTAL	10/12/93	0001	UG/L		3.4	J	3.4	I
MAGNESIUM, SOLUBLE	10/12/93	0001	UG/L		46300.	J	46300.	I
MAGNESIUM, TOTAL	10/12/93	0001	UG/L		31300.	J	31300.	I
MANGANESE, SOLUBLE	10/12/93	0001	UG/L		25.7	J	25.7	I
MANGANESE, TOTAL	10/12/93	0001	UG/L		103.	J	103.	I
MOLYBDENUM	10/12/93	0001	UG/L		128.	J	128.	I
MOLYBDENUM, SOLUBLE	10/12/93	0001	UG/L	B	10.2		10.2	I
NICKEL, SOLUBLE	10/12/93	0001	UG/L		89.7	J	89.7	I
NICKEL, TOTAL	10/12/93	0001	UG/L		480.	J	480.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0115
NORTH COORDINATE: 598602.38 FT
EAST COORDINATE: 1495604.15 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LIMESTONE (LS)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
NITRATE NITRITE	10/12/93	0001	MG/L		19.6		19.6	I
PLUTONIUM-239/240	10/12/93	0001	PCI/L		.186		REJECT	I
POTASSIUM, SOLUBLE	10/12/93	0001	UG/L	B	2070.	J	2070.	I
POTASSIUM, TOTAL	10/12/93	0001	UG/L	B	1760.	J	1760.	I
RADIUM-226	10/12/93	0001	PCI/L		.857		.857	I
SODIUM, SOLUBLE	10/12/93	0001	UG/L		175000.	J	175000.	I
SODIUM, TOTAL	10/12/93	0001	UG/L		110000.	J	110000.	I
SULFATE	10/12/93	0001	MG/L		178.		178.	I
TETRACHLOROETHENE	10/12/93	0001	UG/L		1.8	J	1.8	I
THORIUM-228	10/12/93	0001	PCI/L		.441		REJECT	I
THORIUM-230	10/12/93	0001	PCI/L		.119		.119	I
THORIUM-232	10/12/93	0001	PCI/L		.0992		.0992	I
TOTAL DISSOLVED SOLIDS	10/12/93	0001	MG/L		1040.		1040.	I
TOTAL ORGANIC CARBON	10/12/93	0001	MG/L		1.3		1.3	I
TOTAL SUSPENDED SOLIDS	10/12/93	0001	MG/L		267.		267.	I
TRICHLOROETHENE	10/12/93	0001	UG/L		4.4	J	4.4	I
TRITIUM	10/12/93	0001	PCI/L		46500.		46500.	I
URANIUM-234	10/12/93	0001	PCI/L		.622		.622	I
URANIUM-238	10/12/93	0001	PCI/L		.248		.248	I
ZINC, TOTAL	10/12/93	0001	UG/L	B	11.4	J	11.4	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0117
NORTH COORDINATE: 598073.89 FT
EAST COORDINATE: 1495765.36 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SHALE (SH)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, SOLUBLE	10/13/93	0001	UG/L	B	16.9	J	16.9	I
ALUMINUM, TOTAL	10/13/93	0001	UG/L		28500.	J	28500.	I
AMERICIUM-241	10/12/93	0001	PCI/L		.083		REJECT	I
AMMONIA	10/13/93	0001	MG/L		0.74		0.74	I
ANTIMONY, SOLUBLE	10/13/93	0001	UG/L		6.6		6.6	I
ANTIMONY, TOTAL	10/13/93	0001	UG/L	B	0.52	J	0.52	I
ARSENIC, TOTAL	10/13/93	0001	UG/L	B	8.2		8.2	I
BARIUM, SOLUBLE	10/13/93	0001	UG/L	B	59.4		59.4	I
BARIUM, TOTAL	10/13/93	0001	UG/L	B	121.		121.	I
BERYLLIUM, TOTAL	10/13/93	0001	UG/L		1.4		1.4	I
CADMIUM, TOTAL	10/13/93	0001	UG/L	B	4.7		4.7	I
CALCIUM, SOLUBLE	10/13/93	0001	UG/L		127000.	J	127000.	I
CALCIUM, TOTAL	10/13/93	0001	UG/L		224000.	J	224000.	I
CHLORIDE	10/13/93	0001	MG/L		229.		229.	I
CHROMIUM, TOTAL	10/13/93	0001	UG/L		2870.	J	2870.	I
COBALT, TOTAL	10/13/93	0001	UG/L	B	42.3		42.3	I
COPPER, SOLUBLE	10/13/93	0001	UG/L	B	3.5		3.5	I
COPPER, TOTAL	10/13/93	0001	UG/L		84.0		84.0	I
FLUORIDE	10/13/93	0001	MG/L		0.57		0.57	I
IRON, TOTAL	10/13/93	0001	UG/L		58100.	J	58100.	I
LEAD, SOLUBLE	10/13/93	0001	UG/L	B	2.6	J	2.6	I
LEAD, TOTAL	10/13/93	0001	UG/L		15.0		15.0	I
LITHIUM, SOLUBLE	10/13/93	0001	UG/L	B	33.6		33.6	I
LITHIUM, TOTAL	10/13/93	0001	UG/L	B	80.6		80.6	I
MAGNESIUM, SOLUBLE	10/13/93	0001	UG/L		58300.	J	58300.	I
MAGNESIUM, TOTAL	10/13/93	0001	UG/L		63700.	J	63700.	I
MANGANESE, SOLUBLE	10/13/93	0001	UG/L		38.6	J	38.6	I
MANGANESE, TOTAL	10/13/93	0001	UG/L		1720.	J	1720.	I
MOLYBDENUM	10/13/93	0001	UG/L		169.		169.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0117
NORTH COORDINATE: 598073.89 FT
EAST COORDINATE: 1495765.36 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SHALE (SH)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
MOLYBDENUM, SOLUBLE	10/13/93	0001	UG/L		44.4		44.4	I
NICKEL, SOLUBLE	10/13/93	0001	UG/L		187.	J	187.	I
NICKEL, TOTAL	10/13/93	0001	UG/L		1340.	J	1340.	I
PLUTONIUM-238	10/12/93	0001	PCI/L		.235		.235	I
PLUTONIUM-239/240	10/12/93	0001	PCI/L		.378		REJECT	I
POTASSIUM, SOLUBLE	10/13/93	0001	UG/L		5270.	J	5270.	I
POTASSIUM, TOTAL	10/13/93	0001	UG/L		10700.		10700.	I
POTASSIUM-40	10/12/93	0001	PCI/L		129.		129.	I
RADIUM-226	10/12/93	0001	PCI/L		3.01		3.01	I
SODIUM, SOLUBLE	10/13/93	0001	UG/L		81400.	J	81400.	I
SODIUM, TOTAL	10/13/93	0001	UG/L		56300.	J	56300.	I
SULFATE	10/13/93	0001	MG/L		208.		208.	I
THORIUM-228	10/12/93	0001	PCI/L		3.48	J	3.48	I
THORIUM-230	10/12/93	0001	PCI/L		.18		.18	I
THORIUM-232	10/12/93	0001	PCI/L		2.09		2.09	I
TIN, TOTAL	10/13/93	0001	UG/L		65.9		65.9	I
TOTAL DISSOLVED SOLIDS	10/13/93	0001	MG/L		712.	J	712.	I
TOTAL KJELDAHL NITROGEN	10/13/93	0001	MG/L		1.5		1.5	I
TOTAL ORGANIC CARBON	10/13/93	0001	MG/L		1.9		1.9	I
TOTAL PHOSPHATE	10/13/93	0001	MG/L		10.1		10.1	I
TOTAL SUSPENDED SOLIDS	10/13/93	0001	MG/L		2880.	J	2880.	I
TRITIUM	10/12/93	0001	PCI/L		9250.		9250.	I
URANIUM-234	10/12/93	0001	PCI/L		1.37		1.37	I
URANIUM-238	10/12/93	0001	PCI/L		.48		.48	I
VANADIUM, SOLUBLE	10/13/93	0001	UG/L	B	0.79		0.79	I
VANADIUM, TOTAL	10/13/93	0001	UG/L		31.7		31.7	I
ZINC, TOTAL	10/13/93	0001	UG/L		116.		116.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0118
NORTH COORDINATE: 600088.12 FT
EAST COORDINATE: 1495735.50 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY SAND OR SILTY GRAVELLY SAND (SM)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMMONIA	09/14/93	0001	MG/L		0.30		0.30	I
BARIUM, SOLUBLE	09/14/93	0001	UG/L	B	89.1	J	89.1	I
BARIUM, TOTAL	09/14/93	0001	UG/L	B	86.7	J	86.7	I
BIS(2-ETHYLHEXYL)PHTHALATE	09/14/93	0001	UG/L	J	0.8	J	0.8	I
CALCIUM, SOLUBLE	09/14/93	0001	UG/L		96900.	J	96900.	I
CALCIUM, TOTAL	09/14/93	0001	UG/L		92800.	J	92800.	I
CHLORIDE	09/14/93	0001	MG/L		92.4	J	92.4	I
CHROMIUM, TOTAL	09/14/93	0001	UG/L		42.1		42.1	I
COPPER, SOLUBLE	09/14/93	0001	UG/L	B	1.7		1.7	I
COPPER, TOTAL	09/14/93	0001	UG/L	B	2.7		2.7	I
FLUORIDE	09/14/93	0001	MG/L		0.20		0.20	I
IRON, SOLUBLE	09/14/93	0001	UG/L	B	35.9		35.9	I
IRON, TOTAL	09/14/93	0001	UG/L		595.		595.	I
MAGNESIUM, SOLUBLE	09/14/93	0001	UG/L		32400.	J	32400.	I
MAGNESIUM, TOTAL	09/14/93	0001	UG/L		31300.	J	31300.	I
MANGANESE, SOLUBLE	09/14/93	0001	UG/L	B	4.1		4.1	I
MANGANESE, TOTAL	09/14/93	0001	UG/L	B	12.3		12.3	I
NICKEL, SOLUBLE	09/14/93	0001	UG/L		47.6		47.6	I
NICKEL, TOTAL	09/14/93	0001	UG/L		59.4		59.4	I
NITRATE NITRITE	09/14/93	0001	MG/L		3.3		3.3	I
POTASSIUM, SOLUBLE	09/14/93	0001	UG/L	B	1470.	J	1470.	I
POTASSIUM, TOTAL	09/14/93	0001	UG/L	B	1470.	J	1470.	I
RADIUM-226	09/14/93	0001	PCI/L		.345		.345	I
SELENIUM, SOLUBLE	09/14/93	0001	UG/L	B	1.4		1.4	I
SODIUM, SOLUBLE	09/14/93	0001	UG/L		52300.		52300.	I
SODIUM, TOTAL	09/14/93	0001	UG/L		52000.		52000.	I
SULFATE	09/14/93	0001	MG/L		52.8		52.8	I
THORIUM-228	09/14/93	0001	PCI/L		.686		REJECT	I
THORIUM-230	09/14/93	0001	PCI/L		.496		.496	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0118
NORTH COORDINATE: 600088.12 FT
EAST COORDINATE: 1495735.50 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY SAND OR SILTY GRAVELLY SAND (SM)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL DISSOLVED SOLIDS	09/14/93	0001	MG/L		543.		543.	I
TOTAL ORGANIC CARBON	09/14/93	0001	MG/L		0.74		0.74	I
TOTAL PHOSPHATE	09/14/93	0001	MG/L		0.10		0.10	I
TRITIUM	09/14/93	0001	PCI/L		630.		630.	I
URANIUM-234	09/14/93	0001	PCI/L		.383		.383	I
URANIUM-238	09/14/93	0001	PCI/L		.184		.184	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0119
NORTH COORDINATE: 597543.93 FT
EAST COORDINATE: 1495848.91 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTS, SANDY OR GRAVELLY SILTS, DIATOMACEOUS SOILS (ML)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMERICIUM-241	09/25/93	0001	PCI/L		.102		.102	I
ANTIMONY, SOLUBLE	09/25/93	0001	UG/L	B	2.0		2.0	I
ANTIMONY, TOTAL	09/25/93	0001	UG/L	B	0.60		0.60	I
ARSENIC, TOTAL	09/25/93	0001	UG/L	B	2.6		2.6	I
BARIUM, SOLUBLE	09/25/93	0001	UG/L	B	73.1		73.1	I
BARIUM, TOTAL	09/25/93	0001	UG/L	B	74.6		74.6	I
CALCIUM, SOLUBLE	09/25/93	0001	UG/L		115000.		115000.	I
CALCIUM, TOTAL	09/25/93	0001	UG/L		116000.		116000.	I
CHLORIDE	09/25/93	0001	MG/L		303.		303.	I
FLUORIDE	09/25/93	0001	MG/L		0.21		0.21	I
IRON, SOLUBLE	09/25/93	0001	UG/L		908.		908.	I
IRON, TOTAL	09/25/93	0001	UG/L		1180.		1180.	I
LEAD, TOTAL	09/25/93	0001	UG/L		29.1		29.1	I
LITHIUM, SOLUBLE	09/25/93	0001	UG/L	B	8.6	J	8.6	I
LITHIUM, TOTAL	09/25/93	0001	UG/L	B	8.6	J	8.6	I
MAGNESIUM, SOLUBLE	09/25/93	0001	UG/L		36100.		36100.	I
MAGNESIUM, TOTAL	09/25/93	0001	UG/L		36500.		36500.	I
MANGANESE, SOLUBLE	09/25/93	0001	UG/L		33.2		33.2	I
MANGANESE, TOTAL	09/25/93	0001	UG/L		33.6		33.6	I
MOLYBDENUM	09/25/93	0001	UG/L	B	2.4		2.4	I
MOLYBDENUM, SOLUBLE	09/25/93	0001	UG/L	B	2.5		2.5	I
PLUTONIUM-239/240	09/25/93	0001	PCI/L		.117		REJECT	I
POTASSIUM, SOLUBLE	09/25/93	0001	UG/L	B	2910.		2910.	I
POTASSIUM, TOTAL	09/25/93	0001	UG/L	B	2060.	J	2060.	I
RADIUM-226	09/25/93	0001	PCI/L		1.03		1.03	I
SODIUM, SOLUBLE	09/25/93	0001	UG/L		137000.		137000.	I
SODIUM, TOTAL	09/25/93	0001	UG/L		139000.		139000.	I
SULFATE	09/25/93	0001	MG/L		157.		157.	I
THORIUM-228	09/25/93	0001	PCI/L		.255		REJECT	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0119
NORTH COORDINATE: 597543.93 FT
EAST COORDINATE: 1495848.91 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTS, SANDY OR GRAVELLY SILTS, DIATOMACEOUS SOILS (ML)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
THORIUM-230	09/25/93	0001	PCI/L		.559	J	.559	I
TIN, SOLUBLE	09/25/93	0001	UG/L	B	13.4		13.4	I
TIN, TOTAL	09/25/93	0001	UG/L	B	17.6		17.6	I
TOTAL DISSOLVED SOLIDS	09/25/93	0001	MG/L		1050.		1050.	I
TOTAL KJELDAHL NITROGEN	09/25/93	0001	MG/L		0.13		0.13	I
TOTAL ORGANIC CARBON	09/25/93	0001	MG/L		0.80		0.80	I
TOTAL PHOSPHATE	09/25/93	0001	MG/L		0.088		0.088	I
TOTAL SUSPENDED SOLIDS	09/25/93	0001	MG/L		15.0		15.0	I
TRITIUM	09/25/93	0001	PCI/L		2430.		2430.	I
URANIUM-234	09/25/93	0001	PCI/L		.344		.344	I
URANIUM-238	09/25/93	0001	PCI/L		.166		.166	I
VANADIUM, SOLUBLE	09/25/93	0001	UG/L		11.8		11.8	I
VANADIUM, TOTAL	09/25/93	0001	UG/L		11.8		11.8	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0120
NORTH COORDINATE: 598125.35 FT
EAST COORDINATE: 1495747.04 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LIMESTONE (LS)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, SOLUBLE	10/14/93	0001	UG/L		22.8	J	22.8	I
ALUMINUM, TOTAL	10/14/93	0001	UG/L		25600.	J	25600.	I
AMERICIUM-241	10/14/93	0001	PCI/L		.082		REJECT	I
AMMONIA	10/14/93	0001	MG/L		0.37		0.37	I
ANTIMONY, SOLUBLE	10/14/93	0001	UG/L	B	1.9	J	1.9	I
ANTIMONY, TOTAL	10/14/93	0001	UG/L	B	0.62	J	0.62	I
ARSENIC, TOTAL	10/14/93	0001	UG/L		18.7	J	18.7	I
BARIUM, SOLUBLE	10/14/93	0001	UG/L	B	56.7		56.7	I
BARIUM, TOTAL	10/14/93	0001	UG/L	B	186.		186.	I
BERYLLIUM, TOTAL	10/14/93	0001	UG/L		2.3		2.3	I
BISMUTH, SOLUBLE	10/14/93	0001	UG/L	B	41.8		41.8	I
BISMUTH, TOTAL	10/14/93	0001	UG/L	B	38.9		38.9	I
CADMIUM, TOTAL	10/14/93	0001	UG/L		13.1	J	13.1	I
CALCIUM, SOLUBLE	10/14/93	0001	UG/L		169000.		169000.	I
CALCIUM, TOTAL	10/14/93	0001	UG/L		229000.		229000.	I
CHLORIDE	10/14/93	0001	MG/L		420.		420.	I
CHROMIUM, SOLUBLE	10/14/93	0001	UG/L	B	5.6	J	5.6	I
CHROMIUM, TOTAL	10/14/93	0001	UG/L		15100.	J	15100.	I
COBALT, TOTAL	10/14/93	0001	UG/L		99.0		99.0	I
COPPER, TOTAL	10/14/93	0001	UG/L		232.		232.	I
FLUORIDE	10/14/93	0001	MG/L		0.22		0.22	I
IRON, SOLUBLE	10/14/93	0001	UG/L	B	53.8	J	53.8	I
IRON, TOTAL	10/14/93	0001	UG/L		181000.	J	181000.	I
LEAD, SOLUBLE	10/14/93	0001	UG/L	B	2.8		2.8	I
LEAD, TOTAL	10/14/93	0001	UG/L		26.4	J	26.4	I
LITHIUM, SOLUBLE	10/14/93	0001	UG/L	B	57.0		57.0	I
LITHIUM, TOTAL	10/14/93	0001	UG/L	B	99.0	J	99.0	I
MAGNESIUM, SOLUBLE	10/14/93	0001	UG/L		92400.		92400.	I
MAGNESIUM, TOTAL	10/14/93	0001	UG/L		99100.		99100.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0120
NORTH COORDINATE: 598125.35 FT
EAST COORDINATE: 1495747.04 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LIMESTONE (LS)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
MANGANESE, SOLUBLE	10/14/93	0001	UG/L	B	14.4		14.4	I
MANGANESE, TOTAL	10/14/93	0001	UG/L		1710.		1710.	I
MOLYBDENUM	10/14/93	0001	UG/L		173.		173.	I
NICKEL, SOLUBLE	10/14/93	0001	UG/L		75.3		75.3	I
NICKEL, TOTAL	10/14/93	0001	UG/L		1430.		1430.	I
NITRATE NITRITE	10/14/93	0001	MG/L		1.3		1.3	I
PLUTONIUM-238	10/14/93	0001	PCI/L		.236		.236	I
PLUTONIUM-239/240	10/14/93	0001	PCI/L		.156		REJECT	I
POTASSIUM, SOLUBLE	10/14/93	0001	UG/L		6700.		6700.	I
POTASSIUM, TOTAL	10/14/93	0001	UG/L		14700.		14700.	I
RADIUM-226	10/14/93	0001	PCI/L		1.36		1.36	I
SELENIUM, TOTAL	10/14/93	0001	UG/L	B	7.0	J	7.0	I
SODIUM, SOLUBLE	10/14/93	0001	UG/L		133000.		133000.	I
SODIUM, TOTAL	10/14/93	0001	UG/L		117000.		117000.	I
SULFATE	10/14/93	0001	MG/L		218.		218.	I
THORIUM-228	10/14/93	0001	PCI/L		2.95		REJECT	I
THORIUM-230	10/14/93	0001	PCI/L		1.77		1.77	I
THORIUM-232	10/14/93	0001	PCI/L		1.46		1.46	I
TIN, SOLUBLE	10/14/93	0001	UG/L	B	21.5		21.5	I
TOTAL DISSOLVED SOLIDS	10/14/93	0001	MG/L		1440.		1440.	I
TOTAL KJELDAHL NITROGEN	10/14/93	0001	MG/L		1.6		1.6	I
TOTAL ORGANIC CARBON	10/14/93	0001	MG/L		8.1		8.1	I
TOTAL PHOSPHATE	10/14/93	0001	MG/L		2.7		2.7	I
TOTAL SUSPENDED SOLIDS	10/14/93	0001	MG/L		20.0		20.0	I
TRITIUM	10/14/93	0001	PCI/L		33500.		33500.	I
URANIUM-234	10/14/93	0001	PCI/L		2.69		2.69	I
URANIUM-238	10/14/93	0001	PCI/L		1.34		1.34	I
VANADIUM, TOTAL	10/14/93	0001	UG/L	B	43.4		43.4	I
ZINC, SOLUBLE	10/14/93	0001	UG/L		285.		285.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0120
NORTH COORDINATE: 598125.35 FT
EAST COORDINATE: 1495747.04 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LIMESTONE (LS)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ZINC, TOTAL	10/14/93	0001	UG/L		141.		141.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0123
NORTH COORDINATE: 597471.08 FT
EAST COORDINATE: 1494745.82 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY SAND OR SILTY GRAVELLY SAND (SM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, SOLUBLE	09/22/93	0001	UG/L	B	12.8		12.8	I
ALUMINUM, TOTAL	09/22/93	0001	UG/L	B	13.7		13.7	I
AMERICIUM-241	09/22/93	0001	PCI/L		.0937		.0937	I
AMMONIA	09/22/93	0001	MG/L		2.1	J	2.1	I
ANTIMONY, SOLUBLE	09/22/93	0001	UG/L	B	6.8	J	6.8	I
BARIUM, SOLUBLE	09/22/93	0001	UG/L	B	60.0		60.0	I
BARIUM, TOTAL	09/22/93	0001	UG/L	B	59.2		59.2	I
CALCIUM, SOLUBLE	09/22/93	0001	UG/L		623000.		REJECT	I
CALCIUM, TOTAL	09/22/93	0001	UG/L		528000.		REJECT	I
CHLORIDE	09/22/93	0001	MG/L		901.		901.	I
CHROMIUM, TOTAL	09/22/93	0001	UG/L		12.6		12.6	I
FLUORIDE	09/22/93	0001	MG/L		0.61		0.61	I
IRON, TOTAL	09/22/93	0001	UG/L		136.		136.	I
LITHIUM, SOLUBLE	09/22/93	0001	UG/L		207.		207.	I
LITHIUM, TOTAL	09/22/93	0001	UG/L		198.		198.	I
MAGNESIUM, SOLUBLE	09/22/93	0001	UG/L		30600.	J	30600.	I
MAGNESIUM, TOTAL	09/22/93	0001	UG/L		30300.	J	30300.	I
MANGANESE, SOLUBLE	09/22/93	0001	UG/L		335.	J	335.	I
MANGANESE, TOTAL	09/22/93	0001	UG/L		325.	J	325.	I
MOLYBDENUM	09/22/93	0001	UG/L	B	2.3		2.3	I
MOLYBDENUM, SOLUBLE	09/22/93	0001	UG/L	B	2.8		2.8	I
NICKEL, SOLUBLE	09/22/93	0001	UG/L	B	28.9		28.9	I
NICKEL, TOTAL	09/22/93	0001	UG/L	B	34.6		34.6	I
NITRATE NITRITE	09/22/93	0001	MG/L		0.10		0.10	I
POTASSIUM, SOLUBLE	09/22/93	0001	UG/L	B	12700.		12700.	I
POTASSIUM, TOTAL	09/22/93	0001	UG/L	B	13000.		13000.	I
SELENIUM, TOTAL	09/22/93	0001	UG/L	B	2.1	J	2.1	I
SODIUM, SOLUBLE	09/22/93	0001	UG/L		623000.	J	623000.	I
SODIUM, TOTAL	09/22/93	0001	UG/L		528000.	J	528000.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0123
NORTH COORDINATE: 597471.08 FT
EAST COORDINATE: 1494745.82 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY SAND OR SILTY GRAVELLY SAND (SM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SULFATE	09/22/93	0001	MG/L		47.3		47.3	I
THORIUM-230	09/22/93	0001	PCI/L		2.49		2.49	I
TOTAL DISSOLVED SOLIDS	09/22/93	0001	MG/L		1810.		1810.	I
TOTAL KJELDAHL NITROGEN	09/22/93	0001	MG/L		1.9		1.9	I
TOTAL PHOSPHATE	09/22/93	0001	MG/L		0.12		0.12	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0124
NORTH COORDINATE: 597345.57 FT
EAST COORDINATE: 1494710.93 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY SAND OR SILTY GRAVELLY SAND (SM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
BARIUM, SOLUBLE	09/23/93	0001	UG/L	B	87.9	J	87.9	I
BARIUM, TOTAL	09/23/93	0001	UG/L	B	85.3		85.3	I
CALCIUM, SOLUBLE	09/23/93	0001	UG/L		104000.	J	104000.	I
CALCIUM, TOTAL	09/23/93	0001	UG/L		101000.	J	101000.	I
CHLORIDE	09/23/93	0001	MG/L		112.		112.	I
COPPER, SOLUBLE	09/23/93	0001	UG/L	B	1.4		1.4	I
COPPER, TOTAL	09/23/93	0001	UG/L	B	3.1		3.1	I
FLUORIDE	09/23/93	0001	MG/L		0.17		0.17	I
LITHIUM, SOLUBLE	09/23/93	0001	UG/L	B	6.1		6.1	I
LITHIUM, TOTAL	09/23/93	0001	UG/L	B	6.1		6.1	I
MAGNESIUM, SOLUBLE	09/23/93	0001	UG/L		31400.	J	31400.	I
MAGNESIUM, TOTAL	09/23/93	0001	UG/L		30700.	J	30700.	I
MANGANESE, SOLUBLE	09/23/93	0001	UG/L	B	4.7	J	4.7	I
MANGANESE, TOTAL	09/23/93	0001	UG/L	B	5.8	J	5.8	I
NITRATE NITRITE	09/23/93	0001	MG/L		2.8		2.8	I
PLUTONIUM-239/240	09/23/93	0001	PCI/L		.124		REJECT	I
POTASSIUM, SOLUBLE	09/23/93	0001	UG/L	B	2390.		2390.	I
POTASSIUM, TOTAL	09/23/93	0001	UG/L	B	2540.		2540.	I
SELENIUM, TOTAL	09/23/93	0001	UG/L	B	2.5	J	2.5	I
SODIUM, SOLUBLE	09/23/93	0001	UG/L		59600.	J	59600.	I
SODIUM, TOTAL	09/23/93	0001	UG/L		58100.		58100.	I
SULFATE	09/23/93	0001	MG/L		66.2		66.2	I
THORIUM-228	09/23/93	0001	PCI/L		.661		REJECT	I
THORIUM-230	09/23/93	0001	PCI/L		.388		REJECT	I
TIN, SOLUBLE	09/23/93	0001	UG/L	B	20.7	J	20.7	I
TIN, TOTAL	09/23/93	0001	UG/L	B	15.5	J	15.5	I
TOTAL DISSOLVED SOLIDS	09/23/93	0001	MG/L		615.		615.	I
TOTAL ORGANIC CARBON	09/23/93	0001	MG/L		1.0		1.0	I
TOTAL PHOSPHATE	09/23/93	0001	MG/L		0.15		0.15	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0124
NORTH COORDINATE: 597345.57 FT
EAST COORDINATE: 1494710.93 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY SAND OR SILTY GRAVELLY SAND (SM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TRITIUM	09/23/93	0001	PCI/L		2430.		2430.	I
URANIUM-234	09/23/93	0001	PCI/L		.322		.322	I
URANIUM-238	09/23/93	0001	PCI/L		.221		.221	I
VANADIUM, SOLUBLE	09/23/93	0001	UG/L	B	8.6	J	8.6	I
VANADIUM, TOTAL	09/23/93	0001	UG/L	B	9.3	J	9.3	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0125
NORTH COORDINATE: 597319.87 FT
EAST COORDINATE: 1495388.82 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTS, SANDY OR GRAVELLY SILTS, DIATOMACEOUS SOILS (ML)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	09/24/93	0001	UG/L		188.		188.	I
AMERICIUM-241	09/24/93	0001	PCI/L		.138		REJECT	I
BARIUM, TOTAL	09/24/93	0001	UG/L	B	74.4		74.4	I
CALCIUM, TOTAL	09/24/93	0001	UG/L		107000.		107000.	I
IRON, TOTAL	09/24/93	0001	UG/L		159.		159.	I
LEAD, TOTAL	09/24/93	0001	UG/L		17.8		17.8	I
LITHIUM, TOTAL	09/24/93	0001	UG/L	B	8.6	J	8.6	I
MAGNESIUM, TOTAL	09/24/93	0001	UG/L		47700.		47700.	I
MOLYBDENUM	09/24/93	0001	UG/L	B	14.2		14.2	I
NICKEL, TOTAL	09/24/93	0001	UG/L	B	6.0		6.0	I
PLUTONIUM-239/240	09/24/93	0001	PCI/L		.102		REJECT	I
POTASSIUM, TOTAL	09/24/93	0001	UG/L	B	2610.		2610.	I
SODIUM, TOTAL	09/24/93	0001	UG/L		39100.		39100.	I
THORIUM-228	09/24/93	0001	PCI/L		.488		REJECT	I
THORIUM-230	09/24/93	0001	PCI/L		.311		REJECT	I
TIN, TOTAL	09/24/93	0001	UG/L	B	22.5		22.5	I
TRITIUM	09/24/93	0001	PCI/L		1490.		1490.	I
URANIUM-234	09/24/93	0001	PCI/L		2.8		2.8	I
URANIUM-238	09/24/93	0001	PCI/L		2.5		2.5	I
VANADIUM, TOTAL	09/24/93	0001	UG/L		16.4		16.4	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0126
NORTH COORDINATE: 597159.58 FT
EAST COORDINATE: 1494700.09 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY SAND OR SILTY GRAVELLY SAND (SM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMERICIUM-241	09/14/93	0001	PCI/L		.0465		.0465	I
BARIUM, SOLUBLE	09/14/93	0001	UG/L	B	99.3	J	99.3	I
BARIUM, TOTAL	09/14/93	0001	UG/L	B	90.4	J	90.4	I
CALCIUM, SOLUBLE	09/14/93	0001	UG/L		112000.	J	112000.	I
CALCIUM, TOTAL	09/14/93	0001	UG/L		102000.	J	102000.	I
CHLORIDE	09/14/93	0001	MG/L		124.	J	124.	I
COPPER, SOLUBLE	09/14/93	0001	UG/L	B	1.3		1.3	I
COPPER, TOTAL	09/14/93	0001	UG/L	B	1.9		1.9	I
FLUORIDE	09/14/93	0001	MG/L		0.15		0.15	I
IRON, TOTAL	09/14/93	0001	UG/L	B	46.6		46.6	I
LEAD, TOTAL	09/14/93	0001	UG/L		4.9	J	4.9	I
LITHIUM, SOLUBLE	09/14/93	0001	UG/L	B	2.8	J	2.8	I
LITHIUM, TOTAL	09/14/93	0001	UG/L	B	2.8	J	2.8	I
MAGNESIUM, SOLUBLE	09/14/93	0001	UG/L		32800.	J	32800.	I
MAGNESIUM, TOTAL	09/14/93	0001	UG/L		30000.	J	30000.	I
MANGANESE, SOLUBLE	09/14/93	0001	UG/L	B	2.9		2.9	I
MANGANESE, TOTAL	09/14/93	0001	UG/L	B	3.1		3.1	I
NICKEL, SOLUBLE	09/14/93	0001	UG/L	B	2.6		2.6	I
NICKEL, TOTAL	09/14/93	0001	UG/L	B	4.2		4.2	I
NITRATE NITRITE	09/14/93	0001	MG/L		3.5		3.5	I
PETN	09/14/93	0001	UG/L		4.8	J	4.8	I
POTASSIUM, SOLUBLE	09/14/93	0001	UG/L	B	2740.	J	2740.	I
POTASSIUM, TOTAL	09/14/93	0001	UG/L	B	2640.	J	2640.	I
RADIUM-226	09/14/93	0001	PCI/L		.168		.168	I
SELENIUM, TOTAL	09/14/93	0001	UG/L	B	2.0	J	2.0	I
SODIUM, SOLUBLE	09/14/93	0001	UG/L		76300.		76300.	I
SODIUM, TOTAL	09/14/93	0001	UG/L		68400.		68400.	I
SULFATE	09/14/93	0001	MG/L		74.1		74.1	I
THORIUM-230	09/14/93	0001	PCI/L		1.8		1.8	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0126
NORTH COORDINATE: 597159.58 FT
EAST COORDINATE: 1494700.09 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY SAND OR SILTY GRAVELLY SAND (SM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
THORIUM-232	09/14/93	0001	PCI/L		.108		.108	I
TIN, SOLUBLE	09/14/93	0001	UG/L	B	24.6		24.6	I
TIN, TOTAL	09/14/93	0001	UG/L	B	25.8		25.8	I
TOTAL DISSOLVED SOLIDS	09/14/93	0001	MG/L		737.		737.	I
TOTAL ORGANIC CARBON	09/14/93	0001	MG/L		0.83		0.83	I
TOTAL PHOSPHATE	09/14/93	0001	MG/L		0.10		0.10	I
TOTAL SUSPENDED SOLIDS	09/14/93	0001	MG/L		11.0		11.0	I
TRITIUM	09/14/93	0001	PCI/L		4000.		4000.	I
URANIUM-238	09/14/93	0001	PCI/L		.177		.177	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0127
NORTH COORDINATE: 597166.92 FT
EAST COORDINATE: 1493915.42 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND WELL GRADED (SW)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMERICIUM-241	09/13/93	0001	PCI/L		.0664		.0664	I
AMMONIA	09/13/93	0001	MG/L		0.13		0.13	I
BARIUM, SOLUBLE	09/13/93	0001	UG/L		211.		211.	I
BARIUM, TOTAL	09/13/93	0001	UG/L		224.		224.	I
CALCIUM, SOLUBLE	09/13/93	0001	UG/L		82800.	J	82800.	I
CALCIUM, TOTAL	09/13/93	0001	UG/L		85100.	J	85100.	I
CHLORIDE	09/13/93	0001	MG/L		33.3	J	33.3	I
COPPER, SOLUBLE	09/13/93	0001	UG/L	B	1.2		1.2	I
COPPER, TOTAL	09/13/93	0001	UG/L	B	1.4		1.4	I
FLUORIDE	09/13/93	0001	MG/L		0.34		0.34	I
IRON, TOTAL	09/13/93	0001	UG/L	B	18.3		18.3	I
LITHIUM, SOLUBLE	09/13/93	0001	UG/L	B	2.6	J	2.6	I
MAGNESIUM, SOLUBLE	09/13/93	0001	UG/L		26400.		26400.	I
MAGNESIUM, TOTAL	09/13/93	0001	UG/L		27500.		27500.	I
MANGANESE, SOLUBLE	09/13/93	0001	UG/L		41.4		41.4	I
MANGANESE, TOTAL	09/13/93	0001	UG/L		44.1		44.1	I
MOLYBDENUM	09/13/93	0001	UG/L	B	4.2		4.2	I
MOLYBDENUM, SOLUBLE	09/13/93	0001	UG/L	B	4.8		4.8	I
NICKEL, SOLUBLE	09/13/93	0001	UG/L	B	3.2	J	3.2	I
NICKEL, TOTAL	09/13/93	0001	UG/L	B	2.4	J	2.4	I
NITRATE NITRITE	09/13/93	0001	MG/L		0.68		0.68	I
PLUTONIUM-239/240	09/13/93	0001	PCI/L		.15		.15	I
POTASSIUM, SOLUBLE	09/13/93	0001	UG/L	B	2490.		2490.	I
POTASSIUM, TOTAL	09/13/93	0001	UG/L	B	2640.		2640.	I
RADIUM-226	09/13/93	0001	PCI/L		.4		.4	I
SODIUM, SOLUBLE	09/13/93	0001	UG/L		38700.		38700.	I
SODIUM, TOTAL	09/13/93	0001	UG/L		40600.		40600.	I
SULFATE	09/13/93	0001	MG/L		63.0		63.0	I
THORIUM-228	09/13/93	0001	PCI/L		.608		REJECT	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0127
NORTH COORDINATE: 597166.92 FT
EAST COORDINATE: 1493915.42 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND WELL GRADED (SW)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
THORIUM-230	09/13/93	0001	PCI/L		.934		.934	I
TIN, SOLUBLE	09/13/93	0001	UG/L	B	16.8		16.8	I
TIN, TOTAL	09/13/93	0001	UG/L	B	15.9		15.9	I
TOTAL DISSOLVED SOLIDS	09/13/93	0001	MG/L		524.		524.	I
TOTAL KJELDAHL NITROGEN	09/13/93	0001	MG/L		0.11		0.11	I
TOTAL ORGANIC CARBON	09/13/93	0001	MG/L		1.8		1.8	I
TOTAL PHOSPHATE	09/13/93	0001	MG/L		0.11		0.11	I
TOTAL SUSPENDED SOLIDS	09/13/93	0001	MG/L		13.0		13.0	I
TRITIUM	09/13/93	0001	PCI/L		325.		325.	I
URANIUM-234	09/13/93	0001	PCI/L		.292		.292	I
URANIUM-238	09/13/93	0001	PCI/L		.171		.171	I
VANADIUM, SOLUBLE	09/13/93	0001	UG/L	B	8.5	J	8.5	I
VANADIUM, TOTAL	09/13/93	0001	UG/L	B	7.7	J	7.7	I
ZINC, TOTAL	09/13/93	0001	UG/L	B	5.8		5.8	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0128
NORTH COORDINATE: 597105.98 FT
EAST COORDINATE: 1493916.75 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND WELL GRADED (SW)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMMONIA	09/24/93	0001	MG/L		1.4		1.4	I
	09/24/93	1001	MG/L		1.3		1.3	I
ANTIMONY, SOLUBLE	09/24/93	0001	UG/L	B	0.88		0.88	I
	09/24/93	1001	UG/L	B	0.80		0.80	I
ANTIMONY, TOTAL	09/24/93	0001	UG/L	B	0.50		0.50	I
BARIUM, SOLUBLE	09/24/93	0001	UG/L	B	176.		176.	I
	09/24/93	1001	UG/L	B	193.		193.	I
BARIUM, TOTAL	09/24/93	0001	UG/L	B	186.		186.	I
	09/24/93	1001	UG/L	B	181.		181.	I
CADMIUM, SOLUBLE	09/24/93	0001	UG/L	B	1.0		1.0	I
CALCIUM, SOLUBLE	09/24/93	0001	UG/L		75000.		75000.	I
	09/24/93	1001	UG/L		86900.		86900.	I
CALCIUM, TOTAL	09/24/93	0001	UG/L		80000.		80000.	I
	09/24/93	1001	UG/L		76900.		76900.	I
CHLORIDE	09/24/93	0001	MG/L		66.6		66.6	I
	09/24/93	1001	MG/L		68.9		68.9	I
COBALT, SOLUBLE	09/24/93	0001	UG/L	B	1.5		1.5	I
COBALT, TOTAL	09/24/93	0001	UG/L	B	1.5		1.5	I
	09/24/93	1001	UG/L	B	1.6		1.6	I
FLUORIDE	09/24/93	0001	MG/L		0.29		0.29	I
	09/24/93	1001	MG/L		0.29		0.29	I
LEAD, SOLUBLE	09/24/93	0001	UG/L		14.0	J	14.0	I
	09/24/93	1001	UG/L		43.9	J	43.9	I
MAGNESIUM, SOLUBLE	09/24/93	0001	UG/L		27700.		27700.	I
	09/24/93	1001	UG/L		32300.		32300.	I
MAGNESIUM, TOTAL	09/24/93	0001	UG/L		29600.		29600.	I
	09/24/93	1001	UG/L		28400.		28400.	I
MANGANESE, SOLUBLE	09/24/93	0001	UG/L		198.		198.	I
	09/24/93	1001	UG/L		229.		229.	I
MANGANESE, TOTAL	09/24/93	0001	UG/L		211.		211.	I
	09/24/93	1001	UG/L		203.		203.	I
MOLYBDENUM	09/24/93	0001	UG/L	B	6.9		6.9	I
	09/24/93	1001	UG/L	B	6.2		6.2	I
MOLYBDENUM, SOLUBLE	09/24/93	0001	UG/L	B	6.8		6.8	I
	09/24/93	1001	UG/L	B	6.5		6.5	I
NICKEL, SOLUBLE	09/24/93	0001	UG/L	B	5.4	J	5.4	I
	09/24/93	1001	UG/L	B	3.6	J	3.6	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0128
NORTH COORDINATE: 597105.98 FT
EAST COORDINATE: 1493916.75 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND WELL GRADED (SW)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
NICKEL, TOTAL	09/24/93	0001	UG/L	B	5.0		5.0	I
	09/24/93	1001	UG/L	B	4.5		4.5	I
NITRATE NITRITE	09/24/93	0001	MG/L		0.039		0.039	I
	09/24/93	1001	MG/L		0.16		0.16	I
PLUTONIUM-239/240	09/21/93	0001	PCI/L		.186		REJECT	I
	09/24/93	1001	PCI/L		.121		REJECT	I
POTASSIUM, SOLUBLE	09/24/93	0001	UG/L	B	3010.		3010.	I
	09/24/93	1001	UG/L	B	3260.		3260.	I
POTASSIUM, TOTAL	09/24/93	0001	UG/L	B	3060.		3060.	I
	09/24/93	1001	UG/L	B	2860.		2860.	I
RADIUM-226	09/24/93	1001	PCI/L		.479		.479	I
SODIUM, SOLUBLE	09/24/93	0001	UG/L		51000.		51000.	I
	09/24/93	1001	UG/L		58300.		58300.	I
SODIUM, TOTAL	09/24/93	0001	UG/L		54100.		54100.	I
	09/24/93	1001	UG/L		52200.		52200.	I
SULFATE	09/24/93	0001	MG/L		39.9		39.9	I
	09/24/93	1001	MG/L		52.8		52.8	I
THORIUM-228	09/21/93	0001	PCI/L		.958		REJECT	I
	09/24/93	1001	PCI/L		.624		REJECT	I
THORIUM-230	09/21/93	0001	PCI/L		.326		REJECT	I
	09/24/93	1001	PCI/L		.227		REJECT	I
THORIUM-232	09/21/93	0001	PCI/L		.0611		.0611	I
TIN, SOLUBLE	09/24/93	0001	UG/L	B	14.5		14.5	I
	09/24/93	1001	UG/L	B	15.6		15.6	I
TIN, TOTAL	09/24/93	0001	UG/L	B	12.4		12.4	I
	09/24/93	1001	UG/L	B	15.8		15.8	I
TOTAL DISSOLVED SOLIDS	09/24/93	0001	MG/L		483.		483.	I
	09/24/93	1001	MG/L		505.		505.	I
TOTAL KJELDAHL NITROGEN	09/24/93	0001	MG/L		1.4		1.4	I
	09/24/93	1001	MG/L		1.4		1.4	I
TOTAL ORGANIC CARBON	09/24/93	0001	MG/L		1.5		1.5	I
	09/24/93	1001	MG/L		1.6		1.6	I
TOTAL PHOSPHATE	09/24/93	0001	MG/L		0.097		0.097	I
	09/24/93	1001	MG/L		0.088		0.088	I
URANIUM-234	09/21/93	0001	PCI/L		.212		.212	I
	09/24/93	1001	PCI/L		.317		.317	I
URANIUM-238	09/21/93	0001	PCI/L		.207		.207	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0128
NORTH COORDINATE: 597105.98 FT
EAST COORDINATE: 1493916.75 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND WELL GRADED (SW)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
URANIUM-238	09/24/93	1001	PCI/L		.131		.131	I
VANADIUM, SOLUBLE	09/24/93	1001	UG/L		16.0	J	16.0	I
VANADIUM, TOTAL	09/24/93	0001	UG/L		10.8		10.8	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0129
NORTH COORDINATE: 596836.77 FT
EAST COORDINATE: 1494665.33 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY SAND OR SILTY GRAVELLY SAND (SM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	09/14/93	0001	UG/L		1.3		REJECT	I
BARIUM, SOLUBLE	09/14/93	0001	UG/L	B	74.9	J	74.9	I
BARIUM, TOTAL	09/14/93	0001	UG/L	B	72.4	J	72.4	I
CADMIUM, TOTAL	09/14/93	0001	UG/L	B	1.3		1.3	I
CALCIUM, SOLUBLE	09/14/93	0001	UG/L		111000.	J	111000.	I
CALCIUM, TOTAL	09/14/93	0001	UG/L		111000.	J	111000.	I
CHLORIDE	09/14/93	0001	MG/L		94.2	J	94.2	I
CHROMIUM, TOTAL	09/14/93	0001	UG/L	B	8.9		8.9	I
COPPER, SOLUBLE	09/14/93	0001	UG/L	B	5.0		5.0	I
FLUORIDE	09/14/93	0001	MG/L		0.16		0.16	I
IRON, TOTAL	09/14/93	0001	UG/L		106.		106.	I
LITHIUM, SOLUBLE	09/14/93	0001	UG/L	B	2.6	J	2.6	I
LITHIUM, TOTAL	09/14/93	0001	UG/L	B	2.6	J	2.6	I
MAGNESIUM, SOLUBLE	09/14/93	0001	UG/L		33700.	J	33700.	I
MAGNESIUM, TOTAL	09/14/93	0001	UG/L		33000.	J	33000.	I
MANGANESE, SOLUBLE	09/14/93	0001	UG/L	B	0.78	J	0.78	I
MANGANESE, TOTAL	09/14/93	0001	UG/L	B	3.1		3.1	I
NICKEL, SOLUBLE	09/14/93	0001	UG/L	B	20.0		20.0	I
NICKEL, TOTAL	09/14/93	0001	UG/L	B	29.6		29.6	I
NITRATE NITRITE	09/14/93	0001	MG/L		4.4		4.4	I
PETN	09/14/93	0001	UG/L		5.2		5.2	I
PHENOL	09/14/93	0001	UG/L	J	1.	J	1.	I
PLUTONIUM-239/240	09/14/93	0001	PCI/L		.0782		.0782	I
POTASSIUM, SOLUBLE	09/14/93	0001	UG/L	B	2790.	J	2790.	I
POTASSIUM, TOTAL	09/14/93	0001	UG/L	B	2720.	J	2720.	I
RADIUM-226	09/14/93	0001	PCI/L		.132		.132	I
SELENIUM, SOLUBLE	09/14/93	0001	UG/L	B	1.6	J	1.6	I
SODIUM, SOLUBLE	09/14/93	0001	UG/L		57900.	J	57900.	I
SODIUM, TOTAL	09/14/93	0001	UG/L		55700.	J	55700.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0129
NORTH COORDINATE: 596836.77 FT
EAST COORDINATE: 1494665.33 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY SAND OR SILTY GRAVELLY SAND (SM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SULFATE	09/14/93	0001	MG/L		14.0		14.0	I
THORIUM-228	09/14/93	0001	PCI/L		.299		REJECT	I
THORIUM-230	09/14/93	0001	PCI/L		.25		.25	I
TIN, SOLUBLE	09/14/93	0001	UG/L	B	20.7		20.7	I
TIN, TOTAL	09/14/93	0001	UG/L	B	23.3		23.3	I
TOTAL DISSOLVED SOLIDS	09/14/93	0001	MG/L		618.		618.	I
TOTAL ORGANIC CARBON	09/14/93	0001	MG/L		1.7		1.7	I
TOTAL PHOSPHATE	09/14/93	0001	MG/L		0.12		0.12	I
TOTAL SUSPENDED SOLIDS	09/14/93	0001	MG/L		6.0		6.0	I
TRITIUM	09/14/93	0001	PCI/L		1080.		1080.	I
URANIUM-238	09/14/93	0001	PCI/L		.148		.148	I
VANADIUM, SOLUBLE	09/14/93	0001	UG/L		10.8	J	10.8	I
VANADIUM, TOTAL	09/14/93	0001	UG/L		12.2	J	12.2	I
ZINC, SOLUBLE	09/14/93	0001	UG/L	B	5.1		5.1	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0130
NORTH COORDINATE: 596460.03 FT
EAST COORDINATE: 1493662.34 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMERICIUM-241	09/27/93	0001	PCI/L		.0469		.0469	I
AMMONIA	09/27/93	0001	MG/L		4.3		4.3	I
ANTIMONY, SOLUBLE	09/27/93	0001	UG/L		7.9		7.9	I
ANTIMONY, TOTAL	09/27/93	0001	UG/L	B	0.58		0.58	I
BARIUM, SOLUBLE	09/27/93	0001	UG/L		249.	J	249.	I
BARIUM, TOTAL	09/27/93	0001	UG/L		235.	J	235.	I
CALCIUM, SOLUBLE	09/27/93	0001	UG/L		84100.	J	84100.	I
CALCIUM, TOTAL	09/27/93	0001	UG/L		77900.	J	77900.	I
CHLORIDE	09/27/93	0001	MG/L		71.3		71.3	I
COBALT, TOTAL	09/27/93	0001	UG/L	B	1.7		1.7	I
COPPER, SOLUBLE	09/27/93	0001	UG/L	B	4.5		4.5	I
COPPER, TOTAL	09/27/93	0001	UG/L	B	0.93		0.93	I
FLUORIDE	09/27/93	0001	MG/L		0.30		0.30	I
LEAD, SOLUBLE	09/27/93	0001	UG/L	B	2.2	J	2.2	I
MAGNESIUM, SOLUBLE	09/27/93	0001	UG/L		31900.	J	31900.	I
MAGNESIUM, TOTAL	09/27/93	0001	UG/L		29400.	J	29400.	I
MANGANESE, SOLUBLE	09/27/93	0001	UG/L		353.	J	353.	I
MANGANESE, TOTAL	09/27/93	0001	UG/L		339.	J	339.	I
MOLYBDENUM	09/27/93	0001	UG/L	B	6.7		6.7	I
MOLYBDENUM, SOLUBLE	09/27/93	0001	UG/L	B	6.5		6.5	I
POTASSIUM, SOLUBLE	09/27/93	0001	UG/L	B	3300.		3300.	I
POTASSIUM, TOTAL	09/27/93	0001	UG/L	B	3150.		3150.	I
SODIUM, SOLUBLE	09/27/93	0001	UG/L		57200.		57200.	I
SODIUM, TOTAL	09/27/93	0001	UG/L		52000.		52000.	I
THORIUM-228	09/27/93	0001	PCI/L		.359		.359	I
THORIUM-230	09/27/93	0001	PCI/L		.306		.306	I
THORIUM-232	09/27/93	0001	PCI/L		.105		.105	I
TIN, SOLUBLE	09/27/93	0001	UG/L	B	12.9		12.9	I
TIN, TOTAL	09/27/93	0001	UG/L	B	10.4		10.4	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0130
NORTH COORDINATE: 596460.03 FT
EAST COORDINATE: 1493662.34 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL DISSOLVED SOLIDS	09/27/93	0001	MG/L		478.		478.	I
TOTAL KJELDAHL NITROGEN	09/27/93	0001	MG/L		4.4		4.4	I
TOTAL ORGANIC CARBON	09/27/93	0001	MG/L		1.5		1.5	I
TOTAL PHOSPHATE	09/27/93	0001	MG/L		0.088		0.088	I
URANIUM-234	09/27/93	0001	PCI/L		.141		.141	I
URANIUM-238	09/27/93	0001	PCI/L		.122		.122	I
VANADIUM, SOLUBLE	09/27/93	0001	UG/L	B	7.5	J	7.5	I
VANADIUM, TOTAL	09/27/93	0001	UG/L	B	7.8	J	7.8	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0137 37-1A
NORTH COORDINATE: 597337.47 FT
EAST COORDINATE: 1495070.12 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: GRAVEL OR SANDY GRAVEL, WELL GRADED (GW)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	09/27/93	0001	UG/L		171.		171.	I
AMMONIA	10/12/93	0001	MG/L		0.70		0.70	I
ANTIMONY, TOTAL	09/27/93	0001	UG/L	B	3.7		3.7	I
BARIUM, SOLUBLE	09/28/93	0001	UG/L	B	88.6		88.6	I
BARIUM, TOTAL	09/27/93	0001	UG/L	B	74.1		74.1	I
CADMIUM, TOTAL	09/27/93	0001	UG/L	B	3.2		3.2	I
CALCIUM, SOLUBLE	09/28/93	0001	UG/L		139000.	J	139000.	I
CALCIUM, TOTAL	09/27/93	0001	UG/L		131000.	J	131000.	I
CHLORIDE	09/27/93	0001	MG/L		168.		168.	I
CHROMIUM, TOTAL	09/27/93	0001	UG/L	B	9.8		9.8	I
COBALT, TOTAL	09/27/93	0001	UG/L	B	4.7		4.7	I
COPPER, TOTAL	09/27/93	0001	UG/L		69.1		69.1	I
FLUORIDE	09/27/93	0001	MG/L		0.23		0.23	I
IRON, SOLUBLE	09/28/93	0001	UG/L		10300.	J	10300.	I
IRON, TOTAL	09/27/93	0001	UG/L		42200.	J	42200.	I
LEAD, TOTAL	09/27/93	0001	UG/L		23.8		23.8	I
MAGNESIUM, SOLUBLE	09/28/93	0001	UG/L		45900.	J	45900.	I
MAGNESIUM, TOTAL	09/27/93	0001	UG/L		45100.	J	45100.	I
MANGANESE, SOLUBLE	09/28/93	0001	UG/L		84.0		84.0	I
MANGANESE, TOTAL	09/27/93	0001	UG/L		186.	J	186.	I
MERCURY, TOTAL	09/27/93	0001	UG/L	B	0.15		0.15	I
MOLYBDENUM	09/27/93	0001	UG/L	B	9.1		9.1	I
MOLYBDENUM, SOLUBLE	09/28/93	0001	UG/L	B	2.1		2.1	I
NITRATE NITRITE	10/12/93	0001	MG/L		0.70		0.70	I
PLUTONIUM-239/240	09/26/93	0001	PCI/L		.13		.13	I
POTASSIUM, SOLUBLE	09/28/93	0001	UG/L	B	717.	J	717.	I
POTASSIUM, TOTAL	09/27/93	0001	UG/L	B	820.	J	820.	I
SODIUM, SOLUBLE	09/28/93	0001	UG/L		78100.	J	78100.	I
SODIUM, TOTAL	09/27/93	0001	UG/L		74100.	J	74100.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0137 37-1A
NORTH COORDINATE: 597337.47 FT
EAST COORDINATE: 1495070.12 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: GRAVEL OR SANDY GRAVEL, WELL GRADED (GW)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
STRONTIUM-90	09/26/93	0001	PCI/L		.663		.663	I
SULFATE	09/27/93	0001	MG/L		78.8	J	78.8	I
THORIUM-228	09/26/93	0001	PCI/L		.403		.403	I
TIN, SOLUBLE	09/28/93	0001	UG/L	B	23.7		23.7	I
TIN, TOTAL	09/27/93	0001	UG/L	B	38.4		38.4	I
TOTAL DISSOLVED SOLIDS	09/27/93	0001	MG/L		836.		836.	I
TOTAL KJELDAHL NITROGEN	10/12/93	0001	MG/L		1.1		1.1	I
TOTAL ORGANIC CARBON	09/28/93	0001	MG/L		1.4		1.4	I
TOTAL PHOSPHATE	10/12/93	0001	MG/L		0.12		0.12	I
TOTAL SUSPENDED SOLIDS	09/27/93	0001	MG/L		94.0		94.0	I
TRICHLOROETHENE	09/26/93	0001	UG/L		1.6	J	1.6	I
TRICHLOROMETHANE (CHLOROFORM)	09/26/93	0001	UG/L		0.58	J	0.58	I
TRITIUM	09/26/93	0001	PCI/L		2730.		2730.	I
URANIUM-234	09/26/93	0001	PCI/L		.69		.69	I
URANIUM-238	09/26/93	0001	PCI/L		.387		.387	I
VANADIUM, SOLUBLE	09/28/93	0001	UG/L	B	9.1		9.1	I
ZINC, TOTAL	09/27/93	0001	UG/L		59.1		59.1	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0138
NORTH COORDINATE: 599671.13 FT
EAST COORDINATE: 1495320.80 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, SOLUBLE	09/22/93	0001	UG/L	B	16.6		16.6	I
ALUMINUM, TOTAL	09/22/93	0001	UG/L		32.9		32.9	I
AMERICIUM-241	09/23/93	0001	PCI/L		.269		.269	I
BARIUM, SOLUBLE	09/22/93	0001	UG/L	B	84.0		84.0	I
BARIUM, TOTAL	09/22/93	0001	UG/L	B	87.7		87.7	I
CALCIUM, SOLUBLE	09/22/93	0001	UG/L		120000.		120000.	I
CALCIUM, TOTAL	09/22/93	0001	UG/L		127000.		127000.	I
CHLORIDE	09/22/93	0001	MG/L		144.		144.	I
CHROMIUM, TOTAL	09/22/93	0001	UG/L		48.2		48.2	I
COPPER, TOTAL	09/22/93	0001	UG/L	B	1.1		1.1	I
FLUORIDE	09/22/93	0001	MG/L		0.18		0.18	I
IRON, TOTAL	09/22/93	0001	UG/L		755.	J	755.	I
MAGNESIUM, SOLUBLE	09/22/93	0001	UG/L		37500.	J	37500.	I
MAGNESIUM, TOTAL	09/22/93	0001	UG/L		39600.	J	39600.	I
MANGANESE, SOLUBLE	09/22/93	0001	UG/L	B	1.3	J	1.3	I
MANGANESE, TOTAL	09/22/93	0001	UG/L	B	7.7		7.7	I
NICKEL, TOTAL	09/22/93	0001	UG/L	B	20.7		20.7	I
NITRATE NITRITE	09/22/93	0001	MG/L		3.8		3.8	I
PLUTONIUM-239/240	09/23/93	0001	PCI/L		.189		REJECT	I
POTASSIUM, SOLUBLE	09/22/93	0001	UG/L	B	2880.		2880.	I
POTASSIUM, TOTAL	09/22/93	0001	UG/L	B	3030.		3030.	I
SELENIUM, TOTAL	09/22/93	0001	UG/L	B	1.0	J	1.0	I
SODIUM, SOLUBLE	09/22/93	0001	UG/L		75400.		75400.	I
SODIUM, TOTAL	09/22/93	0001	UG/L		68800.		68800.	I
SULFATE	09/22/93	0001	MG/L		49.1		49.1	I
THORIUM-228	09/23/93	0001	PCI/L		.31		REJECT	I
THORIUM-230	09/23/93	0001	PCI/L		.31		REJECT	I
TOTAL DISSOLVED SOLIDS	09/22/93	0001	MG/L		658.		658.	I
TOTAL ORGANIC CARBON	09/22/93	0001	MG/L		1.1		1.1	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0138
NORTH COORDINATE: 599671.13 FT
EAST COORDINATE: 1495320.80 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL PHOSPHATE	09/22/93	0001	MG/L		0.14		0.14	I
TOTAL SUSPENDED SOLIDS	09/22/93	0001	MG/L		6.0		6.0	I
TRITIUM	09/23/93	0001	PCI/L		2010.		2010.	I
URANIUM-234	09/23/93	0001	PCI/L		.535		.535	I
URANIUM-238	09/23/93	0001	PCI/L		.274		.274	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0151 44-1
NORTH COORDINATE: 597273.77 FT
EAST COORDINATE: 1495544.31 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: CLAYEY SAND OR CLAYEY GRAVELLY SAND (SC)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, SOLUBLE	10/15/93	0001	UG/L	B	14.6	J	14.6	I
ALUMINUM, TOTAL	10/15/93	0001	UG/L		5710.	J	5710.	I
ANTIMONY, SOLUBLE	10/15/93	0001	UG/L		10.6		10.6	I
ARSENIC, TOTAL	10/15/93	0001	UG/L	B	6.6		6.6	I
BARIUM, SOLUBLE	10/15/93	0001	UG/L	B	54.7		54.7	I
BARIUM, TOTAL	10/15/93	0001	UG/L	B	81.7		81.7	I
BERYLLIUM, TOTAL	10/15/93	0001	UG/L		0.38		0.38	I
BISMUTH, TOTAL	10/15/93	0001	UG/L	B	39.4		39.4	I
CALCIUM, SOLUBLE	10/15/93	0001	UG/L		99800.		99800.	I
CALCIUM, TOTAL	10/15/93	0001	UG/L		116000.		116000.	I
CHROMIUM, SOLUBLE	10/15/93	0001	UG/L	B	1.6	J	1.6	I
CHROMIUM, TOTAL	10/15/93	0001	UG/L		20.0	J	20.0	I
COBALT, TOTAL	10/15/93	0001	UG/L	B	5.8		5.8	I
COPPER, TOTAL	10/15/93	0001	UG/L	B	18.7		18.7	I
IRON, SOLUBLE	10/15/93	0001	UG/L	B	34.6	J	34.6	I
IRON, TOTAL	10/15/93	0001	UG/L		10700.	J	10700.	I
LEAD, TOTAL	10/15/93	0001	UG/L		17.2		17.2	I
MAGNESIUM, SOLUBLE	10/15/93	0001	UG/L		44700.		44700.	I
MAGNESIUM, TOTAL	10/15/93	0001	UG/L		49100.		49100.	I
MANGANESE, SOLUBLE	10/15/93	0001	UG/L	B	1.0		1.0	I
MANGANESE, TOTAL	10/15/93	0001	UG/L		184.		184.	I
MOLYBDENUM	10/15/93	0001	UG/L	B	16.1		16.1	I
NICKEL, SOLUBLE	10/15/93	0001	UG/L	B	6.0		6.0	I
NICKEL, TOTAL	10/15/93	0001	UG/L	B	18.6		18.6	I
POTASSIUM, SOLUBLE	10/15/93	0001	UG/L	B	126.	J	126.	I
POTASSIUM, TOTAL	10/15/93	0001	UG/L	B	1930.	J	1930.	I
SODIUM, SOLUBLE	10/15/93	0001	UG/L		9170.		9170.	I
SODIUM, TOTAL	10/15/93	0001	UG/L		8280.		8280.	I
TRITIUM	10/15/93	0001	PCI/L		498.		498.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0151 44-1
NORTH COORDINATE: 597273.77 FT
EAST COORDINATE: 1495544.31 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: CLAYEY SAND OR CLAYEY GRAVELLY SAND (SC)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
VANADIUM, TOTAL	10/15/93	0001	UG/L		13.6		13.6	I
ZINC, TOTAL	10/15/93	0001	UG/L		36.0		36.0	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0152 46-2
NORTH COORDINATE: 596986.30 FT
EAST COORDINATE: 1494954.07 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMERICIUM-241	09/12/93	0001	PCI/L		.0946		.0946	I
BARIUM, SOLUBLE	09/12/93	0001	UG/L	B	101.		101.	I
BARIUM, TOTAL	09/12/93	0001	UG/L	B	114.		114.	I
CALCIUM, SOLUBLE	09/12/93	0001	UG/L		127000.	J	127000.	I
CALCIUM, TOTAL	09/12/93	0001	UG/L		139000.	J	139000.	I
CHLORIDE	09/12/93	0001	MG/L		87.9	J	87.9	I
CHROMIUM, TOTAL	09/12/93	0001	UG/L		374.	J	374.	I
COBALT, TOTAL	09/12/93	0001	UG/L	B	4.4		4.4	I
COPPER, TOTAL	09/12/93	0001	UG/L	B	11.9		11.9	I
FLUORIDE	09/12/93	0001	MG/L		0.11		0.11	I
IRON, SOLUBLE	09/12/93	0001	UG/L	B	28.9		28.9	I
IRON, TOTAL	09/12/93	0001	UG/L		3140.	J	3140.	I
LITHIUM, SOLUBLE	09/12/93	0001	UG/L	B	10.4		10.4	I
LITHIUM, TOTAL	09/12/93	0001	UG/L	B	10.4		10.4	I
MAGNESIUM, SOLUBLE	09/12/93	0001	UG/L		39500.	J	39500.	I
MAGNESIUM, TOTAL	09/12/93	0001	UG/L		43400.	J	43400.	I
MANGANESE, SOLUBLE	09/12/93	0001	UG/L	B	8.2		8.2	I
MANGANESE, TOTAL	09/12/93	0001	UG/L		34.7	J	34.7	I
NICKEL, SOLUBLE	09/12/93	0001	UG/L		62.2		62.2	I
NICKEL, TOTAL	09/12/93	0001	UG/L		98.9		98.9	I
NITRATE NITRITE	09/12/93	0001	MG/L		1.8		1.8	I
PLUTONIUM-239/240	09/12/93	0001	PCI/L		.134		REJECT	I
POTASSIUM, SOLUBLE	09/12/93	0001	UG/L	B	2730.		2730.	I
POTASSIUM, TOTAL	09/12/93	0001	UG/L	B	3150.		3150.	I
SODIUM, SOLUBLE	09/12/93	0001	UG/L		58900.	J	58900.	I
SODIUM, TOTAL	09/12/93	0001	UG/L		64000.	J	64000.	I
SULFATE	09/12/93	0001	MG/L		142.		142.	I
TETRACHLOROETHENE	09/12/93	0001	UG/L		3.0		3.0	I
THALLIUM, SOLUBLE	09/12/93	0001	UG/L	B	2.7	J	2.7	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0152 46-2
NORTH COORDINATE: 596986.30 FT
EAST COORDINATE: 1494954.07 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
THORIUM-228	09/12/93	0001	PCI/L		1.47		REJECT	I
THORIUM-230	09/12/93	0001	PCI/L		.544		REJECT	I
TOTAL DISSOLVED SOLIDS	09/12/93	0001	MG/L		819.		819.	I
TOTAL ORGANIC CARBON	09/12/93	0001	MG/L		0.79		0.79	I
TOTAL PHOSPHATE	09/12/93	0001	MG/L		0.099		0.099	I
TOTAL SUSPENDED SOLIDS	09/12/93	0001	MG/L		16.0		16.0	I
TRICHLOROETHENE	09/12/93	0001	UG/L		4.3		4.3	I
TRITIUM	09/12/93	0001	PCI/L		6600.		6600.	I
URANIUM-234	09/12/93	0001	PCI/L		.321		.321	I
URANIUM-238	09/12/93	0001	PCI/L		.414		.414	I
VANADIUM, SOLUBLE	09/12/93	0001	UG/L		15.9		15.9	I
VANADIUM, TOTAL	09/12/93	0001	UG/L		18.0		18.0	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0153 55-2
NORTH COORDINATE: 596692.39 FT
EAST COORDINATE: 1494952.09 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LEAN CLAYS, SANDY CLAYS, OR GRAVELLY CLAYS (CL)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMMONIA	09/12/93	0001	MG/L		0.11		0.11	I
ANTIMONY, SOLUBLE	09/12/93	0001	UG/L	B	2.1	J	2.1	I
BARIUM, SOLUBLE	09/12/93	0001	UG/L	B	81.3		81.3	I
BARIUM, TOTAL	09/12/93	0001	UG/L	B	77.0		77.0	I
CALCIUM, SOLUBLE	09/12/93	0001	UG/L		117000.	J	117000.	I
CALCIUM, TOTAL	09/12/93	0001	UG/L		112000.	J	112000.	I
CHLORIDE	09/12/93	0001	MG/L		117.	J	117.	I
CHROMIUM, TOTAL	09/12/93	0001	UG/L		24.5		24.5	I
COPPER, TOTAL	09/12/93	0001	UG/L	B	1.2		1.2	I
DIETHYL PHTHALATE	09/12/93	0001	UG/L	J	0.6	J	0.6	I
FLUORIDE	09/12/93	0001	MG/L		0.14		0.14	I
IRON, TOTAL	09/12/93	0001	UG/L		337.	J	337.	I
LITHIUM, SOLUBLE	09/12/93	0001	UG/L	B	6.9		6.9	I
LITHIUM, TOTAL	09/12/93	0001	UG/L	B	6.9		6.9	I
MAGNESIUM, SOLUBLE	09/12/93	0001	UG/L		36000.		36000.	I
MAGNESIUM, TOTAL	09/12/93	0001	UG/L		33900.		33900.	I
MANGANESE, SOLUBLE	09/12/93	0001	UG/L	B	0.93		0.93	I
MANGANESE, TOTAL	09/12/93	0001	UG/L	B	3.9		3.9	I
NICKEL, SOLUBLE	09/12/93	0001	UG/L	B	6.0		6.0	I
NICKEL, TOTAL	09/12/93	0001	UG/L	B	11.9		11.9	I
NITRATE NITRITE	09/12/93	0001	MG/L		4.2		4.2	I
PHENOL	09/12/93	0001	UG/L	J	0.6	J	0.6	I
PLUTONIUM-239/240	09/12/93	0001	PCI/L		.109		REJECT	I
POTASSIUM, SOLUBLE	09/12/93	0001	UG/L	B	2800.		2800.	I
POTASSIUM, TOTAL	09/12/93	0001	UG/L	B	2660.		2660.	I
SODIUM, SOLUBLE	09/12/93	0001	UG/L		66800.		66800.	I
SODIUM, TOTAL	09/12/93	0001	UG/L		62400.		62400.	I
SULFATE	09/12/93	0001	MG/L		144.		144.	I
TETRACHLOROETHENE	09/12/93	0001	UG/L		4.9		REJECT	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0153 55-2
NORTH COORDINATE: 596692.39 FT
EAST COORDINATE: 1494952.09 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LEAN CLAYS, SANDY CLAYS, OR GRAVELLY CLAYS (CL)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
THORIUM-228	09/12/93	0001	PCI/L		.576		REJECT	I
THORIUM-230	09/12/93	0001	PCI/L		.408		REJECT	I
TOTAL DISSOLVED SOLIDS	09/12/93	0001	MG/L		785.	J	785.	I
TOTAL ORGANIC CARBON	09/12/93	0001	MG/L		0.88		0.88	I
TOTAL PHOSPHATE	09/12/93	0001	MG/L		0.13		0.13	I
TRICHLOROETHENE	09/12/93	0001	UG/L		5.9		5.9	I
TRITIUM	09/12/93	0001	PCI/L		6810.		6810.	I
URANIUM-234	09/12/93	0001	PCI/L		.518		.518	I
URANIUM-238	09/12/93	0001	PCI/L		.223		.223	I
VANADIUM, SOLUBLE	09/12/93	0001	UG/L		16.6		16.6	I
VANADIUM, TOTAL	09/12/93	0001	UG/L		16.8		16.8	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0154
NORTH COORDINATE: 596418.69 FT
EAST COORDINATE: 1494969.81 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,2-CIS-DICHLOROETHENE	09/11/93	0001	UG/L		2.8		2.8	I
AMERICIUM-241	09/11/93	0001	PCI/L		.0478		.0478	I
AMMONIA	09/11/93	0001	MG/L		0.15		0.15	I
ANTIMONY, SOLUBLE	09/11/93	0001	UG/L	B	5.9	J	5.9	I
BARIUM, SOLUBLE	09/11/93	0001	UG/L		84.1		84.1	I
BARIUM, TOTAL	09/11/93	0001	UG/L	B	87.7		87.7	I
CALCIUM, SOLUBLE	09/11/93	0001	UG/L		103000.	J	103000.	I
CALCIUM, TOTAL	09/11/93	0001	UG/L		109000.	J	109000.	I
CHLORIDE	09/11/93	0001	MG/L		222.	J	222.	I
CHROMIUM, TOTAL	09/11/93	0001	UG/L	B	4.9	J	4.9	I
COPPER, SOLUBLE	09/11/93	0001	UG/L	B	1.6		1.6	I
COPPER, TOTAL	09/11/93	0001	UG/L	B	1.0		1.0	I
FLUORIDE	09/11/93	0001	MG/L		0.18		0.18	I
IRON, TOTAL	09/11/93	0001	UG/L	B	70.3		70.3	I
LITHIUM, SOLUBLE	09/11/93	0001	UG/L	B	6.9		6.9	I
LITHIUM, TOTAL	09/11/93	0001	UG/L	B	6.9		6.9	I
MAGNESIUM, SOLUBLE	09/11/93	0001	UG/L		31400.	J	31400.	I
MAGNESIUM, TOTAL	09/11/93	0001	UG/L		33100.	J	33100.	I
MANGANESE, SOLUBLE	09/11/93	0001	UG/L	B	0.80		0.80	I
MANGANESE, TOTAL	09/11/93	0001	UG/L	B	1.9		1.9	I
NICKEL, TOTAL	09/11/93	0001	UG/L	B	4.0		4.0	I
NITRATE NITRITE	09/11/93	0001	MG/L		2.0		2.0	I
PLUTONIUM-239/240	09/11/93	0001	PCI/L		.317		REJECT	I
POTASSIUM, SOLUBLE	09/11/93	0001	UG/L	B	2610.		2610.	I
POTASSIUM, TOTAL	09/11/93	0001	UG/L	B	2900.		2900.	I
SELENIUM, SOLUBLE	09/11/93	0001	UG/L	B	1.0	J	1.0	I
SELENIUM, TOTAL	09/11/93	0001	UG/L	B	1.1	J	1.1	I
SODIUM, SOLUBLE	09/11/93	0001	UG/L		81000.	J	81000.	I
SODIUM, TOTAL	09/11/93	0001	UG/L		86200.	J	86200.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0154
NORTH COORDINATE: 596418.69 FT
EAST COORDINATE: 1494969.81 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SULFATE	09/11/93	0001	MG/L		113.		113.	I
THORIUM-228	09/11/93	0001	PCI/L		.476		REJECT	I
THORIUM-230	09/11/93	0001	PCI/L		.157		REJECT	I
TOTAL DISSOLVED SOLIDS	09/11/93	0001	MG/L		934.		934.	I
TOTAL ORGANIC CARBON	09/11/93	0001	MG/L		0.88		0.88	I
TOTAL PHOSPHATE	09/11/93	0001	MG/L		0.11		0.11	I
TOTAL SUSPENDED SOLIDS	09/11/93	0001	MG/L		20.0		20.0	I
TRICHLOROETHENE	09/11/93	0001	UG/L		2.9		2.9	I
TRITIUM	09/11/93	0001	PCI/L		2480.		2480.	I
URANIUM-234	09/11/93	0001	PCI/L		.188		.188	I
URANIUM-235/236	09/11/93	0001	PCI/L		.188		.188	I
URANIUM-238	09/11/93	0001	PCI/L		.248		.248	I
VANADIUM, SOLUBLE	09/11/93	0001	UG/L		14.6		14.6	I
VANADIUM, TOTAL	09/11/93	0001	UG/L		15.4		15.4	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0155
NORTH COORDINATE: 596407.55 FT
EAST COORDINATE: 1494971.72 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,2-CIS-DICHLOROETHENE	09/11/93	0001	UG/L		3.0		3.0	I
AMERICIUM-241	09/11/93	0001	PCI/L		.0419		.0419	I
AMMONIA	09/11/93	0001	MG/L		0.15		0.15	I
ANTIMONY, SOLUBLE	09/11/93	0001	UG/L	B	2.2	J	2.2	I
BARIUM, SOLUBLE	09/11/93	0001	UG/L	B	113.		113.	I
BARIUM, TOTAL	09/11/93	0001	UG/L	B	111.		111.	I
CALCIUM, SOLUBLE	09/11/93	0001	UG/L		123000.	J	123000.	I
CALCIUM, TOTAL	09/11/93	0001	UG/L		119000.	J	119000.	I
CARBON DISULFIDE	09/11/93	0001	UG/L		7.7		REJECT	I
CHLORIDE	09/11/93	0001	MG/L		200.	J	200.	I
CHROMIUM, TOTAL	09/11/93	0001	UG/L		41.0		41.0	I
COPPER, TOTAL	09/11/93	0001	UG/L	B	1.6		1.6	I
FLUORIDE	09/11/93	0001	MG/L		0.11		0.11	I
IRON, SOLUBLE	09/11/93	0001	UG/L	B	23.3	J	23.3	I
IRON, TOTAL	09/11/93	0001	UG/L		253.	J	253.	I
LITHIUM, SOLUBLE	09/11/93	0001	UG/L	B	5.2		5.2	I
LITHIUM, TOTAL	09/11/93	0001	UG/L	B	5.2		5.2	I
MAGNESIUM, SOLUBLE	09/11/93	0001	UG/L		35200.		35200.	I
MAGNESIUM, TOTAL	09/11/93	0001	UG/L		33900.		33900.	I
MANGANESE, SOLUBLE	09/11/93	0001	UG/L	B	3.9		3.9	I
MANGANESE, TOTAL	09/11/93	0001	UG/L	B	6.1		6.1	I
NICKEL, SOLUBLE	09/11/93	0001	UG/L	B	28.8		28.8	I
NICKEL, TOTAL	09/11/93	0001	UG/L	B	31.7		31.7	I
NITRATE NITRITE	09/11/93	0001	MG/L		3.8		3.8	I
PLUTONIUM-239/240	09/11/93	0001	PCI/L		.188		REJECT	I
POTASSIUM, SOLUBLE	09/11/93	0001	UG/L	B	3250.		3250.	I
POTASSIUM, TOTAL	09/11/93	0001	UG/L	B	2980.		2980.	I
SELENIUM, TOTAL	09/11/93	0001	UG/L	B	1.3	J	1.3	I
SODIUM, SOLUBLE	09/11/93	0001	UG/L		87500.		87500.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0155
NORTH COORDINATE: 596407.55 FT
EAST COORDINATE: 1494971.72 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SODIUM, TOTAL	09/11/93	0001	UG/L		83900.		83900.	I
SULFATE	09/11/93	0001	MG/L		105.		105.	I
THORIUM-228	09/11/93	0001	PCI/L		.764		REJECT	I
THORIUM-230	09/11/93	0001	PCI/L		.281		REJECT	I
TOTAL DISSOLVED SOLIDS	09/11/93	0001	MG/L		796.	J	796.	I
TOTAL ORGANIC CARBON	09/11/93	0001	MG/L		1.4		1.4	I
TOTAL PHOSPHATE	09/11/93	0001	MG/L		0.10		0.10	I
TRICHLOROETHENE	09/11/93	0001	UG/L		3.5		3.5	I
TRICHLOROMETHANE (CHLOROFORM)	09/11/93	0001	UG/L		0.81		0.81	I
TRITIUM	09/11/93	0001	PCI/L		2140.		2140.	I
URANIUM-234	09/11/93	0001	PCI/L		.279		.279	I
URANIUM-238	09/11/93	0001	PCI/L		.272		.272	I
VANADIUM, SOLUBLE	09/11/93	0001	UG/L		17.4		17.4	I
VANADIUM, TOTAL	09/11/93	0001	UG/L		16.9		16.9	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0156
NORTH COORDINATE: 596183.82 FT
EAST COORDINATE: 1494547.14 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY SAND OR SILTY GRAVELLY SAND (SM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHA	09/15/93	0001	UG/L		6.9	J	6.9	I
ALUMINUM, TOTAL	09/15/93	0001	UG/L		60.3	J	60.3	I
AMMONIA	09/15/93	0001	MG/L		0.41		0.41	I
BARIUM, SOLUBLE	09/15/93	0001	UG/L		78.7	J	78.7	I
BARIUM, TOTAL	09/15/93	0001	UG/L	B	76.8	J	76.8	I
CALCIUM, SOLUBLE	09/15/93	0001	UG/L		94500.	J	94500.	I
CALCIUM, TOTAL	09/15/93	0001	UG/L		93400.	J	93400.	I
CHLORIDE	09/15/93	0001	MG/L		35.3	J	35.3	I
COPPER, SOLUBLE	09/15/93	0001	UG/L	B	1.1	J	1.1	I
COPPER, TOTAL	09/15/93	0001	UG/L	B	1.1	J	1.1	I
FLUORIDE	09/15/93	0001	MG/L		0.16		0.16	I
IRON, SOLUBLE	09/15/93	0001	UG/L	U	13.2	J	13.2	I
IRON, TOTAL	09/15/93	0001	UG/L	B	83.3	J	83.3	I
MAGNESIUM, SOLUBLE	09/15/93	0001	UG/L		28300.	J	28300.	I
MAGNESIUM, TOTAL	09/15/93	0001	UG/L		28000.	J	28000.	I
MANGANESE, SOLUBLE	09/15/93	0001	UG/L	B	0.89	J	0.89	I
MANGANESE, TOTAL	09/15/93	0001	UG/L	B	4.9	J	4.9	I
NITRATE NITRITE	09/15/93	0001	MG/L		1.3		1.3	I
POTASSIUM, SOLUBLE	09/15/93	0001	UG/L	B	2290.		2290.	I
POTASSIUM, TOTAL	09/15/93	0001	UG/L	B	2390.		2390.	I
SODIUM, SOLUBLE	09/15/93	0001	UG/L		30300.	J	30300.	I
SODIUM, TOTAL	09/15/93	0001	UG/L		29600.	J	29600.	I
STRONTIUM-90	09/16/93	0001	PCI/L		.871		.871	I
SULFATE	09/15/93	0001	MG/L		36.4		36.4	I
THORIUM-228	09/16/93	0001	PCI/L		.554		REJECT	I
THORIUM-230	09/16/93	0001	PCI/L		.754		REJECT	I
TIN, SOLUBLE	09/15/93	0001	UG/L	B	18.9	J	18.9	I
TIN, TOTAL	09/15/93	0001	UG/L	B	21.0	J	21.0	I
TOTAL DISSOLVED SOLIDS	09/15/93	0001	MG/L		491.	J	491.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0156
NORTH COORDINATE: 596183.82 FT
EAST COORDINATE: 1494547.14 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY SAND OR SILTY GRAVELLY SAND (SM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL KJELDAHL NITROGEN	09/15/93	0001	MG/L		0.33		0.33	I
TOTAL ORGANIC CARBON	09/15/93	0001	MG/L		1.3		1.3	I
TOTAL PHOSPHATE	09/15/93	0001	MG/L		0.13		0.13	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0157
NORTH COORDINATE: 596173.53 FT
EAST COORDINATE: 1494548.21 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: GRAVEL OR SANDY GRAVEL, POORLY GRADED (GP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMMONIA	09/27/93	0001	MG/L		0.82		0.82	I
ANTIMONY, SOLUBLE	09/27/93	0001	UG/L		5.0		5.0	I
BARIUM, SOLUBLE	09/27/93	0001	UG/L	B	105.	J	105.	I
BARIUM, TOTAL	09/27/93	0001	UG/L	B	97.3	J	97.3	I
BISMUTH, TOTAL	09/27/93	0001	UG/L	B	36.1		36.1	I
CALCIUM, SOLUBLE	09/27/93	0001	UG/L		85600.	J	85600.	I
CALCIUM, TOTAL	09/27/93	0001	UG/L		82000.	J	82000.	I
CHLORIDE	09/27/93	0001	MG/L		105.		105.	I
COPPER, SOLUBLE	09/27/93	0001	UG/L	B	1.9		1.9	I
FLUORIDE	09/27/93	0001	MG/L		0.19		0.19	I
IRON, SOLUBLE	09/27/93	0001	UG/L	B	19.5		19.5	I
IRON, TOTAL	09/27/93	0001	UG/L	B	29.3		29.3	I
MAGNESIUM, SOLUBLE	09/27/93	0001	UG/L		31800.	J	31800.	I
MAGNESIUM, TOTAL	09/27/93	0001	UG/L		30500.	J	30500.	I
MANGANESE, SOLUBLE	09/27/93	0001	UG/L		125.	J	125.	I
MANGANESE, TOTAL	09/27/93	0001	UG/L		121.	J	121.	I
NICKEL, SOLUBLE	09/27/93	0001	UG/L	B	3.6		3.6	I
NICKEL, TOTAL	09/27/93	0001	UG/L	B	3.7		3.7	I
PLUTONIUM-239/240	09/27/93	0001	PCI/L		.186		.186	I
POTASSIUM, SOLUBLE	09/27/93	0001	UG/L	B	3240.		3240.	I
POTASSIUM, TOTAL	09/27/93	0001	UG/L	B	3240.		3240.	I
SODIUM, SOLUBLE	09/27/93	0001	UG/L		51800.	J	51800.	I
SODIUM, TOTAL	09/27/93	0001	UG/L		48700.	J	48700.	I
STRONTIUM-90	09/27/93	0001	PCI/L		2.46		2.46	I
SULFATE	09/27/93	0001	MG/L		104.		104.	I
THORIUM-228	09/27/93	0001	PCI/L		.347		.347	I
TIN, SOLUBLE	09/27/93	0001	UG/L	B	12.2		12.2	I
TIN, TOTAL	09/27/93	0001	UG/L	B	13.2		13.2	I
TOTAL DISSOLVED SOLIDS	09/27/93	0001	MG/L		528.		528.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0157
NORTH COORDINATE: 596173.53 FT
EAST COORDINATE: 1494548.21 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: GRAVEL OR SANDY GRAVEL, POORLY GRADED (GP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL KJELDAHL NITROGEN	09/27/93	0001	MG/L		1.6		1.6	I
TOTAL ORGANIC CARBON	09/27/93	0001	MG/L		1.1		1.1	I
TOTAL PHOSPHATE	09/27/93	0001	MG/L		0.090		0.090	I
TRITIUM	09/27/93	0001	PCI/L		785.		785.	I
URANIUM-234	09/27/93	0001	PCI/L		.311		.311	I
URANIUM-238	09/27/93	0001	PCI/L		.235		.235	I
ZINC, SOLUBLE	09/27/93	0001	UG/L	B	3.1		3.1	I
ZINC, TOTAL	09/27/93	0001	UG/L	B	2.6		2.6	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0158
NORTH COORDINATE: 594037.32 FT
EAST COORDINATE: 1495277.53 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, SOLUBLE	09/23/93	0001	UG/L	B	15.5		15.5	I
	09/23/93	1001	UG/L	B	13.9		13.9	I
ALUMINUM, TOTAL	09/23/93	0001	UG/L	B	16.9		16.9	I
	09/23/93	1001	UG/L	B	15.4		15.4	I
AMERICIUM-241	09/23/93	0001	PCI/L		.0548		.0548	I
ANTIMONY, TOTAL	09/23/93	1001	UG/L	U	2.0	J	2.0	I
BARIUM, SOLUBLE	09/23/93	0001	UG/L	B	70.8		70.8	I
	09/23/93	1001	UG/L	B	68.4		68.4	I
BARIUM, TOTAL	09/23/93	0001	UG/L	B	66.6		66.6	I
	09/23/93	1001	UG/L	B	65.8		65.8	I
CALCIUM, SOLUBLE	09/23/93	0001	UG/L		102000.		102000.	I
	09/23/93	1001	UG/L		97700.		97700.	I
CALCIUM, TOTAL	09/23/93	0001	UG/L		96400.		96400.	I
	09/23/93	1001	UG/L		96700.		96700.	I
CHLORIDE	09/23/93	0001	MG/L		144.		144.	I
	09/23/93	1001	MG/L		147.		147.	I
FLUORIDE	09/23/93	0001	MG/L		0.22		0.22	I
	09/23/93	1001	MG/L		0.21		0.21	I
IRON, SOLUBLE	09/23/93	0001	UG/L	B	15.3		15.3	I
MAGNESIUM, SOLUBLE	09/23/93	0001	UG/L		34500.	J	34500.	I
	09/23/93	1001	UG/L		33300.	J	33300.	I
MAGNESIUM, TOTAL	09/23/93	0001	UG/L		32800.	J	32800.	I
	09/23/93	1001	UG/L		32700.	J	32700.	I
MANGANESE, SOLUBLE	09/23/93	0001	UG/L	B	0.96	J	0.96	I
	09/23/93	1001	UG/L	B	0.96	J	0.96	I
MANGANESE, TOTAL	09/23/93	0001	UG/L	B	0.58	J	0.58	I
	09/23/93	1001	UG/L	B	0.96	J	0.96	I
NITRATE NITRITE	09/23/93	0001	MG/L		3.4		3.4	I
	09/23/93	1001	MG/L		3.4		3.4	I
PLUTONIUM-238	09/23/93	0001	PCI/L		.0431		REJECT	I
PLUTONIUM-239/240	09/23/93	0001	PCI/L		.201		REJECT	I
	09/23/93	1001	PCI/L		.231		REJECT	I
POTASSIUM, SOLUBLE	09/23/93	0001	UG/L	B	1820.		1820.	I
	09/23/93	1001	UG/L	B	1870.		1870.	I
POTASSIUM, TOTAL	09/23/93	0001	UG/L	B	1870.		1870.	I
	09/23/93	1001	UG/L	B	1870.		1870.	I
SODIUM, SOLUBLE	09/23/93	0001	UG/L		86500.		86500.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0158
NORTH COORDINATE: 594037.32 FT
EAST COORDINATE: 1495277.53 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SODIUM, SOLUBLE	09/23/93	1001	UG/L		85900.		85900.	I
SODIUM, TOTAL	09/23/93	0001	UG/L		84400.		84400.	I
	09/23/93	1001	UG/L		82000.		82000.	I
STRONTIUM-90	09/23/93	0001	PCI/L		.715		.715	I
	09/23/93	1001	PCI/L		1.29		1.29	I
SULFATE	09/23/93	0001	MG/L		128.		128.	I
	09/23/93	1001	MG/L		72.7		72.7	I
THORIUM-228	09/23/93	0001	PCI/L		.435		REJECT	I
	09/23/93	1001	PCI/L		.445		REJECT	I
THORIUM-230	09/23/93	0001	PCI/L		.348		REJECT	I
	09/23/93	1001	PCI/L		.501	J	.501	I
TOTAL DISSOLVED SOLIDS	09/23/93	0001	MG/L		695.		695.	I
	09/23/93	1001	MG/L		721.		721.	I
TOTAL ORGANIC CARBON	09/23/93	0001	MG/L		0.98		0.98	I
	09/23/93	1001	MG/L		0.98		0.98	I
TOTAL PHOSPHATE	09/23/93	0001	MG/L		0.16		0.16	I
	09/23/93	1001	MG/L		0.16		0.16	I
TOTAL SUSPENDED SOLIDS	09/23/93	0001	MG/L		7.0		7.0	I
TRITIUM	09/23/93	0001	PCI/L		511.		511.	I
	09/23/93	1001	PCI/L		681.		681.	I
URANIUM-234	09/23/93	0001	PCI/L		.297		.297	I
	09/23/93	1001	PCI/L		.337		.337	I
URANIUM-238	09/23/93	0001	PCI/L		.283		.283	I
	09/23/93	1001	PCI/L		.15		.15	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0159
NORTH COORDINATE: 594038.51 FT
EAST COORDINATE: 1494169.57 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
4,4'-DDE	09/15/93	0001	UG/L	J	0.060	J	0.060	I
ALUMINUM, SOLUBLE	09/15/93	0001	UG/L		163.		163.	I
AMMONIA	09/15/93	0001	MG/L		0.86		0.86	I
ANTIMONY, SOLUBLE	09/15/93	0001	UG/L	B	3.4	J	3.4	I
ARSENIC, SOLUBLE	09/15/93	0001	UG/L	B	5.0	J	5.0	I
ARSENIC, TOTAL	09/15/93	0001	UG/L		43.6	J	43.6	I
BARIUM, SOLUBLE	09/15/93	0001	UG/L	B	135.	J	135.	I
BARIUM, TOTAL	09/15/93	0001	UG/L		443.	J	443.	I
CALCIUM, SOLUBLE	09/15/93	0001	UG/L		73700.	J	73700.	I
CALCIUM, TOTAL	09/15/93	0001	UG/L		70100.	J	70100.	I
CHLORIDE	09/15/93	0001	MG/L		33.5	J	33.5	I
FLUORIDE	09/15/93	0001	MG/L		0.28		0.28	I
GAMMA CHLORDANE	09/15/93	0001	UG/L	J	0.050	J	0.050	I
HEPTACHLOR EPOXIDE	09/15/93	0001	UG/L	J	0.030	J	0.030	I
IRON, SOLUBLE	09/15/93	0001	UG/L		961.	J	961.	I
IRON, TOTAL	09/15/93	0001	UG/L		9850.	J	9850.	I
LEAD, SOLUBLE	09/15/93	0001	UG/L		8.7		8.7	I
LITHIUM, SOLUBLE	09/15/93	0001	UG/L	B	2.4	J	2.4	I
LITHIUM, TOTAL	09/15/93	0001	UG/L	B	2.4	J	2.4	I
MAGNESIUM, SOLUBLE	09/15/93	0001	UG/L		23100.	J	23100.	I
MAGNESIUM, TOTAL	09/15/93	0001	UG/L		22700.	J	22700.	I
MANGANESE, SOLUBLE	09/15/93	0001	UG/L		142.	J	142.	I
MANGANESE, TOTAL	09/15/93	0001	UG/L		173.	J	173.	I
NICKEL, SOLUBLE	09/15/93	0001	UG/L	B	2.0		2.0	I
NICKEL, TOTAL	09/15/93	0001	UG/L	B	2.8		2.8	I
NITRATE NITRITE	09/15/93	0001	MG/L		0.15		0.15	I
PLUTONIUM-239/240	09/15/93	0001	PCI/L		.172		.172	I
POTASSIUM, SOLUBLE	09/15/93	0001	UG/L	B	2020.		2020.	I
POTASSIUM, TOTAL	09/15/93	0001	UG/L	B	1950.		1950.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0159
NORTH COORDINATE: 594038.51 FT
EAST COORDINATE: 1494169.57 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
RADIUM-226	09/15/93	0001	PCI/L		2.15		2.15	I
SODIUM, SOLUBLE	09/15/93	0001	UG/L		857000.	J	857000.	I
SODIUM, TOTAL	09/15/93	0001	UG/L		23500.	J	23500.0	I
SULFATE	09/15/93	0001	MG/L		47.1		47.1	I
THORIUM-228	09/15/93	0001	PCI/L		.902		REJECT	I
THORIUM-230	09/15/93	0001	PCI/L		.22		REJECT	I
TOTAL DISSOLVED SOLIDS	09/15/93	0001	MG/L		467.	J	467.	I
TOTAL KJELDAHL NITROGEN	09/15/93	0001	MG/L		0.82		0.82	I
TOTAL ORGANIC CARBON	09/15/93	0001	MG/L		2.3		2.3	I
TOTAL PHOSPHATE	09/15/93	0001	MG/L		3.9		3.9	I
TOTAL SUSPENDED SOLIDS	09/15/93	0001	MG/L		35.0	J	35.0	I
URANIUM-234	09/15/93	0001	PCI/L		.229		.229	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0160
NORTH COORDINATE: 594049.08 FT
EAST COORDINATE: 1494168.42 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: GRAVEL OR SANDY GRAVEL, POORLY GRADED (GP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHA	09/15/93	0001	UG/L		8.1	J	8.1	I
AMMONIA	09/15/93	0001	MG/L		1.5	J	1.5	I
ARSENIC, SOLUBLE	09/15/93	0001	UG/L		34.6		34.6	I
BARIUM, SOLUBLE	09/15/93	0001	UG/L		262.	J	262.	I
BARIUM, TOTAL	09/15/93	0001	UG/L		287.	J	287.	I
CALCIUM, SOLUBLE	09/15/93	0001	UG/L		74900.	J	74900.	I
CALCIUM, TOTAL	09/15/93	0001	UG/L		73400.	J	73400.	I
CHLORIDE	09/15/93	0001	MG/L		29.0	J	29.0	I
COPPER, TOTAL	09/15/93	0001	UG/L	B	1.9	J	1.9	I
DI-N-BUTYL PHTHALATE	09/15/93	0001	UG/L	J	1.	J	1.	I
DIETHYL PHTHALATE	09/15/93	0001	UG/L	J	2.	J	2.	I
FLUORIDE	09/15/93	0001	MG/L		0.36		0.36	I
IRON, SOLUBLE	09/15/93	0001	UG/L		1400.	J	1400.	I
IRON, TOTAL	09/15/93	0001	UG/L		1210.	J	1210.	I
MAGNESIUM, SOLUBLE	09/15/93	0001	UG/L		30600.	J	30600.	I
MAGNESIUM, TOTAL	09/15/93	0001	UG/L		30300.	J	30300.	I
MANGANESE, SOLUBLE	09/15/93	0001	UG/L		153.	J	153.	I
MANGANESE, TOTAL	09/15/93	0001	UG/L		160.	J	160.	I
MOLYBDENUM	09/15/93	0001	UG/L	B	7.4		7.4	I
MOLYBDENUM, SOLUBLE	09/15/93	0001	UG/L	B	6.2		6.2	I
PHENOL	09/15/93	0001	UG/L	J	2.	J	2.	I
PLUTONIUM-239/240	09/15/93	0001	PCI/L		.151		.151	I
POTASSIUM, SOLUBLE	09/15/93	0001	UG/L	B	2490.		2490.	I
POTASSIUM, TOTAL	09/15/93	0001	UG/L	B	2490.		2490.	I
RADIUM-226	09/15/93	0001	PCI/L		.559		.559	I
SODIUM, SOLUBLE	09/15/93	0001	UG/L		25700.	J	25700.	I
SODIUM, TOTAL	09/15/93	0001	UG/L		26700.	J	26700.	I
SULFATE	09/15/93	0001	MG/L		169.		169.	I
THORIUM-228	09/15/93	0001	PCI/L		.559		REJECT	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0160
NORTH COORDINATE: 594049.08 FT
EAST COORDINATE: 1494168.42 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: GRAVEL OR SANDY GRAVEL, POORLY GRADED (GP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
THORIUM-230	09/15/93	0001	PCI/L		.266		REJECT	I
TIN, SOLUBLE	09/15/93	0001	UG/L	B	22.5	J	22.5	I
TIN, TOTAL	09/15/93	0001	UG/L	B	25.2	J	25.2	I
TOTAL DISSOLVED SOLIDS	09/15/93	0001	MG/L		452.	J	452.	I
TOTAL KJELDAHL NITROGEN	09/15/93	0001	MG/L		1.7		1.7	I
TOTAL ORGANIC CARBON	09/15/93	0001	MG/L		2.7		2.7	I
TOTAL PHOSPHATE	09/15/93	0001	MG/L		0.80		0.80	I
TOTAL SUSPENDED SOLIDS	09/15/93	0001	MG/L		4.0	J	4.0	I
ZINC, SOLUBLE	09/15/93	0001	UG/L	B	18.6	J	18.6	I
ZINC, TOTAL	09/15/93	0001	UG/L		26.2	J	26.2	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0271 71-2
NORTH COORDINATE: 596154.56 FT
EAST COORDINATE: 1495028.58 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	10/11/93	0001	UG/L		1.8	J	1.8	I
1,2-CIS-DICHLOROETHENE	10/11/93	0001	UG/L		1.5	J	1.5	I
ANTIMONY, SOLUBLE	10/11/93	0001	UG/L		7.0		7.0	I
BARIUM, SOLUBLE	10/11/93	0001	UG/L	B	84.3	J	84.3	I
BARIUM, TOTAL	10/11/93	0001	UG/L	B	83.4	J	83.4	I
CALCIUM, SOLUBLE	10/11/93	0001	UG/L		102000.	J	102000.	I
CALCIUM, TOTAL	10/11/93	0001	UG/L		102000.	J	102000.	I
CHLORIDE	10/11/93	0001	MG/L		119.		119.	I
COPPER, SOLUBLE	10/11/93	0001	UG/L	B	4.4		4.4	I
COPPER, TOTAL	10/11/93	0001	UG/L	B	3.9		3.9	I
FLUORIDE	10/11/93	0001	MG/L		0.15		0.15	I
IRON, SOLUBLE	10/11/93	0001	UG/L	B	18.8		18.8	I
IRON, TOTAL	10/11/93	0001	UG/L	B	31.2		31.2	I
LITHIUM, SOLUBLE	10/11/93	0001	UG/L	B	2.9		2.9	I
LITHIUM, TOTAL	10/11/93	0001	UG/L	B	2.9		2.9	I
MAGNESIUM, SOLUBLE	10/11/93	0001	UG/L		33100.	J	33100.	I
MAGNESIUM, TOTAL	10/11/93	0001	UG/L		33000.	J	33000.	I
MANGANESE, SOLUBLE	10/11/93	0001	UG/L		15.2		15.2	I
MANGANESE, TOTAL	10/11/93	0001	UG/L	B	13.0		13.0	I
NICKEL, TOTAL	10/11/93	0001	UG/L	B	2.2		2.2	I
NITRATE NITRITE	10/11/93	0001	MG/L		4.9		4.9	I
POTASSIUM, SOLUBLE	10/11/93	0001	UG/L	B	2390.		2390.	I
POTASSIUM, TOTAL	10/11/93	0001	UG/L	B	2390.		2390.	I
SODIUM, SOLUBLE	10/11/93	0001	UG/L		68500.	J	68500.	I
SODIUM, TOTAL	10/11/93	0001	UG/L		69700.	J	69700.	I
SULFATE	10/11/93	0001	MG/L		83.0		83.0	I
TETRACHLOROETHENE	10/11/93	0001	UG/L		0.75	J	0.75	I
THORIUM-228	10/11/93	0001	PCI/L		.635		.635	I
THORIUM-230	10/11/93	0001	PCI/L		.221		REJECT	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0271 71-2
NORTH COORDINATE: 596154.56 FT
EAST COORDINATE: 1495028.58 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
THORIUM-232	10/11/93	0001	PCI/L		.1		.1	I
TOTAL DISSOLVED SOLIDS	10/11/93	0001	MG/L		589.		589.	I
TOTAL KJELDAHL NITROGEN	10/11/93	0001	MG/L		0.18		0.18	I
TOTAL ORGANIC CARBON	10/11/93	0001	MG/L		1.1		1.1	I
TOTAL PHOSPHATE	10/11/93	0001	MG/L		0.11		0.11	I
TOTAL SUSPENDED SOLIDS	10/11/93	0001	MG/L		8.0		8.0	I
TRICHLOROETHENE	10/11/93	0001	UG/L		2.2	J	2.2	I
TRITIUM	10/11/93	0001	PCI/L		1490.		1490.	I
URANIUM-234	10/11/93	0001	PCI/L		.279		.279	I
URANIUM-238	10/11/93	0001	PCI/L		.233		.233	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0301
NORTH COORDINATE: 597872.00 FT
EAST COORDINATE: 1494178.20 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LEAN CLAYS, SANDY CLAYS, OR GRAVELLY CLAYS (CL)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	09/24/93	0001	UG/L		2370.		2370.	I
AMMONIA	09/24/93	0001	MG/L		0.14		0.14	I
ANTIMONY, SOLUBLE	09/24/93	0001	UG/L		3.5		3.5	I
ANTIMONY, TOTAL	09/24/93	0001	UG/L	B	0.68		0.68	I
BARIUM, SOLUBLE	09/24/93	0001	UG/L	B	135.		135.	I
BARIUM, TOTAL	09/24/93	0001	UG/L	B	141.		141.	I
CALCIUM, SOLUBLE	09/24/93	0001	UG/L		68700.		68700.	I
CALCIUM, TOTAL	09/24/93	0001	UG/L		97000.		97000.	I
CHLORIDE	09/24/93	0001	MG/L		194.		194.	I
CHROMIUM, TOTAL	09/24/93	0001	UG/L		104.		104.	I
COBALT, SOLUBLE	09/24/93	0001	UG/L	B	2.2		2.2	I
COBALT, TOTAL	09/24/93	0001	UG/L	B	5.5		5.5	I
COPPER, TOTAL	09/24/93	0001	UG/L	B	8.0		8.0	I
FLUORIDE	09/24/93	0001	MG/L		0.32		0.32	I
IRON, SOLUBLE	09/24/93	0001	UG/L		145.		145.	I
IRON, TOTAL	09/24/93	0001	UG/L		4980.		4980.	I
LEAD, SOLUBLE	09/24/93	0001	UG/L		13.2		13.2	I
LITHIUM, TOTAL	09/24/93	0001	UG/L	B	7.0	J	7.0	I
MAGNESIUM, SOLUBLE	09/24/93	0001	UG/L		24800.		24800.	I
MAGNESIUM, TOTAL	09/24/93	0001	UG/L		37500.		37500.	I
MANGANESE, SOLUBLE	09/24/93	0001	UG/L		344.		344.	I
MANGANESE, TOTAL	09/24/93	0001	UG/L		461.		461.	I
MOLYBDENUM	09/24/93	0001	UG/L	B	5.4		5.4	I
MOLYBDENUM, SOLUBLE	09/24/93	0001	UG/L	B	3.3		3.3	I
NICKEL, SOLUBLE	09/24/93	0001	UG/L	B	6.6		6.6	I
NICKEL, TOTAL	09/24/93	0001	UG/L		44.7		44.7	I
PLUTONIUM-239/240	09/24/93	0001	PCI/L		.11		REJECT	I
POTASSIUM, SOLUBLE	09/24/93	0001	UG/L	B	699.	J	699.	I
POTASSIUM, TOTAL	09/24/93	0001	UG/L	B	1400.	J	1400.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0301
NORTH COORDINATE: 597872.00 FT
EAST COORDINATE: 1494178.20 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LEAN CLAYS, SANDY CLAYS, OR GRAVELLY CLAYS (CL)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
RADIUM-226	09/24/93	0001	PCI/L		1.18		1.18	I
SODIUM, SOLUBLE	09/24/93	0001	UG/L		72300.		72300.	I
SODIUM, TOTAL	09/24/93	0001	UG/L		62700.		62700.	I
THORIUM-228	09/24/93	0001	PCI/L		.704		REJECT	I
THORIUM-230	09/24/93	0001	PCI/L		.0441		REJECT	I
THORIUM-232	09/24/93	0001	PCI/L		.161		.161	I
TIN, SOLUBLE	09/24/93	0001	UG/L	B	12.2		12.2	I
TIN, TOTAL	09/24/93	0001	UG/L	B	14.1		14.1	I
TOTAL DISSOLVED SOLIDS	09/24/93	0001	MG/L		587.		587.	I
TOTAL KJELDAHL NITROGEN	09/24/93	0001	MG/L		0.24		0.24	I
TOTAL ORGANIC CARBON	09/24/93	0001	MG/L		1.9		1.9	I
TOTAL PHOSPHATE	09/24/93	0001	MG/L		0.23		0.23	I
TOTAL SUSPENDED SOLIDS	09/24/93	0001	MG/L		375.		375.	I
URANIUM-234	09/24/93	0001	PCI/L		.489		.489	I
URANIUM-235/236	09/24/93	0001	PCI/L		.0737		.0737	I
URANIUM-238	09/24/93	0001	PCI/L		.279		.279	I
VANADIUM, TOTAL	09/24/93	0001	UG/L		16.6		16.6	I
ZINC, TOTAL	09/24/93	0001	UG/L		30.2		30.2	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0302
NORTH COORDINATE: 597099.47 FT
EAST COORDINATE: 1493921.81 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: CLAYEY GRAVEL OR CLAYEY SANDY GRAVEL (GC)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	09/28/93	0001	UG/L		1410.	J	1410.	I
AMERICIUM-241	09/28/93	0001	PCI/L		.111		.111	I
AMMONIA	09/28/93	0001	MG/L		0.14		0.14	I
ANTIMONY, TOTAL	09/28/93	0001	UG/L	B	0.78		0.78	I
ARSENIC, SOLUBLE	09/28/93	0001	UG/L	B	6.6		6.6	I
ARSENIC, TOTAL	09/28/93	0001	UG/L		11.4		11.4	I
BARIUM, SOLUBLE	09/28/93	0001	UG/L		438.	J	438.	I
BARIUM, TOTAL	09/28/93	0001	UG/L		458.	J	458.	I
CALCIUM, SOLUBLE	09/28/93	0001	UG/L		100000.	J	100000.	I
CALCIUM, TOTAL	09/28/93	0001	UG/L		112000.	J	112000.	I
CHLORIDE	09/28/93	0001	MG/L		124.		124.	I
COBALT, SOLUBLE	09/28/93	0001	UG/L	B	1.3		1.3	I
COBALT, TOTAL	09/28/93	0001	UG/L	B	2.3		2.3	I
COPPER, TOTAL	09/28/93	0001	UG/L	B	4.1		4.1	I
FLUORIDE	09/28/93	0001	MG/L		0.26		0.26	I
IRON, SOLUBLE	09/28/93	0001	UG/L		1340.	J	1340.	I
IRON, TOTAL	09/28/93	0001	UG/L		5080.	J	5080.	I
LITHIUM, SOLUBLE	09/28/93	0001	UG/L	B	4.0		4.0	I
LITHIUM, TOTAL	09/28/93	0001	UG/L	B	7.3		7.3	I
MAGNESIUM, SOLUBLE	09/28/93	0001	UG/L		32800.	J	32800.	I
MAGNESIUM, TOTAL	09/28/93	0001	UG/L		35600.	J	35600.	I
MANGANESE, SOLUBLE	09/28/93	0001	UG/L		42.0	J	42.0	I
MANGANESE, TOTAL	09/28/93	0001	UG/L		88.8	J	88.8	I
MOLYBDENUM	09/28/93	0001	UG/L	B	5.1		5.1	I
MOLYBDENUM, SOLUBLE	09/28/93	0001	UG/L	B	4.2		4.2	I
PLUTONIUM-239/240	09/28/93	0001	PCI/L		.191		.191	I
POTASSIUM, SOLUBLE	09/28/93	0001	UG/L	B	2290.	J	2290.	I
POTASSIUM, TOTAL	09/28/93	0001	UG/L	B	2740.		2740.	I
RADIUM-226	09/28/93	0001	PCI/L		.562		.562	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0302
NORTH COORDINATE: 597099.47 FT
EAST COORDINATE: 1493921.81 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: CLAYEY GRAVEL OR CLAYEY SANDY GRAVEL (GC)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SODIUM, SOLUBLE	09/28/93	0001	UG/L		58600.		58600.	I
SODIUM, TOTAL	09/28/93	0001	UG/L		58300.		58300.	I
THORIUM-228	09/28/93	0001	PCI/L		.569		.569	I
TIN, SOLUBLE	09/28/93	0001	UG/L	B	12.4		12.4	I
TIN, TOTAL	09/28/93	0001	UG/L	B	13.7		13.7	I
TOTAL DISSOLVED SOLIDS	09/28/93	0001	MG/L		552.		552.	I
TOTAL KJELDAHL NITROGEN	09/28/93	0001	MG/L		0.30		0.30	I
TOTAL ORGANIC CARBON	09/28/93	0001	MG/L		0.80		0.80	I
TOTAL PHOSPHATE	09/28/93	0001	MG/L		0.14		0.14	I
TOTAL SUSPENDED SOLIDS	09/28/93	0001	MG/L		39.0		39.0	I
TRITIUM	09/28/93	0001	PCI/L		4890.		4890.	I
URANIUM-234	09/28/93	0001	PCI/L		.232		.232	I
URANIUM-238	09/28/93	0001	PCI/L		.267		.267	I
VANADIUM, SOLUBLE	09/28/93	0001	UG/L	B	7.7	J	7.7	I
VANADIUM, TOTAL	09/28/93	0001	UG/L		10.2	J	10.2	I
ZINC, SOLUBLE	09/28/93	0001	UG/L	B	13.9		13.9	I
ZINC, TOTAL	09/28/93	0001	UG/L		48.5	J	48.5	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0303
NORTH COORDINATE: 597134.54 FT
EAST COORDINATE: 1494493.75 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: TILL (TI)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	09/23/93	0001	UG/L		5940.		5940.	I
AMMONIA	09/23/93	0001	MG/L		3.1		3.1	I
BARIUM, SOLUBLE	09/23/93	0001	UG/L		210.	J	210.	I
BARIUM, TOTAL	09/23/93	0001	UG/L		245.		245.	I
BERYLLIUM, TOTAL	09/23/93	0001	UG/L	B	0.35		0.35	I
CALCIUM, SOLUBLE	09/23/93	0001	UG/L		99900.	J	99900.	I
CALCIUM, TOTAL	09/23/93	0001	UG/L		114000.	J	114000.	I
CHLORIDE	09/23/93	0001	MG/L		139.		139.	I
CHROMIUM, TOTAL	09/23/93	0001	UG/L	B	8.4		8.4	I
COBALT, TOTAL	09/23/93	0001	UG/L	B	4.7	J	4.7	I
COPPER, TOTAL	09/23/93	0001	UG/L	B	10.7		10.7	I
FLUORIDE	09/23/93	0001	MG/L		0.65		0.65	I
IRON, SOLUBLE	09/23/93	0001	UG/L		4230.		4230.	I
IRON, TOTAL	09/23/93	0001	UG/L		12000.		12000.	I
LEAD, TOTAL	09/23/93	0001	UG/L		5.5		REJECT	I
LITHIUM, TOTAL	09/23/93	0001	UG/L	B	9.8		9.8	I
MAGNESIUM, SOLUBLE	09/23/93	0001	UG/L		35400.	J	35400.	I
MAGNESIUM, TOTAL	09/23/93	0001	UG/L		39500.	J	39500.	I
MANGANESE, SOLUBLE	09/23/93	0001	UG/L		380.		380.	I
MANGANESE, TOTAL	09/23/93	0001	UG/L		524.		524.	I
MOLYBDENUM	09/23/93	0001	UG/L	B	11.1		11.1	I
MOLYBDENUM, SOLUBLE	09/23/93	0001	UG/L	B	7.4		7.4	I
PLUTONIUM-239/240	09/23/93	0001	PCI/L		.102		REJECT	I
POTASSIUM, SOLUBLE	09/23/93	0001	UG/L	B	918.		918.	I
POTASSIUM, TOTAL	09/23/93	0001	UG/L	B	2740.		2740.	I
SODIUM, SOLUBLE	09/23/93	0001	UG/L		25800.	J	25800.	I
SODIUM, TOTAL	09/23/93	0001	UG/L		25400.		25400.	I
THALLIUM, SOLUBLE	09/23/93	0001	UG/L	B	20.0	J	20.0	I
THORIUM-228	09/23/93	0001	PCI/L		.45		REJECT	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0303
NORTH COORDINATE: 597134.54 FT
EAST COORDINATE: 1494493.75 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: TILL (TI)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
THORIUM-230	09/23/93	0001	PCI/L		.16		REJECT	I
THORIUM-232	09/23/93	0001	PCI/L		.159		.159	I
TIN, SOLUBLE	09/23/93	0001	UG/L	B	20.6	J	20.6	I
TIN, TOTAL	09/23/93	0001	UG/L	B	34.1	J	34.1	I
TOTAL DISSOLVED SOLIDS	09/23/93	0001	MG/L		508.		508.	I
TOTAL KJELDAHL NITROGEN	09/23/93	0001	MG/L		3.0		3.0	I
TOTAL ORGANIC CARBON	09/23/93	0001	MG/L		1.0		1.0	I
TOTAL PHOSPHATE	09/23/93	0001	MG/L		0.48		0.48	I
TOTAL SUSPENDED SOLIDS	09/23/93	0001	MG/L		150.		150.	I
TRITIUM	09/23/93	0001	PCI/L		8510.		8510.	I
URANIUM-234	09/23/93	0001	PCI/L		.171		.171	I
VANADIUM, SOLUBLE	09/23/93	0001	UG/L	B	7.1	J	7.1	I
VANADIUM, TOTAL	09/23/93	0001	UG/L		14.7	J	14.7	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0304
NORTH COORDINATE: 596179.38 FT
EAST COORDINATE: 1494546.74 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LEAN CLAYS, SANDY CLAYS, OR GRAVELLY CLAYS (CL)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	09/16/93	0001	UG/L		22300.	J	22300.	I
AMERICIUM-241	09/16/93	0001	PCI/L		.114		.114	I
AMMONIA	09/16/93	0001	MG/L		0.33	J	0.33	I
ANTIMONY, SOLUBLE	09/16/93	0001	UG/L		11.2		11.2	I
BARIUM, SOLUBLE	09/16/93	0001	UG/L		260.	J	260.	I
BARIUM, TOTAL	09/16/93	0001	UG/L		988.	J	988.	I
BERYLLIUM, TOTAL	09/16/93	0001	UG/L		2.2		2.2	I
CADMIUM, TOTAL	09/16/93	0001	UG/L	B	2.4	J	2.4	I
CALCIUM, SOLUBLE	09/16/93	0001	UG/L		67100.	J	67100.	I
CALCIUM, TOTAL	09/16/93	0001	UG/L		504000.	J	504000.	I
CHLORIDE	09/16/93	0001	MG/L		28.0	J	28.0	I
CHROMIUM, TOTAL	09/16/93	0001	UG/L		30.6		30.6	I
COBALT, TOTAL	09/16/93	0001	UG/L	B	39.6		39.6	I
COPPER, SOLUBLE	09/16/93	0001	UG/L	B	3.6	J	3.6	I
COPPER, TOTAL	09/16/93	0001	UG/L		209.	J	209.	I
FLUORIDE	09/16/93	0001	MG/L		0.30		0.30	I
IRON, SOLUBLE	09/16/93	0001	UG/L		1000.	J	1000.	I
IRON, TOTAL	09/16/93	0001	UG/L		38600.	J	38600.	I
LEAD, TOTAL	09/16/93	0001	UG/L		43.0	J	43.0	I
LITHIUM, TOTAL	09/16/93	0001	UG/L	B	35.6		35.6	I
MAGNESIUM, SOLUBLE	09/16/93	0001	UG/L		21700.	J	21700.	I
MAGNESIUM, TOTAL	09/16/93	0001	UG/L		121000.	J	121000.	I
MANGANESE, SOLUBLE	09/16/93	0001	UG/L		121.	J	121.	I
MANGANESE, TOTAL	09/16/93	0001	UG/L		2630.	J	2630.	I
MOLYBDENUM	09/16/93	0001	UG/L	B	6.7		6.7	I
MOLYBDENUM, SOLUBLE	09/16/93	0001	UG/L	B	11.8		11.8	I
NICKEL, TOTAL	09/16/93	0001	UG/L		80.2	J	80.2	I
POTASSIUM, SOLUBLE	09/16/93	0001	UG/L	B	2490.		2490.	I
POTASSIUM, TOTAL	09/16/93	0001	UG/L		6340.		6340.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0304
NORTH COORDINATE: 596179.38 FT
EAST COORDINATE: 1494546.74 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LEAN CLAYS, SANDY CLAYS, OR GRAVELLY CLAYS (CL)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
RADIUM-226	09/16/93	0001	PCI/L		12.7		12.7	I
SODIUM, SOLUBLE	09/16/93	0001	UG/L		11300.	J	11300.	I
SODIUM, TOTAL	09/16/93	0001	UG/L		11600.	J	11600.	I
SULFATE	09/16/93	0001	MG/L		30.2		30.2	I
THORIUM-228	09/16/93	0001	PCI/L		4.99	J	4.99	I
THORIUM-230	09/16/93	0001	PCI/L		3.51		REJECT	I
THORIUM-232	09/16/93	0001	PCI/L		3.28		3.28	I
TIN, SOLUBLE	09/16/93	0001	UG/L	B	18.8	J	18.8	I
TIN, TOTAL	09/16/93	0001	UG/L		87.4		87.4	I
TOTAL DISSOLVED SOLIDS	09/16/93	0001	MG/L		479.		479.	I
TOTAL KJELDAHL NITROGEN	09/16/93	0001	MG/L		3.5		3.5	I
TOTAL ORGANIC CARBON	09/16/93	0001	MG/L		1.4		1.4	I
TOTAL PHOSPHATE	09/16/93	0001	MG/L		2.0		2.0	I
TOTAL SUSPENDED SOLIDS	09/16/93	0001	MG/L		1880.		1880.	I
TRITIUM	09/16/93	0001	PCI/L		1300.		1300.	I
URANIUM-234	09/16/93	0001	PCI/L		6.95		6.95	I
URANIUM-235/236	09/16/93	0001	PCI/L		.334	J	.334	I
URANIUM-238	09/16/93	0001	PCI/L		6.77		6.77	I
VANADIUM, TOTAL	09/16/93	0001	UG/L		66.5	J	66.5	I
ZINC, TOTAL	09/16/93	0001	UG/L		203.	J	203.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0305
NORTH COORDINATE: 596494.00 FT
EAST COORDINATE: 1495083.91 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: CLAYEY GRAVEL OR CLAYEY SANDY GRAVEL (GC)
HYDRAULIC FLOW RELATIONSHIP: NOT KNOWN (N)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,2-CIS-DICHLOROETHENE	09/11/93	0001	UG/L		8.6		8.6	I
1,2-TRANS-DICHLOROETHENE	09/11/93	0001	UG/L		1.3		1.3	I
AMMONIA	09/11/93	0001	MG/L		0.75		0.75	I
BARIUM, SOLUBLE	09/11/93	0001	UG/L	B	127.		127.	I
BARIUM, TOTAL	09/11/93	0001	UG/L	B	122.		122.	I
CALCIUM, SOLUBLE	09/11/93	0001	UG/L		128000.	J	128000.	I
CALCIUM, TOTAL	09/11/93	0001	UG/L		115000.	J	115000.	I
CHLORIDE	09/11/93	0001	MG/L		152.	J	152.	I
CHROMIUM, TOTAL	09/11/93	0001	UG/L		494.	J	494.	I
COBALT, TOTAL	09/11/93	0001	UG/L	B	4.7		4.7	I
COPPER, SOLUBLE	09/11/93	0001	UG/L	B	1.0		1.0	I
COPPER, TOTAL	09/11/93	0001	UG/L	B	16.3		16.3	I
DIETHYL PHTHALATE	09/11/93	0001	UG/L	J	4.	J	4.	I
FLUORIDE	09/11/93	0001	MG/L		0.14		0.14	I
IRON, SOLUBLE	09/11/93	0001	UG/L	B	76.0		76.0	I
IRON, TOTAL	09/11/93	0001	UG/L		5990.	J	5990.	I
LITHIUM, SOLUBLE	09/11/93	0001	UG/L	B	13.9		13.9	I
LITHIUM, TOTAL	09/11/93	0001	UG/L	B	13.9		13.9	I
MAGNESIUM, SOLUBLE	09/11/93	0001	UG/L		41900.	J	41900.	I
MAGNESIUM, TOTAL	09/11/93	0001	UG/L		37300.	J	37300.	I
MANGANESE, SOLUBLE	09/11/93	0001	UG/L		15.4		15.4	I
MANGANESE, TOTAL	09/11/93	0001	UG/L		39.6	J	39.6	I
MOLYBDENUM	09/11/93	0001	UG/L	B	14.7		14.7	I
NICKEL, SOLUBLE	09/11/93	0001	UG/L		54.6		54.6	I
NICKEL, TOTAL	09/11/93	0001	UG/L		146.	J	146.	I
NITRATE NITRITE	09/11/93	0001	MG/L		3.8		3.8	I
PHENOL	09/11/93	0001	UG/L	J	3.	J	3.	I
PLUTONIUM-239/240	09/11/93	0001	PCI/L		.136		REJECT	I
POTASSIUM, SOLUBLE	09/11/93	0001	UG/L	B	2730.		2730.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0305
NORTH COORDINATE: 596494.00 FT
EAST COORDINATE: 1495083.91 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: CLAYEY GRAVEL OR CLAYEY SANDY GRAVEL (GC)
HYDRAULIC FLOW RELATIONSHIP: NOT KNOWN (N)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
POTASSIUM, TOTAL	09/11/93	0001	UG/L	B	2510.		2510.	I
RADIUM-226	09/11/93	0001	PCI/L		.437		.437	I
SODIUM, SOLUBLE	09/11/93	0001	UG/L		87200.	J	87200.	I
SODIUM, TOTAL	09/11/93	0001	UG/L		77100.	J	77100.	I
SULFATE	09/11/93	0001	MG/L		69.0		69.0	I
TETRACHLOROETHENE	09/11/93	0001	UG/L		16.		16.	I
TETRACHLOROMETHANE (CCL4)	09/11/93	0001	UG/L		1.6		1.6	I
THORIUM-228	09/11/93	0001	PCI/L		1.02		REJECT	I
THORIUM-230	09/11/93	0001	PCI/L		3.22	J	3.22	I
THORIUM-232	09/11/93	0001	PCI/L		.463		.463	I
TIN, TOTAL	09/11/93	0001	UG/L	B	31.0		31.0	I
TOTAL DISSOLVED SOLIDS	09/11/93	0001	MG/L		706.		706.	I
TOTAL ORGANIC CARBON	09/11/93	0001	MG/L		0.79		0.79	I
TOTAL PHOSPHATE	09/11/93	0001	MG/L		0.13		0.13	I
TRICHLOROETHENE	09/11/93	0001	UG/L		23.		23.	I
TRICHLOROMETHANE (CHLOROFORM)	09/11/93	0001	UG/L		3.6		3.6	I
TRITIUM	09/11/93	0001	PCI/L		5200.		5200.	I
URANIUM-234	09/11/93	0001	PCI/L		.653		.653	I
URANIUM-235/236	09/11/93	0001	PCI/L		.098		.098	I
URANIUM-238	09/11/93	0001	PCI/L		.567		.567	I
VANADIUM, SOLUBLE	09/11/93	0001	UG/L		16.5		16.5	I
VANADIUM, TOTAL	09/11/93	0001	UG/L		15.2		15.2	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0306
NORTH COORDINATE: 596673.28 FT
EAST COORDINATE: 1495083.91 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: CLAYEY GRAVEL OR CLAYEY SANDY GRAVEL (GC)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, SOLUBLE	09/11/93	0001	UG/L		86.0		86.0	I
ALUMINUM, TOTAL	09/11/93	0001	UG/L		30.7		30.7	I
ANTIMONY, SOLUBLE	09/11/93	0001	UG/L	B	4.0	J	4.0	I
BARIUM, SOLUBLE	09/11/93	0001	UG/L	B	67.8		67.8	I
BARIUM, TOTAL	09/11/93	0001	UG/L	B	85.6		85.6	I
CALCIUM, SOLUBLE	09/11/93	0001	UG/L		79100.	J	79100.	I
CALCIUM, TOTAL	09/11/93	0001	UG/L		117000.	J	117000.	I
CHLORIDE	09/11/93	0001	MG/L		121.	J	121.	I
CHROMIUM, TOTAL	09/11/93	0001	UG/L		122.		122.	I
COBALT, TOTAL	09/11/93	0001	UG/L	B	5.5		5.5	I
COPPER, TOTAL	09/11/93	0001	UG/L	B	3.7		3.7	I
DIETHYL PHTHALATE	09/11/93	0001	UG/L	J	2.	J	2.	I
FLUORIDE	09/11/93	0001	MG/L		0.14		0.14	I
IRON, SOLUBLE	09/11/93	0001	UG/L	B	53.5	J	53.5	I
IRON, TOTAL	09/11/93	0001	UG/L		2870.	J	2870.	I
LEAD, SOLUBLE	09/11/93	0001	UG/L	B	2.8	J	2.8	I
LEAD, TOTAL	09/11/93	0001	UG/L	B	2.8	J	2.8	I
LITHIUM, SOLUBLE	09/11/93	0001	UG/L	B	8.6		8.6	I
LITHIUM, TOTAL	09/11/93	0001	UG/L	B	6.9		6.9	I
MAGNESIUM, SOLUBLE	09/11/93	0001	UG/L		37500.		37500.	I
MAGNESIUM, TOTAL	09/11/93	0001	UG/L		36100.		36100.	I
MANGANESE, SOLUBLE	09/11/93	0001	UG/L	B	3.7		3.7	I
MANGANESE, TOTAL	09/11/93	0001	UG/L		22.1		22.1	I
NICKEL, SOLUBLE	09/11/93	0001	UG/L		47.3		47.3	I
NICKEL, TOTAL	09/11/93	0001	UG/L		64.5		64.5	I
NITRATE NITRITE	09/11/93	0001	MG/L		3.8		3.8	I
PHENOL	09/11/93	0001	UG/L	J	2.	J	2.	I
POTASSIUM, SOLUBLE	09/11/93	0001	UG/L	B	3100.		3100.	I
POTASSIUM, TOTAL	09/11/93	0001	UG/L	B	2830.		2830.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0306
NORTH COORDINATE: 596673.28 FT
EAST COORDINATE: 1495083.91 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: CLAYEY GRAVEL OR CLAYEY SANDY GRAVEL (GC)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SELENIUM, SOLUBLE	09/11/93	0001	UG/L	B	1.4	J	1.4	I
SODIUM, SOLUBLE	09/11/93	0001	UG/L		420000.		420000.	I
SODIUM, TOTAL	09/11/93	0001	UG/L		69300.		69300.	I
SULFATE	09/11/93	0001	MG/L		115.		115.	I
TETRACHLOROETHENE	09/11/93	0001	UG/L		4.4	J	4.4	I
THORIUM-228	09/11/93	0001	PCI/L		.62		REJECT	I
THORIUM-230	09/11/93	0001	PCI/L		.102		REJECT	I
TOTAL DISSOLVED SOLIDS	09/11/93	0001	MG/L		789.	J	789.	I
TOTAL ORGANIC CARBON	09/11/93	0001	MG/L		0.79		0.79	I
TOTAL PHOSPHATE	09/11/93	0001	MG/L		0.17		0.17	I
TRICHLOROETHENE	09/11/93	0001	UG/L		6.0	J	6.0	I
TRITIUM	09/11/93	0001	PCI/L		6310.		6310.	I
URANIUM-234	09/11/93	0001	PCI/L		.416		.416	I
URANIUM-238	09/11/93	0001	PCI/L		.384		.384	I
VANADIUM, SOLUBLE	09/11/93	0001	UG/L		15.4		15.4	I
VANADIUM, TOTAL	09/11/93	0001	UG/L		15.3		15.3	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0307
NORTH COORDINATE: 596848.92 FT
EAST COORDINATE: 1495024.17 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: GRAVEL OR SANDY GRAVEL, WELL GRADED (GW)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, SOLUBLE	09/13/93	0001	UG/L	B	17.4		17.4	I
ALUMINUM, TOTAL	09/13/93	0001	UG/L		26.6		26.6	I
BARIUM, SOLUBLE	09/13/93	0001	UG/L	B	148.		148.	I
BARIUM, TOTAL	09/13/93	0001	UG/L	B	139.		139.	I
CALCIUM, SOLUBLE	09/13/93	0001	UG/L		144000.	J	144000.	I
CALCIUM, TOTAL	09/13/93	0001	UG/L		133000.	J	133000.	I
CHLORIDE	09/13/93	0001	MG/L		214.	J	214.	I
CHROMIUM, TOTAL	09/13/93	0001	UG/L	B	5.3		5.3	I
COPPER, TOTAL	09/13/93	0001	UG/L	B	1.3		1.3	I
FLUORIDE	09/13/93	0001	MG/L		0.18		0.18	I
IRON, SOLUBLE	09/13/93	0001	UG/L		140.	J	140.	I
IRON, TOTAL	09/13/93	0001	UG/L		222.	J	222.	I
LITHIUM, SOLUBLE	09/13/93	0001	UG/L	B	23.3		23.3	I
LITHIUM, TOTAL	09/13/93	0001	UG/L	B	24.8		24.8	I
MAGNESIUM, SOLUBLE	09/13/93	0001	UG/L		47800.	J	47800.	I
MAGNESIUM, TOTAL	09/13/93	0001	UG/L		44500.	J	44500.	I
MANGANESE, SOLUBLE	09/13/93	0001	UG/L		24.2	J	24.2	I
MANGANESE, TOTAL	09/13/93	0001	UG/L		26.4	J	26.4	I
NICKEL, SOLUBLE	09/13/93	0001	UG/L		44.1		44.1	I
NICKEL, TOTAL	09/13/93	0001	UG/L		51.5		51.5	I
NITRATE NITRITE	09/13/93	0001	MG/L		2.7		2.7	I
PHENOL	09/13/93	0001	UG/L	J	1.	J	1.	I
PLUTONIUM-239/240	09/13/93	0001	PCI/L		.104		.104	I
POTASSIUM, SOLUBLE	09/13/93	0001	UG/L	B	3060.		3060.	I
POTASSIUM, TOTAL	09/13/93	0001	UG/L	B	928.		928.	I
RADIUM-226	09/13/93	0001	PCI/L		.438		.438	I
SODIUM, SOLUBLE	09/13/93	0001	UG/L		98900.	J	98900.	I
SODIUM, TOTAL	09/13/93	0001	UG/L		92800.	J	92800.	I
SULFATE	09/13/93	0001	MG/L		122.		122.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0307
NORTH COORDINATE: 596848.92 FT
EAST COORDINATE: 1495024.17 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: GRAVEL OR SANDY GRAVEL, WELL GRADED (GW)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TETRACHLOROETHENE	09/13/93	0001	UG/L		10.	J	10.	I
TETRACHLOROMETHANE (CCL4)	09/13/93	0001	UG/L		1.3		1.3	I
THORIUM-228	09/13/93	0001	PCI/L		.432		REJECT	I
THORIUM-230	09/13/93	0001	PCI/L		2.3		2.3	I
THORIUM-232	09/13/93	0001	PCI/L		.503		.503	I
TOTAL DISSOLVED SOLIDS	09/13/93	0001	MG/L		885.		885.	I
TOTAL ORGANIC CARBON	09/13/93	0001	MG/L		1.1		1.1	I
TOTAL PHOSPHATE	09/13/93	0001	MG/L		0.097		0.097	I
TRICHLOROETHENE	09/13/93	0001	UG/L		6.7		6.7	I
TRICHLOROMETHANE (CHLOROFORM)	09/13/93	0001	UG/L		0.81		0.81	I
TRITIUM	09/13/93	0001	PCI/L		7150.		7150.	I
URANIUM-234	09/13/93	0001	PCI/L		.427		.427	I
URANIUM-238	09/13/93	0001	PCI/L		.397		.397	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0309
NORTH COORDINATE: 596503.70 FT
EAST COORDINATE: 1495097.74 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SHALE (SH)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMMONIA	09/14/93	0001	MG/L		3.4		3.4	I
BARIUM, SOLUBLE	09/14/93	0001	UG/L		423.	J	423.	I
BARIUM, TOTAL	09/14/93	0001	UG/L		373.	J	373.	I
BIS(2-ETHYLHEXYL)PHTHALATE	09/14/93	0001	UG/L	J	3.	J	3.	I
CALCIUM, SOLUBLE	09/14/93	0001	UG/L		67800.	J	67800.	I
CALCIUM, TOTAL	09/14/93	0001	UG/L		60200.	J	60200.	I
CHLORIDE	09/14/93	0001	MG/L		471.	J	471.	I
CHROMIUM, TOTAL	09/14/93	0001	UG/L	B	2.1		2.1	I
COBALT, SOLUBLE	09/14/93	0001	UG/L	B	20.4		20.4	I
COBALT, TOTAL	09/14/93	0001	UG/L	B	18.0		18.0	I
DI-N-BUTYL PHTHALATE	09/14/93	0001	UG/L	J	0.5	J	0.5	I
FLUORIDE	09/14/93	0001	MG/L		1.0		1.0	I
IRON, SOLUBLE	09/14/93	0001	UG/L		546.		546.	I
IRON, TOTAL	09/14/93	0001	UG/L		518.		518.	I
LITHIUM, SOLUBLE	09/14/93	0001	UG/L		208.		208.	I
LITHIUM, TOTAL	09/14/93	0001	UG/L		186.		186.	I
MAGNESIUM, SOLUBLE	09/14/93	0001	UG/L		34200.	J	34200.	I
MAGNESIUM, TOTAL	09/14/93	0001	UG/L		30300.	J	30300.	I
MANGANESE, SOLUBLE	09/14/93	0001	UG/L		1930.	J	1930.	I
MANGANESE, TOTAL	09/14/93	0001	UG/L		1690.	J	1690.	I
MOLYBDENUM	09/14/93	0001	UG/L	B	2.1		2.1	I
NICKEL, SOLUBLE	09/14/93	0001	UG/L		61.4		61.4	I
NICKEL, TOTAL	09/14/93	0001	UG/L		56.8		56.8	I
PETN	09/14/93	0001	UG/L		5.20		5.20	I
PLUTONIUM-239/240	09/14/93	0001	PCI/L		.263		.263	I
POTASSIUM, SOLUBLE	09/14/93	0001	UG/L		11700.		11700.	I
POTASSIUM, TOTAL	09/14/93	0001	UG/L		8940.		8940.	I
RADIUM-226	09/14/93	0001	PCI/L		2.22		2.22	I
SODIUM, SOLUBLE	09/14/93	0001	UG/L		222000.	J	222000.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0309
NORTH COORDINATE: 596503.70 FT
EAST COORDINATE: 1495097.74 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SHALE (SH)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SODIUM, TOTAL	09/14/93	0001	UG/L		197000.	J	197000.	I
THORIUM-228	09/14/93	0001	PCI/L		.476		REJECT	I
THORIUM-230	09/14/93	0001	PCI/L		3.86		3.86	I
THORIUM-232	09/14/93	0001	PCI/L		.369		.369	I
TIN, SOLUBLE	09/14/93	0001	UG/L	B	22.1		22.1	I
TIN, TOTAL	09/14/93	0001	UG/L	B	19.8		19.8	I
TOTAL DISSOLVED SOLIDS	09/14/93	0001	MG/L		1070.		1070.	I
TOTAL KJELDAHL NITROGEN	09/14/93	0001	MG/L		3.2		3.2	I
TOTAL ORGANIC CARBON	09/14/93	0001	MG/L		6.0		6.0	I
TOTAL PHOSPHATE	09/14/93	0001	MG/L		0.096		0.096	I
TOTAL SUSPENDED SOLIDS	09/14/93	0001	MG/L		8.0		8.0	I
TRITIUM	09/14/93	0001	PCI/L		616.		616.	I
URANIUM-234	09/14/93	0001	PCI/L		.124		.124	I
VANADIUM, SOLUBLE	09/14/93	0001	UG/L	B	9.0	J	9.0	I
VANADIUM, TOTAL	09/14/93	0001	UG/L	B	7.9	J	7.9	I
ZINC, TOTAL	09/14/93	0001	UG/L	B	5.2		5.2	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0310
NORTH COORDINATE: 596693.15 FT
EAST COORDINATE: 1494951.55 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LIMESTONE (LS)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMERICIUM-241	09/14/93	1001	PCI/L		.131		.131	I
AMMONIA	09/14/93	0001	MG/L		0.52		0.52	I
	09/14/93	1001	MG/L		0.46		0.46	I
BARIUM, SOLUBLE	09/14/93	0001	UG/L	B	134.		134.	I
	09/14/93	1001	UG/L	B	130.		130.	I
BARIUM, TOTAL	09/14/93	0001	UG/L	B	128.		128.	I
	09/14/93	1001	UG/L	B	129.		129.	I
CALCIUM, SOLUBLE	09/14/93	0001	UG/L		86300.	J	86300.	I
	09/14/93	1001	UG/L		87200.	J	87200.	I
CALCIUM, TOTAL	09/14/93	0001	UG/L		83900.	J	83900.	I
	09/14/93	1001	UG/L		87000.	J	87000.	I
CHLORIDE	09/14/93	0001	MG/L		197.	J	197.	I
	09/14/93	1001	MG/L		199.	J	199.	I
FLUORIDE	09/14/93	0001	MG/L		0.54		0.54	I
	09/14/93	1001	MG/L		0.53		0.53	I
IRON, SOLUBLE	09/14/93	0001	UG/L		224.	J	224.	I
	09/14/93	1001	UG/L		210.	J	210.	I
IRON, TOTAL	09/14/93	0001	UG/L		282.	J	282.	I
	09/14/93	1001	UG/L		386.	J	386.	I
LEAD, SOLUBLE	09/14/93	1001	UG/L	B	2.6	J	2.6	I
LEAD, TOTAL	09/14/93	0001	UG/L		4.1	J	4.1	I
LITHIUM, SOLUBLE	09/14/93	0001	UG/L	B	19.6		19.6	I
	09/14/93	1001	UG/L	B	19.6		19.6	I
LITHIUM, TOTAL	09/14/93	0001	UG/L	B	19.6		19.6	I
	09/14/93	1001	UG/L	B	19.6		19.6	I
MAGNESIUM, SOLUBLE	09/14/93	0001	UG/L		39600.	J	39600.	I
	09/14/93	1001	UG/L		40300.	J	40300.	I
MAGNESIUM, TOTAL	09/14/93	0001	UG/L		38800.	J	38800.	I
	09/14/93	1001	UG/L		39900.	J	39900.	I
MANGANESE, SOLUBLE	09/14/93	0001	UG/L		48.2	J	48.2	I
	09/14/93	1001	UG/L		48.2	J	48.2	I
MANGANESE, TOTAL	09/14/93	0001	UG/L		47.7	J	47.7	I
	09/14/93	1001	UG/L		71.0	J	71.0	I
NICKEL, SOLUBLE	09/14/93	0001	UG/L	B	17.6	J	17.6	I
	09/14/93	1001	UG/L	B	11.8	J	11.8	I
NICKEL, TOTAL	09/14/93	0001	UG/L	B	12.6	J	12.6	I
	09/14/93	1001	UG/L	B	24.9	J	24.9	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0310
NORTH COORDINATE: 596693.15 FT
EAST COORDINATE: 1494951.55 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LIMESTONE (LS)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
PHENOL	09/14/93	1001	UG/L	J	0.7	J	0.7	I
PLUTONIUM-239/240	09/14/93	0001	PCI/L		.244		.244	I
	09/14/93	1001	PCI/L		.047		.047	I
POTASSIUM, SOLUBLE	09/14/93	0001	UG/L		7890.		7890.	I
	09/14/93	1001	UG/L		7520.		7520.	I
POTASSIUM, TOTAL	09/14/93	0001	UG/L		7840.		7840.	I
	09/14/93	1001	UG/L		8140.		8140.	I
RADIUM-226	09/14/93	0001	PCI/L		1.		1.	I
	09/14/93	1001	PCI/L		.805		.805	I
SODIUM, SOLUBLE	09/14/93	0001	UG/L		31800.	J	31800.	I
	09/14/93	1001	UG/L		32900.	J	32900.	I
SODIUM, TOTAL	09/14/93	0001	UG/L		31500.	J	31500.	I
	09/14/93	1001	UG/L		32100.	J	32100.	I
SULFATE	09/14/93	0001	MG/L		39.0		39.0	I
	09/14/93	1001	MG/L		45.2		45.2	I
THORIUM-228	09/14/93	0001	PCI/L		.854		REJECT	I
	09/14/93	1001	PCI/L		.558		REJECT	I
THORIUM-230	09/14/93	0001	PCI/L		.32		REJECT	I
	09/14/93	1001	PCI/L		3.95		REJECT	I
THORIUM-232	09/14/93	1001	PCI/L		.139		.139	I
TOTAL DISSOLVED SOLIDS	09/14/93	0001	MG/L		629.	J	629.	I
	09/14/93	1001	MG/L		632.	J	632.	I
TOTAL KJELDAHL NITROGEN	09/14/93	0001	MG/L		0.33		0.33	I
	09/14/93	1001	MG/L		0.37		0.37	I
TOTAL ORGANIC CARBON	09/14/93	0001	MG/L		0.54		0.54	I
TOTAL PHOSPHATE	09/14/93	0001	MG/L		0.11		0.11	I
	09/14/93	1001	MG/L		0.11		0.11	I
TRITIUM	09/14/93	0001	PCI/L		13500.		13500.	I
	09/14/93	1001	PCI/L		12300.		12300.	I
URANIUM-234	09/14/93	0001	PCI/L		.203		.203	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0311
NORTH COORDINATE: 597872.58 FT
EAST COORDINATE: 1494186.02 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND WELL GRADED (SW)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHA	09/15/93	0001	UG/L		8.1	J	8.1	I
	09/15/93	1001	UG/L		5.0	J	5.0	I
ALUMINUM, TOTAL	09/15/93	1001	UG/L		26.8		26.8	I
AMMONIA	09/15/93	0001	MG/L		0.27		0.27	I
	09/15/93	1001	MG/L		0.14		0.14	I
ARSENIC, TOTAL	09/15/93	0001	UG/L	B	3.8	J	3.8	I
BARIUM, SOLUBLE	09/15/93	0001	UG/L	B	69.6		69.6	I
	09/15/93	1001	UG/L	B	72.0		72.0	I
BARIUM, TOTAL	09/15/93	0001	UG/L	B	67.7		67.7	I
	09/15/93	1001	UG/L	B	66.6		66.6	I
CALCIUM, SOLUBLE	09/15/93	0001	UG/L		81800.	J	81800.	I
	09/15/93	1001	UG/L		81000.	J	81000.	I
CALCIUM, TOTAL	09/15/93	0001	UG/L		78700.	J	78700.	I
	09/15/93	1001	UG/L		80000.	J	80000.	I
CHLORIDE	09/15/93	0001	MG/L		51.4	J	51.4	I
	09/15/93	1001	MG/L		54.6	J	54.6	I
COPPER, SOLUBLE	09/15/93	1001	UG/L	B	0.81	J	0.81	I
COPPER, TOTAL	09/15/93	1001	UG/L	B	1.0	J	1.0	I
FLUORIDE	09/15/93	0001	MG/L		0.23		0.23	I
	09/15/93	1001	MG/L		0.22		0.22	I
IRON, SOLUBLE	09/15/93	0001	UG/L	B	16.8		16.8	I
	09/15/93	1001	UG/L	B	13.5		13.5	I
IRON, TOTAL	09/15/93	0001	UG/L	B	30.3		30.3	I
	09/15/93	1001	UG/L	B	33.8		33.8	I
LEAD, TOTAL	09/15/93	0001	UG/L	B	2.4	J	2.4	I
LITHIUM, SOLUBLE	09/15/93	1001	UG/L	B	2.4		REJECT	I
MAGNESIUM, SOLUBLE	09/15/93	0001	UG/L		26100.	J	26100.	I
	09/15/93	1001	UG/L		25800.	J	25800.	I
MAGNESIUM, TOTAL	09/15/93	0001	UG/L		25100.	J	25100.	I
	09/15/93	1001	UG/L		25300.	J	25300.	I
MOLYBDENUM	09/15/93	0001	UG/L	B	2.3		2.3	I
	09/15/93	1001	UG/L	B	2.9		2.9	I
MOLYBDENUM, SOLUBLE	09/15/93	0001	UG/L	B	2.0		2.0	I
	09/15/93	1001	UG/L	B	1.9		1.9	I
NICKEL, SOLUBLE	09/15/93	0001	UG/L	B	9.2		9.2	I
	09/15/93	1001	UG/L	B	11.2		11.2	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0311
NORTH COORDINATE: 597872.58 FT
EAST COORDINATE: 1494186.02 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND WELL GRADED (SW)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
NICKEL, TOTAL	09/15/93	0001	UG/L	B	12.9		12.9	I
	09/15/93	1001	UG/L	B	10.9		10.9	I
NITRATE NITRITE	09/15/93	0001	MG/L		4.7		4.7	I
	09/15/93	1001	MG/L		4.0		4.0	I
PHENOL	09/15/93	1001	UG/L	J	0.6	J	0.6	I
PLUTONIUM-239/240	09/15/93	0001	PCI/L		.184		.184	I
	09/15/93	1001	PCI/L		.0619		.0619	I
POTASSIUM, SOLUBLE	09/15/93	0001	UG/L	B	2680.		2680.	I
	09/15/93	1001	UG/L	B	2680.		2680.	I
POTASSIUM, TOTAL	09/15/93	0001	UG/L	B	2640.		2640.	I
	09/15/93	1001	UG/L	B	2680.		2680.	I
RADIUM-226	09/15/93	0001	PCI/L		.191		.191	I
	09/15/93	1001	PCI/L		.211		.211	I
SODIUM, SOLUBLE	09/15/93	0001	UG/L		49000.	J	49000.	I
	09/15/93	1001	UG/L		48400.	J	48400.	I
SODIUM, TOTAL	09/15/93	0001	UG/L		47200.	J	47200.	I
	09/15/93	1001	UG/L		46800.	J	46800.	I
SULFATE	09/15/93	0001	MG/L		53.5		53.5	I
	09/15/93	1001	MG/L		51.6		51.6	I
THORIUM-228	09/15/93	0001	PCI/L		.461		REJECT	I
	09/15/93	1001	PCI/L		.756		.756	I
THORIUM-230	09/15/93	0001	PCI/L		.514		REJECT	I
TIN, SOLUBLE	09/15/93	0001	UG/L	B	16.1		16.1	I
	09/15/93	1001	UG/L	B	17.1		17.1	I
TIN, TOTAL	09/15/93	0001	UG/L	B	16.9		16.9	I
	09/15/93	1001	UG/L	B	18.6		18.6	I
TOTAL DISSOLVED SOLIDS	09/15/93	0001	MG/L		555.	J	555.	I
	09/15/93	1001	MG/L		530.	J	530.	I
TOTAL ORGANIC CARBON	09/15/93	0001	MG/L		1.0		1.0	I
	09/15/93	1001	MG/L		1.0		1.0	I
TOTAL PHOSPHATE	09/15/93	0001	MG/L		0.29		0.29	I
	09/15/93	1001	MG/L		0.30		0.30	I
TRITIUM	09/15/93	0001	PCI/L		792.		792.	I
	09/15/93	1001	PCI/L		792.		792.	I
URANIUM-234	09/15/93	0001	PCI/L		.515		.515	I
	09/15/93	1001	PCI/L		.51		.51	I
URANIUM-238	09/15/93	0001	PCI/L		.496		.496	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0311
NORTH COORDINATE: 597872.58 FT
EAST COORDINATE: 1494186.02 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND WELL GRADED (SW)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
URANIUM-238	09/15/93	1001	PCI/L		.456		.456	I
VANADIUM, SOLUBLE	09/15/93	0001	UG/L	B	9.8		9.8	I
	09/15/93	1001	UG/L	B	9.2		9.2	I
VANADIUM, TOTAL	09/15/93	0001	UG/L	B	9.2		9.2	I
	09/15/93	1001	UG/L		11.3		11.3	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0312
NORTH COORDINATE: 597747.67 FT
EAST COORDINATE: 1495031.74 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: CLAYEY GRAVEL OR CLAYEY SANDY GRAVEL (GC)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,2-CIS-DICHLOROETHENE	09/24/93	0001	UG/L		8.7	J	8.7	I
1,2-TRANS-DICHLOROETHENE	09/24/93	0001	UG/L		1.1	J	1.1	I
ALUMINUM, TOTAL	09/24/93	0001	UG/L		1910.		1910.	I
ANTIMONY, SOLUBLE	09/24/93	0001	UG/L	B	5.9		5.9	I
ANTIMONY, TOTAL	09/24/93	0001	UG/L	B	2.2		2.2	I
ARSENIC, TOTAL	09/24/93	0001	UG/L	B	15.7		15.7	I
BARIUM, SOLUBLE	09/24/93	0001	UG/L	B	26.9		26.9	I
BARIUM, TOTAL	09/24/93	0001	UG/L	B	39.9		39.9	I
BERYLLIUM, TOTAL	09/24/93	0001	UG/L	B	0.25		0.25	I
CALCIUM, SOLUBLE	09/24/93	0001	UG/L		206000.	J	206000.	I
CALCIUM, TOTAL	09/24/93	0001	UG/L		139000.	J	139000.	I
CHROMIUM, TOTAL	09/24/93	0001	UG/L		8190.		8190.	I
COBALT, SOLUBLE	09/24/93	0001	UG/L		283.		283.	I
COBALT, TOTAL	09/24/93	0001	UG/L		260.		260.	I
COPPER, SOLUBLE	09/24/93	0001	UG/L	B	8.4		8.4	I
COPPER, TOTAL	09/24/93	0001	UG/L		277.		277.	I
IRON, SOLUBLE	09/24/93	0001	UG/L		4900.		4900.	I
IRON, TOTAL	09/24/93	0001	UG/L		33400.		33400.	I
LEAD, SOLUBLE	09/24/93	0001	UG/L		4.1	J	4.1	I
LEAD, TOTAL	09/24/93	0001	UG/L		8.5		8.5	I
LITHIUM, TOTAL	09/24/93	0001	UG/L	B	31.9		31.9	I
MAGNESIUM, SOLUBLE	09/24/93	0001	UG/L		87000.		87000.	I
MAGNESIUM, TOTAL	09/24/93	0001	UG/L		64600.		64600.	I
MANGANESE, SOLUBLE	09/24/93	0001	UG/L		2100.		2100.	I
MANGANESE, TOTAL	09/24/93	0001	UG/L		2140.		2140.	I
MOLYBDENUM	09/24/93	0001	UG/L		261.		261.	I
MOLYBDENUM, SOLUBLE	09/24/93	0001	UG/L		26.5		26.5	I
NICKEL, SOLUBLE	09/24/93	0001	UG/L		7220.		7220.	I
NICKEL, TOTAL	09/24/93	0001	UG/L		6600.		6600.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0312
NORTH COORDINATE: 597747.67 FT
EAST COORDINATE: 1495031.74 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: CLAYEY GRAVEL OR CLAYEY SANDY GRAVEL (GC)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
POTASSIUM, SOLUBLE	09/24/93	0001	UG/L	B	4810.	J	4810.	I
POTASSIUM, TOTAL	09/24/93	0001	UG/L		6000.		6000.	I
SODIUM, SOLUBLE	09/24/93	0001	UG/L		57800.		57800.	I
SODIUM, TOTAL	09/24/93	0001	UG/L		53100.		53100.	I
TIN, TOTAL	09/24/93	0001	UG/L	B	18.5		18.5	I
TRICHLOROETHENE	09/24/93	0001	UG/L		22.	J	22.	I
TRITIUM	09/24/93	0001	PCI/L		8930.		8930.	I
VANADIUM, SOLUBLE	09/24/93	0001	UG/L		21.9		21.9	I
VANADIUM, TOTAL	09/24/93	0001	UG/L		59.5		59.5	I
ZINC, SOLUBLE	09/24/93	0001	UG/L		138.		138.	I
ZINC, TOTAL	09/24/93	0001	UG/L		399.		399.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0313
NORTH COORDINATE: 596850.42 FT
EAST COORDINATE: 1495021.50 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LEAN CLAYS, SANDY CLAYS, OR GRAVELLY CLAYS (CL)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, SOLUBLE	09/13/93	0001	UG/L		20.2		20.2	I
ALUMINUM, TOTAL	09/13/93	0001	UG/L		3300.		3300.	I
AMMONIA	09/13/93	0001	MG/L		0.24		0.24	I
BARIUM, SOLUBLE	09/13/93	0001	UG/L	B	147.		147.	I
BARIUM, TOTAL	09/13/93	0001	UG/L	B	164.		164.	I
BERYLLIUM, TOTAL	09/13/93	0001	UG/L	B	0.31		0.31	I
CALCIUM, SOLUBLE	09/13/93	0001	UG/L		139000.	J	139000.	I
CALCIUM, TOTAL	09/13/93	0001	UG/L		203000.	J	203000.	I
CHLORIDE	09/13/93	0001	MG/L		201.	J	201.	I
CHROMIUM, TOTAL	09/13/93	0001	UG/L		258.		258.	I
COBALT, TOTAL	09/13/93	0001	UG/L	B	9.5		9.5	I
COPPER, SOLUBLE	09/13/93	0001	UG/L	B	1.8		1.8	I
COPPER, TOTAL	09/13/93	0001	UG/L	B	13.7		13.7	I
FLUORIDE	09/13/93	0001	MG/L		0.20		0.20	I
IRON, TOTAL	09/13/93	0001	UG/L		9050.	J	9050.	I
LEAD, TOTAL	09/13/93	0001	UG/L	B	2.6	J	2.6	I
LITHIUM, SOLUBLE	09/13/93	0001	UG/L	B	22.4		22.4	I
LITHIUM, TOTAL	09/13/93	0001	UG/L	B	27.1		27.1	I
MAGNESIUM, SOLUBLE	09/13/93	0001	UG/L		43300.	J	43300.	I
MAGNESIUM, TOTAL	09/13/93	0001	UG/L		50000.	J	50000.	I
MANGANESE, SOLUBLE	09/13/93	0001	UG/L		68.2	J	68.2	I
MANGANESE, TOTAL	09/13/93	0001	UG/L		255.	J	255.	I
NICKEL, SOLUBLE	09/13/93	0001	UG/L		109.		109.	I
NICKEL, TOTAL	09/13/93	0001	UG/L		160.		160.	I
NITRATE NITRITE	09/13/93	0001	MG/L		2.0		2.0	I
PLUTONIUM-239/240	09/13/93	0001	PCI/L		.069		.069	I
POTASSIUM, SOLUBLE	09/13/93	0001	UG/L	B	2670.		2670.	I
POTASSIUM, TOTAL	09/13/93	0001	UG/L	B	3520.		3520.	I
RADIUM-226	09/13/93	0001	PCI/L		.817		.817	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0313
NORTH COORDINATE: 596850.42 FT
EAST COORDINATE: 1495021.50 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LEAN CLAYS, SANDY CLAYS, OR GRAVELLY CLAYS (CL)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SODIUM, SOLUBLE	09/13/93	0001	UG/L		86500.	J	86500.	I
SODIUM, TOTAL	09/13/93	0001	UG/L		77400.	J	77400.	I
SULFATE	09/13/93	0001	MG/L		133.		133.	I
TETRACHLOROETHENE	09/13/93	0001	UG/L		7.5	J	7.5	I
THORIUM-228	09/13/93	0001	PCI/L		.441		REJECT	I
THORIUM-230	09/13/93	0001	PCI/L		.717		.717	I
TIN, SOLUBLE	09/13/93	0001	UG/L	B	20.4		20.4	I
TOTAL DISSOLVED SOLIDS	09/13/93	0001	MG/L		867.		867.	I
TOTAL KJELDAHL NITROGEN	09/13/93	0001	MG/L		0.15		0.15	I
TOTAL ORGANIC CARBON	09/13/93	0001	MG/L		2.1		2.1	I
TOTAL PHOSPHATE	09/13/93	0001	MG/L		0.21		0.21	I
TOTAL SUSPENDED SOLIDS.	09/13/93	0001	MG/L		99.0		99.0	I
TRICHLOROETHENE	09/13/93	0001	UG/L		3.5		3.5	I
TRITIUM	09/13/93	0001	PCI/L		4850.		4850.	I
URANIUM-234	09/13/93	0001	PCI/L		.738		.738	I
URANIUM-238	09/13/93	0001	PCI/L		.594		.594	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0314
NORTH COORDINATE: 597414.24 FT
EAST COORDINATE: 1495712.96 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LEAN CLAYS, SANDY CLAYS, OR GRAVELLY CLAYS (CL)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, SOLUBLE	09/14/93	0001	UG/L		35.1		35.1	I
ALUMINUM, TOTAL	09/14/93	0001	UG/L		2600.	J	2600.	I
AMMONIA	09/14/93	0001	MG/L		0.28		0.28	I
ANTIMONY, SOLUBLE	09/14/93	0001	UG/L	B	7.6		7.6	I
ARSENIC, SOLUBLE	09/14/93	0001	UG/L	B	3.7	J	3.7	I
ARSENIC, TOTAL	09/14/93	0001	UG/L		46.5		46.5	I
BARIUM, SOLUBLE	09/14/93	0001	UG/L	B	76.5	J	76.5	I
BARIUM, TOTAL	09/14/93	0001	UG/L	B	85.8	J	85.8	I
BIS(2-ETHYLHEXYL)PHTHALATE	09/14/93	0001	UG/L	J	1.	J	1.	I
CALCIUM, SOLUBLE	09/14/93	0001	UG/L		149000.	J	149000.	I
CALCIUM, TOTAL	09/14/93	0001	UG/L		146000.	J	146000.	I
CHLORIDE	09/14/93	0001	MG/L		401.	J	401.	I
CHROMIUM, TOTAL	09/14/93	0001	UG/L	B	3.5	J	3.5	I
COPPER, SOLUBLE	09/14/93	0001	UG/L	B	5.2	J	5.2	I
COPPER, TOTAL	09/14/93	0001	UG/L	B	3.2	J	3.2	I
DI-N-BUTYL PHTHALATE	09/14/93	0001	UG/L	J	1.	J	1.	I
FLUORIDE	09/14/93	0001	MG/L		0.86		0.86	I
IRON, SOLUBLE	09/14/93	0001	UG/L		413.		413.	I
IRON, TOTAL	09/14/93	0001	UG/L		8790.	J	8790.	I
LEAD, SOLUBLE	09/14/93	0001	UG/L	B	2.6	J	2.6	I
LITHIUM, SOLUBLE	09/14/93	0001	UG/L	B	23.6	J	23.6	I
LITHIUM, TOTAL	09/14/93	0001	UG/L	B	23.6	J	23.6	I
MAGNESIUM, SOLUBLE	09/14/93	0001	UG/L		56400.	J	56400.	I
MAGNESIUM, TOTAL	09/14/93	0001	UG/L		54700.	J	54700.	I
MOLYBDENUM	09/14/93	0001	UG/L	B	11.2	J	11.2	I
MOLYBDENUM, SOLUBLE	09/14/93	0001	UG/L	B	10.6	J	10.6	I
NICKEL, SOLUBLE	09/14/93	0001	UG/L	B	2.5		2.5	I
NICKEL, TOTAL	09/14/93	0001	UG/L	B	8.7		8.7	I
PLUTONIUM-239/240	09/14/93	0001	PCI/L		.0834		.0834	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0314
NORTH COORDINATE: 597414.24 FT
EAST COORDINATE: 1495712.96 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LEAN CLAYS, SANDY CLAYS, OR GRAVELLY CLAYS (CL)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
POTASSIUM, SOLUBLE	09/14/93	0001	UG/L	B	2570.	J	2570.	I
POTASSIUM, TOTAL	09/14/93	0001	UG/L	B	3130.	J	3130.	I
RADIUM-226	09/14/93	0001	PCI/L		.679		.679	I
SODIUM, SOLUBLE	09/14/93	0001	UG/L		131000.	J	131000.	I
SODIUM, TOTAL	09/14/93	0001	UG/L		123000.	J	123000.	I
SULFATE	09/14/93	0001	MG/L		110.		110.	I
THORIUM-228	09/14/93	0001	PCI/L		.576		REJECT	I
THORIUM-230	09/14/93	0001	PCI/L		1.26		1.26	I
TIN, SOLUBLE	09/14/93	0001	UG/L	B	33.0	J	33.0	I
TIN, TOTAL	09/14/93	0001	UG/L	B	32.5	J	32.5	I
TOTAL DISSOLVED SOLIDS	09/14/93	0001	MG/L		1070.		1070.	I
TOTAL KJELDAHL NITROGEN	09/14/93	0001	MG/L		0.50		0.50	I
TOTAL ORGANIC CARBON	09/14/93	0001	MG/L		0.93		0.93	I
TOTAL PHOSPHATE	09/14/93	0001	MG/L		0.30		0.30	I
TOTAL SUSPENDED SOLIDS	09/14/93	0001	MG/L		81.0		81.0	I
TRITIUM	09/14/93	0001	PCI/L		4580.		4580.	I
URANIUM-234	09/14/93	0001	PCI/L		.796		.796	I
URANIUM-238	09/14/93	0001	PCI/L		.708		.708	I
ZINC, SOLUBLE	09/14/93	0001	UG/L		161.	J	161.	I
ZINC, TOTAL	09/14/93	0001	UG/L		51.2	J	51.2	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0315
NORTH COORDINATE: 597341.80 FT
EAST COORDINATE: 1495078.77 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY SAND OR SILTY GRAVELLY SAND (SM)
HYDRAULIC FLOW RELATIONSHIP: CROSS GRADIENT (C)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,2-CIS-DICHLOROETHENE	09/12/93	0001	UG/L		1.5		1.5	I
ANTIMONY, SOLUBLE	09/12/93	0001	UG/L	B	2.5		2.5	I
BARIUM, SOLUBLE	09/12/93	0001	UG/L	B	133.		133.	I
BARIUM, TOTAL	09/12/93	0001	UG/L	B	167.		167.	I
CALCIUM, SOLUBLE	09/12/93	0001	UG/L		139000.	J	139000.	I
CALCIUM, TOTAL	09/12/93	0001	UG/L		143000.	J	143000.	I
CHLORIDE	09/12/93	0001	MG/L		303.	J	303.	I
CHROMIUM, TOTAL	09/12/93	0001	UG/L		69.1	J	69.1	I
COPPER, TOTAL	09/12/93	0001	UG/L	B	3.1	J	3.1	I
FLUORIDE	09/12/93	0001	MG/L		0.32		0.32	I
IRON, SOLUBLE	09/12/93	0001	UG/L		134.		134.	I
IRON, TOTAL	09/12/93	0001	UG/L		1090.		1090.	I
LEAD, TOTAL	09/12/93	0001	UG/L	B	2.7	J	2.7	I
LITHIUM, SOLUBLE	09/12/93	0001	UG/L	B	11.6	J	11.6	I
LITHIUM, TOTAL	09/12/93	0001	UG/L	B	15.2		15.2	I
MAGNESIUM, SOLUBLE	09/12/93	0001	UG/L		46000.		46000.	I
MAGNESIUM, TOTAL	09/12/93	0001	UG/L		51500.		51500.	I
MANGANESE, SOLUBLE	09/12/93	0001	UG/L		23.5		23.5	I
MANGANESE, TOTAL	09/12/93	0001	UG/L		20.4		20.4	I
MOLYBDENUM	09/12/93	0001	UG/L	B	4.5		4.5	I
NICKEL, SOLUBLE	09/12/93	0001	UG/L		43.4	J	43.4	I
NICKEL, TOTAL	09/12/93	0001	UG/L		102.	J	102.	I
NITRATE NITRITE	09/12/93	0001	MG/L		1.4		1.4	I
PLUTONIUM-239/240	09/12/93	0001	PCI/L		.0563		.0563	I
POTASSIUM, SOLUBLE	09/12/93	0001	UG/L	B	2860.		2860.	I
POTASSIUM, TOTAL	09/12/93	0001	UG/L	B	2440.		2440.	I
RADIUM-226	09/12/93	0001	PCI/L		.338		.338	I
SELENIUM, SOLUBLE	09/12/93	0001	UG/L	B	1.1	J	1.1	I
SODIUM, SOLUBLE	09/12/93	0001	UG/L		92000.		92000.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0315
NORTH COORDINATE: 597341.80 FT
EAST COORDINATE: 1495078.77 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY SAND OR SILTY GRAVELLY SAND (SM)
HYDRAULIC FLOW RELATIONSHIP: CROSS GRADIENT (C)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SODIUM, TOTAL	09/12/93	0001	UG/L		107000.		107000.	I
SULFATE	09/12/93	0001	MG/L		114.		114.	I
TETRACHLOROMETHANE (CCL4)	09/12/93	0001	UG/L		3.1		3.1	I
THORIUM-228	09/12/93	0001	PCI/L		.445		REJECT	I
THORIUM-230	09/12/93	0001	PCI/L		1.09		1.09	I
TIN, SOLUBLE	09/12/93	0001	UG/L	B	22.6	J	22.6	I
TIN, TOTAL	09/12/93	0001	UG/L	B	25.7	J	25.7	I
TOTAL DISSOLVED SOLIDS	09/12/93	0001	MG/L		943.		943.	I
TOTAL ORGANIC CARBON	09/12/93	0001	MG/L		0.98		0.98	I
TOTAL PHOSPHATE	09/12/93	0001	MG/L		0.10		0.10	I
TOTAL SUSPENDED SOLIDS	09/12/93	0001	MG/L		18.0		18.0	I
TRICHLOROETHENE	09/12/93	0001	UG/L		8.6		8.6	I
TRITIUM	09/12/93	0001	PCI/L		5660.		5660.	I
URANIUM-234	09/12/93	0001	PCI/L		.68		.68	I
URANIUM-238	09/12/93	0001	PCI/L		.42		.42	I
VANADIUM, SOLUBLE	09/12/93	0001	UG/L		14.0	J	14.0	I
VANADIUM, TOTAL	09/12/93	0001	UG/L		14.3	J	14.3	I
ZINC, TOTAL	09/12/93	0001	UG/L	B	11.2	J	11.2	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0317
NORTH COORDINATE: 596207.32 FT
EAST COORDINATE: 1495022.91 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	09/10/93	0001	UG/L		890.		890.	I
AMERICIUM-241	09/10/93	0001	PCI/L		.131		.131	I
AMMONIA	09/10/93	0001	MG/L		0.40		0.40	I
ANTIMONY, SOLUBLE	09/10/93	0001	UG/L	B	2.9	J	2.9	I
BARIUM, SOLUBLE	09/10/93	0001	UG/L	B	78.2		78.2	I
BARIUM, TOTAL	09/10/93	0001	UG/L	B	76.4	J	76.4	I
CALCIUM, SOLUBLE	09/10/93	0001	UG/L		79300.	J	79300.	I
CALCIUM, TOTAL	09/10/93	0001	UG/L		78700.	J	78700.	I
CHLORIDE	09/10/93	0001	MG/L		86.0	J	86.0	I
CHROMIUM, TOTAL	09/10/93	0001	UG/L	B	5.4	J	5.4	I
COBALT, TOTAL	09/10/93	0001	UG/L	B	1.6	J	1.6	I
COPPER, SOLUBLE	09/10/93	0001	UG/L	B	0.85		0.85	I
COPPER, TOTAL	09/10/93	0001	UG/L	B	3.6	J	3.6	I
FLUORIDE	09/10/93	0001	MG/L		0.15		0.15	I
IRON, TOTAL	09/10/93	0001	UG/L		1850.	J	1850.	I
LITHIUM, SOLUBLE	09/10/93	0001	UG/L	B	5.2		5.2	I
LITHIUM, TOTAL	09/10/93	0001	UG/L	B	5.2		5.2	I
MAGNESIUM, SOLUBLE	09/10/93	0001	UG/L		28100.		28100.	I
MAGNESIUM, TOTAL	09/10/93	0001	UG/L		27600.		27600.	I
MANGANESE, SOLUBLE	09/10/93	0001	UG/L		48.7		48.7	I
MANGANESE, TOTAL	09/10/93	0001	UG/L		75.6	J	75.6	I
NICKEL, TOTAL	09/10/93	0001	UG/L	B	5.0	J	5.0	I
NITRATE NITRITE	09/10/93	0001	MG/L		0.58		0.58	I
PLUTONIUM-239/240	09/10/93	0001	PCI/L		.108		REJECT	I
POTASSIUM, SOLUBLE	09/10/93	0001	UG/L	B	2390.		2390.	I
POTASSIUM, TOTAL	09/10/93	0001	UG/L	B	2410.		2410.	I
SELENIUM, TOTAL	09/10/93	0001	UG/L	B	2.7	J	2.7	I
SODIUM, SOLUBLE	09/10/93	0001	UG/L		52300.		52300.	I
SODIUM, TOTAL	09/10/93	0001	UG/L		47100.		47100.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0317
NORTH COORDINATE: 596207.32 FT
EAST COORDINATE: 1495022.91 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SULFATE	09/10/93	0001	MG/L		78.4		78.4	I
THORIUM-228	09/10/93	0001	PCI/L		.735		REJECT	I
TOTAL DISSOLVED SOLIDS	09/10/93	0001	MG/L		538.	J	538.	I
TOTAL KJELDAHL NITROGEN	09/10/93	0001	MG/L		0.46		0.46	I
TOTAL ORGANIC CARBON	09/10/93	0001	MG/L		0.88		0.88	I
TOTAL PHOSPHATE	09/10/93	0001	MG/L		0.15		0.15	I
TOTAL SUSPENDED SOLIDS	09/10/93	0001	MG/L		37.0	J	37.0	I
TRITIUM	09/10/93	0001	PCI/L		1240.		1240.	I
URANIUM-234	09/10/93	0001	PCI/L		.478		.478	I
URANIUM-238	09/10/93	0001	PCI/L		.172		.172	I
VANADIUM, TOTAL	09/10/93	0001	UG/L		13.5	J	13.5	I
ZINC, TOTAL	09/10/93	0001	UG/L		37.2	J	37.2	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0318
NORTH COORDINATE: 598644.24 FT
EAST COORDINATE: 1497216.04 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SHALE (SH)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMMONIA	09/12/93	0001	MG/L		0.35		0.35	I
ANTIMONY, SOLUBLE	09/12/93	0001	UG/L	B	4.1	J	4.1	I
BARIUM, SOLUBLE	09/12/93	0001	UG/L	B	95.1		95.1	I
BARIUM, TOTAL	09/12/93	0001	UG/L	B	105.		105.	I
CALCIUM, SOLUBLE	09/12/93	0001	UG/L		90900.	J	90900.	I
CALCIUM, TOTAL	09/12/93	0001	UG/L		99600.	J	99600.	I
CHLORIDE	09/12/93	0001	MG/L		127.	J	127.	I
COPPER, SOLUBLE	09/12/93	0001	UG/L	B	2.5		2.5	I
FLUORIDE	09/12/93	0001	MG/L		0.45		0.45	I
IRON, SOLUBLE	09/12/93	0001	UG/L		455.	J	455.	I
IRON, TOTAL	09/12/93	0001	UG/L		1390.	J	1390.	I
LITHIUM, SOLUBLE	09/12/93	0001	UG/L	B	24.3		24.3	I
LITHIUM, TOTAL	09/12/93	0001	UG/L	B	27.8		27.8	I
MAGNESIUM, SOLUBLE	09/12/93	0001	UG/L		35700.		35700.	I
MAGNESIUM, TOTAL	09/12/93	0001	UG/L		39000.		39000.	I
MANGANESE, SOLUBLE	09/12/93	0001	UG/L		33.0		33.0	I
MANGANESE, TOTAL	09/12/93	0001	UG/L		34.2		34.2	I
PLUTONIUM-239/240	09/12/93	0001	PCI/L		.236		REJECT	I
POTASSIUM, SOLUBLE	09/12/93	0001	UG/L	B	3640.		3640.	I
POTASSIUM, TOTAL	09/12/93	0001	UG/L	B	3940.		3940.	I
SODIUM, SOLUBLE	09/12/93	0001	UG/L		35200.		35200.	I
SODIUM, TOTAL	09/12/93	0001	UG/L		38100.		38100.	I
SULFATE	09/12/93	0001	MG/L		70.8		70.8	I
THORIUM-228	09/12/93	0001	PCI/L		.92		REJECT	I
THORIUM-230	09/12/93	0001	PCI/L		.894		REJECT	I
TOTAL DISSOLVED SOLIDS	09/12/93	0001	MG/L		614.	J	614.	I
TOTAL KJELDAHL NITROGEN	09/12/93	0001	MG/L		0.34		0.34	I
TOTAL ORGANIC CARBON	09/12/93	0001	MG/L		1.1		1.1	I
TOTAL PHOSPHATE	09/12/93	0001	MG/L		0.092		0.092	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0318
NORTH COORDINATE: 598644.24 FT
EAST COORDINATE: 1497216.04 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SHALE (SH)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL SUSPENDED SOLIDS	09/12/93	0001	MG/L		5.0	J	5.0	I
TRITIUM	09/12/93	0001	PCI/L		2850.		2850.	I
VANADIUM, SOLUBLE	09/12/93	0001	UG/L		14.8		14.8	I
VANADIUM, TOTAL	09/12/93	0001	UG/L		15.3		15.3	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0319
NORTH COORDINATE: 595512.74 FT
EAST COORDINATE: 1495147.81 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: CLAYEY SAND OR CLAYEY GRAVELLY SAND (SC)
HYDRAULIC FLOW RELATIONSHIP: NOT KNOWN (N)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ANTIMONY, SOLUBLE	09/22/93	0001	UG/L	B	4.8		4.8	I
BARIUM, SOLUBLE	09/22/93	0001	UG/L	B	125.	J	125.	I
BARIUM, TOTAL	09/22/93	0001	UG/L	B	122.		122.	I
CALCIUM, SOLUBLE	09/22/93	0001	UG/L		95600.	J	95600.	I
CALCIUM, TOTAL	09/22/93	0001	UG/L		94300.	J	94300.	I
CHLORIDE	09/22/93	0001	MG/L		64.4		64.4	I
COPPER, SOLUBLE	09/22/93	0001	UG/L	B	3.1		3.1	I
COPPER, TOTAL	09/22/93	0001	UG/L	B	1.1		1.1	I
FLUORIDE	09/22/93	0001	MG/L		0.25		0.25	I
LITHIUM, SOLUBLE	09/22/93	0001	UG/L	B	8.0		8.0	I
LITHIUM, TOTAL	09/22/93	0001	UG/L	B	8.0		8.0	I
MAGNESIUM, SOLUBLE	09/22/93	0001	UG/L		30900.	J	30900.	I
MAGNESIUM, TOTAL	09/22/93	0001	UG/L		30300.	J	30300.	I
MANGANESE, SOLUBLE	09/22/93	0001	UG/L		76.8		76.8	I
MANGANESE, TOTAL	09/22/93	0001	UG/L		83.6		83.6	I
MOLYBDENUM	09/22/93	0001	UG/L	B	3.1		3.1	I
MOLYBDENUM, SOLUBLE	09/22/93	0001	UG/L	B	2.2		2.2	I
NICKEL, SOLUBLE	09/22/93	0001	UG/L	B	19.6		19.6	I
NICKEL, TOTAL	09/22/93	0001	UG/L	B	19.1		19.1	I
NITRATE NITRITE	09/22/93	0001	MG/L		0.29		0.29	I
POTASSIUM, SOLUBLE	09/22/93	0001	UG/L	B	1780.		1780.	I
POTASSIUM, TOTAL	09/22/93	0001	UG/L	B	1780.		1780.	I
RADIUM-226	09/23/93	0001	PCI/L		.595		.595	I
SODIUM, SOLUBLE	09/22/93	0001	UG/L		42500.	J	42500.	I
SODIUM, TOTAL	09/22/93	0001	UG/L		42000.		42000.	I
SULFATE	09/22/93	0001	MG/L		36.2		36.2	I
THORIUM-228	09/23/93	0001	PCI/L		.806		REJECT	I
THORIUM-230	09/23/93	0001	PCI/L		.202		REJECT	I
TIN, SOLUBLE	09/22/93	0001	UG/L	B	18.3	J	18.3	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0319
NORTH COORDINATE: 595512.74 FT
EAST COORDINATE: 1495147.81 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: CLAYEY SAND OR CLAYEY GRAVELLY SAND (SC)
HYDRAULIC FLOW RELATIONSHIP: NOT KNOWN (N)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TIN, TOTAL	09/22/93	0001	UG/L	B	20.4	J	20.4	I
TOTAL DISSOLVED SOLIDS	09/22/93	0001	MG/L		499.		499.	I
TOTAL ORGANIC CARBON	09/22/93	0001	MG/L		0.62		0.62	I
TOTAL PHOSPHATE	09/22/93	0001	MG/L		0.10		0.10	I
TOTAL SUSPENDED SOLIDS	09/22/93	0001	MG/L		9.0		9.0	I
TRITIUM	09/23/93	0001	PCI/L		654.		654.	I
URANIUM-234	09/23/93	0001	PCI/L		1.14		1.14	I
URANIUM-238	09/23/93	0001	PCI/L		.906		.906	I
VANADIUM, SOLUBLE	09/22/93	0001	UG/L	B	7.4	J	7.4	I
VANADIUM, TOTAL	09/22/93	0001	UG/L	B	7.9	J	7.9	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0320
NORTH COORDINATE: 595022.59 FT
EAST COORDINATE: 1495353.77 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LEAN CLAYS, SANDY CLAYS, OR GRAVELLY CLAYS (CL)
HYDRAULIC FLOW RELATIONSHIP: NOT KNOWN (N)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, SOLUBLE	09/22/93	0001	UG/L	B	17.7		17.7	I
ALUMINUM, TOTAL	09/22/93	0001	UG/L		102.		102.	I
AMERICIUM-241	09/23/93	0001	PCI/L		.151		.151	I
BARIUM, SOLUBLE	09/22/93	0001	UG/L	B	123.		123.	I
BARIUM, TOTAL	09/22/93	0001	UG/L	B	117.		117.	I
CALCIUM, SOLUBLE	09/22/93	0001	UG/L		92300.		92300.	I
CALCIUM, TOTAL	09/22/93	0001	UG/L		87500.		87500.	I
CHLORIDE	09/22/93	0001	MG/L		57.4		57.4	I
CHROMIUM, TOTAL	09/22/93	0001	UG/L	B	6.3		6.3	I
FLUORIDE	09/22/93	0001	MG/L		0.17		0.17	I
IRON, SOLUBLE	09/22/93	0001	UG/L	B	33.7		33.7	I
IRON, TOTAL	09/22/93	0001	UG/L		277.		277.	I
MAGNESIUM, SOLUBLE	09/22/93	0001	UG/L		27100.	J	27100.	I
MAGNESIUM, TOTAL	09/22/93	0001	UG/L		25900.	J	25900.	I
MANGANESE, SOLUBLE	09/22/93	0001	UG/L		17.9		17.9	I
MANGANESE, TOTAL	09/22/93	0001	UG/L		73.9		73.9	I
NICKEL, SOLUBLE	09/22/93	0001	UG/L	B	31.9		31.9	I
NICKEL, TOTAL	09/22/93	0001	UG/L	B	34.6		34.6	I
NITRATE NITRITE	09/22/93	0001	MG/L		0.93		0.93	I
PLUTONIUM-239/240	09/23/93	0001	PCI/L		.229		REJECT	I
POTASSIUM, SOLUBLE	09/22/93	0001	UG/L	B	1570.	J	1570.	I
POTASSIUM, TOTAL	09/22/93	0001	UG/L	B	1570.	J	1570.	I
RADIUM-226	09/23/93	0001	PCI/L		.751		.751	I
SODIUM, SOLUBLE	09/22/93	0001	UG/L		34100.		34100.	I
SODIUM, TOTAL	09/22/93	0001	UG/L		33300.		33300.	I
STRONTIUM-90	09/23/93	0001	PCI/L		.756		.756	I
SULFATE	09/22/93	0001	MG/L		43.2		43.2	I
THORIUM-228	09/23/93	0001	PCI/L		.504		REJECT	I
THORIUM-230	09/23/93	0001	PCI/L		.705	J	.705	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0320
NORTH COORDINATE: 595022.59 FT
EAST COORDINATE: 1495353.77 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LEAN CLAYS, SANDY CLAYS, OR GRAVELLY CLAYS (CL)
HYDRAULIC FLOW RELATIONSHIP: NOT KNOWN (N)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL DISSOLVED SOLIDS	09/22/93	0001	MG/L		483.		483.	I
TOTAL ORGANIC CARBON	09/22/93	0001	MG/L		0.56		0.56	I
TOTAL PHOSPHATE	09/22/93	0001	MG/L		0.10		0.10	I
TOTAL SUSPENDED SOLIDS	09/22/93	0001	MG/L		7.0		7.0	I
TRITIUM	09/23/93	0001	PCI/L		579.		579.	I
URANIUM-234	09/23/93	0001	PCI/L		.319		.319	I
URANIUM-238	09/23/93	0001	PCI/L		.274		.274	I
ZINC, TOTAL	09/22/93	0001	UG/L	B	16.8		16.8	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0322
NORTH COORDINATE: 598865.46 FT
EAST COORDINATE: 1497201.16 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SHALE (SH)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, SOLUBLE	09/27/93	0001	UG/L		70.5		70.5	I
ALUMINUM, TOTAL	09/27/93	0001	UG/L		4680.	J	4680.	I
AMMONIA	09/27/93	0001	MG/L		2.6		2.6	I
ANTIMONY, SOLUBLE	09/27/93	0001	UG/L	B	1.0	J	1.0	I
BARIUM, SOLUBLE	09/27/93	0001	UG/L	B	23.8		23.8	I
BARIUM, TOTAL	09/27/93	0001	UG/L	B	25.5		25.5	I
BERYLLIUM, TOTAL	09/27/93	0001	UG/L	B	0.27		0.27	I
CALCIUM, SOLUBLE	09/27/93	0001	UG/L		46300.	J	46300.	I
CALCIUM, TOTAL	09/27/93	0001	UG/L		52300.	J	52300.	I
CHLORIDE	09/27/93	0001	MG/L		81.8		81.8	I
CHROMIUM, TOTAL	09/27/93	0001	UG/L		13.4		13.4	I
COBALT, TOTAL	09/27/93	0001	UG/L	B	4.3		4.3	I
COPPER, SOLUBLE	09/27/93	0001	UG/L	B	1.1		1.1	I
COPPER, TOTAL	09/27/93	0001	UG/L	B	6.4		6.4	I
FLUORIDE	09/27/93	0001	MG/L		2.4		2.4	I
IRON, SOLUBLE	09/27/93	0001	UG/L	B	75.5		75.5	I
IRON, TOTAL	09/27/93	0001	UG/L		6950.	J	6950.	I
LITHIUM, SOLUBLE	09/27/93	0001	UG/L	B	67.7		67.7	I
LITHIUM, TOTAL	09/27/93	0001	UG/L	B	67.7		67.7	I
MAGNESIUM, SOLUBLE	09/27/93	0001	UG/L		30100.	J	30100.	I
MAGNESIUM, TOTAL	09/27/93	0001	UG/L		29600.	J	29600.	I
MANGANESE, SOLUBLE	09/27/93	0001	UG/L		24.5		24.5	I
MANGANESE, TOTAL	09/27/93	0001	UG/L		163.	J	163.	I
MOLYBDENUM	09/27/93	0001	UG/L		26.8		26.8	I
MOLYBDENUM, SOLUBLE	09/27/93	0001	UG/L		32.4		32.4	I
NITRATE NITRITE	09/27/93	0001	MG/L		0.054		0.054	I
PLUTONIUM-239/240	09/27/93	0001	PCI/L		.128		.128	I
POTASSIUM, SOLUBLE	09/27/93	0001	UG/L		15600.		15600.	I
POTASSIUM, TOTAL	09/27/93	0001	UG/L		14800.		14800.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0322
NORTH COORDINATE: 598865.46 FT
EAST COORDINATE: 1497201.16 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SHALE (SH)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
RADIUM-226	09/27/93	0001	PCI/L		1.35		1.35	I
SODIUM, SOLUBLE	09/27/93	0001	UG/L		128000.	J	128000.	I
SODIUM, TOTAL	09/27/93	0001	UG/L		113000.	J	113000.	I
SULFATE	09/27/93	0001	MG/L		85.5		85.5	I
THORIUM-228	09/27/93	0001	PCI/L		.607		.607	I
TIN, SOLUBLE	09/27/93	0001	UG/L	B	12.1		12.1	I
TIN, TOTAL	09/27/93	0001	UG/L	B	20.4		20.4	I
TOTAL DISSOLVED SOLIDS	09/27/93	0001	MG/L		659.		659.	I
TOTAL KJELDAHL NITROGEN	09/27/93	0001	MG/L		2.3		2.3	I
TOTAL PHOSPHATE	09/27/93	0001	MG/L		0.22		0.22	I
TOTAL SUSPENDED SOLIDS	09/27/93	0001	MG/L		9.0		9.0	I
URANIUM-234	09/27/93	0001	PCI/L		.266		.266	I
URANIUM-238	09/27/93	0001	PCI/L		.133		.133	I
VANADIUM, SOLUBLE	09/27/93	0001	UG/L	B	6.8	J	6.8	I
VANADIUM, TOTAL	09/27/93	0001	UG/L		11.1	J	11.1	I
ZINC, TOTAL	09/27/93	0001	UG/L		71.0	J	71.0	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0324
NORTH COORDINATE: 597926.59 FT
EAST COORDINATE: 1495701.00 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SHALE (SH)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,2-CIS-DICHLOROETHENE	09/16/93	0001	UG/L		2.0		2.0	I
ALUMINUM, TOTAL	09/16/93	0001	UG/L		5290.	J	5290.	I
AMERICIUM-241	09/16/93	0001	PCI/L		.119		.119	I
AMMONIA	09/16/93	0001	MG/L		0.58		0.58	I
ANTIMONY, SOLUBLE	09/16/93	0001	UG/L		11.9		11.9	I
ANTIMONY, TOTAL	09/16/93	0001	UG/L	B	2.9		2.9	I
BARIUM, SOLUBLE	09/16/93	0001	UG/L	B	76.0	J	76.0	I
BARIUM, TOTAL	09/16/93	0001	UG/L	B	125.	J	125.	I
BERYLLIUM, TOTAL	09/16/93	0001	UG/L	B	0.34		0.34	I
CALCIUM, SOLUBLE	09/16/93	0001	UG/L		211000.	J	211000.	I
CALCIUM, TOTAL	09/16/93	0001	UG/L		200000.	J	200000.	I
CHLORIDE	09/16/93	0001	MG/L		542.	J	542.	I
CHROMIUM, TOTAL	09/16/93	0001	UG/L		28.1		28.1	I
COPPER, SOLUBLE	09/16/93	0001	UG/L	B	5.1		5.1	I
FLUORIDE	09/16/93	0001	MG/L		0.25		0.25	I
IRON, SOLUBLE	09/16/93	0001	UG/L		298.	J	298.	I
IRON, TOTAL	09/16/93	0001	UG/L		4810.	J	4810.	I
LEAD, TOTAL	09/16/93	0001	UG/L	B	2.2	J	2.2	I
LITHIUM, SOLUBLE	09/16/93	0001	UG/L	B	28.7	J	28.7	I
LITHIUM, TOTAL	09/16/93	0001	UG/L	B	30.6	J	30.6	I
MAGNESIUM, SOLUBLE	09/16/93	0001	UG/L		72600.	J	72600.	I
MAGNESIUM, TOTAL	09/16/93	0001	UG/L		68300.	J	68300.	I
MANGANESE, SOLUBLE	09/16/93	0001	UG/L		946.	J	946.	I
MANGANESE, TOTAL	09/16/93	0001	UG/L		1130.	J	1130.	I
NITRATE NITRITE	09/16/93	0001	MG/L		0.024		0.024	I
PLUTONIUM-239/240	09/16/93	0001	PCI/L		.11		.11	I
POTASSIUM, SOLUBLE	09/16/93	0001	UG/L	B	2850.		2850.	I
POTASSIUM, TOTAL	09/16/93	0001	UG/L		5840.		5840.	I
RADIUM-226	09/16/93	0001	PCI/L		.552		.552	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0324
NORTH COORDINATE: 597926.59 FT
EAST COORDINATE: 1495701.00 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SHALE (SH)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SELENIUM, TOTAL	09/16/93	0001	UG/L	B	1.6	J	1.6	I
SODIUM, SOLUBLE	09/16/93	0001	UG/L		170000.		170000.	I
SODIUM, TOTAL	09/16/93	0001	UG/L		207000.		207000.	I
SULFATE	09/16/93	0001	MG/L		154.		154.	I
THORIUM-228	09/16/93	0001	PCI/L		.46		REJECT	I
TOTAL DISSOLVED SOLIDS	09/16/93	0001	MG/L		1450.		1450.	I
TOTAL KJELDAHL NITROGEN	09/16/93	0001	MG/L		0.14		0.14	I
TOTAL ORGANIC CARBON	09/16/93	0001	MG/L		1.4		1.4	I
TOTAL PHOSPHATE	09/16/93	0001	MG/L		0.27		0.27	I
TOTAL SUSPENDED SOLIDS	09/16/93	0001	MG/L		37.0		37.0	I
TRICHLOROETHENE	09/16/93	0001	UG/L		1.9		1.9	I
TRITIUM	09/16/93	0001	PCI/L		23200.		23200.	I
URANIUM-234	09/16/93	0001	PCI/L		1.56		1.56	I
URANIUM-238	09/16/93	0001	PCI/L		.656		.656	I
VANADIUM, SOLUBLE	09/16/93	0001	UG/L		25.5		25.5	I
VANADIUM, TOTAL	09/16/93	0001	UG/L		30.3		30.3	I
ZINC, SOLUBLE	09/16/93	0001	UG/L	B	17.4		17.4	I
ZINC, TOTAL	09/16/93	0001	UG/L	B	39.9		39.9	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0325
NORTH COORDINATE: 597270.67 FT
EAST COORDINATE: 1496570.83 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SHALE (SH)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	10/13/93	0001	UG/L		11500.	J	11500.	I
AMERICIUM-241	10/13/93	0001	PCI/L		.074		REJECT	I
AMMONIA	10/13/93	0001	MG/L		3.0		3.0	I
ANTIMONY, SOLUBLE	10/13/93	0001	UG/L		10.2		10.2	I
BARIUM, SOLUBLE	10/13/93	0001	UG/L		245.		245.	I
BARIUM, TOTAL	10/13/93	0001	UG/L		231.		231.	I
BERYLLIUM, TOTAL	10/13/93	0001	UG/L	B	0.68		0.68	I
CALCIUM, SOLUBLE	10/13/93	0001	UG/L		172000.	J	172000.	I
CALCIUM, TOTAL	10/13/93	0001	UG/L		295000.	J	295000.	I
CHLORIDE	10/13/93	0001	MG/L		2130.		2130.	I
CHROMIUM, TOTAL	10/13/93	0001	UG/L		30.8		30.8	I
COBALT, SOLUBLE	10/13/93	0001	UG/L	B	2.7		2.7	I
COBALT, TOTAL	10/13/93	0001	UG/L	B	14.6		14.6	I
COPPER, SOLUBLE	10/13/93	0001	UG/L	B	4.3	J	4.3	I
COPPER, TOTAL	10/13/93	0001	UG/L	B	21.0		21.0	I
FLUORIDE	10/13/93	0001	MG/L		0.67		0.67	I
IRON, TOTAL	10/13/93	0001	UG/L		19600.	J	19600.	I
LEAD, TOTAL	10/13/93	0001	UG/L		12.0		12.0	I
LITHIUM, SOLUBLE	10/13/93	0001	UG/L		254.		254.	I
LITHIUM, TOTAL	10/13/93	0001	UG/L		239.		239.	I
MAGNESIUM, SOLUBLE	10/13/93	0001	UG/L		88600.		88600.	I
MAGNESIUM, TOTAL	10/13/93	0001	UG/L		89100.		89100.	I
MANGANESE, SOLUBLE	10/13/93	0001	UG/L		109.		109.	I
MANGANESE, TOTAL	10/13/93	0001	UG/L		888.		888.	I
NICKEL, SOLUBLE	10/13/93	0001	UG/L	B	31.9		31.9	I
NICKEL, TOTAL	10/13/93	0001	UG/L		53.2		53.2	I
NITRATE NITRITE	10/13/93	0001	MG/L		0.14		0.14	I
PLUTONIUM-239/240	10/13/93	0001	PCI/L		.307		REJECT	I
POTASSIUM, SOLUBLE	10/13/93	0001	UG/L	B	28900.		28900.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0325
NORTH COORDINATE: 597270.67 FT
EAST COORDINATE: 1496570.83 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SHALE (SH)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
POTASSIUM, TOTAL	10/13/93	0001	UG/L	B	23300.		23300.	I
RADIUM-226	10/13/93	0001	PCI/L		4.38		4.38	I
SODIUM, SOLUBLE	10/13/93	0001	UG/L		778000.		778000.	I
SODIUM, TOTAL	10/13/93	0001	UG/L		632000.		632000.	I
SULFATE	10/13/93	0001	MG/L		79.5		79.5	I
THORIUM-228	10/13/93	0001	PCI/L		1.64		REJECT	I
THORIUM-230	10/13/93	0001	PCI/L		.141		.141	I
THORIUM-232	10/13/93	0001	PCI/L		.815		.815	I
TOTAL DISSOLVED SOLIDS	10/13/93	0001	MG/L		1990.	J	1990.	I
TOTAL KJELDAHL NITROGEN	10/13/93	0001	MG/L		4.6		4.6	I
TOTAL ORGANIC CARBON	10/13/93	0001	MG/L		0.55		0.55	I
TOTAL PHOSPHATE	10/13/93	0001	MG/L		0.61		0.61	I
TOTAL SUSPENDED SOLIDS	10/13/93	0001	MG/L		702.	J	702.	I
TRITIUM	10/13/93	0001	PCI/L		576.		576.	I
URANIUM-234	10/13/93	0001	PCI/L		.886		.886	I
URANIUM-238	10/13/93	0001	PCI/L		.303		.303	I
VANADIUM, SOLUBLE	10/13/93	0001	UG/L	B	1.6	J	1.6	I
VANADIUM, TOTAL	10/13/93	0001	UG/L		19.2		19.2	I
ZINC, TOTAL	10/13/93	0001	UG/L		51.4	J	51.4	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0326
NORTH COORDINATE: 597365.17 FT
EAST COORDINATE: 1497091.18 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SHALE (SH)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHA	09/15/93	0001	UG/L		2.2	J	2.2	I
4-METHYLPHENOL	09/15/93	0001	UG/L		61.	J	61.	I
ACETONE	09/15/93	0001	UG/L		28.		REJECT	I
ALUMINUM, TOTAL	09/15/93	0001	UG/L		364.	J	364.	I
AMMONIA	09/15/93	0001	MG/L		0.50		0.50	I
ANTIMONY, SOLUBLE	09/15/93	0001	UG/L		12.8		12.8	I
ARSENIC, SOLUBLE	09/15/93	0001	UG/L	B	2.6		2.6	I
ARSENIC, TOTAL	09/15/93	0001	UG/L	B	2.5		2.5	I
BARIUM, SOLUBLE	09/15/93	0001	UG/L	B	111.	J	111.	I
BARIUM, TOTAL	09/15/93	0001	UG/L	B	116.	J	116.	I
BIS(2-ETHYLHEXYL)PHTHALATE	09/15/93	0001	UG/L	B	250.	B	250.	D1
CALCIUM, SOLUBLE	09/15/93	0001	UG/L		91000.	J	91000.	I
CALCIUM, TOTAL	09/15/93	0001	UG/L		92500.	J	92500.	I
CHLORIDE	09/15/93	0001	MG/L		233.	J	233.	I
FLUORIDE	09/15/93	0001	MG/L		0.27		0.27	I
IRON, SOLUBLE	09/15/93	0001	UG/L		192.	J	192.	I
IRON, TOTAL	09/15/93	0001	UG/L		746.	J	746.	I
LEAD, TOTAL	09/15/93	0001	UG/L	B	2.2	J	2.2	I
MAGNESIUM, SOLUBLE	09/15/93	0001	UG/L		19600.	J	19600.	I
MAGNESIUM, TOTAL	09/15/93	0001	UG/L		20300.	J	20300.	I
MANGANESE, SOLUBLE	09/15/93	0001	UG/L		194.	J	194.	I
MANGANESE, TOTAL	09/15/93	0001	UG/L		209.	J	209.	I
NITRATE NITRITE	09/15/93	0001	MG/L		0.80		0.80	I
PHENOL	09/15/93	0001	UG/L	J	2.	J	2.	I
PLUTONIUM-239/240	09/15/93	0001	PCI/L		.0945		.0945	I
POTASSIUM, SOLUBLE	09/15/93	0001	UG/L	B	4480.		4480.	I
POTASSIUM, TOTAL	09/15/93	0001	UG/L	B	4760.		4760.	I
RADIUM-226	09/15/93	0001	PCI/L		.213		.213	I
SODIUM, SOLUBLE	09/15/93	0001	UG/L		145000.		145000.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0326
NORTH COORDINATE: 597365.17 FT
EAST COORDINATE: 1497091.18 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SHALE (SH)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SODIUM, TOTAL	09/15/93	0001	UG/L		149000.		149000.	I
SULFATE	09/15/93	0001	MG/L		30.8		30.8	I
THORIUM-228	09/15/93	0001	PCI/L		.602		REJECT	I
THORIUM-230	09/15/93	0001	PCI/L		.161		REJECT	I
THORIUM-232	09/15/93	0001	PCI/L		.16		.16	I
TOTAL DISSOLVED SOLIDS	09/15/93	0001	MG/L		752.	J	752.	I
TOTAL KJELDAHL NITROGEN	09/15/93	0001	MG/L		0.76		0.76	I
TOTAL ORGANIC CARBON	09/15/93	0001	MG/L		47.9		47.9	I
TOTAL PHOSPHATE	09/15/93	0001	MG/L		0.19		0.19	I
TOTAL SUSPENDED SOLIDS	09/15/93	0001	MG/L		6.0	J	6.0	I
URANIUM-234	09/15/93	0001	PCI/L		.484		.484	I
URANIUM-238	09/15/93	0001	PCI/L		.244		.244	I
VANADIUM, SOLUBLE	09/15/93	0001	UG/L		14.6		14.6	I
VANADIUM, TOTAL	09/15/93	0001	UG/L		14.8		14.8	I
ZINC, TOTAL	09/15/93	0001	UG/L	B	23.9		23.9	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0327
NORTH COORDINATE: 601687.99 FT
EAST COORDINATE: 1495166.93 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: GRAVEL OR SANDY GRAVEL, POORLY GRADED (GP)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	09/27/93	0001	UG/L		2.3	J	2.3	I
ALUMINUM, TOTAL	09/27/93	0001	UG/L		161.		161.	I
ANTIMONY, SOLUBLE	09/27/93	0001	UG/L		5.9		5.9	I
BARIUM, SOLUBLE	09/27/93	0001	UG/L	B	96.1		96.1	I
BARIUM, TOTAL	09/27/93	0001	UG/L	B	86.6		86.6	I
CALCIUM, SOLUBLE	09/27/93	0001	UG/L		109000.	J	109000.	I
CALCIUM, TOTAL	09/27/93	0001	UG/L		97800.	J	97800.	I
CHLORIDE	09/27/93	0001	MG/L		136.		136.	I
CHROMIUM, TOTAL	09/27/93	0001	UG/L		177.	J	177.	I
COBALT, TOTAL	09/27/93	0001	UG/L	B	2.3		2.3	I
COPPER, SOLUBLE	09/27/93	0001	UG/L	B	3.3		3.3	I
COPPER, TOTAL	09/27/93	0001	UG/L	B	4.5		4.5	I
FLUORIDE	09/27/93	0001	MG/L		0.31		0.31	I
IRON, SOLUBLE	09/27/93	0001	UG/L		223.		223.	I
IRON, TOTAL	09/27/93	0001	UG/L		1410.	J	1410.	I
MAGNESIUM, SOLUBLE	09/27/93	0001	UG/L		33700.	J	33700.	I
MAGNESIUM, TOTAL	09/27/93	0001	UG/L		30300.	J	30300.	I
MANGANESE, SOLUBLE	09/27/93	0001	UG/L	B	5.6		5.6	I
MANGANESE, TOTAL	09/27/93	0001	UG/L	B	14.9		14.9	I
MOLYBDENUM	09/27/93	0001	UG/L	B	6.7		6.7	I
MOLYBDENUM, SOLUBLE	09/27/93	0001	UG/L	B	6.0		6.0	I
NICKEL, SOLUBLE	09/27/93	0001	UG/L		84.9		84.9	I
NICKEL, TOTAL	09/27/93	0001	UG/L		111.	J	111.	I
NITRATE NITRITE	09/27/93	0001	MG/L		4.6		4.6	I
POTASSIUM, SOLUBLE	09/27/93	0001	UG/L	B	4560.	J	4560.	I
POTASSIUM, TOTAL	09/27/93	0001	UG/L	B	4200.	J	4200.	I
SODIUM, SOLUBLE	09/27/93	0001	UG/L		69100.	J	69100.	I
SODIUM, TOTAL	09/27/93	0001	UG/L		63100.	J	63100.	I
STRONTIUM-90	09/27/93	0001	PCI/L		.762		.762	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0327
NORTH COORDINATE: 601687.99 FT
EAST COORDINATE: 1495166.93 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: GRAVEL OR SANDY GRAVEL, POORLY GRADED (GP)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TETRACHLOROETHENE	09/27/93	0001	UG/L		12.	J	12.	I
THORIUM-228	09/27/93	0001	PCI/L		.48		.48	I
THORIUM-230	09/27/93	0001	PCI/L		.144		.144	I
TIN, SOLUBLE	09/27/93	0001	UG/L	B	16.2		16.2	I
TIN, TOTAL	09/27/93	0001	UG/L	B	14.7		14.7	I
TOTAL DISSOLVED SOLIDS	09/27/93	0001	MG/L		615.		615.	I
TOTAL ORGANIC CARBON	09/27/93	0001	MG/L		1.0		1.0	I
TOTAL PHOSPHATE	09/27/93	0001	MG/L		0.14		0.14	I
TOTAL SUSPENDED SOLIDS	09/27/93	0001	MG/L		15.0		15.0	I
TRICHLOROMETHANE (CHLOROFORM)	09/27/93	0001	UG/L		0.50	J	0.50	I
TRITIUM	09/27/93	0001	PCI/L		415.		415.	I
URANIUM-234	09/27/93	0001	PCI/L		.591		.591	I
URANIUM-238	09/27/93	0001	PCI/L		.536		.536	I
VANADIUM, SOLUBLE	09/27/93	0001	UG/L		10.9	J	10.9	I
VANADIUM, TOTAL	09/27/93	0001	UG/L		10.8	J	10.8	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0328
NORTH COORDINATE: 601695.63 FT
EAST COORDINATE: 1495166.40 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,2-CIS-DICHLOROETHENE	09/27/93	0001	UG/L		1.1	J	1.1	I
ANTIMONY, SOLUBLE	09/27/93	0001	UG/L		4.3		4.3	I
ARSENIC, SOLUBLE	09/27/93	0001	UG/L	B	2.2		2.2	I
ARSENIC, TOTAL	09/27/93	0001	UG/L	B	2.5	J	2.5	I
BARIUM, SOLUBLE	09/27/93	0001	UG/L	B	171.	J	171.	I
BARIUM, TOTAL	09/27/93	0001	UG/L	B	177.	J	177.	I
BIS(2-ETHYLHEXYL)PHTHALATE	09/27/93	0001	UG/L	JB	9.	J	9.	I
CALCIUM, SOLUBLE	09/27/93	0001	UG/L		96500.	J	96500.	I
CALCIUM, TOTAL	09/27/93	0001	UG/L		100000.	J	100000.	I
CHLORIDE	09/27/93	0001	MG/L		33.2		33.2	I
COPPER, TOTAL	09/27/93	0001	UG/L	B	0.89		0.89	I
FLUORIDE	09/27/93	0001	MG/L		0.29		0.29	I
IRON, SOLUBLE	09/27/93	0001	UG/L		1410.	J	1410.	I
IRON, TOTAL	09/27/93	0001	UG/L		1490.	J	1490.	I
LITHIUM, SOLUBLE	09/27/93	0001	UG/L	B	4.0		4.0	I
LITHIUM, TOTAL	09/27/93	0001	UG/L	B	4.0		4.0	I
MAGNESIUM, SOLUBLE	09/27/93	0001	UG/L		38800.	J	38800.	I
MAGNESIUM, TOTAL	09/27/93	0001	UG/L		39900.	J	39900.	I
MANGANESE, SOLUBLE	09/27/93	0001	UG/L		140.	J	140.	I
MANGANESE, TOTAL	09/27/93	0001	UG/L		146.	J	146.	I
MOLYBDENUM	09/27/93	0001	UG/L	B	4.8		4.8	I
MOLYBDENUM, SOLUBLE	09/27/93	0001	UG/L	B	4.7		4.7	I
PLUTONIUM-239/240	09/27/93	0001	PCI/L		.188		REJECT	I
POTASSIUM, SOLUBLE	09/27/93	0001	UG/L	B	2840.		2840.	I
POTASSIUM, TOTAL	09/27/93	0001	UG/L	B	3050.		3050.	I
SODIUM, SOLUBLE	09/27/93	0001	UG/L		21100.	J	21100.	I
SODIUM, TOTAL	09/27/93	0001	UG/L		21600.	J	21600.	I
STRONTIUM-90	09/27/93	0001	PCI/L		.659		.659	I
SULFATE	09/27/93	0001	MG/L		16.1		16.1	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0328
NORTH COORDINATE: 601695.63 FT
EAST COORDINATE: 1495166.40 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
THORIUM-228	09/27/93	0001	PCI/L		.291		.291	I
TIN, SOLUBLE	09/27/93	0001	UG/L	B	16.0		16.0	I
TIN, TOTAL	09/27/93	0001	UG/L	B	16.5		16.5	I
TOTAL DISSOLVED SOLIDS	09/27/93	0001	MG/L		485.		485.	I
TOTAL KJELDAHL NITROGEN	09/27/93	0001	MG/L		0.13		0.13	I
TOTAL ORGANIC CARBON	09/27/93	0001	MG/L		0.70		0.70	I
TOTAL PHOSPHATE	09/27/93	0001	MG/L		0.087		0.087	I
TOTAL SUSPENDED SOLIDS	09/27/93	0001	MG/L		6.0		6.0	I
TRITIUM	09/27/93	0001	PCI/L		330.		330.	I
URANIUM-234	09/27/93	0001	PCI/L		.633		.633	I
URANIUM-238	09/27/93	0001	PCI/L		.438		.438	I
VANADIUM, SOLUBLE	09/27/93	0001	UG/L	B	9.4	J	9.4	I
VANADIUM, TOTAL	09/27/93	0001	UG/L	B	9.1	J	9.1	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0330
NORTH COORDINATE: 601230.60 FT
EAST COORDINATE: 1496422.12 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	09/30/93	0001	UG/L		55.4	J	55.4	I
	09/30/93	1001	UG/L		31.5	J	31.5	I
AMERICIUM-241	09/30/93	0001	PCI/L		.0618		.0618	I
	09/30/93	1001	PCI/L		.0476		.0476	I
AMMONIA	09/30/93	0001	MG/L		0.15		0.15	I
	09/30/93	1001	MG/L		0.13		0.13	I
ARSENIC, SOLUBLE	09/30/93	0001	UG/L	B	2.7		2.7	I
	09/30/93	1001	UG/L	B	2.4		2.4	I
ARSENIC, TOTAL	09/30/93	0001	UG/L	B	3.2		3.2	I
	09/30/93	1001	UG/L	B	4.0		4.0	I
BARIUM, SOLUBLE	09/30/93	0001	UG/L		222.	J	222.	I
	09/30/93	1001	UG/L		212.	J	212.	I
BARIUM, TOTAL	09/30/93	0001	UG/L		243.	J	243.	I
	09/30/93	1001	UG/L		264.	J	264.	I
CALCIUM, SOLUBLE	09/30/93	0001	UG/L		83300.	J	83300.	I
	09/30/93	1001	UG/L		80300.	J	80300.	I
CALCIUM, TOTAL	09/30/93	0001	UG/L		96900.	J	96900.	I
	09/30/93	1001	UG/L		97800.	J	97800.	I
CHLORIDE	09/30/93	0001	MG/L		31.1		31.1	I
	09/30/93	1001	MG/L		30.8		30.8	I
CHROMIUM, SOLUBLE	09/30/93	0001	UG/L	B	1.0	J	1.0	I
CHROMIUM, TOTAL	09/30/93	0001	UG/L	B	5.9	J	5.9	I
	09/30/93	1001	UG/L	B	2.7	J	2.7	I
COPPER, TOTAL	09/30/93	0001	UG/L	B	0.88	J	0.88	I
FLUORIDE	09/30/93	0001	MG/L		0.35		0.35	I
	09/30/93	1001	MG/L		0.35		0.35	I
IRON, SOLUBLE	09/30/93	0001	UG/L		1070.	J	1070.	I
	09/30/93	1001	UG/L		1160.	J	1160.	I
IRON, TOTAL	09/30/93	0001	UG/L		2530.	J	2530.	I
	09/30/93	1001	UG/L		2490.	J	2490.	I
LITHIUM, SOLUBLE	09/30/93	0001	UG/L	B	5.7		REJECT	I
	09/30/93	1001	UG/L	B	5.7		REJECT	I
LITHIUM, TOTAL	09/30/93	0001	UG/L	B	5.7		REJECT	I
	09/30/93	1001	UG/L	B	5.7		REJECT	I
MAGNESIUM, SOLUBLE	09/30/93	0001	UG/L		37100.	J	37100.	I
	09/30/93	1001	UG/L		35800.	J	35800.	I
MAGNESIUM, TOTAL	09/30/93	0001	UG/L		35100.	J	35100.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0330
NORTH COORDINATE: 601230.60 FT
EAST COORDINATE: 1496422.12 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
MAGNESIUM, TOTAL	09/30/93	1001	UG/L		37200.	J	37200.	I
MANGANESE, SOLUBLE	09/30/93	0001	UG/L		96.4	J	96.4	I
	09/30/93	1001	UG/L		93.8	J	93.8	I
MANGANESE, TOTAL	09/30/93	0001	UG/L		107.	J	107.	I
	09/30/93	1001	UG/L		108.	J	108.	I
NICKEL, TOTAL	09/30/93	0001	UG/L	B	5.1	J	5.1	I
POTASSIUM, SOLUBLE	09/30/93	0001	UG/L	B	2660.		2660.	I
	09/30/93	1001	UG/L	B	2560.		2560.	I
POTASSIUM, TOTAL	09/30/93	0001	UG/L	B	2700.		2700.	I
	09/30/93	1001	UG/L	B	2470.		2470.	I
RADIUM-226	09/30/93	1001	PCI/L		.862		.862	I
SODIUM, SOLUBLE	09/30/93	0001	UG/L		15800.	J	15800.	I
	09/30/93	1001	UG/L		15000.	J	15000.	I
SODIUM, TOTAL	09/30/93	0001	UG/L		14400.	J	14400.	I
	09/30/93	1001	UG/L		15000.	J	15000.	I
STRONTIUM-90	09/30/93	0001	PCI/L		.844		.844	I
SULFATE	09/30/93	0001	MG/L		77.0		77.0	I
	09/30/93	1001	MG/L		73.5		73.5	I
THORIUM-228	09/30/93	0001	PCI/L		.635		.635	I
	09/30/93	1001	PCI/L		.57		.57	I
THORIUM-230	09/30/93	0001	PCI/L		.104		REJECT	I
TIN, SOLUBLE	09/30/93	0001	UG/L	B	26.1		26.1	I
	09/30/93	1001	UG/L	B	24.8		24.8	I
TIN, TOTAL	09/30/93	0001	UG/L	B	27.4		27.4	I
	09/30/93	1001	UG/L	B	27.5		27.5	I
TOTAL DISSOLVED SOLIDS	09/30/93	0001	MG/L		486.		486.	I
	09/30/93	1001	MG/L		480.		480.	I
TOTAL KJELDAHL NITROGEN	09/30/93	0001	MG/L		0.27		0.27	I
	09/30/93	1001	MG/L		0.30		0.30	I
TOTAL ORGANIC CARBON	09/30/93	0001	MG/L		0.68		0.68	I
	09/30/93	1001	MG/L		0.58		0.58	I
TOTAL SUSPENDED SOLIDS	09/30/93	0001	MG/L		40.0		40.0	I
	09/30/93	1001	MG/L		18.0		18.0	I
TRITIUM	09/30/93	0001	PCI/L		715.		715.	I
	09/30/93	1001	PCI/L		808.		808.	I
URANIUM-234	09/30/93	0001	PCI/L		.25		.25	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0330
NORTH COORDINATE: 601230.60 FT
EAST COORDINATE: 1496422.12 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
URANIUM-234	09/30/93	1001	PCI/L		.398		.398	I
URANIUM-238	09/30/93	1001	PCI/L		.145		.145	I
ZINC, TOTAL	09/30/93	0001	UG/L		143.	J	143.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0332
NORTH COORDINATE: 599505.71 FT
EAST COORDINATE: 1497447.41 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: UNDIFFERENTIATED BEDROCK (BR)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	09/24/93	0001	UG/L		428.	J	428.	I
AMERICIUM-241	09/24/93	0001	PCI/L		.0638		REJECT	I
AMMONIA	09/24/93	0001	MG/L		0.57		0.57	I
ANTIMONY, SOLUBLE	09/24/93	0001	UG/L		5.6		5.6	I
BARIUM, SOLUBLE	09/24/93	0001	UG/L	B	65.8		65.8	I
BARIUM, TOTAL	09/24/93	0001	UG/L	B	71.2		71.2	I
CALCIUM, SOLUBLE	09/24/93	0001	UG/L		92000.	J	92000.	I
CALCIUM, TOTAL	09/24/93	0001	UG/L		95800.	J	95800.	I
CHLORIDE	09/24/93	0001	MG/L		80.3		80.3	I
COBALT, TOTAL	09/24/93	0001	UG/L	B	1.5		1.5	I
COPPER, SOLUBLE	09/24/93	0001	UG/L	B	1.6		1.6	I
COPPER, TOTAL	09/24/93	0001	UG/L	B	1.4		1.4	I
DICHLOROMETHANE-METHYLENE CHLORIDE	09/24/93	0001	UG/L		8.9	J	8.9	I
FLUORIDE	09/24/93	0001	MG/L		1.1		1.1	I
IRON, SOLUBLE	09/24/93	0001	UG/L		215.	J	215.	I
IRON, TOTAL	09/24/93	0001	UG/L		641.	J	641.	I
MAGNESIUM, SOLUBLE	09/24/93	0001	UG/L		49800.	J	49800.	I
MAGNESIUM, TOTAL	09/24/93	0001	UG/L		51700.	J	51700.	I
MANGANESE, SOLUBLE	09/24/93	0001	UG/L		32.9	J	32.9	I
MANGANESE, TOTAL	09/24/93	0001	UG/L		53.0	J	53.0	I
NICKEL, SOLUBLE	09/24/93	0001	UG/L	B	4.4		4.4	I
NICKEL, TOTAL	09/24/93	0001	UG/L	B	16.3		16.3	I
NITRATE NITRITE	09/24/93	0001	MG/L		0.035		0.035	I
PLUTONIUM-239/240	09/24/93	0001	PCI/L		.151		REJECT	I
POTASSIUM, SOLUBLE	09/24/93	0001	UG/L		6970.		6970.	I
POTASSIUM, TOTAL	09/24/93	0001	UG/L		9930.		9930.	I
SODIUM, SOLUBLE	09/24/93	0001	UG/L		26300.		26300.	I
SODIUM, TOTAL	09/24/93	0001	UG/L		37800.		37800.	I
SULFATE	09/24/93	0001	MG/L		62.1		62.1	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0332
NORTH COORDINATE: 599505.71 FT
EAST COORDINATE: 1497447.41 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: UNDIFFERENTIATED BEDROCK (BR)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
THORIUM-228	09/24/93	0001	PCI/L		.646		REJECT	I
THORIUM-230	09/24/93	0001	PCI/L		.149		REJECT	I
THORIUM-232	09/24/93	0001	PCI/L		.0662		.0662	I
TIN, SOLUBLE	09/24/93	0001	UG/L	B	15.4		15.4	I
TIN, TOTAL	09/24/93	0001	UG/L	B	17.0		17.0	I
TOTAL DISSOLVED SOLIDS	09/24/93	0001	MG/L		614.		614.	I
TOTAL KJELDAHL NITROGEN	09/24/93	0001	MG/L		0.72		0.72	I
TOTAL ORGANIC CARBON	09/24/93	0001	MG/L		6.3		6.3	I
TOTAL PHOSPHATE	09/24/93	0001	MG/L		0.13		0.13	I
TOTAL SUSPENDED SOLIDS	09/24/93	0001	MG/L		7.0		7.0	I
VANADIUM, SOLUBLE	09/24/93	0001	UG/L		14.1		14.1	I
VANADIUM, TOTAL	09/24/93	0001	UG/L		15.6		15.6	I
ZINC, SOLUBLE	09/24/93	0001	UG/L	B	12.6		12.6	I
ZINC, TOTAL	09/24/93	0001	UG/L	B	15.4		15.4	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0333
NORTH COORDINATE: 600547.19 FT
EAST COORDINATE: 1494851.90 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: GRAVEL OR SANDY GRAVEL, POORLY GRADED (GP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ANTIMONY, SOLUBLE	10/11/93	0001	UG/L	B	0.85	J	0.85	I
ANTIMONY, TOTAL	10/11/93	0001	UG/L	B	0.62	J	0.62	I
ARSENIC, SOLUBLE	10/11/93	0001	UG/L		28.1		28.1	I
ARSENIC, TOTAL	10/11/93	0001	UG/L		30.2		30.2	I
BARIUM, SOLUBLE	10/11/93	0001	UG/L		217.		217.	I
BARIUM, TOTAL	10/11/93	0001	UG/L		234.		234.	I
CALCIUM, SOLUBLE	10/11/93	0001	UG/L		81700.	J	81700.	I
CALCIUM, TOTAL	10/11/93	0001	UG/L		86800.	J	86800.	I
CHLORIDE	10/11/93	0001	MG/L		40.2		40.2	I
CHROMIUM, SOLUBLE	10/11/93	0001	UG/L	B	2.6	J	2.6	I
CHROMIUM, TOTAL	10/11/93	0001	UG/L	B	3.5	J	3.5	I
FLUORIDE	10/11/93	0001	MG/L		0.30		0.30	I
IRON, SOLUBLE	10/11/93	0001	UG/L		2550.	J	2550.	I
IRON, TOTAL	10/11/93	0001	UG/L		2800.	J	2800.	I
LEAD, SOLUBLE	10/11/93	0001	UG/L		11.9		11.9	I
MAGNESIUM, SOLUBLE	10/11/93	0001	UG/L		32500.	J	32500.	I
MAGNESIUM, TOTAL	10/11/93	0001	UG/L		34500.	J	34500.	I
MANGANESE, SOLUBLE	10/11/93	0001	UG/L		152.	J	152.	I
MANGANESE, TOTAL	10/11/93	0001	UG/L		163.	J	163.	I
PHENOL	10/11/93	0001	UG/L	J	0.5	J	0.5	I
PLUTONIUM-239/240	10/11/93	0001	PCI/L		.225		REJECT	I
POTASSIUM, SOLUBLE	10/11/93	0001	UG/L	B	1390.	J	1390.	I
POTASSIUM, TOTAL	10/11/93	0001	UG/L	B	1650.	J	1650.	I
RADIUM-226	10/11/93	0001	PCI/L		.997		.997	I
SODIUM, SOLUBLE	10/11/93	0001	UG/L		13500.	J	13500.	I
SODIUM, TOTAL	10/11/93	0001	UG/L		14400.	J	14400.	I
SULFATE	10/11/93	0001	MG/L		126.		126.	I
THORIUM-228	10/11/93	0001	PCI/L		.628		.628	I
TOTAL DISSOLVED SOLIDS	10/11/93	0001	MG/L		509.		509.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0333
NORTH COORDINATE: 600547.19 FT
EAST COORDINATE: 1494851.90 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: GRAVEL OR SANDY GRAVEL, POORLY GRADED (GP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL ORGANIC CARBON	10/11/93	0001	MG/L		0.87		0.87	I
TOTAL SUSPENDED SOLIDS	10/11/93	0001	MG/L		12.0		12.0	I
TRITIUM	10/11/93	0001	PCI/L		1080.		1080.	I
URANIUM-234	10/11/93	0001	PCI/L		.748		.748	I
URANIUM-238	10/11/93	0001	PCI/L		.56		.56	I
ZINC, SOLUBLE	10/11/93	0001	UG/L	B	6.2		6.2	I
ZINC, TOTAL	10/11/93	0001	UG/L	B	9.1		9.1	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0334
NORTH COORDINATE: 600540.81 FT
EAST COORDINATE: 1494850.09 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: GRAVEL OR SANDY GRAVEL, POORLY GRADED (GP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	09/30/93	0001	UG/L		0.46	J	0.46	I
ANTIMONY, SOLUBLE	09/30/93	0001	UG/L	B	0.8	J	0.8	I
BARIUM, SOLUBLE	09/30/93	0001	UG/L	B	117.		117.	I
BARIUM, TOTAL	09/30/93	0001	UG/L	B	115.		115.	I
CALCIUM, SOLUBLE	09/30/93	0001	UG/L		99300.	J	99300.	I
CALCIUM, TOTAL	09/30/93	0001	UG/L		102000.	J	102000.	I
CHLORIDE	09/30/93	0001	MG/L		89.4		89.4	I
CHROMIUM, SOLUBLE	09/30/93	0001	UG/L	B	1.2		1.2	I
CHROMIUM, TOTAL	09/30/93	0001	UG/L	B	5.3		5.3	I
COPPER, SOLUBLE	09/30/93	0001	UG/L	B	0.80		0.80	I
COPPER, TOTAL	09/30/93	0001	UG/L	B	0.90		0.90	I
FLUORIDE	09/30/93	0001	MG/L		0.19		0.19	I
IRON, SOLUBLE	09/30/93	0001	UG/L	B	17.5		17.5	I
IRON, TOTAL	09/30/93	0001	UG/L	B	49.0		49.0	I
MAGNESIUM, SOLUBLE	09/30/93	0001	UG/L		32600.	J	32600.	I
MAGNESIUM, TOTAL	09/30/93	0001	UG/L		33200.	J	33200.	I
MANGANESE, SOLUBLE	09/30/93	0001	UG/L	B	3.2		3.2	I
MANGANESE, TOTAL	09/30/93	0001	UG/L	B	3.8		3.8	I
NICKEL, SOLUBLE	09/30/93	0001	UG/L	B	10.2		10.2	I
NICKEL, TOTAL	09/30/93	0001	UG/L	B	10.5		10.5	I
NITRATE NITRITE	09/30/93	0001	MG/L		4.5		4.5	I
POTASSIUM, SOLUBLE	09/30/93	0001	UG/L	B	3960.		3960.	I
POTASSIUM, TOTAL	09/30/93	0001	UG/L	B	3910.		3910.	I
SODIUM, SOLUBLE	09/30/93	0001	UG/L		51900.	J	51900.	I
SODIUM, TOTAL	09/30/93	0001	UG/L		52000.	J	52000.	I
STRONTIUM-90	09/30/93	0001	PCI/L		.718		.718	I
SULFATE	09/30/93	0001	MG/L		63.0		63.0	I
TIN, SOLUBLE	09/30/93	0001	UG/L	B	20.7		20.7	I
TIN, TOTAL	09/30/93	0001	UG/L	B	26.2		26.2	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0334
NORTH COORDINATE: 600540.81 FT
EAST COORDINATE: 1494850.09 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: GRAVEL OR SANDY GRAVEL, POORLY GRADED (GP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL DISSOLVED SOLIDS	09/30/93	0001	MG/L		582.		582.	I
TOTAL ORGANIC CARBON	09/30/93	0001	MG/L		2.1		2.1	I
TOTAL PHOSPHATE	09/30/93	0001	MG/L		0.056		0.056	I
TRICHLOROMETHANE (CHLOROFORM)	09/30/93	0001	UG/L		0.57	J	0.57	I
TRITIUM	09/30/93	0001	PCI/L		626.		626.	I
URANIUM-234	09/30/93	0001	PCI/L		.45		.45	I
URANIUM-238	09/30/93	0001	PCI/L		.216		.216	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0335
NORTH COORDINATE: 598844.46 FT
EAST COORDINATE: 1494824.78 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: UNDIFFERENTIATED BEDROCK (BR)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMMONIA	09/30/93	0001	MG/L		35.0		35.0	I
BARIUM, SOLUBLE	09/30/93	0001	UG/L		243.	J	243.	I
BARIUM, TOTAL	09/30/93	0001	UG/L		235.	J	235.	I
CALCIUM, SOLUBLE	09/30/93	0001	UG/L		1290000.	J	1290000.	I
CALCIUM, TOTAL	09/30/93	0001	UG/L		793000.	J	793000.	I
CHLORIDE	09/30/93	0001	MG/L		16100.		16100.	I
CHROMIUM, TOTAL	09/30/93	0001	UG/L		17.2		17.2	I
COBALT, SOLUBLE	09/30/93	0001	UG/L	B	2.3		2.3	I
COBALT, TOTAL	09/30/93	0001	UG/L	B	1.4		1.4	I
COPPER, SOLUBLE	09/30/93	0001	UG/L	B	2.6		2.6	I
COPPER, TOTAL	09/30/93	0001	UG/L	B	1.3		1.3	I
FLUORIDE	09/30/93	0001	MG/L		0.32		0.32	I
IRON, SOLUBLE	09/30/93	0001	UG/L		1040.		1040.	I
IRON, TOTAL	09/30/93	0001	UG/L		2220.		2220.	I
LITHIUM, SOLUBLE	09/30/93	0001	UG/L		3100.		3100.	I
LITHIUM, TOTAL	09/30/93	0001	UG/L		3580.		3580.	I
MAGNESIUM, SOLUBLE	09/30/93	0001	UG/L		560000.	J	560000.	I
MAGNESIUM, TOTAL	09/30/93	0001	UG/L		719000.	J	719000.	I
MANGANESE, SOLUBLE	09/30/93	0001	UG/L		395.	J	395.	I
MANGANESE, TOTAL	09/30/93	0001	UG/L		315.	J	315.	I
NICKEL, SOLUBLE	09/30/93	0001	UG/L		125.		125.	I
NICKEL, TOTAL	09/30/93	0001	UG/L		49.0		49.0	I
POTASSIUM, SOLUBLE	09/30/93	0001	UG/L	B	199000.		199000.	I
POTASSIUM, TOTAL	09/30/93	0001	UG/L	B	205000.		205000.	I
POTASSIUM-40	09/30/93	0001	PCI/L		190.		190.	I
SODIUM, SOLUBLE	09/30/93	0001	UG/L		3230000.	J	3230000.	I
SODIUM, TOTAL	09/30/93	0001	UG/L		3630000.	J	3630000.	I
STRONTIUM-90	09/30/93	0001	PCI/L		4.42		4.42	I
SULFATE	09/30/93	0001	MG/L		112.		112.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0335
NORTH COORDINATE: 598844.46 FT
EAST COORDINATE: 1494824.78 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: UNDIFFERENTIATED BEDROCK (BR)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
THALLIUM, SOLUBLE	09/30/93	0001	UG/L	U	20.0	J	20.0	I
THALLIUM, TOTAL	09/30/93	0001	UG/L	U	20.0	J	20.0	I
THORIUM-228	09/30/93	0001	PCI/L		1.52		1.52	I
TIN, SOLUBLE	09/30/93	0001	UG/L	B	300.2		300.2	I
TIN, TOTAL	09/30/93	0001	UG/L	B	357.2		357.2	I
TOTAL DISSOLVED SOLIDS	09/30/93	0001	MG/L		32500.		32500.	I
TOTAL KJELDAHL NITROGEN	09/30/93	0001	MG/L		32.6		32.6	I
TOTAL PHOSPHATE	09/30/93	0001	MG/L		0.085		0.085	I
TOTAL SUSPENDED SOLIDS	09/30/93	0001	MG/L		25.0		25.0	I
TRITIUM	09/30/93	0001	PCI/L		700.		700.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0336
NORTH COORDINATE: 600380.42 FT
EAST COORDINATE: 1496202.19 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, SOLUBLE	09/29/93	0001	UG/L	B	11.8	J	11.8	I
ALUMINUM, TOTAL	09/29/93	0001	UG/L	B	14.2	J	14.2	I
BARIUM, SOLUBLE	09/29/93	0001	UG/L	B	86.3		86.3	I
BARIUM, TOTAL	09/29/93	0001	UG/L	B	87.5		87.5	I
CALCIUM, SOLUBLE	09/29/93	0001	UG/L		98800.	J	98800.	I
CALCIUM, TOTAL	09/29/93	0001	UG/L		102000.	J	102000.	I
CHLORIDE	09/29/93	0001	MG/L		112.		112.	I
CHROMIUM, SOLUBLE	09/29/93	0001	UG/L	B	3.1		3.1	I
CHROMIUM, TOTAL	09/29/93	0001	UG/L		49.7	J	49.7	I
COBALT, TOTAL	09/29/93	0001	UG/L	B	1.7		1.7	I
COPPER, TOTAL	09/29/93	0001	UG/L	B	1.7		1.7	I
FLUORIDE	09/29/93	0001	MG/L		0.23		0.23	I
IRON, SOLUBLE	09/29/93	0001	UG/L	B	56.5		56.5	I
IRON, TOTAL	09/29/93	0001	UG/L		289.		289.	I
LITHIUM, SOLUBLE	09/29/93	0001	UG/L	B	4.0		4.0	I
LITHIUM, TOTAL	09/29/93	0001	UG/L	B	4.0		4.0	I
MAGNESIUM, SOLUBLE	09/29/93	0001	UG/L		33800.	J	33800.	I
MAGNESIUM, TOTAL	09/29/93	0001	UG/L		35000.	J	35000.	I
MANGANESE, SOLUBLE	09/29/93	0001	UG/L	B	9.6		9.6	I
MANGANESE, TOTAL	09/29/93	0001	UG/L		18.4		18.4	I
NICKEL, SOLUBLE	09/29/93	0001	UG/L		93.0		93.0	I
NICKEL, TOTAL	09/29/93	0001	UG/L		137.	J	137.	I
NITRATE NITRITE	09/29/93	0001	MG/L		1.9		1.9	I
POTASSIUM, SOLUBLE	09/29/93	0001	UG/L	B	2520.		2520.	I
POTASSIUM, TOTAL	09/29/93	0001	UG/L	B	2700.		2700.	I
SODIUM, SOLUBLE	09/29/93	0001	UG/L		61600.		61600.	I
SODIUM, TOTAL	09/29/93	0001	UG/L		63700.		63700.	I
STRONTIUM-90	09/29/93	0001	PCI/L		1.11		1.11	I
SULFATE	09/29/93	0001	MG/L		44.5	J	44.5	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0336
NORTH COORDINATE: 600380.42 FT
EAST COORDINATE: 1496202.19 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
THORIUM-228	09/29/93	0001	PCI/L		.605		.605	I
THORIUM-230	09/29/93	0001	PCI/L		.316		REJECT	I
TIN, SOLUBLE	09/29/93	0001	UG/L	B	25.6		25.6	I
TIN, TOTAL	09/29/93	0001	UG/L	B	24.6		24.6	I
TOTAL DISSOLVED SOLIDS	09/29/93	0001	MG/L		622.		622.	I
TOTAL ORGANIC CARBON	09/29/93	0001	MG/L		2.5		2.5	I
TRITIUM	09/29/93	0001	PCI/L		832.	J	832.	I
URANIUM-234	09/29/93	0001	PCI/L		.392		.392	I
URANIUM-238	09/29/93	0001	PCI/L		.307	J	.307	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0337
NORTH COORDINATE: 600372.79 FT
EAST COORDINATE: 1496201.85 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ANTIMONY, SOLUBLE	09/29/93	0001	UG/L	B	1.1		1.1	I
BARIUM, SOLUBLE	09/29/93	0001	UG/L	B	88.1		88.1	I
BARIUM, TOTAL	09/29/93	0001	UG/L	B	85.8		85.8	I
CALCIUM, SOLUBLE	09/29/93	0001	UG/L		109000.	J	109000.	I
CALCIUM, TOTAL	09/29/93	0001	UG/L		107000.	J	107000.	I
CHLORIDE	09/29/93	0001	MG/L		74.6		74.6	I
COPPER, SOLUBLE	09/29/93	0001	UG/L	B	0.93		0.93	I
COPPER, TOTAL	09/29/93	0001	UG/L	B	1.1		1.1	I
FLUORIDE	09/29/93	0001	MG/L		0.13		0.13	I
MAGNESIUM, SOLUBLE	09/29/93	0001	UG/L		35300.	J	35300.	I
MAGNESIUM, TOTAL	09/29/93	0001	UG/L		34400.	J	34400.	I
NITRATE NITRITE	09/29/93	0001	MG/L		4.2		4.2	I
PLUTONIUM-239/240	09/29/93	0001	PCI/L		.0798		.0798	I
POTASSIUM, SOLUBLE	09/29/93	0001	UG/L		7070.		7070.	I
POTASSIUM, TOTAL	09/29/93	0001	UG/L		7770.		7770.	I
SELENIUM, SOLUBLE	09/29/93	0001	UG/L	B	1.8		REJECT	I
SELENIUM, TOTAL	09/29/93	0001	UG/L	B	1.0		REJECT	I
SODIUM, SOLUBLE	09/29/93	0001	UG/L		49400.	J	49400.	I
SODIUM, TOTAL	09/29/93	0001	UG/L		47900.	J	47900.	I
SULFATE	09/29/93	0001	MG/L		64.0		64.0	I
THORIUM-228	09/29/93	0001	PCI/L		.387		.387	I
TIN, SOLUBLE	09/29/93	0001	UG/L	B	15.2		15.2	I
TIN, TOTAL	09/29/93	0001	UG/L	B	12.8		12.8	I
TOTAL DISSOLVED SOLIDS	09/29/93	0001	MG/L		579.		579.	I
TOTAL ORGANIC CARBON	09/29/93	0001	MG/L		0.55		0.55	I
TRITIUM	09/29/93	0001	PCI/L		842.		842.	I
URANIUM-234	09/29/93	0001	PCI/L		.23		.23	I
URANIUM-238	09/29/93	0001	PCI/L		.244		.244	I
VANADIUM, SOLUBLE	09/29/93	0001	UG/L		10.1	J	10.1	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0337
NORTH COORDINATE: 600372.79 FT
EAST COORDINATE: 1496201.85 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
VANADIUM, TOTAL	09/29/93	0001	UG/L	B	10.	J	10.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0341
NORTH COORDINATE: 597650.38 FT
EAST COORDINATE: 1494728.37 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: UNDIFFERENTIATED BEDROCK (BR)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMMONIA	09/24/93	0001	MG/L		11.0		11.0	I
ANTIMONY, SOLUBLE	09/24/93	0001	UG/L	B	0.62	J	0.62	I
BARIUM, SOLUBLE	09/24/93	0001	UG/L	B	103.		103.	I
BARIUM, TOTAL	09/24/93	0001	UG/L	B	103.		103.	I
CALCIUM, SOLUBLE	09/24/93	0001	UG/L		145000.	J	145000.	I
CALCIUM, TOTAL	09/24/93	0001	UG/L		149000.	J	149000.	I
CHLORIDE	09/24/93	0001	MG/L		2890.		2890.	I
COBALT, TOTAL	09/24/93	0001	UG/L	B	1.3		1.3	I
COPPER, TOTAL	09/24/93	0001	UG/L	B	1.2		1.2	I
FLUORIDE	09/24/93	0001	MG/L		0.81		0.81	I
IRON, SOLUBLE	09/24/93	0001	UG/L		404.	J	404.	I
IRON, TOTAL	09/24/93	0001	UG/L		452.	J	452.	I
LITHIUM, SOLUBLE	09/24/93	0001	UG/L		1000.		1000.	I
LITHIUM, TOTAL	09/24/93	0001	UG/L		1030.		1030.	I
MAGNESIUM, SOLUBLE	09/24/93	0001	UG/L		77800.	J	77800.	I
MAGNESIUM, TOTAL	09/24/93	0001	UG/L		79900.	J	79900.	I
MANGANESE, SOLUBLE	09/24/93	0001	UG/L		81.8	J	81.8	I
MANGANESE, TOTAL	09/24/93	0001	UG/L		83.3	J	83.3	I
NICKEL, SOLUBLE	09/24/93	0001	UG/L	B	31.9		31.9	I
NICKEL, TOTAL	09/24/93	0001	UG/L	B	36.9		36.9	I
PLUTONIUM-239/240	09/24/93	0001	PCI/L		.13		REJECT	I
POTASSIUM, SOLUBLE	09/24/93	0001	UG/L		46000.		46000.	I
POTASSIUM, TOTAL	09/24/93	0001	UG/L		48800.		48800.	I
RADIUM-226	09/24/93	0001	PCI/L		6.26		6.26	I
SELENIUM, TOTAL	09/24/93	0001	UG/L	B	1.7	J	1.7	I
SODIUM, SOLUBLE	09/24/93	0001	UG/L		1370000.		1370000.	I
SODIUM, TOTAL	09/24/93	0001	UG/L		1520000.		1520000.	I
THORIUM-228	09/24/93	0001	PCI/L		.722		REJECT	I
THORIUM-230	09/24/93	0001	PCI/L		.197		REJECT	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0341
NORTH COORDINATE: 597650.38 FT
EAST COORDINATE: 1494728.37 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: UNDIFFERENTIATED BEDROCK (BR)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
THORIUM-232	09/24/93	0001	PCI/L		.115		.115	I
TIN, SOLUBLE	09/24/93	0001	UG/L	B	19.2		19.2	I
TIN, TOTAL	09/24/93	0001	UG/L	B	22.1		22.1	I
TOTAL DISSOLVED SOLIDS	09/24/93	0001	MG/L		1400.		1400.	I
TOTAL KJELDAHL NITROGEN	09/24/93	0001	MG/L		8.4		8.4	I
TOTAL ORGANIC CARBON	09/24/93	0001	MG/L		1.3		1.3	I
TOTAL PHOSPHATE	09/24/93	0001	MG/L		0.093		0.093	I
TOTAL SUSPENDED SOLIDS	09/24/93	0001	MG/L		13.0		13.0	I
TRITIUM	09/24/93	0001	PCI/L		1270.		1270.	I
VANADIUM, SOLUBLE	09/24/93	0001	UG/L		23.7		23.7	I
VANADIUM, TOTAL	09/24/93	0001	UG/L		24.1		24.1	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0342
NORTH COORDINATE: 596168.63 FT
EAST COORDINATE: 1494550.20 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	10/12/93	1001	UG/L	B	12.7	J	12.7	I
AMERICIUM-241	10/12/93	0001	PCI/L		.097		REJECT	I
AMMONIA	10/12/93	0001	MG/L		0.50		0.50	I
	10/12/93	1001	MG/L		0.59		0.59	I
ANTIMONY, SOLUBLE	10/12/93	1001	UG/L	B	2.4		2.4	I
ANTIMONY, TOTAL	10/12/93	0001	UG/L	B	0.50		0.50	I
BARIUM, SOLUBLE	10/12/93	0001	UG/L	B	200.		200.	I
	10/12/93	1001	UG/L		231.		231.	I
BARIUM, TOTAL	10/12/93	0001	UG/L		248.		248.	I
	10/12/93	1001	UG/L		247.		247.	I
CALCIUM, SOLUBLE	10/12/93	0001	UG/L		60700.	J	60700.	I
	10/12/93	1001	UG/L		70600.	J	70600.	I
CALCIUM, TOTAL	10/12/93	0001	UG/L		75300.	J	75300.	I
	10/12/93	1001	UG/L		75100.	J	75100.	I
CHLORIDE	10/12/93	0001	MG/L		49.4		49.4	I
	10/12/93	1001	MG/L		45.4		45.4	I
CHROMIUM, TOTAL	10/12/93	0001	UG/L	B	6.5	J	6.5	I
	10/12/93	1001	UG/L	B	5.1	J	5.1	I
FLUORIDE	10/12/93	0001	MG/L		0.41		0.41	I
	10/12/93	1001	MG/L		0.40		0.40	I
IRON, SOLUBLE	10/12/93	0001	UG/L		1970.	J	1970.	I
	10/12/93	1001	UG/L		2220.	J	2220.	I
IRON, TOTAL	10/12/93	0001	UG/L		2510.	J	2510.	I
	10/12/93	1001	UG/L		2490.	J	2490.	I
LEAD, SOLUBLE	10/12/93	0001	UG/L		7.5	J	7.5	I
	10/12/93	1001	UG/L		4.8	J	4.8	I
LEAD, TOTAL	10/12/93	1001	UG/L		6.0	J	6.0	I
LITHIUM, SOLUBLE	10/12/93	0001	UG/L	B	8.4		8.4	I
	10/12/93	1001	UG/L	B	10.0		10.0	I
MAGNESIUM, SOLUBLE	10/12/93	0001	UG/L		23900.	J	23900.	I
	10/12/93	1001	UG/L		27900.	J	27900.	I
MAGNESIUM, TOTAL	10/12/93	0001	UG/L		29800.	J	29800.	I
	10/12/93	1001	UG/L		29700.	J	29700.	I
MANGANESE, SOLUBLE	10/12/93	0001	UG/L		30.1	J	30.1	I
	10/12/93	1001	UG/L		33.9	J	33.9	I
MANGANESE, TOTAL	10/12/93	0001	UG/L		36.7	J	36.7	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0342
NORTH COORDINATE: 596168.63 FT
EAST COORDINATE: 1494550.20 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
MANGANESE, TOTAL	10/12/93	1001	UG/L		36.4	J	36.4	I
MOLYBDENUM	10/12/93	0001	UG/L	B	11.4		11.4	I
NICKEL, SOLUBLE	10/12/93	0001	UG/L	B	3.5	J	3.5	I
NICKEL, TOTAL	10/12/93	0001	UG/L	B	4.0	J	4.0	I
PHENOL	10/12/93	1001	UG/L	J	0.6	J	0.6	I
PLUTONIUM-239/240	10/12/93	0001	PCI/L		.24		REJECT	I
	10/12/93	1001	PCI/L		.313		REJECT	I
POTASSIUM, SOLUBLE	10/12/93	0001	UG/L	B	236.	J	236.	I
	10/12/93	1001	UG/L	B	397.	J	397.	I
POTASSIUM, TOTAL	10/12/93	0001	UG/L	B	603.	J	603.	I
	10/12/93	1001	UG/L	B	603.	J	603.	I
RADIUM-226	10/12/93	1001	PCI/L		.51		.51	I
SODIUM, SOLUBLE	10/12/93	0001	UG/L		16300.	J	16300.	I
	10/12/93	1001	UG/L		19400.	J	19400.	I
SODIUM, TOTAL	10/12/93	0001	UG/L		20700.	J	20700.	I
	10/12/93	1001	UG/L		20700.	J	20700.	I
SULFATE	10/12/93	0001	MG/L		25.5		25.5	I
	10/12/93	1001	MG/L		51.0		51.0	I
THORIUM-228	10/12/93	0001	PCI/L		.795		.795	I
	10/12/93	1001	PCI/L		.366		.366	I
THORIUM-230	10/12/93	0001	PCI/L		.347		.347	I
	10/12/93	1001	PCI/L		.324		.324	I
TIN, SOLUBLE	10/12/93	1001	UG/L	B	42.5		42.5	I
TOTAL DISSOLVED SOLIDS	10/12/93	0001	MG/L		451.		451.	I
	10/12/93	1001	MG/L		421.		421.	I
TOTAL KJELDAHL NITROGEN	10/12/93	0001	MG/L		0.38		0.38	I
	10/12/93	1001	MG/L		0.38		0.38	I
TOTAL ORGANIC CARBON	10/12/93	0001	MG/L		0.68		0.68	I
	10/12/93	1001	MG/L		0.68		0.68	I
TOTAL SUSPENDED SOLIDS	10/12/93	0001	MG/L		21.0		21.0	I
	10/12/93	1001	MG/L		18.0		18.0	I
URANIUM-235/236	10/12/93	1001	PCI/L		.0788		.0788	I
URANIUM-238	10/12/93	0001	PCI/L		.0661		.0661	I
ZINC, SOLUBLE	10/12/93	0001	UG/L	B	15.3		15.3	I
ZINC, TOTAL	10/12/93	0001	UG/L	B	8.8		8.8	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0342
NORTH COORDINATE: 596168.63 FT
EAST COORDINATE: 1494550.20 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ZINC, TOTAL	10/12/93	1001	UG/L	B	9.7		9.7	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0343
NORTH COORDINATE: 597140.04 FT
EAST COORDINATE: 1494485.25 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	09/28/93	0001	UG/L		0.57	J	0.57	I
	09/28/93	1001	UG/L		0.75	J	0.75	I
ALUMINUM, TOTAL	09/28/93	0001	UG/L		217.	J	217.	I
	09/28/93	1001	UG/L		182.	J	182.	I
AMERICIUM-241	09/28/93	0001	PCI/L		.791		.791	I
AMMONIA	09/28/93	0001	MG/L		4.0		4.0	I
	09/28/93	1001	MG/L		3.9		3.9	I
ANTIMONY, SOLUBLE	09/28/93	0001	UG/L	B	0.75	J	0.75	I
	09/28/93	1001	UG/L	B	1.1	J	1.1	I
ANTIMONY, TOTAL	09/28/93	0001	UG/L	B	0.70	J	0.70	I
ARSENIC, SOLUBLE	09/28/93	0001	UG/L	B	2.0		2.0	I
BARIUM, SOLUBLE	09/28/93	0001	UG/L	B	54.9	J	54.9	I
	09/28/93	1001	UG/L	B	56.3	J	56.3	I
BARIUM, TOTAL	09/28/93	0001	UG/L	B	52.3	J	52.3	I
	09/28/93	1001	UG/L	B	54.3	J	54.3	I
BIS(2-ETHYLHEXYL)PHTHALATE	09/28/93	1001	UG/L	B	28.	J	28.	I
CALCIUM, SOLUBLE	09/28/93	0001	UG/L		51500.	J	51500.	I
	09/28/93	1001	UG/L		52400.	J	52400.	I
CALCIUM, TOTAL	09/28/93	0001	UG/L		45100.	J	45100.	I
	09/28/93	1001	UG/L		47900.	J	47900.	I
CHLORIDE	09/28/93	0001	MG/L		104.		104.	I
	09/28/93	1001	MG/L		107.		107.	I
COPPER, TOTAL	09/28/93	0001	UG/L	B	2.1		2.1	I
	09/28/93	1001	UG/L	B	1.9		1.9	I
FLUORIDE	09/28/93	0001	MG/L		0.51		0.51	I
	09/28/93	1001	MG/L		0.52		0.52	I
IRON, TOTAL	09/28/93	0001	UG/L		1190.	J	1190.	I
	09/28/93	1001	UG/L		1200.	J	1200.	I
LITHIUM, SOLUBLE	09/28/93	0001	UG/L	B	14.0		14.0	I
	09/28/93	1001	UG/L	B	12.4		12.4	I
LITHIUM, TOTAL	09/28/93	0001	UG/L	B	15.7		15.7	I
	09/28/93	1001	UG/L	B	15.7		15.7	I
MAGNESIUM, SOLUBLE	09/28/93	0001	UG/L		16200.	J	16200.	I
	09/28/93	1001	UG/L		16300.	J	16300.	I
MAGNESIUM, TOTAL	09/28/93	0001	UG/L		14500.	J	14500.	I
	09/28/93	1001	UG/L		15300.	J	15300.	I
MANGANESE, SOLUBLE	09/28/93	0001	UG/L		74.0	J	74.0	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0343
NORTH COORDINATE: 597140.04 FT
EAST COORDINATE: 1494485.25 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
MANGANESE, SOLUBLE	09/28/93	1001	UG/L		77.6	J	77.6	I
MANGANESE, TOTAL	09/28/93	0001	UG/L		73.8	J	73.8	I
	09/28/93	1001	UG/L		82.0	J	82.0	I
MOLYBDENUM	09/28/93	0001	UG/L		23.8		23.8	I
	09/28/93	1001	UG/L		23.2		23.2	I
MOLYBDENUM, SOLUBLE	09/28/93	0001	UG/L		23.4		23.4	I
	09/28/93	1001	UG/L		21.6		21.6	I
NITRATE NITRITE	09/28/93	0001	MG/L		0.17		0.17	I
	09/28/93	1001	MG/L		0.18		0.18	I
PLUTONIUM-239/240	09/28/93	1001	PCI/L		.0965		.0965	I
POTASSIUM, SOLUBLE	09/28/93	0001	UG/L	B	6560.		6560.	I
	09/28/93	1001	UG/L		6260.		6260.	I
POTASSIUM, TOTAL	09/28/93	0001	UG/L		7220.		7220.	I
	09/28/93	1001	UG/L	B	7070.		7070.	I
SODIUM, SOLUBLE	09/28/93	0001	UG/L		40500.		40500.	I
	09/28/93	1001	UG/L		40600.		40600.	I
SODIUM, TOTAL	09/28/93	0001	UG/L		40600.		40600.	I
	09/28/93	1001	UG/L		41300.		41300.	I
SULFATE	09/28/93	0001	MG/L		9.6		9.6	I
THORIUM-228	09/28/93	0001	PCI/L		.395		.395	I
	09/28/93	1001	PCI/L		.545		.545	I
THORIUM-230	09/28/93	0001	PCI/L		.279		.279	I
	09/28/93	1001	PCI/L		.164		.164	I
TIN, SOLUBLE	09/28/93	0001	UG/L	B	5.1		5.1	I
	09/28/93	1001	UG/L	B	6.0		6.0	I
TIN, TOTAL	09/28/93	1001	UG/L	B	6.0		6.0	I
TOTAL DISSOLVED SOLIDS	09/28/93	0001	MG/L		323.		323.	I
	09/28/93	1001	MG/L		318.		318.	I
TOTAL KJELDAHL NITROGEN	09/28/93	0001	MG/L		4.0		4.0	I
	09/28/93	1001	MG/L		3.9		3.9	I
TOTAL ORGANIC CARBON	09/28/93	0001	MG/L		1.9		1.9	I
	09/28/93	1001	MG/L		1.9		1.9	I
TOTAL PHOSPHATE	09/28/93	0001	MG/L		0.25		0.25	I
	09/28/93	1001	MG/L		0.27		0.27	I
TOTAL SUSPENDED SOLIDS	09/28/93	0001	MG/L		7.0		7.0	I
	09/28/93	1001	MG/L		12.0		12.0	I
TRITIUM	09/28/93	0001	PCI/L		8150.		8150.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0343
NORTH COORDINATE: 597140.04 FT
EAST COORDINATE: 1494485.25 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TRITIUM	09/28/93	1001	PCI/L		8400.		8400.	I
URANIUM-234	09/28/93	0001	PCI/L		.142		.142	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0344
NORTH COORDINATE: 595521.96 FT
EAST COORDINATE: 1495145.72 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	10/14/93	0001	UG/L	B	12.8	J	12.8	I
ANTIMONY, SOLUBLE	10/14/93	0001	UG/L	B	3.8		3.8	I
BARIUM, SOLUBLE	10/14/93	0001	UG/L		348.		348.	I
BARIUM, TOTAL	10/14/93	0001	UG/L		343.		343.	I
CALCIUM, SOLUBLE	10/14/93	0001	UG/L		108000.		108000.	I
CALCIUM, TOTAL	10/14/93	0001	UG/L		107000.		107000.	I
CHLORIDE	10/14/93	0001	MG/L		98.6		98.6	I
CHROMIUM, TOTAL	10/14/93	0001	UG/L	B	2.4	J	2.4	I
FLUORIDE	10/14/93	0001	MG/L		0.20		0.20	I
IRON, SOLUBLE	10/14/93	0001	UG/L		4620.	J	4620.	I
IRON, TOTAL	10/14/93	0001	UG/L		4640.	J	4640.	I
MAGNESIUM, SOLUBLE	10/14/93	0001	UG/L		32300.		32300.	I
MAGNESIUM, TOTAL	10/14/93	0001	UG/L		32100.		32100.	I
MANGANESE, SOLUBLE	10/14/93	0001	UG/L		73.2		73.2	I
MANGANESE, TOTAL	10/14/93	0001	UG/L		73.2		73.2	I
NICKEL, SOLUBLE	10/14/93	0001	UG/L	B	17.5		17.5	I
NICKEL, TOTAL	10/14/93	0001	UG/L	B	10.0		10.0	I
PLUTONIUM-238	10/14/93	0001	PCI/L		.0475		.0475	I
PLUTONIUM-239/240	10/14/93	0001	PCI/L		.206		REJECT	I
POTASSIUM, SOLUBLE	10/14/93	0001	UG/L	B	763.	J	763.	I
POTASSIUM, TOTAL	10/14/93	0001	UG/L	B	710.	J	710.	I
RADIUM-226	10/14/93	0001	PCI/L		1.67		1.67	I
SODIUM, SOLUBLE	10/14/93	0001	UG/L		31000.		31000.	I
SODIUM, TOTAL	10/14/93	0001	UG/L		30700.		30700.	I
SULFATE	10/14/93	0001	MG/L		64.5		64.5	I
THORIUM-228	10/14/93	0001	PCI/L		.537		REJECT	I
THORIUM-230	10/14/93	0001	PCI/L		.868		.868	I
TOTAL DISSOLVED SOLIDS	10/14/93	0001	MG/L		581.		581.	I
TOTAL KJELDAHL NITROGEN	10/14/93	0001	MG/L		0.36		0.36	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0344
NORTH COORDINATE: 595521.96 FT
EAST COORDINATE: 1495145.72 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL ORGANIC CARBON	10/14/93	0001	MG/L		1.2		1.2	I
TOTAL PHOSPHATE	10/14/93	0001	MG/L		0.099		0.099	I
TOTAL SUSPENDED SOLIDS	10/14/93	0001	MG/L		8.0		8.0	I
TRITIUM	10/14/93	0001	PCI/L		2150.		2150.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0345
NORTH COORDINATE: 597625.59 FT
EAST COORDINATE: 1496496.46 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMERICIUM-241	09/14/93	0001	PCI/L		.0475		.0475	I
AMMONIA	09/14/93	0001	MG/L		0.19		0.19	I
ANTIMONY, SOLUBLE	09/14/93	0001	UG/L	B	8.6		8.6	I
BARIUM, SOLUBLE	09/14/93	0001	UG/L		68.3	J	68.3	I
BARIUM, TOTAL	09/14/93	0001	UG/L	B	67.9	J	67.9	I
CALCIUM, SOLUBLE	09/14/93	0001	UG/L		109000.	J	109000.	I
CALCIUM, TOTAL	09/14/93	0001	UG/L		110000.	J	110000.	I
CHLORIDE	09/14/93	0001	MG/L		224.	J	224.	I
FLUORIDE	09/14/93	0001	MG/L		0.14		0.14	I
IRON, TOTAL	09/14/93	0001	UG/L	B	49.7	J	49.7	I
LITHIUM, SOLUBLE	09/14/93	0001	UG/L	B	15.7	J	15.7	I
LITHIUM, TOTAL	09/14/93	0001	UG/L	B	13.8	J	13.8	I
MAGNESIUM, SOLUBLE	09/14/93	0001	UG/L		37200.	J	37200.	I
MAGNESIUM, TOTAL	09/14/93	0001	UG/L		37600.	J	37600.	I
MANGANESE, SOLUBLE	09/14/93	0001	UG/L		16.7	J	16.7	I
MANGANESE, TOTAL	09/14/93	0001	UG/L		17.7	J	17.7	I
NITRATE NITRITE	09/14/93	0001	MG/L		1.4		1.4	I
PLUTONIUM-239/240	09/14/93	0001	PCI/L		.113		.113	I
POTASSIUM, SOLUBLE	09/14/93	0001	UG/L		6010.		6010.	I
POTASSIUM, TOTAL	09/14/93	0001	UG/L		5630.		5630.	I
SODIUM, SOLUBLE	09/14/93	0001	UG/L		119000.		119000.	I
SODIUM, TOTAL	09/14/93	0001	UG/L		119000.		119000.	I
SULFATE	09/14/93	0001	MG/L		75.0		75.0	I
THORIUM-228	09/14/93	0001	PCI/L		.795		REJECT	I
THORIUM-230	09/14/93	0001	PCI/L		.743		REJECT	I
TOTAL DISSOLVED SOLIDS	09/14/93	0001	MG/L		809.	J	809.	I
TOTAL ORGANIC CARBON	09/14/93	0001	MG/L		1.2	J	1.2	I
TOTAL PHOSPHATE	09/14/93	0001	MG/L		0.090		0.090	I
TRITIUM	09/14/93	0001	PCI/L		1230.		1230.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP9B GROUNDWATER SWEEPS
LOCATION: 0345
NORTH COORDINATE: 597625.59 FT
EAST COORDINATE: 1496496.46 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
URANIUM-234	09/14/93	0001	PCI/L		.604		.604	I
URANIUM-238	09/14/93	0001	PCI/L		.57		.57	I
VANADIUM, SOLUBLE	09/14/93	0001	UG/L		18.5		18.5	I
VANADIUM, TOTAL	09/14/93	0001	UG/L		18.2		18.2	I
ZINC, SOLUBLE	09/14/93	0001	UG/L	B	18.5		18.5	I
ZINC, TOTAL	09/14/93	0001	UG/L	B	19.6		19.6	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0346
NORTH COORDINATE: 597626.90 FT
EAST COORDINATE: 1496107.04 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	09/23/93	0001	UG/L		111.		111.	I
AMMONIA	09/23/93	0001	MG/L		0.11		0.11	I
ANTIMONY, SOLUBLE	09/23/93	0001	UG/L	B	2.1		2.1	I
BARIUM, SOLUBLE	09/23/93	0001	UG/L	B	45.9		45.9	I
BARIUM, TOTAL	09/23/93	0001	UG/L	B	45.9		45.9	I
CALCIUM, SOLUBLE	09/23/93	0001	UG/L		132000.	J	132000.	I
CALCIUM, TOTAL	09/23/93	0001	UG/L		131000.	J	131000.	I
CHLORIDE	09/23/93	0001	MG/L		378.		378.	I
CHROMIUM, TOTAL	09/23/93	0001	UG/L		37.7		37.7	I
COPPER, TOTAL	09/23/93	0001	UG/L	B	1.9		1.9	I
FLUORIDE	09/23/93	0001	MG/L		0.29		0.29	I
IRON, SOLUBLE	09/23/93	0001	UG/L		1020.		1020.	I
IRON, TOTAL	09/23/93	0001	UG/L		1380.		1380.	I
LITHIUM, SOLUBLE	09/23/93	0001	UG/L	B	33.9		33.9	I
LITHIUM, TOTAL	09/23/93	0001	UG/L	B	33.9		33.9	I
MAGNESIUM, SOLUBLE	09/23/93	0001	UG/L		48800.	J	48800.	I
MAGNESIUM, TOTAL	09/23/93	0001	UG/L		48300.	J	48300.	I
MANGANESE, SOLUBLE	09/23/93	0001	UG/L		38.2		38.2	I
MANGANESE, TOTAL	09/23/93	0001	UG/L		45.4		45.4	I
MOLYBDENUM	09/23/93	0001	UG/L	B	2.7		2.7	I
MOLYBDENUM, SOLUBLE	09/23/93	0001	UG/L	B	2.5		2.5	I
NICKEL, SOLUBLE	09/23/93	0001	UG/L		65.0		65.0	I
NICKEL, TOTAL	09/23/93	0001	UG/L		57.5		57.5	I
NITRATE NITRITE	09/23/93	0001	MG/L		0.034		0.034	I
PLUTONIUM-239/240	09/23/93	0001	PCI/L		.185		REJECT	I
POTASSIUM, SOLUBLE	09/23/93	0001	UG/L	B	4370.		4370.	I
POTASSIUM, TOTAL	09/23/93	0001	UG/L	B	4320.		4320.	I
RADIUM-226	09/23/93	0001	PCI/L		1.17		1.17	I
SODIUM, SOLUBLE	09/23/93	0001	UG/L		191000.	J	191000.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0346
NORTH COORDINATE: 597626.90 FT
EAST COORDINATE: 1496107.04 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SODIUM, TOTAL	09/23/93	0001	UG/L		190000.	J	190000.	I
STRONTIUM-90	09/23/93	0001	PCI/L		.687		.687	I
SULFATE	09/23/93	0001	MG/L		106.		106.	I
THORIUM-228	09/23/93	0001	PCI/L		.547		REJECT	I
THORIUM-230	09/23/93	0001	PCI/L		.328		REJECT	I
THORIUM-232	09/23/93	0001	PCI/L		.109		.109	I
TIN, SOLUBLE	09/23/93	0001	UG/L	B	25.7		25.7	I
TIN, TOTAL	09/23/93	0001	UG/L	B	22.9	J	22.9	I
TOTAL DISSOLVED SOLIDS	09/23/93	0001	MG/L		1180.		1180.	I
TOTAL KJELDAHL NITROGEN	09/23/93	0001	MG/L		0.21		0.21	I
TOTAL ORGANIC CARBON	09/23/93	0001	MG/L		3.2		3.2	I
TOTAL PHOSPHATE	09/23/93	0001	MG/L		0.12		0.12	I
TOTAL SUSPENDED SOLIDS	09/23/93	0001	MG/L		7.0		7.0	I
TRITIUM	09/23/93	0001	PCI/L		4740.		4740.	I
URANIUM-234	09/23/93	0001	PCI/L		.355		.355	I
URANIUM-238	09/23/93	0001	PCI/L		.369		.369	I
VANADIUM, SOLUBLE	09/23/93	0001	UG/L		10.6	J	10.6	I
VANADIUM, TOTAL	09/23/93	0001	UG/L		10.3	J	10.3	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0347
NORTH COORDINATE: 597375.07 FT
EAST COORDINATE: 1495092.49 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND WELL GRADED (SW)
HYDRAULIC FLOW RELATIONSHIP: NOT KNOWN (N)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,2-CIS-DICHLOROETHENE	09/30/93	0001	UG/L		2.4	J	2.4	I
1,2-TRANS-DICHLOROETHENE	09/30/93	0001	UG/L	JB	0.5		REJECT	I
	09/30/93	0001	UG/L		1.2	J	1.2	I
ALUMINUM, SOLUBLE	09/30/93	0001	UG/L	B	8.9	J	8.9	I
ALUMINUM, TOTAL	09/30/93	0001	UG/L	B	11.8	J	11.8	I
AMERICIUM-241	09/30/93	0001	PCI/L		.0464		.0464	I
BARIUM, SOLUBLE	09/30/93	0001	UG/L	B	144.		144.	I
BARIUM, TOTAL	09/30/93	0001	UG/L	B	138.		138.	I
CALCIUM, SOLUBLE	09/30/93	0001	UG/L		176000.	J	176000.	I
CALCIUM, TOTAL	09/30/93	0001	UG/L		168000.	J	168000.	I
CHLORIDE	09/30/93	0001	MG/L		302.		302.	I
CHROMIUM, TOTAL	09/30/93	0001	UG/L	B	9.1	J	9.1	I
COPPER, SOLUBLE	09/30/93	0001	UG/L	B	0.98		0.98	I
COPPER, TOTAL	09/30/93	0001	UG/L	B	0.90		0.90	I
FLUORIDE	09/30/93	0001	MG/L		0.27		0.27	I
IRON, SOLUBLE	09/30/93	0001	UG/L	B	35.5		35.5	I
IRON, TOTAL	09/30/93	0001	UG/L	B	97.7		97.7	I
LITHIUM, SOLUBLE	09/30/93	0001	UG/L	B	9.0		9.0	I
LITHIUM, TOTAL	09/30/93	0001	UG/L	B	9.0		9.0	I
MAGNESIUM, SOLUBLE	09/30/93	0001	UG/L		51800.	J	51800.	I
MAGNESIUM, TOTAL	09/30/93	0001	UG/L		51000.	J	51000.	I
MANGANESE, SOLUBLE	09/30/93	0001	UG/L		20.1		20.1	I
MANGANESE, TOTAL	09/30/93	0001	UG/L		19.8		19.8	I
NICKEL, SOLUBLE	09/30/93	0001	UG/L	B	29.5		29.5	I
NICKEL, TOTAL	09/30/93	0001	UG/L	B	30.7	J	30.7	I
NITRATE NITRITE	09/30/93	0001	MG/L		4.0		4.0	I
POTASSIUM, SOLUBLE	09/30/93	0001	UG/L	B	2980.		2980.	I
POTASSIUM, TOTAL	09/30/93	0001	UG/L	B	2890.		2890.	I
RADIUM-226	09/30/93	0001	PCI/L		.907		.907	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0347
NORTH COORDINATE: 597375.07 FT
EAST COORDINATE: 1495092.49 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND WELL GRADED (SW)
HYDRAULIC FLOW RELATIONSHIP: NOT KNOWN (N)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SODIUM, SOLUBLE	09/30/93	0001	UG/L		153000.		153000.	I
SODIUM, TOTAL	09/30/93	0001	UG/L		149000.		149000.	I
STRONTIUM-90	09/30/93	0001	PCI/L		1.25		1.25	I
SULFATE	09/30/93	0001	MG/L		166.		166.	I
TETRACHLOROMETHANE (CCL4)	09/30/93	0001	UG/L		4.4	J	4.4	I
THORIUM-228	09/30/93	0001	PCI/L		.511		.511	I
THORIUM-230	09/30/93	0001	PCI/L		.559		REJECT	I
THORIUM-232	09/30/93	0001	PCI/L		.12		.12	I
TIN, SOLUBLE	09/30/93	0001	UG/L	B	31.3		31.3	I
TIN, TOTAL	09/30/93	0001	UG/L	B	29.3		29.3	I
TOTAL DISSOLVED SOLIDS	09/30/93	0001	MG/L		1140.		1140.	I
TOTAL ORGANIC CARBON	09/30/93	0001	MG/L		0.89		0.89	I
TRICHLOROETHENE	09/30/93	0001	UG/L		9.2	J	9.2	I
TRICHLOROMETHANE (CHLOROFORM)	09/30/93	0001	UG/L		0.89	J	0.89	I
TRITIUM	09/30/93	0001	PCI/L		3070.		3070.	I
URANIUM-234	09/30/93	0001	PCI/L		.837		.837	I
URANIUM-238	09/30/93	0001	PCI/L		.71		.71	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0351
NORTH COORDINATE: 596433.35 FT
EAST COORDINATE: 1497050.28 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LIMESTONE (LS)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	09/26/93	0001	UG/L		208.	J	208.	I
AMERICIUM-241	09/26/93	0001	PCI/L		.0608		REJECT	I
ANTIMONY, SOLUBLE	09/26/93	0001	UG/L	B	1.2		1.2	I
BARIUM, SOLUBLE	09/26/93	0001	UG/L	B	19.3		19.3	I
BARIUM, TOTAL	09/26/93	0001	UG/L	B	20.0		20.0	I
BISMUTH, SOLUBLE	09/26/93	0001	UG/L	B	42.2		42.2	I
BISMUTH, TOTAL	09/26/93	0001	UG/L	B	51.0		51.0	I
CALCIUM, SOLUBLE	09/26/93	0001	UG/L		129000.	J	129000.	I
CALCIUM, TOTAL	09/26/93	0001	UG/L		131000.	J	131000.	I
CHLORIDE	09/26/93	0001	MG/L		26.4		26.4	I
COPPER, TOTAL	09/26/93	0001	UG/L	B	1.3		1.3	I
FLUORIDE	09/26/93	0001	MG/L		0.55		0.55	I
IRON, SOLUBLE	09/26/93	0001	UG/L		276.	J	276.	I
IRON, TOTAL	09/26/93	0001	UG/L		424.	J	424.	I
LITHIUM, SOLUBLE	09/26/93	0001	UG/L	B	85.7		85.7	I
LITHIUM, TOTAL	09/26/93	0001	UG/L	B	82.5		82.5	I
MAGNESIUM, SOLUBLE	09/26/93	0001	UG/L		83100.	J	83100.	I
MAGNESIUM, TOTAL	09/26/93	0001	UG/L		84400.	J	84400.	I
MANGANESE, SOLUBLE	09/26/93	0001	UG/L		15.4	J	15.4	I
MANGANESE, TOTAL	09/26/93	0001	UG/L		22.7	J	22.7	I
NITRATE NITRITE	09/26/93	0001	MG/L		0.026		0.026	I
PLUTONIUM-239/240	09/26/93	0001	PCI/L		.245		REJECT	I
POTASSIUM, SOLUBLE	09/26/93	0001	UG/L		16400.		16400.	I
POTASSIUM, TOTAL	09/26/93	0001	UG/L		15500.		15500.	I
RADIUM-226	09/26/93	0001	PCI/L		1.37		1.37	I
SODIUM, SOLUBLE	09/26/93	0001	UG/L		26800.		26800.	I
SODIUM, TOTAL	09/26/93	0001	UG/L		22900.		22900.	I
SULFATE	09/26/93	0001	MG/L		28.5		28.5	I
THORIUM-228	09/26/93	0001	PCI/L		.468		REJECT	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0351
NORTH COORDINATE: 596433.35 FT
EAST COORDINATE: 1497050.28 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LIMESTONE (LS)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
THORIUM-230	09/26/93	0001	PCI/L		.246		REJECT	I
TIN, SOLUBLE	09/26/93	0001	UG/L	B	18.5		18.5	I
TIN, TOTAL	09/26/93	0001	UG/L	B	19.7		19.7	I
TOTAL DISSOLVED SOLIDS	09/26/93	0001	MG/L		942.		942.	I
TOTAL KJELDAHL NITROGEN	09/26/93	0001	MG/L		0.87		0.87	I
TOTAL ORGANIC CARBON	09/26/93	0001	MG/L		0.60		0.60	I
TOTAL PHOSPHATE	09/26/93	0001	MG/L		0.095		0.095	I
TOTAL SUSPENDED SOLIDS	09/26/93	0001	MG/L		9.0		9.0	I
URANIUM-234	09/26/93	0001	PCI/L		.311		.311	I
URANIUM-238	09/26/93	0001	PCI/L		.206		.206	I
VANADIUM, SOLUBLE	09/26/93	0001	UG/L		22.5		22.5	I
VANADIUM, TOTAL	09/26/93	0001	UG/L		22.4		22.4	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0353
NORTH COORDINATE: 596241.80 FT
EAST COORDINATE: 1495668.78 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTS, SANDY OR GRAVELLY SILTS, DIATOMACEOUS SOILS (ML)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	09/16/93	0001	UG/L		424.	J	424.	I
	09/16/93	1001	UG/L		117.	J	117.	I
AMERICIUM-241	09/16/93	0001	PCI/L		.0829		.0829	I
	09/16/93	1001	PCI/L		.132		.132	I
AMMONIA	09/16/93	0001	MG/L		0.56		0.56	I
	09/16/93	1001	MG/L		0.40		0.40	I
ANTIMONY, SOLUBLE	09/16/93	0001	UG/L		11.7	J	11.7	I
	09/16/93	1001	UG/L	B	3.4	J	3.4	I
BARIUM, SOLUBLE	09/16/93	0001	UG/L	B	131.	J	131.	I
	09/16/93	1001	UG/L	B	112.	J	112.	I
BARIUM, TOTAL	09/16/93	0001	UG/L	B	129.	J	129.	I
	09/16/93	1001	UG/L	B	133.	J	133.	I
CALCIUM, SOLUBLE	09/16/93	0001	UG/L		177000.	J	177000.	I
	09/16/93	1001	UG/L		134000.	J	134000.	I
CALCIUM, TOTAL	09/16/93	0001	UG/L		145000.	J	145000.	I
	09/16/93	1001	UG/L		167000.	J	167000.	I
CHLORIDE	09/16/93	0001	MG/L		225.	J	225.	I
	09/16/93	1001	MG/L		201.	J	201.	I
COPPER, SOLUBLE	09/16/93	0001	UG/L	B	0.76		0.76	I
DIETHYL PHTHALATE	09/16/93	1001	UG/L	J	1.	J	1.	I
FLUORIDE	09/16/93	0001	MG/L		0.18		0.18	I
	09/16/93	1001	MG/L		0.19		0.19	I
IRON, SOLUBLE	09/16/93	0001	UG/L		1350.	J	1350.	I
	09/16/93	1001	UG/L		1210.	J	1210.	I
IRON, TOTAL	09/16/93	0001	UG/L		2120.	J	2120.	I
	09/16/93	1001	UG/L		1670.	J	1670.	I
LITHIUM, SOLUBLE	09/16/93	0001	UG/L	B	15.7	J	15.7	I
	09/16/93	1001	UG/L	B	12.0	J	12.0	I
LITHIUM, TOTAL	09/16/93	0001	UG/L	B	17.6	J	17.6	I
	09/16/93	1001	UG/L	B	15.7	J	15.7	I
MAGNESIUM, SOLUBLE	09/16/93	0001	UG/L		54500.	J	54500.	I
	09/16/93	1001	UG/L		48600.	J	48600.	I
MAGNESIUM, TOTAL	09/16/93	0001	UG/L		53700.	J	53700.	I
	09/16/93	1001	UG/L		53700.	J	53700.	I
MANGANESE, SOLUBLE	09/16/93	0001	UG/L		56.4	J	56.4	I
	09/16/93	1001	UG/L		61.1	J	61.1	I
MANGANESE, TOTAL	09/16/93	0001	UG/L		62.5	J	62.5	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0353
NORTH COORDINATE: 596241.80 FT
EAST COORDINATE: 1495668.78 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTS, SANDY OR GRAVELLY SILTS, DIATOMACEOUS SOILS (ML)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
MANGANESE, TOTAL	09/16/93	1001	UG/L		49.7	J	49.7	I
PHENOL	09/16/93	1001	UG/L	J	1.	J	1.	I
PLUTONIUM-239/240	09/16/93	1001	PCI/L		.1		.1	I
POTASSIUM, SOLUBLE	09/16/93	0001	UG/L	B	3180.		3180.	I
	09/16/93	1001	UG/L	B	2630.		2630.	I
POTASSIUM, TOTAL	09/16/93	0001	UG/L	B	3070.		3070.	I
	09/16/93	1001	UG/L	B	3180.		3180.	I
RADIUM-226	09/16/93	0001	PCI/L		.487		.487	I
	09/16/93	1001	PCI/L		.344		.344	I
SODIUM, SOLUBLE	09/16/93	0001	UG/L		20300.		20300.	I
	09/16/93	1001	UG/L		17700.		17700.	I
SODIUM, TOTAL	09/16/93	0001	UG/L		19800.		19800.	I
	09/16/93	1001	UG/L		20400.		20400.	I
SULFATE	09/16/93	0001	MG/L		94.4		94.4	I
	09/16/93	1001	MG/L		107.		107.	I
THORIUM-228	09/16/93	0001	PCI/L		.359		REJECT	I
	09/16/93	1001	PCI/L		.53		REJECT	I
THORIUM-230	09/16/93	0001	PCI/L		.15		REJECT	I
	09/16/93	1001	PCI/L		1.15		REJECT	I
TOTAL DISSOLVED SOLIDS	09/16/93	0001	MG/L		833.		833.	I
	09/16/93	1001	MG/L		802.		802.	I
TOTAL KJELDAHL NITROGEN	09/16/93	0001	MG/L		0.14		0.14	I
	09/16/93	1001	MG/L		0.14		0.14	I
TOTAL ORGANIC CARBON	09/16/93	0001	MG/L		0.97		0.97	I
	09/16/93	1001	MG/L		1.5		1.5	I
TOTAL PHOSPHATE	09/16/93	0001	MG/L		0.18		0.18	I
	09/16/93	1001	MG/L		0.14		0.14	I
TOTAL SUSPENDED SOLIDS	09/16/93	0001	MG/L		18.0		18.0	I
	09/16/93	1001	MG/L		16.0		16.0	I
TRITIUM	09/16/93	0001	PCI/L		1320.		1320.	I
	09/16/93	1001	PCI/L		1260.		1260.	I
URANIUM-234	09/16/93	0001	PCI/L		.172		.172	I
	09/16/93	1001	PCI/L		.181		.181	I
VANADIUM, SOLUBLE	09/16/93	0001	UG/L		21.2		21.2	I
	09/16/93	1001	UG/L		20.2		20.2	I
VANADIUM, TOTAL	09/16/93	0001	UG/L		23.6		23.6	I
	09/16/93	1001	UG/L		21.6		21.6	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0353
NORTH COORDINATE: 596241.80 FT
EAST COORDINATE: 1495668.78 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTS, SANDY OR GRAVELLY SILTS, DIATOMACEOUS SOILS (ML)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ZINC, TOTAL	09/16/93	0001	UG/L	B	27.0	J	27.0	I
	09/16/93	1001	UG/L	B	17.3	J	17.3	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0354
NORTH COORDINATE: 595602.10 FT
EAST COORDINATE: 1496322.15 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTSTONE (ST)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	10/11/93	0001	UG/L		307.		307.	I
AMERICIUM-241	10/11/93	0001	PCI/L		.0848		.0848	I
ANTIMONY, SOLUBLE	10/11/93	0001	UG/L		6.3		6.3	I
BARIUM, SOLUBLE	10/11/93	0001	UG/L	B	39.4	J	39.4	I
BARIUM, TOTAL	10/11/93	0001	UG/L	B	39.5	J	39.5	I
CALCIUM, SOLUBLE	10/11/93	0001	UG/L		97200.	J	97200.	I
CALCIUM, TOTAL	10/11/93	0001	UG/L		96100.	J	96100.	I
CHLORIDE	10/11/93	0001	MG/L		13.1		13.1	I
COPPER, SOLUBLE	10/11/93	0001	UG/L	B	2.4		2.4	I
FLUORIDE	10/11/93	0001	MG/L		0.21		0.21	I
IRON, TOTAL	10/11/93	0001	UG/L		502.		502.	I
LITHIUM, SOLUBLE	10/11/93	0001	UG/L	B	24.4		24.4	I
LITHIUM, TOTAL	10/11/93	0001	UG/L	B	24.4		24.4	I
MAGNESIUM, SOLUBLE	10/11/93	0001	UG/L		50800.	J	50800.	I
MAGNESIUM, TOTAL	10/11/93	0001	UG/L		50100.	J	50100.	I
MANGANESE, SOLUBLE	10/11/93	0001	UG/L	B	3.6		3.6	I
MANGANESE, TOTAL	10/11/93	0001	UG/L		22.6		22.6	I
NITRATE NITRITE	10/11/93	0001	MG/L		0.031		0.031	I
POTASSIUM, SOLUBLE	10/11/93	0001	UG/L	B	3990.		3990.	I
POTASSIUM, TOTAL	10/11/93	0001	UG/L	B	3940.		3940.	I
SODIUM, SOLUBLE	10/11/93	0001	UG/L		6410.	J	6410.	I
SODIUM, TOTAL	10/11/93	0001	UG/L		6110.	J	6110.	I
SULFATE	10/11/93	0001	MG/L		198.		198.	I
THORIUM-228	10/11/93	0001	PCI/L		.696		.696	I
TOTAL DISSOLVED SOLIDS	10/11/93	0001	MG/L		506.		506.	I
TOTAL KJELDAHL NITROGEN	10/11/93	0001	MG/L		0.28		0.28	I
TOTAL ORGANIC CARBON	10/11/93	0001	MG/L		3.2		3.2	I
TOTAL PHOSPHATE	10/11/93	0001	MG/L		0.16		0.16	I
TOTAL SUSPENDED SOLIDS	10/11/93	0001	MG/L		11.0		11.0	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0354
NORTH COORDINATE: 595602.10 FT
EAST COORDINATE: 1496322.15 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTSTONE (ST)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TRITIUM	10/11/93	0001	PCI/L		1340.		1340.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0356
NORTH COORDINATE: 595011.45 FT
EAST COORDINATE: 1495353.58 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	09/25/93	0001	UG/L		180.	J	180.	I
AMERICIUM-241	09/25/93	0001	PCI/L		.0438		REJECT	I
ANTIMONY, SOLUBLE	09/25/93	0001	UG/L	B	0.85	J	0.85	I
BARIUM, SOLUBLE	09/25/93	0001	UG/L	B	145.		145.	I
BARIUM, TOTAL	09/25/93	0001	UG/L	B	152.		152.	I
CALCIUM, SOLUBLE	09/25/93	0001	UG/L		96300.	J	96300.	I
CALCIUM, TOTAL	09/25/93	0001	UG/L		104000.	J	104000.	I
CHLORIDE	09/25/93	0001	MG/L		105.		105.	I
FLUORIDE	09/25/93	0001	MG/L		0.18		0.18	I
IRON, SOLUBLE	09/25/93	0001	UG/L		737.	J	737.	I
IRON, TOTAL	09/25/93	0001	UG/L		1110.	J	1110.	I
MAGNESIUM, SOLUBLE	09/25/93	0001	UG/L		31400.	J	31400.	I
MAGNESIUM, TOTAL	09/25/93	0001	UG/L		33200.	J	33200.	I
MANGANESE, SOLUBLE	09/25/93	0001	UG/L		186.	J	186.	I
MANGANESE, TOTAL	09/25/93	0001	UG/L		204.	J	204.	I
PLUTONIUM-239/240	09/25/93	0001	PCI/L		.101		REJECT	I
POTASSIUM, SOLUBLE	09/25/93	0001	UG/L	B	4060.		4060.	I
POTASSIUM, TOTAL	09/25/93	0001	UG/L	B	3750.		3750.	I
RADIUM-226	09/25/93	0001	PCI/L		.783		.783	I
SODIUM, SOLUBLE	09/25/93	0001	UG/L		39000.		39000.	I
SODIUM, TOTAL	09/25/93	0001	UG/L		40600.		40600.	I
THORIUM-228	09/25/93	0001	PCI/L		.565		REJECT	I
THORIUM-230	09/25/93	0001	PCI/L		.0565		REJECT	I
TIN, SOLUBLE	09/25/93	0001	UG/L	B	13.5		13.5	I
TIN, TOTAL	09/25/93	0001	UG/L	B	14.3		14.3	I
TOTAL DISSOLVED SOLIDS	09/25/93	0001	MG/L		524.		524.	I
TOTAL KJELDAHL NITROGEN	09/25/93	0001	MG/L		0.20		0.20	I
TOTAL ORGANIC CARBON	09/25/93	0001	MG/L		1.9		1.9	I
TOTAL PHOSPHATE	09/25/93	0001	MG/L		0.10		0.10	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0356
NORTH COORDINATE: 595011.45 FT
EAST COORDINATE: 1495353.58 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL SUSPENDED SOLIDS	09/25/93	0001	MG/L		12.0		12.0	I
TRITIUM	09/25/93	0001	PCI/L		1230.		1230.	I
URANIUM-234	09/25/93	0001	PCI/L		.734		.734	I
URANIUM-238	09/25/93	0001	PCI/L		.735		.735	I
VANADIUM, SOLUBLE	09/25/93	0001	UG/L		13.8		13.8	I
VANADIUM, TOTAL	09/25/93	0001	UG/L		13.7		13.7	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0370
NORTH COORDINATE: 596829.64 FT
EAST COORDINATE: 1495100.73 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	09/24/93	0001	UG/L		0.44	J	0.44	I
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHA	09/24/93	0001	UG/L		3.7	J	3.7	I
1,2-CIS-DICHLOROETHENE	09/24/93	0001	UG/L		190.		190.	D1
1,2-TRANS-DICHLOROETHENE	09/24/93	0001	UG/L		1.1	J	1.1	I
ACETONITRILE	09/24/93	0001	UG/L	J	4.	J	4.	I
ALUMINUM, SOLUBLE	09/24/93	0001	UG/L	B	8.6		8.6	I
ALUMINUM, TOTAL	09/24/93	0001	UG/L	B	7.7		7.7	I
AMERICIUM-241	09/24/93	0001	PCI/L		.0747		.0747	I
BARIUM, SOLUBLE	09/24/93	0001	UG/L	B	134.	J	134.	I
BARIUM, TOTAL	09/24/93	0001	UG/L	B	132.	J	132.	I
CALCIUM, SOLUBLE	09/24/93	0001	UG/L		147000.	J	147000.	I
CALCIUM, TOTAL	09/24/93	0001	UG/L		142000.	J	142000.	I
CHLORIDE	09/24/93	0001	MG/L		314.		314.	I
CHLOROETHENE (VINYL CHLORIDE)	09/24/93	0001	UG/L		1.8	J	1.8	I
COPPER, SOLUBLE	09/24/93	0001	UG/L	B	1.00	J	1.00	I
COPPER, TOTAL	09/24/93	0001	UG/L	B	1.00	J	1.00	I
FLUORIDE	09/24/93	0001	MG/L		0.26		0.26	I
IRON, SOLUBLE	09/24/93	0001	UG/L		621.		621.	I
IRON, TOTAL	09/24/93	0001	UG/L		252.		252.	I
LEAD, SOLUBLE	09/24/93	0001	UG/L	B	2.5		2.5	I
LEAD, TOTAL	09/24/93	0001	UG/L		5.4		5.4	I
MAGNESIUM, SOLUBLE	09/24/93	0001	UG/L		53800.	J	53800.	I
MAGNESIUM, TOTAL	09/24/93	0001	UG/L		52200.	J	52200.	I
MANGANESE, SOLUBLE	09/24/93	0001	UG/L		81.5	J	81.5	I
MANGANESE, TOTAL	09/24/93	0001	UG/L		59.5	J	59.5	I
NICKEL, SOLUBLE	09/24/93	0001	UG/L		184.	J	184.	I
NICKEL, TOTAL	09/24/93	0001	UG/L		99.9		99.9	I
NITRATE NITRITE	09/24/93	0001	MG/L		0.92		0.92	I
PLUTONIUM-239/240	09/24/93	0001	PCI/L		.207		REJECT	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0370
NORTH COORDINATE: 596829.64 FT
EAST COORDINATE: 1495100.73 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
POTASSIUM, SOLUBLE	09/24/93	0001	UG/L	B	3090.	J	3090.	I
POTASSIUM, TOTAL	09/24/93	0001	UG/L	B	2880.	J	2880.	I
RADIUM-226	09/24/93	0001	PCI/L		.382		.382	I
SODIUM, SOLUBLE	09/24/93	0001	UG/L		109000.	J	109000.	I
SODIUM, TOTAL	09/24/93	0001	UG/L		106000.	J	106000.	I
SULFATE	09/24/93	0001	MG/L		76.0		76.0	I
TETRACHLOROETHENE	09/24/93	0001	UG/L		140.		140.	D1
TETRACHLOROMETHANE (CCL4)	09/24/93	0001	UG/L		3.2	J	3.2	I
THORIUM-228	09/24/93	0001	PCI/L		.765		REJECT	I
THORIUM-230	09/24/93	0001	PCI/L		1.42	J	1.42	I
TOTAL DISSOLVED SOLIDS	09/24/93	0001	MG/L		984.		984.	I
TOTAL KJELDAHL NITROGEN	09/24/93	0001	MG/L		0.12		0.12	I
TOTAL ORGANIC CARBON	09/24/93	0001	MG/L		2.7		2.7	I
TOTAL PHOSPHATE	09/24/93	0001	MG/L		0.092		0.092	I
TOTAL SUSPENDED SOLIDS	09/24/93	0001	MG/L		5.0		5.0	I
TRICHLOROETHENE	09/24/93	0001	UG/L		72.	J	72.	D1
TRICHLOROFLUOROMETHANE	09/24/93	0001	UG/L		2.2	J	2.2	I
TRICHLOROMETHANE (CHLOROFORM)	09/24/93	0001	UG/L		25.	J	25.	I
TRITIUM	09/24/93	0001	PCI/L		4850.		4850.	I
URANIUM-234	09/24/93	0001	PCI/L		.695		.695	I
URANIUM-238	09/24/93	0001	PCI/L		1.46		1.46	I
VANADIUM, SOLUBLE	09/24/93	0001	UG/L		20.2		20.2	I
VANADIUM, TOTAL	09/24/93	0001	UG/L		20.5		20.5	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0372
NORTH COORDINATE: 596693.75 FT
EAST COORDINATE: 1495331.22 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	09/24/93	0001	UG/L		210.	J	210.	I
AMERICIUM-241	09/24/93	0001	PCI/L		.0852		REJECT	I
AMMONIA	09/24/93	0001	MG/L		4.6		4.6	I
ANTIMONY, SOLUBLE	09/24/93	0001	UG/L	B	0.98	J	0.98	I
BARIUM, SOLUBLE	09/24/93	0001	UG/L	B	162.		162.	I
BARIUM, TOTAL	09/24/93	0001	UG/L	B	161.		161.	I
CALCIUM, SOLUBLE	09/24/93	0001	UG/L		65100.	J	65100.	I
CALCIUM, TOTAL	09/24/93	0001	UG/L		65100.	J	65100.	I
CHLORIDE	09/24/93	0001	MG/L		630.		630.	I
CHROMIUM, TOTAL	09/24/93	0001	UG/L	B	7.1		7.1	I
COPPER, SOLUBLE	09/24/93	0001	UG/L	B	4.2		4.2	I
COPPER, TOTAL	09/24/93	0001	UG/L	B	6.0		6.0	I
DICHLOROMETHANE-METHYLENE CHLORIDE	09/24/93	0001	UG/L		8.0	J	8.0	I
FLUORIDE	09/24/93	0001	MG/L		1.8		1.8	I
IRON, SOLUBLE	09/24/93	0001	UG/L	U	13.2	J	13.2	I
IRON, TOTAL	09/24/93	0001	UG/L		499.	J	499.	I
LITHIUM, SOLUBLE	09/24/93	0001	UG/L		171.		171.	I
LITHIUM, TOTAL	09/24/93	0001	UG/L		166.		166.	I
MAGNESIUM, SOLUBLE	09/24/93	0001	UG/L		46200.	J	46200.	I
MAGNESIUM, TOTAL	09/24/93	0001	UG/L		46000.	J	46000.	I
MANGANESE, SOLUBLE	09/24/93	0001	UG/L		15.6	J	15.6	I
MANGANESE, TOTAL	09/24/93	0001	UG/L		21.4	J	21.4	I
MOLYBDENUM	09/24/93	0001	UG/L	B	12.7		12.7	I
MOLYBDENUM, SOLUBLE	09/24/93	0001	UG/L	B	13.1		13.1	I
NICKEL, SOLUBLE	09/24/93	0001	UG/L	B	11.0		11.0	I
NICKEL, TOTAL	09/24/93	0001	UG/L	B	14.1		14.1	I
PLUTONIUM-239/240	09/24/93	0001	PCI/L		.24		REJECT	I
POTASSIUM, SOLUBLE	09/24/93	0001	UG/L		24600.		24600.	I
POTASSIUM, TOTAL	09/24/93	0001	UG/L		23700.		23700.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0372
NORTH COORDINATE: 596693.75 FT
EAST COORDINATE: 1495331.22 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
RADIUM-226	09/24/93	0001	PCI/L		2.15		2.15	I
SELENIUM, TOTAL	09/24/93	0001	UG/L	B	1.4	J	1.4	I
SODIUM, SOLUBLE	09/24/93	0001	UG/L		335000.		335000.	I
SODIUM, TOTAL	09/24/93	0001	UG/L		329000.		329000.	I
SULFATE	09/24/93	0001	MG/L		6.3		6.3	I
THORIUM-228	09/24/93	0001	PCI/L		.707		REJECT	I
THORIUM-230	09/24/93	0001	PCI/L		.101		REJECT	I
TIN, SOLUBLE	09/24/93	0001	UG/L	B	18.1		18.1	I
TIN, TOTAL	09/24/93	0001	UG/L	B	16.7		16.7	I
TOTAL DISSOLVED SOLIDS	09/24/93	0001	MG/L		1430.		1430.	I
TOTAL KJELDAHL NITROGEN	09/24/93	0001	MG/L		4.0		4.0	I
TOTAL PHOSPHATE	09/24/93	0001	MG/L		0.12		0.12	I
TOTAL SUSPENDED SOLIDS	09/24/93	0001	MG/L		9.0		9.0	I
URANIUM-234	09/24/93	0001	PCI/L		.3		.3	I
VANADIUM, SOLUBLE	09/24/93	0001	UG/L		14.4		14.4	I
VANADIUM, TOTAL	09/24/93	0001	UG/L		14.7		14.7	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0373
NORTH COORDINATE: 596690.56 FT
EAST COORDINATE: 1495128.52 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHA	09/25/93	0001	UG/L		5.2		5.2	I
1,2-CIS-DICHLOROETHENE	09/25/93	0001	UG/L		13.	J	13.	I
AMERICIUM-241	09/25/93	0001	PCI/L		.128		REJECT	I
BARIUM, SOLUBLE	09/25/93	0001	UG/L	B	160.		160.	I
BARIUM, TOTAL	09/25/93	0001	UG/L	B	166.		166.	I
BIS(2-ETHYLHEXYL)PHTHALATE	09/25/93	0001	UG/L	B	11.		11.	I
CALCIUM, SOLUBLE	09/25/93	0001	UG/L		141000.	J	141000.	I
CALCIUM, TOTAL	09/25/93	0001	UG/L		144000.	J	144000.	I
CHLORIDE	09/25/93	0001	MG/L		296.		296.	I
COPPER, SOLUBLE	09/25/93	0001	UG/L	B	1.4		1.4	I
COPPER, TOTAL	09/25/93	0001	UG/L	B	1.6		1.6	I
FLUORIDE	09/25/93	0001	MG/L		0.26		0.26	I
IRON, SOLUBLE	09/25/93	0001	UG/L		264.		264.	I
IRON, TOTAL	09/25/93	0001	UG/L		441.		441.	I
LEAD, SOLUBLE	09/25/93	0001	UG/L	B	2.9		2.9	I
LEAD, TOTAL	09/25/93	0001	UG/L	B	2.9		2.9	I
LITHIUM, SOLUBLE	09/25/93	0001	UG/L	B	28.6		28.6	I
MAGNESIUM, SOLUBLE	09/25/93	0001	UG/L		51900.		51900.	I
MAGNESIUM, TOTAL	09/25/93	0001	UG/L		53600.		53600.	I
MANGANESE, SOLUBLE	09/25/93	0001	UG/L		25.1		25.1	I
MANGANESE, TOTAL	09/25/93	0001	UG/L		20.9		20.9	I
NICKEL, SOLUBLE	09/25/93	0001	UG/L		53.5		53.5	I
NICKEL, TOTAL	09/25/93	0001	UG/L		57.5		57.5	I
NITRATE NITRITE	09/25/93	0001	MG/L		0.92		0.92	I
PLUTONIUM-239/240	09/25/93	0001	PCI/L		.113		REJECT	I
POTASSIUM, SOLUBLE	09/25/93	0001	UG/L	B	3250.	J	3250.	I
POTASSIUM, TOTAL	09/25/93	0001	UG/L	B	3140.	J	3140.	I
SODIUM, SOLUBLE	09/25/93	0001	UG/L		103000.		103000.	I
SODIUM, TOTAL	09/25/93	0001	UG/L		107000.		107000.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0373
NORTH COORDINATE: 596690.56 FT
EAST COORDINATE: 1495128.52 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SULFATE	09/25/93	0001	MG/L		66.8		66.8	I
TETRACHLOROETHENE	09/25/93	0001	UG/L		49.	J	49.	I
TETRACHLOROMETHANE (CCL4)	09/25/93	0001	UG/L		4.5	J	4.5	I
THORIUM-228	09/25/93	0001	PCI/L		.518		REJECT	I
THORIUM-230	09/25/93	0001	PCI/L		.27		REJECT	I
TOTAL DISSOLVED SOLIDS	09/25/93	0001	MG/L		1010.		1010.	I
TOTAL ORGANIC CARBON	09/25/93	0001	MG/L		3.3		3.3	I
TOTAL PHOSPHATE	09/25/93	0001	MG/L		0.11		0.11	I
TRICHLOROETHENE	09/25/93	0001	UG/L		31.	J	31.	I
TRICHLOROFLUOROMETHANE	09/25/93	0001	UG/L		3.2		3.2	I
TRICHLOROMETHANE (CHLOROFORM)	09/25/93	0001	UG/L		8.3		8.3	I
TRITIUM	09/25/93	0001	PCI/L		4930.		4930.	I
URANIUM-234	09/25/93	0001	PCI/L		.59		.59	I
URANIUM-238	09/25/93	0001	PCI/L		.691		.691	I
VANADIUM, SOLUBLE	09/25/93	0001	UG/L		19.7		19.7	I
VANADIUM, TOTAL	09/25/93	0001	UG/L		18.7		18.7	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0375
NORTH COORDINATE: 597074.08 FT
EAST COORDINATE: 1494980.33 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	09/30/93	0001	UG/L		25.3		25.3	I
AMERICIUM-241	10/13/93	0001	PCI/L		.0651		REJECT	I
BARIUM, TOTAL	09/30/93	0001	UG/L	B	84.9		84.9	I
CALCIUM, TOTAL	09/30/93	0001	UG/L		140000.	J	140000.	I
CHROMIUM, TOTAL	09/30/93	0001	UG/L		31.7	J	31.7	I
COPPER, TOTAL	09/30/93	0001	UG/L	B	1.3		1.3	I
IRON, TOTAL	09/30/93	0001	UG/L		343.		343.	I
LITHIUM, TOTAL	09/30/93	0001	UG/L	B	7.3		7.3	I
MAGNESIUM, TOTAL	09/30/93	0001	UG/L		42300.	J	42300.	I
MANGANESE, TOTAL	09/30/93	0001	UG/L		26.9		26.9	I
NICKEL, TOTAL	09/30/93	0001	UG/L	B	30.3	J	30.3	I
PLUTONIUM-239/240	10/13/93	0001	PCI/L		.149		REJECT	I
POTASSIUM, TOTAL	09/30/93	0001	UG/L	B	3030.		3030.	I
SODIUM, TOTAL	09/30/93	0001	UG/L		64700.		64700.	I
TETRACHLOROETHENE	09/30/93	0001	UG/L		4.8	J	4.8	I
THORIUM-228	10/13/93	0001	PCI/L		.771		REJECT	I
THORIUM-230	10/13/93	0001	PCI/L		.393		.393	I
TIN, TOTAL	09/30/93	0001	UG/L	B	28.3		28.3	I
TRICHLOROETHENE	09/30/93	0001	UG/L		2.7		2.7	I
URANIUM-234	10/13/93	0001	PCI/L		.438		.438	I
URANIUM-238	10/13/93	0001	PCI/L		.339		.339	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0376
NORTH COORDINATE: 596696.75 FT
EAST COORDINATE: 1494760.63 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	09/26/93	0001	UG/L		0.79	J	0.79	I
AMERICIUM-241	09/26/93	0001	PCI/L		.118		REJECT	I
ANTIMONY, SOLUBLE	09/26/93	0001	UG/L	B	4.8		4.8	I
BARIUM, SOLUBLE	09/26/93	0001	UG/L	B	77.4		77.4	I
BARIUM, TOTAL	09/26/93	0001	UG/L	B	76.8		76.8	I
CALCIUM, SOLUBLE	09/26/93	0001	UG/L		109000.	J	109000.	I
CALCIUM, TOTAL	09/26/93	0001	UG/L		107000.	J	107000.	I
CHLORIDE	09/26/93	0001	MG/L		172.		172.	I
COPPER, SOLUBLE	09/26/93	0001	UG/L	B	1.4		1.4	I
COPPER, TOTAL	09/26/93	0001	UG/L	B	1.6		1.6	I
FLUORIDE	09/26/93	0001	MG/L		0.17		0.17	I
IRON, TOTAL	09/26/93	0001	UG/L		587.		587.	I
LEAD, SOLUBLE	09/26/93	0001	UG/L		3.4		3.4	I
LEAD, TOTAL	09/26/93	0001	UG/L		4.9		4.9	I
MAGNESIUM, SOLUBLE	09/26/93	0001	UG/L		31600.		31600.	I
MAGNESIUM, TOTAL	09/26/93	0001	UG/L		31400.		31400.	I
NICKEL, SOLUBLE	09/26/93	0001	UG/L		40.8		40.8	I
NICKEL, TOTAL	09/26/93	0001	UG/L		51.7		51.7	I
NITRATE NITRITE	09/26/93	0001	MG/L		3.2		3.2	I
PLUTONIUM-239/240	09/26/93	0001	PCI/L		.309		REJECT	I
POTASSIUM, SOLUBLE	09/26/93	0001	UG/L	B	2500.	J	2500.	I
POTASSIUM, TOTAL	09/26/93	0001	UG/L	B	2610.	J	2610.	I
SODIUM, SOLUBLE	09/26/93	0001	UG/L		221000.		221000.	I
SODIUM, TOTAL	09/26/93	0001	UG/L		107000.		107000.	I
SULFATE	09/26/93	0001	MG/L		48.8		48.8	I
THORIUM-228	09/26/93	0001	PCI/L		1.26		REJECT	I
THORIUM-230	09/26/93	0001	PCI/L		.222		REJECT	I
TOTAL DISSOLVED SOLIDS	09/26/93	0001	MG/L		783.		783.	I
TOTAL ORGANIC CARBON	09/26/93	0001	MG/L		0.77		0.77	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0376
NORTH COORDINATE: 596696.75 FT
EAST COORDINATE: 1494760.63 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL PHOSPHATE	09/26/93	0001	MG/L		0.20		0.20	I
TOTAL SUSPENDED SOLIDS	09/26/93	0001	MG/L		5.0		5.0	I
TRITIUM	09/26/93	0001	PCI/L		1620.		1620.	I
URANIUM-234	09/26/93	0001	PCI/L		.298		.298	I
URANIUM-238	09/26/93	0001	PCI/L		.28		.28	I
VANADIUM, SOLUBLE	09/26/93	0001	UG/L		16.3		16.3	I
VANADIUM, TOTAL	09/26/93	0001	UG/L		15.6		15.6	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0377
NORTH COORDINATE: 596522.25 FT
EAST COORDINATE: 1494774.87 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	09/26/93	0001	UG/L		17.	J	17.	I
	09/26/93	1001	UG/L		16.	J	16.	I
ALUMINUM, TOTAL	09/26/93	0001	UG/L		34.0		34.0	I
	09/26/93	1001	UG/L		43.1		43.1	I
BARIUM, SOLUBLE	09/26/93	0001	UG/L	B	70.5		70.5	I
	09/26/93	1001	UG/L	B	72.3		72.3	I
BARIUM, TOTAL	09/26/93	0001	UG/L	B	78.6		78.6	I
	09/26/93	1001	UG/L	B	80.4		80.4	I
CALCIUM, SOLUBLE	09/26/93	0001	UG/L		97900.	J	97900.	I
	09/26/93	1001	UG/L		97900.	J	97900.	I
CALCIUM, TOTAL	09/26/93	0001	UG/L		104000.	J	104000.	I
	09/26/93	1001	UG/L		102000.	J	102000.	I
CHLORIDE	09/26/93	0001	MG/L		258.		258.	I
	09/26/93	1001	MG/L		255.		255.	I
CHROMIUM, SOLUBLE	09/26/93	0001	UG/L		10.7		10.7	I
CHROMIUM, TOTAL	09/26/93	0001	UG/L		174.		174.	I
	09/26/93	1001	UG/L		191.		191.	I
COPPER, SOLUBLE	09/26/93	0001	UG/L	B	1.4	J	1.4	I
	09/26/93	1001	UG/L	B	1.00	J	1.00	I
COPPER, TOTAL	09/26/93	0001	UG/L	B	8.8		8.8	I
	09/26/93	1001	UG/L	B	9.0		9.0	I
FLUORIDE	09/26/93	0001	MG/L		0.18		0.18	I
	09/26/93	1001	MG/L		0.18		0.18	I
IRON, SOLUBLE	09/26/93	0001	UG/L		642.		642.	I
	09/26/93	1001	UG/L		557.		557.	I
IRON, TOTAL	09/26/93	0001	UG/L		6320.		6320.	I
	09/26/93	1001	UG/L		7240.		7240.	I
LEAD, SOLUBLE	09/26/93	0001	UG/L		3.6	J	3.6	I
	09/26/93	1001	UG/L		6.7	J	6.7	I
LEAD, TOTAL	09/26/93	0001	UG/L		4.7		4.7	I
	09/26/93	1001	UG/L		3.8		3.8	I
MAGNESIUM, SOLUBLE	09/26/93	0001	UG/L		28500.		28500.	I
	09/26/93	1001	UG/L		28700.		28700.	I
MAGNESIUM, TOTAL	09/26/93	0001	UG/L		30300.		30300.	I
	09/26/93	1001	UG/L		29800.		29800.	I
MANGANESE, SOLUBLE	09/26/93	0001	UG/L		32.9		32.9	I
	09/26/93	1001	UG/L		30.8		30.8	I
MANGANESE, TOTAL	09/26/93	0001	UG/L		63.7		63.7	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0377
NORTH COORDINATE: 596522.25 FT
EAST COORDINATE: 1494774.87 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
MANGANESE, TOTAL	09/26/93	1001	UG/L		63.7		63.7	I
NICKEL, SOLUBLE	09/26/93	0001	UG/L		165.		165.	I
	09/26/93	1001	UG/L		156.		156.	I
NICKEL, TOTAL	09/26/93	0001	UG/L		226.		226.	I
	09/26/93	1001	UG/L		228.		228.	I
NITRATE NITRITE	09/26/93	0001	MG/L		2.6		2.6	I
	09/26/93	1001	MG/L		2.5		2.5	I
PLUTONIUM-238	09/26/93	0001	PCI/L		.0536		.0536	I
PLUTONIUM-239/240	09/26/93	0001	PCI/L		.121		.121	I
	09/26/93	1001	PCI/L		.166		.166	I
POTASSIUM, SOLUBLE	09/26/93	0001	UG/L	B	2020.	J	2020.	I
	09/26/93	1001	UG/L	B	2020.	J	2020.	I
POTASSIUM, TOTAL	09/26/93	0001	UG/L	B	2280.	J	2280.	I
	09/26/93	1001	UG/L	B	2070.	J	2070.	I
SODIUM, SOLUBLE	09/26/93	0001	UG/L		157000.		157000.	I
	09/26/93	1001	UG/L		157000.		157000.	I
SODIUM, TOTAL	09/26/93	0001	UG/L		163000.		163000.	I
	09/26/93	1001	UG/L		163000.		163000.	I
STRONTIUM-90	09/26/93	0001	PCI/L		.766		.766	I
SULFATE	09/26/93	0001	MG/L		87.0		87.0	I
THORIUM-228	09/26/93	0001	PCI/L		.549		.549	I
	09/26/93	1001	PCI/L		.553		.553	I
THORIUM-230	09/26/93	0001	PCI/L		.275		.275	I
	09/26/93	1001	PCI/L		.113		.113	I
TOTAL DISSOLVED SOLIDS	09/26/93	0001	MG/L		895.		895.	I
	09/26/93	1001	MG/L		880.		880.	I
TOTAL ORGANIC CARBON	09/26/93	0001	MG/L		0.77		0.77	I
	09/26/93	1001	MG/L		0.77		0.77	I
TOTAL PHOSPHATE	09/26/93	0001	MG/L		0.23		0.23	I
	09/26/93	1001	MG/L		0.25		0.25	I
TOTAL SUSPENDED SOLIDS	09/26/93	0001	MG/L		22.0		22.0	I
	09/26/93	1001	MG/L		25.0		25.0	I
TRITIUM	09/26/93	0001	PCI/L		2910.		2910.	I
	09/26/93	1001	PCI/L		2820.		2820.	I
URANIUM-234	09/26/93	0001	PCI/L		.24		.24	I
	09/26/93	1001	PCI/L		.29		.29	I
URANIUM-238	09/26/93	0001	PCI/L		.279		.279	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0377
NORTH COORDINATE: 596522.25 FT
EAST COORDINATE: 1494774.87 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
URANIUM-238	09/26/93	1001	PCI/L		.179		.179	I
VANADIUM, SOLUBLE	09/26/93	0001	UG/L		14.3		14.3	I
	09/26/93	1001	UG/L		14.0		14.0	I
VANADIUM, TOTAL	09/26/93	0001	UG/L		13.3		13.3	I
	09/26/93	1001	UG/L		12.2		12.2	I
ZINC, TOTAL	09/26/93	1001	UG/L		23.1	J	23.1	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0378
NORTH COORDINATE: 596376.63 FT
EAST COORDINATE: 1494789.86 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	09/26/93	0001	UG/L		16.	J	16.	I
ANTIMONY, SOLUBLE	09/26/93	0001	UG/L	B	2.0		2.0	I
BARIUM, SOLUBLE	09/26/93	0001	UG/L	B	77.6	J	77.6	I
BARIUM, TOTAL	09/26/93	0001	UG/L	B	78.1	J	78.1	I
CALCIUM, SOLUBLE	09/26/93	0001	UG/L		101000.	J	101000.	I
CALCIUM, TOTAL	09/26/93	0001	UG/L		104000.	J	104000.	I
CHLORIDE	09/26/93	0001	MG/L		186.		186.	I
CHROMIUM, TOTAL	09/26/93	0001	UG/L	B	9.6		9.6	I
COBALT, TOTAL	09/26/93	0001	UG/L	B	1.9		1.9	I
COPPER, SOLUBLE	09/26/93	0001	UG/L	B	1.1		1.1	I
COPPER, TOTAL	09/26/93	0001	UG/L	B	1.3		1.3	I
FLUORIDE	09/26/93	0001	MG/L		0.19		0.19	I
IRON, SOLUBLE	09/26/93	0001	UG/L		271.		271.	I
IRON, TOTAL	09/26/93	0001	UG/L		740.	J	740.	I
LEAD, SOLUBLE	09/26/93	0001	UG/L	B	2.0		2.0	I
MAGNESIUM, SOLUBLE	09/26/93	0001	UG/L		30100.	J	30100.	I
MAGNESIUM, TOTAL	09/26/93	0001	UG/L		30900.	J	30900.	I
MANGANESE, SOLUBLE	09/26/93	0001	UG/L	B	14.7		14.7	I
MANGANESE, TOTAL	09/26/93	0001	UG/L		26.0	J	26.0	I
NICKEL, SOLUBLE	09/26/93	0001	UG/L		66.2		66.2	I
NICKEL, TOTAL	09/26/93	0001	UG/L		91.7		91.7	I
NITRATE NITRITE	09/26/93	0001	MG/L		0.53		2.6	I
PLUTONIUM-239/240	09/26/93	0001	PCI/L		.154		.154	I
POTASSIUM, SOLUBLE	09/26/93	0001	UG/L	B	2120.		2120.	I
POTASSIUM, TOTAL	09/26/93	0001	UG/L	B	2170.		2170.	I
SELENIUM, SOLUBLE	09/26/93	0001	UG/L	B	1.4	J	1.4	I
SELENIUM, TOTAL	09/26/93	0001	UG/L	B	1.1	J	1.1	I
SODIUM, SOLUBLE	09/26/93	0001	UG/L		112000.	J	112000.	I
SODIUM, TOTAL	09/26/93	0001	UG/L		113000.	J	113000.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0378
NORTH COORDINATE: 596376.63 FT
EAST COORDINATE: 1494789.86 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SULFATE	09/26/93	0001	MG/L		29.4		29.4	I
THORIUM-228	09/26/93	0001	PCI/L		.702		.702	I
THORIUM-230	09/26/93	0001	PCI/L		.202		.202	I
TIN, SOLUBLE	09/26/93	0001	UG/L	B	13.1		13.1	I
TIN, TOTAL	09/26/93	0001	UG/L	B	14.4		14.4	I
TOTAL DISSOLVED SOLIDS	09/26/93	0001	MG/L		729.		729.	I
TOTAL ORGANIC CARBON	09/26/93	0001	MG/L		0.60		0.60	I
TOTAL PHOSPHATE	09/26/93	0001	MG/L		0.11		0.11	I
TRITIUM	09/26/93	0001	PCI/L		2330.		2330.	I
URANIUM-234	09/26/93	0001	PCI/L		.27		.27	I
URANIUM-235/236	09/26/93	0001	PCI/L		.0667		.0667	I
URANIUM-238	09/26/93	0001	PCI/L		.227		.227	I
ZINC, SOLUBLE	09/26/93	0001	UG/L	B	1.8		1.8	I
ZINC, TOTAL	09/26/93	0001	UG/L	B	3.6		3.6	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0379
NORTH COORDINATE: 597179.70 FT
EAST COORDINATE: 1495153.92 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMERICIUM-241	09/26/93	0001	PCI/L		.0783		REJECT	I
ANTIMONY, SOLUBLE	09/26/93	0001	UG/L	B	2.0		2.0	I
BARIUM, SOLUBLE	09/26/93	0001	UG/L	B	147.		147.	I
BARIUM, TOTAL	09/26/93	0001	UG/L	B	158.0		158.0	I
CALCIUM, SOLUBLE	09/26/93	0001	UG/L		146000.	J	146000.	I
CALCIUM, TOTAL	09/26/93	0001	UG/L		160000.	J	160000.	I
CHLORIDE	09/26/93	0001	MG/L		427.		427.	I
CHROMIUM, TOTAL	09/26/93	0001	UG/L		71.7	J	71.7	I
FLUORIDE	09/26/93	0001	MG/L		0.48		0.48	I
IRON, SOLUBLE	09/26/93	0001	UG/L		117.		117.	I
IRON, TOTAL	09/26/93	0001	UG/L		1360.	J	1360.	I
LEAD, TOTAL	09/26/93	0001	UG/L		16.0		16.0	I
LITHIUM, SOLUBLE	09/26/93	0001	UG/L	B	26.9	J	26.9	I
LITHIUM, TOTAL	09/26/93	0001	UG/L	B	28.6	J	28.6	I
MAGNESIUM, SOLUBLE	09/26/93	0001	UG/L		59700.	J	59700.	I
MAGNESIUM, TOTAL	09/26/93	0001	UG/L		63000.	J	63000.	I
MANGANESE, SOLUBLE	09/26/93	0001	UG/L	B	11.6		11.6	I
MANGANESE, TOTAL	09/26/93	0001	UG/L	B	12.7		12.7	I
MOLYBDENUM	09/26/93	0001	UG/L	B	4.6		4.6	I
MOLYBDENUM, SOLUBLE	09/26/93	0001	UG/L	B	4.0		4.0	I
NICKEL, SOLUBLE	09/26/93	0001	UG/L	B	26.3		26.3	I
NICKEL, TOTAL	09/26/93	0001	UG/L		40.9		40.9	I
NITRATE NITRITE	09/26/93	0001	MG/L		0.053		0.053	I
PLUTONIUM-239/240	09/26/93	0001	PCI/L		.136		REJECT	I
POTASSIUM, SOLUBLE	09/26/93	0001	UG/L	B	4010.		4010.	I
POTASSIUM, TOTAL	09/26/93	0001	UG/L	B	4060.		4060.	I
SODIUM, SOLUBLE	09/26/93	0001	UG/L		138000.	J	138000.	I
SODIUM, TOTAL	09/26/93	0001	UG/L		146000.	J	146000.	I
TETRACHLOROETHENE	09/26/93	0001	UG/L		2.4	J	2.4	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0379
NORTH COORDINATE: 597179.70 FT
EAST COORDINATE: 1495153.92 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TETRACHLOROMETHANE (CCL4)	09/26/93	0001	UG/L		2.6	J	2.6	I
THORIUM-228	09/26/93	0001	PCI/L		.625		REJECT	I
THORIUM-230	09/26/93	0001	PCI/L		.365		REJECT	I
TIN, SOLUBLE	09/26/93	0001	UG/L	B	21.5		21.5	I
TIN, TOTAL	09/26/93	0001	UG/L	B	18.8		18.8	I
TOTAL DISSOLVED SOLIDS	09/26/93	0001	MG/L		1230.		1230.	I
TOTAL ORGANIC CARBON	09/26/93	0001	MG/L		0.60		0.60	I
TOTAL PHOSPHATE	09/26/93	0001	MG/L		0.11		0.11	I
TOTAL SUSPENDED SOLIDS	09/26/93	0001	MG/L		9.0		9.0	I
TRICHLOROETHENE	09/26/93	0001	UG/L		1.4	J	1.4	I
TRITIUM	09/26/93	0001	PCI/L		5680.		5680.	I
URANIUM-234	09/26/93	0001	PCI/L		.52		.52	I
URANIUM-238	09/26/93	0001	PCI/L		.44		.44	I
VANADIUM, SOLUBLE	09/26/93	0001	UG/L		16.5		16.5	I
VANADIUM, TOTAL	09/26/93	0001	UG/L		17.1		17.1	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0380
NORTH COORDINATE: 597109.65 FT
EAST COORDINATE: 1495394.52 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, SOLUBLE	09/27/93	0001	UG/L		39.3		39.3	I
ALUMINUM, TOTAL	09/27/93	0001	UG/L		3300.		3300.	I
AMERICIUM-241	09/27/93	0001	PCI/L		.0675		.0675	I
AMMONIA	09/27/93	0001	MG/L		6.5		6.5	I
ANTIMONY, SOLUBLE	09/27/93	0001	UG/L	B	1.5	J	1.5	I
BARIUM, SOLUBLE	09/27/93	0001	UG/L	B	64.4		64.4	I
BARIUM, TOTAL	09/27/93	0001	UG/L	B	54.2		54.2	I
BERYLLIUM, TOTAL	09/27/93	0001	UG/L	B	0.38		0.38	I
BIS(2-ETHYLHEXYL)PHTHALATE	09/27/93	0001	UG/L	B	11.	B	11.	I
CALCIUM, SOLUBLE	09/27/93	0001	UG/L		33000.		33000.	I
CALCIUM, TOTAL	09/27/93	0001	UG/L		31000.		31000.	I
CHLORIDE	09/27/93	0001	MG/L		987.		987.	I
COBALT, TOTAL	09/27/93	0001	UG/L	B	2.5		2.5	I
COPPER, TOTAL	09/27/93	0001	UG/L	B	5.4		5.4	I
FLUORIDE	09/27/93	0001	MG/L		1.7		1.7	I
IRON, SOLUBLE	09/27/93	0001	UG/L	B	56.1		56.1	I
IRON, TOTAL	09/27/93	0001	UG/L		4460.		4460.	I
LEAD, SOLUBLE	09/27/93	0001	UG/L		3.8	J	3.8	I
LEAD, TOTAL	09/27/93	0001	UG/L		4.2	J	4.2	I
LITHIUM, SOLUBLE	09/27/93	0001	UG/L		315.		315.	I
LITHIUM, TOTAL	09/27/93	0001	UG/L		281.		281.	I
MAGNESIUM, SOLUBLE	09/27/93	0001	UG/L		18800.		18800.	I
MAGNESIUM, TOTAL	09/27/93	0001	UG/L		17400.		17400.	I
MANGANESE, SOLUBLE	09/27/93	0001	UG/L	B	14.0		14.0	I
MANGANESE, TOTAL	09/27/93	0001	UG/L		65.7		65.7	I
MOLYBDENUM	09/27/93	0001	UG/L	B	1.9		1.9	I
PLUTONIUM-239/240	09/27/93	0001	PCI/L		.102		.102	I
POTASSIUM, SOLUBLE	09/27/93	0001	UG/L		11600.		11600.	I
POTASSIUM, TOTAL	09/27/93	0001	UG/L		10300.		10300.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0380
NORTH COORDINATE: 597109.65 FT
EAST COORDINATE: 1495394.52 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SODIUM, SOLUBLE	09/27/93	0001	UG/L		740000.	J	740000.	I
SODIUM, TOTAL	09/27/93	0001	UG/L		678000.	J	678000.	I
STRONTIUM-90	09/27/93	0001	PCI/L		.748		.748	I
THORIUM-228	09/27/93	0001	PCI/L		.429		.429	I
THORIUM-230	09/27/93	0001	PCI/L		.056		.056	I
TIN, SOLUBLE	09/27/93	0001	UG/L	B	10.6		10.6	I
TIN, TOTAL	09/27/93	0001	UG/L	B	16.8		16.8	I
TOTAL DISSOLVED SOLIDS	09/27/93	0001	MG/L		2010.		2010.	I
TOTAL KJELDAHL NITROGEN	09/27/93	0001	MG/L		5.3		5.3	I
TOTAL PHOSPHATE	09/27/93	0001	MG/L		0.33		0.33	I
TOTAL SUSPENDED SOLIDS	09/27/93	0001	MG/L		21.0		21.0	I
URANIUM-234	09/27/93	0001	PCI/L		.251		.251	I
URANIUM-238	09/27/93	0001	PCI/L		.105		.105	I
VANADIUM, SOLUBLE	09/27/93	0001	UG/L	B	3.0	J	3.0	I
VANADIUM, TOTAL	09/27/93	0001	UG/L	B	8.0	J	8.0	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0381
NORTH COORDINATE: 596982.13 FT
EAST COORDINATE: 1495399.69 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	09/29/93	0001	UG/L		0.95		0.95	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0382
NORTH COORDINATE: 596601.67 FT
EAST COORDINATE: 1495444.40 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	09/26/93	0001	UG/L		291.7		291.7	I
AMERICIUM-241	09/26/93	0001	PCI/L		.165		.165	I
ANTIMONY, SOLUBLE	09/26/93	0001	UG/L	B	1.5		1.5	I
BARIUM, SOLUBLE	09/26/93	0001	UG/L		244.		244.	I
BARIUM, TOTAL	09/26/93	0001	UG/L		284.		284.	I
CALCIUM, SOLUBLE	09/26/93	0001	UG/L		72100.		72100.	I
CALCIUM, TOTAL	09/26/93	0001	UG/L		83100.		83100.	I
CHLORIDE	09/26/93	0001	MG/L		495.		495.	I
FLUORIDE	09/26/93	0001	MG/L		0.67		0.67	I
IRON, SOLUBLE	09/26/93	0001	UG/L		206.		206.	I
IRON, TOTAL	09/26/93	0001	UG/L		514.		514.	I
LEAD, SOLUBLE	09/26/93	0001	UG/L		6.2		6.2	I
LITHIUM, SOLUBLE	09/26/93	0001	UG/L		132.		132.	I
LITHIUM, TOTAL	09/26/93	0001	UG/L		152.		152.	I
MAGNESIUM, SOLUBLE	09/26/93	0001	UG/L		46100.		46100.	I
MAGNESIUM, TOTAL	09/26/93	0001	UG/L		53900.		53900.	I
MANGANESE, SOLUBLE	09/26/93	0001	UG/L		25.7		25.7	I
MANGANESE, TOTAL	09/26/93	0001	UG/L		34.2		34.2	I
MOLYBDENUM, SOLUBLE	09/26/93	0001	UG/L	B	2.0		2.0	I
NICKEL, TOTAL	09/26/93	0001	UG/L	B	2.1		2.1	I
PLUTONIUM-239/240	09/26/93	0001	PCI/L		.0893		.0893	I
POTASSIUM, SOLUBLE	09/26/93	0001	UG/L		19600.		19600.	I
POTASSIUM, TOTAL	09/26/93	0001	UG/L		24100.		24100.	I
RADIUM-226	09/26/93	0001	PCI/L		2.61		2.61	I
SODIUM, SOLUBLE	09/26/93	0001	UG/L		220000.		220000.	I
SODIUM, TOTAL	09/26/93	0001	UG/L		252000.		252000.	I
SULFATE	09/26/93	0001	MG/L		36.2		36.2	I
THORIUM-228	09/26/93	0001	PCI/L		.635		.635	I
THORIUM-230	09/26/93	0001	PCI/L		.194		.194	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0382
NORTH COORDINATE: 596601.67 FT
EAST COORDINATE: 1495444.40 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TIN, SOLUBLE	09/26/93	0001	UG/L	B	15.9		15.9	I
TIN, TOTAL	09/26/93	0001	UG/L	B	16.7		16.7	I
TOTAL DISSOLVED SOLIDS	09/26/93	0001	MG/L		1150.		1150.	I
TOTAL KJELDAHL NITROGEN	09/26/93	0001	MG/L		2.4		2.4	I
TOTAL ORGANIC CARBON	09/26/93	0001	MG/L		5.7		5.7	I
TOTAL PHOSPHATE	09/26/93	0001	MG/L		0.11		0.11	I
TOTAL SUSPENDED SOLIDS	09/26/93	0001	MG/L		12.0		12.0	I
TRITIUM	09/26/93	0001	PCI/L		761.		761.	I
URANIUM-238	09/26/93	0001	PCI/L		.104		.104	I
VANADIUM, SOLUBLE	09/26/93	0001	UG/L		11.8		11.8	I
VANADIUM, TOTAL	09/26/93	0001	UG/L		13.3		13.3	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0383
NORTH COORDINATE: 597138.34 FT
EAST COORDINATE: 1494477.15 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMERICIUM-241	09/28/93	0001	PCI/L		.293	J	.293	I
BARIUM, SOLUBLE	09/28/93	0001	UG/L	B	86.4		86.4	I
BARIUM, TOTAL	09/28/93	0001	UG/L	B	92.9		92.9	I
CALCIUM, SOLUBLE	09/28/93	0001	UG/L		97100.		97100.	I
CALCIUM, TOTAL	09/28/93	0001	UG/L		103000.		103000.	I
CHLORIDE	09/28/93	0001	MG/L		67.2		67.2	I
COPPER, SOLUBLE	09/28/93	0001	UG/L	B	1.3		1.3	I
COPPER, TOTAL	09/28/93	0001	UG/L	B	1.3		1.3	I
FLUORIDE	09/28/93	0001	MG/L		0.22		0.22	I
IRON, SOLUBLE	09/28/93	0001	UG/L	B	16.6		16.6	I
IRON, TOTAL	09/28/93	0001	UG/L	B	34.4		34.4	I
MAGNESIUM, SOLUBLE	09/28/93	0001	UG/L		29300.		29300.	I
MAGNESIUM, TOTAL	09/28/93	0001	UG/L		31700.		31700.	I
MOLYBDENUM	09/28/93	0001	UG/L	B	1.6		1.6	I
MOLYBDENUM, SOLUBLE	09/28/93	0001	UG/L	B	2.1		2.1	I
NITRATE NITRITE	09/28/93	0001	MG/L		1.7		1.7	I
PLUTONIUM-239/240	09/28/93	0001	PCI/L		.349		REJECT	I
POTASSIUM, SOLUBLE	09/28/93	0001	UG/L	B	1900.	J	1900.	I
POTASSIUM, TOTAL	09/28/93	0001	UG/L	B	2660.	J	2660.	I
SODIUM, SOLUBLE	09/28/93	0001	UG/L		49400.	J	49400.	I
SODIUM, TOTAL	09/28/93	0001	UG/L		51200.	J	51200.	I
SULFATE	09/28/93	0001	MG/L		45.6	J	45.6	I
THORIUM-230	09/28/93	0001	PCI/L		.497	J	.497	I
THORIUM-232	09/28/93	0001	PCI/L	U	.096	J	.096	I
TIN, SOLUBLE	09/28/93	0001	UG/L	B	11.2		11.2	I
TIN, TOTAL	09/28/93	0001	UG/L	B	15.1		15.1	I
TOTAL DISSOLVED SOLIDS	09/28/93	0001	MG/L		563.		563.	I
TOTAL ORGANIC CARBON	09/28/93	0001	MG/L		1.2		1.2	I
TOTAL PHOSPHATE	09/28/93	0001	MG/L		0.12		0.12	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0383
NORTH COORDINATE: 597138.34 FT
EAST COORDINATE: 1494477.15 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL SUSPENDED SOLIDS	09/28/93	0001	MG/L		6.0		6.0	I
TRITIUM	09/28/93	0001	PCI/L		327.		327.	I
URANIUM-234	09/28/93	0001	PCI/L		.239	J	.239	I
URANIUM-238	09/28/93	0001	PCI/L		.235	J	.235	I
VANADIUM, SOLUBLE	09/28/93	0001	UG/L	B	9.6	J	9.6	I
VANADIUM, TOTAL	09/28/93	0001	UG/L	B	9.4	J	9.4	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0386
NORTH COORDINATE: 597345.22 FT
EAST COORDINATE: 1494953.59 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ANTIMONY, SOLUBLE	09/29/93	0001	UG/L	B	1.5		1.5	I
BARIUM, SOLUBLE	09/29/93	0001	UG/L	B	96.2		96.2	I
BARIUM, TOTAL	09/29/93	0001	UG/L	B	91.9		91.9	I
CALCIUM, SOLUBLE	09/29/93	0001	UG/L		149000.	J	149000.	I
CALCIUM, TOTAL	09/29/93	0001	UG/L		145000.	J	145000.	I
CHLORIDE	09/29/93	0001	MG/L		82.8		82.8	I
COPPER, SOLUBLE	09/29/93	0001	UG/L	B	0.95		0.95	I
COPPER, TOTAL	09/29/93	0001	UG/L	B	1.1		1.1	I
FLUORIDE	09/29/93	0001	MG/L		0.16		0.16	I
IRON, SOLUBLE	09/29/93	0001	UG/L		206.		206.	I
IRON, TOTAL	09/29/93	0001	UG/L		236.		236.	I
LITHIUM, SOLUBLE	09/29/93	0001	UG/L	B	5.6		5.6	I
LITHIUM, TOTAL	09/29/93	0001	UG/L	B	5.6		5.6	I
MAGNESIUM, SOLUBLE	09/29/93	0001	UG/L		43900.	J	43900.	I
MAGNESIUM, TOTAL	09/29/93	0001	UG/L		42600.	J	42600.	I
MANGANESE, SOLUBLE	09/29/93	0001	UG/L		18.8		18.8	I
MANGANESE, TOTAL	09/29/93	0001	UG/L		18.6		18.6	I
NICKEL, SOLUBLE	09/29/93	0001	UG/L		94.7		94.7	I
NICKEL, TOTAL	09/29/93	0001	UG/L		84.9		84.9	I
NITRATE NITRITE	09/29/93	0001	MG/L		1.6		1.6	I
POTASSIUM, SOLUBLE	09/29/93	0001	UG/L	B	2190.		2190.	I
POTASSIUM, TOTAL	09/29/93	0001	UG/L	B	2190.		2190.	I
SELENIUM, TOTAL	09/29/93	0001	UG/L	B	1.0	J	1.0	I
SODIUM, SOLUBLE	09/29/93	0001	UG/L		50100.	J	50100.	I
SODIUM, TOTAL	09/29/93	0001	UG/L		47900.	J	47900.	I
SULFATE	09/29/93	0001	MG/L		158.		158.	I
THORIUM-228	09/29/93	0001	PCI/L		.324		.324	I
TIN, SOLUBLE	09/29/93	0001	UG/L	B	16.6		16.6	I
TIN, TOTAL	09/29/93	0001	UG/L	B	18.9		18.9	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0386
NORTH COORDINATE: 597345.22 FT
EAST COORDINATE: 1494953.59 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL DISSOLVED SOLIDS	09/29/93	0001	MG/L		752.		752.	I
TOTAL ORGANIC CARBON	09/29/93	0001	MG/L		1.4		1.4	I
TRICHLOROETHENE	09/29/93	0001	UG/L		3.5	J	3.5	I
TRITIUM	09/29/93	0001	PCI/L		4430.		4430.	I
URANIUM-234	09/29/93	0001	PCI/L		.483		.483	I
URANIUM-238	09/29/93	0001	PCI/L		.371		.371	I
VANADIUM, SOLUBLE	09/29/93	0001	UG/L		12.7	J	12.7	I
VANADIUM, TOTAL	09/29/93	0001	UG/L		14.1	J	14.1	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0387
NORTH COORDINATE: 597210.50 FT
EAST COORDINATE: 1494897.38 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	09/28/93	0001	UG/L	B	18.8		18.8	I
AMERICIUM-241	09/28/93	0001	PCI/L		.0938		.0938	I
ANTIMONY, SOLUBLE	09/28/93	0001	UG/L		4.4		4.4	I
BARIUM, SOLUBLE	09/28/93	0001	UG/L	B	129.		129.	I
BARIUM, TOTAL	09/28/93	0001	UG/L	B	127.		127.	I
CALCIUM, SOLUBLE	09/28/93	0001	UG/L		145000.		145000.	I
CALCIUM, TOTAL	09/28/93	0001	UG/L		143000.		143000.	I
CHLORIDE	09/28/93	0001	MG/L		106.		106.	I
COPPER, SOLUBLE	09/28/93	0001	UG/L	B	2.6		2.6	I
COPPER, TOTAL	09/28/93	0001	UG/L	B	2.5		2.5	I
FLUORIDE	09/28/93	0001	MG/L		0.16		0.16	I
IRON, SOLUBLE	09/28/93	0001	UG/L	B	24.0		24.0	I
IRON, TOTAL	09/28/93	0001	UG/L	B	46.7		46.7	I
LEAD, TOTAL	09/28/93	0001	UG/L	B	2.0		2.0	I
MAGNESIUM, SOLUBLE	09/28/93	0001	UG/L		43000.		43000.	I
MAGNESIUM, TOTAL	09/28/93	0001	UG/L		42300.		42300.	I
MANGANESE, SOLUBLE	09/28/93	0001	UG/L	B	10.8		10.8	I
MANGANESE, TOTAL	09/28/93	0001	UG/L	B	11.4		11.4	I
MOLYBDENUM	09/28/93	0001	UG/L	B	1.6		1.6	I
NITRATE NITRITE	09/28/93	0001	MG/L		2.9		2.9	I
PLUTONIUM-239/240	09/28/93	0001	PCI/L		.133		.133	I
POTASSIUM, SOLUBLE	09/28/93	0001	UG/L	B	2050.	J	2050.	I
POTASSIUM, TOTAL	09/28/93	0001	UG/L	B	2000.	J	2000.	I
RADIUM-226	09/28/93	0001	PCI/L		.831		.831	I
SODIUM, SOLUBLE	09/28/93	0001	UG/L		71400.	J	71400.	I
SODIUM, TOTAL	09/28/93	0001	UG/L		73600.	J	73600.	I
SULFATE	09/28/93	0001	MG/L		48.2		48.2	I
TETRACHLOROETHENE	09/28/93	0001	UG/L		0.42	J	0.42	I
THORIUM-228	09/28/93	0001	PCI/L		.586		.586	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0387
NORTH COORDINATE: 597210.50 FT
EAST COORDINATE: 1494897.38 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TIN, SOLUBLE	09/28/93	0001	UG/L	B	17.5		17.5	I
TIN, TOTAL	09/28/93	0001	UG/L	B	16.2		16.2	I
TOTAL DISSOLVED SOLIDS	09/28/93	0001	MG/L		750.		750.	I
TOTAL ORGANIC CARBON	09/28/93	0001	MG/L		0.90		0.90	I
TOTAL PHOSPHATE	09/28/93	0001	MG/L		0.097		0.097	I
TRITIUM	09/28/93	0001	PCI/L		8360.		8360.	I
URANIUM-234	09/28/93	0001	PCI/L		.334		.334	I
URANIUM-238	09/28/93	0001	PCI/L		.274		.274	I
VANADIUM, SOLUBLE	09/28/93	0001	UG/L		14.1	J	14.1	I
VANADIUM, TOTAL	09/28/93	0001	UG/L		14.5	J	14.5	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0388
NORTH COORDINATE: 596793.37 FT
EAST COORDINATE: 1494747.75 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	09/26/93	0001	UG/L		0.43	J	0.43	I
ACETONITRILE	09/26/93	0001	UG/L	J	6.	J	6.	I
ALUMINUM, TOTAL	09/26/93	0001	UG/L		93.2	J	93.2	I
ANTIMONY, SOLUBLE	09/26/93	0001	UG/L		3.8		3.8	I
ANTIMONY, TOTAL	09/26/93	0001	UG/L	B	0.80		0.80	I
BARIUM, SOLUBLE	09/26/93	0001	UG/L	B	71.9		71.9	I
BARIUM, TOTAL	09/26/93	0001	UG/L	B	75.3		75.3	I
CALCIUM, SOLUBLE	09/26/93	0001	UG/L		108000.	J	108000.	I
CALCIUM, TOTAL	09/26/93	0001	UG/L		110000.	J	110000.	I
CHLORIDE	09/26/93	0001	MG/L		282.		282.	I
CHROMIUM, TOTAL	09/26/93	0001	UG/L		53.6		53.6	I
COBALT, SOLUBLE	09/26/93	0001	UG/L	B	1.3		1.3	I
COBALT, TOTAL	09/26/93	0001	UG/L	B	2.5		2.5	I
COPPER, SOLUBLE	09/26/93	0001	UG/L	B	2.0		2.0	I
COPPER, TOTAL	09/26/93	0001	UG/L	B	3.0		3.0	I
FLUORIDE	09/26/93	0001	MG/L		0.18		0.18	I
IRON, SOLUBLE	09/26/93	0001	UG/L	B	85.9	J	85.9	I
IRON, TOTAL	09/26/93	0001	UG/L		915.	J	915.	I
MAGNESIUM, SOLUBLE	09/26/93	0001	UG/L		30800.	J	30800.	I
MAGNESIUM, TOTAL	09/26/93	0001	UG/L		31600.	J	31600.	I
MANGANESE, SOLUBLE	09/26/93	0001	UG/L	B	14.1	J	14.1	I
MANGANESE, TOTAL	09/26/93	0001	UG/L		18.0	J	18.0	I
NICKEL, SOLUBLE	09/26/93	0001	UG/L		112.		112.	I
NICKEL, TOTAL	09/26/93	0001	UG/L		128.		128.	I
NITRATE NITRITE	09/26/93	0001	MG/L		0.50		2.5	I
POTASSIUM, SOLUBLE	09/26/93	0001	UG/L	B	3190.		3190.	I
POTASSIUM, TOTAL	09/26/93	0001	UG/L	B	3400.		3400.	I
SODIUM, SOLUBLE	09/26/93	0001	UG/L		151000.		151000.	I
SODIUM, TOTAL	09/26/93	0001	UG/L		155000.		155000.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0388
NORTH COORDINATE: 596793.37 FT
EAST COORDINATE: 1494747.75 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SULFATE	09/26/93	0001	MG/L		6.2		6.2	I
THORIUM-228	09/26/93	0001	PCI/L		.648		REJECT	I
THORIUM-230	09/26/93	0001	PCI/L		.113		REJECT	I
TIN, SOLUBLE	09/26/93	0001	UG/L	B	13.0		13.0	I
TIN, TOTAL	09/26/93	0001	UG/L	B	13.3		13.3	I
TOTAL DISSOLVED SOLIDS	09/26/93	0001	MG/L		894.		894.	I
TOTAL ORGANIC CARBON	09/26/93	0001	MG/L		0.94		0.94	I
TOTAL PHOSPHATE	09/26/93	0001	MG/L		0.20		0.20	I
TOTAL SUSPENDED SOLIDS	09/26/93	0001	MG/L		8.0		8.0	I
TRITIUM	09/26/93	0001	PCI/L		2320.		2320.	I
URANIUM-234	09/26/93	0001	PCI/L		.436		.436	I
URANIUM-238	09/26/93	0001	PCI/L		.299		.299	I
VANADIUM, SOLUBLE	09/26/93	0001	UG/L		14.4		14.4	I
VANADIUM, TOTAL	09/26/93	0001	UG/L		15.1		15.1	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0389
NORTH COORDINATE: 597337.46 FT
EAST COORDINATE: 1494949.43 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMERICIUM-241	09/28/93	0001	PCI/L		.0967		.0967	I
ANTIMONY, SOLUBLE	09/28/93	0001	UG/L		4.9		4.9	I
BARIUM, SOLUBLE	09/28/93	0001	UG/L	B	89.5		89.5	I
BARIUM, TOTAL	09/28/93	0001	UG/L	B	89.2		89.2	I
CALCIUM, SOLUBLE	09/28/93	0001	UG/L		143000.	J	143000.	I
CALCIUM, TOTAL	09/28/93	0001	UG/L		143000.	J	143000.	I
CHLORIDE	09/28/93	0001	MG/L		95.7		95.7	I
COPPER, SOLUBLE	09/28/93	0001	UG/L	B	1.2		1.2	I
COPPER, TOTAL	09/28/93	0001	UG/L	B	1.1		1.1	I
FLUORIDE	09/28/93	0001	MG/L		0.17		0.17	I
LITHIUM, SOLUBLE	09/28/93	0001	UG/L	B	5.6		5.6	I
LITHIUM, TOTAL	09/28/93	0001	UG/L	B	5.6		5.6	I
MAGNESIUM, SOLUBLE	09/28/93	0001	UG/L		41000.	J	41000.	I
MAGNESIUM, TOTAL	09/28/93	0001	UG/L		41000.	J	41000.	I
MANGANESE, SOLUBLE	09/28/93	0001	UG/L	B	5.8		5.8	I
MANGANESE, TOTAL	09/28/93	0001	UG/L	B	6.3		6.3	I
NICKEL, SOLUBLE	09/28/93	0001	UG/L	B	24.1		24.1	I
NICKEL, TOTAL	09/28/93	0001	UG/L	B	23.1		23.1	I
NITRATE NITRITE	09/28/93	0001	MG/L		2.8		2.8	I
PLUTONIUM-239/240	09/28/93	0001	PCI/L		.219		REJECT	I
POTASSIUM, SOLUBLE	09/28/93	0001	UG/L	B	2340.		2340.	I
POTASSIUM, TOTAL	09/28/93	0001	UG/L	B	2390.		2390.	I
SELENIUM, SOLUBLE	09/28/93	0001	UG/L	B	1.0		1.0	I
SODIUM, SOLUBLE	09/28/93	0001	UG/L		52100.	J	52100.	I
SODIUM, TOTAL	09/28/93	0001	UG/L		51800.	J	51800.	I
SULFATE	09/28/93	0001	MG/L		119.		119.	I
TETRACHLOROETHENE	09/28/93	0001	UG/L		0.34	J	0.34	I
THORIUM-228	09/28/93	0001	PCI/L		.627		.627	I
THORIUM-230	09/28/93	0001	PCI/L		.378		.378	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0389
NORTH COORDINATE: 597337.46 FT
EAST COORDINATE: 1494949.43 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
THORIUM-232	09/28/93	0001	PCI/L		.116		.116	I
TIN, SOLUBLE	09/28/93	0001	UG/L	B	16.7		16.7	I
TIN, TOTAL	09/28/93	0001	UG/L	B	14.7		14.7	I
TOTAL DISSOLVED SOLIDS	09/28/93	0001	MG/L		734.		734.	I
TOTAL ORGANIC CARBON	09/28/93	0001	MG/L		3.3		3.3	I
TRICHLOROETHENE	09/28/93	0001	UG/L		2.9	J	2.9	I
TRITIUM	09/28/93	0001	PCI/L		8220.		8220.	I
URANIUM-234	09/28/93	0001	PCI/L		.57		.57	I
URANIUM-238	09/28/93	0001	PCI/L		.469		.469	I
VANADIUM, SOLUBLE	09/28/93	0001	UG/L		13.4	J	13.4	I
VANADIUM, TOTAL	09/28/93	0001	UG/L		14.2	J	14.2	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0393
NORTH COORDINATE: 596694.53 FT
EAST COORDINATE: 1495024.89 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, SOLUBLE	09/25/93	0001	UG/L		33.0		33.0	I
ALUMINUM, TOTAL	09/25/93	0001	UG/L		362.	J	362.	I
AMERICIUM-241	09/25/93	0001	PCI/L		.122		REJECT	I
ANTIMONY, SOLUBLE	09/25/93	0001	UG/L		4.0	J	4.0	I
BARIUM, SOLUBLE	09/25/93	0001	UG/L	B	78.4		78.4	I
BARIUM, TOTAL	09/25/93	0001	UG/L	B	132.		132.	I
CALCIUM, SOLUBLE	09/25/93	0001	UG/L		44700.	J	44700.	I
CALCIUM, TOTAL	09/25/93	0001	UG/L		82900.	J	82900.	I
CHLORIDE	09/25/93	0001	MG/L		342.		342.	I
COPPER, SOLUBLE	09/25/93	0001	UG/L	B	2.6		2.6	I
COPPER, TOTAL	09/25/93	0001	UG/L	B	1.2		1.2	I
FLUORIDE	09/25/93	0001	MG/L		0.76		0.76	I
IRON, SOLUBLE	09/25/93	0001	UG/L	B	78.2	J	78.2	I
IRON, TOTAL	09/25/93	0001	UG/L		793.	J	793.	I
LITHIUM, SOLUBLE	09/25/93	0001	UG/L		120.		120.	I
LITHIUM, TOTAL	09/25/93	0001	UG/L		122.		122.	I
MAGNESIUM, SOLUBLE	09/25/93	0001	UG/L		40100.	J	40100.	I
MAGNESIUM, TOTAL	09/25/93	0001	UG/L		43500.	J	43500.	I
MANGANESE, SOLUBLE	09/25/93	0001	UG/L		38.6	J	38.6	I
MANGANESE, TOTAL	09/25/93	0001	UG/L		52.0	J	52.0	I
NICKEL, SOLUBLE	09/25/93	0001	UG/L	B	24.9		24.9	I
NICKEL, TOTAL	09/25/93	0001	UG/L	B	24.8		24.8	I
NITRATE NITRITE	09/25/93	0001	MG/L		0.030		0.030	I
PLUTONIUM-239/240	09/25/93	0001	PCI/L		.122		REJECT	I
POTASSIUM, SOLUBLE	09/25/93	0001	UG/L		20400.		20400.	I
POTASSIUM, TOTAL	09/25/93	0001	UG/L		21200.		21200.	I
RADIUM-226	09/25/93	0001	PCI/L		1.68		1.68	I
SELENIUM, TOTAL	09/25/93	0001	UG/L	B	1.2	J	1.2	I
SODIUM, SOLUBLE	09/25/93	0001	UG/L		580000.		580000.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0393
NORTH COORDINATE: 596694.53 FT
EAST COORDINATE: 1495024.89 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SODIUM, TOTAL	09/25/93	0001	UG/L		150000.		150000.	I
THORIUM-228	09/25/93	0001	PCI/L		.508		REJECT	I
THORIUM-230	09/25/93	0001	PCI/L		.407		REJECT	I
THORIUM-232	09/25/93	0001	PCI/L		.186		.186	I
TIN, SOLUBLE	09/25/93	0001	UG/L	B	16.8		16.8	I
TIN, TOTAL	09/25/93	0001	UG/L	B	15.0		15.0	I
TOTAL DISSOLVED SOLIDS	09/25/93	0001	MG/L		970.		970.	I
TOTAL KJELDAHL NITROGEN	09/25/93	0001	MG/L		1.9		1.9	I
TOTAL ORGANIC CARBON	09/25/93	0001	MG/L		0.80		0.80	I
TOTAL PHOSPHATE	09/25/93	0001	MG/L		0.10		0.10	I
TOTAL SUSPENDED SOLIDS	09/25/93	0001	MG/L		12.0		12.0	I
TRITIUM	09/25/93	0001	PCI/L		4480.		4480.	I
URANIUM-234	09/25/93	0001	PCI/L		.782		.782	I
URANIUM-238	09/25/93	0001	PCI/L		.385		.385	I
VANADIUM, SOLUBLE	09/25/93	0001	UG/L		11.6		11.6	I
VANADIUM, TOTAL	09/25/93	0001	UG/L		13.4		13.4	I
ZINC, SOLUBLE	09/25/93	0001	UG/L	B	11.0		11.0	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0394
NORTH COORDINATE: 596489.48 FT
EAST COORDINATE: 1495003.44 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	09/13/93	0001	UG/L		2790.		2790.	I
AMERICIUM-241	09/13/93	0001	PCI/L		.0733		.0733	I
AMMONIA	09/13/93	0001	MG/L		2.3		2.3	I
ANTIMONY, SOLUBLE	09/13/93	0001	UG/L	B	2.1		2.1	I
BARIUM, SOLUBLE	09/13/93	0001	UG/L	B	55.1	J	55.1	I
BARIUM, TOTAL	09/13/93	0001	UG/L	B	116.	J	116.	I
BISMUTH, TOTAL	09/13/93	0001	UG/L	B	44.1		44.1	I
CALCIUM, SOLUBLE	09/13/93	0001	UG/L		52800.	J	52800.	I
CALCIUM, TOTAL	09/13/93	0001	UG/L		70800.	J	70800.	I
CHLORIDE	09/13/93	0001	MG/L		224.	J	224.	I
CHROMIUM, TOTAL	09/13/93	0001	UG/L	B	4.0		4.0	I
COPPER, TOTAL	09/13/93	0001	UG/L	B	3.0		3.0	I
FLUORIDE	09/13/93	0001	MG/L		0.66		0.66	I
IRON, SOLUBLE	09/13/93	0001	UG/L		432.		432.	I
IRON, TOTAL	09/13/93	0001	UG/L		1740.		1740.	I
LITHIUM, SOLUBLE	09/13/93	0001	UG/L	B	42.5	J	42.5	I
LITHIUM, TOTAL	09/13/93	0001	UG/L	B	51.9	J	51.9	I
MAGNESIUM, SOLUBLE	09/13/93	0001	UG/L		25100.	J	25100.	I
MAGNESIUM, TOTAL	09/13/93	0001	UG/L		30700.	J	30700.	I
MANGANESE, SOLUBLE	09/13/93	0001	UG/L		33.7		33.7	I
MANGANESE, TOTAL	09/13/93	0001	UG/L		66.6		66.6	I
NICKEL, TOTAL	09/13/93	0001	UG/L	B	5.3		5.3	I
NITRATE NITRITE	09/13/93	0001	MG/L		0.094		0.094	I
PETN	09/13/93	0001	UG/L		4.6	J	4.6	I
POTASSIUM, SOLUBLE	09/13/93	0001	UG/L		10800.	J	10800.	I
POTASSIUM, TOTAL	09/13/93	0001	UG/L		16200.		16200.	I
RADIUM-226	09/13/93	0001	PCI/L		1.12		1.12	I
SODIUM, SOLUBLE	09/13/93	0001	UG/L		103000.		103000.	I
SODIUM, TOTAL	09/13/93	0001	UG/L		121000.		121000.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0394
NORTH COORDINATE: 596489.48 FT
EAST COORDINATE: 1495003.44 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SULFATE	09/13/93	0001	MG/L		74.0		74.0	I
THORIUM-228	09/13/93	0001	PCI/L		.494		REJECT	I
THORIUM-230	09/13/93	0001	PCI/L		.302		.302	I
THORIUM-232	09/13/93	0001	PCI/L		.209		.209	I
TIN, TOTAL	09/13/93	0001	UG/L	B	29.9		29.9	I
TOTAL DISSOLVED SOLIDS	09/13/93	0001	MG/L		724.		724.	I
TOTAL KJELDAHL NITROGEN	09/13/93	0001	MG/L		2.0		2.0	I
TOTAL ORGANIC CARBON	09/13/93	0001	MG/L		0.83		0.83	I
TOTAL PHOSPHATE	09/13/93	0001	MG/L		0.18		0.18	I
TOTAL SUSPENDED SOLIDS	09/13/93	0001	MG/L		116.		116.	I
TRITIUM	09/13/93	0001	PCI/L		8710.		8710.	I
URANIUM-234	09/13/93	0001	PCI/L		.301		.301	I
URANIUM-238	09/13/93	0001	PCI/L		.182		.182	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0397
NORTH COORDINATE: 596702.12 FT
EAST COORDINATE: 1495024.40 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: TILL (TI)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHA	09/25/93	0001	UG/L		2.1		2.1	I
1,2-CIS-DICHLOROETHENE	09/25/93	0001	UG/L		1.1	J	1.1	I
ANTIMONY, SOLUBLE	09/25/93	0001	UG/L	B	3.0	J	3.0	I
BARIUM, SOLUBLE	09/25/93	0001	UG/L	B	136.		136.	I
BARIUM, TOTAL	09/25/93	0001	UG/L	B	136.		136.	I
CALCIUM, SOLUBLE	09/25/93	0001	UG/L		141000.	J	141000.	I
CALCIUM, TOTAL	09/25/93	0001	UG/L		144000.	J	144000.	I
CHLORIDE	09/25/93	0001	MG/L		162.		162.	I
COPPER, SOLUBLE	09/25/93	0001	UG/L	B	1.2		1.2	I
COPPER, TOTAL	09/25/93	0001	UG/L	B	0.80		0.80	I
FLUORIDE	09/25/93	0001	MG/L		0.17		0.17	I
IRON, SOLUBLE	09/25/93	0001	UG/L		982.		982.	I
IRON, TOTAL	09/25/93	0001	UG/L		1430.		1430.	I
LEAD, SOLUBLE	09/25/93	0001	UG/L		6.8		6.8	I
LEAD, TOTAL	09/25/93	0001	UG/L	B	2.9		2.9	I
MAGNESIUM, SOLUBLE	09/25/93	0001	UG/L		43100.		43100.	I
MAGNESIUM, TOTAL	09/25/93	0001	UG/L		43700.		43700.	I
MANGANESE, SOLUBLE	09/25/93	0001	UG/L		52.2		52.2	I
MANGANESE, TOTAL	09/25/93	0001	UG/L		76.3		76.3	I
NICKEL, SOLUBLE	09/25/93	0001	UG/L		294.		294.	I
NICKEL, TOTAL	09/25/93	0001	UG/L		281.		281.	I
NITRATE NITRITE	09/25/93	0001	MG/L		2.3		2.3	I
PLUTONIUM-239/240	09/25/93	0001	PCI/L		.213		REJECT	I
POTASSIUM, SOLUBLE	09/25/93	0001	UG/L	B	2820.	J	2820.	I
POTASSIUM, TOTAL	09/25/93	0001	UG/L	B	2880.	J	2880.	I
SODIUM, SOLUBLE	09/25/93	0001	UG/L		86300.		86300.	I
SODIUM, TOTAL	09/25/93	0001	UG/L		86600.		86600.	I
SULFATE	09/25/93	0001	MG/L		101.		101.	I
TETRACHLOROETHENE	09/25/93	0001	UG/L		14.	J	14.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP98 GROUNDWATER SWEEPS
LOCATION: 0397
NORTH COORDINATE: 596702.12 FT
EAST COORDINATE: 1495024.40 FT
09/10/93 TO 10/15/93
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: TILL (TI)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TETRACHLOROMETHANE (CCL4)	09/25/93	0001	UG/L		1.5	J	1.5	I
THORIUM-228	09/25/93	0001	PCI/L		.765		REJECT	I
THORIUM-230	09/25/93	0001	PCI/L		.247		REJECT	I
THORIUM-232	09/25/93	0001	PCI/L		.099		.099	I
TOTAL DISSOLVED SOLIDS	09/25/93	0001	MG/L		929.		929.	I
TOTAL KJELDAHL NITROGEN	09/25/93	0001	MG/L		0.12		0.12	I
TOTAL ORGANIC CARBON	09/25/93	0001	MG/L		1.1		1.1	I
TOTAL PHOSPHATE	09/25/93	0001	MG/L		0.10		0.10	I
TRICHLOROETHENE	09/25/93	0001	UG/L		11.	J	11.	I
TRICHLOROMETHANE (CHLOROFORM)	09/25/93	0001	UG/L		0.92		0.92	I
TRITIUM	09/25/93	0001	PCI/L		3480.		3480.	I
URANIUM-234	09/25/93	0001	PCI/L		.556		.556	I
URANIUM-238	09/25/93	0001	PCI/L		.389		.389	I
VANADIUM, SOLUBLE	09/25/93	0001	UG/L		17.0		17.0	I
VANADIUM, TOTAL	09/25/93	0001	UG/L		17.9		17.9	I
ZINC, SOLUBLE	09/25/93	0001	UG/L		177.		177.	I
ZINC, TOTAL	09/25/93	0001	UG/L	B	17.8		17.8	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

DATA FILE NAME: K:\DART\SWP\SWP98\GWQ10004.DAT

Table C.4.

Spring Hits Table

Laboratory Qualifier Codes	
U	Indicates analyte was analyzed for but not detected; the associated value is reporting limit or sample quantitation limit.
J	Indicates an estimated value; for organic compounds, J often signifies a value less than the Contract Required Quantitation Limit (CRQL) but greater than zero.
B	For inorganic analyses, the reported value is less than the Contract Required Detection Limit (CRDL) but greater than the Instrument Detection Limit (IDL). For organic analyses, indicates the analyte was found in the associated blank.
E	For organic analyses, identifies compounds whose concentrations exceeded the calibration range of the instrument for that specific analysis.
D	For organic analyses, indicates the compounds were identified in an analysis performed at a secondary dilution factor.
JB	For organic analyses, indicates that the reported analyte concentration was estimated and that the analyte was found in the associated blank.
BD	For organic analyses, indicates the compounds were identified in an analysis performed at a secondary dilution factor and were found in the associated blank.
*	For inorganic analyses, the laboratory duplicate analysis was not within control limits.
NR	For inorganic analyses, the analyte is not required to be analyzed.
NC	Not calculated.
NS	For organic matrix spike analyses, indicates the analyte was not spiked for the analysis.

SURFACE WATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0601
NORTH COORDINATE: 48426. FT
EAST COORDINATE: 46200. FT
03/16/94 TO 04/13/94
REPORT DATE: 04/04/95

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	04/12/94	0001	UG/L		244.		244.	I
ANTIMONY, SOLUBLE	04/12/94	0001	UG/L	B	1.6	J	1.6	I
BARIUM, SOLUBLE	04/12/94	0001	UG/L	B	54.1	B	54.1	I
BARIUM, TOTAL	04/12/94	0001	UG/L	B	47.7	B	47.7	I
CALCIUM, SOLUBLE	04/12/94	0001	UG/L		131000.	J	131000.	I
CALCIUM, TOTAL	04/12/94	0001	UG/L		116000.	J	116000.	I
CHLORIDE	04/12/94	0001	MG/L		253.		253.	I
COPPER, SOLUBLE	04/12/94	0001	UG/L	B	1.3	B	1.3	I
COPPER, TOTAL	04/12/94	0001	UG/L	B	1.6	B	1.6	I
FLUORIDE	04/12/94	0001	MG/L		0.18		0.18	I
IRON, TOTAL	04/12/94	0001	UG/L		331.		331.	I
LEAD, TOTAL	04/12/94	0001	UG/L		3.1	J	3.1	I
MAGNESIUM, SOLUBLE	04/12/94	0001	UG/L		31000.	J	31000.	I
MAGNESIUM, TOTAL	04/12/94	0001	UG/L		27200.	J	27200.	I
MANGANESE, SOLUBLE	04/12/94	0001	UG/L		19.8		19.8	I
MANGANESE, TOTAL	04/12/94	0001	UG/L		32.5		32.5	I
NITRATE NITRITE	04/12/94	0001	MG/L		7.8		7.8	I
POTASSIUM, SOLUBLE	04/12/94	0001	UG/L	B	2390.	B	2390.	I
POTASSIUM, TOTAL	04/12/94	0001	UG/L	B	2140.	B	2140.	I
RADIUM-226	04/12/94	0001	PCI/L		0.28		0.28	I
SODIUM, SOLUBLE	04/12/94	0001	UG/L		140000.		140000.	I
SODIUM, TOTAL	04/12/94	0001	UG/L		122000.		122000.	I
SULFATE	04/12/94	0001	MG/L		92.6		92.6	I
TETRACHLOROETHENE	04/12/94	0001	UG/L		11.	J	11.	I
THORIUM-228	04/12/94	0001	PCI/L		0.095		0.095	I
THORIUM-230	04/12/94	0001	PCI/L		0.083	J	0.083	I
TOTAL DISSOLVED SOLIDS	04/12/94	0001	MG/L		961.		961.	I
TOTAL ORGANIC CARBON	04/12/94	0001	MG/L		1.6		1.6	I
TRICHLOROETHENE	04/12/94	0001	UG/L		3.5	J	3.5	I
TRITIUM	04/12/94	0001	PCI/L		76500.		76500.	I

SURFACE WATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0601
NORTH COORDINATE: 48426. FT
EAST COORDINATE: 46200. FT
03/16/94 TO 04/13/94
REPORT DATE: 04/04/95

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
URANIUM-234	04/12/94	0001	PCI/L		4.76		4.76	I
URANIUM-235	04/12/94	0001	PCI/L		0.045		0.045	I
URANIUM-238	04/12/94	0001	PCI/L		0.186		0.186	I
VANADIUM, SOLUBLE	04/12/94	0001	UG/L		12.6		12.6	I
VANADIUM, TOTAL	04/12/94	0001	UG/L		13.0		13.0	I

SURFACE WATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0602
NORTH COORDINATE: 47640. FT
EAST COORDINATE: 46956. FT
03/16/94 TO 04/13/94
REPORT DATE: 04/04/95

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	04/08/94	0001	UG/L		1580.		1580.	I
BARIUM, SOLUBLE	04/08/94	0001	UG/L	B	80.5	J	80.5	I
BARIUM, TOTAL	04/08/94	0001	UG/L	B	78.5	J	78.5	I
CALCIUM, SOLUBLE	04/08/94	0001	UG/L		142000.		142000.	I
CALCIUM, TOTAL	04/08/94	0001	UG/L		130000.		130000.	I
CHLORIDE	04/08/94	0001	MG/L		969.		969.	I
CHROMIUM, TOTAL	04/08/94	0001	UG/L	B	9.9	B	9.9	I
COPPER, SOLUBLE	04/08/94	0001	UG/L		33.7		33.7	I
COPPER, TOTAL	04/08/94	0001	UG/L		78.9		78.9	I
FLUORIDE	04/08/94	0001	MG/L		0.19		0.19	I
IRON, TOTAL	04/08/94	0001	UG/L		2200.		2200.	I
LEAD, SOLUBLE	04/08/94	0001	UG/L	B	1.7	J	1.7	I
MAGNESIUM, SOLUBLE	04/08/94	0001	UG/L		38000.	J	38000.	I
MAGNESIUM, TOTAL	04/08/94	0001	UG/L		34600.		34600.	I
MANGANESE, SOLUBLE	04/08/94	0001	UG/L		15.5		15.5	I
MANGANESE, TOTAL	04/08/94	0001	UG/L		77.4		77.4	I
MOLYBDENUM	04/08/94	0001	UG/L	B	1.8	B	1.8	I
NICKEL, TOTAL	04/08/94	0001	UG/L	B	2.9	J	2.9	I
PLUTONIUM-239/240	04/08/94	0001	PCI/L		0.0027		0.0027	I
POTASSIUM, SOLUBLE	04/08/94	0001	UG/L	B	4580.	B	4580.	I
POTASSIUM, TOTAL	04/08/94	0001	UG/L	B	4620.	B	4620.	I
SODIUM, SOLUBLE	04/08/94	0001	UG/L		542000.		542000.	I
SODIUM, TOTAL	04/08/94	0001	UG/L		483000.		483000.	I
SULFATE	04/08/94	0001	MG/L		200.		200.	I
THORIUM-228	04/08/94	0001	PCI/L		0.047		0.047	I
TOTAL DISSOLVED SOLIDS	04/08/94	0001	MG/L		1990.		1990.	I
TOTAL KJELDAHL NITROGEN	04/08/94	0001	MG/L		0.26		0.26	I
TOTAL ORGANIC CARBON	04/08/94	0001	MG/L		2.3		2.3	I
TOTAL PHOSPHATE	04/08/94	0001	MG/L		0.082		0.082	I
TRITIUM	04/08/94	0001	PCI/L		20700.		20700.	I

SURFACE WATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0602
NORTH COORDINATE: 47640. FT
EAST COORDINATE: 46956. FT
03/16/94 TO 04/13/94
REPORT DATE: 04/04/95

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
URANIUM-234	04/08/94	0001	PCI/L		0.79		0.79	I
URANIUM-238	04/08/94	0001	PCI/L		0.45		0.45	I
VANADIUM, SOLUBLE	04/08/94	0001	UG/L		13.8		13.8	I
VANADIUM, TOTAL	04/08/94	0001	UG/L		13.9		13.9	I

SURFACE WATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0605 S005
NORTH COORDINATE: 49139. FT
EAST COORDINATE: 47211. FT
03/16/94 TO 04/13/94
REPORT DATE: 04/04/95

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,2-CIS-DICHLOROETHENE	04/12/94	0001	UG/L		15.		15.	I
ALUMINUM, TOTAL	04/12/94	0001	UG/L		94.4		94.4	I
ANTIMONY, SOLUBLE	04/12/94	0001	UG/L	B	1.9	J	1.9	I
BARIUM, SOLUBLE	04/12/94	0001	UG/L	B	47.8	B	47.8	I
BARIUM, TOTAL	04/12/94	0001	UG/L	B	52.0	B	52.0	I
CALCIUM, SOLUBLE	04/12/94	0001	UG/L		121000.	J	121000.	I
CALCIUM, TOTAL	04/12/94	0001	UG/L		130000.	J	130000.	I
CHLORIDE	04/12/94	0001	MG/L		495.		495.	I
CHLOROETHENE (VINYL CHLORIDE)	04/12/94	0001	UG/L		1.1	J	1.1	I
COPPER, SOLUBLE	04/12/94	0001	UG/L	B	1.4	B	1.4	I
COPPER, TOTAL	04/12/94	0001	UG/L	B	1.6	B	1.6	I
FLUORIDE	04/12/94	0001	MG/L		0.15		0.15	I
IRON, TOTAL	04/12/94	0001	UG/L		114.		114.	I
LEAD, SOLUBLE	04/12/94	0001	UG/L	B	2.1	J	2.1	I
LEAD, TOTAL	04/12/94	0001	UG/L	B	2.3	J	2.3	I
MAGNESIUM, SOLUBLE	04/12/94	0001	UG/L		34800.	J	34800.	I
MAGNESIUM, TOTAL	04/12/94	0001	UG/L		37900.	J	37900.	I
MANGANESE, SOLUBLE	04/12/94	0001	UG/L	B	0.98	J	0.98	I
MANGANESE, TOTAL	04/12/94	0001	UG/L	B	3.6	B	3.6	I
NITRATE NITRITE	04/12/94	0001	MG/L		5.6		5.6	I
POTASSIUM, SOLUBLE	04/12/94	0001	UG/L	B	2890.	B	2890.	I
POTASSIUM, TOTAL	04/12/94	0001	UG/L	B	3080.	B	3080.	I
SODIUM, SOLUBLE	04/12/94	0001	UG/L		227000.		227000.	I
SODIUM, TOTAL	04/12/94	0001	UG/L		248000.		248000.	I
SULFATE	04/12/94	0001	MG/L		92.4		92.4	I
THORIUM-230	04/12/94	0001	PCI/L		0.064	J	0.064	I
TOTAL DISSOLVED SOLIDS	04/12/94	0001	MG/L		1350.		1350.	I
TOTAL ORGANIC CARBON	04/12/94	0001	MG/L		1.8		1.8	I
TOTAL SUSPENDED SOLIDS	04/12/94	0001	MG/L		6.0		6.0	I
TRICHLOROETHENE	04/12/94	0001	UG/L		5.7	J	5.7	I

SURFACE WATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0605 S005
NORTH COORDINATE: 49139. FT
EAST COORDINATE: 47211. FT
03/16/94 TO 04/13/94
REPORT DATE: 04/04/95

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TRITIUM	04/12/94	0001	PCI/L		18400.		18400.	I
URANIUM-234	04/12/94	0001	PCI/L		0.194		0.194	I
URANIUM-238	04/12/94	0001	PCI/L		0.130		0.130	I
VANADIUM, SOLUBLE	04/12/94	0001	UG/L		13.8		13.8	I
VANADIUM, TOTAL	04/12/94	0001	UG/L		14.2		14.2	I

SURFACE WATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0607
NORTH COORDINATE: 49245. FT
EAST COORDINATE: 47660. FT
03/16/94 TO 04/13/94
REPORT DATE: 04/04/95

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
BARIUM, SOLUBLE	04/08/94	0001	UG/L	B	102.	J	102.	I
BARIUM, TOTAL	04/08/94	0001	UG/L	B	120.	J	120.	I
CALCIUM, SOLUBLE	04/08/94	0001	UG/L		189000.		189000.	I
CALCIUM, TOTAL	04/08/94	0001	UG/L		230000.		230000.	I
CHLORIDE	04/08/94	0001	MG/L		1030.		1030.	I
FLUORIDE	04/08/94	0001	MG/L		0.16		0.16	I
MAGNESIUM, SOLUBLE	04/08/94	0001	UG/L		50600.	J	50600.	I
MAGNESIUM, TOTAL	04/08/94	0001	UG/L		58600.		58600.	I
MOLYBDENUM, SOLUBLE	04/08/94	0001	UG/L	B	1.8	B	1.8	I
NITRATE NITRITE	04/08/94	0001	MG/L		4.1		4.1	I
PLUTONIUM-239/240	04/08/94	0001	PCI/L		0.0057		0.0057	I
POTASSIUM, SOLUBLE	04/08/94	0001	UG/L		5650.		5650.	I
POTASSIUM, TOTAL	04/08/94	0001	UG/L		6060.		6060.	I
SODIUM, SOLUBLE	04/08/94	0001	UG/L		521000.		521000.	I
SODIUM, TOTAL	04/08/94	0001	UG/L		557000.		557000.	I
SULFATE	04/08/94	0001	MG/L		122.		122.	I
TOTAL DISSOLVED SOLIDS	04/08/94	0001	MG/L		2700.	J	2700.	I
TOTAL ORGANIC CARBON	04/13/94	0001	MG/L		2.5		2.5	I
TOTAL PHOSPHATE	04/08/94	0001	MG/L		0.071		0.071	I
TRICHLOROETHENE	04/08/94	0001	UG/L		1.4	J	1.4	I
TRITIUM	04/08/94	0001	PCI/L		12220.		12220.	I
URANIUM-234	04/08/94	0001	PCI/L		0.19		0.19	I
URANIUM-238	04/08/94	0001	PCI/L		0.19		0.19	I
VANADIUM, SOLUBLE	04/08/94	0001	UG/L		17.5		17.5	I
VANADIUM, TOTAL	04/08/94	0001	UG/L		17.6		17.6	I

SURFACE WATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0608
NORTH COORDINATE: 49372. FT
EAST COORDINATE: 46865. FT
03/16/94 TO 04/13/94
REPORT DATE: 04/04/95

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,2-CIS-DICHLOROETHENE	04/08/94	0001	UG/L		1.4	J	1.4	I
ALUMINUM, TOTAL	04/08/94	0001	UG/L		210.		210.	I
ANTIMONY, SOLUBLE	04/08/94	0001	UG/L	B	0.60	B	0.60	I
BARIUM, SOLUBLE	04/08/94	0001	UG/L	B	60.0	J	60.0	I
BARIUM, TOTAL	04/08/94	0001	UG/L	B	54.3	J	54.3	I
BISMUTH-210	04/08/94	0001	PCI/L		16		16	I
CALCIUM, SOLUBLE	04/08/94	0001	UG/L		161000.		161000.	I
CALCIUM, TOTAL	04/08/94	0001	UG/L		147000.		147000.	I
CHLORIDE	04/08/94	0001	MG/L		356.		356.	I
FLUORIDE	04/08/94	0001	MG/L		0.14		0.14	I
IRON, TOTAL	04/08/94	0001	UG/L		244.		244.	I
LEAD, TOTAL	04/08/94	0001	UG/L	B	1.0	J	1.0	I
MAGNESIUM, SOLUBLE	04/08/94	0001	UG/L		59500.	J	59500.	I
MAGNESIUM, TOTAL	04/08/94	0001	UG/L		54600.		54600.	I
MANGANESE, TOTAL	04/08/94	0001	UG/L	B	3.8	J	3.8	I
NITRATE NITRITE	04/08/94	0001	MG/L		3.3		3.3	I
PLUTONIUM-238	04/08/94	0001	PCI/L		0.0036		0.0036	I
PLUTONIUM-239/240	04/08/94	0001	PCI/L		0.0080		0.0080	I
POTASSIUM, SOLUBLE	04/08/94	0001	UG/L	B	4760.	B	4760.	I
POTASSIUM, TOTAL	04/08/94	0001	UG/L	B	4580.	B	4580.	I
SODIUM, SOLUBLE	04/08/94	0001	UG/L		127000.		127000.	I
SODIUM, TOTAL	04/08/94	0001	UG/L		120000.		120000.	I
SULFATE	04/08/94	0001	MG/L		141.		141.	I
THORIUM-228	04/08/94	0001	PCI/L		0.100		0.100	I
TOTAL DISSOLVED SOLIDS	04/08/94	0001	MG/L		1260.		1260.	I
TOTAL ORGANIC CARBON	04/08/94	0001	MG/L		0.94		0.94	I
TRICHLOROETHENE	04/08/94	0001	UG/L		5.3	J	5.3	I
TRITIUM	04/08/94	0001	PCI/L		20200.		20200.	I
URANIUM-234	04/08/94	0001	PCI/L		0.30		0.30	I
URANIUM-238	04/08/94	0001	PCI/L		0.168		0.168	I

SURFACE WATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0608
NORTH COORDINATE: 49372. FT
EAST COORDINATE: 46865. FT
03/16/94 TO 04/13/94
REPORT DATE: 04/04/95

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
VANADIUM, SOLUBLE	04/08/94	0001	UG/L		16.2		16.2	I
VANADIUM, TOTAL	04/08/94	0001	UG/L		15.8		15.8	I

SURFACE WATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0701
NORTH COORDINATE: UNKNOWN
EAST COORDINATE: UNKNOWN
03/16/94 TO 04/13/94
REPORT DATE: 04/04/95

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	03/16/94	0001	UG/L		63.		63.	D1
1,2,4-TRICHLOROBENZENE	03/16/94	0001	UG/L		64.		64.	I
1,2-DICHLOROBENZENE	03/16/94	0001	UG/L		27.		27.	I
	03/16/94	0001	UG/L		94.		94.	D1
1,2-DICHLOROETHANE	03/16/94	0001	UG/L		110.		110.	D1
1,2-DICHLOROPROPANE	03/16/94	0001	UG/L		71.		71.	D1
1,3,5-TRINITROBENZENE	03/16/94	0001	UG/L		2.3	J	2.3	I
1,3-DICHLOROBENZENE	03/16/94	0001	UG/L		110.		110.	D1
2,4,5-TRICHLOROPHENOL	03/16/94	0001	UG/L		65.		65.	I
2,4-DINITROTOLUENE	03/16/94	0001	UG/L		220.	J	220.	D1
2-CHLORONAPHTHALENE	03/16/94	0001	UG/L		64.		64.	I
2-METHYLNAPHTHALENE	03/16/94	0001	UG/L		17.		17.	I
2-METHYLPHENOL	03/16/94	0001	UG/L		45.		45.	I
4,4'-DDD	03/16/94	0001	UG/L	J	2.2	J	2.2	D1
4,4'-DDE	03/16/94	0001	UG/L	D	8.6	J	8.6	D1
4-CHLOROPHENYL-PHENYLETHER	03/16/94	0001	UG/L		77.		77.	I
4-METHYL-2-PENTANONE	03/16/94	0001	UG/L		33.	J	33.	D1
ACENAPHTHYLENE	03/16/94	0001	UG/L		16.		16.	I
ALDRIN	03/16/94	0001	UG/L	J	0.94	J	0.94	D1
ALPHA-BHC	03/16/94	0001	UG/L	D	5.7	J	5.7	D1
ALUMINUM, SOLUBLE	03/16/94	0001	UG/L		188.		188.	I
AMMONIA	03/16/94	0001	MG/L		1.7		1.7	I
ANTHRACENE	03/16/94	0001	UG/L		16.		16.	I
ANTIMONY, SOLUBLE	03/16/94	0001	UG/L		52.0		52.0	I
ARSENIC, SOLUBLE	03/16/94	0001	UG/L		234.		234.	I
BARIUM, SOLUBLE	03/16/94	0001	UG/L		348.		348.	I
BENZENE	03/16/94	0001	UG/L		31.	J	31.	D1
BENZO(A)ANTHRACENE	03/16/94	0001	UG/L		71.		71.	I
BERYLLIUM, SOLUBLE	03/16/94	0001	UG/L		134.		134.	I
BETA-BHC	03/16/94	0001	UG/L	D	5.0	J	5.0	D1

SURFACE WATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0701
NORTH COORDINATE: UNKNOWN
EAST COORDINATE: UNKNOWN
03/16/94 TO 04/13/94
REPORT DATE: 04/04/95

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
BIS(2-ETHYLHEXYL)PHTHALATE	03/16/94	0001	UG/L	B	91.	B	91.	D1
BROMODICHLOROMETHANE	03/16/94	0001	UG/L		54.		54.	D1
BROMOFORM	03/16/94	0001	UG/L		44.		44.	D1
CADMIUM, SOLUBLE	03/16/94	0001	UG/L		165.		165.	I
CHLORIDE	03/16/94	0001	MG/L		150.		150.	I
CHROMIUM, SOLUBLE	03/16/94	0001	UG/L		307.		307.	I
COBALT, SOLUBLE	03/16/94	0001	UG/L		405.		405.	I
COPPER, SOLUBLE	03/16/94	0001	UG/L		144.		144.	I
CYANIDE, SOLUBLE (METAL)	03/16/94	0001	UG/L		215.		215.	I
DIBENZOFURAN	03/16/94	0001	UG/L		49.		49.	I
DICHLOROMETHANE-METHYLENE CHLORIDE	03/16/94	0001	UG/L		85.	J	85.	D1
DIELDRIN	03/16/94	0001	UG/L	J	3.3	J	3.3	D1
DIMETHYL PHTHALATE	03/16/94	0001	UG/L		44.		44.	I
ENDRIN	03/16/94	0001	UG/L	D	8.3	J	8.3	D1
ETHYLBENZENE	03/16/94	0001	UG/L		32.	J	32.	D1
FLUORIDE	03/16/94	0001	MG/L		6.8		6.8	I
HEPTACHLOR	03/16/94	0001	UG/L	J	2.2	J	2.2	D1
HEPTACHLOR EPOXIDE	03/16/94	0001	UG/L	D	4.3	J	4.3	D1
INDENO(1,2,3-CD)PYRENE	03/16/94	0001	UG/L		18.		18.	I
IRON, SOLUBLE	03/16/94	0001	UG/L		525.		525.	I
LEAD, SOLUBLE	03/16/94	0001	UG/L		328.		328.	I
MANGANESE, SOLUBLE	03/16/94	0001	UG/L		128.		128.	I
MERCURY, SOLUBLE	03/16/94	0001	UG/L		5.2		5.2	I
METHOXYCHLOR	03/16/94	0001	UG/L		2.6	J	2.6	I
MOLYBDENUM, SOLUBLE	03/16/94	0001	UG/L		161.		161.	I
NICKEL, SOLUBLE	03/16/94	0001	UG/L		402.		402.	I
NITRATE NITRITE	03/16/94	0001	MG/L		18.2		18.2	I
PENTACHLOROPHENOL	03/16/94	0001	UG/L		81.		81.	I
PYRENE	03/16/94	0001	UG/L		32.		32.	I
SELENIUM, SOLUBLE	03/16/94	0001	UG/L		232.		232.	I

SURFACE WATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0701
NORTH COORDINATE: UNKNOWN
EAST COORDINATE: UNKNOWN
03/16/94 TO 04/13/94
REPORT DATE: 04/04/95

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SILVER, SOLUBLE	03/16/94	0001	UG/L		151.		151.	I
SULFATE	03/16/94	0001	MG/L		204.		204.	I
TETRACHLOROETHENE	03/16/94	0001	UG/L		44.		44.	D1
TETRACHLOROMETHANE (CCL4)	03/16/94	0001	UG/L		48.		48.	D1
THALLIUM, SOLUBLE	03/16/94	0001	UG/L		66.2		66.2	I
TOLUENE	03/16/94	0001	UG/L		80.		80.	D1
TOTAL DISSOLVED SOLIDS	03/16/94	0001	MG/L		950.		950.	I
TOTAL KJELDAHL NITROGEN	03/16/94	0001	MG/L		17.3		17.3	I
TOTAL PHOSPHATE	03/16/94	0001	MG/L		2.1		2.1	I
TOTAL XYLENES	03/16/94	0001	UG/L		88.	J	88.	D1
TRICHLOROETHENE	03/16/94	0001	UG/L		55.		55.	D1
VANADIUM, SOLUBLE	03/16/94	0001	UG/L		224.		224.	I
ZINC, SOLUBLE	03/16/94	0001	UG/L		107.		107.	I

DATA FILE NAME: K:\DART\SWP\SWP99\SWQ10000.DAT

EG+G-29-01-10-05-03
#9506050038

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0046 46-1
NORTH COORDINATE: 597074.65 FT
EAST COORDINATE: 1495004.51 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: CLAYEY GRAVEL OR CLAYEY SANDY GRAVEL (GC)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, SOLUBLE	03/18/94	0001	UG/L		21.3		21.3	I
ALUMINUM, TOTAL	03/18/94	0001	UG/L		40.0		40.0	I
AMMONIA	03/18/94	0001	MG/L		0.17		0.17	I
ANTIMONY, SOLUBLE	03/18/94	0001	UG/L	B	1.4		1.4	I
BARIUM, SOLUBLE	03/18/94	0001	UG/L	B	101.	J	101.	I
BARIUM, TOTAL	03/18/94	0001	UG/L	B	104.	J	104.	I
CALCIUM, SOLUBLE	03/18/94	0001	UG/L		146000.	J	146000.	I
CALCIUM, TOTAL	03/18/94	0001	UG/L		147000.	J	147000.	I
CHLORIDE	03/18/94	0001	MG/L		131.		131.	I
COPPER, SOLUBLE	03/18/94	0001	UG/L	B	6.8		6.8	I
COPPER, TOTAL	03/18/94	0001	UG/L		71.4		71.4	I
FLUORIDE	03/18/94	0001	MG/L		0.15		0.15	I
IRON, SOLUBLE	03/18/94	0001	UG/L	B	56.4	J	56.4	I
IRON, TOTAL	03/18/94	0001	UG/L		546.	J	546.	I
LEAD, TOTAL	03/18/94	0001	UG/L		12.0		12.0	I
MAGNESIUM, SOLUBLE	03/18/94	0001	UG/L		41200.	J	41200.	I
MAGNESIUM, TOTAL	03/18/94	0001	UG/L		41500.	J	41500.	I
MANGANESE, SOLUBLE	03/18/94	0001	UG/L		19.0	J	19.0	I
MANGANESE, TOTAL	03/18/94	0001	UG/L		20.7	J	20.7	I
NICKEL, SOLUBLE	03/18/94	0001	UG/L	B	2.5		2.5	I
NICKEL, TOTAL	03/18/94	0001	UG/L	B	7.2		7.2	I
NITRATE NITRITE	03/18/94	0001	MG/L		2.7		2.7	I
POTASSIUM, SOLUBLE	03/18/94	0001	UG/L	B	2520.		2520.	I
POTASSIUM, TOTAL	03/18/94	0001	UG/L	B	2520.		2520.	I
RADIUM-226	03/18/94	0001	PCI/L		0.19		0.19	I
SODIUM, SOLUBLE	03/18/94	0001	UG/L		77000.	J	77000.	I
SODIUM, TOTAL	03/18/94	0001	UG/L		72100.	J	72100.	I
SULFATE	03/18/94	0001	MG/L		123.		123.	I
TETRACHLOROETHENE	03/18/94	0001	UG/L		5.6		5.6	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0046 46-1
NORTH COORDINATE: 597074.65 FT
EAST COORDINATE: 1495004.51 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: CLAYEY GRAVEL OR CLAYEY SANDY GRAVEL (GC)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
THORIUM-230	03/18/94	0001	PCI/L		0.121		0.121	I
TOTAL DISSOLVED SOLIDS	03/18/94	0001	MG/L		789.		789.	I
TOTAL ORGANIC CARBON	03/18/94	0001	MG/L		0.85		0.85	I
TRICHLOROETHENE	03/18/94	0001	UG/L		2.4		2.4	I
TRITIUM	03/18/94	0001	PCI/L		5630.		5630.	I
URANIUM-234	03/18/94	0001	PCI/L		0.44		0.44	I
URANIUM-238	03/18/94	0001	PCI/L		0.39		0.39	I
ZINC, SOLUBLE	03/18/94	0001	UG/L		32.4		32.4	I
ZINC, TOTAL	03/18/94	0001	UG/L		88.6		88.6	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0063 63-1
NORTH COORDINATE: 596573.68 FT
EAST COORDINATE: 1495055.91 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: CLAYEY GRAVEL OR CLAYEY SANDY GRAVEL (GC)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,2-CIS-DICHLOROETHENE	03/18/94	0001	UG/L		8.6		8.6	I
BARIUM, SOLUBLE	03/18/94	0001	UG/L	B	139.	J	139.	I
BARIUM, TOTAL	03/18/94	0001	UG/L	B	94.6	J	94.6	I
CALCIUM, SOLUBLE	03/18/94	0001	UG/L		144000.	J	144000.	I
CALCIUM, TOTAL	03/18/94	0001	UG/L		96800.	J	96800.	I
CHLORIDE	03/18/94	0001	MG/L		198.		198.	I
COPPER, TOTAL	03/18/94	0001	UG/L	B	8.5		8.5	I
FLUORIDE	03/18/94	0001	MG/L		0.19		0.19	I
IRON, SOLUBLE	03/18/94	0001	UG/L		469.	J	469.	I
IRON, TOTAL	03/18/94	0001	UG/L		3960.	J	3960.	I
LEAD, TOTAL	03/18/94	0001	UG/L		5.0	J	5.0	I
MAGNESIUM, SOLUBLE	03/18/94	0001	UG/L		45800.	J	45800.	I
MAGNESIUM, TOTAL	03/18/94	0001	UG/L		43500.	J	43500.	I
MANGANESE, SOLUBLE	03/18/94	0001	UG/L		20.8	J	20.8	I
MANGANESE, TOTAL	03/18/94	0001	UG/L		211.	J	211.	I
MOLYBDENUM	03/18/94	0001	UG/L	B	4.0		4.0	I
NICKEL, TOTAL	03/18/94	0001	UG/L	B	2.8		2.8	I
NITRATE NITRITE	03/18/94	0001	MG/L		1.8		1.8	I
PLUTONIUM-238	03/18/94	0001	PCI/L		0.005		0.005	I
PLUTONIUM-239/240	03/18/94	0001	PCI/L		0.002		0.002	I
POTASSIUM, SOLUBLE	03/18/94	0001	UG/L	B	2720.		2720.	I
POTASSIUM, TOTAL	03/18/94	0001	UG/L	B	2570.		2570.	I
RADIUM-226	03/18/94	0001	PCI/L		0.30		0.30	I
SODIUM, SOLUBLE	03/18/94	0001	UG/L		86100.	J	86100.	I
SODIUM, TOTAL	03/18/94	0001	UG/L		82800.	J	82800.	I
SULFATE	03/18/94	0001	MG/L		99.5		99.5	I
TETRACHLOROETHENE	03/18/94	0001	UG/L		23.		23.	D1
TETRACHLOROMETHANE (CCL4)	03/18/94	0001	UG/L		2.7		2.7	I
THORIUM-230	03/18/94	0001	PCI/L		0.039	J	0.039	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0063 63-1
NORTH COORDINATE: 596573.68 FT
EAST COORDINATE: 1495055.91 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: CLAYEY GRAVEL OR CLAYEY SANDY GRAVEL (GC)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL DISSOLVED SOLIDS	03/18/94	0001	MG/L		896.		896.	I
TOTAL ORGANIC CARBON	03/18/94	0001	MG/L		0.76		0.76	I
TOTAL SUSPENDED SOLIDS	03/18/94	0001	MG/L		6.0		6.0	I
TRICHLOROETHENE	03/18/94	0001	UG/L		30.		30.	D1
TRICHLOROMETHANE (CHLOROFORM)	03/18/94	0001	UG/L		6.6	J	6.6	I
TRITIUM	03/18/94	0001	PCI/L		5150.		5150.	I
URANIUM-234	03/18/94	0001	PCI/L		0.374		0.374	I
URANIUM-238	03/18/94	0001	PCI/L		0.228		0.228	I
ZINC, SOLUBLE	03/18/94	0001	UG/L		478.		478.	I
ZINC, TOTAL	03/18/94	0001	UG/L		246.		246.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0071 71-1
NORTH COORDINATE: 596320.81 FT
EAST COORDINATE: 1495998.88 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	04/07/94	0001	UG/L		1.0	J	1.0	I
1,2-CIS-DICHLOROETHENE	04/07/94	0001	UG/L		3.7		3.7	I
ANTIMONY, SOLUBLE	04/07/94	0001	UG/L	B	1.0	J	1.0	I
BARIUM, SOLUBLE	04/07/94	0001	UG/L	B	93.5	J	93.5	I
BARIUM, TOTAL	04/07/94	0001	UG/L	B	98.0	J	98.0	I
CALCIUM, SOLUBLE	04/07/94	0001	UG/L		106000.		106000.	I
CALCIUM, TOTAL	04/07/94	0001	UG/L		113000.		113000.	I
CHLORIDE	04/07/94	0001	MG/L		157.		157.	I
COPPER, SOLUBLE	04/07/94	0001	UG/L	B	14.5		14.5	I
COPPER, TOTAL	04/07/94	0001	UG/L	B	9.1		9.1	I
FLUORIDE	04/07/94	0001	MG/L		0.14		0.14	I
LEAD, SOLUBLE	04/07/94	0001	UG/L		4.7	J	4.7	I
MAGNESIUM, SOLUBLE	04/07/94	0001	UG/L		32500.	J	32500.	I
MAGNESIUM, TOTAL	04/07/94	0001	UG/L		34600.		34600.	I
MANGANESE, SOLUBLE	04/07/94	0001	UG/L	B	4.6	J	4.6	I
MANGANESE, TOTAL	04/07/94	0001	UG/L	B	2.6	J	2.6	I
MOLYBDENUM	04/07/94	0001	UG/L	B	1.5	J	1.5	I
MOLYBDENUM, SOLUBLE	04/07/94	0001	UG/L	B	1.7		1.7	I
NITRATE NITRITE	04/07/94	0001	MG/L		2.5		2.5	I
PLUTONIUM-238	04/07/94	C001	PCI/L		0.0031		0.0031	DU
PLUTONIUM-239/240	04/07/94	C001	PCI/L		0.0092		0.0092	DU
POTASSIUM, SOLUBLE	04/07/94	0001	UG/L	B	3170.		3170.	I
POTASSIUM, TOTAL	04/07/94	0001	UG/L	B	3280.		3280.	I
POTASSIUM-40	04/07/94	0001	PCI/L		120		120	I
RADIUM-226	04/07/94 04/07/94	0001 C001	PCI/L PCI/L		0.52 0.20		0.52 0.20	I DU
SODIUM, SOLUBLE	04/07/94	0001	UG/L		92900.		92900.	I
SODIUM, TOTAL	04/07/94	0001	UG/L		100000.		100000.	I
SULFATE	04/07/94	0001	MG/L		41.9	J	41.9	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0071 71-1
NORTH COORDINATE: 596320.81 FT
EAST COORDINATE: 1495998.88 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TETRACHLOROETHENE	04/07/94	0001	UG/L		0.71		0.71	I
TOTAL DISSOLVED SOLIDS	04/07/94	0001	MG/L		840.		840.	I
TOTAL ORGANIC CARBON	04/07/94	0001	MG/L		0.88		0.88	I
TRICHLOROETHENE	04/07/94	0001	UG/L		2.7	J	2.7	I
TRITIUM	04/07/94 04/07/94	0001 C001	PCI/L PCI/L		2300. 2120.		2300. 2120.	I DU
URANIUM-234	04/07/94 04/07/94	0001 C001	PCI/L PCI/L		0.24 0.30		0.24 0.30	I DU
URANIUM-238	04/07/94 04/07/94	0001 C001	PCI/L PCI/L		0.169 0.24		0.169 0.24	I DU
VANADIUM, SOLUBLE	04/07/94	0001	UG/L		11.6		11.6	I
VANADIUM, TOTAL	04/07/94	0001	UG/L		11.2		11.2	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0076 76-1
NORTH COORDINATE: 595863.23 FT
EAST COORDINATE: 1495077.46 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	04/07/94	0001	UG/L		0.71		0.71	I
AMMONIA	04/07/94	0001	MG/L		0.58		0.58	I
ANTIMONY, SOLUBLE	04/07/94	0001	UG/L		14.4		14.4	I
BARIUM, SOLUBLE	04/07/94	0001	UG/L	B	81.7	J	81.7	I
BARIUM, TOTAL	04/07/94	0001	UG/L	B	81.6	J	81.6	I
CALCIUM, SOLUBLE	04/07/94	0001	UG/L		96100.		96100.	I
CALCIUM, TOTAL	04/07/94	0001	UG/L		95400.		95400.	I
CHLORIDE	04/07/94	0001	MG/L		98.1		98.1	I
COPPER, SOLUBLE	04/07/94	0001	UG/L	B	7.4		7.4	I
COPPER, TOTAL	04/07/94	0001	UG/L	B	2.5		2.5	I
FLUORIDE	04/07/94	0001	MG/L		0.18		0.18	I
LEAD, SOLUBLE	04/07/94	0001	UG/L		10.5		10.5	I
MAGNESIUM, SOLUBLE	04/07/94	0001	UG/L		30500.	J	30500.	I
MAGNESIUM, TOTAL	04/07/94	0001	UG/L		30300.		30300.	I
MANGANESE, SOLUBLE	04/07/94	0001	UG/L	B	13.8		13.8	I
MANGANESE, TOTAL	04/07/94	0001	UG/L	B	12.3		12.3	I
MOLYBDENUM	04/07/94	0001	UG/L	B	2.0		2.0	I
MOLYBDENUM, SOLUBLE	04/07/94	0001	UG/L	B	2.7		2.7	I
NITRATE NITRITE	04/07/94	0001	MG/L		1.1		1.1	I
PLUTONIUM-239/240	04/07/94	0001	PCI/L		0.0018		0.0018	I
POTASSIUM, SOLUBLE	04/07/94	0001	UG/L	B	3000.		3000.	I
POTASSIUM, TOTAL	04/07/94	0001	UG/L	B	3050.		3050.	I
RADIUM-226	04/07/94	0001	PCI/L		0.52		0.52	I
SODIUM, SOLUBLE	04/07/94	0001	UG/L		54900.		54900.	I
SODIUM, TOTAL	04/07/94	0001	UG/L		53000.		53000.	I
TETRACHLOROETHENE	04/07/94	0001	UG/L		0.51		0.51	I
TOTAL DISSOLVED SOLIDS	04/07/94	0001	MG/L		562.		562.	I
TOTAL KJELDAHL NITROGEN	04/07/94	0001	MG/L		0.52		0.52	I
TOTAL ORGANIC CARBON	04/07/94	0001	MG/L		0.94		0.94	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0076 76-1
NORTH COORDINATE: 595863.23 FT
EAST COORDINATE: 1495077.46 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TRICHLOROETHENE	04/07/94	0001	UG/L		1.6	J	1.6	I
TRITIUM	04/07/94	0001	PCI/L		1350.		1350.	I
URANIUM-234	04/07/94	0001	PCI/L		0.20		0.20	I
URANIUM-238	04/07/94	0001	PCI/L		0.20		0.20	I
VANADIUM, SOLUBLE	04/07/94	0001	UG/L		10.8		10.8	I
VANADIUM, TOTAL	04/07/94	0001	UG/L		11.2		11.2	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0111
NORTH COORDINATE: 597970.72 FT
EAST COORDINATE: 1496733.76 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	03/17/94	0001	UG/L		62.1		62.1	I
ANTIMONY, SOLUBLE	03/17/94	0001	UG/L	B	2.0		2.0	I
BARIUM, SOLUBLE	03/17/94	0001	UG/L	B	88.5	J	88.5	I
BARIUM, TOTAL	03/17/94	0001	UG/L	B	91.5	J	91.5	I
BERYLLIUM, SOLUBLE	03/17/94	0001	UG/L	B	0.25		0.25	I
BERYLLIUM, TOTAL	03/17/94	0001	UG/L	B	0.25		0.25	I
CALCIUM, SOLUBLE	03/17/94	0001	UG/L		106000.	J	106000.	I
CALCIUM, TOTAL	03/17/94	0001	UG/L		109000.	J	109000.	I
CHLORIDE	03/17/94	0001	MG/L		107.		107.	I
CHROMIUM, TOTAL	03/17/94	0001	UG/L		23.4		23.4	I
FLUORIDE	03/17/94	0001	MG/L		0.16		0.16	I
IRON, TOTAL	03/17/94	0001	UG/L		113.	J	113.	I
MAGNESIUM, SOLUBLE	03/17/94	0001	UG/L		26500.	J	26500.	I
MAGNESIUM, TOTAL	03/17/94	0001	UG/L		27300.	J	27300.	I
MANGANESE, SOLUBLE	03/17/94	0001	UG/L	B	0.85	J	0.85	I
MANGANESE, TOTAL	03/17/94	0001	UG/L	B	1.9	J	1.9	I
NICKEL, SOLUBLE	03/17/94	0001	UG/L	B	17.0		17.0	I
NICKEL, TOTAL	03/17/94	0001	UG/L	B	18.0		18.0	I
NITRATE NITRITE	03/17/94	0001	MG/L		0.63		0.63	I
PLUTONIUM-238	03/17/94	0001	PCI/L		0.018		0.018	I
POTASSIUM, SOLUBLE	03/17/94	0001	UG/L	B	1480.	J	1480.	I
POTASSIUM, TOTAL	03/17/94	0001	UG/L	B	1420.	J	1420.	I
SODIUM, SOLUBLE	03/17/94	0001	UG/L		80800.	J	80800.	I
SODIUM, TOTAL	03/17/94	0001	UG/L		82800.	J	82800.	I
STRONTIUM-90	03/17/94	0001	PCI/L		6.1		6.1	I
SULFATE	03/17/94	0001	MG/L		60.1		60.1	I
THORIUM-228	03/17/94	0001	PCI/L		0.044		0.044	I
THORIUM-230	03/17/94	0001	PCI/L		0.041	J	0.041	I
TOTAL DISSOLVED SOLIDS	03/17/94	0001	MG/L		639.		639.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0111
NORTH COORDINATE: 597970.72 FT
EAST COORDINATE: 1496733.76 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL KJELDAHL NITROGEN	03/17/94	0001	MG/L		0.12		0.12	I
TOTAL ORGANIC CARBON	03/17/94	0001	MG/L		0.66		0.66	I
TRICHLOROMETHANE (CHLOROFORM)	03/17/94	0001	UG/L		2.4	J	2.4	I
TRITIUM	03/17/94	0001	PCI/L		1880.		1880.	I
URANIUM-234	03/17/94	0001	PCI/L		0.308		0.308	I
URANIUM-238	03/17/94	0001	PCI/L		0.203		0.203	I
ZINC, SOLUBLE	03/17/94	0001	UG/L	B	19.4		19.4	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0112
NORTH COORDINATE: 597974.29 FT
EAST COORDINATE: 1496515.90 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTS, SANDY OR GRAVELLY SILTS, DIATOMACEOUS SOILS (ML)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	03/15/94	0001	UG/L		211.		211.	I
AMMONIA	03/15/94	0001	MG/L		1.5		1.5	I
ANTIMONY, SOLUBLE	03/15/94	0001	UG/L		5.5		5.5	I
BARIUM, SOLUBLE	03/15/94	0001	UG/L	B	66.7		66.7	I
BARIUM, TOTAL	03/15/94	0001	UG/L	B	64.0		64.0	I
BERYLLIUM, SOLUBLE	03/15/94	0001	UG/L		0.34		0.34	I
BERYLLIUM, TOTAL	03/15/94	0001	UG/L		0.58		0.58	I
CALCIUM, SOLUBLE	03/15/94	0001	UG/L		102000.		102000.	I
CALCIUM, TOTAL	03/15/94	0001	UG/L		97500.		97500.	I
CHLORIDE	03/15/94	0001	MG/L		43.3		43.3	I
COPPER, SOLUBLE	03/15/94	0001	UG/L	B	5.8		5.8	I
FLUORIDE	03/15/94	0001	MG/L		0.57		0.57	I
IRON, SOLUBLE	03/15/94	0001	UG/L	B	45.7		45.7	I
IRON, TOTAL	03/15/94	0001	UG/L		360.		360.	I
LEAD, SOLUBLE	03/15/94	0001	UG/L	B	2.2		2.2	I
LEAD, TOTAL	03/15/94	0001	UG/L	B	2.5		2.5	I
LITHIUM, SOLUBLE	03/15/94	0001	UG/L	B	66.5		66.5	I
LITHIUM, TOTAL	03/15/94	0001	UG/L	B	59.6		59.6	I
MAGNESIUM, SOLUBLE	03/15/94	0001	UG/L		50200.		50200.	I
MAGNESIUM, TOTAL	03/15/94	0001	UG/L		47400.		47400.	I
MANGANESE, SOLUBLE	03/15/94	0001	UG/L		31.2		31.2	I
MANGANESE, TOTAL	03/15/94	0001	UG/L		30.9		30.9	I
PLUTONIUM-239/240	03/15/94	0001	PCI/L		0.003		0.003	I
POTASSIUM, SOLUBLE	03/15/94	0001	UG/L		11300.		11300.	I
POTASSIUM, TOTAL	03/15/94	0001	UG/L		10700.		10700.	I
RADIUM-226	03/15/94	0001	PCI/L		0.29		0.29	I
SELENIUM, TOTAL	03/15/94	0001	UG/L	B	3.4	J	3.4	I
SODIUM, SOLUBLE	03/15/94	0001	UG/L		31100.		31100.	I
SODIUM, TOTAL	03/15/94	0001	UG/L		28500.		28500.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0112
NORTH COORDINATE: 597974.29 FT
EAST COORDINATE: 1496515.90 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTS, SANDY OR GRAVELLY SILTS, DIATOMACEOUS SOILS (ML)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SULFATE	03/15/94	0001	MG/L		212.		212.	I
THORIUM-228	03/15/94	0001	PCI/L		0.157		0.157	I
THORIUM-230	03/15/94	0001	PCI/L		0.042	J	0.042	I
THORIUM-232	03/15/94	0001	PCI/L		0.018		0.018	I
TOTAL DISSOLVED SOLIDS	03/15/94	0001	MG/L		724.		724.	I
TOTAL KJELDAHL NITROGEN	03/15/94	0001	MG/L		1.3		1.3	I
TOTAL ORGANIC CARBON	03/15/94	0001	MG/L		1.1		1.1	I
TOTAL SUSPENDED SOLIDS	03/15/94	0001	MG/L		11.0		11.0	I
TRITIUM	03/15/94	0001	PCI/L		3720.		3720.	I
URANIUM-234	03/15/94	0001	PCI/L		0.297		0.297	I
URANIUM-238	03/15/94	0001	PCI/L		0.088	J	0.088	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0115
NORTH COORDINATE: 598602.38 FT
EAST COORDINATE: 1495604.15 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LIMESTONE (LS)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	03/22/94	0001	UG/L		7820.		7820.	I
ANTIMONY, SOLUBLE	03/22/94	0001	UG/L	B	1.4		1.4	I
BARIUM, SOLUBLE	03/22/94	0001	UG/L	B	73.3		73.3	I
BARIUM, TOTAL	03/22/94	0001	UG/L	B	117.		117.	I
CALCIUM, SOLUBLE	03/22/94	0001	UG/L		135000.		135000.	I
CALCIUM, TOTAL	03/22/94	0001	UG/L		156000.		156000.	I
CHLORIDE	03/22/94	0001	MG/L		255.		255.	I
CHROMIUM, TOTAL	03/22/94	0001	UG/L		2950.		2950.	I
COBALT, TOTAL	03/22/94	0001	UG/L	B	23.5		23.5	I
COPPER, TOTAL	03/22/94	0001	UG/L		56.7		56.7	I
DIETHYL PHTHALATE	03/22/94	0001	UG/L	J	0.5	J	0.5	I
FLUORIDE	03/22/94	0001	MG/L		0.18		0.18	I
IRON, TOTAL	03/22/94	0001	UG/L		19100.		19100.	I
LEAD, TOTAL	03/22/94	0001	UG/L		4.2	J	4.2	I
MAGNESIUM, SOLUBLE	03/22/94	0001	UG/L		42200.		42200.	I
MAGNESIUM, TOTAL	03/22/94	0001	UG/L		42100.		42100.	I
MANGANESE, SOLUBLE	03/22/94	0001	UG/L	B	6.8		6.8	I
MANGANESE, TOTAL	03/22/94	0001	UG/L		440.		440.	I
MOLYBDENUM	03/22/94	0001	UG/L		132.		132.	I
MOLYBDENUM, SOLUBLE	03/22/94	0001	UG/L	B	16.8		16.8	I
NICKEL, SOLUBLE	03/22/94	0001	UG/L	B	31.4		31.4	I
NICKEL, TOTAL	03/22/94	0001	UG/L		275.		275.	I
NITRATE NITRITE	03/22/94	0001	MG/L		6.8		6.8	I
POTASSIUM, SOLUBLE	03/22/94	0001	UG/L	B	2320.		2320.	I
POTASSIUM, TOTAL	03/22/94	0001	UG/L	B	4890.		4890.	I
RADIUM-226	03/22/94	0001	PCI/L		0.67		0.67	I
SODIUM, SOLUBLE	03/22/94	0001	UG/L		153000.		153000.	I
SODIUM, TOTAL	03/22/94	0001	UG/L		141000.		141000.	I
SULFATE	03/22/94	0001	MG/L		89.7		89.7	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0115
NORTH COORDINATE: 598602.38 FT
EAST COORDINATE: 1495604.15 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LIMESTONE (LS)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TETRACHLOROETHENE	03/22/94	0001	UG/L		0.66		0.66	I
THORIUM-228	03/22/94	0001	PCI/L		0.414		0.414	I
THORIUM-230	03/22/94	0001	PCI/L		0.132	J	0.132	I
THORIUM-232	03/22/94	0001	PCI/L		0.276		0.276	I
TIN, TOTAL	03/22/94	0001	UG/L	B	6.1		6.1	I
TOTAL DISSOLVED SOLIDS	03/22/94	0001	MG/L		976.		976.	I
TOTAL KJELDAHL NITROGEN	03/22/94	0001	MG/L		0.86		0.86	I
TOTAL ORGANIC CARBON	03/22/94	0001	MG/L		2.1		2.1	I
TOTAL PHOSPHATE	03/22/94	0001	MG/L		0.96		0.96	I
TOTAL SUSPENDED SOLIDS	03/22/94	0001	MG/L		788.		788.	I
TRICHLOROETHENE	03/22/94	0001	UG/L		1.6		1.6	I
TRITIUM	03/22/94	0001	PCI/L		15410.		15410.	I
URANIUM-234	03/22/94	0001	PCI/L		0.418		0.418	I
URANIUM-235	03/22/94	0001	PCI/L		0.019		0.019	I
URANIUM-238	03/22/94	0001	PCI/L		0.265		0.265	I
VANADIUM, TOTAL	03/22/94	0001	UG/L		36.3		36.3	I
ZINC, TOTAL	03/22/94	0001	UG/L		41.4		41.4	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0117
NORTH COORDINATE: 598073.89 FT
EAST COORDINATE: 1495765.36 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SHALE (SH)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	04/14/94	0001	UG/L		15500.		15500.	I
ANTIMONY, SOLUBLE	04/14/94	0001	UG/L	B	0.72		0.72	I
BARIUM, SOLUBLE	04/14/94	0001	UG/L	B	58.1		58.1	I
BARIUM, TOTAL	04/14/94	0001	UG/L	B	178.		178.	I
BERYLLIUM, TOTAL	04/14/94	0001	UG/L		1.6		1.6	I
CALCIUM, SOLUBLE	04/14/94	0001	UG/L		128000.		128000.	I
CALCIUM, TOTAL	04/14/94	0001	UG/L		143000.		143000.	I
CHLORIDE	04/14/94	0001	MG/L		256.		256.	I
CHROMIUM, TOTAL	04/14/94	0001	UG/L		2980.	J	2980.	I
COBALT, TOTAL	04/14/94	0001	UG/L		63.4		63.4	I
COPPER, SOLUBLE	04/14/94	0001	UG/L	B	1.5		1.5	I
COPPER, TOTAL	04/14/94	0001	UG/L		84.4		84.4	I
FLUORIDE	04/14/94	0001	MG/L		0.16		0.16	I
IRON, TOTAL	04/14/94	0001	UG/L		34600.	J	34600.	I
LEAD, TOTAL	04/14/94	0001	UG/L		17.8		REJECT	I
LITHIUM, SOLUBLE	04/14/94	0001	UG/L	B	18.2	J	18.2	I
LITHIUM, TOTAL	04/14/94	0001	UG/L	B	56.7	J	56.7	I
MAGNESIUM, SOLUBLE	04/14/94	0001	UG/L		56100.		56100.	I
MAGNESIUM, TOTAL	04/14/94	0001	UG/L		79600.		79600.	I
MANGANESE, SOLUBLE	04/14/94	0001	UG/L		31.9	J	31.9	I
MANGANESE, TOTAL	04/14/94	0001	UG/L		2720.	J	2720.	I
MOLYBDENUM	04/14/94	0001	UG/L		172.		172.	I
MOLYBDENUM, SOLUBLE	04/14/94	0001	UG/L	B	13.6		13.6	I
NICKEL, SOLUBLE	04/14/94	0001	UG/L		87.7	J	87.7	I
NICKEL, TOTAL	04/14/94	0001	UG/L		762.	J	762.	I
POTASSIUM, SOLUBLE	04/14/94	0001	UG/L	B	4690.		4690.	I
POTASSIUM, TOTAL	04/14/94	0001	UG/L		9470.		9470.	I
RADIUM-226	04/14/94	0001	PCI/L		2.21		2.21	I
SODIUM, SOLUBLE	04/14/94	0001	UG/L		100000.		100000.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0117
NORTH COORDINATE: 598073.89 FT
EAST COORDINATE: 1495765.36 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SHALE (SH)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SODIUM, TOTAL	04/14/94	0001	UG/L		84200.		84200.	I
SULFATE	04/14/94	0001	MG/L		180.		180.	I
THORIUM-228	04/14/94	0001	PCI/L		0.73		0.73	I
THORIUM-230	04/14/94	0001	PCI/L		0.122	J	0.122	I
THORIUM-232	04/14/94	0001	PCI/L		0.44		0.44	I
TOTAL DISSOLVED SOLIDS	04/14/94	0001	MG/L		983.		983.	I
TOTAL KJELDAHL NITROGEN	04/14/94	0001	MG/L		1.1		1.1	I
TOTAL ORGANIC CARBON	04/14/94	0001	MG/L		1.7		1.7	I
TOTAL PHOSPHATE	04/14/94	0001	MG/L		0.85		0.85	I
TOTAL SUSPENDED SOLIDS	04/14/94	0001	MG/L		1710.		1710.	I
TRITIUM	04/14/94	0001	PCI/L		11200.		11200.	I
URANIUM-234	04/14/94	0001	PCI/L		1.03		1.03	I
URANIUM-238	04/14/94	0001	PCI/L		0.59		0.59	I
VANADIUM, SOLUBLE	04/14/94	0001	UG/L		13.2		13.2	I
VANADIUM, TOTAL	04/14/94	0001	UG/L		42.3		42.3	I
ZINC, TOTAL	04/14/94	0001	UG/L		64.4	J	64.4	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0118
NORTH COORDINATE: 600088.12 FT
EAST COORDINATE: 1495735.50 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY SAND OR SILTY GRAVELLY SAND (SM)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	03/29/94	0001	UG/L		1.6		1.6	I
BARIUM, SOLUBLE	03/29/94	0001	UG/L	B	88.2		88.2	I
BARIUM, TOTAL	03/29/94	0001	UG/L	B	90.9		90.9	I
CALCIUM, SOLUBLE	03/29/94	0001	UG/L		98700.	J	98700.	I
CALCIUM, TOTAL	03/29/94	0001	UG/L		97000.	J	97000.	I
CHLORIDE	03/29/94	0001	MG/L		72.8		72.8	I
CHROMIUM, SOLUBLE	03/29/94	0001	UG/L	U	0.82	J	0.82	I
CHROMIUM, TOTAL	03/29/94	0001	UG/L		85.0	J	85.0	I
COBALT, TOTAL	03/29/94	0001	UG/L	B	1.6		1.6	I
COPPER, TOTAL	03/29/94	0001	UG/L	B	1.8		1.8	I
FLUORIDE	03/29/94	0001	MG/L		0.20		0.20	I
IRON, SOLUBLE	03/29/94	0001	UG/L	B	29.2	J	29.2	I
IRON, TOTAL	03/29/94	0001	UG/L		1160.	J	1160.	I
MAGNESIUM, SOLUBLE	03/29/94	0001	UG/L		32600.		32600.	I
MAGNESIUM, TOTAL	03/29/94	0001	UG/L		32200.		32200.	I
MANGANESE, SOLUBLE	03/29/94	0001	UG/L	B	3.7		3.7	I
MANGANESE, TOTAL	03/29/94	0001	UG/L		15.7		15.7	I
MOLYBDENUM	03/29/94	0001	UG/L	B	3.6		3.6	I
MOLYBDENUM, SOLUBLE	03/29/94	0001	UG/L	B	2.4		2.4	I
NICKEL, SOLUBLE	03/29/94	0001	UG/L		43.3		43.3	I
NICKEL, TOTAL	03/29/94	0001	UG/L		52.9		52.9	I
NITRATE NITRITE	03/29/94	0001	MG/L		3.1		3.1	I
PLUTONIUM-238	03/29/94	0001	PCI/L		0.0054		0.0054	I
PLUTONIUM-239/240	03/29/94	0001	PCI/L		0.0028		0.0028	I
POTASSIUM, SOLUBLE	03/29/94	0001	UG/L	B	2490.		2490.	I
POTASSIUM, TOTAL	03/29/94	0001	UG/L	B	2440.		2440.	I
SELENIUM, TOTAL	03/29/94	0001	UG/L	B	2.5	J	2.5	I
SODIUM, SOLUBLE	03/29/94	0001	UG/L		51600.		51600.	I
SODIUM, TOTAL	03/29/94	0001	UG/L		48300.		48300.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0118
NORTH COORDINATE: 600088.12 FT
EAST COORDINATE: 1495735.50 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY SAND OR SILTY GRAVELLY SAND (SM)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SULFATE	03/29/94	0001	MG/L		48.8		48.8	I
THORIUM-228	03/29/94	0001	PCI/L		0.084		0.084	I
THORIUM-230	03/29/94	0001	PCI/L		0.023		0.023	I
TOTAL DISSOLVED SOLIDS	03/29/94	0001	MG/L		593.		593.	I
TOTAL ORGANIC CARBON	03/29/94	0001	MG/L		0.93		0.93	I
TRITIUM	03/29/94	0001	PCI/L		850.		850.	I
URANIUM-234	03/29/94	0001	PCI/L		0.34		0.34	I
URANIUM-238	03/29/94	0001	PCI/L		0.255		0.255	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0119
NORTH COORDINATE: 597543.93 FT
EAST COORDINATE: 1495848.91 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTS, SANDY OR GRAVELLY SILTS, DIATOMACEOUS SOILS (ML)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, SOLUBLE	03/14/94	0001	UG/L	B	13.3	J	13.3	I
ALUMINUM, TOTAL	03/14/94	0001	UG/L		112.		112.	I
AMMONIA	03/14/94	0001	MG/L		0.13		0.13	I
ANTIMONY, SOLUBLE	03/14/94	0001	UG/L	B	0.88		0.88	I
ARSENIC, TOTAL	03/14/94	0001	UG/L	B	4.2		4.2	I
BARIUM, SOLUBLE	03/14/94	0001	UG/L	B	86.9		86.9	I
BARIUM, TOTAL	03/14/94	0001	UG/L	B	82.5		82.5	I
CALCIUM, SOLUBLE	03/14/94	0001	UG/L		161000.		161000.	I
CALCIUM, TOTAL	03/14/94	0001	UG/L		137000.		137000.	I
CHLORIDE	03/14/94	0001	MG/L		292.		292.	I
COBALT, SOLUBLE	03/14/94	0001	UG/L	B	0.67	J	0.67	I
COPPER, SOLUBLE	03/14/94	0001	UG/L	B	1.5	J	1.5	I
COPPER, TOTAL	03/14/94	0001	UG/L	B	1.8	J	1.8	I
FLUORIDE	03/14/94	0001	MG/L		0.21		0.21	I
IRON, SOLUBLE	03/14/94	0001	UG/L		1070.		1070.	I
IRON, TOTAL	03/14/94	0001	UG/L		1390.		1390.	I
LITHIUM, SOLUBLE	03/14/94	0001	UG/L	B	53.7		53.7	I
LITHIUM, TOTAL	03/14/94	0001	UG/L	B	53.7		53.7	I
MAGNESIUM, SOLUBLE	03/14/94	0001	UG/L		45700.		45700.	I
MAGNESIUM, TOTAL	03/14/94	0001	UG/L		41900.		41900.	I
MANGANESE, SOLUBLE	03/14/94	0001	UG/L		40.9		40.9	I
MANGANESE, TOTAL	03/14/94	0001	UG/L		41.8		41.8	I
MOLYBDENUM	03/14/94	0001	UG/L	B	1.9	J	1.9	I
POTASSIUM, SOLUBLE	03/14/94	0001	UG/L	B	534.		534.	I
POTASSIUM, TOTAL	03/14/94	0001	UG/L	B	2860.		2860.	I
RADIUM-226	03/14/94	0001	PCI/L		0.22		0.22	I
SODIUM, SOLUBLE	03/14/94	0001	UG/L		161000.		161000.	I
SODIUM, TOTAL	03/14/94	0001	UG/L		149000.		149000.	I
SULFATE	03/14/94	0001	MG/L		104.		104.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0119
NORTH COORDINATE: 597543.93 FT
EAST COORDINATE: 1495848.91 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTS, SANDY OR GRAVELLY SILTS, DIATOMACEOUS SOILS (ML)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
THORIUM-228	03/14/94	0001	PCI/L		0.093		0.093	I
THORIUM-230	03/14/94	0001	PCI/L		0.054	J	0.054	I
THORIUM-232	03/14/94	0001	PCI/L		0.013		0.013	I
TOTAL DISSOLVED SOLIDS	03/14/94	0001	MG/L		992.		992.	I
TOTAL KJELDAHL NITROGEN	03/14/94	0001	MG/L		0.12		0.12	I
TOTAL ORGANIC CARBON	03/14/94	0001	MG/L		1.4		1.4	I
TOTAL SUSPENDED SOLIDS	03/14/94	0001	MG/L		8.0		8.0	I
TRITIUM	03/14/94	0001	PCI/L		2400.		2400.	I
URANIUM-234	03/14/94	0001	PCI/L		0.424		0.424	I
URANIUM-235	03/14/94	0001	PCI/L		0.013		0.013	I
URANIUM-238	03/14/94	0001	PCI/L		0.264		0.264	I
VANADIUM, SOLUBLE	03/14/94	0001	UG/L		27.7		27.7	I
ZINC, TOTAL	03/14/94	0001	UG/L	B	5.6		5.6	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0120
NORTH COORDINATE: 598125.35 FT
EAST COORDINATE: 1495747.04 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LIMESTONE (LS)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	04/14/94	0001	UG/L		21500.		21500.	I
BARIUM, SOLUBLE	04/14/94	0001	UG/L	B	23.5		23.5	I
BARIUM, TOTAL	04/14/94	0001	UG/L	B	90.1		90.1	I
BERYLLIUM, TOTAL	04/14/94	0001	UG/L		1.8		1.8	I
CALCIUM, SOLUBLE	04/14/94	0001	UG/L		63600.		63600.	I
CALCIUM, TOTAL	04/14/94	0001	UG/L		165000.		165000.	I
CHLORIDE	04/14/94	0001	MG/L		405.		405.	I
CHROMIUM, TOTAL	04/14/94	0001	UG/L		2600.	J	2600.	I
COBALT, TOTAL	04/14/94	0001	UG/L	B	40.2		40.2	I
COPPER, SOLUBLE	04/14/94	0001	UG/L	B	1.7		1.7	I
COPPER, TOTAL	04/14/94	0001	UG/L		57.7		57.7	I
CYANIDE, TOTAL (METAL)	04/14/94	0001	UG/L	B	5.5		5.5	I
FLUORIDE	04/14/94	0001	MG/L		0.22		0.22	I
IRON, TOTAL	04/14/94	0001	UG/L		46400.	J	46400.	I
LEAD, TOTAL	04/14/94	0001	UG/L		13.4		13.4	I
LITHIUM, TOTAL	04/14/94	0001	UG/L	B	63.1	J	63.1	I
MAGNESIUM, SOLUBLE	04/14/94	0001	UG/L		29700.		29700.	I
MAGNESIUM, TOTAL	04/14/94	0001	UG/L		63500.		63500.	I
MANGANESE, SOLUBLE	04/14/94	0001	UG/L	B	8.7	J	8.7	I
MANGANESE, TOTAL	04/14/94	0001	UG/L		1060.	J	1060.	I
MOLYBDENUM	04/14/94	0001	UG/L		49.2	J	49.2	I
NICKEL, SOLUBLE	04/14/94	0001	UG/L	B	26.1	J	26.1	I
NICKEL, TOTAL	04/14/94	0001	UG/L		320.	J	320.	I
NITRATE NITRITE	04/14/94	0001	MG/L		3.4		3.4	I
PLUTONIUM-238	04/14/94	0001	PCI/L		0.026		0.026	I
POTASSIUM, SOLUBLE	04/14/94	0001	UG/L	B	3280.		3280.	I
POTASSIUM, TOTAL	04/14/94	0001	UG/L		11000.		11000.	I
RADIUM-226	04/14/94	0001	PCI/L		4.08		4.08	I
SODIUM, SOLUBLE	04/14/94	0001	UG/L		127000.		127000.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0120
NORTH COORDINATE: 598125.35 FT
EAST COORDINATE: 1495747.04 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LIMESTONE (LS)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SODIUM, TOTAL	04/14/94	0001	UG/L		204000.		204000.	I
SULFATE	04/14/94	0001	MG/L		181.		181.	I
THORIUM-228	04/14/94	0001	PCI/L		1.40		1.40	I
THORIUM-230	04/14/94	0001	PCI/L		0.62	J	0.62	I
THORIUM-232	04/14/94	0001	PCI/L		0.96		0.96	I
TOTAL DISSOLVED SOLIDS	04/14/94	0001	MG/L		1220.		1220.	I
TOTAL KJELDAHL NITROGEN	04/14/94	0001	MG/L		1.2		1.2	I
TOTAL ORGANIC CARBON	04/14/94	0001	MG/L		2.0		2.0	I
TOTAL PHOSPHATE	04/14/94	0001	MG/L		1.3		1.3	I
TOTAL SUSPENDED SOLIDS	04/14/94	0001	MG/L		1560.		1560.	I
TRITIUM	04/14/94	0001	PCI/L		19800.		19800.	I
URANIUM-234	04/14/94	0001	PCI/L		4.26		4.26	I
URANIUM-235	04/14/94	0001	PCI/L		0.086		0.086	I
URANIUM-238	04/14/94	0001	PCI/L		1.29		1.29	I
VANADIUM, SOLUBLE	04/14/94	0001	UG/L	B	8.1		8.1	I
VANADIUM, TOTAL	04/14/94	0001	UG/L		36.8		36.8	I
ZINC, TOTAL	04/14/94	0001	UG/L		94.7	J	94.7	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0123
NORTH COORDINATE: 597471.08 FT
EAST COORDINATE: 1494745.82 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY SAND OR SILTY GRAVELLY SAND (SM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMMONIA	03/31/94	0001	MG/L		1.8		1.8	I
	03/31/94	1001	MG/L		1.8		1.8	I
BARIUM, SOLUBLE	03/31/94	0001	UG/L	B	62.3		62.3	I
	03/31/94	1001	UG/L	B	63.8		63.8	I
BARIUM, TOTAL	03/31/94	0001	UG/L	B	62.3		62.3	I
	03/31/94	1001	UG/L	B	66.1		66.1	I
CALCIUM, SOLUBLE	03/31/94	0001	UG/L		68700.		68700.	I
	03/31/94	1001	UG/L		71200.		71200.	I
CALCIUM, TOTAL	03/31/94	0001	UG/L		69100.		69100.	I
	03/31/94	1001	UG/L		71800.		71800.	I
CHLORIDE	03/31/94	0001	MG/L		786.		786.	I
	03/31/94	1001	MG/L		794.		794.	I
FLUORIDE	03/31/94	0001	MG/L		0.60		0.60	I
	03/31/94	1001	MG/L		0.61		0.61	I
IRON, TOTAL	03/31/94	1001	UG/L	B	59.9		59.9	I
LEAD, SOLUBLE	03/31/94	0001	UG/L	B	1.7	J	1.7	I
MAGNESIUM, SOLUBLE	03/31/94	0001	UG/L		30900.		30900.	I
	03/31/94	1001	UG/L		32000.		32000.	I
MAGNESIUM, TOTAL	03/31/94	0001	UG/L		31200.		31200.	I
	03/31/94	1001	UG/L		32200.		32200.	I
MANGANESE, SOLUBLE	03/31/94	0001	UG/L		363.		363.	I
	03/31/94	1001	UG/L		371.		371.	I
MANGANESE, TOTAL	03/31/94	0001	UG/L		365.		365.	I
	03/31/94	1001	UG/L		377.		377.	I
NICKEL, TOTAL	03/31/94	0001	UG/L	B	11.5	J	11.5	I
	03/31/94	1001	UG/L	B	10.0	J	10.0	I
NITRATE NITRITE	03/31/94	0001	MG/L		0.074	J	0.074	I
POTASSIUM, SOLUBLE	03/31/94	0001	UG/L		13800.		13800.	I
	03/31/94	1001	UG/L		13500.		13500.	I
POTASSIUM, TOTAL	03/31/94	0001	UG/L		13500.		13500.	I
	03/31/94	1001	UG/L		13900.		13900.	I
RADIUM-226	03/31/94	0001	PCI/L		0.48		0.48	I
SODIUM, SOLUBLE	03/31/94	0001	UG/L		538000.		538000.	I
	03/31/94	1001	UG/L		558000.		558000.	I
SODIUM, TOTAL	03/31/94	0001	UG/L		544000.		544000.	I
	03/31/94	1001	UG/L		554000.		554000.	I
SULFATE	03/31/94	0001	MG/L		51.4		51.4	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0123
NORTH COORDINATE: 597471.08 FT
EAST COORDINATE: 1494745.82 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY SAND OR SILTY GRAVELLY SAND (SM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SULFATE	03/31/94	1001	MG/L		42.2		42.2	I
THORIUM-228	03/31/94	0001	PCI/L		0.051	J	0.051	I
	03/31/94	1001	PCI/L		0.23	J	0.23	I
TIN, SOLUBLE	03/31/94	0001	UG/L	B	22.9	J	22.9	I
TOTAL DISSOLVED SOLIDS	03/31/94	0001	MG/L		1940.	J	1940.	I
	03/31/94	1001	MG/L		1910.		1910.	I
TOTAL KJELDAHL NITROGEN	03/31/94	0001	MG/L		2.1		2.1	I
	03/31/94	1001	MG/L		2.1		2.1	I
TOTAL ORGANIC CARBON	03/31/94	0001	MG/L		0.50		0.50	I
	03/31/94	1001	MG/L		0.50		0.50	I
URANIUM-234	03/31/94	0001	PCI/L		0.180		0.180	I
	03/31/94	1001	PCI/L		0.146		0.146	I
URANIUM-238	03/31/94	0001	PCI/L		0.074	J	0.074	I
	03/31/94	1001	PCI/L		0.038	J	0.038	I
VANADIUM, SOLUBLE	03/31/94	0001	UG/L	B	16.4	J	16.4	I
VANADIUM, TOTAL	03/31/94	0001	UG/L	B	14.0		14.0	I
	03/31/94	1001	UG/L	B	14.9		14.9	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0124
NORTH COORDINATE: 597345.57 FT
EAST COORDINATE: 1494710.93 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY SAND OR SILTY GRAVELLY SAND (SM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMERICIUM-241	03/31/94	0001	PCI/L		0.028		0.028	I
ANTIMONY, SOLUBLE	03/31/94	0001	UG/L	B	0.68	J	0.68	I
BARIUM, SOLUBLE	03/31/94	0001	UG/L	B	79.5		79.5	I
BARIUM, TOTAL	03/31/94	0001	UG/L	B	80.8		80.8	I
CALCIUM, SOLUBLE	03/31/94	0001	UG/L		98900.		98900.	I
CALCIUM, TOTAL	03/31/94	0001	UG/L		101000.		101000.	I
CHLORIDE	03/31/94	0001	MG/L		92.4		92.4	I
FLUORIDE	03/31/94	0001	MG/L		0.17		0.17	I
MAGNESIUM, SOLUBLE	03/31/94	0001	UG/L		29000.		29000.	I
MAGNESIUM, TOTAL	03/31/94	0001	UG/L		29600.		29600.	I
MANGANESE, SOLUBLE	03/31/94	0001	UG/L	B	4.8		4.8	I
MANGANESE, TOTAL	03/31/94	0001	UG/L	B	4.8		4.8	I
NICKEL, SOLUBLE	03/31/94	0001	UG/L	B	2.6		2.6	I
NICKEL, TOTAL	03/31/94	0001	UG/L	B	4.1		4.1	I
NITRATE NITRITE	03/31/94	0001	MG/L		3.0		3.0	I
POTASSIUM, SOLUBLE	03/31/94	0001	UG/L	B	2880.		2880.	I
POTASSIUM, TOTAL	03/31/94	0001	UG/L	B	2950.		2950.	I
SODIUM, SOLUBLE	03/31/94	0001	UG/L		59300.		59300.	I
SODIUM, TOTAL	03/31/94	0001	UG/L		62000.		62000.	I
SULFATE	03/31/94	0001	MG/L		76.4		76.4	I
TOTAL DISSOLVED SOLIDS	03/31/94	0001	MG/L		626.		626.	I
TOTAL ORGANIC CARBON	03/31/94	0001	MG/L		0.70		0.70	I
TRITIUM	03/31/94	0001	PCI/L		2230.		2230.	I
URANIUM-234	03/31/94	0001	PCI/L		0.153		0.153	I
URANIUM-235	03/31/94	0001	PCI/L		0.035		0.035	I
URANIUM-238	03/31/94	0001	PCI/L		0.176		0.176	I
VANADIUM, SOLUBLE	03/31/94	0001	UG/L		13.9		13.9	I
VANADIUM, TOTAL	03/31/94	0001	UG/L		13.9		13.9	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0125
NORTH COORDINATE: 597319.87 FT
EAST COORDINATE: 1495388.82 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTS, SANDY OR GRAVELLY SILTS, DIATOMACEOUS SOILS (ML)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, SOLUBLE	03/16/94	0001	UG/L		40.2		40.2	I
ALUMINUM, TOTAL	03/16/94	0001	UG/L		166.		166.	I
AMMONIA	03/16/94	0001	MG/L		0.15		0.15	I
ANTIMONY, SOLUBLE	03/16/94	0001	UG/L	B	1.6		1.6	I
BARIUM, SOLUBLE	03/16/94	0001	UG/L	B	76.3	J	76.3	I
BARIUM, TOTAL	03/16/94	0001	UG/L	B	70.9	J	70.9	I
BERYLLIUM, SOLUBLE	03/16/94	0001	UG/L		0.38		0.38	I
CALCIUM, SOLUBLE	03/16/94	0001	UG/L		96400.	J	96400.	I
CALCIUM, TOTAL	03/16/94	0001	UG/L		85100.	J	85100.	I
CHLORIDE	03/16/94	0001	MG/L		40.2		40.2	I
FLUORIDE	03/16/94	0001	MG/L		1.3		1.3	I
IRON, TOTAL	03/16/94	0001	UG/L		452.	J	452.	I
MAGNESIUM, SOLUBLE	03/16/94	0001	UG/L		42300.	J	42300.	I
MAGNESIUM, TOTAL	03/16/94	0001	UG/L		37600.	J	37600.	I
MANGANESE, TOTAL	03/16/94	0001	UG/L	B	11.0	J	11.0	I
MOLYBDENUM	03/16/94	0001	UG/L	B	12.4		12.4	I
MOLYBDENUM, SOLUBLE	03/16/94	0001	UG/L	B	14.6		14.6	I
NICKEL, TOTAL	03/16/94	0001	UG/L	B	3.4		3.4	I
NITRATE NITRITE	03/16/94	0001	MG/L		0.088		0.088	I
POTASSIUM, SOLUBLE	03/16/94	0001	UG/L		9010.		9010.	I
POTASSIUM, TOTAL	03/16/94	0001	UG/L		7610.		7610.	I
SODIUM, SOLUBLE	03/16/94	0001	UG/L		44800.	J	44800.	I
SODIUM, TOTAL	03/16/94	0001	UG/L		38300.	J	38300.	I
SULFATE	03/16/94	0001	MG/L		113.		113.	I
THORIUM-228	03/28/94	0001	PCI/L		0.052		0.052	I
THORIUM-232	03/28/94	0001	PCI/L		0.026		0.026	I
TOTAL DISSOLVED SOLIDS	03/16/94	0001	MG/L		563.		563.	I
TOTAL ORGANIC CARBON	03/16/94	0001	MG/L		0.76		0.76	I
TOTAL SUSPENDED SOLIDS	03/16/94	0001	MG/L		10.0		10.0	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0125
NORTH COORDINATE: 597319.87 FT
EAST COORDINATE: 1495388.82 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTS, SANDY OR GRAVELLY SILTS, DIATOMACEOUS SOILS (ML)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TRITIUM	03/28/94	0001	PCI/L		950.		950.	I
URANIUM-234	03/28/94	0001	PCI/L		2.34		2.34	I
URANIUM-235	03/28/94	0001	PCI/L		0.097		0.097	I
URANIUM-238	03/28/94	0001	PCI/L		1.73		1.73	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0126
NORTH COORDINATE: 597159.58 FT
EAST COORDINATE: 1494700.09 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY SAND OR SILTY GRAVELLY SAND (SM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	03/23/94	0001	UG/L		0.44		0.44	I
ANTIMONY, SOLUBLE	03/23/94	0001	UG/L	B	0.78		0.78	I
BARIUM, SOLUBLE	03/23/94	0001	UG/L	B	93.6		93.6	I
BARIUM, TOTAL	03/23/94	0001	UG/L	B	97.9		97.9	I
CADMIUM, SOLUBLE	03/23/94	0001	UG/L	B	1.7		1.7	I
CALCIUM, SOLUBLE	03/23/94	0001	UG/L		106000.		106000.	I
CALCIUM, TOTAL	03/23/94	0001	UG/L		111000.		111000.	I
CHLORIDE	03/23/94	0001	MG/L		123.		123.	I
COPPER, SOLUBLE	03/23/94	0001	UG/L	B	0.93		0.93	I
COPPER, TOTAL	03/23/94	0001	UG/L	B	0.60		0.60	I
FLUORIDE	03/23/94	0001	MG/L		0.15		0.15	I
IRON, TOTAL	03/23/94	0001	UG/L	B	31.0		31.0	I
MAGNESIUM, SOLUBLE	03/23/94	0001	UG/L		31100.		31100.	I
MAGNESIUM, TOTAL	03/23/94	0001	UG/L		32700.		32700.	I
MANGANESE, SOLUBLE	03/23/94	0001	UG/L	B	4.5		4.5	I
MANGANESE, TOTAL	03/23/94	0001	UG/L	B	4.9		4.9	I
NICKEL, SOLUBLE	03/23/94	0001	UG/L	B	35.9		35.9	I
NICKEL, TOTAL	03/23/94	0001	UG/L	B	38.3		38.3	I
NITRATE NITRITE	03/23/94	0001	MG/L		2.8		2.8	I
PLUTONIUM-238	03/23/94	0001	PCI/L		0.0039		0.0039	I
POTASSIUM, SOLUBLE	03/23/94	0001	UG/L	B	3170.		3170.	I
POTASSIUM, TOTAL	03/23/94	0001	UG/L	B	3460.		3460.	I
RADIUM-226	03/23/94	0001	PCI/L		0.31		0.31	I
SODIUM, SOLUBLE	03/23/94	0001	UG/L		83800.	J	83800.	I
SODIUM, TOTAL	03/23/94	0001	UG/L		81100.	J	81100.	I
SULFATE	03/23/94	0001	MG/L		58.1		58.1	I
TETRACHLOROETHENE	03/23/94	0001	UG/L		0.48		0.48	I
THORIUM-230	03/23/94	0001	PCI/L		0.36		0.36	I
TOTAL DISSOLVED SOLIDS	03/23/94	0001	MG/L		673.		673.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0126
NORTH COORDINATE: 597159.58 FT
EAST COORDINATE: 1494700.09 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY SAND OR SILTY GRAVELLY SAND (SM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL ORGANIC CARBON	03/23/94	0001	MG/L		0.62		0.62	I
TOTAL SUSPENDED SOLIDS	03/23/94	0001	MG/L		6.0		6.0	I
TRITIUM	03/23/94	0001	PCI/L		2580.		2580.	I
URANIUM-234	03/23/94	0001	PCI/L		0.350	J	0.350	I
URANIUM-238	03/23/94	0001	PCI/L		0.327		0.327	I
VANADIUM, SOLUBLE	03/23/94	0001	UG/L		10.3	J	10.3	I
VANADIUM, TOTAL	03/23/94	0001	UG/L		10.4	J	10.4	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0127
NORTH COORDINATE: 597166.92 FT
EAST COORDINATE: 1493915.42 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND WELL GRADED (SW)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ANTIMONY, SOLUBLE	04/04/94	0001	UG/L	B	0.90	J	0.90	I
BARIUM, SOLUBLE	04/04/94	0001	UG/L		202.		202.	I
BARIUM, TOTAL	04/04/94	0001	UG/L	B	177.		177.	I
CALCIUM, SOLUBLE	04/04/94	0001	UG/L		80800.		80800.	I
CALCIUM, TOTAL	04/04/94	0001	UG/L		71200.		71200.	I
CHLORIDE	04/04/94	0001	MG/L		50.5		50.5	I
COPPER, SOLUBLE	04/04/94	0001	UG/L	B	0.91		0.91	I
COPPER, TOTAL	04/04/94	0001	UG/L	B	1.6		1.6	I
FLUORIDE	04/04/94	0001	MG/L		0.36		0.36	I
IRON, TOTAL	04/04/94	0001	UG/L	B	39.9		39.9	I
LEAD, SOLUBLE	04/04/94	0001	UG/L	B	0.90	J	0.90	I
LEAD, TOTAL	04/04/94	0001	UG/L	B	1.0	J	1.0	I
MAGNESIUM, SOLUBLE	04/04/94	0001	UG/L		26200.		26200.	I
MAGNESIUM, TOTAL	04/04/94	0001	UG/L		23100.		23100.	I
MANGANESE, SOLUBLE	04/04/94	0001	UG/L		35.9		35.9	I
MANGANESE, TOTAL	04/04/94	0001	UG/L		30.5		30.5	I
NICKEL, SOLUBLE	04/04/94	0001	UG/L	B	4.0		4.0	I
NITRATE NITRITE	04/04/94	0001	MG/L		0.20		0.20	I
POTASSIUM, SOLUBLE	04/04/94	0001	UG/L	B	3000.		3000.	I
POTASSIUM, TOTAL	04/04/94	0001	UG/L	B	2670.		2670.	I
SODIUM, SOLUBLE	04/04/94	0001	UG/L		28800.		28800.	I
SODIUM, TOTAL	04/04/94	0001	UG/L		26000.		26000.	I
SULFATE	04/04/94	0001	MG/L		50.8		50.8	I
THORIUM-228	04/04/94	0001	PCI/L		0.33		0.33	I
THORIUM-230	04/04/94	0001	PCI/L		0.30		0.30	I
TOTAL DISSOLVED SOLIDS	04/04/94	0001	MG/L		418.		418.	I
TOTAL KJELDAHL NITROGEN	04/04/94	0001	MG/L		0.19		0.19	I
TOTAL ORGANIC CARBON	04/04/94	0001	MG/L		1.3		1.3	I
URANIUM-234	04/04/94	0001	PCI/L		0.080		0.080	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0127
NORTH COORDINATE: 597166.92 FT
EAST COORDINATE: 1493915.42 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND WELL GRADED (SW)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
URANIUM-238	04/04/94	0001	PCI/L		0.095		0.095	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0128
NORTH COORDINATE: 597105.98 FT
EAST COORDINATE: 1493916.75 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND WELL GRADED (SW)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMMONIA	04/04/94	0001	MG/L		1.3		1.3	I
	04/04/94	1001	MG/L		1.3		1.3	I
BARIUM, SOLUBLE	04/04/94	0001	UG/L	B	161.		161.	I
	04/04/94	1001	UG/L	B	160.		160.	I
BARIUM, TOTAL	04/04/94	0001	UG/L	B	150.		150.	I
	04/04/94	1001	UG/L	B	165.		165.	I
CALCIUM, SOLUBLE	04/04/94	0001	UG/L		69000.		69000.	I
	04/04/94	1001	UG/L		69700.		69700.	I
CALCIUM, TOTAL	04/04/94	0001	UG/L		64100.		64100.	I
	04/04/94	1001	UG/L		70500.		70500.	I
CHLORIDE	04/04/94	0001	MG/L		60.3		60.3	I
	04/04/94	1001	MG/L		66.5		66.5	I
COPPER, TOTAL	04/04/94	0001	UG/L	B	3.5	J	3.5	I
FLUORIDE	04/04/94	0001	MG/L		0.28		0.28	I
	04/04/94	1001	MG/L		0.29		0.29	I
IRON, SOLUBLE	04/04/94	0001	UG/L	B	39.4		39.4	I
	04/04/94	1001	UG/L	B	39.9		39.9	I
IRON, TOTAL	04/04/94	0001	UG/L	B	39.9	J	39.9	I
LEAD, SOLUBLE	04/04/94	1001	UG/L		3.2	J	3.2	I
LEAD, TOTAL	04/04/94	1001	UG/L		44.4	J	44.4	I
MAGNESIUM, SOLUBLE	04/04/94	0001	UG/L		25600.		25600.	I
	04/04/94	1001	UG/L		25900.		25900.	I
MAGNESIUM, TOTAL	04/04/94	0001	UG/L		23700.		23700.	I
	04/04/94	1001	UG/L		26200.		26200.	I
MANGANESE, SOLUBLE	04/04/94	0001	UG/L		177.		177.	I
	04/04/94	1001	UG/L		181.		181.	I
MANGANESE, TOTAL	04/04/94	0001	UG/L		170.		170.	I
	04/04/94	1001	UG/L		185.		185.	I
NICKEL, SOLUBLE	04/04/94	0001	UG/L	B	3.7		3.7	I
	04/04/94	1001	UG/L	B	2.9		2.9	I
NICKEL, TOTAL	04/04/94	0001	UG/L	B	4.0		4.0	I
	04/04/94	1001	UG/L	B	4.2		4.2	I
POTASSIUM, SOLUBLE	04/04/94	0001	UG/L	B	2940.		2940.	I
	04/04/94	1001	UG/L	B	2940.		2940.	I
POTASSIUM, TOTAL	04/04/94	0001	UG/L	B	2780.		2780.	I
	04/04/94	1001	UG/L	B	3050.		3050.	I
SODIUM, SOLUBLE	04/04/94	0001	UG/L		43000.		43000.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0128
NORTH COORDINATE: 597105.98 FT
EAST COORDINATE: 1493916.75 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND WELL GRADED (SW)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SODIUM, SOLUBLE	04/04/94	1001	UG/L		43300.		43300.	I
SODIUM, TOTAL	04/04/94	0001	UG/L		39400.		39400.	I
	04/04/94	1001	UG/L		43200.		43200.	I
SULFATE	04/04/94	0001	MG/L		68.1		68.1	I
	04/04/94	1001	MG/L		53.4		53.4	I
THORIUM-228	04/04/94	0001	PCI/L		0.067	J	0.067	I
THORIUM-230	04/04/94	0001	PCI/L		0.093	J	0.093	I
TOTAL DISSOLVED SOLIDS	04/04/94	0001	MG/L		457.		457.	I
	04/04/94	1001	MG/L		455.		455.	I
TOTAL KJELDAHL NITROGEN	04/04/94	0001	MG/L		1.5		1.5	I
	04/04/94	1001	MG/L		1.4		1.4	I
TOTAL ORGANIC CARBON	04/04/94	0001	MG/L		1.3		1.3	I
	04/04/94	1001	MG/L		1.3		1.3	I
TRITIUM	04/04/94	0001	PCI/L		700.		700.	I
	04/04/94	1001	PCI/L		560.		560.	I
URANIUM-234	04/04/94	0001	PCI/L		0.229		0.229	I
	04/04/94	1001	PCI/L		0.163		0.163	I
URANIUM-235	04/04/94	1001	PCI/L		0.009		0.009	I
URANIUM-238	04/04/94	0001	PCI/L		0.175		0.175	I
	04/04/94	1001	PCI/L		0.146		0.146	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0129
NORTH COORDINATE: 596836.77 FT
EAST COORDINATE: 1494665.33 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY SAND OR SILTY GRAVELLY SAND (SM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	04/11/94	0001	UG/L		1.2		1.2	I
ANTIMONY, SOLUBLE	04/11/94	0001	UG/L	B	0.80	J	0.80	I
BARIUM, SOLUBLE	04/11/94	0001	UG/L	B	76.5	J	76.5	I
BARIUM, TOTAL	04/11/94	0001	UG/L	B	72.6		72.6	I
CALCIUM, SOLUBLE	04/11/94	0001	UG/L		111000.		111000.	I
CALCIUM, TOTAL	04/11/94	0001	UG/L		106000.		106000.	I
CHLORIDE	04/11/94	0001	MG/L		88.1		88.1	I
COPPER, SOLUBLE	04/11/94	0001	UG/L	B	1.1		1.1	I
COPPER, TOTAL	04/11/94	0001	UG/L	B	1.3		1.3	I
FLUORIDE	04/11/94	0001	MG/L		0.16		0.16	I
IRON, SOLUBLE	04/11/94	0001	UG/L	B	13.4		13.4	I
IRON, TOTAL	04/11/94	0001	UG/L	B	19.4		19.4	I
LEAD, SOLUBLE	04/11/94	0001	UG/L	B	1.4	J	1.4	I
LEAD, TOTAL	04/11/94	0001	UG/L	B	2.0		2.0	I
MAGNESIUM, SOLUBLE	04/11/94	0001	UG/L		33700.		33700.	I
MAGNESIUM, TOTAL	04/11/94	0001	UG/L		32100.		32100.	I
MANGANESE, SOLUBLE	04/11/94	0001	UG/L	B	0.83		0.83	I
MANGANESE, TOTAL	04/11/94	0001	UG/L	B	0.50		0.50	I
MOLYBDENUM	04/11/94	0001	UG/L	B	1.7		1.7	I
NICKEL, SOLUBLE	04/11/94	0001	UG/L		42.9		42.9	I
NICKEL, TOTAL	04/11/94	0001	UG/L	B	37.2		37.2	I
NITRATE NITRITE	04/11/94	0001	MG/L		3.4		3.4	I
PLUTONIUM-238	04/11/94	0001	PCI/L		0.0108		0.0108	I
PLUTONIUM-239/240	04/11/94	0001	PCI/L		0.0054		0.0054	I
POTASSIUM, SOLUBLE	04/11/94	0001	UG/L	B	2870.	J	2870.	I
POTASSIUM, TOTAL	04/11/94	0001	UG/L	B	3250.	J	3250.	I
RADIUM-226	04/11/94	0001	PCI/L		0.22		0.22	I
SODIUM, SOLUBLE	04/11/94	0001	UG/L		58900.		58900.	I
SODIUM, TOTAL	04/11/94	0001	UG/L		60900.	J	60900.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0129
NORTH COORDINATE: 596836.77 FT
EAST COORDINATE: 1494665.33 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY SAND OR SILTY GRAVELLY SAND (SM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SULFATE	04/11/94	0001	MG/L		54.7		54.7	I
THORIUM-228	04/11/94	0001	PCI/L		0.057		0.057	I
THORIUM-230	04/11/94	0001	PCI/L		0.042	J	0.042	I
TOTAL DISSOLVED SOLIDS	04/11/94	0001	MG/L		567.		567.	I
TOTAL ORGANIC CARBON	04/11/94	0001	MG/L		1.0		1.0	I
TRITIUM	04/11/94	0001	PCI/L		940.		940.	I
URANIUM-234	04/11/94	0001	PCI/L		0.173		0.173	I
URANIUM-238	04/11/94	0001	PCI/L		0.169		0.169	I
VANADIUM, SOLUBLE	04/11/94	0001	UG/L		11.0		11.0	I
VANADIUM, TOTAL	04/11/94	0001	UG/L		11.4		11.4	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0130
NORTH COORDINATE: 596460.03 FT
EAST COORDINATE: 1493662.34 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, SOLUBLE	04/06/94	0001	UG/L		53.2		53.2	I
AMMONIA	04/06/94	0001	MG/L		3.9		3.9	I
BARIUM, SOLUBLE	04/06/94	0001	UG/L		257.		257.	I
BARIUM, TOTAL	04/06/94	0001	UG/L		272.		272.	I
CALCIUM, SOLUBLE	04/06/94	0001	UG/L		77000.	J	77000.	I
CALCIUM, TOTAL	04/06/94	0001	UG/L		81000.	J	81000.	I
CHLORIDE	04/06/94	0001	MG/L		65.0		65.0	I
CHROMIUM, SOLUBLE	04/06/94	0001	UG/L	B	1.1		1.1	I
COPPER, SOLUBLE	04/06/94	0001	UG/L	B	1.2		1.2	I
FLUORIDE	04/06/94	0001	MG/L		0.30		0.30	I
MAGNESIUM, SOLUBLE	04/06/94	0001	UG/L		27200.	J	27200.	I
MAGNESIUM, TOTAL	04/06/94	0001	UG/L		28300.	J	28300.	I
MANGANESE, SOLUBLE	04/06/94	0001	UG/L		367.		367.	I
MANGANESE, TOTAL	04/06/94	0001	UG/L		386.		386.	I
NICKEL, SOLUBLE	04/06/94	0001	UG/L	B	2.8		2.8	I
NICKEL, TOTAL	04/06/94	0001	UG/L	B	3.0		3.0	I
POTASSIUM, SOLUBLE	04/06/94	0001	UG/L	B	3040.		3040.	I
POTASSIUM, TOTAL	04/06/94	0001	UG/L	B	3100.		3100.	I
RADIUM-226	04/06/94	0001	PCI/L		0.30		0.30	I
SODIUM, SOLUBLE	04/06/94	0001	UG/L		41200.		41200.	I
SODIUM, TOTAL	04/06/94	0001	UG/L		42400.		42400.	I
TOTAL DISSOLVED SOLIDS	04/06/94	0001	MG/L		458.		458.	I
TOTAL KJELDAHL NITROGEN	04/06/94	0001	MG/L		4.1		4.1	I
TOTAL ORGANIC CARBON	04/06/94	0001	MG/L		1.8		1.8	I
TRITIUM	04/06/94	0001	PCI/L		520.		520.	I
URANIUM-234	04/06/94	0001	PCI/L		0.101		0.101	I
URANIUM-238	04/06/94	0001	PCI/L		0.101		0.101	I
VANADIUM, SOLUBLE	04/06/94	0001	UG/L		12.5		12.5	I
VANADIUM, TOTAL	04/06/94	0001	UG/L		12.4		12.4	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0137 37-1A
NORTH COORDINATE: 597337.47 FT
EAST COORDINATE: 1495070.12 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: GRAVEL OR SANDY GRAVEL, WELL GRADED (GW)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	03/28/94	0001	UG/L		303.		303.	I
AMERICIUM-241	03/28/94	0001	PCI/L		0.065	J	0.065	I
AMMONIA	03/28/94	0001	MG/L		0.59		0.59	I
ANTIMONY, TOTAL	03/28/94	0001	UG/L	B	0.85	J	0.85	I
BARIUM, SOLUBLE	03/28/94	0001	UG/L	B	68.3		68.3	I
BARIUM, TOTAL	03/28/94	0001	UG/L	B	72.4		72.4	I
BERYLLIUM, SOLUBLE	03/28/94	0001	UG/L	B	0.52		0.52	I
BERYLLIUM, TOTAL	03/28/94	0001	UG/L	B	0.52		0.52	I
CADMIUM, TOTAL	03/28/94	0001	UG/L	B	2.4		2.4	I
CALCIUM, SOLUBLE	03/28/94	0001	UG/L		112000.		112000.	I
CALCIUM, TOTAL	03/28/94	0001	UG/L		109000.		109000.	I
CHLORIDE	03/28/94	0001	MG/L		130.		130.	I
COBALT, TOTAL	03/28/94	0001	UG/L	B	2.1	J	2.1	I
COPPER, TOTAL	03/28/94	0001	UG/L		46.8		46.8	I
FLUORIDE	03/28/94	0001	MG/L		0.19		0.19	I
IRON, SOLUBLE	03/28/94	0001	UG/L		6110.		6110.	I
IRON, TOTAL	03/28/94	0001	UG/L		30000.		30000.	I
LEAD, TOTAL	03/28/94	0001	UG/L		18.4		18.4	I
LITHIUM, SOLUBLE	03/28/94	0001	UG/L	B	15.7		15.7	I
LITHIUM, TOTAL	03/28/94	0001	UG/L	B	15.7		15.7	I
MAGNESIUM, SOLUBLE	03/28/94	0001	UG/L		39900.		39900.	I
MAGNESIUM, TOTAL	03/28/94	0001	UG/L		39500.		39500.	I
MANGANESE, SOLUBLE	03/28/94	0001	UG/L		76.8		76.8	I
MANGANESE, TOTAL	03/28/94	0001	UG/L		132.		132.	I
MERCURY, TOTAL	03/28/94	0001	UG/L	B	0.12		0.12	I
MOLYBDENUM	03/28/94	0001	UG/L	B	3.4		3.4	I
NITRATE NITRITE	03/28/94	0001	MG/L		0.53		0.53	I
PLUTONIUM-238	03/28/94	0001	PCI/L		0.097		0.097	I
POTASSIUM, SOLUBLE	03/28/94	0001	UG/L	B	1950.		1950.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0137 37-1A
NORTH COORDINATE: 597337.47 FT
EAST COORDINATE: 1495070.12 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: GRAVEL OR SANDY GRAVEL, WELL GRADED (GW)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
POTASSIUM, TOTAL	03/28/94	0001	UG/L	B	2100.		2100.	I
SILVER, TOTAL	03/28/94	0001	UG/L	B	1.4		1.4	I
SODIUM, SOLUBLE	03/28/94	0001	UG/L		69100.		69100.	I
SODIUM, TOTAL	03/28/94	0001	UG/L		68100.		68100.	I
SULFATE	03/28/94	0001	MG/L		119.		119.	I
TETRACHLOROETHENE	03/28/94	0001	UG/L		0.38		0.38	I
THORIUM-228	03/28/94	0001	PCI/L		0.24		0.24	I
THORIUM-230	03/28/94	0001	PCI/L		0.68		0.68	I
TOTAL DISSOLVED SOLIDS	03/28/94	0001	MG/L		750.		750.	I
TOTAL KJELDAHL NITROGEN	03/28/94	0001	MG/L		1.6		1.6	I
TOTAL ORGANIC CARBON	03/28/94	0001	MG/L		1.6		1.6	I
TOTAL PHOSPHATE	03/28/94	0001	MG/L		0.087		0.087	I
TOTAL SUSPENDED SOLIDS	03/28/94	0001	MG/L		38.0		38.0	I
TRICHLOROETHENE	03/28/94	0001	UG/L		2.8	J	2.8	I
TRITIUM	03/28/94	0001	PCI/L		3260.		3260.	I
URANIUM-234	03/28/94	0001	PCI/L		0.423	J	0.423	I
URANIUM-235	03/28/94	0001	PCI/L		0.062		0.062	I
URANIUM-238	03/28/94	0001	PCI/L		0.268		0.268	I
ZINC, TOTAL	03/28/94	0001	UG/L		32.0		32.0	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0138
NORTH COORDINATE: 599671.13 FT
EAST COORDINATE: 1495320.80 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
BARIUM, SOLUBLE	03/29/94	0001	UG/L		92.9		92.9	I
	03/29/94	1001	UG/L	B	91.6		91.6	I
BARIUM, TOTAL	03/29/94	0001	UG/L		80.3		80.3	I
	03/29/94	1001	UG/L	B	86.8		86.8	I
CALCIUM, SOLUBLE	03/29/94	0001	UG/L		129000.	J	129000.	I
	03/29/94	1001	UG/L		129000.	J	129000.	I
CALCIUM, TOTAL	03/29/94	0001	UG/L		118000.	J	118000.	I
	03/29/94	1001	UG/L		122000.	J	122000.	I
CHLORIDE	03/29/94	0001	MG/L		120.		120.	I
	03/29/94	1001	MG/L		118.		118.	I
CHROMIUM, TOTAL	03/29/94	0001	UG/L		13.1		13.1	I
	03/29/94	1001	UG/L		12.5		12.5	I
COPPER, TOTAL	03/29/94	0001	UG/L	B	1.1	J	1.1	I
FLUORIDE	03/29/94	0001	MG/L		0.18		0.18	I
	03/29/94	1001	MG/L		0.18		0.18	I
IRON, TOTAL	03/29/94	0001	UG/L		206.		206.	I
	03/29/94	1001	UG/L		196.		196.	I
MAGNESIUM, SOLUBLE	03/29/94	0001	UG/L		41800.	J	41800.	I
	03/29/94	1001	UG/L		41800.	J	41800.	I
MAGNESIUM, TOTAL	03/29/94	0001	UG/L		36200.	J	36200.	I
	03/29/94	1001	UG/L		38800.	J	38800.	I
MANGANESE, SOLUBLE	03/29/94	0001	UG/L	B	0.57		0.57	I
	03/29/94	1001	UG/L	B	0.43		0.43	I
MANGANESE, TOTAL	03/29/94	0001	UG/L	B	2.3		2.3	I
	03/29/94	1001	UG/L	B	2.1		2.1	I
MOLYBDENUM	03/29/94	1001	UG/L	B	1.6	J	1.6	I
MOLYBDENUM, SOLUBLE	03/29/94	1001	UG/L	B	1.4	J	1.4	I
NICKEL, SOLUBLE	03/29/94	0001	UG/L	B	8.6		8.6	I
	03/29/94	1001	UG/L	B	9.1		9.1	I
NICKEL, TOTAL	03/29/94	0001	UG/L	B	8.6		8.6	I
	03/29/94	1001	UG/L	B	8.8		8.8	I
NITRATE NITRITE	03/29/94	0001	MG/L		2.8		2.8	I
	03/29/94	1001	MG/L		2.7		2.7	I
PLUTONIUM-239/240	03/29/94	0001	PCI/L		0.0032		0.0032	I
POTASSIUM, SOLUBLE	03/29/94	0001	UG/L	B	3360.		3360.	I
	03/29/94	1001	UG/L	B	3360.		3360.	I
POTASSIUM, TOTAL	03/29/94	0001	UG/L	B	3020.		3020.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0138
NORTH COORDINATE: 599671.13 FT
EAST COORDINATE: 1495320.80 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
POTASSIUM, TOTAL	03/29/94	1001	UG/L	B	3080.		3080.	I
RADIUM-226	03/29/94	0001	PCI/L		0.23		0.23	I
SODIUM, SOLUBLE	03/29/94	0001	UG/L		71100.		71100.	I
	03/29/94	1001	UG/L		72500.		72500.	I
SODIUM, TOTAL	03/29/94	0001	UG/L		64500.		64500.	I
	03/29/94	1001	UG/L		65700.		65700.	I
SULFATE	03/29/94	0001	MG/L		77.2		77.2	I
	03/29/94	1001	MG/L		75.3		75.3	I
THORIUM-228	03/29/94	0001	PCI/L		0.079	J	0.079	I
	03/29/94	1001	PCI/L		0.043		0.043	I
THORIUM-230	03/29/94	0001	PCI/L		0.035	J	0.035	I
	03/29/94	1001	PCI/L		0.022		0.022	I
TOTAL DISSOLVED SOLIDS	03/29/94	0001	MG/L		694.		694.	I
	03/29/94	1001	MG/L		676.		676.	I
TOTAL ORGANIC CARBON	03/29/94	0001	MG/L		2.8	J	2.8	I
	03/29/94	1001	MG/L		1.1	J	1.1	I
TOTAL SUSPENDED SOLIDS	03/29/94	1001	MG/L		5.0	J	5.0	I
TRITIUM	03/29/94	0001	PCI/L		2200.		2200.	I
	03/29/94	1001	PCI/L		2200.		2200.	I
URANIUM-234	03/29/94	0001	PCI/L		0.40	J	0.40	I
	03/29/94	1001	PCI/L		0.271	J	0.271	I
URANIUM-235	03/29/94	1001	PCI/L		0.027		0.027	I
URANIUM-238	03/29/94	0001	PCI/L		0.188	J	0.188	I
	03/29/94	1001	PCI/L		0.150	J	0.150	I
ZINC, SOLUBLE	03/29/94	0001	UG/L		32.6	J	32.6	I
ZINC, TOTAL	03/29/94	0001	UG/L		23.3	J	23.3	I
	03/29/94	1001	UG/L		43.3	J	43.3	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0151 44-1
NORTH COORDINATE: 597273.77 FT
EAST COORDINATE: 1495544.31 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: CLAYEY SAND OR CLAYEY GRAVELLY SAND (SC)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, SOLUBLE	03/21/94	0001	UG/L		1850.		1850.	I
ALUMINUM, TOTAL	03/17/94	0001	UG/L		4430.		4430.	I
ANTIMONY, SOLUBLE	03/21/94	0001	UG/L	B	2.1		2.1	I
ARSENIC, SOLUBLE	03/21/94	0001	UG/L	B	2.1	J	2.1	I
BARIUM, SOLUBLE	03/21/94	0001	UG/L	B	48.8		48.8	I
BARIUM, TOTAL	03/17/94	0001	UG/L	B	69.7	J	69.7	I
BISMUTH, SOLUBLE	03/21/94	0001	UG/L	B	35.8		35.8	I
CALCIUM, SOLUBLE	03/21/94	0001	UG/L		76000.		76000.	I
CALCIUM, TOTAL	03/17/94	0001	UG/L		90500.		90500.	I
CHLORIDE	03/17/94	0001	MG/L		8.8		8.8	I
CHROMIUM, SOLUBLE	03/21/94	0001	UG/L	B	7.9		7.9	I
CHROMIUM, TOTAL	03/17/94	0001	UG/L		14.7		14.7	I
COPPER, SOLUBLE	03/21/94	0001	UG/L	B	6.3		6.3	I
COPPER, TOTAL	03/17/94	0001	UG/L	B	17.0		17.0	I
FLUORIDE	03/17/94	0001	MG/L		1.7		1.7	I
IRON, SOLUBLE	03/21/94	0001	UG/L		3210.		3210.	I
IRON, TOTAL	03/17/94	0001	UG/L		8040.	J	8040.	I
LEAD, SOLUBLE	03/21/94	0001	UG/L	B	2.6		2.6	I
LEAD, TOTAL	03/17/94	0001	UG/L		6.1	J	6.1	I
LITHIUM, SOLUBLE	03/21/94	0001	UG/L	B	25.5		25.5	I
MAGNESIUM, SOLUBLE	03/21/94	0001	UG/L		39500.		39500.	I
MAGNESIUM, TOTAL	03/17/94	0001	UG/L		44100.	J	44100.	I
MANGANESE, SOLUBLE	03/21/94	0001	UG/L		55.2	J	55.2	I
MANGANESE, TOTAL	03/17/94	0001	UG/L		125.	J	125.	I
MOLYBDENUM	03/17/94	0001	UG/L		26.6		26.6	I
MOLYBDENUM, SOLUBLE	03/21/94	0001	UG/L		22.2		22.2	I
NICKEL, SOLUBLE	03/21/94	0001	UG/L	B	7.4		7.4	I
NICKEL, TOTAL	03/17/94	0001	UG/L	B	13.5		13.5	I
NITRATE NITRITE	03/17/94	0001	MG/L		0.040		0.040	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0151 44-1
NORTH COORDINATE: 597273.77 FT
EAST COORDINATE: 1495544.31 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: CLAYEY SAND OR CLAYEY GRAVELLY SAND (SC)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
PLUTONIUM-238	03/17/94	0001	PCI/L		0.012		0.012	I
POTASSIUM, SOLUBLE	03/21/94	0001	UG/L	B	2030.		2030.	I
POTASSIUM, TOTAL	03/17/94	0001	UG/L	B	2870.		2870.	I
RADIUM-226	03/17/94	0001	PCI/L		1.52		1.52	I
SODIUM, SOLUBLE	03/21/94	0001	UG/L		10000.		10000.	I
SODIUM, TOTAL	03/17/94	0001	UG/L		9590.	J	9590.	I
SULFATE	03/17/94	0001	MG/L		92.4		92.4	I
THORIUM-228	03/17/94	0001	PCI/L		0.080		0.080	I
THORIUM-230	03/17/94	0001	PCI/L		0.094	J	0.094	I
THORIUM-232	03/17/94	0001	PCI/L		0.021		0.021	I
TOTAL DISSOLVED SOLIDS	03/17/94	0001	MG/L		437.		437.	I
TOTAL KJELDAHL NITROGEN	03/17/94	0001	MG/L		1.4		1.4	I
TOTAL ORGANIC CARBON	03/17/94	0001	MG/L		1.1		1.1	I
TOTAL PHOSPHATE	03/17/94	0001	MG/L		0.23		0.23	I
TOTAL SUSPENDED SOLIDS	03/17/94	0001	MG/L		12.0		12.0	I
TRITIUM	03/17/94	0001	PCI/L		600.		600.	I
URANIUM-234	03/17/94	0001	PCI/L		2.27		2.27	I
URANIUM-235	03/17/94	0001	PCI/L		0.133		0.133	I
URANIUM-238	03/17/94	0001	PCI/L		1.71		1.71	I
VANADIUM, SOLUBLE	03/21/94	0001	UG/L	B	4.5		4.5	I
VANADIUM, TOTAL	03/17/94	0001	UG/L	B	9.4		9.4	I
ZINC, SOLUBLE	03/21/94	0001	UG/L		8.5		8.5	I
ZINC, TOTAL	03/17/94	0001	UG/L		25.8		25.8	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0152 46-2
NORTH COORDINATE: 596986.30 FT
EAST COORDINATE: 1494954.07 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ANTIMONY, SOLUBLE	03/25/94	0001	UG/L	B	0.90		0.90	I
BARIUM, SOLUBLE	03/25/94	0001	UG/L	B	109.	J	109.	I
BARIUM, TOTAL	03/25/94	0001	UG/L	B	109.	J	109.	I
CALCIUM, SOLUBLE	03/25/94	0001	UG/L		136000.	J	136000.	I
CALCIUM, TOTAL	03/25/94	0001	UG/L		134000.	J	134000.	I
CHLORIDE	03/25/94	0001	MG/L		100.		100.	I
CHROMIUM, TOTAL	03/25/94	0001	UG/L		21.0		21.0	I
COPPER, TOTAL	03/25/94	0001	UG/L	B	1.00	J	1.00	I
FLUORIDE	03/25/94	0001	MG/L		0.11		0.11	I
IRON, SOLUBLE	03/25/94	0001	UG/L	B	61.1	J	61.1	I
IRON, TOTAL	03/25/94	0001	UG/L		752.	J	752.	I
MAGNESIUM, SOLUBLE	03/25/94	0001	UG/L		42100.	J	42100.	I
MAGNESIUM, TOTAL	03/25/94	0001	UG/L		41400.	J	41400.	I
MANGANESE, SOLUBLE	03/25/94	0001	UG/L	B	10.7		10.7	I
MANGANESE, TOTAL	03/25/94	0001	UG/L		15.4		15.4	I
NICKEL, SOLUBLE	03/25/94	0001	UG/L		92.7		92.7	I
NICKEL, TOTAL	03/25/94	0001	UG/L		94.3		94.3	I
NITRATE NITRITE	03/25/94	0001	MG/L		3.2		3.2	I
POTASSIUM, SOLUBLE	03/25/94	0001	UG/L	B	3010.		3010.	I
POTASSIUM, TOTAL	03/25/94	0001	UG/L	B	3150.		3150.	I
SELENIUM, TOTAL	03/25/94	0001	UG/L	B	2.2	J	2.2	I
SODIUM, SOLUBLE	03/25/94	0001	UG/L		288000.		REJECT	I
SODIUM, TOTAL	03/25/94	0001	UG/L		273000.		REJECT	I
SULFATE	03/25/94	0001	MG/L		128.		128.	I
TETRACHLOROETHENE	03/25/94	0001	UG/L		5.1		5.1	I
TOTAL DISSOLVED SOLIDS	03/25/94	0001	MG/L		795.		795.	I
TOTAL ORGANIC CARBON	03/25/94	0001	MG/L		1.0		1.0	I
TRICHLOROETHENE	03/25/94	0001	UG/L		6.5		6.5	I
TRITIUM	03/25/94	0001	PCI/L		7310.		7310.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0152 46-2
NORTH COORDINATE: 596986.30 FT
EAST COORDINATE: 1494954.07 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
URANIUM-234	03/25/94	0001	PCI/L		0.295	J	0.295	I
URANIUM-235	03/25/94	0001	PCI/L		0.019		0.019	I
URANIUM-238	03/25/94	0001	PCI/L		0.215		0.215	I
VANADIUM, SOLUBLE	03/25/94	0001	UG/L		13.4		13.4	I
VANADIUM, TOTAL	03/25/94	0001	UG/L		13.1		13.1	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0153 55-2
NORTH COORDINATE: 596692.39 FT
EAST COORDINATE: 1494952.09 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LEAN CLAYS, SANDY CLAYS, OR GRAVELLY CLAYS (CL)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMERICIUM-241	03/25/94	0001	PCI/L		0.046	J	0.046	I
BARIUM, SOLUBLE	03/25/94	0001	UG/L	B	98.0	J	98.0	I
BARIUM, TOTAL	03/25/94	0001	UG/L	B	102.	J	102.	I
CALCIUM, SOLUBLE	03/25/94	0001	UG/L		142000.	J	142000.	I
CALCIUM, TOTAL	03/25/94	0001	UG/L		147000.	J	147000.	I
CHLORIDE	03/25/94	0001	MG/L		123.		123.	I
CHROMIUM, TOTAL	03/25/94	0001	UG/L		14.3		14.3	I
COPPER, SOLUBLE	03/25/94	0001	UG/L	B	0.54	J	0.54	I
COPPER, TOTAL	03/25/94	0001	UG/L	B	0.70	J	0.70	I
FLUORIDE	03/25/94	0001	MG/L		0.13		0.13	I
IRON, TOTAL	03/25/94	0001	UG/L		282.	J	282.	I
MAGNESIUM, SOLUBLE	03/25/94	0001	UG/L		42200.	J	42200.	I
MAGNESIUM, TOTAL	03/25/94	0001	UG/L		43700.	J	43700.	I
MANGANESE, SOLUBLE	03/25/94	0001	UG/L	B	4.0		4.0	I
MANGANESE, TOTAL	03/25/94	0001	UG/L	B	5.6		5.6	I
NICKEL, SOLUBLE	03/25/94	0001	UG/L	B	20.6		20.6	I
NICKEL, TOTAL	03/25/94	0001	UG/L	B	23.6		23.6	I
NITRATE NITRITE	03/25/94	0001	MG/L		3.1		3.1	I
POTASSIUM, SOLUBLE	03/25/94	0001	UG/L	B	3050.		3050.	I
POTASSIUM, TOTAL	03/25/94	0001	UG/L	B	3150.		3150.	I
SODIUM, SOLUBLE	03/25/94	0001	UG/L		307000.		REJECT	I
SODIUM, TOTAL	03/25/94	0001	UG/L		312000.		REJECT	I
SULFATE	03/25/94	0001	MG/L		116.		116.	I
TETRACHLOROETHENE	03/25/94	0001	UG/L		8.2		8.2	I
TOTAL DISSOLVED SOLIDS	03/25/94	0001	MG/L		789.		789.	I
TOTAL ORGANIC CARBON	03/25/94	0001	MG/L		4.7		4.7	I
TOTAL PHOSPHATE	03/25/94	0001	MG/L		0.054		0.054	I
TOTAL SUSPENDED SOLIDS	03/25/94	0001	MG/L		7.0		7.0	I
TRICHLOROETHENE	03/25/94	0001	UG/L		12.		12.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0153 55-2
NORTH COORDINATE: 596692.39 FT
EAST COORDINATE: 1494952.09 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LEAN CLAYS, SANDY CLAYS, OR GRAVELLY CLAYS (CL)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TRITIUM	03/25/94	0001	PCI/L		5340.		5340.	I
URANIUM-234	03/25/94	0001	PCI/L		0.345	J	0.345	I
URANIUM-235	03/25/94	0001	PCI/L		0.020		0.020	I
URANIUM-238	03/25/94	0001	PCI/L		0.325		0.325	I
VANADIUM, SOLUBLE	03/25/94	0001	UG/L		13.2		13.2	I
VANADIUM, TOTAL	03/25/94	0001	UG/L		13.4		13.4	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0154
NORTH COORDINATE: 596418.69 FT
EAST COORDINATE: 1494969.81 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	03/24/94	0001	UG/L		0.66		0.66	I
1,2-CIS-DICHLOROETHENE	03/24/94	0001	UG/L		4.5		4.5	I
BARIUM, SOLUBLE	03/24/94	0001	UG/L	B	102.	J	102.	I
BARIUM, TOTAL	03/24/94	0001	UG/L	B	100.	J	100.	I
CALCIUM, SOLUBLE	03/24/94	0001	UG/L		124000.	J	124000.	I
CALCIUM, TOTAL	03/24/94	0001	UG/L		123000.	J	123000.	I
CHLORIDE	03/24/94	0001	MG/L		168.		168.	I
COPPER, SOLUBLE	03/24/94	0001	UG/L	B	0.63	J	0.63	I
FLUORIDE	03/24/94	0001	MG/L		0.14		0.14	I
IRON, TOTAL	03/24/94	0001	UG/L	B	66.4	J	66.4	I
MAGNESIUM, SOLUBLE	03/24/94	0001	UG/L		36700.	J	36700.	I
MAGNESIUM, TOTAL	03/24/94	0001	UG/L		36000.	J	36000.	I
MANGANESE, SOLUBLE	03/24/94	0001	UG/L	B	0.95		0.95	I
MANGANESE, TOTAL	03/24/94	0001	UG/L	B	1.3		1.3	I
MOLYBDENUM	03/24/94	0001	UG/L	B	1.8		1.8	I
MOLYBDENUM, SOLUBLE	03/24/94	0001	UG/L	B	2.1		2.1	I
NICKEL, SOLUBLE	03/24/94	0001	UG/L	B	9.5		9.5	I
NICKEL, TOTAL	03/24/94	0001	UG/L	B	13.0		13.0	I
NITRATE NITRITE	03/24/94	0001	MG/L		2.9		2.9	I
PLUTONIUM-238	03/24/94	0001	PCI/L		0.0271		0.0271	I
PLUTONIUM-239/240	03/24/94	0001	PCI/L		0.0039		0.0039	I
POTASSIUM, SOLUBLE	03/24/94	0001	UG/L	B	2960.		2960.	I
POTASSIUM, TOTAL	03/24/94	0001	UG/L	B	2770.		2770.	I
RADIUM-226	03/24/94	0001	PCI/L		0.21		0.21	I
SODIUM, SOLUBLE	03/24/94	0001	UG/L		494000.		REJECT	I
SODIUM, TOTAL	03/24/94	0001	UG/L		470000.		REJECT	I
SULFATE	03/24/94	0001	MG/L		76.5		76.5	I
TETRACHLOROETHENE	03/24/94	0001	UG/L		1.1		1.1	I
THORIUM-228	03/24/94	0001	PCI/L		0.31		0.31	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0154
NORTH COORDINATE: 596418.69 FT
EAST COORDINATE: 1494969.81 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL DISSOLVED SOLIDS	03/24/94	0001	MG/L		790.		790.	I
TOTAL ORGANIC CARBON	03/24/94	0001	MG/L		1.1		1.1	I
TOTAL SUSPENDED SOLIDS	03/24/94	0001	MG/L		6.0		6.0	I
TRICHLOROETHENE	03/24/94	0001	UG/L		4.4		4.4	I
TRITIUM	03/24/94	0001	PCI/L		2290.		2290.	I
URANIUM-234	03/24/94	0001	PCI/L		0.225	J	0.225	I
URANIUM-235	03/24/94	0001	PCI/L		0.013		0.013	I
URANIUM-238	03/24/94	0001	PCI/L		0.287		0.287	I
VANADIUM, SOLUBLE	03/24/94	0001	UG/L		11.3		11.3	I
VANADIUM, TOTAL	03/24/94	0001	UG/L		11.7		11.7	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0155
NORTH COORDINATE: 596407.55 FT
EAST COORDINATE: 1494971.72 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	03/10/94	0001	UG/L		0.32	J	0.32	I
1,2-CIS-DICHLOROETHENE	03/10/94	0001	UG/L		4.0		4.0	I
ANTIMONY, SOLUBLE	03/10/94	0001	UG/L		3.0		3.0	I
ANTIMONY, TOTAL	03/10/94	0001	UG/L	B	0.92		0.92	I
BARIUM, SOLUBLE	03/10/94	0001	UG/L	B	133.		133.	I
BARIUM, TOTAL	03/10/94	0001	UG/L	B	135.		135.	I
CALCIUM, SOLUBLE	03/10/94	0001	UG/L		149000.		149000.	I
CALCIUM, TOTAL	03/10/94	0001	UG/L		149000.		149000.	I
CHLORIDE	03/10/94	0001	MG/L		197.		197.	I
CHROMIUM, TOTAL	03/10/94	0001	UG/L		15.3	J	15.3	I
FLUORIDE	03/10/94	0001	MG/L		0.12		0.12	I
IRON, SOLUBLE	03/10/94	0001	UG/L	B	78.1		78.1	I
IRON, TOTAL	03/10/94	0001	UG/L		201.		201.	I
MAGNESIUM, SOLUBLE	03/10/94	0001	UG/L		41400.		41400.	I
MAGNESIUM, TOTAL	03/10/94	0001	UG/L		40600.		40600.	I
MANGANESE, SOLUBLE	03/10/94	0001	UG/L	B	8.1		8.1	I
MANGANESE, TOTAL	03/10/94	0001	UG/L	B	7.8		7.8	I
MOLYBDENUM	03/10/94	0001	UG/L	B	2.2		2.2	I
NICKEL, SOLUBLE	03/10/94	0001	UG/L		52.1		52.1	I
NICKEL, TOTAL	03/10/94	0001	UG/L		47.3		47.3	I
NITRATE NITRITE	03/10/94	0001	MG/L		2.9		2.9	I
POTASSIUM, SOLUBLE	03/10/94	0001	UG/L	B	3340.		3340.	I
POTASSIUM, TOTAL	03/10/94	0001	UG/L	B	3260.		3260.	I
RADIUM-226	03/10/94	0001	PCI/L		0.18		0.18	I
SODIUM, SOLUBLE	03/10/94	0001	UG/L		125000.	J	125000.	I
SODIUM, TOTAL	03/10/94	0001	UG/L		126000.	J	126000.	I
SULFATE	03/10/94	0001	MG/L		82.7		82.7	I
TETRACHLOROETHENE	03/10/94	0001	UG/L		0.52		0.52	I
THORIUM-228	03/10/94	0001	PCI/L		0.056		0.056	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0155
NORTH COORDINATE: 596407.55 FT
EAST COORDINATE: 1494971.72 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
THORIUM-230	03/10/94	0001	PCI/L		0.041		0.041	I
TOTAL DISSOLVED SOLIDS	03/10/94	0001	MG/L		893.		893.	I
TOTAL ORGANIC CARBON	03/10/94	0001	MG/L		0.70		0.70	I
TRICHLOROETHENE	03/10/94	0001	UG/L		3.1		3.1	I
TRICHLOROMETHANE (CHLOROFORM)	03/10/94	0001	UG/L		0.70	J	0.70	I
TRITIUM	03/10/94	0001	PCI/L		2170.		2170.	I
URANIUM-234	03/10/94	0001	PCI/L		0.324		0.324	I
URANIUM-235	03/10/94	0001	PCI/L		0.026		0.026	I
URANIUM-238	03/10/94	0001	PCI/L		0.337		0.337	I
VANADIUM, SOLUBLE	03/10/94	0001	UG/L	B	1.1		1.1	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0156
NORTH COORDINATE: 596183.82 FT
EAST COORDINATE: 1494547.14 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY SAND OR SILTY GRAVELLY SAND (SM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	04/06/94	0001	UG/L		219.	J	219.	I
	04/06/94	1001	UG/L		147.	J	147.	I
AMERICIUM-241	04/06/94	1001	PCI/L		0.019	J	0.019	I
AMMONIA	04/06/94	0001	MG/L		0.22		0.22	I
	04/06/94	1001	MG/L		0.22		0.22	I
BARIUM, SOLUBLE	04/06/94	0001	UG/L	B	68.3		68.3	I
	04/06/94	1001	UG/L	B	73.6		73.6	I
BARIUM, TOTAL	04/06/94	0001	UG/L	B	73.0		73.0	I
	04/06/94	1001	UG/L	B	74.9		74.9	I
CALCIUM, SOLUBLE	04/06/94	0001	UG/L		90500.	J	90500.	I
	04/06/94	1001	UG/L		95500.	J	95500.	I
CALCIUM, TOTAL	04/06/94	0001	UG/L		94600.	J	94600.	I
	04/06/94	1001	UG/L		97800.	J	97800.	I
CHLORIDE	04/06/94	0001	MG/L		46.8		46.8	I
	04/06/94	1001	MG/L		47.3		47.3	I
FLUORIDE	04/06/94	0001	MG/L		0.16		0.16	I
	04/06/94	1001	MG/L		0.17		0.17	I
IRON, TOTAL	04/06/94	0001	UG/L		231.	J	231.	I
	04/06/94	1001	UG/L		166.	J	166.	I
LEAD, SOLUBLE	04/06/94	1001	UG/L		4.0	J	4.0	I
MAGNESIUM, SOLUBLE	04/06/94	0001	UG/L		26500.	J	26500.	I
	04/06/94	1001	UG/L		28100.	J	28100.	I
MAGNESIUM, TOTAL	04/06/94	0001	UG/L		27800.	J	27800.	I
	04/06/94	1001	UG/L		28800.	J	28800.	I
MANGANESE, SOLUBLE	04/06/94	0001	UG/L	B	1.0		1.0	I
	04/06/94	1001	UG/L	B	1.0		1.0	I
MANGANESE, TOTAL	04/06/94	0001	UG/L	B	5.6		5.6	I
	04/06/94	1001	UG/L	B	4.4		4.4	I
NITRATE NITRITE	04/06/94	0001	MG/L		1.6		1.6	I
	04/06/94	1001	MG/L		1.5		1.5	I
PLUTONIUM-239/240	04/06/94	1001	PCI/L		0.0050		0.0050	I
POTASSIUM, SOLUBLE	04/06/94	0001	UG/L	B	2150.		2150.	I
	04/06/94	1001	UG/L	B	2260.		2260.	I
POTASSIUM, TOTAL	04/06/94	0001	UG/L	B	2310.		2310.	I
	04/06/94	1001	UG/L	B	2420.		2420.	I
POTASSIUM-40	04/06/94	1001	PCI/L		200		200	I
RADIUM-226	04/06/94	0001	PCI/L		0.54		0.54	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0156
NORTH COORDINATE: 596183.82 FT
EAST COORDINATE: 1494547.14 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY SAND OR SILTY GRAVELLY SAND (SM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
RADIUM-226	04/06/94	1001	PCI/L		0.21		0.21	I
SODIUM, SOLUBLE	04/06/94	0001	UG/L		31000.		31000.	I
	04/06/94	1001	UG/L		33000.		33000.	I
SODIUM, TOTAL	04/06/94	0001	UG/L		32200.		32200.	I
	04/06/94	1001	UG/L		33100.		33100.	I
THORIUM-230	04/06/94	0001	PCI/L		0.028		0.028	I
THORIUM-232	04/06/94	1001	PCI/L		0.034		0.034	I
TOTAL DISSOLVED SOLIDS	04/06/94	0001	MG/L		497.		497.	I
	04/06/94	1001	MG/L		480.		480.	I
TOTAL KJELDAHL NITROGEN	04/06/94	0001	MG/L		0.25		0.25	I
	04/06/94	1001	MG/L		0.27		0.27	I
TOTAL ORGANIC CARBON	04/06/94	0001	MG/L		1.2		1.2	I
	04/06/94	1001	MG/L		1.1		1.1	I
TOTAL PHOSPHATE	04/06/94	1001	MG/L		0.055	J	0.055	I
TRITIUM	04/06/94	0001	PCI/L		550.		550.	I
URANIUM-234	04/06/94	0001	PCI/L		0.156		0.156	I
	04/06/94	1001	PCI/L		0.086		0.086	I
URANIUM-238	04/06/94	0001	PCI/L		0.103	J	0.103	I
	04/06/94	1001	PCI/L		0.159	J	0.159	I
VANADIUM, SOLUBLE	04/06/94	0001	UG/L		12.8		12.8	I
	04/06/94	1001	UG/L		13.0		13.0	I
VANADIUM, TOTAL	04/06/94	0001	UG/L		13.3		13.3	I
	04/06/94	1001	UG/L		13.8		13.8	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0157
NORTH COORDINATE: 596173.53 FT
EAST COORDINATE: 1494548.21 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: GRAVEL OR SANDY GRAVEL, POORLY GRADED (GP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMMONIA	04/11/94	0001	MG/L		1.6		1.6	I
	04/11/94	1001	MG/L		1.5		1.5	I
ANTIMONY, SOLUBLE	04/11/94	0001	UG/L	B	0.60	J	0.60	I
BARIUM, SOLUBLE	04/11/94	0001	UG/L	B	107.	J	107.	I
	04/11/94	1001	UG/L	B	96.1	J	96.1	I
BARIUM, TOTAL	04/11/94	0001	UG/L	B	106.	J	106.	I
	04/11/94	1001	UG/L	B	97.8	J	97.8	I
BISMUTH, TOTAL	04/11/94	1001	UG/L	B	34.7	J	34.7	I
CALCIUM, SOLUBLE	04/11/94	0001	UG/L		88600.		88600.	I
	04/11/94	1001	UG/L		80400.		80400.	I
CALCIUM, TOTAL	04/11/94	0001	UG/L		87600.		87600.	I
	04/11/94	1001	UG/L		81200.		81200.	I
CHLORIDE	04/11/94	0001	MG/L		102.		102.	I
	04/11/94	1001	MG/L		97.1		97.1	I
COBALT, TOTAL	04/11/94	0001	UG/L	B	1.1	J	1.1	I
COPPER, SOLUBLE	04/11/94	0001	UG/L	B	1.3	J	1.3	I
	04/11/94	1001	UG/L	B	1.9	J	1.9	I
COPPER, TOTAL	04/11/94	0001	UG/L	B	1.5	J	1.5	I
	04/11/94	1001	UG/L	B	0.85	J	0.85	I
FLUORIDE	04/11/94	0001	MG/L		0.17		0.17	I
	04/11/94	1001	MG/L		0.17		0.17	I
IRON, SOLUBLE	04/11/94	0001	UG/L	B	7.8	J	7.8	I
	04/11/94	1001	UG/L	B	32.4	J	32.4	I
IRON, TOTAL	04/11/94	0001	UG/L	B	10.1	J	10.1	I
	04/11/94	1001	UG/L	B	16.7	J	16.7	I
MAGNESIUM, SOLUBLE	04/11/94	0001	UG/L		32800.		32800.	I
	04/11/94	1001	UG/L		29600.		29600.	I
MAGNESIUM, TOTAL	04/11/94	0001	UG/L		32500.		32500.	I
	04/11/94	1001	UG/L		29800.		29800.	I
MANGANESE, SOLUBLE	04/11/94	0001	UG/L		128.		128.	I
	04/11/94	1001	UG/L		118.		118.	I
MANGANESE, TOTAL	04/11/94	0001	UG/L		125.		125.	I
	04/11/94	1001	UG/L		121.		121.	I
MOLYBDENUM	04/11/94	0001	UG/L	B	2.7		2.7	I
	04/11/94	1001	UG/L	B	2.2		2.2	I
MOLYBDENUM, SOLUBLE	04/11/94	0001	UG/L	B	2.1		2.1	I
	04/11/94	1001	UG/L	B	2.1		2.1	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0157
NORTH COORDINATE: 596173.53 FT
EAST COORDINATE: 1494548.21 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: GRAVEL OR SANDY GRAVEL, POORLY GRADED (GP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
NICKEL, SOLUBLE	04/11/94	0001	UG/L	B	3.2		3.2	I
	04/11/94	1001	UG/L	B	2.5		2.5	I
NICKEL, TOTAL	04/11/94	1001	UG/L	B	3.2	J	3.2	I
POTASSIUM, SOLUBLE	04/11/94	0001	UG/L	B	3060.	J	3060.	I
	04/11/94	1001	UG/L	B	2740.	J	2740.	I
POTASSIUM, TOTAL	04/11/94	0001	UG/L	B	3120.	J	3120.	I
	04/11/94	1001	UG/L	B	2800.	J	2800.	I
RADIUM-226	04/11/94	0001	PCI/L		0.66		0.66	I
	04/11/94	1001	PCI/L		0.39		0.39	I
SODIUM, SOLUBLE	04/11/94	0001	UG/L		60400.	J	60400.	I
	04/11/94	1001	UG/L		56200.	J	56200.	I
SODIUM, TOTAL	04/11/94	0001	UG/L		60500.	J	60500.	I
	04/11/94	1001	UG/L		54700.	J	54700.	I
SULFATE	04/11/94	0001	MG/L		55.7		55.7	I
	04/11/94	1001	MG/L		55.7		55.7	I
THORIUM-228	04/11/94	0001	PCI/L		0.096		0.096	I
THORIUM-230	04/11/94	0001	PCI/L		0.084	J	0.084	I
TOTAL DISSOLVED SOLIDS	04/11/94	0001	MG/L		504.		504.	I
	04/11/94	1001	MG/L		513.		513.	I
TOTAL KJELDAHL NITROGEN	04/11/94	0001	MG/L		1.6		1.6	I
	04/11/94	1001	MG/L		1.7		1.7	I
TOTAL ORGANIC CARBON	04/11/94	0001	MG/L		1.0		1.0	I
	04/11/94	1001	MG/L		1.0		1.0	I
TRITIUM	04/11/94	0001	PCI/L		1090.		1090.	I
	04/11/94	1001	PCI/L		1210.		1210.	I
URANIUM-234	04/11/94	0001	PCI/L		0.199		0.199	I
	04/11/94	1001	PCI/L		0.142		0.142	I
URANIUM-238	04/11/94	0001	PCI/L		0.157		0.157	I
	04/11/94	1001	PCI/L		0.179		0.179	I
VANADIUM, SOLUBLE	04/11/94	0001	UG/L	B	9.9		9.9	I
	04/11/94	1001	UG/L	B	10.		10.	I
VANADIUM, TOTAL	04/11/94	0001	UG/L		11.2		11.2	I
	04/11/94	1001	UG/L	B	9.8		9.8	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0158
NORTH COORDINATE: 594037.32 FT
EAST COORDINATE: 1495277.53 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
BARIUM, SOLUBLE	03/25/94	0001	UG/L	B	74.2	J	74.2	I
BARIUM, TOTAL	03/25/94	0001	UG/L	B	70.3	J	70.3	I
CALCIUM, SOLUBLE	03/25/94	0001	UG/L		101000.	J	101000.	I
CALCIUM, TOTAL	03/25/94	0001	UG/L		96900.	J	96900.	I
CHLORIDE	03/25/94	0001	MG/L		134.		134.	I
COPPER, SOLUBLE	03/25/94	0001	UG/L	B	0.98	J	0.98	I
FLUORIDE	03/25/94	0001	MG/L		0.20		0.20	I
MAGNESIUM, SOLUBLE	03/25/94	0001	UG/L		33300.	J	33300.	I
MAGNESIUM, TOTAL	03/25/94	0001	UG/L		31900.	J	31900.	I
MANGANESE, SOLUBLE	03/25/94	0001	UG/L	B	1.6		1.6	I
MANGANESE, TOTAL	03/25/94	0001	UG/L	B	1.4		1.4	I
NICKEL, SOLUBLE	03/25/94	0001	UG/L	B	3.0		3.0	I
NITRATE NITRITE	03/25/94	0001	MG/L		8.8		8.8	I
POTASSIUM, SOLUBLE	03/25/94	0001	UG/L	B	2380.		2380.	I
POTASSIUM, TOTAL	03/25/94	0001	UG/L	B	2380.		2380.	I
SODIUM, SOLUBLE	03/25/94	0001	UG/L		419000.		REJECT	I
SODIUM, TOTAL	03/25/94	0001	UG/L		417000.		REJECT	I
SULFATE	03/25/94	0001	MG/L		86.5		86.5	I
THORIUM-228	03/25/94	0001	PCI/L		0.19		0.19	I
THORIUM-230	03/25/94	0001	PCI/L		0.49		0.49	I
TOTAL DISSOLVED SOLIDS	03/25/94	0001	MG/L		679.		679.	I
TOTAL ORGANIC CARBON	03/25/94	0001	MG/L		6.5		6.5	I
TOTAL PHOSPHATE	03/25/94	0001	MG/L		0.065		0.065	I
TOTAL SUSPENDED SOLIDS	03/25/94	0001	MG/L		9.0		9.0	I
TRITIUM	03/25/94	0001	PCI/L		1020.		1020.	I
URANIUM-234	03/25/94	0001	PCI/L		0.152	J	0.152	I
URANIUM-235	03/25/94	0001	PCI/L		0.014		0.014	I
URANIUM-238	03/25/94	0001	PCI/L		0.186		0.186	I
VANADIUM, SOLUBLE	03/25/94	0001	UG/L	B	9.1	J	9.1	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0158
NORTH COORDINATE: 594037.32 FT
EAST COORDINATE: 1495277.53 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
VANADIUM, TOTAL	03/25/94	0001	UG/L	B	9.3	J	9.3	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0159
NORTH COORDINATE: 594038.51 FT
EAST COORDINATE: 1494169.57 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMERICIUM-241	04/01/94	0001	PCI/L	U	0.009		0.011	I
AMMONIA	04/01/94	0001	MG/L		0.62		0.62	I
ANTIMONY, SOLUBLE	04/01/94	0001	UG/L		3.4	J	3.4	I
ARSENIC, SOLUBLE	04/01/94	0001	UG/L	B	5.2	J	5.2	I
ARSENIC, TOTAL	04/01/94	0001	UG/L		22.6	J	22.6	I
BARIUM, SOLUBLE	04/01/94	0001	UG/L	B	120.		120.	I
BARIUM, TOTAL	04/01/94	0001	UG/L		307.		307.	I
CALCIUM, SOLUBLE	04/01/94	0001	UG/L		68700.		68700.	I
CALCIUM, TOTAL	04/01/94	0001	UG/L		76700.		76700.	I
CHLORIDE	04/01/94	0001	MG/L		66.6		66.6	I
CHROMIUM, TOTAL	04/01/94	0001	UG/L	B	5.1		5.1	I
FLUORIDE	04/01/94	0001	MG/L		0.33		0.33	I
IRON, SOLUBLE	04/01/94	0001	UG/L		759.		759.	I
IRON, TOTAL	04/01/94	0001	UG/L		5890.		5890.	I
MAGNESIUM, SOLUBLE	04/01/94	0001	UG/L		21300.		21300.	I
MAGNESIUM, TOTAL	04/01/94	0001	UG/L		23000.		23000.	I
MANGANESE, SOLUBLE	04/01/94	0001	UG/L		115.		115.	I
MANGANESE, TOTAL	04/01/94	0001	UG/L		156.		156.	I
MOLYBDENUM	04/01/94	0001	UG/L	B	2.5		2.5	I
MOLYBDENUM, SOLUBLE	04/01/94	0001	UG/L	B	4.9		4.9	I
NITRATE NITRITE	04/01/94	0001	MG/L		0.34		0.34	I
PHENOL	04/01/94	0001	UG/L	J	0.5	J	0.5	I
PLUTONIUM-238	04/01/94	0001	PCI/L		0.006		0.006	I
POTASSIUM, SOLUBLE	04/01/94	0001	UG/L	B	2220.		2220.	I
POTASSIUM, TOTAL	04/01/94	0001	UG/L	B	2370.		2370.	I
RADIUM-226	04/01/94	0001	PCI/L		0.73		0.73	I
SODIUM, SOLUBLE	04/01/94	0001	UG/L		30500.		30500.	I
SODIUM, TOTAL	04/01/94	0001	UG/L		35100.		35100.	I
SULFATE	04/01/94	0001	MG/L		51.4		51.4	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0159
NORTH COORDINATE: 594038.51 FT
EAST COORDINATE: 1494169.57 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
THORIUM-228	04/01/94	0001	PCI/L		0.314	J	0.314	I
THORIUM-230	04/01/94	0001	PCI/L		0.039	J	0.039	I
THORIUM-232	04/01/94	0001	PCI/L		0.007		0.007	I
TOTAL DISSOLVED SOLIDS	04/01/94	0001	MG/L		447.		447.	I
TOTAL KJELDAHL NITROGEN	04/01/94	0001	MG/L		0.71		0.71	I
TOTAL ORGANIC CARBON	04/01/94	0001	MG/L		1.7		1.7	I
TOTAL PHOSPHATE	04/01/94	0001	MG/L		1.9		1.9	I
TOTAL SUSPENDED SOLIDS	04/01/94	0001	MG/L		24.0		24.0	I
URANIUM-234	04/01/94	0001	PCI/L		0.080		0.080	I
URANIUM-238	04/01/94	0001	PCI/L		0.052		0.052	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0160
NORTH COORDINATE: 594049.08 FT
EAST COORDINATE: 1494168.42 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: GRAVEL OR SANDY GRAVEL, POORLY GRADED (GP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMMONIA	04/01/94	0001	MG/L		1.2		1.2	I
ARSENIC, SOLUBLE	04/01/94	0001	UG/L		35.2		35.2	I
ARSENIC, TOTAL	04/01/94	0001	UG/L		22.7		22.7	I
BARIUM, SOLUBLE	04/01/94	0001	UG/L		232.		232.	I
BARIUM, TOTAL	04/01/94	0001	UG/L		238.		238.	I
CALCIUM, SOLUBLE	04/01/94	0001	UG/L		67600.		67600.	I
CALCIUM, TOTAL	04/01/94	0001	UG/L		68700.		68700.	I
CHLORIDE	04/01/94	0001	MG/L		35.4		35.4	I
FLUORIDE	04/01/94	0001	MG/L		0.36		0.36	I
IRON, SOLUBLE	04/01/94	0001	UG/L		1120.		1120.	I
IRON, TOTAL	04/01/94	0001	UG/L		1170.		1170.	I
MAGNESIUM, SOLUBLE	04/01/94	0001	UG/L		25300.		25300.	I
MAGNESIUM, TOTAL	04/01/94	0001	UG/L		25700.		25700.	I
MANGANESE, SOLUBLE	04/01/94	0001	UG/L		141.		141.	I
MANGANESE, TOTAL	04/01/94	0001	UG/L		144.		144.	I
MOLYBDENUM	04/01/94	0001	UG/L	B	6.6		6.6	I
MOLYBDENUM, SOLUBLE	04/01/94	0001	UG/L	B	6.0		6.0	I
NITRATE NITRITE	04/01/94	0001	MG/L		0.047		0.047	I
POTASSIUM, SOLUBLE	04/01/94	0001	UG/L	B	2590.		2590.	I
POTASSIUM, TOTAL	04/01/94	0001	UG/L	B	2660.		2660.	I
RADIUM-226	04/01/94	0001	PCI/L		0.56		0.56	I
SODIUM, SOLUBLE	04/01/94	0001	UG/L		27700.		27700.	I
SODIUM, TOTAL	04/01/94	0001	UG/L		28100.		28100.	I
SULFATE	04/01/94	0001	MG/L		48.0		48.0	I
THORIUM-228	04/01/94	0001	PCI/L		0.059		0.059	I
THORIUM-230	04/01/94	0001	PCI/L		0.021		0.021	I
TOTAL DISSOLVED SOLIDS	04/01/94	0001	MG/L		437.		437.	I
TOTAL KJELDAHL NITROGEN	04/01/94	0001	MG/L		1.5		1.5	I
TOTAL ORGANIC CARBON	04/01/94	0001	MG/L		2.0		2.0	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0160
NORTH COORDINATE: 594049.08 FT
EAST COORDINATE: 1494168.42 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: GRAVEL OR SANDY GRAVEL, POORLY GRADED (GP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL PHOSPHATE	04/01/94	0001	MG/L		0.59		0.59	I
TOTAL SUSPENDED SOLIDS	04/01/94	0001	MG/L		6.0		6.0	I
URANIUM-234	04/01/94	0001	PCI/L		0.063		0.063	I
URANIUM-238	04/01/94	0001	PCI/L		0.053		0.053	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0271 71-2
NORTH COORDINATE: 596154.56 FT
EAST COORDINATE: 1495028.58 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	04/07/94	0001	UG/L		1.7		1.7	I
	04/07/94	1001	UG/L		1.4		1.4	I
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHA	04/07/94	0001	UG/L		2.3	J	2.3	I
	04/07/94	1001	UG/L		2.6	J	2.6	I
1,2-CIS-DICHLOROETHENE	04/07/94	0001	UG/L		1.3	J	1.3	I
	04/07/94	1001	UG/L		1.2		1.2	I
AMERICIUM-241	04/07/94	1001	PCI/L		0.025	J	0.025	I
BARIUM, SOLUBLE	04/07/94	0001	UG/L	B	98.7	J	98.7	I
	04/07/94	1001	UG/L	B	86.9	J	86.9	I
BARIUM, TOTAL	04/07/94	0001	UG/L	B	85.8	J	85.8	I
	04/07/94	1001	UG/L	B	85.8	J	85.8	I
CALCIUM, SOLUBLE	04/07/94	0001	UG/L		117000.		117000.	I
	04/07/94	1001	UG/L		103000.		103000.	I
CALCIUM, TOTAL	04/07/94	0001	UG/L		105000.		105000.	I
	04/07/94	1001	UG/L		100000.		100000.	I
CHLORIDE	04/07/94	0001	MG/L		132.		132.	I
	04/07/94	1001	MG/L		128.		128.	I
COPPER, SOLUBLE	04/07/94	0001	UG/L	B	9.2		9.2	I
	04/07/94	1001	UG/L	B	8.9		8.9	I
COPPER, TOTAL	04/07/94	0001	UG/L	B	7.5		7.5	I
	04/07/94	1001	UG/L	B	8.7		8.7	I
FLUORIDE	04/07/94	0001	MG/L		0.14		0.14	I
	04/07/94	1001	MG/L		0.15		0.15	I
MAGNESIUM, SOLUBLE	04/07/94	0001	UG/L		37600.	J	37600.	I
	04/07/94	1001	UG/L		33400.	J	33400.	I
MAGNESIUM, TOTAL	04/07/94	0001	UG/L		33200.		33200.	I
	04/07/94	1001	UG/L		32900.		32900.	I
MANGANESE, SOLUBLE	04/07/94	0001	UG/L	B	13.7		13.7	I
	04/07/94	1001	UG/L	B	11.8		11.8	I
MANGANESE, TOTAL	04/07/94	0001	UG/L	B	11.4		11.4	I
	04/07/94	1001	UG/L	B	11.6		11.6	I
MOLYBDENUM	04/07/94	1001	UG/L	B	1.6	J	1.6	I
MOLYBDENUM, SOLUBLE	04/07/94	0001	UG/L	B	2.0		2.0	I
	04/07/94	1001	UG/L	B	1.7		1.7	I
NITRATE NITRITE	04/07/94	0001	MG/L		2.5		2.5	I
	04/07/94	1001	MG/L		2.5		2.5	I
PLUTONIUM-239/240	04/07/94	0001	PCI/L		0.0065	J	0.0065	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0271 71-2
NORTH COORDINATE: 596154.56 FT
EAST COORDINATE: 1495028.58 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
PLUTONIUM-239/240	04/07/94	1001	PCI/L		0.0104	J	0.0104	I
POTASSIUM, SOLUBLE	04/07/94	0001	UG/L	B	3050.		3050.	I
	04/07/94	1001	UG/L	B	2990.		2990.	I
POTASSIUM, TOTAL	04/07/94	0001	UG/L	B	2990.		2990.	I
	04/07/94	1001	UG/L	B	2930.		2930.	I
RADIUM-226	04/07/94	0001	PCI/L		0.40		0.40	I
SODIUM, SOLUBLE	04/07/94	0001	UG/L		84200.		84200.	I
	04/07/94	1001	UG/L		81200.		81200.	I
SODIUM, TOTAL	04/07/94	0001	UG/L		84200.		84200.	I
	04/07/94	1001	UG/L		78600.		78600.	I
SULFATE	04/07/94	0001	MG/L		44.9		44.9	I
	04/07/94	1001	MG/L		54.0		54.0	I
TETRACHLOROETHENE	04/07/94	0001	UG/L		0.60		0.60	I
	04/07/94	1001	UG/L		0.53		0.53	I
TIN, TOTAL	04/07/94	0001	UG/L	B	8.7	J	8.7	I
TOTAL DISSOLVED SOLIDS	04/07/94	0001	MG/L		719.		719.	I
	04/07/94	1001	MG/L		685.		685.	I
TOTAL ORGANIC CARBON	04/07/94	0001	MG/L		0.85		0.85	I
	04/07/94	1001	MG/L		0.79		0.79	I
TOTAL PHOSPHATE	04/07/94	0001	MG/L		0.22	J	0.22	I
TRICHLOROETHENE	04/07/94	0001	UG/L		1.3	J	1.3	I
	04/07/94	1001	UG/L		1.2	J	1.2	I
TRITIUM	04/07/94	0001	PCI/L		2070.		2070.	I
	04/07/94	1001	PCI/L		2170.		2170.	I
URANIUM-234	04/07/94	0001	PCI/L		0.26		0.26	I
	04/07/94	1001	PCI/L		0.25		0.25	I
URANIUM-238	04/07/94	0001	PCI/L		0.15		0.15	I
	04/07/94	1001	PCI/L		0.131		0.131	I
VANADIUM, SOLUBLE	04/07/94	0001	UG/L		10.9		10.9	I
	04/07/94	1001	UG/L		11.2		11.2	I
VANADIUM, TOTAL	04/07/94	0001	UG/L		10.6		10.6	I
	04/07/94	1001	UG/L		10.9		10.9	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0301
NORTH COORDINATE: 597872.00 FT
EAST COORDINATE: 1494178.20 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LEAN CLAYS, SANDY CLAYS, OR GRAVELLY CLAYS (CL)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	04/04/94	0001	UG/L		1590.		1590.	I
AMERICIUM-241	04/04/94	0001	PCI/L		0.018		0.180	I
ANTIMONY, SOLUBLE	04/04/94	0001	UG/L	B	0.75	J	0.75	I
BARIUM, SOLUBLE	04/04/94	0001	UG/L	B	149.		149.	I
BARIUM, TOTAL	04/04/94	0001	UG/L	B	145.		145.	I
BERYLLIUM, TOTAL	04/04/94	0001	UG/L	B	0.48		0.48	I
CALCIUM, SOLUBLE	04/04/94	0001	UG/L		72300.		72300.	I
CALCIUM, TOTAL	04/04/94	0001	UG/L		133000.		133000.	I
CHLORIDE	04/04/94	0001	MG/L		190.		190.	I
CHROMIUM, TOTAL	04/04/94	0001	UG/L		48.7		48.7	I
COBALT, SOLUBLE	04/04/94	0001	UG/L	B	1.4		1.4	I
COBALT, TOTAL	04/04/94	0001	UG/L	B	4.2		4.2	I
COPPER, TOTAL	04/04/94	0001	UG/L	B	5.3		5.3	I
FLUORIDE	04/04/94	0001	MG/L		0.31		0.31	I
IRON, SOLUBLE	04/04/94	0001	UG/L		116.		116.	I
IRON, TOTAL	04/04/94	0001	UG/L		3860.		3860.	I
LEAD, TOTAL	04/04/94	0001	UG/L		4.3	J	4.3	I
MAGNESIUM, SOLUBLE	04/04/94	0001	UG/L		26500.		26500.	I
MAGNESIUM, TOTAL	04/04/94	0001	UG/L		53500.		53500.	I
MANGANESE, SOLUBLE	04/04/94	0001	UG/L		330.		330.	I
MANGANESE, TOTAL	04/04/94	0001	UG/L		524.		524.	I
NICKEL, SOLUBLE	04/04/94	0001	UG/L	B	4.7		4.7	I
NICKEL, TOTAL	04/04/94	0001	UG/L	B	21.3		21.3	I
POTASSIUM, SOLUBLE	04/04/94	0001	UG/L	B	1400.		1400.	I
POTASSIUM, TOTAL	04/04/94	0001	UG/L	B	1680.		1680.	I
RADIUM-226	04/04/94	0001	PCI/L		0.23		0.23	I
SODIUM, SOLUBLE	04/04/94	0001	UG/L		76000.		76000.	I
SODIUM, TOTAL	04/04/94	0001	UG/L		67900.		67900.	I
THORIUM-228	04/04/94	0001	PCI/L		0.218	J	0.218	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0301
NORTH COORDINATE: 597872.00 FT
EAST COORDINATE: 1494178.20 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LEAN CLAYS, SANDY CLAYS, OR GRAVELLY CLAYS (CL)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
THORIUM-230	04/04/94	0001	PCI/L		0.256	J	0.256	I
THORIUM-232	04/04/94	0001	PCI/L		0.060		0.060	I
TOTAL DISSOLVED SOLIDS	04/04/94	0001	MG/L		563.		563.	I
TOTAL KJELDAHL NITROGEN	04/04/94	0001	MG/L		0.15		0.15	I
TOTAL ORGANIC CARBON	04/04/94	0001	MG/L		0.60		0.60	I
TOTAL PHOSPHATE	04/04/94	0001	MG/L		0.29		0.29	I
TOTAL SUSPENDED SOLIDS	04/04/94	0001	MG/L		235.		235.	I
URANIUM-234	04/04/94	0001	PCI/L		0.475		0.475	I
URANIUM-235	04/04/94	0001	PCI/L		0.021		0.021	I
URANIUM-238	04/04/94	0001	PCI/L		0.237		0.237	I
VANADIUM, TOTAL	04/04/94	0001	UG/L		21.0		21.0	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0302
NORTH COORDINATE: 597099.47 FT
EAST COORDINATE: 1493921.81 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: CLAYEY GRAVEL OR CLAYEY SANDY GRAVEL (GC)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	04/05/94	0001	UG/L		240.	J	240.	I
ARSENIC, SOLUBLE	04/05/94	0001	UG/L	B	5.0		5.0	I
ARSENIC, TOTAL	04/05/94	0001	UG/L	B	6.0		6.0	I
BARIUM, SOLUBLE	04/05/94	0001	UG/L		354.	J	354.	I
BARIUM, TOTAL	04/05/94	0001	UG/L		354.	J	354.	I
CALCIUM, SOLUBLE	04/05/94	0001	UG/L		87800.		87800.	I
CALCIUM, TOTAL	04/05/94	0001	UG/L		89500.		89500.	I
CHLORIDE	04/05/94	0001	MG/L		113.		113.	I
COPPER, SOLUBLE	04/05/94	0001	UG/L	B	1.7		1.7	I
COPPER, TOTAL	04/05/94	0001	UG/L	B	2.2		2.2	I
FLUORIDE	04/05/94	0001	MG/L		0.25		0.25	I
IRON, SOLUBLE	04/05/94	0001	UG/L		954.	J	954.	I
IRON, TOTAL	04/05/94	0001	UG/L		1550.	J	1550.	I
LEAD, TOTAL	04/05/94	0001	UG/L	B	1.3	J	1.3	I
MAGNESIUM, SOLUBLE	04/05/94	0001	UG/L		27000.	J	27000.	I
MAGNESIUM, TOTAL	04/05/94	0001	UG/L		27400.	J	27400.	I
MANGANESE, SOLUBLE	04/05/94	0001	UG/L		42.6	J	42.6	I
MANGANESE, TOTAL	04/05/94	0001	UG/L		53.5	J	53.5	I
MOLYBDENUM	04/05/94	0001	UG/L	B	3.4		3.4	I
MOLYBDENUM, SOLUBLE	04/05/94	0001	UG/L	B	3.0		3.0	I
POTASSIUM, SOLUBLE	04/05/94	0001	UG/L	B	1980.		1980.	I
POTASSIUM, TOTAL	04/05/94	0001	UG/L	B	2030.		2030.	I
RADIUM-226	04/05/94	0001	PCI/L		0.63		0.63	I
SODIUM, SOLUBLE	04/05/94	0001	UG/L		48700.		48700.	I
SODIUM, TOTAL	04/05/94	0001	UG/L		47600.		47600.	I
THORIUM-228	04/05/94	0001	PCI/L		0.097		0.097	I
TOTAL DISSOLVED SOLIDS	04/05/94	0001	MG/L		563.		563.	I
TOTAL KJELDAHL NITROGEN	04/05/94	0001	MG/L		0.22		0.22	I
TOTAL ORGANIC CARBON	04/05/94	0001	MG/L		0.95		0.95	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0302
NORTH COORDINATE: 597099.47 FT
EAST COORDINATE: 1493921.81 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: CLAYEY GRAVEL OR CLAYEY SANDY GRAVEL (GC)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL SUSPENDED SOLIDS	04/05/94	0001	MG/L		20.0		20.0	I
TRITIUM	04/05/94	0001	PCI/L		4490.		4490.	I
URANIUM-234	04/05/94	0001	PCI/L		0.32		0.32	I
URANIUM-238	04/05/94	0001	PCI/L		0.17		0.17	I
ZINC, TOTAL	04/05/94	0001	UG/L		23.5	J	23.5	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0303
NORTH COORDINATE: 597134.54 FT
EAST COORDINATE: 1494493.75 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: TILL (TI)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	04/01/94	0001	UG/L		1680.		1680.	I
AMMONIA	04/01/94	0001	MG/L		2.9		2.9	I
BARIUM, SOLUBLE	04/01/94	0001	UG/L	B	193.		193.	I
BARIUM, TOTAL	04/01/94	0001	UG/L	B	196.		196.	I
CADMIUM, SOLUBLE	04/01/94	0001	UG/L	B	0.99		0.99	I
CALCIUM, SOLUBLE	04/01/94	0001	UG/L		95100.		95100.	I
CALCIUM, TOTAL	04/01/94	0001	UG/L		95400.		95400.	I
CHLORIDE	04/01/94	0001	MG/L		136.		136.	I
CHROMIUM, TOTAL	04/01/94	0001	UG/L	B	2.0		2.0	I
COBALT, TOTAL	04/01/94	0001	UG/L	B	2.1		2.1	I
COPPER, TOTAL	04/01/94	0001	UG/L	B	4.1		4.1	I
FLUORIDE	04/01/94	0001	MG/L		0.66		0.66	I
IRON, SOLUBLE	04/01/94	0001	UG/L		4060.		4060.	I
IRON, TOTAL	04/01/94	0001	UG/L		7810.		7810.	I
LEAD, SOLUBLE	04/01/94	0001	UG/L	B	0.90	J	0.90	I
LEAD, TOTAL	04/01/94	0001	UG/L		3.0	J	3.0	I
MAGNESIUM, SOLUBLE	04/01/94	0001	UG/L		32900.		32900.	I
MAGNESIUM, TOTAL	04/01/94	0001	UG/L		32100.		32100.	I
MANGANESE, SOLUBLE	04/01/94	0001	UG/L		348.		348.	I
MANGANESE, TOTAL	04/01/94	0001	UG/L		402.		402.	I
MOLYBDENUM	04/01/94	0001	UG/L	B	4.5		4.5	I
MOLYBDENUM, SOLUBLE	04/01/94	0001	UG/L	B	5.4		5.4	I
NICKEL, TOTAL	04/01/94	0001	UG/L	B	5.0		5.0	I
POTASSIUM, SOLUBLE	04/01/94	0001	UG/L	B	1500.		1500.	I
POTASSIUM, TOTAL	04/01/94	0001	UG/L	B	1570.		1570.	I
RADIUM-226	04/01/94	0001	PCI/L		0.22		0.22	I
SODIUM, SOLUBLE	04/01/94	0001	UG/L		23800.		23800.	I
SODIUM, TOTAL	04/01/94	0001	UG/L		21700.		21700.	I
THORIUM-228	04/01/94	0001	PCI/L		0.287		0.287	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0303
NORTH COORDINATE: 597134.54 FT
EAST COORDINATE: 1494493.75 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: TILL (TI)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
THORIUM-230	04/01/94	0001	PCI/L		0.237		0.237	I
THORIUM-232	04/01/94	0001	PCI/L		0.141		0.141	I
TOTAL DISSOLVED SOLIDS	04/01/94	0001	MG/L		596.		596.	I
TOTAL KJELDAHL NITROGEN	04/01/94	0001	MG/L		3.1		3.1	I
TOTAL ORGANIC CARBON	04/01/94	0001	MG/L		0.90		0.90	I
TOTAL PHOSPHATE	04/01/94	0001	MG/L		0.36		0.36	I
TOTAL SUSPENDED SOLIDS	04/01/94	0001	MG/L		80.0		80.0	I
TRITIUM	04/01/94	0001	PCI/L		10270.		10270.	I
URANIUM-234	04/01/94	0001	PCI/L		0.145		0.145	I
URANIUM-238	04/01/94	0001	PCI/L		0.185		0.185	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0304
NORTH COORDINATE: 596179.38 FT
EAST COORDINATE: 1494546.74 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LEAN CLAYS, SANDY CLAYS, OR GRAVELLY CLAYS (CL)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, SOLUBLE	04/05/94	0001	UG/L		40700.	J	40700.	I
ALUMINUM, TOTAL	04/05/94	0001	UG/L		49700.	J	49700.	I
AMMONIA	04/05/94	0001	MG/L		0.14		0.14	I
ARSENIC, SOLUBLE	04/05/94	0001	UG/L		3.3		3.3	I
ARSENIC, TOTAL	04/05/94	0001	UG/L	B	5.2	J	5.2	I
BARIUM, SOLUBLE	04/05/94	0001	UG/L		538.	J	538.	I
BARIUM, TOTAL	04/05/94	0001	UG/L		662.	J	662.	I
BERYLLIUM, SOLUBLE	04/05/94	0001	UG/L		2.0		2.0	I
BERYLLIUM, TOTAL	04/05/94	0001	UG/L		2.4	J	2.4	I
CADMIUM, SOLUBLE	04/05/94	0001	UG/L	B	1.4		1.4	I
CADMIUM, TOTAL	04/05/94	0001	UG/L	B	1.8	J	1.8	I
CALCIUM, SOLUBLE	04/05/94	0001	UG/L		224000.		224000.	I
CALCIUM, TOTAL	04/05/94	0001	UG/L		323000.		323000.	I
CHLORIDE	04/05/94	0001	MG/L		52.7		52.7	I
CHROMIUM, SOLUBLE	04/05/94	0001	UG/L		52.9	J	52.9	I
CHROMIUM, TOTAL	04/05/94	0001	UG/L		65.8	J	65.8	I
COBALT, SOLUBLE	04/05/94	0001	UG/L	B	28.3		28.3	I
COBALT, TOTAL	04/05/94	0001	UG/L	B	35.2	J	35.2	I
COPPER, SOLUBLE	04/05/94	0001	UG/L		87.6		87.6	I
COPPER, TOTAL	04/05/94	0001	UG/L		113.	J	113.	I
FLUORIDE	04/05/94	0001	MG/L		0.24		0.24	I
IRON, SOLUBLE	04/05/94	0001	UG/L		51300.	J	51300.	I
IRON, TOTAL	04/05/94	0001	UG/L		64500.	J	64500.	I
LEAD, SOLUBLE	04/05/94	0001	UG/L		23.7		23.7	I
LEAD, TOTAL	04/05/94	0001	UG/L		51.0	J	51.0	I
LITHIUM, SOLUBLE	04/05/94	0001	UG/L	B	76.4	J	76.4	I
LITHIUM, TOTAL	04/05/94	0001	UG/L	B	90.4	J	90.4	I
MAGNESIUM, SOLUBLE	04/05/94	0001	UG/L		62300.	J	62300.	I
MAGNESIUM, TOTAL	04/05/94	0001	UG/L		79700.	J	79700.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0304
NORTH COORDINATE: 596179.38 FT
EAST COORDINATE: 1494546.74 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LEAN CLAYS, SANDY CLAYS, OR GRAVELLY CLAYS (CL)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
MANGANESE, SOLUBLE	04/05/94	0001	UG/L		1130.	J	1130.	I
MANGANESE, TOTAL	04/05/94	0001	UG/L		1600.	J	1600.	I
NICKEL, SOLUBLE	04/05/94	0001	UG/L		65.0		65.0	I
NICKEL, TOTAL	04/05/94	0001	UG/L		82.4	J	82.4	I
POTASSIUM, SOLUBLE	04/05/94	0001	UG/L		10800.		10800.	I
POTASSIUM, TOTAL	04/05/94	0001	UG/L		12600.		12600.	I
RADIUM-226	04/05/94	0001	PCI/L		5.94		5.94	I
SILVER, SOLUBLE	04/05/94	0001	UG/L	B	1.3		1.3	I
SILVER, TOTAL	04/05/94	0001	UG/L	B	1.9	J	1.9	I
SODIUM, SOLUBLE	04/05/94	0001	UG/L		9170.		9170.	I
SODIUM, TOTAL	04/05/94	0001	UG/L		9830.		9830.	I
THORIUM-228	04/05/94	0001	PCI/L		1.93		1.93	I
THORIUM-230	04/05/94	0001	PCI/L		1.56		1.56	I
THORIUM-232	04/05/94	0001	PCI/L		0.85		0.85	I
TIN, SOLUBLE	04/05/94	0001	UG/L	B	19.1		19.1	I
TIN, TOTAL	04/05/94	0001	UG/L	B	22.6	J	22.6	I
TOTAL DISSOLVED SOLIDS	04/05/94	0001	MG/L		454.		454.	I
TOTAL KJELDAHL NITROGEN	04/05/94	0001	MG/L		3.4		3.4	I
TOTAL ORGANIC CARBON	04/05/94	0001	MG/L		2.2		2.2	I
TOTAL PHOSPHATE	04/05/94	0001	MG/L		1.4		1.4	I
TOTAL SUSPENDED SOLIDS	04/05/94	0001	MG/L		2590.		2590.	I
TRITIUM	04/05/94	0001	PCI/L		3000.		3000.	I
URANIUM-234	04/05/94	0001	PCI/L		2.00		2.00	I
URANIUM-235	04/05/94	0001	PCI/L		0.075		0.075	I
URANIUM-238	04/05/94	0001	PCI/L		1.77		1.77	I
VANADIUM, SOLUBLE	04/05/94	0001	UG/L		68.1	J	68.1	I
VANADIUM, TOTAL	04/05/94	0001	UG/L		82.1	J	82.1	I
ZINC, SOLUBLE	04/05/94	0001	UG/L		157.	J	157.	I
ZINC, TOTAL	04/05/94	0001	UG/L		210.	J	210.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0305
NORTH COORDINATE: 596494.00 FT
EAST COORDINATE: 1495083.91 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: CLAYEY GRAVEL OR CLAYEY SANDY GRAVEL (GC)
HYDRAULIC FLOW RELATIONSHIP: NOT KNOWN (N)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,2-CIS-DICHLOROETHENE	03/10/94	0001	UG/L		13.		13.	I
ANTIMONY, SOLUBLE	03/10/94	0001	UG/L	B	2.4		2.4	I
BARIUM, SOLUBLE	03/10/94	0001	UG/L	B	132.		132.	I
BARIUM, TOTAL	03/10/94	0001	UG/L	B	141.		141.	I
CALCIUM, SOLUBLE	03/10/94	0001	UG/L		144000.		144000.	I
CALCIUM, TOTAL	03/10/94	0001	UG/L		147000.		147000.	I
CHLORIDE	03/10/94	0001	MG/L		184.		184.	I
CHROMIUM, TOTAL	03/10/94	0001	UG/L		273.		273.	I
COPPER, TOTAL	03/10/94	0001	UG/L	B	9.4		9.4	I
FLUORIDE	03/10/94	0001	MG/L		0.18		0.18	I
IRON, SOLUBLE	03/10/94	0001	UG/L	B	63.8		63.8	I
IRON, TOTAL	03/10/94	0001	UG/L		4310.		4310.	I
MAGNESIUM, SOLUBLE	03/10/94	0001	UG/L		45500.		45500.	I
MAGNESIUM, TOTAL	03/10/94	0001	UG/L		46000.		46000.	I
MANGANESE, SOLUBLE	03/10/94	0001	UG/L	B	11.2		11.2	I
MANGANESE, TOTAL	03/10/94	0001	UG/L		31.9		31.9	I
MOLYBDENUM	03/10/94	0001	UG/L	B	3.0		3.0	I
NICKEL, SOLUBLE	03/10/94	0001	UG/L		69.5		69.5	I
NICKEL, TOTAL	03/10/94	0001	UG/L		140.		140.	I
NITRATE NITRITE	03/10/94	0001	MG/L		2.2		2.2	I
POTASSIUM, SOLUBLE	03/10/94	0001	UG/L	B	3040.		3040.	I
POTASSIUM, TOTAL	03/10/94	0001	UG/L	B	3130.		3130.	I
SODIUM, SOLUBLE	03/10/94	0001	UG/L		104000.	J	104000.	I
SODIUM, TOTAL	03/10/94	0001	UG/L		104000.	J	104000.	I
SULFATE	03/10/94	0001	MG/L		97.4		97.4	I
TETRACHLOROETHENE	03/10/94	0001	UG/L		22.		22.	I
TETRACHLOROMETHANE (CCL4)	03/10/94	0001	UG/L		1.4	J	1.4	I
THORIUM-230	03/10/94	0001	PCI/L		1.95		1.95	I
TOTAL DISSOLVED SOLIDS	03/10/94	0001	MG/L		871.		871.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0305
NORTH COORDINATE: 596494.00 FT
EAST COORDINATE: 1495083.91 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: CLAYEY GRAVEL OR CLAYEY SANDY GRAVEL (GC)
HYDRAULIC FLOW RELATIONSHIP: NOT KNOWN (N)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL ORGANIC CARBON	03/10/94	0001	MG/L		0.89		0.89	I
TRICHLOROETHENE	03/10/94	0001	UG/L		26.	J	26.	I
TRICHLOROMETHANE (CHLOROFORM)	03/10/94	0001	UG/L		5.5	J	5.5	I
TRITIUM	03/10/94	0001	PCI/L		5070.		5070.	I
URANIUM-234	03/10/94	0001	PCI/L		0.515		0.515	I
URANIUM-235	03/10/94	0001	PCI/L		0.025		0.025	I
URANIUM-238	03/10/94	0001	PCI/L		0.478		0.478	I
VANADIUM, TOTAL	03/10/94	0001	UG/L	B	1.2		1.2	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0306
NORTH COORDINATE: 596673.28 FT
EAST COORDINATE: 1495083.91 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: CLAYEY GRAVEL OR CLAYEY SANDY GRAVEL (GC)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ANTIMONY, TOTAL	03/10/94	0001	UG/L		5.3		5.3	I
BARIUM, SOLUBLE	03/10/94	0001	UG/L	B	86.5		86.5	I
BARIUM, TOTAL	03/10/94	0001	UG/L	B	90.7		90.7	I
CALCIUM, SOLUBLE	03/10/94	0001	UG/L		137000.		137000.	I
CALCIUM, TOTAL	03/10/94	0001	UG/L		143000.		143000.	I
CHLORIDE	03/10/94	0001	MG/L		130.		130.	I
CHROMIUM, TOTAL	03/10/94	0001	UG/L	B	2.0	J	2.0	I
FLUORIDE	03/10/94	0001	MG/L		0.14		0.14	I
IRON, SOLUBLE	03/10/94	0001	UG/L	B	80.9		80.9	I
IRON, TOTAL	03/10/94	0001	UG/L		154.		154.	I
MAGNESIUM, SOLUBLE	03/10/94	0001	UG/L		39600.		39600.	I
MAGNESIUM, TOTAL	03/10/94	0001	UG/L		41400.		41400.	I
MANGANESE, TOTAL	03/10/94	0001	UG/L	B	6.5		6.5	I
NICKEL, SOLUBLE	03/10/94	0001	UG/L		72.4		72.4	I
NICKEL, TOTAL	03/10/94	0001	UG/L		74.7		74.7	I
NITRATE NITRITE	03/10/94	0001	MG/L		3.1		3.1	I
POTASSIUM, SOLUBLE	03/10/94	0001	UG/L	B	1380.		1380.	I
POTASSIUM, TOTAL	03/10/94	0001	UG/L	B	3260.		3260.	I
SODIUM, SOLUBLE	03/10/94	0001	UG/L		81700.	J	81700.	I
SODIUM, TOTAL	03/10/94	0001	UG/L		86000.	J	86000.	I
SULFATE	03/10/94	0001	MG/L		95.4		95.4	I
TETRACHLOROETHENE	03/10/94	0001	UG/L		7.9		7.9	I
THORIUM-228	03/10/94	0001	PCI/L		0.040		0.040	I
THORIUM-230	03/10/94	0001	PCI/L		0.037	J	0.037	I
TOTAL DISSOLVED SOLIDS	03/10/94	0001	MG/L		791.		791.	I
TOTAL ORGANIC CARBON	03/10/94	0001	MG/L		1.1		1.1	I
TRICHLOROETHENE	03/10/94	0001	UG/L		12.	J	12.	I
TRITIUM	03/10/94	0001	PCI/L		5600.		5600.	I
URANIUM-234	03/10/94	0001	PCI/L		0.238		0.238	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0306
NORTH COORDINATE: 596673.28 FT
EAST COORDINATE: 1495083.91 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: CLAYEY GRAVEL OR CLAYEY SANDY GRAVEL (GC)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
URANIUM-238	03/10/94	0001	PCI/L		0.262		0.262	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0307
NORTH COORDINATE: 596848.92 FT
EAST COORDINATE: 1495024.17 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: GRAVEL OR SANDY GRAVEL, WELL GRADED (GW)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ANTIMONY, SOLUBLE	03/10/94	0001	UG/L		7.3	J	7.3	I
BARIUM, SOLUBLE	03/10/94	0001	UG/L	B	120.		120.	I
BARIUM, TOTAL	03/10/94	0001	UG/L	B	124.		124.	I
CALCIUM, SOLUBLE	03/10/94	0001	UG/L		129000.		129000.	I
CALCIUM, TOTAL	03/10/94	0001	UG/L		133000.		133000.	I
CHLORIDE	03/10/94	0001	MG/L		189.		189.	I
CHROMIUM, SOLUBLE	03/10/94	0001	UG/L	B	1.2	J	1.2	I
CHROMIUM, TOTAL	03/10/94	0001	UG/L	B	2.5	J	2.5	I
FLUORIDE	03/10/94	0001	MG/L		0.18		0.18	I
IRON, SOLUBLE	03/10/94	0001	UG/L		139.		139.	I
IRON, TOTAL	03/10/94	0001	UG/L		224.		224.	I
MAGNESIUM, SOLUBLE	03/10/94	0001	UG/L		42700.		42700.	I
MAGNESIUM, TOTAL	03/10/94	0001	UG/L		43700.		43700.	I
MANGANESE, SOLUBLE	03/10/94	0001	UG/L		27.9		27.9	I
MANGANESE, TOTAL	03/10/94	0001	UG/L		36.0		36.0	I
NICKEL, SOLUBLE	03/10/94	0001	UG/L		71.5		71.5	I
NICKEL, TOTAL	03/10/94	0001	UG/L		54.6		54.6	I
NITRATE NITRITE	03/10/94	0001	MG/L		1.4		1.4	I
PLUTONIUM-238	03/10/94	0001	PCI/L		0.005		0.005	I
POTASSIUM, SOLUBLE	03/10/94	0001	UG/L	B	3170.		3170.	I
POTASSIUM, TOTAL	03/10/94	0001	UG/L	B	3300.		3300.	I
SODIUM, SOLUBLE	03/10/94	0001	UG/L		101000.	J	101000.	I
SODIUM, TOTAL	03/10/94	0001	UG/L		108000.	J	108000.	I
SULFATE	03/10/94	0001	MG/L		101.		101.	I
TETRACHLOROETHENE	03/10/94	0001	UG/L		10.		10.	I
TETRACHLOROMETHANE (CCL4)	03/10/94	0001	UG/L		1.2		1.2	I
THORIUM-228	03/10/94	0001	PCI/L		0.054		0.054	I
THORIUM-230	03/10/94	0001	PCI/L		0.055		0.055	I
TOTAL DISSOLVED SOLIDS	03/10/94	0001	MG/L		836.		836.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0307
NORTH COORDINATE: 596848.92 FT
EAST COORDINATE: 1495024.17 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: GRAVEL OR SANDY GRAVEL, WELL GRADED (GW)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL ORGANIC CARBON	03/10/94	0001	MG/L		0.88		0.88	I
TRICHLOROETHENE	03/10/94	0001	UG/L		6.1		6.1	I
TRITIUM	03/10/94	0001	PCI/L		5770.		5770.	I
URANIUM-234	03/10/94	0001	PCI/L		0.487		0.487	I
URANIUM-235	03/10/94	0001	PCI/L		0.033		0.033	I
URANIUM-238	03/10/94	0001	PCI/L		0.282		0.282	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0309
NORTH COORDINATE: 596503.70 FT
EAST COORDINATE: 1495097.74 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SHALE (SH)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	03/10/94	0001	UG/L	*	70.3	J	70.3	I
AMMONIA	03/10/94	0001	MG/L		3.8		3.8	I
ANTIMONY, SOLUBLE	03/10/94	0001	UG/L	B	1.7		1.7	I
BARIUM, SOLUBLE	03/10/94	0001	UG/L		309.	J	309.	I
BARIUM, TOTAL	03/10/94	0001	UG/L		274.	J	274.	I
CALCIUM, SOLUBLE	03/10/94	0001	UG/L		69900.	J	69900.	I
CALCIUM, TOTAL	03/10/94	0001	UG/L		64600.	J	64600.	I
CHLORIDE	03/10/94	0001	MG/L		462.		462.	I
CHROMIUM, TOTAL	03/10/94	0001	UG/L	B	7.7		7.7	I
COBALT, SOLUBLE	03/10/94	0001	UG/L	B	14.5		14.5	I
COBALT, TOTAL	03/10/94	0001	UG/L	B	14.0		14.0	I
FLUORIDE	03/10/94	0001	MG/L		1.1		1.1	I
IRON, SOLUBLE	03/10/94	0001	UG/L		393.	J	393.	I
IRON, TOTAL	03/10/94	0001	UG/L		717.	J	717.	I
LITHIUM, SOLUBLE	03/10/94	0001	UG/L		281.		281.	I
LITHIUM, TOTAL	03/10/94	0001	UG/L		281.		281.	I
MAGNESIUM, SOLUBLE	03/10/94	0001	UG/L		35200.	J	35200.	I
MAGNESIUM, TOTAL	03/10/94	0001	UG/L		32700.	J	32700.	I
MANGANESE, SOLUBLE	03/10/94	0001	UG/L		997.	J	997.	I
MANGANESE, TOTAL	03/10/94	0001	UG/L		871.	J	871.	I
MOLYBDENUM	03/10/94	0001	UG/L	B	4.6		4.6	I
MOLYBDENUM, SOLUBLE	03/10/94	0001	UG/L	B	1.8		1.8	I
NICKEL, SOLUBLE	03/10/94	0001	UG/L	B	37.5		37.5	I
NICKEL, TOTAL	03/10/94	0001	UG/L		77.9		77.9	I
PLUTONIUM-238	03/10/94	0001	PCI/L		0.002		0.002	I
POTASSIUM, SOLUBLE	03/10/94	0001	UG/L		21500.		21500.	I
POTASSIUM, TOTAL	03/10/94	0001	UG/L	B	23100.		23100.	I
RADIUM-226	03/10/94	0001	PCI/L		1.51		1.51	I
SODIUM, SOLUBLE	03/10/94	0001	UG/L		282000.	J	282000.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0309
NORTH COORDINATE: 596503.70 FT
EAST COORDINATE: 1495097.74 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SHALE (SH)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SODIUM, TOTAL	03/10/94	0001	UG/L		288000.	J	288000.	I
THORIUM-228	03/10/94	0001	PCI/L		0.146		0.146	I
THORIUM-230	03/10/94	0001	PCI/L		0.025		0.025	I
TIN, TOTAL	03/10/94	0001	UG/L	B	32.0		32.0	I
TOTAL DISSOLVED SOLIDS	03/10/94	0001	MG/L		989.		989.	I
TOTAL KJELDAHL NITROGEN	03/10/94	0001	MG/L		3.0		3.0	I
TOTAL SUSPENDED SOLIDS	03/10/94	0001	MG/L		8.0		8.0	I
TRITIUM	03/10/94	0001	PCI/L		760.		760.	I
URANIUM-234	03/10/94	0001	PCI/L		0.084		0.084	I
URANIUM-235	03/10/94	0001	PCI/L		0.013		0.013	I
URANIUM-238	03/10/94	0001	PCI/L		0.062	J	0.062	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0310
NORTH COORDINATE: 596693.15 FT
EAST COORDINATE: 1494951.55 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LIMESTONE (LS)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMMONIA	03/11/94	0001	MG/L		0.48	J	0.48	I
ANTIMONY, SOLUBLE	03/11/94	0001	UG/L	B	1.0		1.0	I
BARIUM, SOLUBLE	03/11/94	0001	UG/L	B	140.		140.	I
BARIUM, TOTAL	03/11/94	0001	UG/L	B	145.		145.	I
CALCIUM, SOLUBLE	03/11/94	0001	UG/L		105000.		105000.	I
CALCIUM, TOTAL	03/11/94	0001	UG/L		108000.		108000.	I
CHLORIDE	03/11/94	0001	MG/L		182.		182.	I
FLUORIDE	03/11/94	0001	MG/L		0.53		0.53	I
IRON, SOLUBLE	03/11/94	0001	UG/L		273.		273.	I
IRON, TOTAL	03/11/94	0001	UG/L		323.		323.	I
MAGNESIUM, SOLUBLE	03/11/94	0001	UG/L		46500.		46500.	I
MAGNESIUM, TOTAL	03/11/94	0001	UG/L		47800.		47800.	I
MANGANESE, SOLUBLE	03/11/94	0001	UG/L		68.4		68.4	I
MANGANESE, TOTAL	03/11/94	0001	UG/L		68.7		68.7	I
PLUTONIUM-239/240	03/11/94	0001	PCI/L		0.002		0.002	I
POTASSIUM, SOLUBLE	03/11/94	0001	UG/L	B	8990.		8990.	I
POTASSIUM, TOTAL	03/11/94	0001	UG/L	B	9500.	J	9500.	I
RADIUM-226	03/11/94	0001	PCI/L		0.57		0.57	I
SODIUM, SOLUBLE	03/11/94	0001	UG/L		41500.	J	41500.	I
SODIUM, TOTAL	03/11/94	0001	UG/L		40400.		40400.	I
SULFATE	03/11/94	0001	MG/L		36.2		36.2	I
THORIUM-228	03/11/94	0001	PCI/L		0.072		0.072	I
THORIUM-230	03/11/94	0001	PCI/L		0.023	J	0.023	I
THORIUM-232	03/11/94	0001	PCI/L		0.007		0.007	I
TOTAL DISSOLVED SOLIDS	03/11/94	0001	MG/L		630.		630.	I
TOTAL KJELDAHL NITROGEN	03/11/94	0001	MG/L		0.37		0.37	I
TOTAL ORGANIC CARBON	03/11/94	0001	MG/L		0.80		0.80	I
TRITIUM	03/11/94	0001	PCI/L		11570.		11570.	I
URANIUM-234	03/11/94	0001	PCI/L		0.045		0.045	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0310
NORTH COORDINATE: 596693.15 FT
EAST COORDINATE: 1494951.55 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LIMESTONE (LS)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
URANIUM-238	03/11/94	0001	PCI/L		0.022		0.022	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0311
NORTH COORDINATE: 597872.58 FT
EAST COORDINATE: 1494186.02 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND WELL GRADED (SW)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMERICIUM-241	03/30/94	0001	PCI/L	U	0.010		0.065	I
ANTIMONY, SOLUBLE	03/30/94	0001	UG/L	B	1.3		1.3	I
BARIUM, SOLUBLE	03/30/94	0001	UG/L	B	55.5	J	55.5	I
BARIUM, TOTAL	03/30/94	0001	UG/L	B	58.3	J	58.3	I
CALCIUM, SOLUBLE	03/30/94	0001	UG/L		76300.	J	76300.	I
CALCIUM, TOTAL	03/30/94	0001	UG/L		78900.	J	78900.	I
CHLORIDE	03/30/94	0001	MG/L		55.5		55.5	I
FLUORIDE	03/30/94	0001	MG/L		0.22		0.22	I
IRON, TOTAL	03/30/94	0001	UG/L	B	92.5	J	92.5	I
MAGNESIUM, SOLUBLE	03/30/94	0001	UG/L		25300.		25300.	I
MAGNESIUM, TOTAL	03/30/94	0001	UG/L		26100.		26100.	I
MANGANESE, SOLUBLE	03/30/94	0001	UG/L	B	4.7	J	4.7	I
MANGANESE, TOTAL	03/30/94	0001	UG/L	B	8.7	J	8.7	I
NICKEL, SOLUBLE	03/30/94	0001	UG/L		11.8		11.8	I
NICKEL, TOTAL	03/30/94	0001	UG/L	B	14.8		14.8	I
NITRATE NITRITE	03/30/94	0001	MG/L		2.5		2.5	I
POTASSIUM, SOLUBLE	03/30/94	0001	UG/L	B	2710.		2710.	I
POTASSIUM, TOTAL	03/30/94	0001	UG/L	B	2870.		2870.	I
SELENIUM, TOTAL	03/30/94	0001	UG/L	B	1.1		1.1	I
SODIUM, SOLUBLE	03/30/94	0001	UG/L		31800.		31800.	I
SODIUM, TOTAL	03/30/94	0001	UG/L		34400.		34400.	I
SULFATE	03/30/94	0001	MG/L		43.6		43.6	I
THORIUM-228	03/30/94	0001	PCI/L		0.025		0.025	I
THORIUM-230	03/30/94	0001	PCI/L		0.037	J	0.037	I
THORIUM-232	03/30/94	0001	PCI/L		0.016		0.016	I
TOTAL DISSOLVED SOLIDS	03/30/94	0001	MG/L		431.		431.	I
TOTAL ORGANIC CARBON	03/30/94	0001	MG/L		1.3		1.3	I
TOTAL PHOSPHATE	03/30/94	0001	MG/L		0.23		0.23	I
URANIUM-234	03/30/94	0001	PCI/L		0.46		0.46	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0311
NORTH COORDINATE: 597872.58 FT
EAST COORDINATE: 1494186.02 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND WELL GRADED (SW)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
URANIUM-238	03/30/94	0001	PCI/L		0.44		0.44	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0312
NORTH COORDINATE: 597747.67 FT
EAST COORDINATE: 1495031.74 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: CLAYEY GRAVEL OR CLAYEY SANDY GRAVEL (GC)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,2-CIS-DICHLOROETHENE	04/08/94	0001	UG/L		16.		16.	I
ALUMINUM, SOLUBLE	04/13/94	0001	UG/L		1040.		1040.	I
BARIUM, SOLUBLE	04/13/94	0001	UG/L	B	39.6		39.6	I
BERYLLIUM, SOLUBLE	04/13/94	0001	UG/L	B	0.22		0.22	I
CADMIUM, SOLUBLE	04/13/94	0001	UG/L	B	0.99		0.99	I
CALCIUM, SOLUBLE	04/13/94	0001	UG/L		178000.	J	178000.	I
CHROMIUM, SOLUBLE	04/13/94	0001	UG/L		8950.		8950.	I
COBALT, SOLUBLE	04/13/94	0001	UG/L		123.		123.	I
COPPER, SOLUBLE	04/13/94	0001	UG/L		141.		141.	I
IRON, SOLUBLE	04/13/94	0001	UG/L		23200.	J	23200.	I
LITHIUM, SOLUBLE	04/13/94	0001	UG/L	B	24.2	J	24.2	I
MAGNESIUM, SOLUBLE	04/13/94	0001	UG/L		76200.	J	76200.	I
MANGANESE, SOLUBLE	04/13/94	0001	UG/L		741.	J	741.	I
MOLYBDENUM, SOLUBLE	04/13/94	0001	UG/L		320.		320.	I
NICKEL, SOLUBLE	04/13/94	0001	UG/L		4330.	J	4330.	I
POTASSIUM, SOLUBLE	04/13/94	0001	UG/L		5650.		5650.	I
RADIUM-226	04/13/94	0001	PCI/L		0.40		0.40	I
SODIUM, SOLUBLE	04/13/94	0001	UG/L		47400.	J	47400.	I
THORIUM-228	04/13/94	0001	PCI/L		0.229		0.229	I
THORIUM-230	04/13/94	0001	PCI/L		0.126		0.126	I
THORIUM-232	04/13/94	0001	PCI/L		0.138		0.138	I
TIN, SOLUBLE	04/13/94	0001	UG/L	B	7.2	J	7.2	I
TRICHLOROETHENE	04/08/94	0001	UG/L		46.		46.	D1
TRITIUM	04/13/94	0001	PCI/L		7840.		7840.	I
URANIUM-234	04/13/94	0001	PCI/L		1.68		1.68	I
URANIUM-235	04/13/94	0001	PCI/L		0.078		0.078	I
URANIUM-238	04/13/94	0001	PCI/L		1.13		1.13	I
VANADIUM, SOLUBLE	04/13/94	0001	UG/L		70.3		70.3	I
ZINC, SOLUBLE	04/13/94	0001	UG/L	B	15.0		15.0	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0313
NORTH COORDINATE: 596850.42 FT
EAST COORDINATE: 1495021.50 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LEAN CLAYS, SANDY CLAYS, OR GRAVELLY CLAYS (CL)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, SOLUBLE	03/17/94	0001	UG/L		40.7		40.7	I
ALUMINUM, TOTAL	03/17/94	0001	UG/L		1220.		1220.	I
AMMONIA	03/17/94	0001	MG/L		0.12		0.12	I
ANTIMONY, SOLUBLE	03/17/94	0001	UG/L	B	1.1		1.1	I
BARIUM, SOLUBLE	03/17/94	0001	UG/L	B	139.	J	139.	I
BARIUM, TOTAL	03/17/94	0001	UG/L	B	152.	J	152.	I
BERYLLIUM, TOTAL	03/17/94	0001	UG/L	B	0.25		0.25	I
BISMUTH, TOTAL	03/17/94	0001	UG/L	B	39.4		39.4	I
CALCIUM, SOLUBLE	03/17/94	0001	UG/L		150000.	J	150000.	I
CALCIUM, TOTAL	03/17/94	0001	UG/L		173000.	J	173000.	I
CHLORIDE	03/17/94	0001	MG/L		184.		184.	I
CHROMIUM, SOLUBLE	03/17/94	0001	UG/L		13.6		13.6	I
CHROMIUM, TOTAL	03/17/94	0001	UG/L		820.		820.	I
COBALT, TOTAL	03/17/94	0001	UG/L	B	6.9		6.9	I
COPPER, TOTAL	03/17/94	0001	UG/L	B	21.2		21.2	I
FLUORIDE	03/17/94	0001	MG/L		0.21		0.21	I
IRON, SOLUBLE	03/17/94	0001	UG/L		186.	J	186.	I
IRON, TOTAL	03/17/94	0001	UG/L		7210.	J	7210.	I
LEAD, TOTAL	03/17/94	0001	UG/L	B	2.6	J	2.6	I
MAGNESIUM, SOLUBLE	03/17/94	0001	UG/L		44700.	J	44700.	I
MAGNESIUM, TOTAL	03/17/94	0001	UG/L		45400.	J	45400.	I
MANGANESE, SOLUBLE	03/17/94	0001	UG/L		48.0	J	48.0	I
MANGANESE, TOTAL	03/17/94	0001	UG/L		144.	J	144.	I
MOLYBDENUM	03/17/94	0001	UG/L	B	17.1		17.1	I
NICKEL, SOLUBLE	03/17/94	0001	UG/L		138.		138.	I
NICKEL, TOTAL	03/17/94	0001	UG/L		199.		199.	I
NITRATE NITRITE	03/17/94	0001	MG/L		2.2		2.2	I
PLUTONIUM-238	03/17/94	0001	PCI/L		0.012		0.012	I
PLUTONIUM-239/240	03/17/94	0001	PCI/L		0.003		0.003	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0313
NORTH COORDINATE: 596850.42 FT
EAST COORDINATE: 1495021.50 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LEAN CLAYS, SANDY CLAYS, OR GRAVELLY CLAYS (CL)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
POTASSIUM, SOLUBLE	03/17/94	0001	UG/L	B	2670.		2670.	I
POTASSIUM, TOTAL	03/17/94	0001	UG/L	B	2770.		2770.	I
RADIUM-226	03/17/94	0001	PCI/L		0.28		0.28	I
SODIUM, SOLUBLE	03/17/94	0001	UG/L		83100.	J	83100.	I
SODIUM, TOTAL	03/17/94	0001	UG/L		78200.	J	78200.	I
SULFATE	03/17/94	0001	MG/L		123.		123.	I
TETRACHLOROETHENE	03/17/94	0001	UG/L		11.		11.	I
TETRACHLOROMETHANE (CCL4)	03/17/94	0001	UG/L		1.5		1.5	I
THORIUM-228	03/17/94	0001	PCI/L		0.158		0.158	I
THORIUM-230	03/17/94	0001	PCI/L		0.192		0.192	I
THORIUM-232	03/17/94	0001	PCI/L		0.101		0.101	I
TOTAL DISSOLVED SOLIDS	03/17/94	0001	MG/L		873.		873.	I
TOTAL KJELDAHL NITROGEN	03/17/94	0001	MG/L		0.59		0.59	I
TOTAL ORGANIC CARBON	03/17/94	0001	MG/L		1.1		1.1	I
TOTAL PHOSPHATE	03/17/94	0001	MG/L		0.16		0.16	I
TOTAL SUSPENDED SOLIDS	03/17/94	0001	MG/L		121.		121.	I
TRICHLOROETHENE	03/17/94	0001	UG/L		4.6		4.6	I
TRITIUM	03/17/94	0001	PCI/L		4980.		4980.	I
URANIUM-234	03/17/94	0001	PCI/L		0.605		0.605	I
URANIUM-235	03/17/94	0001	PCI/L		0.046		0.046	I
URANIUM-238	03/17/94	0001	PCI/L		0.569		0.569	I
VANADIUM, TOTAL	03/17/94	0001	UG/L	B	8.3		8.3	I
ZINC, SOLUBLE	03/17/94	0001	UG/L		61.0		61.0	I
ZINC, TOTAL	03/17/94	0001	UG/L		20.2		20.2	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0314
NORTH COORDINATE: 597414.24 FT
EAST COORDINATE: 1495712.96 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LEAN CLAYS, SANDY CLAYS, OR GRAVELLY CLAYS (CL)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,3,5-TRINITROBENZENE	03/16/94	0001	UG/L	J	1.1	J	1.1	I
ALUMINUM, TOTAL	03/16/94	0001	UG/L		3310.	J	3310.	I
AMMONIA	03/16/94	0001	MG/L		0.25		0.25	I
ANTIMONY, SOLUBLE	03/16/94	0001	UG/L	B	1.4		1.4	I
ARSENIC, SOLUBLE	03/16/94	0001	UG/L	B	4.4		4.4	I
ARSENIC, TOTAL	03/16/94	0001	UG/L		36.8	J	36.8	I
BARIUM, SOLUBLE	03/16/94	0001	UG/L	B	65.4	J	65.4	I
BARIUM, TOTAL	03/16/94	0001	UG/L	B	97.1	J	97.1	I
CADMIUM, SOLUBLE	03/16/94	0001	UG/L	U	0.75	J	0.75	I
CALCIUM, SOLUBLE	03/16/94	0001	UG/L		136000.		136000.	I
CALCIUM, TOTAL	03/16/94	0001	UG/L		235000.	J	235000.	I
CHLORIDE	03/16/94	0001	MG/L		336.		336.	I
CHROMIUM, TOTAL	03/16/94	0001	UG/L		28.9		28.9	I
COPPER, TOTAL	03/16/94	0001	UG/L		9.2		9.2	I
FLUORIDE	03/16/94	0001	MG/L		0.82		0.82	I
IRON, SOLUBLE	03/16/94	0001	UG/L		616.	J	616.	I
IRON, TOTAL	03/16/94	0001	UG/L		12400.	J	12400.	I
LEAD, SOLUBLE	03/16/94	0001	UG/L	B	2.2		2.2	I
LEAD, TOTAL	03/16/94	0001	UG/L		22.4	J	22.4	I
LITHIUM, SOLUBLE	03/16/94	0001	UG/L	B	16.7		16.7	I
LITHIUM, TOTAL	03/16/94	0001	UG/L	B	38.2	J	38.2	I
MAGNESIUM, SOLUBLE	03/16/94	0001	UG/L		49800.	J	49800.	I
MAGNESIUM, TOTAL	03/16/94	0001	UG/L		69100.	J	69100.	I
MANGANESE, SOLUBLE	03/16/94	0001	UG/L		51.6	J	51.6	I
MANGANESE, TOTAL	03/16/94	0001	UG/L		185.	J	185.	I
MOLYBDENUM	03/16/94	0001	UG/L		20.4		20.4	I
MOLYBDENUM, SOLUBLE	03/16/94	0001	UG/L	B	9.5		9.5	I
NICKEL, SOLUBLE	03/16/94	0001	UG/L	B	14.4		14.4	I
NICKEL, TOTAL	03/16/94	0001	UG/L		40.8		40.8	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0314
NORTH COORDINATE: 597414.24 FT
EAST COORDINATE: 1495712.96 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LEAN CLAYS, SANDY CLAYS, OR GRAVELLY CLAYS (CL)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
POTASSIUM, SOLUBLE	03/16/94	0001	UG/L	B	3120.		3120.	I
POTASSIUM, TOTAL	03/16/94	0001	UG/L	B	4650.		4650.	I
POTASSIUM-40	03/15/94	0001	PCI/L		258		258	I
RADIUM-226	03/15/94	0001	PCI/L		0.22		0.22	I
SODIUM, SOLUBLE	03/16/94	0001	UG/L		117000.	J	117000.	I
SODIUM, TOTAL	03/16/94	0001	UG/L		123000.	J	123000.	I
SULFATE	03/16/94	0001	MG/L		188.		188.	I
THORIUM-228	03/15/94	0001	PCI/L		0.256		0.256	I
THORIUM-230	03/15/94	0001	PCI/L		0.376		0.376	I
THORIUM-232	03/15/94	0001	PCI/L		0.153		0.153	I
TIN, SOLUBLE	03/16/94	0001	UG/L	B	29.6		29.6	I
TIN, TOTAL	03/16/94	0001	UG/L	B	37.9		37.9	I
TOTAL DISSOLVED SOLIDS	03/16/94	0001	MG/L		1170.		1170.	I
TOTAL KJELDAHL NITROGEN	03/16/94	0001	MG/L		0.67		0.67	I
TOTAL ORGANIC CARBON	03/16/94	0001	MG/L		1.4		1.4	I
TOTAL PHOSPHATE	03/16/94	0001	MG/L		0.40		0.40	I
TOTAL SUSPENDED SOLIDS	03/16/94	0001	MG/L		291.		291.	I
TRITIUM	03/15/94	0001	PCI/L		4160.		4160.	I
URANIUM-234	03/15/94	0001	PCI/L		0.756		0.756	I
URANIUM-235	03/15/94	0001	PCI/L		0.040		0.040	I
URANIUM-238	03/15/94	0001	PCI/L		0.640		0.640	I
VANADIUM, SOLUBLE	03/16/94	0001	UG/L		16.6		16.6	I
VANADIUM, TOTAL	03/16/94	0001	UG/L		21.4		21.4	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0315
NORTH COORDINATE: 597341.80 FT
EAST COORDINATE: 1495078.77 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY SAND OR SILTY GRAVELLY SAND (SM)
HYDRAULIC FLOW RELATIONSHIP: CROSS GRADIENT (C)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMERICIUM-241	03/25/94	0001	PCI/L		0.012		0.012	I
ANTIMONY, SOLUBLE	03/25/94	0001	UG/L	B	1.2		1.2	I
BARIUM, SOLUBLE	03/25/94	0001	UG/L	B	166.	J	166.	I
BARIUM, TOTAL	03/25/94	0001	UG/L	B	165.	J	165.	I
CALCIUM, SOLUBLE	03/25/94	0001	UG/L		150000.	J	150000.	I
CALCIUM, TOTAL	03/25/94	0001	UG/L		149000.	J	149000.	I
CHLORIDE	03/25/94	0001	MG/L		287.		287.	I
CHROMIUM, TOTAL	03/25/94	0001	UG/L		71.4		71.4	I
COPPER, SOLUBLE	03/25/94	0001	UG/L	B	3.0		3.0	I
COPPER, TOTAL	03/25/94	0001	UG/L	B	1.2	J	1.2	I
FLUORIDE	03/25/94	0001	MG/L		0.30		0.30	I
IRON, TOTAL	03/25/94	0001	UG/L		427.	J	427.	I
MAGNESIUM, SOLUBLE	03/25/94	0001	UG/L		52200.	J	52200.	I
MAGNESIUM, TOTAL	03/25/94	0001	UG/L		52000.	J	52000.	I
MANGANESE, SOLUBLE	03/25/94	0001	UG/L	B	7.0		7.0	I
MANGANESE, TOTAL	03/25/94	0001	UG/L	B	11.9		11.9	I
MOLYBDENUM	03/25/94	0001	UG/L	B	3.6		3.6	I
MOLYBDENUM, SOLUBLE	03/25/94	0001	UG/L	B	2.6		2.6	I
NICKEL, SOLUBLE	03/25/94	0001	UG/L		70.9		70.9	I
NICKEL, TOTAL	03/25/94	0001	UG/L		72.0		72.0	I
NITRATE NITRITE	03/25/94	0001	MG/L		2.1		2.1	I
POTASSIUM, SOLUBLE	03/25/94	0001	UG/L	B	2480.		2480.	I
POTASSIUM, TOTAL	03/25/94	0001	UG/L	B	2530.		2530.	I
SODIUM, SOLUBLE	03/25/94	0001	UG/L		493000.		REJECT	I
SODIUM, TOTAL	03/25/94	0001	UG/L		500000.		REJECT	I
SULFATE	03/25/94	0001	MG/L		131.		131.	I
TETRACHLOROMETHANE (CCL4)	03/25/94	0001	UG/L		4.1		4.1	I
THORIUM-228	03/25/94	0001	PCI/L		0.054	J	0.054	I
THORIUM-230	03/25/94	0001	PCI/L		0.016		0.016	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0315
NORTH COORDINATE: 597341.80 FT
EAST COORDINATE: 1495078.77 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY SAND OR SILTY GRAVELLY SAND (SM)
HYDRAULIC FLOW RELATIONSHIP: CROSS GRADIENT (C)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL DISSOLVED SOLIDS	03/25/94	0001	MG/L		954.		954.	I
TOTAL ORGANIC CARBON	03/25/94	0001	MG/L		1.0		1.0	I
TOTAL SUSPENDED SOLIDS	03/25/94	0001	MG/L		8.0		8.0	I
TRICHLOROETHENE	03/25/94	0001	UG/L		7.8		7.8	I
TRITIUM	03/25/94	0001	PCI/L		4580.		4580.	I
URANIUM-234	03/25/94	0001	PCI/L		0.55	J	0.55	I
URANIUM-238	03/25/94	0001	PCI/L		0.44	J	0.44	I
VANADIUM, SOLUBLE	03/25/94	0001	UG/L		14.7		14.7	I
VANADIUM, TOTAL	03/25/94	0001	UG/L		15.1		15.1	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0317
NORTH COORDINATE: 596207.32 FT
EAST COORDINATE: 1495022.91 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	03/16/94	0001	UG/L		1600.		1600.	I
	03/16/94	1001	UG/L		1830.		1830.	I
AMMONIA	03/16/94	0001	MG/L		0.45		0.45	I
	03/16/94	1001	MG/L		0.35		0.35	I
ANTIMONY, SOLUBLE	03/16/94	0001	UG/L	B	0.85		0.85	I
	03/16/94	1001	UG/L	B	0.90		0.90	I
ANTIMONY, TOTAL	03/16/94	0001	UG/L	B	1.0	J	1.0	I
ARSENIC, TOTAL	03/16/94	1001	UG/L	B	2.6	J	2.6	I
BARIUM, SOLUBLE	03/16/94	0001	UG/L	B	95.2	J	95.2	I
	03/16/94	1001	UG/L	B	91.1	J	91.1	I
BARIUM, TOTAL	03/16/94	0001	UG/L	B	93.4	J	93.4	I
	03/16/94	1001	UG/L	B	103.	J	103.	I
BISMUTH, TOTAL	03/16/94	0001	UG/L	B	28.3	J	28.3	I
CALCIUM, SOLUBLE	03/16/94	0001	UG/L		96600.		96600.	I
	03/16/94	1001	UG/L		104000.		104000.	I
CALCIUM, TOTAL	03/16/94	0001	UG/L		95400.		95400.	I
	03/16/94	1001	UG/L		102000.		102000.	I
CHLORIDE	03/16/94	0001	MG/L		120.		120.	I
	03/16/94	1001	MG/L		114.		114.	I
CHROMIUM, TOTAL	03/16/94	0001	UG/L	B	5.3		5.3	I
	03/16/94	1001	UG/L	B	6.0		6.0	I
COPPER, TOTAL	03/16/94	0001	UG/L	B	7.8	J	7.8	I
	03/16/94	1001	UG/L	B	10.3	J	10.3	I
FLUORIDE	03/16/94	0001	MG/L		0.14		0.14	I
	03/16/94	1001	MG/L		0.14		0.14	I
IRON, SOLUBLE	03/16/94	1001	UG/L	B	38.2		38.2	I
IRON, TOTAL	03/16/94	0001	UG/L		4010.		4010.	I
	03/16/94	1001	UG/L		4670.		4670.	I
LEAD, SOLUBLE	03/16/94	0001	UG/L		4.5		4.5	I
	03/16/94	1001	UG/L		4.8		4.8	I
LEAD, TOTAL	03/16/94	0001	UG/L		5.9	J	5.9	I
	03/16/94	1001	UG/L		24.4	J	24.4	I
MAGNESIUM, SOLUBLE	03/16/94	0001	UG/L		36000.	J	36000.	I
	03/16/94	1001	UG/L		35300.	J	35300.	I
MAGNESIUM, TOTAL	03/16/94	0001	UG/L		34400.	J	34400.	I
	03/16/94	1001	UG/L		38300.	J	38300.	I
MANGANESE, SOLUBLE	03/16/94	0001	UG/L		68.9	J	68.9	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0317
NORTH COORDINATE: 596207.32 FT
EAST COORDINATE: 1495022.91 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
MANGANESE, SOLUBLE	03/16/94	1001	UG/L		68.2	J	68.2	I
MANGANESE, TOTAL	03/16/94	0001	UG/L		113.	J	113.	I
	03/16/94	1001	UG/L		133.	J	133.	I
MOLYBDENUM	03/16/94	0001	UG/L	B	6.1		6.1	I
	03/16/94	1001	UG/L	B	6.8		6.8	I
MOLYBDENUM, SOLUBLE	03/16/94	1001	UG/L	B	1.8	J	1.8	I
NICKEL, TOTAL	03/16/94	0001	UG/L	B	5.9		5.9	I
	03/16/94	1001	UG/L	B	4.6		4.6	I
NITRATE NITRITE	03/16/94	0001	MG/L		2.8		2.8	I
	03/16/94	1001	MG/L		2.8		2.8	I
POTASSIUM, SOLUBLE	03/16/94	0001	UG/L	B	2580.		2580.	I
	03/16/94	1001	UG/L	B	2630.		2630.	I
POTASSIUM, TOTAL	03/16/94	0001	UG/L	B	2870.		2870.	I
	03/16/94	1001	UG/L	B	2920.		2920.	I
RADIUM-226	03/16/94	0001	PCI/L		0.50		0.50	I
	03/16/94	1001	PCI/L		0.34		0.34	I
SODIUM, SOLUBLE	03/16/94	0001	UG/L		60100.		60100.	I
	03/16/94	1001	UG/L		58700.		58700.	I
SODIUM, TOTAL	03/16/94	0001	UG/L		51600.		51600.	I
	03/16/94	1001	UG/L		53500.		53500.	I
SULFATE	03/16/94	0001	MG/L		53.7		53.7	I
	03/16/94	1001	MG/L		56.2		56.2	I
THORIUM-228	03/16/94	0001	PCI/L		0.049	J	0.049	I
	03/16/94	1001	PCI/L		0.97	J	0.97	I
THORIUM-230	03/16/94	0001	PCI/L		0.049	J	0.049	I
	03/16/94	1001	PCI/L		0.95	J	0.95	I
THORIUM-232	03/16/94	0001	PCI/L		0.036	J	0.036	I
	03/16/94	1001	PCI/L		0.588	J	0.588	I
TOTAL DISSOLVED SOLIDS	03/16/94	0001	MG/L		592.		592.	I
	03/16/94	1001	MG/L		588.		588.	I
TOTAL KJELDAHL NITROGEN	03/16/94	0001	MG/L		0.36		0.36	I
	03/16/94	1001	MG/L		0.37		0.37	I
TOTAL ORGANIC CARBON	03/16/94	0001	MG/L		0.95		0.95	I
	03/16/94	1001	MG/L		0.86		0.86	I
TOTAL PHOSPHATE	03/16/94	0001	MG/L		0.27	J	0.27	I
	03/16/94	1001	MG/L		0.17	J	0.17	I
TOTAL SUSPENDED SOLIDS	03/16/94	0001	MG/L		40.0		40.0	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0317
NORTH COORDINATE: 596207.32 FT
EAST COORDINATE: 1495022.91 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL SUSPENDED SOLIDS	03/16/94	1001	MG/L		40.0		40.0	1
TRITIUM	03/16/94	0001	PCI/L		2020.		2020.	1
	03/16/94	1001	PCI/L		2230.		2230.	1
URANIUM-234	03/16/94	0001	PCI/L		0.227		0.227	1
	03/16/94	1001	PCI/L		0.262		0.262	1
URANIUM-238	03/16/94	0001	PCI/L		0.293		0.293	1
	03/16/94	1001	PCI/L		0.178		0.178	1
VANADIUM, SOLUBLE	03/16/94	0001	UG/L	B	11.1	J	11.1	1
	03/16/94	1001	UG/L		14.9	J	14.9	1
VANADIUM, TOTAL	03/16/94	0001	UG/L		12.5		12.5	1
	03/16/94	1001	UG/L		15.1		15.1	1
ZINC, TOTAL	03/16/94	0001	UG/L		32.7		32.7	1
	03/16/94	1001	UG/L		27.9		27.9	1

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0318
NORTH COORDINATE: 598644.24 FT
EAST COORDINATE: 1497216.04 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SHALE (SH)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALPHA CHLORDANE	03/18/94	0001	UG/L		0.069	J	0.069	I
ALUMINUM, TOTAL	03/18/94	0001	UG/L		104.	J	104.	I
AMMONIA	03/18/94	0001	MG/L		0.41		0.41	I
ANTIMONY, SOLUBLE	03/18/94	0001	UG/L	B	0.82		0.82	I
BARIUM, SOLUBLE	03/18/94	0001	UG/L	B	110.	J	110.	I
BARIUM, TOTAL	03/18/94	0001	UG/L	B	103.	J	103.	I
BERYLLIUM, SOLUBLE	03/18/94	0001	UG/L	B	0.25		0.25	I
BERYLLIUM, TOTAL	03/18/94	0001	UG/L	B	0.25		0.25	I
CADMIUM, TOTAL	03/18/94	0001	UG/L	B	0.90		0.90	I
CALCIUM, SOLUBLE	03/18/94	0001	UG/L		114000.	J	114000.	I
CALCIUM, TOTAL	03/18/94	0001	UG/L		100000.	J	100000.	I
CHLORIDE	03/18/94	0001	MG/L		135.		135.	I
CYANIDE, TOTAL (METAL)	03/18/94	0001	UG/L	B	6.3		6.3	I
FLUORIDE	03/18/94	0001	MG/L		0.50		0.50	I
IRON, SOLUBLE	03/18/94	0001	UG/L		537.	J	537.	I
IRON, TOTAL	03/18/94	0001	UG/L		1170.	J	1170.	I
LEAD, TOTAL	03/18/94	0001	UG/L	B	3.2		3.2	I
MAGNESIUM, SOLUBLE	03/18/94	0001	UG/L		42300.	J	42300.	I
MAGNESIUM, TOTAL	03/18/94	0001	UG/L		37900.	J	37900.	I
MANGANESE, SOLUBLE	03/18/94	0001	UG/L		40.5	J	40.5	I
MANGANESE, TOTAL	03/18/94	0001	UG/L		37.8	J	37.8	I
MOLYBDENUM	03/18/94	0001	UG/L	B	7.4		7.4	I
MOLYBDENUM, SOLUBLE	03/18/94	0001	UG/L	B	5.4		5.4	I
NICKEL, TOTAL	03/18/94	0001	UG/L	B	5.1		5.1	I
POTASSIUM, SOLUBLE	03/18/94	0001	UG/L	B	4220.		4220.	I
POTASSIUM, TOTAL	03/18/94	0001	UG/L	B	3820.		3820.	I
RADIUM-226	03/18/94	0001	PCI/L		0.25		0.25	I
SODIUM, SOLUBLE	03/18/94	0001	UG/L		41500.	J	41500.	I
SODIUM, TOTAL	03/18/94	0001	UG/L		38100.	J	38100.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0318
NORTH COORDINATE: 598644.24 FT
EAST COORDINATE: 1497216.04 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SHALE (SH)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
STRONTIUM-90	03/18/94	0001	PCI/L		9.0		9.0	I
SULFATE	03/18/94	0001	MG/L		65.6		65.6	I
THORIUM-228	03/18/94	0001	PCI/L		0.118	J	0.118	I
THORIUM-230	03/18/94	0001	PCI/L		0.051	J	0.051	I
TOTAL DISSOLVED SOLIDS	03/18/94	0001	MG/L		605.		605.	I
TOTAL KJELDAHL NITROGEN	03/18/94	0001	MG/L		0.40		0.40	I
TOTAL ORGANIC CARBON	03/18/94	0001	MG/L		0.86		0.86	I
TOTAL SUSPENDED SOLIDS	03/18/94	0001	MG/L		13.0		13.0	I
TRITIUM	03/18/94	0001	PCI/L		3080.		3080.	I
URANIUM-234	03/18/94	0001	PCI/L		0.033	J	0.033	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0319
NORTH COORDINATE: 595512.74 FT
EAST COORDINATE: 1495147.81 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: CLAYEY SAND OR CLAYEY GRAVELLY SAND (SC)
HYDRAULIC FLOW RELATIONSHIP: NOT KNOWN (N)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
BARIUM, SOLUBLE	03/21/94	0001	UG/L	B	112.		112.	I
BARIUM, TOTAL	03/21/94	0001	UG/L		112.		112.	I
CALCIUM, SOLUBLE	03/21/94	0001	UG/L		92300.		92300.	I
CALCIUM, TOTAL	03/21/94	0001	UG/L		91900.	J	91900.	I
CHLORIDE	03/21/94	0001	MG/L		66.9		66.9	I
FLUORIDE	03/21/94	0001	MG/L		0.25		0.25	I
IRON, TOTAL	03/21/94	0001	UG/L	B	71.9		71.9	I
MAGNESIUM, SOLUBLE	03/21/94	0001	UG/L		29000.		29000.	I
MAGNESIUM, TOTAL	03/21/94	0001	UG/L		29000.		29000.	I
MANGANESE, SOLUBLE	03/21/94	0001	UG/L		78.0	J	78.0	I
MANGANESE, TOTAL	03/21/94	0001	UG/L		83.2	J	83.2	I
NICKEL, SOLUBLE	03/21/94	0001	UG/L	B	12.7		12.7	I
NICKEL, TOTAL	03/21/94	0001	UG/L		13.4		13.4	I
NITRATE NITRITE	03/21/94	0001	MG/L		0.32		0.32	I
POTASSIUM, SOLUBLE	03/21/94	0001	UG/L	B	2030.		2030.	I
POTASSIUM, TOTAL	03/21/94	0001	UG/L	B	1790.		1790.	I
RADIUM-226	03/21/94	0001	PCI/L		0.26		0.26	I
SELENIUM, TOTAL	03/21/94	0001	UG/L	B	3.6	J	3.6	I
SODIUM, SOLUBLE	03/21/94	0001	UG/L		42200.		42200.	I
SODIUM, TOTAL	03/21/94	0001	UG/L		42400.		42400.	I
SULFATE	03/21/94	0001	MG/L		51.8		51.8	I
THORIUM-228	03/21/94	0001	PCI/L		0.035		0.035	I
THORIUM-230	03/21/94	0001	PCI/L		0.055	J	0.055	I
TOTAL DISSOLVED SOLIDS	03/21/94	0001	MG/L		541.		541.	I
TOTAL KJELDAHL NITROGEN	03/21/94	0001	MG/L		0.11		0.11	I
TOTAL ORGANIC CARBON	03/21/94	0001	MG/L		0.66		0.66	I
TRITIUM	03/21/94	0001	PCI/L		1220.		1220.	I
URANIUM-234	03/21/94	0001	PCI/L		0.617		0.617	I
URANIUM-235	03/21/94	0001	PCI/L		0.025		0.025	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0319
NORTH COORDINATE: 595512.74 FT
EAST COORDINATE: 1495147.81 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: CLAYEY SAND OR CLAYEY GRAVELLY SAND (SC)
HYDRAULIC FLOW RELATIONSHIP: NOT KNOWN (N)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
URANIUM-238	03/21/94	0001	PCI/L		0.309		0.309	I
ZINC, SOLUBLE	03/21/94	0001	UG/L	B	0.92	J	0.92	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0320
NORTH COORDINATE: 595022.59 FT
EAST COORDINATE: 1495353.77 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LEAN CLAYS, SANDY CLAYS, OR GRAVELLY CLAYS (CL)
HYDRAULIC FLOW RELATIONSHIP: NOT KNOWN (N)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
BARIUM, SOLUBLE	03/22/94	0001	UG/L	B	126.		126.	I
BARIUM, TOTAL	03/22/94	0001	UG/L	B	128.		128.	I
CALCIUM, SOLUBLE	03/22/94	0001	UG/L		99900.		99900.	I
CALCIUM, TOTAL	03/22/94	0001	UG/L		98100.		98100.	I
CHLORIDE	03/22/94	0001	MG/L		53.1		53.1	I
CHROMIUM, TOTAL	03/22/94	0001	UG/L		22.6		22.6	I
FLUORIDE	03/22/94	0001	MG/L		0.21		0.21	I
IRON, TOTAL	03/22/94	0001	UG/L		596.		596.	I
MAGNESIUM, SOLUBLE	03/22/94	0001	UG/L		28800.		28800.	I
MAGNESIUM, TOTAL	03/22/94	0001	UG/L		28300.		28300.	I
MANGANESE, SOLUBLE	03/22/94	0001	UG/L		15.5		15.5	I
MANGANESE, TOTAL	03/22/94	0001	UG/L		39.8		39.8	I
NICKEL, SOLUBLE	03/22/94	0001	UG/L		54.0		54.0	I
NICKEL, TOTAL	03/22/94	0001	UG/L		36.3		36.3	I
NITRATE NITRITE	03/22/94	0001	MG/L		0.55		0.55	I
POTASSIUM, SOLUBLE	03/22/94	0001	UG/L	B	1790.		1790.	I
POTASSIUM, TOTAL	03/22/94	0001	UG/L		1740.		1740.	I
SODIUM, SOLUBLE	03/22/94	0001	UG/L		32900.		32900.	I
SODIUM, TOTAL	03/22/94	0001	UG/L		30000.		30000.	I
SULFATE	03/22/94	0001	MG/L		45.1		45.1	I
THORIUM-228	03/22/94	0001	PCI/L		0.038		0.038	I
THORIUM-230	03/22/94	0001	PCI/L		0.039	J	0.039	I
TOTAL DISSOLVED SOLIDS	03/22/94	0001	MG/L		510.		510.	I
TOTAL ORGANIC CARBON	03/22/94	0001	MG/L		0.85		0.85	I
TRITIUM	03/22/94	0001	PCI/L		1340.		1340.	I
URANIUM-234	03/22/94	0001	PCI/L		0.44	J	0.44	I
URANIUM-238	03/22/94	0001	PCI/L		0.344	J	0.344	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0322
NORTH COORDINATE: 598865.46 FT
EAST COORDINATE: 1497201.16 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SHALE (SH)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, SOLUBLE	03/16/94	0001	UG/L		57.6	J	57.6	I
ALUMINUM, TOTAL	03/16/94	0001	UG/L		231.	J	231.	I
AMMONIA	03/16/94	0001	MG/L		2.5		2.5	I
ANTIMONY, SOLUBLE	03/16/94	0001	UG/L	B	0.82		0.82	I
BARIUM, SOLUBLE	03/16/94	0001	UG/L	B	18.5	J	18.5	I
BARIUM, TOTAL	03/16/94	0001	UG/L	B	17.5	J	17.5	I
CALCIUM, SOLUBLE	03/16/94	0001	UG/L		35900.	J	35900.	I
CALCIUM, TOTAL	03/16/94	0001	UG/L		34000.	J	34000.	I
CHLORIDE	03/16/94	0001	MG/L		73.8		73.8	I
CHROMIUM, TOTAL	03/16/94	0001	UG/L	B	2.6	J	2.6	I
FLUORIDE	03/16/94	0001	MG/L		2.3		2.3	I
IRON, TOTAL	03/16/94	0001	UG/L		419.	J	419.	I
LITHIUM, SOLUBLE	03/16/94	0001	UG/L	B	52.5		52.5	I
LITHIUM, TOTAL	03/16/94	0001	UG/L	B	52.5		52.5	I
MAGNESIUM, SOLUBLE	03/16/94	0001	UG/L		24200.	J	24200.	I
MAGNESIUM, TOTAL	03/16/94	0001	UG/L		22900.	J	22900.	I
MANGANESE, SOLUBLE	03/16/94	0001	UG/L		19.5	J	19.5	I
MANGANESE, TOTAL	03/16/94	0001	UG/L		26.3	J	26.3	I
MOLYBDENUM	03/16/94	0001	UG/L		25.6		25.6	I
MOLYBDENUM, SOLUBLE	03/16/94	0001	UG/L		29.0		29.0	I
NICKEL, TOTAL	03/16/94	0001	UG/L	B	8.7		8.7	I
NITRATE NITRITE	03/16/94	0001	MG/L		0.25		0.25	I
PLUTONIUM-239/240	03/16/94	0001	PCI/L		0.005		0.005	I
POTASSIUM, SOLUBLE	03/16/94	0001	UG/L		14800.		14800.	I
POTASSIUM, TOTAL	03/16/94	0001	UG/L		15800.		15800.	I
RADIUM-226	03/16/94	0001	PCI/L		0.38		0.38	I
SODIUM, SOLUBLE	03/16/94	0001	UG/L		114000.	J	114000.	I
SODIUM, TOTAL	03/16/94	0001	UG/L		118000.	J	118000.	I
SULFATE	03/16/94	0001	MG/L		167.		167.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0322
NORTH COORDINATE: 598865.46 FT
EAST COORDINATE: 1497201.16 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SHALE (SH)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
THORIUM-228	03/16/94	0001	PCI/L		0.15		0.15	I
THORIUM-230	03/16/94	0001	PCI/L		0.085		0.085	I
TOTAL DISSOLVED SOLIDS	03/16/94	0001	MG/L		637.		637.	I
TOTAL KJELDAHL NITROGEN	03/16/94	0001	MG/L		1.9		1.9	I
TOTAL ORGANIC CARBON	03/16/94	0001	MG/L		0.67		0.67	I
TOTAL PHOSPHATE	03/16/94	0001	MG/L		0.084		0.084	I
URANIUM-234	03/16/94	0001	PCI/L		0.226		0.226	I
URANIUM-238	03/16/94	0001	PCI/L		0.165		0.165	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0324
NORTH COORDINATE: 597926.59 FT
EAST COORDINATE: 1495701.00 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SHALE (SH)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,2-CIS-DICHLOROETHENE	03/22/94	0001	UG/L		2.1		2.1	I
ALUMINUM, TOTAL	03/22/94	0001	UG/L		1630.		1630.	I
ANTIMONY, SOLUBLE	03/22/94	0001	UG/L	B	1.0		1.0	I
BARIUM, SOLUBLE	03/22/94	0001	UG/L	B	66.4		66.4	I
BARIUM, TOTAL	03/22/94	0001	UG/L	B	70.5		70.5	I
CALCIUM, SOLUBLE	03/22/94	0001	UG/L		190000.		190000.	I
CALCIUM, TOTAL	03/22/94	0001	UG/L		193000.		193000.	I
CHLORIDE	03/22/94	0001	MG/L		492.		492.	I
FLUORIDE	03/22/94	0001	MG/L		0.24		0.24	I
IRON, SOLUBLE	03/22/94	0001	UG/L		170.		170.	I
IRON, TOTAL	03/22/94	0001	UG/L		2880.		2880.	I
MAGNESIUM, SOLUBLE	03/22/94	0001	UG/L		70000.		70000.	I
MAGNESIUM, TOTAL	03/22/94	0001	UG/L		65700.		65700.	I
MANGANESE, SOLUBLE	03/22/94	0001	UG/L		619.		619.	I
MANGANESE, TOTAL	03/22/94	0001	UG/L		647.		647.	I
NICKEL, SOLUBLE	03/22/94	0001	UG/L	B	2.7		2.7	I
NICKEL, TOTAL	03/22/94	0001	UG/L	B	6.3		6.3	I
NITRATE NITRITE	03/22/94	0001	MG/L		0.052		0.052	I
POTASSIUM, SOLUBLE	03/22/94	0001	UG/L	B	2620.		2620.	I
POTASSIUM, TOTAL	03/22/94	0001	UG/L	B	3050.		3050.	I
RADIUM-226	03/22/94	0001	PCI/L		0.41		0.41	I
SODIUM, SOLUBLE	03/22/94	0001	UG/L		146000.		146000.	I
SODIUM, TOTAL	03/22/94	0001	UG/L		153000.		153000.	I
SULFATE	03/22/94	0001	MG/L		210.		210.	I
THORIUM-228	03/22/94	0001	PCI/L		0.102		0.102	I
THORIUM-230	03/22/94	0001	PCI/L		0.030	J	0.030	I
THORIUM-232	03/22/94	0001	PCI/L		0.034		0.034	I
TOTAL DISSOLVED SOLIDS	03/22/94	0001	MG/L		1440.		1440.	I
TOTAL KJELDAHL NITROGEN	03/22/94	0001	MG/L		0.18		0.18	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0324
NORTH COORDINATE: 597926.59 FT
EAST COORDINATE: 1495701.00 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SHALE (SH)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL ORGANIC CARBON	03/22/94	0001	MG/L		1.3		1.3	I
TOTAL PHOSPHATE	03/22/94	0001	MG/L		0.16		0.16	I
TOTAL SUSPENDED SOLIDS	03/22/94	0001	MG/L		144.		144.	I
TRICHLOROETHENE	03/22/94	0001	UG/L		2.4		2.4	I
TRITIUM	03/22/94	0001	PCI/L		19100.		19100.	I
URANIUM-234	03/22/94	0001	PCI/L		0.554	J	0.554	I
URANIUM-235	03/22/94	0001	PCI/L		0.036		0.036	I
URANIUM-238	03/22/94	0001	PCI/L		0.255	J	0.255	I
VANADIUM, SOLUBLE	03/22/94	0001	UG/L		22.0		22.0	I
VANADIUM, TOTAL	03/22/94	0001	UG/L		23.2		23.2	I
ZINC, TOTAL	03/22/94	0001	UG/L	B	13.4		13.4	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0325
NORTH COORDINATE: 597270.67 FT
EAST COORDINATE: 1496570.83 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SHALE (SH)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	03/25/94	0001	UG/L		4260.		4260.	I
AMMONIA	03/25/94	0001	MG/L		2.9		2.9	I
ANTIMONY, SOLUBLE	03/25/94	0001	UG/L	B	1.8		1.8	I
BARIUM, SOLUBLE	03/25/94	0001	UG/L		200.	J	200.	I
BARIUM, TOTAL	03/25/94	0001	UG/L	B	190.	J	190.	I
BERYLLIUM, TOTAL	03/25/94	0001	UG/L	B	0.31		0.31	I
CALCIUM, SOLUBLE	03/25/94	0001	UG/L		797000.		REJECT	I
CALCIUM, TOTAL	03/25/94	0001	UG/L		935000.		REJECT	I
CHLORIDE	03/25/94	0001	MG/L		1490.		1490.	I
CHROMIUM, TOTAL	03/25/94	0001	UG/L		12.5		12.5	I
COBALT, SOLUBLE	03/25/94	0001	UG/L	B	0.82	J	0.82	I
COBALT, TOTAL	03/25/94	0001	UG/L	B	5.3		5.3	I
COPPER, SOLUBLE	03/25/94	0001	UG/L	B	1.6	J	1.6	I
COPPER, TOTAL	03/25/94	0001	UG/L	B	10.7		10.7	I
FLUORIDE	03/25/94	0001	MG/L		0.48		0.48	I
IRON, TOTAL	03/25/94	0001	UG/L		7030.	J	7030.	I
LEAD, TOTAL	03/25/94	0001	UG/L		3.5	J	3.5	I
LITHIUM, SOLUBLE	03/25/94	0001	UG/L		331.		331.	I
LITHIUM, TOTAL	03/25/94	0001	UG/L		315.		315.	I
MAGNESIUM, SOLUBLE	03/25/94	0001	UG/L		88700.	J	88700.	I
MAGNESIUM, TOTAL	03/25/94	0001	UG/L		82100.	J	82100.	I
MANGANESE, SOLUBLE	03/25/94	0001	UG/L		79.1		79.1	I
MANGANESE, TOTAL	03/25/94	0001	UG/L		417.		417.	I
MOLYBDENUM, SOLUBLE	03/25/94	0001	UG/L	B	2.2		2.2	I
NICKEL, SOLUBLE	03/25/94	0001	UG/L	B	7.4		7.4	I
NICKEL, TOTAL	03/25/94	0001	UG/L	B	16.0		16.0	I
NITRATE NITRITE	03/25/94	0001	MG/L		0.56		0.56	I
POTASSIUM, SOLUBLE	03/25/94	0001	UG/L		31200.		31200.	I
POTASSIUM, TOTAL	03/25/94	0001	UG/L		30200.		30200.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0325
NORTH COORDINATE: 597270.67 FT
EAST COORDINATE: 1496570.83 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SHALE (SH)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SODIUM, SOLUBLE	03/25/94	0001	UG/L		2610000.		REJECT	I
SODIUM, TOTAL	03/25/94	0001	UG/L		2420000.		REJECT	I
SULFATE	03/25/94	0001	MG/L		30.0		30.0	I
THORIUM-228	03/25/94	0001	PCI/L		0.95		0.95	I
THORIUM-230	03/25/94	0001	PCI/L		1.26		1.26	I
TOTAL DISSOLVED SOLIDS	03/25/94	0001	MG/L		3240.		3240.	I
TOTAL KJELDAHL NITROGEN	03/25/94	0001	MG/L		3.6		3.6	I
TOTAL ORGANIC CARBON	03/25/94	0001	MG/L		0.64		0.64	I
TOTAL PHOSPHATE	03/25/94	0001	MG/L		0.91		0.91	I
TOTAL SUSPENDED SOLIDS	03/25/94	0001	MG/L		180.		180.	I
TRITIUM	03/25/94	0001	PCI/L		1090.		1090.	I
URANIUM-234	03/25/94	0001	PCI/L		0.263	J	0.263	I
URANIUM-238	03/25/94	0001	PCI/L		0.114		0.114	I
VANADIUM, SOLUBLE	03/25/94	0001	UG/L		19.6		19.6	I
VANADIUM, TOTAL	03/25/94	0001	UG/L		25.3		25.3	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0326
NORTH COORDINATE: 597365.17 FT
EAST COORDINATE: 1497091.18 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SHALE (SH)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
4-METHYLPHENOL	03/18/94	0001	UG/L		12.		12.	I
ALUMINUM, TOTAL	03/18/94	0001	UG/L	B	39.5		39.5	I
AMMONIA	03/18/94	0001	MG/L		0.65		0.65	I
ANTIMONY, SOLUBLE	03/18/94	0001	UG/L	B	3.4	J	3.4	I
BARIUM, SOLUBLE	03/18/94	0001	UG/L		248.	J	248.	I
BARIUM, TOTAL	03/18/94	0001	UG/L		240.	J	240.	I
BISMUTH, SOLUBLE	03/18/94	0001	UG/L	B	33.9		33.9	I
CALCIUM, SOLUBLE	03/18/94	0001	UG/L		285000.	J	285000.	I
CALCIUM, TOTAL	03/18/94	0001	UG/L		288000.	J	288000.	I
CHLORIDE	03/18/94	0001	MG/L		2400.		2400.	I
CYANIDE, SOLUBLE (METAL)	03/18/94	0001	UG/L	B	9.8		9.8	I
CYANIDE, TOTAL (METAL)	03/18/94	0001	UG/L		14.2		14.2	I
FLUORIDE	03/18/94	0001	MG/L		0.15		0.15	I
IRON, SOLUBLE	03/18/94	0001	UG/L		414.	J	414.	I
IRON, TOTAL	03/18/94	0001	UG/L		714.	J	714.	I
MAGNESIUM, SOLUBLE	03/18/94	0001	UG/L		52900.	J	52900.	I
MAGNESIUM, TOTAL	03/18/94	0001	UG/L		52400.	J	52400.	I
MANGANESE, SOLUBLE	03/18/94	0001	UG/L		339.	J	339.	I
MANGANESE, TOTAL	03/18/94	0001	UG/L		363.	J	363.	I
MOLYBDENUM	03/18/94	0001	UG/L	B	10.3		10.3	I
MOLYBDENUM, SOLUBLE	03/18/94	0001	UG/L	B	9.0		9.0	I
NICKEL, SOLUBLE	03/18/94	0001	UG/L	B	28.0		28.0	I
NICKEL, TOTAL	03/18/94	0001	UG/L	B	25.1		25.1	I
NITRATE NITRITE	03/18/94	0001	MG/L		0.92		4.6	I
POTASSIUM, SOLUBLE	03/18/94	0001	UG/L	B	4220.		4220.	I
POTASSIUM, TOTAL	03/18/94	0001	UG/L	B	4020.		4020.	I
RADIUM-226	03/18/94	0001	PCI/L		0.43		0.43	I
SODIUM, SOLUBLE	03/18/94	0001	UG/L		1280000.	J	1280000.	I
SODIUM, TOTAL	03/18/94	0001	UG/L		1270000.	J	1270000.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0326
NORTH COORDINATE: 597365.17 FT
EAST COORDINATE: 1497091.18 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SHALE (SH)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SULFATE	03/18/94	0001	MG/L		91.7		91.7	I
THORIUM-228	03/18/94	0001	PCI/L		0.096		0.096	I
THORIUM-230	03/18/94	0001	PCI/L		0.062	J	0.062	I
TOTAL DISSOLVED SOLIDS	03/18/94	0001	MG/L		4800.		4800.	I
TOTAL KJELDAHL NITROGEN	03/18/94	0001	MG/L		0.72		0.72	I
TOTAL ORGANIC CARBON	03/18/94	0001	MG/L		2.7		2.7	I
TOTAL SUSPENDED SOLIDS	03/18/94	0001	MG/L		6.0		6.0	I
TRITIUM	03/18/94	0001	PCI/L		480.		480.	I
URANIUM-234	03/18/94	0001	PCI/L		0.78		0.78	I
URANIUM-235	03/18/94	0001	PCI/L		0.032		0.032	I
URANIUM-238	03/18/94	0001	PCI/L		0.67		0.67	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0327
NORTH COORDINATE: 601687.99 FT
EAST COORDINATE: 1495166.93 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: GRAVEL OR SANDY GRAVEL, POORLY GRADED (GP)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	03/30/94	0001	UG/L		1.3		1.3	I
ANTIMONY, SOLUBLE	03/30/94	0001	UG/L	B	0.80		0.80	I
BARIUM, SOLUBLE	03/30/94	0001	UG/L	B	94.0	J	94.0	I
BARIUM, TOTAL	03/30/94	0001	UG/L	B	110.	J	110.	I
CALCIUM, SOLUBLE	03/30/94	0001	UG/L		113000.	J	113000.	I
CALCIUM, TOTAL	03/30/94	0001	UG/L		130000.	J	130000.	I
CHLORIDE	03/30/94	0001	MG/L		310.		310.	I
CHROMIUM, SOLUBLE	03/30/94	0001	UG/L	B	1.8		1.8	I
CHROMIUM, TOTAL	03/30/94	0001	UG/L		79.0		79.0	I
COBALT, SOLUBLE	03/30/94	0001	UG/L	B	0.98		0.98	I
COBALT, TOTAL	03/30/94	0001	UG/L	B	2.0		2.0	I
FLUORIDE	03/30/94	0001	MG/L		0.24		0.24	I
IRON, SOLUBLE	03/30/94	0001	UG/L		204.	J	204.	I
IRON, TOTAL	03/30/94	0001	UG/L		1120.	J	1120.	I
MAGNESIUM, SOLUBLE	03/30/94	0001	UG/L		33800.		33800.	I
MAGNESIUM, TOTAL	03/30/94	0001	UG/L		39000.		39000.	I
MANGANESE, SOLUBLE	03/30/94	0001	UG/L	B	11.4	J	11.4	I
MANGANESE, TOTAL	03/30/94	0001	UG/L		19.7	J	19.7	I
NICKEL, SOLUBLE	03/30/94	0001	UG/L		163.		163.	I
NICKEL, TOTAL	03/30/94	0001	UG/L		183.		183.	I
NITRATE NITRITE	03/30/94	0001	MG/L		5.1		5.1	I
POTASSIUM, SOLUBLE	03/30/94	0001	UG/L	B	4560.		4560.	I
POTASSIUM, TOTAL	03/30/94	0001	UG/L		5410.		5410.	I
SELENIUM, SOLUBLE	03/30/94	0001	UG/L	B	2.0	J	2.0	I
SELENIUM, TOTAL	03/30/94	0001	UG/L	B	1.9	J	1.9	I
SODIUM, SOLUBLE	03/30/94	0001	UG/L		104000.		104000.	I
SODIUM, TOTAL	03/30/94	0001	UG/L		122000.		122000.	I
SULFATE	03/30/94	0001	MG/L		55.2		55.2	I
TETRACHLOROETHENE	03/30/94	0001	UG/L		11.		11.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0327
NORTH COORDINATE: 601687.99 FT
EAST COORDINATE: 1495166.93 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: GRAVEL OR SANDY GRAVEL, POORLY GRADED (GP)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
THORIUM-228	03/30/94	0001	PCI/L		0.093		0.093	I
TOTAL DISSOLVED SOLIDS	03/30/94	0001	MG/L		959.		959.	I
TOTAL ORGANIC CARBON	03/30/94	0001	MG/L		0.60		0.60	I
TOTAL SUSPENDED SOLIDS	03/30/94	0001	MG/L		11.0		11.0	I
TRITIUM	03/30/94	0001	PCI/L		710.		710.	I
URANIUM-234	03/30/94	0001	PCI/L		0.267		0.267	I
URANIUM-238	03/30/94	0001	PCI/L		0.34		0.34	I
VANADIUM, TOTAL	03/30/94	0001	UG/L		16.6		16.6	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0328
NORTH COORDINATE: 601695.63 FT
EAST COORDINATE: 1495166.40 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
BARIUM, SOLUBLE	03/31/94	0001	UG/L	B	157.		157.	I
BARIUM, TOTAL	03/31/94	0001	UG/L	B	165.		165.	I
CALCIUM, SOLUBLE	03/31/94	0001	UG/L		92900.		92900.	I
CALCIUM, TOTAL	03/31/94	0001	UG/L		97900.		97900.	I
CHLORIDE	03/31/94	0001	MG/L		32.8		32.8	I
FLUORIDE	03/31/94	0001	MG/L		0.30		0.30	I
IRON, SOLUBLE	03/31/94	0001	UG/L		1310.		1310.	I
IRON, TOTAL	03/31/94	0001	UG/L		1390.		1390.	I
MAGNESIUM, SOLUBLE	03/31/94	0001	UG/L		36200.		36200.	I
MAGNESIUM, TOTAL	03/31/94	0001	UG/L		38200.		38200.	I
MANGANESE, SOLUBLE	03/31/94	0001	UG/L		129.		129.	I
MANGANESE, TOTAL	03/31/94	0001	UG/L		137.		137.	I
MOLYBDENUM	03/31/94	0001	UG/L	B	3.7		3.7	I
MOLYBDENUM, SOLUBLE	03/31/94	0001	UG/L	B	3.7		3.7	I
POTASSIUM, SOLUBLE	03/31/94	0001	UG/L	B	2880.		2880.	I
POTASSIUM, TOTAL	03/31/94	0001	UG/L	B	3020.		3020.	I
RADIUM-226	03/31/94	0001	PCI/L		0.52		0.52	I
SODIUM, SOLUBLE	03/31/94	0001	UG/L	B	19600.		19600.	I
SODIUM, TOTAL	03/31/94	0001	UG/L		20400.		20400.	I
SULFATE	03/31/94	0001	MG/L		88.4		88.4	I
THORIUM-228	03/31/94	0001	PCI/L		0.14		0.14	I
THORIUM-230	03/31/94	0001	PCI/L		0.070		0.070	I
TOTAL DISSOLVED SOLIDS	03/31/94	0001	MG/L		492.		492.	I
TOTAL SUSPENDED SOLIDS	03/31/94	0001	MG/L		7.0		7.0	I
TRITIUM	03/31/94	0001	PCI/L		660.		660.	I
URANIUM-234	03/31/94	0001	PCI/L		0.44		0.44	I
URANIUM-235	03/31/94	0001	PCI/L		0.035		0.035	I
URANIUM-238	03/31/94	0001	PCI/L		0.48		0.48	I
VANADIUM, SOLUBLE	03/31/94	0001	UG/L		14.0		14.0	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0328
NORTH COORDINATE: 601695.63 FT
EAST COORDINATE: 1495166.40 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
VANADIUM, TOTAL	03/31/94	0001	UG/L		14.1		14.1	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0329
NORTH COORDINATE: 601231.83 FT
EAST COORDINATE: 1496413.66 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	04/04/94	0001	UG/L		0.42		0.42	I
ANTIMONY, SOLUBLE	04/04/94	0001	UG/L	B	1.2	J	1.2	I
BARIUM, SOLUBLE	04/04/94	0001	UG/L	B	44.5		44.5	I
BARIUM, TOTAL	04/04/94	0001	UG/L	B	46.5		46.5	I
CALCIUM, SOLUBLE	04/04/94	0001	UG/L		95900.		95900.	I
CALCIUM, TOTAL	04/04/94	0001	UG/L		97300.		97300.	I
CHLORIDE	04/04/94	0001	MG/L		102.		102.	I
CHROMIUM, TOTAL	04/04/94	0001	UG/L	B	3.9	J	3.9	I
COBALT, SOLUBLE	04/04/94	0001	UG/L	B	6.3		6.3	I
COBALT, TOTAL	04/04/94	0001	UG/L	B	5.4	J	5.4	I
COPPER, SOLUBLE	04/04/94	0001	UG/L	B	1.6		1.6	I
COPPER, TOTAL	04/04/94	0001	UG/L	B	0.91		0.91	I
FLUORIDE	04/04/94	0001	MG/L		0.15		0.15	I
IRON, SOLUBLE	04/04/94	0001	UG/L		1130.		1130.	I
IRON, TOTAL	04/04/94	0001	UG/L		1120.		1120.	I
MAGNESIUM, SOLUBLE	04/04/94	0001	UG/L		28100.		28100.	I
MAGNESIUM, TOTAL	04/04/94	0001	UG/L		28800.		28800.	I
MANGANESE, SOLUBLE	04/04/94	0001	UG/L		108.		108.	I
MANGANESE, TOTAL	04/04/94	0001	UG/L		86.3	J	86.3	I
NICKEL, SOLUBLE	04/04/94	0001	UG/L		427.		427.	I
NICKEL, TOTAL	04/04/94	0001	UG/L		339.	J	339.	I
NITRATE NITRITE	04/04/94	0001	MG/L		3.1		3.1	I
POTASSIUM, SOLUBLE	04/04/94	0001	UG/L	B	4160.		4160.	I
POTASSIUM, TOTAL	04/04/94	0001	UG/L	B	4210.		4210.	I
SELENIUM, TOTAL	04/04/94	0001	UG/L		3.1		3.1	I
SODIUM, SOLUBLE	04/04/94	0001	UG/L		31700.		31700.	I
SODIUM, TOTAL	04/04/94	0001	UG/L		31100.		31100.	I
SULFATE	04/04/94	0001	MG/L		33.6		33.6	I
TETRACHLOROETHENE	04/04/94	0001	UG/L		4.7		4.7	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0329
NORTH COORDINATE: 601231.83 FT
EAST COORDINATE: 1496413.66 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
THORIUM-228	04/04/94	0001	PCI/L		0.062	J	0.062	I
THORIUM-230	04/04/94	0001	PCI/L		0.087	J	0.087	I
THORIUM-232	04/04/94	0001	PCI/L		0.037		0.037	I
TOTAL DISSOLVED SOLIDS	04/04/94	0001	MG/L		571.		571.	I
TOTAL ORGANIC CARBON	04/04/94	0001	MG/L		0.96		0.96	I
TRITIUM	04/04/94	0001	PCI/L		860.		860.	I
URANIUM-234	04/04/94	0001	PCI/L		0.239		0.239	I
URANIUM-235	04/04/94	0001	PCI/L		0.022		0.022	I
URANIUM-238	04/04/94	0001	PCI/L		0.177		0.177	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0330
NORTH COORDINATE: 601230.60 FT
EAST COORDINATE: 1496422.12 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMMONIA	04/06/94	0001	MG/L		0.15		0.15	I
ARSENIC, SOLUBLE	04/06/94	0001	UG/L	B	2.8	J	2.8	I
ARSENIC, TOTAL	04/06/94	0001	UG/L	B	2.0		2.0	I
BARIUM, SOLUBLE	04/06/94	0001	UG/L		248.		248.	I
BARIUM, TOTAL	04/06/94	0001	UG/L		232.		232.	I
CALCIUM, SOLUBLE	04/06/94	0001	UG/L		93700.	J	93700.	I
CALCIUM, TOTAL	04/06/94	0001	UG/L		88200.	J	88200.	I
CHLORIDE	04/06/94	0001	MG/L		27.8		27.8	I
FLUORIDE	04/06/94	0001	MG/L		0.37		0.37	I
IRON, SOLUBLE	04/06/94	0001	UG/L		2700.		2700.	I
IRON, TOTAL	04/06/94	0001	UG/L		2600.		2600.	I
MAGNESIUM, SOLUBLE	04/06/94	0001	UG/L		38000.	J	38000.	I
MAGNESIUM, TOTAL	04/06/94	0001	UG/L		35700.	J	35700.	I
MANGANESE, SOLUBLE	04/06/94	0001	UG/L		91.4		91.4	I
MANGANESE, TOTAL	04/06/94	0001	UG/L		85.1		85.1	I
PLUTONIUM-238	04/06/94	0001	PCI/L		0.0034		0.0034	I
POTASSIUM, SOLUBLE	04/06/94	0001	UG/L	B	1420.		1420.	I
POTASSIUM, TOTAL	04/06/94	0001	UG/L	B	1470.		1470.	I
RADIUM-226	04/06/94	0001	PCI/L		0.65		0.65	I
SODIUM, SOLUBLE	04/06/94	0001	UG/L	B	14800.		14800.	I
SODIUM, TOTAL	04/06/94	0001	UG/L	B	14400.		14400.	I
TOTAL DISSOLVED SOLIDS	04/06/94	0001	MG/L		476.		476.	I
TOTAL KJELDAHL NITROGEN	04/06/94	0001	MG/L		0.27		0.27	I
TOTAL ORGANIC CARBON	04/06/94	0001	MG/L		0.96		0.96	I
TOTAL PHOSPHATE	04/06/94	0001	MG/L		0.064		0.064	I
TRITIUM	04/06/94	0001	PCI/L		1100.		1100.	I
URANIUM-234	04/06/94	0001	PCI/L		0.29		0.29	I
URANIUM-238	04/06/94	0001	PCI/L		0.114		0.114	I
VANADIUM, SOLUBLE	04/06/94	0001	UG/L		13.1		13.1	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0330
NORTH COORDINATE: 601230.60 FT
EAST COORDINATE: 1496422.12 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
VANADIUM, TOTAL	04/06/94	0001	UG/L		13.0		13.0	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0332
NORTH COORDINATE: 599505.71 FT
EAST COORDINATE: 1497447.41 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: UNDIFFERENTIATED BEDROCK (BR)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	03/15/94	0001	UG/L		381.		381.	I
AMMONIA	03/15/94	0001	MG/L		0.86		0.86	I
ANTIMONY, SOLUBLE	03/15/94	0001	UG/L		4.9		4.9	I
BARIUM, SOLUBLE	03/15/94	0001	UG/L	B	62.0		62.0	I
BARIUM, TOTAL	03/15/94	0001	UG/L	B	69.7		69.7	I
CALCIUM, SOLUBLE	03/15/94	0001	UG/L		79700.		79700.	I
CALCIUM, TOTAL	03/15/94	0001	UG/L		87000.		87000.	I
CHLORIDE	03/15/94	0001	MG/L		111.		111.	I
FLUORIDE	03/15/94	0001	MG/L		1.2		1.2	I
IRON, TOTAL	03/15/94	0001	UG/L		584.		584.	I
LITHIUM, SOLUBLE	03/15/94	0001	UG/L	B	45.7		45.7	I
LITHIUM, TOTAL	03/15/94	0001	UG/L	B	45.7		45.7	I
MAGNESIUM, SOLUBLE	03/15/94	0001	UG/L		43700.		43700.	I
MAGNESIUM, TOTAL	03/15/94	0001	UG/L		47800.		47800.	I
MANGANESE, SOLUBLE	03/15/94	0001	UG/L		33.6		33.6	I
MANGANESE, TOTAL	03/15/94	0001	UG/L		45.5		45.5	I
MOLYBDENUM	03/15/94	0001	UG/L	B	2.6		2.6	I
MOLYBDENUM, SOLUBLE	03/15/94	0001	UG/L	B	2.8		2.8	I
NICKEL, SOLUBLE	03/15/94	0001	UG/L	B	10.7	J	10.7	I
NICKEL, TOTAL	03/15/94	0001	UG/L	B	13.4	J	13.4	I
NITRATE NITRITE	03/15/94	0001	MG/L		0.072		0.072	I
POTASSIUM, SOLUBLE	03/15/94	0001	UG/L		6520.		6520.	I
POTASSIUM, TOTAL	03/15/94	0001	UG/L		6770.		6770.	I
SODIUM, SOLUBLE	03/15/94	0001	UG/L		42500.		42500.	I
SODIUM, TOTAL	03/15/94	0001	UG/L		45200.		45200.	I
SULFATE	03/15/94	0001	MG/L		48.1		48.1	I
THORIUM-230	03/15/94	0001	PCI/L		0.37		0.37	I
THORIUM-232	03/15/94	0001	PCI/L		0.079		0.079	I
TOTAL DISSOLVED SOLIDS	03/15/94	0001	MG/L		628.		628.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0332
NORTH COORDINATE: 599505.71 FT
EAST COORDINATE: 1497447.41 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: UNDIFFERENTIATED BEDROCK (BR)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL KJELDAHL NITROGEN	03/15/94	0001	MG/L		0.72		0.72	I
TOTAL ORGANIC CARBON	03/15/94	0001	MG/L		1.0		1.0	I
TOTAL SUSPENDED SOLIDS	03/15/94	0001	MG/L		6.0		6.0	I
URANIUM-234	03/15/94	0001	PCI/L		0.075		0.075	I
URANIUM-238	03/15/94	0001	PCI/L		0.052		0.052	I
ZINC, TOTAL	03/15/94	0001	UG/L	B	12.1		12.1	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0333
NORTH COORDINATE: 600547.19 FT
EAST COORDINATE: 1494851.90 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: GRAVEL OR SANDY GRAVEL, POORLY GRADED (GP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMERICIUM-241	03/31/94	0001	PCI/L		0.015		0.151	I
ANTIMONY, SOLUBLE	03/31/94	0001	UG/L		3.6		3.6	I
ARSENIC, SOLUBLE	03/31/94	0001	UG/L		35.4		35.4	I
ARSENIC, TOTAL	03/31/94	0001	UG/L		26.3	J	26.3	I
BARIUM, SOLUBLE	03/31/94	0001	UG/L		234.		234.	I
BARIUM, TOTAL	03/31/94	0001	UG/L		255.		255.	I
CALCIUM, SOLUBLE	03/31/94	0001	UG/L		84400.		84400.	I
CALCIUM, TOTAL	03/31/94	0001	UG/L		89600.		89600.	I
CHLORIDE	03/31/94	0001	MG/L		35.3		35.3	I
FLUORIDE	03/31/94	0001	MG/L		0.29		0.29	I
IRON, SOLUBLE	03/31/94	0001	UG/L		2600.		2600.	I
IRON, TOTAL	03/31/94	0001	UG/L		2880.		2880.	I
MAGNESIUM, SOLUBLE	03/31/94	0001	UG/L		33000.		33000.	I
MAGNESIUM, TOTAL	03/31/94	0001	UG/L		35200.		35200.	I
MANGANESE, SOLUBLE	03/31/94	0001	UG/L		151.		151.	I
MANGANESE, TOTAL	03/31/94	0001	UG/L		160.		160.	I
MOLYBDENUM	03/31/94	0001	UG/L	B	3.1		3.1	I
MOLYBDENUM, SOLUBLE	03/31/94	0001	UG/L	B	2.3		2.3	I
POTASSIUM, SOLUBLE	03/31/94	0001	UG/L	B	2590.		2590.	I
POTASSIUM, TOTAL	03/31/94	0001	UG/L	B	2800.		2800.	I
RADIUM-226	03/31/94	0001	PCI/L		0.34		0.34	I
SODIUM, SOLUBLE	03/31/94	0001	UG/L	B	15100.		15100.	I
SODIUM, TOTAL	03/31/94	0001	UG/L	B	16700.		16700.	I
SULFATE	03/31/94	0001	MG/L		81.6		81.6	I
THORIUM-230	03/31/94	0001	PCI/L		0.31		0.31	I
TOTAL DISSOLVED SOLIDS	03/31/94	0001	MG/L		488.		488.	I
TOTAL KJELDAHL NITROGEN	03/31/94	0001	MG/L		0.12		0.12	I
TOTAL ORGANIC CARBON	03/31/94	0001	MG/L		0.86		0.86	I
TOTAL PHOSPHATE	03/31/94	0001	MG/L		0.26		0.26	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0333
NORTH COORDINATE: 600547.19 FT
EAST COORDINATE: 1494851.90 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: GRAVEL OR SANDY GRAVEL, POORLY GRADED (GP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL SUSPENDED SOLIDS	03/31/94	0001	MG/L		8.0		8.0	I
TRITIUM	03/31/94	0001	PCI/L		1360.		1360.	I
URANIUM-234	03/31/94	0001	PCI/L		0.48		0.48	I
URANIUM-238	03/31/94	0001	PCI/L		0.44		0.44	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0334
NORTH COORDINATE: 600540.81 FT
EAST COORDINATE: 1494850.09 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: GRAVEL OR SANDY GRAVEL, POORLY GRADED (GP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	03/29/94	0001	UG/L		0.69		0.69	I
BARIUM, SOLUBLE	03/29/94	0001	UG/L	B	118.		118.	I
BARIUM, TOTAL	03/29/94	0001	UG/L	B	115.		115.	I
CALCIUM, SOLUBLE	03/29/94	0001	UG/L		113000.	J	113000.	I
CALCIUM, TOTAL	03/29/94	0001	UG/L		108000.	J	108000.	I
CHLORIDE	03/29/94	0001	MG/L		99.4		99.4	I
COBALT, SOLUBLE	03/29/94	0001	UG/L	B	0.99		0.99	I
COPPER, SOLUBLE	03/29/94	0001	UG/L	B	1.2		1.2	I
FLUORIDE	03/29/94	0001	MG/L		0.18		0.18	I
IRON, SOLUBLE	03/29/94	0001	UG/L	B	38.6		38.6	I
IRON, TOTAL	03/29/94	0001	UG/L	B	67.5		67.5	I
MAGNESIUM, SOLUBLE	03/29/94	0001	UG/L		37500.	J	37500.	I
MAGNESIUM, TOTAL	03/29/94	0001	UG/L		36800.	J	36800.	I
MANGANESE, SOLUBLE	03/29/94	0001	UG/L	B	11.7		11.7	I
MANGANESE, TOTAL	03/29/94	0001	UG/L	B	9.9		9.9	I
MOLYBDENUM	03/29/94	0001	UG/L	B	2.4		2.4	I
MOLYBDENUM, SOLUBLE	03/29/94	0001	UG/L	B	2.6		2.6	I
NICKEL, SOLUBLE	03/29/94	0001	UG/L		46.2		46.2	I
NICKEL, TOTAL	03/29/94	0001	UG/L		40.4		40.4	I
NITRATE NITRITE	03/29/94	0001	MG/L		4.6		4.6	I
POTASSIUM, SOLUBLE	03/29/94	0001	UG/L	B	3580.		3580.	I
POTASSIUM, TOTAL	03/29/94	0001	UG/L	B	3580.		3580.	I
SODIUM, SOLUBLE	03/29/94	0001	UG/L		57100.		57100.	I
SODIUM, TOTAL	03/29/94	0001	UG/L		58300.		58300.	I
SULFATE	03/29/94	0001	MG/L		50.5		50.5	I
THORIUM-228	03/29/94	0001	PCI/L		0.033		0.033	I
TOTAL DISSOLVED SOLIDS	03/29/94	0001	MG/L		587.		587.	I
TOTAL ORGANIC CARBON	03/29/94	0001	MG/L		1.0		1.0	I
TRITIUM	03/29/94	0001	PCI/L		700.		700.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0334
NORTH COORDINATE: 600540.81 FT
EAST COORDINATE: 1494850.09 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: GRAVEL OR SANDY GRAVEL, POORLY GRADED (GP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
URANIUM-234	03/29/94	0001	PCI/L		0.26	J	0.26	I
URANIUM-238	03/29/94	0001	PCI/L		0.26	J	0.26	I
ZINC, SOLUBLE	03/29/94	0001	UG/L		132.		132.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0335
NORTH COORDINATE: 598844.46 FT
EAST COORDINATE: 1494824.78 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: UNDIFFERENTIATED BEDROCK (BR)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMMONIA	04/01/94	0001	MG/L		37.5		37.5	I
ARSENIC, TOTAL	04/01/94	0001	UG/L	B	58.0		58.0	I
BARIUM, SOLUBLE	04/01/94	0001	UG/L	B	293.		293.	I
BARIUM, TOTAL	04/01/94	0001	UG/L	B	321.		321.	I
CALCIUM, SOLUBLE	04/01/94	0001	UG/L		1360000.		1360000.	I
CALCIUM, TOTAL	04/01/94	0001	UG/L		1510000.		1510000.	I
CHLORIDE	04/01/94	0001	MG/L		17700.		17700.	I
FLUORIDE	04/01/94	0001	MG/L		0.34		0.34	I
IRON, SOLUBLE	04/01/94	0001	UG/L		3870.		3870.	I
IRON, TOTAL	04/01/94	0001	UG/L		4740.		4740.	I
LITHIUM, SOLUBLE	04/01/94	0001	UG/L		4590.		4590.	I
LITHIUM, TOTAL	04/01/94	0001	UG/L		4280.		4280.	I
MAGNESIUM, SOLUBLE	04/01/94	0001	UG/L		623000.		623000.	I
MAGNESIUM, TOTAL	04/01/94	0001	UG/L		689000.		689000.	I
MANGANESE, SOLUBLE	04/01/94	0001	UG/L		473.		473.	I
MANGANESE, TOTAL	04/01/94	0001	UG/L	B	438.	J	438.	I
MERCURY, TOTAL	04/01/94	0001	UG/L		1.4		1.4	I
NICKEL, SOLUBLE	04/01/94	0001	UG/L	B	80.8		80.8	I
POTASSIUM, SOLUBLE	04/01/94	0001	UG/L	B	191000.		191000.	I
POTASSIUM, TOTAL	04/01/94	0001	UG/L		214000.		214000.	I
RADIUM-226	04/01/94	0001	PCI/L		39.47		39.47	I
SODIUM, SOLUBLE	04/01/94	0001	UG/L		6580000.		6580000.	I
SODIUM, TOTAL	04/01/94	0001	UG/L		7270000.		7270000.	I
THORIUM-228	04/01/94	0001	PCI/L		8.5		8.5	I
THORIUM-230	04/01/94	0001	PCI/L		0.39		0.39	I
TOTAL DISSOLVED SOLIDS	04/01/94	0001	MG/L		32400.		32400.	I
TOTAL KJELDAHL NITROGEN	04/01/94	0001	MG/L		26.5		26.5	I
TOTAL ORGANIC CARBON	04/01/94	0001	MG/L		0.50		0.50	I
TOTAL SUSPENDED SOLIDS	04/01/94	0001	MG/L		25.0		25.0	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0335
NORTH COORDINATE: 598844.46 FT
EAST COORDINATE: 1494824.78 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: UNDIFFERENTIATED BEDROCK (BR)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
URANIUM-234	04/01/94	0001	PCI/L		0.066		0.066	I
VANADIUM, SOLUBLE	04/01/94	0001	UG/L	B	246.		246.	I
VANADIUM, TOTAL	04/01/94	0001	UG/L	B	277.	J	277.	I
ZINC, SOLUBLE	04/01/94	0001	UG/L	B	50.6		50.6	I
ZINC, TOTAL	04/01/94	0001	UG/L	B	33.5	J	33.5	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0336
NORTH COORDINATE: 600380.42 FT
EAST COORDINATE: 1496202.19 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ANTIMONY, SOLUBLE	03/30/94	0001	UG/L	B	0.82		0.82	I
BARIUM, SOLUBLE	03/30/94	0001	UG/L	B	90.4	J	90.4	I
BARIUM, TOTAL	03/30/94	0001	UG/L	B	84.1	J	84.1	I
CALCIUM, SOLUBLE	03/30/94	0001	UG/L		104000.	J	104000.	I
CALCIUM, TOTAL	03/30/94	0001	UG/L		99200.	J	99200.	I
CHLORIDE	03/30/94	0001	MG/L		107.		107.	I
CHROMIUM, TOTAL	03/30/94	0001	UG/L	B	2.5		2.5	I
FLUORIDE	03/30/94	0001	MG/L		0.25		0.25	I
IRON, TOTAL	03/30/94	0001	UG/L		100.	J	100.	I
MAGNESIUM, SOLUBLE	03/30/94	0001	UG/L		35500.		35500.	I
MAGNESIUM, TOTAL	03/30/94	0001	UG/L		33100.		33100.	I
MANGANESE, SOLUBLE	03/30/94	0001	UG/L	B	2.8	J	2.8	I
MANGANESE, TOTAL	03/30/94	0001	UG/L	B	3.6	J	3.6	I
NICKEL, SOLUBLE	03/30/94	0001	UG/L		54.7		54.7	I
NICKEL, TOTAL	03/30/94	0001	UG/L		49.8		49.8	I
NITRATE NITRITE	03/30/94	0001	MG/L		2.6		2.6	I
POTASSIUM, SOLUBLE	03/30/94	0001	UG/L	B	2440.		2440.	I
POTASSIUM, TOTAL	03/30/94	0001	UG/L	B	2500.		2500.	I
SELENIUM, SOLUBLE	03/30/94	0001	UG/L	B	1.4		1.4	I
SODIUM, SOLUBLE	03/30/94	0001	UG/L		56200.		56200.	I
SODIUM, TOTAL	03/30/94	0001	UG/L		55700.		55700.	I
SULFATE	03/30/94	0001	MG/L		51.2		51.2	I
THORIUM-228	03/30/94	0001	PCI/L		0.114	J	0.114	I
THORIUM-230	03/30/94	0001	PCI/L		0.017	J	0.017	I
THORIUM-232	03/30/94	0001	PCI/L		0.016		0.016	I
TOTAL DISSOLVED SOLIDS	03/30/94	0001	MG/L		589.		589.	I
TOTAL ORGANIC CARBON	03/30/94	0001	MG/L		0.80		0.80	I
TRITIUM	03/30/94	0001	PCI/L		760.		760.	I
URANIUM-234	03/30/94	0001	PCI/L		0.301		0.301	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0336
NORTH COORDINATE: 600380.42 FT
EAST COORDINATE: 1496202.19 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
URANIUM-238	03/30/94	0001	PCI/L		0.147		0.147	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0337
NORTH COORDINATE: 600372.79 FT
EAST COORDINATE: 1496201.85 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ANTIMONY, SOLUBLE	03/29/94	0001	UG/L	B	3.6		3.6	I
ANTIMONY, TOTAL	03/29/94	0001	UG/L	B	0.85		0.85	I
BARIUM, SOLUBLE	03/29/94	0001	UG/L	B	85.3		85.3	I
BARIUM, TOTAL	03/29/94	0001	UG/L	B	82.7		82.7	I
CALCIUM, SOLUBLE	03/29/94	0001	UG/L		106000.	J	106000.	I
CALCIUM, TOTAL	03/29/94	0001	UG/L		102000.	J	102000.	I
CHLORIDE	03/29/94	0001	MG/L		77.9		77.9	I
CHROMIUM, SOLUBLE	03/29/94	0001	UG/L	B	1.8	J	1.8	I
CHROMIUM, TOTAL	03/29/94	0001	UG/L	B	0.88	J	0.88	I
COPPER, SOLUBLE	03/29/94	0001	UG/L	B	1.9		1.9	I
COPPER, TOTAL	03/29/94	0001	UG/L	B	1.2		1.2	I
FLUORIDE	03/29/94	0001	MG/L		0.13		0.13	I
LEAD, SOLUBLE	03/29/94	0001	UG/L		3.2	J	3.2	I
MAGNESIUM, SOLUBLE	03/29/94	0001	UG/L		34400.	J	34400.	I
MAGNESIUM, TOTAL	03/29/94	0001	UG/L		33900.	J	33900.	I
MANGANESE, SOLUBLE	03/29/94	0001	UG/L	B	3.3		3.3	I
MANGANESE, TOTAL	03/29/94	0001	UG/L	B	8.0		8.0	I
NICKEL, SOLUBLE	03/29/94	0001	UG/L	B	31.3		31.3	I
NICKEL, TOTAL	03/29/94	0001	UG/L		70.3		70.3	I
NITRATE NITRITE	03/29/94	0001	MG/L		5.1		5.1	I
PLUTONIUM-239/240	03/29/94	0001	PCI/L		0.0036		0.0036	I
POTASSIUM, SOLUBLE	03/29/94	0001	UG/L		11400.		11400.	I
POTASSIUM, TOTAL	03/29/94	0001	UG/L		9490.		9490.	I
SODIUM, SOLUBLE	03/29/94	0001	UG/L		43900.		43900.	I
SODIUM, TOTAL	03/29/94	0001	UG/L		45600.		45600.	I
SULFATE	03/29/94	0001	MG/L		49.2		49.2	I
THORIUM-228	03/29/94	0001	PCI/L		0.33		0.33	I
THORIUM-230	03/29/94	0001	PCI/L		0.37		0.37	I
TOTAL DISSOLVED SOLIDS	03/29/94	0001	MG/L		576.		576.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0337
NORTH COORDINATE: 600372.79 FT
EAST COORDINATE: 1496201.85 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL ORGANIC CARBON	03/29/94	0001	MG/L		3.0		3.0	I
TOTAL PHOSPHATE	03/29/94	0001	MG/L		0.077		0.077	I
TRITIUM	03/29/94	0001	PCI/L		1210.		1210.	I
URANIUM-234	03/29/94	0001	PCI/L		0.212	J	0.212	I
URANIUM-238	03/29/94	0001	PCI/L		0.151		0.151	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0341
NORTH COORDINATE: 597650.38 FT
EAST COORDINATE: 1494728.37 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: UNDIFFERENTIATED BEDROCK (BR)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMMONIA	03/30/94	0001	MG/L		8.0		8.0	I
ANTIMONY, SOLUBLE	03/30/94	0001	UG/L	B	1.4	J	1.4	I
BARIUM, SOLUBLE	03/30/94	0001	UG/L	B	113.	J	113.	I
BARIUM, TOTAL	03/30/94	0001	UG/L	B	119.	J	119.	I
BISMUTH, TOTAL	03/30/94	0001	UG/L	B	59.2		59.2	I
CALCIUM, SOLUBLE	03/30/94	0001	UG/L		167000.	J	167000.	I
CALCIUM, TOTAL	03/30/94	0001	UG/L		181000.	J	181000.	I
CHLORIDE	03/30/94	0001	MG/L		2120.		2120.	I
FLUORIDE	03/30/94	0001	MG/L		0.78		0.78	I
IRON, SOLUBLE	03/30/94	0001	UG/L		367.	J	367.	I
IRON, TOTAL	03/30/94	0001	UG/L		452.	J	452.	I
LEAD, TOTAL	03/30/94	0001	UG/L	B	2.4	J	2.4	I
LITHIUM, SOLUBLE	03/30/94	0001	UG/L		874.		874.	I
LITHIUM, TOTAL	03/30/94	0001	UG/L		974.	J	974.	I
MAGNESIUM, SOLUBLE	03/30/94	0001	UG/L		85100.		85100.	I
MAGNESIUM, TOTAL	03/30/94	0001	UG/L		92800.		92800.	I
MANGANESE, SOLUBLE	03/30/94	0001	UG/L		74.6	J	74.6	I
MANGANESE, TOTAL	03/30/94	0001	UG/L		79.3	J	79.3	I
NICKEL, SOLUBLE	03/30/94	0001	UG/L	B	23.7		23.7	I
NICKEL, TOTAL	03/30/94	0001	UG/L	B	23.8		23.8	I
NITRATE NITRITE	03/30/94	0001	MG/L		0.027		0.027	I
POTASSIUM, SOLUBLE	03/30/94	0001	UG/L		44700.		44700.	I
POTASSIUM, TOTAL	03/30/94	0001	UG/L		55200.		55200.	I
RADIUM-226	03/30/94	0001	PCI/L		3.45		3.45	I
SODIUM, SOLUBLE	03/30/94	0001	UG/L		1460000.		1460000.	I
SODIUM, TOTAL	03/30/94	0001	UG/L		1630000.		1630000.	I
SULFATE	03/30/94	0001	MG/L		35.2		35.2	I
THORIUM-228	03/30/94	0001	PCI/L		0.31		0.31	I
THORIUM-230	03/30/94	0001	PCI/L		0.013		0.013	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0341
NORTH COORDINATE: 597650.38 FT
EAST COORDINATE: 1494728.37 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: UNDIFFERENTIATED BEDROCK (BR)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL DISSOLVED SOLIDS	03/30/94	0001	MG/L		4800.		4800.	I
TOTAL KJELDAHL NITROGEN	03/30/94	0001	MG/L		8.4		8.4	I
TRITIUM	03/30/94	0001	PCI/L		2230.		2230.	I
URANIUM-234	03/30/94	0001	PCI/L		0.104		0.104	I
URANIUM-238	03/30/94	0001	PCI/L		0.044		0.044	I
VANADIUM, SOLUBLE	03/30/94	0001	UG/L		22.6		22.6	I
VANADIUM, TOTAL	03/30/94	0001	UG/L		23.9		23.9	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0342
NORTH COORDINATE: 596168.63 FT
EAST COORDINATE: 1494550.20 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMMONIA	04/07/94	0001	MG/L		0.38		0.38	I
ANTIMONY, SOLUBLE	04/07/94	0001	UG/L	B	1.4	J	1.4	I
BARIUM, SOLUBLE	04/07/94	0001	UG/L		239.	J	239.	I
BARIUM, TOTAL	04/07/94	0001	UG/L		264.	J	264.	I
CALCIUM, SOLUBLE	04/07/94	0001	UG/L		70900.		70900.	I
CALCIUM, TOTAL	04/07/94	0001	UG/L		78400.		78400.	I
CHLORIDE	04/07/94	0001	MG/L		43.6		43.6	I
FLUORIDE	04/07/94	0001	MG/L		0.37		0.37	I
IRON, SOLUBLE	04/07/94	0001	UG/L		2000.		2000.	I
IRON, TOTAL	04/07/94	0001	UG/L		2370.		2370.	I
MAGNESIUM, SOLUBLE	04/07/94	0001	UG/L		27400.	J	27400.	I
MAGNESIUM, TOTAL	04/07/94	0001	UG/L		30100.		30100.	I
MANGANESE, SOLUBLE	04/07/94	0001	UG/L		31.6		31.6	I
MANGANESE, TOTAL	04/07/94	0001	UG/L		35.5		35.5	I
MOLYBDENUM	04/07/94	0001	UG/L	B	6.8		6.8	I
MOLYBDENUM, SOLUBLE	04/07/94	0001	UG/L	B	5.7		5.7	I
PLUTONIUM-239/240	04/07/94	0001	PCI/L		0.0050		0.0050	I
POTASSIUM, SOLUBLE	04/07/94	0001	UG/L	B	1530.		1530.	I
POTASSIUM, TOTAL	04/07/94	0001	UG/L	B	1690.		1690.	I
RADIUM-226	04/07/94	0001	PCI/L		0.83		0.83	I
SODIUM, SOLUBLE	04/07/94	0001	UG/L		19400.		19400.	I
SODIUM, TOTAL	04/07/94	0001	UG/L		19300.		19300.	I
SULFATE	04/07/94	0001	MG/L		30.9		30.9	I
THORIUM-228	04/07/94	0001	PCI/L		0.080		0.080	I
TOTAL DISSOLVED SOLIDS	04/07/94	0001	MG/L		400.		400.	I
TOTAL KJELDAHL NITROGEN	04/07/94	0001	MG/L		0.40		0.40	I
TOTAL ORGANIC CARBON	04/07/94	0001	MG/L		0.75		0.75	I
TOTAL PHOSPHATE	04/07/94	0001	MG/L		0.053		0.053	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0343
NORTH COORDINATE: 597140.04 FT
EAST COORDINATE: 1494485.25 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMMONIA	04/05/94	0001	MG/L		3.4		3.4	I
ARSENIC, SOLUBLE	04/05/94	0001	UG/L	B	3.2		3.2	I
ARSENIC, TOTAL	04/05/94	0001	UG/L	B	4.3	J	4.3	I
BARIUM, SOLUBLE	04/05/94	0001	UG/L	B	78.7		78.7	I
BARIUM, TOTAL	04/05/94	0001	UG/L	B	76.5		76.5	I
BERYLLIUM, SOLUBLE	04/05/94	0001	UG/L	B	0.29	J	0.29	I
BERYLLIUM, TOTAL	04/05/94	0001	UG/L	B	0.38	J	0.38	I
CADMIUM, SOLUBLE	04/05/94	0001	UG/L	B	0.73		0.73	I
CALCIUM, SOLUBLE	04/05/94	0001	UG/L		79400.		79400.	I
CALCIUM, TOTAL	04/05/94	0001	UG/L		77100.		77100.	I
CHLORIDE	04/05/94	0001	MG/L		132.		132.	I
COPPER, TOTAL	04/05/94	0001	UG/L	B	0.90		0.90	I
FLUORIDE	04/05/94	0001	MG/L		0.60		0.60	I
IRON, SOLUBLE	04/05/94	0001	UG/L		3660.		3660.	I
IRON, TOTAL	04/05/94	0001	UG/L		3790.		3790.	I
MAGNESIUM, SOLUBLE	04/05/94	0001	UG/L		25000.		25000.	I
MAGNESIUM, TOTAL	04/05/94	0001	UG/L		24600.		24600.	I
MANGANESE, SOLUBLE	04/05/94	0001	UG/L		337.		337.	I
MANGANESE, TOTAL	04/05/94	0001	UG/L		334.		334.	I
MOLYBDENUM	04/05/94	0001	UG/L	B	8.8		8.8	I
MOLYBDENUM, SOLUBLE	04/05/94	0001	UG/L	B	7.6		7.6	I
PHENOL	04/05/94	0001	UG/L	J	2.	J	2.	I
POTASSIUM, SOLUBLE	04/05/94	0001	UG/L	B	1360.	J	1360.	I
POTASSIUM, TOTAL	04/05/94	0001	UG/L	B	1250.	J	1250.	I
SODIUM, SOLUBLE	04/05/94	0001	UG/L		24200.		24200.	I
SODIUM, TOTAL	04/05/94	0001	UG/L		23000.		23000.	I
THORIUM-230	04/05/94	0001	PCI/L		0.088	J	0.088	I
TOTAL DISSOLVED SOLIDS	04/05/94	0001	MG/L		538.		538.	I
TOTAL KJELDAHL NITROGEN	04/05/94	0001	MG/L		3.4		3.4	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0343
NORTH COORDINATE: 597140.04 FT
EAST COORDINATE: 1494485.25 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL ORGANIC CARBON	04/05/94	0001	MG/L		2.1		2.1	I
TOTAL PHOSPHATE	04/05/94	0001	MG/L		0.50		0.50	I
TOTAL SUSPENDED SOLIDS	04/05/94	0001	MG/L		5.0		5.0	I
TRITIUM	04/05/94	0001	PCI/L		10140.		10140.	I
URANIUM-234	04/05/94	0001	PCI/L		0.010		0.010	I
URANIUM-238	04/05/94	0001	PCI/L		0.006		0.006	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0344
NORTH COORDINATE: 595521.96 FT
EAST COORDINATE: 1495145.72 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMERICIUM-241	03/24/94	0001	PCI/L		0.014		0.014	I
AMMONIA	03/24/94	0001	MG/L		0.21		0.21	I
BARIUM, SOLUBLE	03/24/94	0001	UG/L		348.	J	348.	I
BARIUM, TOTAL	03/24/94	0001	UG/L		342.	J	342.	I
CALCIUM, SOLUBLE	03/24/94	0001	UG/L		103000.	J	103000.	I
CALCIUM, TOTAL	03/24/94	0001	UG/L		100000.	J	100000.	I
CHLORIDE	03/24/94	0001	MG/L		95.6		95.6	I
COPPER, SOLUBLE	03/24/94	0001	UG/L	B	0.55	J	0.55	I
COPPER, TOTAL	03/24/94	0001	UG/L	B	0.99	J	0.99	I
FLUORIDE	03/24/94	0001	MG/L		0.20		0.20	I
IRON, SOLUBLE	03/24/94	0001	UG/L		4220.	J	4220.	I
IRON, TOTAL	03/24/94	0001	UG/L		4170.	J	4170.	I
MAGNESIUM, SOLUBLE	03/24/94	0001	UG/L		30300.	J	30300.	I
MAGNESIUM, TOTAL	03/24/94	0001	UG/L		29600.	J	29600.	I
MANGANESE, SOLUBLE	03/24/94	0001	UG/L		54.3		54.3	I
MANGANESE, TOTAL	03/24/94	0001	UG/L		52.7		52.7	I
MOLYBDENUM	03/24/94	0001	UG/L	B	2.2		2.2	I
MOLYBDENUM, SOLUBLE	03/24/94	0001	UG/L	B	2.7		2.7	I
NICKEL, SOLUBLE	03/24/94	0001	UG/L	B	16.0		16.0	I
NICKEL, TOTAL	03/24/94	0001	UG/L	B	17.1		17.1	I
POTASSIUM, SOLUBLE	03/24/94	0001	UG/L	B	1620.		1620.	I
POTASSIUM, TOTAL	03/24/94	0001	UG/L	B	1660.		1660.	I
RADIUM-226	03/24/94	0001	PCI/L		0.44		0.44	I
SODIUM, SOLUBLE	03/24/94	0001	UG/L		123000.		REJECT	I
SODIUM, TOTAL	03/24/94	0001	UG/L		134000.		REJECT	I
SULFATE	03/24/94	0001	MG/L		44.6		44.6	I
THORIUM-228	03/24/94	0001	PCI/L		0.095	J	0.095	I
THORIUM-230	03/24/94	0001	PCI/L		0.019		0.019	I
TOTAL DISSOLVED SOLIDS	03/24/94	0001	MG/L		544.		544.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0344
NORTH COORDINATE: 595521.96 FT
EAST COORDINATE: 1495145.72 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL KJELDAHL NITROGEN	03/24/94	0001	MG/L		0.34		0.34	I
TOTAL ORGANIC CARBON	03/24/94	0001	MG/L		1.7		1.7	I
TOTAL SUSPENDED SOLIDS	03/24/94	0001	MG/L		15.0		15.0	I
TRITIUM	03/24/94	0001	PCI/L		2400.		2400.	I
URANIUM-234	03/24/94	0001	PCI/L		0.093	J	0.093	I
URANIUM-238	03/24/94	0001	PCI/L		0.039	J	0.039	I
VANADIUM, SOLUBLE	03/24/94	0001	UG/L	B	8.9	J	8.9	I
VANADIUM, TOTAL	03/24/94	0001	UG/L	B	8.8	J	8.8	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0345
NORTH COORDINATE: 597625.59 FT
EAST COORDINATE: 1496496.46 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ANTIMONY, SOLUBLE	03/11/94	0001	UG/L	B	0.80		0.80	I
BARIUM, SOLUBLE	03/11/94	0001	UG/L	B	65.3		65.3	I
BARIUM, TOTAL	03/11/94	0001	UG/L	B	71.2		71.2	I
CALCIUM, SOLUBLE	03/11/94	0001	UG/L		108000.		108000.	I
CALCIUM, TOTAL	03/11/94	0001	UG/L		112000.		112000.	I
CHLORIDE	03/11/94	0001	MG/L		196.		196.	I
DIETHYL PHTHALATE	03/11/94	0001	UG/L	J	0.9	J	0.9	I
FLUORIDE	03/11/94	0001	MG/L		0.14		0.14	I
LEAD, TOTAL	03/11/94	0001	UG/L	B	2.1		2.1	I
MAGNESIUM, SOLUBLE	03/11/94	0001	UG/L		34800.		34800.	I
MAGNESIUM, TOTAL	03/11/94	0001	UG/L		36200.		36200.	I
MANGANESE, SOLUBLE	03/11/94	0001	UG/L		33.6		33.6	I
MANGANESE, TOTAL	03/11/94	0001	UG/L		33.9		33.9	I
MOLYBDENUM	03/11/94	0001	UG/L	B	2.2		2.2	I
NITRATE NITRITE	03/11/94	0001	MG/L		0.88		0.88	I
PLUTONIUM-238	03/11/94	0001	PCI/L		0.010		0.010	I
POTASSIUM, SOLUBLE	03/11/94	0001	UG/L	B	4320.		4320.	I
POTASSIUM, TOTAL	03/11/94	0001	UG/L	B	4710.		4710.	I
SELENIUM, SOLUBLE	03/11/94	0001	UG/L	B	2.1	J	2.1	I
SODIUM, SOLUBLE	03/11/94	0001	UG/L		121000.	J	121000.	I
SODIUM, TOTAL	03/11/94	0001	UG/L		121000.	J	121000.	I
SULFATE	03/11/94	0001	MG/L		67.4		67.4	I
THORIUM-228	03/11/94	0001	PCI/L		0.048		0.048	I
THORIUM-230	03/11/94	0001	PCI/L		0.029		0.029	I
TOTAL DISSOLVED SOLIDS	03/11/94	0001	MG/L		759.		759.	I
TOTAL ORGANIC CARBON	03/11/94	0001	MG/L		1.3		1.3	I
TRITIUM	03/11/94	0001	PCI/L		1810.		1810.	I
URANIUM-234	03/11/94	0001	PCI/L		0.226		0.226	I
URANIUM-238	03/11/94	0001	PCI/L		0.194		0.194	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0345
NORTH COORDINATE: 597625.59 FT
EAST COORDINATE: 1496496.46 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
VANADIUM, TOTAL	03/11/94	0001	UG/L	B	1.6		1.6	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0346
NORTH COORDINATE: 597626.90 FT
EAST COORDINATE: 1496107.04 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, SOLUBLE	03/14/94	0001	UG/L	B	10.3	J	10.3	I
ALUMINUM, TOTAL	03/14/94	0001	UG/L		21.3	J	21.3	I
AMMONIA	03/14/94	1001	MG/L		2.1	J	2.1	I
ANTIMONY, SOLUBLE	03/14/94	0001	UG/L	B	1.0		1.0	I
	03/14/94	1001	UG/L	B	1.1		1.1	I
BARIUM, SOLUBLE	03/14/94	0001	UG/L	B	44.6	J	44.6	I
	03/14/94	1001	UG/L	B	114.	J	114.	I
BARIUM, TOTAL	03/14/94	0001	UG/L	B	47.0	J	47.0	I
	03/14/94	1001	UG/L	B	127.	J	127.	I
CALCIUM, SOLUBLE	03/14/94	0001	UG/L		148000.	J	148000.	I
	03/14/94	1001	UG/L		73900.	J	73900.	I
CALCIUM, TOTAL	03/14/94	0001	UG/L		149000.	J	149000.	I
	03/14/94	1001	UG/L		82700.	J	82700.	I
CHLORIDE	03/14/94	0001	MG/L		366.	J	366.	I
	03/14/94	1001	MG/L		209.	J	209.	I
CHROMIUM, TOTAL	03/14/94	0001	UG/L		28.1	J	28.1	I
	03/14/94	1001	UG/L		21.0	J	21.0	I
COPPER, SOLUBLE	03/14/94	0001	UG/L	B	5.6	J	5.6	I
	03/14/94	1001	UG/L	B	1.2	J	1.2	I
COPPER, TOTAL	03/14/94	1001	UG/L	B	1.0	J	1.0	I
FLUORIDE	03/14/94	0001	MG/L		0.29	J	0.29	I
	03/14/94	1001	MG/L		0.76	J	0.76	I
IRON, SOLUBLE	03/14/94	0001	UG/L		1030.	J	1030.	I
	03/14/94	1001	UG/L	B	65.1	J	65.1	I
IRON, TOTAL	03/14/94	0001	UG/L		1340.	J	1340.	I
	03/14/94	1001	UG/L		218.	J	218.	I
LEAD, TOTAL	03/14/94	1001	UG/L	B	2.2	J	2.2	I
LITHIUM, SOLUBLE	03/14/94	0001	UG/L	B	61.6	J	61.6	I
	03/14/94	1001	UG/L		110.	J	110.	I
LITHIUM, TOTAL	03/14/94	0001	UG/L	B	53.7	J	53.7	I
	03/14/94	1001	UG/L		118.	J	118.	I
MAGNESIUM, SOLUBLE	03/14/94	0001	UG/L		52300.	J	52300.	I
	03/14/94	1001	UG/L		38100.	J	38100.	I
MAGNESIUM, TOTAL	03/14/94	0001	UG/L		52900.		52900.	I
	03/14/94	1001	UG/L		42600.		42600.	I
MANGANESE, SOLUBLE	03/14/94	0001	UG/L		37.2		37.2	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0346
NORTH COORDINATE: 597626.90 FT
EAST COORDINATE: 1496107.04 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
MANGANESE, SOLUBLE	03/14/94	1001	UG/L		30.0		30.0	I
MANGANESE, TOTAL	03/14/94	0001	UG/L		39.6		39.6	I
	03/14/94	1001	UG/L		35.4		35.4	I
MOLYBDENUM	03/14/94	0001	UG/L	B	4.2	J	4.2	I
NICKEL, SOLUBLE	03/14/94	0001	UG/L		45.3	J	45.3	I
	03/14/94	1001	UG/L	B	15.4	J	15.4	I
NICKEL, TOTAL	03/14/94	0001	UG/L		61.8	J	61.8	I
	03/14/94	1001	UG/L	B	16.5	J	16.5	I
NITRATE NITRITE	03/14/94	1001	MG/L		0.056	J	0.056	I
POTASSIUM, SOLUBLE	03/14/94	0001	UG/L	B	4930.	J	4930.	I
	03/14/94	1001	UG/L		18900.	J	18900.	I
POTASSIUM, TOTAL	03/14/94	0001	UG/L	B	4890.	J	4890.	I
	03/14/94	1001	UG/L		21700.	J	21700.	I
SELENIUM, SOLUBLE	03/14/94	0001	UG/L	B	2.3	J	2.3	I
SODIUM, SOLUBLE	03/14/94	0001	UG/L		213000.	J	213000.	I
	03/14/94	1001	UG/L		94900.	J	94900.	I
SODIUM, TOTAL	03/14/94	0001	UG/L		215000.	J	215000.	I
	03/14/94	1001	UG/L		110000.	J	110000.	I
SULFATE	03/14/94	0001	MG/L		117.	J	117.	I
	03/14/94	1001	MG/L		22.5	J	22.5	I
THORIUM-228	03/14/94	0001	PCI/L		0.452		0.070	I
	03/14/94	1001	PCI/L		0.095		0.095	I
THORIUM-230	03/14/94	0001	PCI/L		0.033	J	0.033	I
	03/14/94	1001	PCI/L		0.026		0.026	I
TOTAL DISSOLVED SOLIDS	03/14/94	0001	MG/L		1130.	J	1130.	I
	03/14/94	1001	MG/L		672.	J	672.	I
TOTAL KJELDAHL NITROGEN	03/14/94	0001	MG/L		0.20	J	0.20	I
	03/14/94	1001	MG/L		1.8	J	1.8	I
TOTAL ORGANIC CARBON	03/14/94	0001	MG/L		0.82	J	0.82	I
	03/14/94	1001	MG/L		0.54	J	0.54	I
TOTAL SUSPENDED SOLIDS	03/14/94	0001	MG/L		8.0	J	8.0	I
TRITIUM	03/14/94	0001	PCI/L		4600.		4600.	I
	03/14/94	1001	PCI/L		4800.		4800.	I
URANIUM-234	03/14/94	0001	PCI/L		0.363		0.363	I
	03/14/94	1001	PCI/L		0.374		0.374	I
URANIUM-238	03/14/94	0001	PCI/L		0.226		0.226	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0346
NORTH COORDINATE: 597626.90 FT
EAST COORDINATE: 1496107.04 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
URANIUM-238	03/14/94	1001	PCI/L		0.297		0.297	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0347
NORTH COORDINATE: 597375.07 FT
EAST COORDINATE: 1495092.49 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND WELL GRADED (SW)
HYDRAULIC FLOW RELATIONSHIP: NOT KNOWN (N)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,2-CIS-DICHLOROETHENE	03/24/94	0001	UG/L		2.1		2.1	I
	03/24/94	1001	UG/L		2.0		2.0	I
AMERICIUM-241	03/24/94	1001	PCI/L		0.021	J	0.021	I
BARIUM, SOLUBLE	03/24/94	0001	UG/L	B	146.	J	146.	I
	03/24/94	1001	UG/L	B	145.	J	145.	I
BARIUM, TOTAL	03/24/94	0001	UG/L	B	142.	J	142.	I
	03/24/94	1001	UG/L	B	142.	J	142.	I
CALCIUM, SOLUBLE	03/24/94	0001	UG/L		708000.		REJECT	I
	03/24/94	1001	UG/L		692000.		REJECT	I
CALCIUM, TOTAL	03/24/94	0001	UG/L		698000.		REJECT	I
	03/24/94	1001	UG/L		665000.		REJECT	I
CHLORIDE	03/24/94	0001	MG/L		311.		311.	I
	03/24/94	1001	MG/L		282.		282.	I
CHROMIUM, TOTAL	03/24/94	0001	UG/L		19.1	J	19.1	I
	03/24/94	1001	UG/L	B	7.2	J	7.2	I
COPPER, SOLUBLE	03/24/94	0001	UG/L	B	0.64	J	0.64	I
	03/24/94	1001	UG/L	B	0.55	J	0.55	I
COPPER, TOTAL	03/24/94	0001	UG/L	B	0.84	J	0.84	I
CYANIDE, TOTAL (METAL)	03/24/94	0001	UG/L	B	5.3	J	5.3	I
FLUORIDE	03/24/94	0001	MG/L		0.23		0.23	I
	03/24/94	1001	MG/L		0.23		0.23	I
IRON, TOTAL	03/24/94	0001	UG/L		124.	J	124.	I
	03/24/94	1001	UG/L	B	84.7	J	84.7	I
MAGNESIUM, SOLUBLE	03/24/94	0001	UG/L		54800.	J	54800.	I
	03/24/94	1001	UG/L		54400.	J	54400.	I
MAGNESIUM, TOTAL	03/24/94	0001	UG/L		53200.	J	53200.	I
	03/24/94	1001	UG/L		53300.	J	53300.	I
MANGANESE, SOLUBLE	03/24/94	0001	UG/L	B	12.1		12.1	I
	03/24/94	1001	UG/L	B	11.0		11.0	I
MANGANESE, TOTAL	03/24/94	0001	UG/L		15.1	J	15.1	I
	03/24/94	1001	UG/L	B	10.8	J	10.8	I
MOLYBDENUM	03/24/94	0001	UG/L	B	4.2		4.2	I
	03/24/94	1001	UG/L	B	4.0		4.0	I
MOLYBDENUM, SOLUBLE	03/24/94	0001	UG/L	B	4.3		4.3	I
	03/24/94	1001	UG/L	B	3.7		3.7	I
NICKEL, SOLUBLE	03/24/94	0001	UG/L		51.5		51.5	I
	03/24/94	1001	UG/L		49.4		49.4	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0347
NORTH COORDINATE: 597375.07 FT
EAST COORDINATE: 1495092.49 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND WELL GRADED (SW)
HYDRAULIC FLOW RELATIONSHIP: NOT KNOWN (N)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
NICKEL, TOTAL	03/24/94	0001	UG/L		60.6	J	60.6	I
	03/24/94	1001	UG/L		44.2	J	44.2	I
NITRATE NITRITE	03/24/94	0001	MG/L		3.7		3.7	I
	03/24/94	1001	MG/L		3.7		3.7	I
PLUTONIUM-238	03/24/94	1001	PCI/L		0.0030		0.0030	I
POTASSIUM, SOLUBLE	03/24/94	0001	UG/L	B	2570.	J	2570.	I
	03/24/94	1001	UG/L	B	4060.	J	4060.	I
POTASSIUM, TOTAL	03/24/94	0001	UG/L	B	2570.		2570.	I
	03/24/94	1001	UG/L	B	2530.		2530.	I
RADIUM-226	03/24/94	0001	PCI/L		0.31		0.31	I
SILVER, SOLUBLE	03/24/94	1001	UG/L	B	1.1	J	1.1	I
SODIUM, SOLUBLE	03/24/94	0001	UG/L		662000.		REJECT	I
	03/24/94	1001	UG/L		645000.		REJECT	I
SODIUM, TOTAL	03/24/94	0001	UG/L		651000.		REJECT	I
	03/24/94	1001	UG/L		616000.		REJECT	I
SULFATE	03/24/94	0001	MG/L		117.		117.	I
	03/24/94	1001	MG/L		129.		129.	I
TETRACHLOROMETHANE (CCL4)	03/24/94	0001	UG/L		4.2		4.2	I
	03/24/94	1001	UG/L		3.9		3.9	I
THORIUM-228	03/24/94	0001	PCI/L		0.25		0.25	I
THORIUM-230	03/24/94	0001	PCI/L		0.65		0.65	I
	03/24/94	1001	PCI/L		0.60		0.60	I
TOTAL DISSOLVED SOLIDS	03/24/94	0001	MG/L		1080.		1080.	I
	03/24/94	1001	MG/L		1080.		1080.	I
TOTAL ORGANIC CARBON	03/24/94	0001	MG/L		0.82	J	0.82	I
	03/24/94	1001	MG/L		1.2	J	1.2	I
TOTAL SUSPENDED SOLIDS	03/24/94	0001	MG/L		6.0		6.0	I
	03/24/94	1001	MG/L		7.0		7.0	I
TRICHLOROETHENE	03/24/94	0001	UG/L		11.	J	11.	I
	03/24/94	1001	UG/L		8.5	J	8.5	I
TRICHLOROMETHANE (CHLOROFORM)	03/24/94	0001	UG/L		0.52		0.52	I
	03/24/94	1001	UG/L		0.50		0.50	I
TRITIUM	03/24/94	0001	PCI/L		3160.		3160.	I
	03/24/94	1001	PCI/L		2490.		2490.	I
URANIUM-234	03/24/94	0001	PCI/L		0.86		0.86	I
	03/24/94	1001	PCI/L		0.63		0.63	I
URANIUM-235	03/24/94	0001	PCI/L		0.028		0.028	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0347
NORTH COORDINATE: 597375.07 FT
EAST COORDINATE: 1495092.49 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND WELL GRADED (SW)
HYDRAULIC FLOW RELATIONSHIP: NOT KNOWN (N)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
URANIUM-235	03/24/94	1001	PCI/L		0.036		0.036	I
URANIUM-238	03/24/94	0001	PCI/L		0.49		0.49	I
	03/24/94	1001	PCI/L		0.508		0.508	I
VANADIUM, SOLUBLE	03/24/94	0001	UG/L		14.2		14.2	I
	03/24/94	1001	UG/L		15.2		15.2	I
VANADIUM, TOTAL	03/24/94	0001	UG/L		14.3		14.3	I
	03/24/94	1001	UG/L		14.6		14.6	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0351
NORTH COORDINATE: 596433.35 FT
EAST COORDINATE: 1497050.28 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LIMESTONE (LS)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMMONIA	03/15/94	0001	MG/L		1.4		1.4	I
BARIUM, SOLUBLE	03/15/94	0001	UG/L	B	16.9		16.9	I
BARIUM, TOTAL	03/15/94	0001	UG/L	B	17.6		17.6	I
BERYLLIUM, SOLUBLE	03/15/94	0001	UG/L		0.58		0.58	I
BERYLLIUM, TOTAL	03/15/94	0001	UG/L		0.58		0.58	I
CALCIUM, SOLUBLE	03/15/94	0001	UG/L		133000.		133000.	I
CALCIUM, TOTAL	03/15/94	0001	UG/L		131000.		131000.	I
CHLORIDE	03/15/94	0001	MG/L		89.1		89.1	I
FLUORIDE	03/15/94	0001	MG/L		0.56		0.56	I
IRON, SOLUBLE	03/15/94	0001	UG/L		331.		331.	I
IRON, TOTAL	03/15/94	0001	UG/L		374.	J	374.	I
LEAD, TOTAL	03/15/94	0001	UG/L		6.4	J	6.4	I
LITHIUM, SOLUBLE	03/15/94	0001	UG/L	B	87.3		87.3	I
LITHIUM, TOTAL	03/15/94	0001	UG/L	B	87.3	J	87.3	I
MAGNESIUM, SOLUBLE	03/15/94	0001	UG/L		90100.		90100.	I
MAGNESIUM, TOTAL	03/15/94	0001	UG/L		87000.		87000.	I
MANGANESE, SOLUBLE	03/15/94	0001	UG/L	B	13.5		13.5	I
MANGANESE, TOTAL	03/15/94	0001	UG/L		15.4		15.4	I
POTASSIUM, SOLUBLE	03/15/94	0001	UG/L		15600.		15600.	I
POTASSIUM, TOTAL	03/15/94	0001	UG/L		15600.	J	15600.	I
RADIUM-226	03/15/94	0001	PCI/L		0.48		0.48	I
SODIUM, SOLUBLE	03/15/94	0001	UG/L		41600.		41600.	I
SODIUM, TOTAL	03/15/94	0001	UG/L		41800.		41800.	I
SULFATE	03/15/94	0001	MG/L		399.		399.	I
THORIUM-228	03/15/94	0001	PCI/L		0.156		0.156	I
TOTAL DISSOLVED SOLIDS	03/15/94	0001	MG/L		1070.		1070.	I
TOTAL KJELDAHL NITROGEN	03/15/94	0001	MG/L		1.2		1.2	I
TOTAL ORGANIC CARBON	03/15/94	0001	MG/L		1.1		1.1	I
TOTAL PHOSPHATE	03/15/94	0001	MG/L		0.099		0.099	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0351
NORTH COORDINATE: 596433.35 FT
EAST COORDINATE: 1497050.28 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: LIMESTONE (LS)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
URANIUM-234	03/15/94	0001	PCI/L		0.101		0.101	I
URANIUM-238	03/15/94	0001	PCI/L		0.099		0.099	I
VANADIUM, SOLUBLE	03/15/94	0001	UG/L		23.6		23.6	I
VANADIUM, TOTAL	03/15/94	0001	UG/L		24.6		24.6	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0353
NORTH COORDINATE: 596241.80 FT
EAST COORDINATE: 1495668.78 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTS, SANDY OR GRAVELLY SILTS, DIATOMACEOUS SOILS (ML)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	04/12/94	0001	UG/L		57.8		57.8	I
BARIUM, SOLUBLE	04/12/94	0001	UG/L	B	106.		106.	I
BARIUM, TOTAL	04/12/94	0001	UG/L	B	106.		106.	I
CALCIUM, SOLUBLE	04/12/94	0001	UG/L		129000.	J	129000.	I
CALCIUM, TOTAL	04/12/94	0001	UG/L		129000.	J	129000.	I
CHLORIDE	04/12/94	0001	MG/L		179.		179.	I
CHROMIUM, TOTAL	04/12/94	0001	UG/L		47.9		47.9	I
COPPER, SOLUBLE	04/12/94	0001	UG/L	B	0.82		0.82	I
COPPER, TOTAL	04/12/94	0001	UG/L	B	2.4		2.4	I
FLUORIDE	04/12/94	0001	MG/L		0.16		0.16	I
IRON, SOLUBLE	04/12/94	0001	UG/L		1280.		1280.	I
IRON, TOTAL	04/12/94	0001	UG/L		1860.		1860.	I
LEAD, TOTAL	04/12/94	0001	UG/L	B	0.90	J	0.90	I
MAGNESIUM, SOLUBLE	04/12/94	0001	UG/L		45500.	J	45500.	I
MAGNESIUM, TOTAL	04/12/94	0001	UG/L		45400.	J	45400.	I
MANGANESE, SOLUBLE	04/12/94	0001	UG/L		46.3		46.3	I
MANGANESE, TOTAL	04/12/94	0001	UG/L		48.1		48.1	I
MOLYBDENUM	04/12/94	0001	UG/L	B	1.5		1.5	I
NICKEL, SOLUBLE	04/12/94	0001	UG/L	B	9.1		9.1	I
NICKEL, TOTAL	04/12/94	0001	UG/L	B	13.4		13.4	I
POTASSIUM, SOLUBLE	04/12/94	0001	UG/L	B	3010.		3010.	I
POTASSIUM, TOTAL	04/12/94	0001	UG/L	B	2950.		2950.	I
RADIUM-226	04/12/94	0001	PCI/L		0.30		0.30	I
SODIUM, SOLUBLE	04/12/94	0001	UG/L		18400.		18400.	I
SODIUM, TOTAL	04/12/94	0001	UG/L		18100.		18100.	I
SULFATE	04/12/94	0001	MG/L		116.		116.	I
THORIUM-228	04/12/94	0001	PCI/L		0.060		0.060	I
THORIUM-230	04/12/94	0001	PCI/L		0.033	J	0.033	I
TOTAL DISSOLVED SOLIDS	04/12/94	0001	MG/L		690.		690.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0353
NORTH COORDINATE: 596241.80 FT
EAST COORDINATE: 1495668.78 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTS, SANDY OR GRAVELLY SILTS, DIATOMACEOUS SOILS (ML)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL KJELDAHL NITROGEN	04/12/94	0001	MG/L		0.16		0.16	I
TOTAL ORGANIC CARBON	04/12/94	0001	MG/L		0.86		0.86	I
TOTAL SUSPENDED SOLIDS	04/12/94	0001	MG/L		17.0		17.0	I
TRITIUM	04/12/94	0001	PCI/L		1860.		1860.	I
URANIUM-234	04/12/94	0001	PCI/L		0.096		0.096	I
VANADIUM, SOLUBLE	04/12/94	0001	UG/L		14.3		14.3	I
VANADIUM, TOTAL	04/12/94	0001	UG/L		14.4		14.4	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0354
NORTH COORDINATE: 595602.10 FT
EAST COORDINATE: 1496322.15 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTSTONE (ST)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	03/23/94	0001	UG/L		876.		876.	I
BARIUM, SOLUBLE	03/23/94	0001	UG/L	B	29.0		29.0	I
BARIUM, TOTAL	03/23/94	0001	UG/L	B	30.4		30.4	I
BISMUTH, SOLUBLE	03/23/94	0001	UG/L	B	32.5		32.5	I
CALCIUM, SOLUBLE	03/23/94	0001	UG/L		87600.		87600.	I
CALCIUM, TOTAL	03/23/94	0001	UG/L		88100.		88100.	I
CHLORIDE	03/23/94	0001	MG/L		8.1		8.1	I
COPPER, TOTAL	03/23/94	0001	UG/L	B	2.5		2.5	I
FLUORIDE	03/23/94	0001	MG/L		0.20		0.20	I
IRON, TOTAL	03/23/94	0001	UG/L		1800.		1800.	I
LITHIUM, SOLUBLE	03/23/94	0001	UG/L	B	13.0	J	13.0	I
LITHIUM, TOTAL	03/23/94	0001	UG/L	B	13.0	J	13.0	I
MAGNESIUM, SOLUBLE	03/23/94	0001	UG/L		48400.		48400.	I
MAGNESIUM, TOTAL	03/23/94	0001	UG/L		47100.		47100.	I
MANGANESE, SOLUBLE	03/23/94	0001	UG/L	B	2.6		2.6	I
MANGANESE, TOTAL	03/23/94	0001	UG/L		118.		118.	I
POTASSIUM, SOLUBLE	03/23/94	0001	UG/L	B	2580.		2580.	I
POTASSIUM, TOTAL	03/23/94	0001	UG/L	B	2820.		2820.	I
SODIUM, SOLUBLE	03/23/94	0001	UG/L		5840.	J	5840.	I
SODIUM, TOTAL	03/23/94	0001	UG/L		6130.	J	6130.	I
SULFATE	03/23/94	0001	MG/L		106.		106.	I
THORIUM-228	03/23/94	0001	PCI/L		0.174	J	0.174	I
THORIUM-230	03/23/94	0001	PCI/L		0.135	J	0.135	I
THORIUM-232	03/23/94	0001	PCI/L		0.079		0.079	I
TOTAL DISSOLVED SOLIDS	03/23/94	0001	MG/L		499.		499.	I
TOTAL KJELDAHL NITROGEN	03/23/94	0001	MG/L		0.13		0.13	I
TOTAL ORGANIC CARBON	03/23/94	0001	MG/L		0.62		0.62	I
TOTAL PHOSPHATE	03/23/94	0001	MG/L		0.20		0.20	I
TOTAL SUSPENDED SOLIDS	03/23/94	0001	MG/L		12.0		12.0	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0354
NORTH COORDINATE: 595602.10 FT
EAST COORDINATE: 1496322.15 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTSTONE (ST)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TRITIUM	03/23/94	0001	PCI/L		1240.		1240.	I
URANIUM-234	03/23/94	0001	PCI/L		0.181	J	0.181	I
URANIUM-238	03/23/94	0001	PCI/L		0.132	J	0.132	I
VANADIUM, SOLUBLE	03/23/94	0001	UG/L		10.9	J	10.9	I
VANADIUM, TOTAL	03/23/94	0001	UG/L		12.0		12.0	I
ZINC, TOTAL	03/23/94	0001	UG/L	B	15.5		15.5	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0356
NORTH COORDINATE: 595011.45 FT
EAST COORDINATE: 1495353.58 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ARSENIC, TOTAL	03/22/94	0001	UG/L	B	2.5	J	2.5	I
BARIUM, SOLUBLE	03/22/94	0001	UG/L	B	129.		129.	I
BARIUM, TOTAL	03/22/94	0001	UG/L	B	143.		143.	I
CADMIUM, SOLUBLE	03/22/94	0001	UG/L	B	0.84		0.84	I
CALCIUM, SOLUBLE	03/22/94	0001	UG/L		86100.		86100.	I
CALCIUM, TOTAL	03/22/94	0001	UG/L		94900.		94900.	I
CHLORIDE	03/22/94	0001	MG/L		94.7		94.7	I
FLUORIDE	03/22/94	0001	MG/L		0.16		0.16	I
IRON, SOLUBLE	03/22/94	0001	UG/L		577.		577.	I
IRON, TOTAL	03/22/94	0001	UG/L		788.	J	788.	I
MAGNESIUM, SOLUBLE	03/22/94	0001	UG/L		27700.		27700.	I
MAGNESIUM, TOTAL	03/22/94	0001	UG/L		30500.		30500.	I
MANGANESE, SOLUBLE	03/22/94	0001	UG/L		171.		171.	I
MANGANESE, TOTAL	03/22/94	0001	UG/L		177.	J	177.	I
NICKEL, TOTAL	03/22/94	0001	UG/L	B	3.4	J	3.4	I
POTASSIUM, SOLUBLE	03/22/94	0001	UG/L	B	3290.		3290.	I
POTASSIUM, TOTAL	03/22/94	0001	UG/L	B	3540.		3540.	I
RADIUM-226	03/22/94	0001	PCI/L		0.49		0.49	I
SODIUM, SOLUBLE	03/22/94	0001	UG/L		35100.		35100.	I
SODIUM, TOTAL	03/22/94	0001	UG/L		38700.		38700.	I
SULFATE	03/22/94	0001	MG/L		56.4		56.4	I
THORIUM-228	03/22/94	0001	PCI/L		0.095	J	0.095	I
THORIUM-230	03/22/94	0001	PCI/L		0.059	J	0.059	I
THORIUM-232	03/22/94	0001	PCI/L		0.066	J	0.066	I
TOTAL DISSOLVED SOLIDS	03/22/94	0001	MG/L		523.		523.	I
TOTAL KJELDAHL NITROGEN	03/22/94	0001	MG/L		0.16		0.16	I
TOTAL ORGANIC CARBON	03/22/94	0001	MG/L		1.0		1.0	I
TOTAL SUSPENDED SOLIDS	03/22/94	0001	MG/L		6.0		6.0	I
TRITIUM	03/22/94	0001	PCI/L		1430.		1430.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0356
NORTH COORDINATE: 595011.45 FT
EAST COORDINATE: 1495353.58 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
URANIUM-234	03/22/94	0001	PCI/L		0.90		0.90	I
URANIUM-235	03/22/94	0001	PCI/L		0.026		0.026	I
URANIUM-238	03/22/94	0001	PCI/L		0.74		0.74	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0370
NORTH COORDINATE: 596829.64 FT
EAST COORDINATE: 1495100.73 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,2-CIS-DICHLOROETHENE	03/08/94	0001	UG/L		380.	J	380.	I
	03/08/94	1001	UG/L		480.	J	480.	I
1,3,5-TRINITROBENZENE	03/08/94	0001	UG/L	J	0.81	J	0.81	I
ANTIMONY, SOLUBLE	03/08/94	0001	UG/L	B	1.4	J	1.4	I
BARIUM, SOLUBLE	03/08/94	0001	UG/L	B	149.	J	149.	I
	03/08/94	1001	UG/L	B	140.	J	140.	I
BARIUM, TOTAL	03/08/94	0001	UG/L	B	141.	J	141.	I
	03/08/94	1001	UG/L	B	142.	J	142.	I
CALCIUM, SOLUBLE	03/08/94	0001	UG/L		149000.	J	149000.	I
	03/08/94	1001	UG/L		142000.	J	142000.	I
CALCIUM, TOTAL	03/08/94	0001	UG/L		148000.	J	148000.	I
	03/08/94	1001	UG/L		150000.	J	150000.	I
CHLORIDE	03/08/94	0001	MG/L		285.		285.	I
	03/08/94	1001	MG/L		278.		278.	I
FLUORIDE	03/08/94	0001	MG/L		0.27		0.27	I
	03/08/94	1001	MG/L		0.27		0.27	I
IRON, SOLUBLE	03/08/94	0001	UG/L	B	80.1	J	80.1	I
	03/08/94	1001	UG/L		153.	J	153.	I
IRON, TOTAL	03/08/94	0001	UG/L		173.	J	173.	I
	03/08/94	1001	UG/L		149.	J	149.	I
MAGNESIUM, SOLUBLE	03/08/94	0001	UG/L		53100.	J	53100.	I
	03/08/94	1001	UG/L		50300.	J	50300.	I
MAGNESIUM, TOTAL	03/08/94	0001	UG/L		52800.	J	52800.	I
	03/08/94	1001	UG/L		52900.	J	52900.	I
MANGANESE, SOLUBLE	03/08/94	0001	UG/L		43.9	J	43.9	I
	03/08/94	1001	UG/L		45.4	J	45.4	I
MANGANESE, TOTAL	03/08/94	0001	UG/L		67.5	J	67.5	I
	03/08/94	1001	UG/L		60.7	J	60.7	I
MOLYBDENUM	03/08/94	0001	UG/L	B	3.9		3.9	I
	03/08/94	1001	UG/L	B	3.5		3.5	I
MOLYBDENUM, SOLUBLE	03/08/94	0001	UG/L	B	3.5		3.5	I
	03/08/94	1001	UG/L	B	3.8		3.8	I
NICKEL, SOLUBLE	03/08/94	0001	UG/L		40.9		40.9	I
	03/08/94	1001	UG/L		42.6		42.6	I
NICKEL, TOTAL	03/08/94	0001	UG/L		103.		103.	I
	03/08/94	1001	UG/L		90.3		90.3	I
NITRATE NITRITE	03/08/94	0001	MG/L		1.2		1.2	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0370
NORTH COORDINATE: 596829.64 FT
EAST COORDINATE: 1495100.73 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
NITRATE NITRITE	03/08/94	1001	MG/L		1.2		1.2	I
PLUTONIUM-238	03/08/94	0001	PCI/L		0.005		0.005	I
	03/08/94	1001	PCI/L		0.006		0.006	I
PLUTONIUM-239/240	03/08/94	1001	PCI/L		0.008		0.008	I
POTASSIUM, SOLUBLE	03/08/94	0001	UG/L	B	3470.		3470.	I
	03/08/94	1001	UG/L	B	3430.		3430.	I
POTASSIUM, TOTAL	03/08/94	0001	UG/L	B	3730.		3730.	I
	03/08/94	1001	UG/L	B	3600.		3600.	I
RADIUM-226	03/08/94	0001	PCI/L		0.21		0.21	I
SELENIUM, TOTAL	03/08/94	0001	UG/L	B	2.1	J	2.1	I
SODIUM, SOLUBLE	03/08/94	0001	UG/L		138000.		138000.	I
	03/08/94	1001	UG/L		126000.		126000.	I
SODIUM, TOTAL	03/08/94	0001	UG/L		129000.		129000.	I
	03/08/94	1001	UG/L		127000.		127000.	I
SULFATE	03/08/94	0001	MG/L		86.6		86.6	I
	03/08/94	1001	MG/L		91.4		91.4	I
TETRACHLOROETHENE	03/08/94	0001	UG/L		240.	J	240.	I
	03/08/94	1001	UG/L		290.	J	290.	I
THORIUM-228	03/08/94	0001	PCI/L		0.056	J	0.056	I
THORIUM-230	03/08/94	0001	PCI/L		0.032	J	0.032	I
	03/08/94	1001	PCI/L		0.38	J	0.38	I
TIN, SOLUBLE	03/08/94	0001	UG/L	B	41.5		41.5	I
	03/08/94	1001	UG/L	B	38.5		38.5	I
TIN, TOTAL	03/08/94	0001	UG/L	B	41.6		41.6	I
	03/08/94	1001	UG/L	B	39.0		39.0	I
TOTAL DISSOLVED SOLIDS	03/08/94	0001	MG/L		909.		909.	I
	03/08/94	1001	MG/L		932.		932.	I
TOTAL ORGANIC CARBON	03/08/94	0001	MG/L		0.80		0.80	I
	03/08/94	1001	MG/L		0.80		0.80	I
TRICHLOROETHENE	03/08/94	0001	UG/L		140.	J	140.	I
	03/08/94	1001	UG/L		160.	J	160.	I
TRICHLOROMETHANE (CHLOROFORM)	03/08/94	0001	UG/L		85.	J	85.	I
	03/08/94	1001	UG/L		87.	J	87.	I
TRITIUM	03/08/94	0001	PCI/L		5270.		5270.	I
	03/08/94	1001	PCI/L		5340.		5340.	I
URANIUM-234	03/08/94	0001	PCI/L		0.60		0.60	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0370
NORTH COORDINATE: 596829.64 FT
EAST COORDINATE: 1495100.73 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
URANIUM-234	03/08/94	1001	PCI/L		0.54		0.54	I
URANIUM-235	03/08/94	0001	PCI/L		0.048		0.048	I
	03/08/94	1001	PCI/L		0.049		0.049	I
URANIUM-238	03/08/94	0001	PCI/L		1.16		1.16	I
	03/08/94	1001	PCI/L		0.88		0.88	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0372
NORTH COORDINATE: 596693.75 FT
EAST COORDINATE: 1495331.22 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	03/21/94	0001	UG/L		2040.		2040.	I
AMMONIA	03/21/94	0001	MG/L		3.7		3.7	I
BARIUM, SOLUBLE	03/21/94	0001	UG/L	B	179.		179.	I
BARIUM, TOTAL	03/21/94	0001	UG/L	B	117.		117.	I
CALCIUM, SOLUBLE	03/21/94	0001	UG/L		63900.		63900.	I
CALCIUM, TOTAL	03/21/94	0001	UG/L		77900.	J	77900.	I
CHLORIDE	03/21/94	0001	MG/L		801.		801.	I
CHROMIUM, TOTAL	03/21/94	0001	UG/L		37.4		37.4	I
COBALT, TOTAL	03/21/94	0001	UG/L	B	5.8		5.8	I
COPPER, TOTAL	03/21/94	0001	UG/L	B	10.2		10.2	I
FLUORIDE	03/21/94	0001	MG/L		1.6		1.6	I
IRON, TOTAL	03/21/94	0001	UG/L		3910.		3910.	I
LEAD, TOTAL	03/21/94	0001	UG/L		6.9		6.9	I
LITHIUM, SOLUBLE	03/21/94	0001	UG/L		182.		182.	I
LITHIUM, TOTAL	03/21/94	0001	UG/L		294.		294.	I
MAGNESIUM, SOLUBLE	03/21/94	0001	UG/L		46200.		46200.	I
MAGNESIUM, TOTAL	03/21/94	0001	UG/L		44700.		44700.	I
MANGANESE, SOLUBLE	03/21/94	0001	UG/L		17.7	J	17.7	I
MANGANESE, TOTAL	03/21/94	0001	UG/L		178.	J	178.	I
MOLYBDENUM	03/21/94	0001	UG/L	B	9.5		9.5	I
MOLYBDENUM, SOLUBLE	03/21/94	0001	UG/L	B	12.8		12.8	I
NICKEL, SOLUBLE	03/21/94	0001	UG/L	B	25.1		25.1	I
NICKEL, TOTAL	03/21/94	0001	UG/L		231.		231.	I
NITRATE NITRITE	03/21/94	0001	MG/L		0.40		0.40	I
POTASSIUM, SOLUBLE	03/21/94	0001	UG/L		23300.		23300.	I
POTASSIUM, TOTAL	03/21/94	0001	UG/L		29500.		29500.	I
RADIUM-226	03/21/94	0001	PCI/L		2.03		2.03	I
SODIUM, SOLUBLE	03/21/94	0001	UG/L		335000.		335000.	I
SODIUM, TOTAL	03/21/94	0001	UG/L		576000.		576000.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0372
NORTH COORDINATE: 596693.75 FT
EAST COORDINATE: 1495331.22 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SULFATE	03/21/94	0001	MG/L		33.4		33.4	I
TOTAL DISSOLVED SOLIDS	03/21/94	0001	MG/L		1640.		1640.	I
TOTAL KJELDAHL NITROGEN	03/21/94	0001	MG/L		3.7		3.7	I
TOTAL ORGANIC CARBON	03/21/94	0001	MG/L		0.85		0.85	I
TOTAL PHOSPHATE	03/21/94	0001	MG/L		0.056		0.056	I
TOTAL SUSPENDED SOLIDS	03/21/94	0001	MG/L		21.0		21.0	I
URANIUM-234	03/21/94	0001	PCI/L		0.122	J	0.122	I
URANIUM-238	03/21/94	0001	PCI/L		0.073	J	0.073	I
VANADIUM, TOTAL	03/21/94	0001	UG/L	B	4.4		4.4	I
ZINC, TOTAL	03/21/94	0001	UG/L	B	12.1		12.1	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0373
NORTH COORDINATE: 596690.56 FT
EAST COORDINATE: 1495128.52 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHA	03/16/94	0001	UG/L		2.5	J	2.5	I
1,2-CIS-DICHLOROETHENE	03/16/94	0001	UG/L		19.		19.	I
BARIUM, SOLUBLE	03/16/94	0001	UG/L	B	178.	J	178.	I
BARIUM, TOTAL	03/16/94	0001	UG/L	B	177.	J	177.	I
BISMUTH, SOLUBLE	03/16/94	0001	UG/L	B	38.2		38.2	I
CALCIUM, SOLUBLE	03/16/94	0001	UG/L		142000.		142000.	I
CALCIUM, TOTAL	03/16/94	0001	UG/L		146000.		146000.	I
CHLORIDE	03/16/94	0001	MG/L		286.		286.	I
CHROMIUM, SOLUBLE	03/16/94	0001	UG/L		115.		115.	I
CHROMIUM, TOTAL	03/16/94	0001	UG/L		228.		228.	I
COPPER, SOLUBLE	03/16/94	0001	UG/L	B	2.6		2.6	I
COPPER, TOTAL	03/16/94	0001	UG/L	B	5.4		5.4	I
FLUORIDE	03/16/94	0001	MG/L		0.27		0.27	I
IRON, SOLUBLE	03/16/94	0001	UG/L		725.		725.	I
IRON, TOTAL	03/16/94	0001	UG/L		1640.		1640.	I
LEAD, SOLUBLE	03/16/94	0001	UG/L	B	2.7		2.7	I
MAGNESIUM, SOLUBLE	03/16/94	0001	UG/L		55400.	J	55400.	I
MAGNESIUM, TOTAL	03/16/94	0001	UG/L		56100.	J	56100.	I
MANGANESE, SOLUBLE	03/16/94	0001	UG/L		43.5	J	43.5	I
MANGANESE, TOTAL	03/16/94	0001	UG/L		59.6	J	59.6	I
MOLYBDENUM	03/16/94	0001	UG/L	B	6.0		6.0	I
MOLYBDENUM, SOLUBLE	03/16/94	0001	UG/L	B	2.9		2.9	I
NICKEL, SOLUBLE	03/16/94	0001	UG/L		122.		122.	I
NICKEL, TOTAL	03/16/94	0001	UG/L		215.		215.	I
NITRATE NITRITE	03/16/94	0001	MG/L		1.2		1.2	I
POTASSIUM, SOLUBLE	03/16/94	0001	UG/L	B	3110.		3110.	I
POTASSIUM, TOTAL	03/16/94	0001	UG/L	B	3160.		3160.	I
RADIUM-226	03/16/94	0001	PCI/L		0.25		0.25	I
SODIUM, SOLUBLE	03/16/94	0001	UG/L		100000.		100000.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0373
NORTH COORDINATE: 596690.56 FT
EAST COORDINATE: 1495128.52 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SODIUM, TOTAL	03/16/94	0001	UG/L		99700.		99700.	I
SULFATE	03/16/94	0001	MG/L		149.		149.	I
TETRACHLOROETHENE	03/16/94	0001	UG/L		48.		48.	D1
TETRACHLOROMETHANE (CCL4)	03/16/94	0001	UG/L		5.1		5.1	I
TOTAL DISSOLVED SOLIDS	03/16/94	0001	MG/L		917.		917.	I
TOTAL ORGANIC CARBON	03/16/94	0001	MG/L		1.0		1.0	I
TRICHLOROETHENE	03/16/94	0001	UG/L		32.		32.	D1
TRICHLOROFLUOROMETHANE	03/16/94	0001	UG/L		3.6		3.6	I
TRICHLOROMETHANE (CHLOROFORM)	03/16/94	0001	UG/L		13.		13.	I
TRITIUM	03/16/94	0001	PCI/L		5080.		5080.	I
URANIUM-234	03/16/94	0001	PCI/L		0.70		0.70	I
URANIUM-235	03/16/94	0001	PCI/L		0.057		0.057	I
URANIUM-238	03/16/94	0001	PCI/L		0.60		0.60	I
VANADIUM, SOLUBLE	03/16/94	0001	UG/L		15.5		15.5	I
VANADIUM, TOTAL	03/16/94	0001	UG/L		16.4		16.4	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0375
NORTH COORDINATE: 597074.08 FT
EAST COORDINATE: 1494980.33 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, SOLUBLE	03/14/94	0001	UG/L	B	9.1	J	9.1	I
ALUMINUM, TOTAL	03/14/94	0001	UG/L	B	4.9	J	4.9	I
ANTIMONY, SOLUBLE	03/14/94	0001	UG/L		3.8		3.8	I
BARIUM, SOLUBLE	03/14/94	0001	UG/L	B	76.0		76.0	I
BARIUM, TOTAL	03/14/94	0001	UG/L	B	85.6		85.6	I
CALCIUM, SOLUBLE	03/14/94	0001	UG/L		145000.		145000.	I
CALCIUM, TOTAL	03/14/94	0001	UG/L		179000.		179000.	I
CHLORIDE	03/14/94	0001	MG/L		89.3		89.3	I
COBALT, SOLUBLE	03/14/94	0001	UG/L	B	1.3	J	1.3	I
COBALT, TOTAL	03/14/94	0001	UG/L	B	1.3	J	1.3	I
COPPER, SOLUBLE	03/14/94	0001	UG/L	B	2.7	J	2.7	I
COPPER, TOTAL	03/14/94	0001	UG/L	B	1.4	J	1.4	I
FLUORIDE	03/14/94	0001	MG/L		0.15		0.15	I
IRON, SOLUBLE	03/14/94	0001	UG/L		490.		490.	I
IRON, TOTAL	03/14/94	0001	UG/L		763.		763.	I
LITHIUM, SOLUBLE	03/14/94	0001	UG/L	B	37.7		37.7	I
LITHIUM, TOTAL	03/14/94	0001	UG/L	B	37.7		37.7	I
MAGNESIUM, SOLUBLE	03/14/94	0001	UG/L		41900.		41900.	I
MAGNESIUM, TOTAL	03/14/94	0001	UG/L		47400.		47400.	I
MANGANESE, SOLUBLE	03/14/94	0001	UG/L		16.4		16.4	I
MANGANESE, TOTAL	03/14/94	0001	UG/L		26.8		26.8	I
NICKEL, SOLUBLE	03/14/94	0001	UG/L		96.7		96.7	I
NICKEL, TOTAL	03/14/94	0001	UG/L		129.		129.	I
NITRATE NITRITE	03/14/94	0001	MG/L		3.4		3.4	I
POTASSIUM, SOLUBLE	03/14/94	0001	UG/L	B	2860.		2860.	I
POTASSIUM, TOTAL	03/14/94	0001	UG/L	B	2780.		2780.	I
SODIUM, SOLUBLE	03/14/94	0001	UG/L		52500.		52500.	I
SODIUM, TOTAL	03/14/94	0001	UG/L		59700.		59700.	I
SULFATE	03/14/94	0001	MG/L		108.		108.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0375
NORTH COORDINATE: 597074.08 FT
EAST COORDINATE: 1494980.33 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TETRACHLOROETHENE	03/14/94	0001	UG/L		8.9		8.9	I
THORIUM-228	03/14/94	0001	PCI/L		0.064		0.064	I
THORIUM-230	03/14/94	0001	PCI/L		0.056		0.056	I
TOTAL DISSOLVED SOLIDS	03/14/94	0001	MG/L		735.		735.	I
TOTAL ORGANIC CARBON	03/14/94	0001	MG/L		1.3		1.3	I
TOTAL SUSPENDED SOLIDS	03/14/94	0001	MG/L		5.0		5.0	I
TRICHLOROETHENE	03/14/94	0001	UG/L		3.4		3.4	I
TRITIUM	03/14/94	0001	PCI/L		5530.		5530.	I
URANIUM-234	03/14/94	0001	PCI/L		0.291		0.291	I
URANIUM-235	03/14/94	0001	PCI/L		0.031		0.031	I
URANIUM-238	03/14/94	0001	PCI/L		0.287		0.287	I
VANADIUM, SOLUBLE	03/14/94	0001	UG/L		30.0		30.0	I
VANADIUM, TOTAL	03/14/94	0001	UG/L		27.1		27.1	I
ZINC, SOLUBLE	03/14/94	0001	UG/L	B	5.8		5.8	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0376
NORTH COORDINATE: 596696.75 FT
EAST COORDINATE: 1494760.63 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	03/28/94	0001	UG/L		0.81		0.81	I
ANTIMONY, SOLUBLE	03/28/94	0001	UG/L	B	1.0	J	1.0	I
BARIUM, SOLUBLE	03/28/94	0001	UG/L	B	68.1		68.1	I
BARIUM, TOTAL	03/28/94	0001	UG/L	B	69.7		69.7	I
BERYLLIUM, SOLUBLE	03/28/94	0001	UG/L	B	0.31		0.31	I
BERYLLIUM, TOTAL	03/28/94	0001	UG/L	B	0.31		0.31	I
CALCIUM, SOLUBLE	03/28/94	0001	UG/L		94300.		94300.	I
CALCIUM, TOTAL	03/28/94	0001	UG/L		94000.		94000.	I
CHLORIDE	03/28/94	0001	MG/L		204.		204.	I
CHROMIUM, TOTAL	03/28/94	0001	UG/L		60.7		60.7	I
COBALT, SOLUBLE	03/28/94	0001	UG/L	B	0.82	J	0.82	I
COBALT, TOTAL	03/28/94	0001	UG/L	B	1.1	J	1.1	I
FLUORIDE	03/28/94	0001	MG/L		0.17		0.17	I
IRON, TOTAL	03/28/94	0001	UG/L		1190.		1190.	I
LITHIUM, SOLUBLE	03/28/94	0001	UG/L	B	15.7		15.7	I
LITHIUM, TOTAL	03/28/94	0001	UG/L	B	15.7		15.7	I
MAGNESIUM, SOLUBLE	03/28/94	0001	UG/L		27200.		27200.	I
MAGNESIUM, TOTAL	03/28/94	0001	UG/L		27100.		27100.	I
MANGANESE, SOLUBLE	03/28/94	0001	UG/L	B	10.2		10.2	I
MANGANESE, TOTAL	03/28/94	0001	UG/L	B	12.4		12.4	I
NICKEL, SOLUBLE	03/28/94	0001	UG/L		130.		130.	I
NICKEL, TOTAL	03/28/94	0001	UG/L		135.		135.	I
NITRATE NITRITE	03/28/94	0001	MG/L		2.6		2.6	I
PLUTONIUM-238	03/28/94	0001	PCI/L		0.0107		0.0107	I
PLUTONIUM-239/240	03/28/94	0001	PCI/L		0.0029		0.0029	I
POTASSIUM, SOLUBLE	03/28/94	0001	UG/L	B	2750.		2750.	I
POTASSIUM, TOTAL	03/28/94	0001	UG/L	B	2700.		2700.	I
RADIUM-226	03/28/94	0001	PCI/L		0.23		0.23	I
SODIUM, SOLUBLE	03/28/94	0001	UG/L		123000.		123000.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0376
NORTH COORDINATE: 596696.75 FT
EAST COORDINATE: 1494760.63 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SODIUM, TOTAL	03/28/94	0001	UG/L		123000.		123000.	I
SULFATE	03/28/94	0001	MG/L		52.9		52.9	I
THORIUM-228	03/28/94	0001	PCI/L		0.047	J	0.047	I
THORIUM-230	03/28/94	0001	PCI/L		0.012		0.012	I
TOTAL DISSOLVED SOLIDS	03/28/94	0001	MG/L		831.		831.	I
TOTAL ORGANIC CARBON	03/28/94	0001	MG/L		1.0		1.0	I
TOTAL PHOSPHATE	03/28/94	0001	MG/L		0.084		0.084	I
TRITIUM	03/28/94	0001	PCI/L		2250.		2250.	I
URANIUM-234	03/28/94	0001	PCI/L		0.304	J	0.304	I
URANIUM-238	03/28/94	0001	PCI/L		0.221	J	0.221	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0377
NORTH COORDINATE: 596522.25 FT
EAST COORDINATE: 1494774.87 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	03/28/94	0001	UG/L		10.		10.	I
AMERICIUM-241	03/28/94	0001	PCI/L		0.007		0.007	I
ARSENIC, TOTAL	03/28/94	0001	UG/L	B	2.1	J	2.1	I
BARIUM, SOLUBLE	03/28/94	0001	UG/L	B	61.3		61.3	I
BARIUM, TOTAL	03/28/94	0001	UG/L	B	75.2		75.2	I
BERYLLIUM, SOLUBLE	03/28/94	0001	UG/L	B	0.42		0.42	I
BERYLLIUM, TOTAL	03/28/94	0001	UG/L	B	0.42		0.42	I
CALCIUM, SOLUBLE	03/28/94	0001	UG/L		93900.		93900.	I
CALCIUM, TOTAL	03/28/94	0001	UG/L		89000.		89000.	I
CHLORIDE	03/28/94	0001	MG/L		164.		164.	I
CHROMIUM, SOLUBLE	03/28/94	0001	UG/L		47.0		47.0	I
CHROMIUM, TOTAL	03/28/94	0001	UG/L		415.		415.	I
COBALT, SOLUBLE	03/28/94	0001	UG/L	B	2.7	J	2.7	I
COBALT, TOTAL	03/28/94	0001	UG/L	B	14.6		14.6	I
COPPER, TOTAL	03/28/94	0001	UG/L	B	21.4		21.4	I
FLUORIDE	03/28/94	0001	MG/L		0.18		0.18	I
IRON, SOLUBLE	03/28/94	0001	UG/L		786.		786.	I
IRON, TOTAL	03/28/94	0001	UG/L		9070.		9070.	I
LITHIUM, SOLUBLE	03/28/94	0001	UG/L	B	15.7		15.7	I
MAGNESIUM, SOLUBLE	03/28/94	0001	UG/L		28000.		28000.	I
MAGNESIUM, TOTAL	03/28/94	0001	UG/L		26500.		26500.	I
MANGANESE, SOLUBLE	03/28/94	0001	UG/L		40.3		40.3	I
MANGANESE, TOTAL	03/28/94	0001	UG/L		169.		169.	I
MOLYBDENUM	03/28/94	0001	UG/L	B	5.3		5.3	I
MOLYBDENUM, SOLUBLE	03/28/94	0001	UG/L	B	2.9		2.9	I
NICKEL, SOLUBLE	03/28/94	0001	UG/L		241.		241.	I
NICKEL, TOTAL	03/28/94	0001	UG/L		373.		373.	I
NITRATE NITRITE	03/28/94	0001	MG/L		2.6		2.6	I
PLUTONIUM-238	03/28/94	0001	PCI/L		0.057		0.057	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0377
NORTH COORDINATE: 596522.25 FT
EAST COORDINATE: 1494774.87 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
POTASSIUM, SOLUBLE	03/28/94	0001	UG/L	B	2650.		2650.	I
POTASSIUM, TOTAL	03/28/94	0001	UG/L	B	2500.		2500.	I
SODIUM, SOLUBLE	03/28/94	0001	UG/L		121000.		121000.	I
SODIUM, TOTAL	03/28/94	0001	UG/L		111000.		111000.	I
SULFATE	03/28/94	0001	MG/L		62.5		62.5	I
THORIUM-228	03/28/94	0001	PCI/L		0.35		0.35	I
THORIUM-230	03/28/94	0001	PCI/L		0.93		0.93	I
TOTAL DISSOLVED SOLIDS	03/28/94	0001	MG/L		731.		731.	I
TOTAL ORGANIC CARBON	03/28/94	0001	MG/L		1.7		1.7	I
TOTAL PHOSPHATE	03/28/94	0001	MG/L		0.49		0.49	I
TOTAL SUSPENDED SOLIDS	03/28/94	0001	MG/L		59.0		59.0	I
TRITIUM	03/28/94	0001	PCI/L		1780.		1780.	I
URANIUM-234	03/28/94	0001	PCI/L		0.233	J	0.233	I
URANIUM-235	03/28/94	0001	PCI/L		0.012		0.012	I
URANIUM-238	03/28/94	0001	PCI/L		0.174		0.174	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0378
NORTH COORDINATE: 596376.63 FT
EAST COORDINATE: 1494789.86 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	03/28/94	0001	UG/L		20.		20.	I
ALUMINUM, TOTAL	03/28/94	0001	UG/L		143.		143.	I
AMERICIUM-241	03/28/94	0001	PCI/L		0.009		0.009	I
ANTIMONY, SOLUBLE	03/28/94	0001	UG/L	B	0.88		0.88	I
BARIUM, SOLUBLE	03/28/94	0001	UG/L	B	69.1		69.1	I
BARIUM, TOTAL	03/28/94	0001	UG/L	B	69.3		69.3	I
BERYLLIUM, SOLUBLE	03/28/94	0001	UG/L	B	0.31		0.31	I
BERYLLIUM, TOTAL	03/28/94	0001	UG/L	B	0.31		0.31	I
CALCIUM, SOLUBLE	03/28/94	0001	UG/L		93800.		93800.	I
CALCIUM, TOTAL	03/28/94	0001	UG/L		90100.		90100.	I
CHLORIDE	03/28/94	0001	MG/L		175.		175.	I
CHROMIUM, TOTAL	03/28/94	0001	UG/L		40.6		40.6	I
COBALT, SOLUBLE	03/28/94	0001	UG/L	B	0.57	J	0.57	I
COBALT, TOTAL	03/28/94	0001	UG/L	B	3.7		3.7	I
COPPER, TOTAL	03/28/94	0001	UG/L	B	4.7		4.7	I
FLUORIDE	03/28/94	0001	MG/L		0.17		0.17	I
IRON, TOTAL	03/28/94	0001	UG/L		3830.		3830.	I
LITHIUM, SOLUBLE	03/28/94	0001	UG/L	B	15.7		15.7	I
LITHIUM, TOTAL	03/28/94	0001	UG/L	B	15.7		15.7	I
MAGNESIUM, SOLUBLE	03/28/94	0001	UG/L		27900.		27900.	I
MAGNESIUM, TOTAL	03/28/94	0001	UG/L		27100.		27100.	I
MANGANESE, SOLUBLE	03/28/94	0001	UG/L	B	12.0		12.0	I
MANGANESE, TOTAL	03/28/94	0001	UG/L		52.3		52.3	I
MOLYBDENUM, SOLUBLE	03/28/94	0001	UG/L	B	1.9		1.9	I
NICKEL, SOLUBLE	03/28/94	0001	UG/L		73.3		73.3	I
NICKEL, TOTAL	03/28/94	0001	UG/L		139.		139.	I
NITRATE NITRITE	03/28/94	0001	MG/L		2.4		2.4	I
PLUTONIUM-238	03/28/94	0001	PCI/L		0.019		0.019	I
POTASSIUM, SOLUBLE	03/28/94	0001	UG/L	B	2350.		2350.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0378
NORTH COORDINATE: 596376.63 FT
EAST COORDINATE: 1494789.86 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
POTASSIUM, TOTAL	03/28/94	0001	UG/L	B	2200.		2200.	I
SODIUM, SOLUBLE	03/28/94	0001	UG/L		114000.		114000.	I
SODIUM, TOTAL	03/28/94	0001	UG/L		112000.		112000.	I
SULFATE	03/28/94	0001	MG/L		66.3		66.3	I
THORIUM-228	03/28/94	0001	PCI/L		0.060	J	0.060	I
THORIUM-230	03/28/94	0001	PCI/L		0.042	J	0.042	I
TOTAL DISSOLVED SOLIDS	03/28/94	0001	MG/L		764.		764.	I
TOTAL KJELDAHL NITROGEN	03/28/94	0001	MG/L		0.15		0.15	I
TOTAL ORGANIC CARBON	03/28/94	0001	MG/L		1.1		1.1	I
TOTAL PHOSPHATE	03/28/94	0001	MG/L		0.089		0.089	I
TOTAL SUSPENDED SOLIDS	03/28/94	0001	MG/L		13.0		13.0	I
TRITIUM	03/28/94	0001	PCI/L		1960.		1960.	I
URANIUM-234	03/28/94	0001	PCI/L		0.205	J	0.205	I
URANIUM-235	03/28/94	0001	PCI/L		0.012		0.012	I
URANIUM-238	03/28/94	0001	PCI/L		0.206	J	0.206	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0379
NORTH COORDINATE: 597179.70 FT
EAST COORDINATE: 1495153.92 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
BARIUM, SOLUBLE	03/15/94	0001	UG/L	B	142.		142.	I
BARIUM, TOTAL	03/15/94	0001	UG/L	B	143.		143.	I
BERYLLIUM, SOLUBLE	03/15/94	0001	UG/L		0.58		0.58	I
BERYLLIUM, TOTAL	03/15/94	0001	UG/L		0.46		0.46	I
CALCIUM, SOLUBLE	03/15/94	0001	UG/L		139000.		139000.	I
CALCIUM, TOTAL	03/15/94	0001	UG/L		138000.		138000.	I
CHLORIDE	03/15/94	0001	MG/L		477.		477.	I
CHROMIUM, TOTAL	03/15/94	0001	UG/L		104.		104.	I
DIETHYL PHTHALATE	03/15/94	0001	UG/L	J	2.	J	2.	I
FLUORIDE	03/15/94	0001	MG/L		0.51		0.51	I
IRON, SOLUBLE	03/15/94	0001	UG/L		162.		162.	I
IRON, TOTAL	03/15/94	0001	UG/L		2090.		2090.	I
LITHIUM, SOLUBLE	03/15/94	0001	UG/L	B	38.8		38.8	I
LITHIUM, TOTAL	03/15/94	0001	UG/L	B	38.8		38.8	I
MAGNESIUM, SOLUBLE	03/15/94	0001	UG/L		57700.		57700.	I
MAGNESIUM, TOTAL	03/15/94	0001	UG/L		57300.		57300.	I
MANGANESE, SOLUBLE	03/15/94	0001	UG/L	B	6.6		6.6	I
MANGANESE, TOTAL	03/15/94	0001	UG/L	B	12.3		12.3	I
MOLYBDENUM	03/15/94	0001	UG/L	B	2.0		2.0	I
MOLYBDENUM, SOLUBLE	03/15/94	0001	UG/L	B	2.0		2.0	I
NICKEL, SOLUBLE	03/15/94	0001	UG/L	B	35.1		35.1	I
NICKEL, TOTAL	03/15/94	0001	UG/L		73.1		73.1	I
NITRATE NITRITE	03/15/94	0001	MG/L		0.15		0.15	I
POTASSIUM, SOLUBLE	03/15/94	0001	UG/L	B	3370.	J	3370.	I
POTASSIUM, TOTAL	03/15/94	0001	UG/L	B	3470.	J	3470.	I
RADIUM-226	03/15/94	0001	PCI/L		0.31		0.31	I
SODIUM, SOLUBLE	03/15/94	0001	UG/L		133000.		133000.	I
SODIUM, TOTAL	03/15/94	0001	UG/L		135000.		135000.	I
SULFATE	03/15/94	0001	MG/L		50.0		50.0	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0379
NORTH COORDINATE: 597179.70 FT
EAST COORDINATE: 1495153.92 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TETRACHLOROETHENE	03/15/94	0001	UG/L		3.2		3.2	I
TETRACHLOROMETHANE (CCL4)	03/15/94	0001	UG/L		2.8		2.8	I
THORIUM-228	03/15/94	0001	PCI/L		0.026		0.026	I
THORIUM-230	03/15/94	0001	PCI/L		0.009		0.009	I
TOTAL DISSOLVED SOLIDS	03/15/94	0001	MG/L		1260.		1260.	I
TOTAL ORGANIC CARBON	03/15/94	0001	MG/L		0.92		0.92	I
TOTAL PHOSPHATE	03/15/94	0001	MG/L		0.086		0.086	I
TRICHLOROETHENE	03/15/94	0001	UG/L		1.4		1.4	I
TRITIUM	03/15/94	0001	PCI/L		6070.		6070.	I
URANIUM-234	03/15/94	0001	PCI/L		0.450		0.450	I
URANIUM-235	03/15/94	0001	PCI/L		0.015		0.015	I
URANIUM-238	03/15/94	0001	PCI/L		0.358		0.358	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0380
NORTH COORDINATE: 597109.65 FT
EAST COORDINATE: 1495394.52 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	03/24/94	0001	UG/L		189.		189.	I
AMMONIA	03/24/94	0001	MG/L		5.3		5.3	I
BARIUM, SOLUBLE	03/24/94	0001	UG/L	B	56.0	J	56.0	I
BARIUM, TOTAL	03/24/94	0001	UG/L	B	55.8	J	55.8	I
CADMIUM, SOLUBLE	03/24/94	0001	UG/L	B	1.1		1.1	I
CALCIUM, SOLUBLE	03/24/94	0001	UG/L		33300.	J	33300.	I
CALCIUM, TOTAL	03/24/94	0001	UG/L		30500.	J	30500.	I
CHLORIDE	03/24/94	0001	MG/L		958.		958.	I
COPPER, SOLUBLE	03/24/94	0001	UG/L	B	4.0		4.0	I
COPPER, TOTAL	03/24/94	0001	UG/L	B	0.89	J	0.89	I
FLUORIDE	03/24/94	0001	MG/L		1.6		1.6	I
IRON, TOTAL	03/24/94	0001	UG/L		340.	J	340.	I
LITHIUM, SOLUBLE	03/24/94	0001	UG/L		419.		419.	I
LITHIUM, TOTAL	03/24/94	0001	UG/L		403.		403.	I
MAGNESIUM, SOLUBLE	03/24/94	0001	UG/L		18000.	J	18000.	I
MAGNESIUM, TOTAL	03/24/94	0001	UG/L		16900.	J	16900.	I
MANGANESE, SOLUBLE	03/24/94	0001	UG/L	B	14.2		14.2	I
MANGANESE, TOTAL	03/24/94	0001	UG/L	B	15.0		15.0	I
NICKEL, SOLUBLE	03/24/94	0001	UG/L	B	11.0		11.0	I
POTASSIUM, SOLUBLE	03/24/94	0001	UG/L		30700.		30700.	I
POTASSIUM, TOTAL	03/24/94	0001	UG/L		30000.		30000.	I
RADIUM-226	03/24/94	0001	PCI/L		0.97		0.97	I
SILVER, SOLUBLE	03/24/94	0001	UG/L	B	0.85		0.85	I
SODIUM, SOLUBLE	03/24/94	0001	UG/L		2850000.		REJECT	I
SODIUM, TOTAL	03/24/94	0001	UG/L		2780000.		REJECT	I
THORIUM-228	03/24/94	0001	PCI/L		0.56		0.56	I
THORIUM-230	03/24/94	0001	PCI/L		0.46		0.46	I
TOTAL DISSOLVED SOLIDS	03/24/94	0001	MG/L		1960.		1960.	I
TOTAL KJELDAHL NITROGEN	03/24/94	0001	MG/L		5.1		5.1	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0380
NORTH COORDINATE: 597109.65 FT
EAST COORDINATE: 1495394.52 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL ORGANIC CARBON	03/24/94	0001	MG/L		0.55		0.55	I
TOTAL SUSPENDED SOLIDS	03/24/94	0001	MG/L		12.0		12.0	I
URANIUM-234	03/24/94	0001	PCI/L		0.050	J	0.050	I
URANIUM-238	03/24/94	0001	PCI/L		0.032		0.032	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0381
NORTH COORDINATE: 596982.13 FT
EAST COORDINATE: 1495399.69 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	04/08/94	0001	UG/L		0.55		0.55	I
ALUMINUM, SOLUBLE	04/13/94	0001	UG/L	B	19.0	J	19.0	I
ALUMINUM, TOTAL	04/08/94	0001	UG/L		1950.		1950.	I
BARIUM, SOLUBLE	04/13/94	0001	UG/L	B	58.6		58.6	I
BARIUM, TOTAL	04/08/94	0001	UG/L	B	44.8	J	44.8	I
BISMUTH, TOTAL	04/08/94	0001	UG/L	B	39.0		39.0	I
CALCIUM, SOLUBLE	04/13/94	0001	UG/L		84400.	J	84400.	I
CALCIUM, TOTAL	04/08/94	0001	UG/L		52800.		52800.	I
CHROMIUM, SOLUBLE	04/13/94	0001	UG/L	B	6.8		6.8	I
CHROMIUM, TOTAL	04/08/94	0001	UG/L		67.6		67.6	I
COBALT, SOLUBLE	04/13/94	0001	UG/L	B	44.4		44.4	I
COBALT, TOTAL	04/08/94	0001	UG/L	B	6.7		6.7	I
COPPER, TOTAL	04/08/94	0001	UG/L		10.4		10.4	I
IRON, SOLUBLE	04/13/94	0001	UG/L		5050.	J	5050.	I
IRON, TOTAL	04/08/94	0001	UG/L		4400.		4400.	I
LITHIUM, SOLUBLE	04/13/94	0001	UG/L		285.		285.	I
LITHIUM, TOTAL	04/08/94	0001	UG/L		239.		239.	I
MAGNESIUM, SOLUBLE	04/13/94	0001	UG/L		55400.	J	55400.	I
MAGNESIUM, TOTAL	04/08/94	0001	UG/L		61400.		61400.	I
MANGANESE, SOLUBLE	04/13/94	0001	UG/L		2390.	J	2390.	I
MANGANESE, TOTAL	04/08/94	0001	UG/L		224.		224.	I
MOLYBDENUM	04/08/94	0001	UG/L	B	13.6		13.6	I
NICKEL, SOLUBLE	04/13/94	0001	UG/L		2340.	J	2340.	I
NICKEL, TOTAL	04/08/94	0001	UG/L		307.		307.	I
POTASSIUM, SOLUBLE	04/13/94	0001	UG/L		27300.		27300.	I
POTASSIUM, TOTAL	04/08/94	0001	UG/L		28300.		28300.	I
RADIUM-226	04/13/94	0001	PCI/L		0.42		0.42	I
SODIUM, SOLUBLE	04/13/94	0001	UG/L		422000.	J	422000.	I
SODIUM, TOTAL	04/08/94	0001	UG/L		392000.		392000.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0381
NORTH COORDINATE: 596982.13 FT
EAST COORDINATE: 1495399.69 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
THORIUM-228	04/13/94	0001	PCI/L		0.145		0.145	I
THORIUM-230	04/13/94	0001	PCI/L		0.057		0.057	I
TRITIUM	04/13/94	0001	PCI/L		540.		540.	I
URANIUM-234	04/13/94	0001	PCI/L		0.48		0.48	I
URANIUM-238	04/13/94	0001	PCI/L		0.123		0.123	I
VANADIUM, SOLUBLE	04/13/94	0001	UG/L		13.1		13.1	I
VANADIUM, TOTAL	04/08/94	0001	UG/L		14.6		14.6	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0382
NORTH COORDINATE: 596601.67 FT
EAST COORDINATE: 1495444.40 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALPHA CHLORDANE	03/17/94	0001	UG/L	J	0.032	J	0.032	I
ALUMINUM, TOTAL	03/17/94	0001	UG/L		233.		233.	I
AMMONIA	03/17/94	0001	MG/L		2.9		2.9	I
BARIUM, SOLUBLE	03/17/94	0001	UG/L		267.	J	267.	I
BARIUM, TOTAL	03/17/94	0001	UG/L		244.	J	244.	I
CALCIUM, SOLUBLE	03/17/94	0001	UG/L		88500.	J	88500.	I
CALCIUM, TOTAL	03/17/94	0001	UG/L		80200.	J	80200.	I
CHLORIDE	03/17/94	0001	MG/L		610.		610.	I
FLUORIDE	03/17/94	0001	MG/L		0.68		0.68	I
IRON, SOLUBLE	03/17/94	0001	UG/L		538.	J	538.	I
IRON, TOTAL	03/17/94	0001	UG/L		886.	J	886.	I
LEAD, SOLUBLE	03/17/94	0001	UG/L		40.4		40.4	I
MAGNESIUM, SOLUBLE	03/17/94	0001	UG/L		54400.	J	54400.	I
MAGNESIUM, TOTAL	03/17/94	0001	UG/L		48800.	J	48800.	I
MANGANESE, SOLUBLE	03/17/94	0001	UG/L		33.9	J	33.9	I
MANGANESE, TOTAL	03/17/94	0001	UG/L		38.5	J	38.5	I
NICKEL, SOLUBLE	03/17/94	0001	UG/L	B	8.2		8.2	I
NICKEL, TOTAL	03/17/94	0001	UG/L	B	9.0		9.0	I
POTASSIUM, SOLUBLE	03/17/94	0001	UG/L		23800.		23800.	I
POTASSIUM, TOTAL	03/17/94	0001	UG/L		22300.		22300.	I
RADIUM-226	03/17/94	0001	PCI/L		1.58		1.58	I
SODIUM, SOLUBLE	03/17/94	0001	UG/L		257000.	J	257000.	I
SODIUM, TOTAL	03/17/94	0001	UG/L		238000.	J	238000.	I
SULFATE	03/17/94	0001	MG/L		9.2		9.2	I
THORIUM-228	03/17/94	0001	PCI/L		0.244		0.244	I
THORIUM-230	03/17/94	0001	PCI/L		0.049	J	0.049	I
TOTAL DISSOLVED SOLIDS	03/17/94	0001	MG/L		1240.		1240.	I
TOTAL KJELDAHL NITROGEN	03/17/94	0001	MG/L		2.4		2.4	I
TOTAL SUSPENDED SOLIDS	03/17/94	0001	MG/L		10.0		10.0	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0382
NORTH COORDINATE: 596601.67 FT
EAST COORDINATE: 1495444.40 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TRITIUM	03/17/94	0001	PCI/L		740.		740.	I
URANIUM-234	03/17/94	0001	PCI/L		0.072	J	0.072	I
URANIUM-238	03/17/94	0001	PCI/L		0.029		0.029	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0383
NORTH COORDINATE: 597138.34 FT
EAST COORDINATE: 1494477.15 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
BARIUM, SOLUBLE	04/01/94	0001	UG/L	B	78.6		78.6	I
BARIUM, TOTAL	04/01/94	0001	UG/L	B	76.2		76.2	I
CALCIUM, SOLUBLE	04/01/94	0001	UG/L		91300.		91300.	I
CALCIUM, TOTAL	04/01/94	0001	UG/L		88600.		88600.	I
CHLORIDE	04/01/94	0001	MG/L		91.1		91.1	I
CHROMIUM, TOTAL	04/01/94	0001	UG/L	B	2.0		2.0	I
FLUORIDE	04/01/94	0001	MG/L		0.21		0.21	I
IRON, TOTAL	04/01/94	0001	UG/L	B	99.6		99.6	I
MAGNESIUM, SOLUBLE	04/01/94	0001	UG/L		27700.		27700.	I
MAGNESIUM, TOTAL	04/01/94	0001	UG/L		27000.		27000.	I
NICKEL, SOLUBLE	04/01/94	0001	UG/L	B	13.5		13.5	I
NICKEL, TOTAL	04/01/94	0001	UG/L	B	11.7		11.7	I
NITRATE NITRITE	04/01/94	0001	MG/L		2.9		2.9	I
POTASSIUM, SOLUBLE	04/01/94	0001	UG/L	B	3020.		3020.	I
POTASSIUM, TOTAL	04/01/94	0001	UG/L	B	2950.		2950.	I
RADIUM-226	04/01/94	0001	PCI/L		0.24		0.24	I
SODIUM, SOLUBLE	04/01/94	0001	UG/L		46600.		46600.	I
SODIUM, TOTAL	04/01/94	0001	UG/L		45400.		45400.	I
SULFATE	04/01/94	0001	MG/L		66.0		66.0	I
THORIUM-228	04/01/94	0001	PCI/L		0.19		0.19	I
TOTAL DISSOLVED SOLIDS	04/01/94	0001	MG/L		565.		565.	I
TOTAL ORGANIC CARBON	04/01/94	0001	MG/L		0.50		0.50	I
TOTAL SUSPENDED SOLIDS	04/01/94	0001	MG/L		6.0		6.0	I
TRITIUM	04/01/94	0001	PCI/L		820.		820.	I
URANIUM-234	04/01/94	0001	PCI/L		0.157		0.157	I
URANIUM-238	04/01/94	0001	PCI/L		0.123		0.123	I
VANADIUM, SOLUBLE	04/01/94	0001	UG/L		13.7		13.7	I
VANADIUM, TOTAL	04/01/94	0001	UG/L		13.5		13.5	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0386
NORTH COORDINATE: 597345.22 FT
EAST COORDINATE: 1494953.59 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ANTIMONY, SOLUBLE	03/23/94	0001	UG/L	B	1.1	J	1.1	I
ARSENIC, SOLUBLE	03/23/94	0001	UG/L	B	2.7	J	2.7	I
ARSENIC, TOTAL	03/23/94	0001	UG/L	B	2.3	J	2.3	I
BARIUM, SOLUBLE	03/23/94	0001	UG/L	B	95.0		95.0	I
	03/23/94	1001	UG/L		94.4		94.4	I
BARIUM, TOTAL	03/23/94	0001	UG/L		95.2		95.2	I
	03/23/94	1001	UG/L	B	97.6		97.6	I
BENZOIC ACID	03/23/94	0001	UG/L	J	1.	J	1.	I
BERYLLIUM, SOLUBLE	03/23/94	0001	UG/L	B	0.61	J	0.61	I
	03/23/94	1001	UG/L	B	0.41	J	0.41	I
BERYLLIUM, TOTAL	03/23/94	0001	UG/L	B	0.51		0.51	I
	03/23/94	1001	UG/L	B	0.41		0.41	I
CALCIUM, SOLUBLE	03/23/94	0001	UG/L		135000.		135000.	I
	03/23/94	1001	UG/L		138000.		138000.	I
CALCIUM, TOTAL	03/23/94	0001	UG/L		141000.		141000.	I
	03/23/94	1001	UG/L		142000.		142000.	I
CHLORIDE	03/23/94	0001	MG/L		109.		109.	I
	03/23/94	1001	MG/L		106.		106.	I
CHROMIUM, TOTAL	03/23/94	0001	UG/L	B	1.1	J	1.1	I
	03/23/94	1001	UG/L	B	3.7	J	3.7	I
FLUORIDE	03/23/94	0001	MG/L		0.15		0.15	I
	03/23/94	1001	MG/L		0.14		0.14	I
IRON, SOLUBLE	03/23/94	0001	UG/L	B	89.2		89.2	I
	03/23/94	1001	UG/L	B	90.5		90.5	I
IRON, TOTAL	03/23/94	0001	UG/L		191.		191.	I
	03/23/94	1001	UG/L		205.		205.	I
MAGNESIUM, SOLUBLE	03/23/94	0001	UG/L		43600.		43600.	I
	03/23/94	1001	UG/L		43600.		43600.	I
MAGNESIUM, TOTAL	03/23/94	0001	UG/L		43800.		43800.	I
	03/23/94	1001	UG/L		45000.		45000.	I
MANGANESE, SOLUBLE	03/23/94	0001	UG/L	B	10.2		10.2	I
	03/23/94	1001	UG/L	B	12.2		12.2	I
MANGANESE, TOTAL	03/23/94	0001	UG/L		14.7		14.7	I
	03/23/94	1001	UG/L	B	12.2		12.2	I
NICKEL, SOLUBLE	03/23/94	0001	UG/L		52.1		52.1	I
	03/23/94	1001	UG/L		54.6		54.6	I
NICKEL, TOTAL	03/23/94	0001	UG/L		59.0		59.0	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0386
NORTH COORDINATE: 597345.22 FT
EAST COORDINATE: 1494953.59 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
NICKEL, TOTAL	03/23/94	1001	UG/L		52.1		52.1	I
NITRATE NITRITE	03/23/94	0001	MG/L		2.0		2.0	I
	03/23/94	1001	MG/L		2.0		2.0	I
POTASSIUM, SOLUBLE	03/23/94	0001	UG/L	B	2290.		2290.	I
	03/23/94	1001	UG/L	B	2240.		2240.	I
POTASSIUM, TOTAL	03/23/94	0001	UG/L	B	2340.		2340.	I
	03/23/94	1001	UG/L	B	2340.		2340.	I
RADIUM-226	03/23/94	1001	PCI/L		0.21		0.21	I
SODIUM, SOLUBLE	03/23/94	0001	UG/L		60400.	J	60400.	I
	03/23/94	1001	UG/L		61000.	J	61000.	I
SODIUM, TOTAL	03/23/94	0001	UG/L		61000.	J	61000.	I
	03/23/94	1001	UG/L		61700.	J	61700.	I
SULFATE	03/23/94	0001	MG/L		145.		145.	I
	03/23/94	1001	MG/L		126.		126.	I
TETRACHLOROETHENE	03/23/94	0001	UG/L		0.36		0.36	I
	03/23/94	1001	UG/L		0.35		0.35	I
THORIUM-228	03/23/94	0001	PCI/L		0.154	J	0.154	I
THORIUM-230	03/23/94	0001	PCI/L		0.050	J	0.050	I
	03/23/94	1001	PCI/L		0.097	J	0.097	I
TOTAL DISSOLVED SOLIDS	03/23/94	0001	MG/L		783.		783.	I
	03/23/94	1001	MG/L		789.		789.	I
TOTAL ORGANIC CARBON	03/23/94	0001	MG/L		4.4	J	4.4	I
	03/23/94	1001	MG/L		0.72	J	0.72	I
TOTAL SUSPENDED SOLIDS	03/23/94	0001	MG/L		8.0		8.0	I
	03/23/94	1001	MG/L		8.0		8.0	I
TRICHLOROETHENE	03/23/94	0001	UG/L		6.8		6.8	I
	03/23/94	1001	UG/L		6.6		6.6	I
TRITIUM	03/23/94	0001	PCI/L		2890.		2890.	I
	03/23/94	1001	PCI/L		3290.		3290.	I
URANIUM-234	03/23/94	0001	PCI/L		0.55	J	0.55	I
	03/23/94	1001	PCI/L		0.393		0.393	I
URANIUM-235	03/23/94	0001	PCI/L		0.048		0.048	I
	03/23/94	1001	PCI/L		0.064		0.064	I
URANIUM-238	03/23/94	0001	PCI/L		0.31	J	0.31	I
	03/23/94	1001	PCI/L		0.363		0.363	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0387
NORTH COORDINATE: 597210.50 FT
EAST COORDINATE: 1494897.38 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ARSENIC, TOTAL	04/05/94	0001	UG/L	B	2.6	J	2.6	I
BARIUM, SOLUBLE	04/05/94	0001	UG/L	B	99.4		99.4	I
BARIUM, TOTAL	04/05/94	0001	UG/L	B	99.2		99.2	I
BERYLLIUM, SOLUBLE	04/05/94	0001	UG/L	B	0.38	J	0.38	I
BERYLLIUM, TOTAL	04/05/94	0001	UG/L	B	0.38	J	0.38	I
CALCIUM, SOLUBLE	04/05/94	0001	UG/L		111000.		111000.	I
CALCIUM, TOTAL	04/05/94	0001	UG/L		110000.		110000.	I
CHLORIDE	04/05/94	0001	MG/L		98.2		98.2	I
COPPER, SOLUBLE	04/05/94	0001	UG/L	B	1.3	J	1.3	I
FLUORIDE	04/05/94	0001	MG/L		0.14		0.14	I
MAGNESIUM, SOLUBLE	04/05/94	0001	UG/L		32900.		32900.	I
MAGNESIUM, TOTAL	04/05/94	0001	UG/L		33000.		33000.	I
MANGANESE, SOLUBLE	04/05/94	0001	UG/L	B	6.7	J	6.7	I
MANGANESE, TOTAL	04/05/94	0001	UG/L	B	7.4	J	7.4	I
NICKEL, SOLUBLE	04/05/94	0001	UG/L	B	9.2	J	9.2	I
NICKEL, TOTAL	04/05/94	0001	UG/L	B	11.3	J	11.3	I
NITRATE NITRITE	04/05/94	0001	MG/L		3.1		3.1	I
POTASSIUM, SOLUBLE	04/05/94	0001	UG/L	B	2530.		2530.	I
POTASSIUM, TOTAL	04/05/94	0001	UG/L	B	2420.		2420.	I
SODIUM, SOLUBLE	04/05/94	0001	UG/L		53000.		53000.	I
SODIUM, TOTAL	04/05/94	0001	UG/L		51700.		51700.	I
SULFATE	04/05/94	0001	MG/L		112.		112.	I
TOTAL DISSOLVED SOLIDS	04/05/94	0001	MG/L		718.		718.	I
TOTAL ORGANIC CARBON	04/05/94	0001	MG/L		0.87		0.87	I
TRITIUM	04/05/94	0001	PCI/L		6240.		6240.	I
URANIUM-234	04/05/94	0001	PCI/L		0.361		0.361	I
URANIUM-235	04/05/94	0001	PCI/L		0.010		0.010	I
URANIUM-238	04/05/94	0001	PCI/L		0.313		0.313	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0388
NORTH COORDINATE: 596793.37 FT
EAST COORDINATE: 1494747.75 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	03/28/94	0001	UG/L		0.43	J	0.43	I
BARIUM, SOLUBLE	03/28/94	0001	UG/L	B	67.3		67.3	I
BARIUM, TOTAL	03/28/94	0001	UG/L		61.5		61.5	I
BERYLLIUM, SOLUBLE	03/28/94	0001	UG/L	B	0.31		0.31	I
BERYLLIUM, TOTAL	03/28/94	0001	UG/L	B	0.31		0.31	I
CALCIUM, SOLUBLE	03/28/94	0001	UG/L		105000.		105000.	I
CALCIUM, TOTAL	03/28/94	0001	UG/L		87500.		87500.	I
CHLORIDE	03/28/94	0001	MG/L		219.		219.	I
CHROMIUM, TOTAL	03/28/94	0001	UG/L		171.	J	171.	I
COBALT, TOTAL	03/28/94	0001	UG/L	B	1.9	J	1.9	I
COPPER, TOTAL	03/28/94	0001	UG/L	B	5.4		5.4	I
FLUORIDE	03/28/94	0001	MG/L		0.18		0.18	I
IRON, TOTAL	03/28/94	0001	UG/L		2310.		2310.	I
MAGNESIUM, SOLUBLE	03/28/94	0001	UG/L		29500.		29500.	I
MAGNESIUM, TOTAL	03/28/94	0001	UG/L		25000.		25000.	I
MANGANESE, SOLUBLE	03/28/94	0001	UG/L	B	7.9		7.9	I
MANGANESE, TOTAL	03/28/94	0001	UG/L	B	13.6		13.6	I
MOLYBDENUM	03/28/94	0001	UG/L	B	3.6		3.6	I
MOLYBDENUM, SOLUBLE	03/28/94	0001	UG/L	B	3.8		3.8	I
NICKEL, SOLUBLE	03/28/94	0001	UG/L		84.2		84.2	I
NICKEL, TOTAL	03/28/94	0001	UG/L		90.1		90.1	I
NITRATE NITRITE	03/28/94	0001	MG/L		2.2		2.2	I
POTASSIUM, SOLUBLE	03/28/94	0001	UG/L	B	3160.		3160.	I
POTASSIUM, TOTAL	03/28/94	0001	UG/L	B	2750.		2750.	I
SELENIUM, TOTAL	03/28/94	0001	UG/L	B	2.3		2.3	I
SODIUM, SOLUBLE	03/28/94	0001	UG/L		151000.		151000.	I
SODIUM, TOTAL	03/28/94	0001	UG/L		136000.		136000.	I
SULFATE	03/28/94	0001	MG/L		52.7		52.7	I
THORIUM-228	03/28/94	0001	PCI/L		0.031		0.031	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0388
NORTH COORDINATE: 596793.37 FT
EAST COORDINATE: 1494747.75 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: DOWN GRADIENT (D)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
THORIUM-230	03/28/94	0001	PCI/L		0.023		0.023	I
TOTAL DISSOLVED SOLIDS	03/28/94	0001	MG/L		804.		804.	I
TOTAL ORGANIC CARBON	03/28/94	0001	MG/L		1.0		1.0	I
TOTAL PHOSPHATE	03/28/94	0001	MG/L		0.18		0.18	I
TRITIUM	03/28/94	0001	PCI/L		1910.		1910.	I
URANIUM-234	03/28/94	0001	PCI/L		0.249	J	0.249	I
URANIUM-235	03/28/94	0001	PCI/L		0.021		0.021	I
URANIUM-238	03/28/94	0001	PCI/L		0.244	J	0.244	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0389
NORTH COORDINATE: 597337.46 FT
EAST COORDINATE: 1494949.43 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ANTIMONY, SOLUBLE	03/21/94	0001	UG/L	B	1.8		1.8	I
BARIUM, SOLUBLE	03/21/94	0001	UG/L	B	82.7		82.7	I
BARIUM, TOTAL	03/21/94	0001	UG/L		85.2		85.2	I
CADMIUM, SOLUBLE	03/21/94	0001	UG/L	B	0.88		0.88	I
CALCIUM, SOLUBLE	03/21/94	0001	UG/L		141000.		141000.	I
CALCIUM, TOTAL	03/21/94	0001	UG/L		146000.	J	146000.	I
CHLORIDE	03/21/94	0001	MG/L		101.		101.	I
FLUORIDE	03/21/94	0001	MG/L		0.15		0.15	I
LITHIUM, SOLUBLE	03/21/94	0001	UG/L	B	18.6		18.6	I
MAGNESIUM, SOLUBLE	03/21/94	0001	UG/L		38200.		38200.	I
MAGNESIUM, TOTAL	03/21/94	0001	UG/L		39600.		39600.	I
NICKEL, SOLUBLE	03/21/94	0001	UG/L	B	9.0		9.0	I
NICKEL, TOTAL	03/21/94	0001	UG/L	B	10.9		10.9	I
NITRATE NITRITE	03/21/94	0001	MG/L		2.1		2.1	I
POTASSIUM, SOLUBLE	03/21/94	0001	UG/L	B	2120.		2120.	I
POTASSIUM, TOTAL	03/21/94	0001	UG/L	B	2120.		2120.	I
RADIUM-226	03/21/94	0001	PCI/L		0.38		0.38	I
SODIUM, SOLUBLE	03/21/94	0001	UG/L		63100.		63100.	I
SODIUM, TOTAL	03/21/94	0001	UG/L		64500.		64500.	I
SULFATE	03/21/94	0001	MG/L		140.		140.	I
TETRACHLOROETHENE	03/21/94	0001	UG/L		0.43		0.43	I
THORIUM-228	03/21/94	0001	PCI/L		0.055		0.055	I
THORIUM-230	03/21/94	0001	PCI/L		0.026		0.026	I
TOTAL DISSOLVED SOLIDS	03/21/94	0001	MG/L		799.		799.	I
TOTAL ORGANIC CARBON	03/21/94	0001	MG/L		1.0		1.0	I
TOTAL PHOSPHATE	03/21/94	0001	MG/L		0.063		0.063	I
TRICHLOROETHENE	03/21/94	0001	UG/L		2.5		2.5	I
TRITIUM	03/21/94	0001	PCI/L		4150.		4150.	I
URANIUM-234	03/21/94	0001	PCI/L		0.578		0.578	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0389
NORTH COORDINATE: 597337.46 FT
EAST COORDINATE: 1494949.43 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
URANIUM-238	03/21/94	0001	PCI/L		0.447		0.447	I
VANADIUM, SOLUBLE	03/21/94	0001	UG/L	B	1.1		1.1	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0393
NORTH COORDINATE: 596694.53 FT
EAST COORDINATE: 1495024.89 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
AMMONIA	03/15/94	0001	MG/L		0.22		0.22	I
BARIUM, SOLUBLE	03/15/94	0001	UG/L	B	41.7		41.7	I
BARIUM, TOTAL	03/15/94	0001	UG/L	B	43.8		43.8	I
CALCIUM, SOLUBLE	03/15/94	0001	UG/L		144000.		144000.	I
CALCIUM, TOTAL	03/15/94	0001	UG/L		159000.		159000.	I
CHLORIDE	03/15/94	0001	MG/L		360.		360.	I
CHROMIUM, TOTAL	03/15/94	0001	UG/L		20.2		20.2	I
COPPER, SOLUBLE	03/15/94	0001	UG/L	B	0.64	J	0.64	I
DIETHYL PHTHALATE	03/15/94	0001	UG/L	J	0.7	J	0.7	I
FLUORIDE	03/15/94	0001	MG/L		0.27		0.27	I
IRON, SOLUBLE	03/15/94	0001	UG/L		999.		999.	I
IRON, TOTAL	03/15/94	0001	UG/L		1280.		1280.	I
LITHIUM, SOLUBLE	03/15/94	0001	UG/L	B	61.7		61.7	I
LITHIUM, TOTAL	03/15/94	0001	UG/L	B	61.7		61.7	I
MAGNESIUM, SOLUBLE	03/15/94	0001	UG/L		50700.		50700.	I
MAGNESIUM, TOTAL	03/15/94	0001	UG/L		52800.		52800.	I
MANGANESE, SOLUBLE	03/15/94	0001	UG/L		35.7		35.7	I
MANGANESE, TOTAL	03/15/94	0001	UG/L		38.0		38.0	I
MOLYBDENUM	03/15/94	0001	UG/L	B	1.8	J	1.8	I
NICKEL, SOLUBLE	03/15/94	0001	UG/L	B	38.6		38.6	I
NICKEL, TOTAL	03/15/94	0001	UG/L		48.7		48.7	I
NITRATE NITRITE	03/15/94	0001	MG/L		0.045		0.045	I
POTASSIUM, SOLUBLE	03/15/94	0001	UG/L	B	4640.		4640.	I
POTASSIUM, TOTAL	03/15/94	0001	UG/L	B	4730.		4730.	I
RADIUM-226	03/15/94	0001	PCI/L		0.46		0.46	I
SODIUM, SOLUBLE	03/15/94	0001	UG/L		194000.		194000.	I
SODIUM, TOTAL	03/15/94	0001	UG/L		198000.		198000.	I
SULFATE	03/15/94	0001	MG/L		118.		118.	I
THORIUM-228	03/15/94	0001	PCI/L		0.132		0.132	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0393
NORTH COORDINATE: 596694.53 FT
EAST COORDINATE: 1495024.89 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TOTAL DISSOLVED SOLIDS	03/15/94	0001	MG/L		1080.		1080.	I
TOTAL KJELDAHL NITROGEN	03/15/94	0001	MG/L		0.20		0.20	I
TOTAL ORGANIC CARBON	03/15/94	0001	MG/L		0.82		0.82	I
TRITIUM	03/15/94	0001	PCI/L		5010.		5010.	I
URANIUM-234	03/15/94	0001	PCI/L		0.190		0.190	I
URANIUM-238	03/15/94	0001	PCI/L		0.063		0.063	I
VANADIUM, TOTAL	03/15/94	0001	UG/L		26.0		26.0	I
ZINC, SOLUBLE	03/15/94	0001	UG/L	B	8.7		8.7	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0394
NORTH COORDINATE: 596489.48 FT
EAST COORDINATE: 1495003.44 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ALUMINUM, TOTAL	03/11/94	0001	UG/L		231.		231.	I
AMMONIA	03/11/94	0001	MG/L		2.1		2.1	I
ANTIMONY, SOLUBLE	03/11/94	0001	UG/L	B	1.6		1.6	I
BARIUM, SOLUBLE	03/11/94	0001	UG/L	B	69.9		69.9	I
BARIUM, TOTAL	03/11/94	0001	UG/L	B	77.2		77.2	I
CALCIUM, SOLUBLE	03/11/94	0001	UG/L		71700.		71700.	I
CALCIUM, TOTAL	03/11/94	0001	UG/L		69400.		69400.	I
CHLORIDE	03/11/94	0001	MG/L		209.		209.	I
CHROMIUM, TOTAL	03/11/94	0001	UG/L		58.8		58.8	I
FLUORIDE	03/11/94	0001	MG/L		0.65		0.65	I
IRON, SOLUBLE	03/11/94	0001	UG/L		613.		613.	I
IRON, TOTAL	03/11/94	0001	UG/L		1280.		1280.	I
MAGNESIUM, SOLUBLE	03/11/94	0001	UG/L		33200.		33200.	I
MAGNESIUM, TOTAL	03/11/94	0001	UG/L		31500.		31500.	I
MANGANESE, SOLUBLE	03/11/94	0001	UG/L		47.9		47.9	I
MANGANESE, TOTAL	03/11/94	0001	UG/L		54.5		54.5	I
MOLYBDENUM	03/11/94	0001	UG/L	B	3.7		3.7	I
MOLYBDENUM, SOLUBLE	03/11/94	0001	UG/L	B	3.6		3.6	I
NICKEL, SOLUBLE	03/11/94	0001	UG/L		47.8		47.8	I
NICKEL, TOTAL	03/11/94	0001	UG/L		56.2		56.2	I
NITRATE NITRITE	03/11/94	0001	MG/L		0.19		0.19	I
POTASSIUM, SOLUBLE	03/11/94	0001	UG/L		19100.		19100.	I
POTASSIUM, TOTAL	03/11/94	0001	UG/L		16800.		16800.	I
RADIUM-226	03/11/94	0001	PCI/L		0.87		0.87	I
SODIUM, SOLUBLE	03/11/94	0001	UG/L		151000.	J	151000.	I
SODIUM, TOTAL	03/11/94	0001	UG/L		138000.	J	138000.	I
SULFATE	03/11/94	0001	MG/L		61.1		61.1	I
THORIUM-228	03/11/94	0001	PCI/L		0.142		0.142	I
THORIUM-230	03/11/94	0001	PCI/L		0.077		0.077	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0394
NORTH COORDINATE: 596489.48 FT
EAST COORDINATE: 1495003.44 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: ALLUVIUM (AL)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
THORIUM-232	03/11/94	0001	PCI/L		0.025		0.025	I
TOTAL DISSOLVED SOLIDS	03/11/94	0001	MG/L		740.		740.	I
TOTAL KJELDAHL NITROGEN	03/11/94	0001	MG/L		1.8		1.8	I
TOTAL ORGANIC CARBON	03/11/94	0001	MG/L		2.7		2.7	I
TOTAL SUSPENDED SOLIDS	03/11/94	0001	MG/L		8.0		8.0	I
TRITIUM	03/11/94	0001	PCI/L		8460.		8460.	I
URANIUM-234	03/11/94	0001	PCI/L		0.147		0.147	I
URANIUM-238	03/11/94	0001	PCI/L		0.161		0.161	I
VANADIUM, TOTAL	03/11/94	0001	UG/L	B	1.5		1.5	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0397
NORTH COORDINATE: 596702.12 FT
EAST COORDINATE: 1495024.40 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: TILL (TI)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
ANTIMONY, SOLUBLE	03/11/94	0001	UG/L		6.4		6.4	I
BARIUM, SOLUBLE	03/11/94	0001	UG/L	B	131.		131.	I
BARIUM, TOTAL	03/11/94	0001	UG/L	B	128.		128.	I
CALCIUM, SOLUBLE	03/11/94	0001	UG/L		143000.		143000.	I
CALCIUM, TOTAL	03/11/94	0001	UG/L		140000.		140000.	I
CHLORIDE	03/11/94	0001	MG/L		159.		159.	I
CHROMIUM, SOLUBLE	03/11/94	0001	UG/L	B	8.7		8.7	I
CHROMIUM, TOTAL	03/11/94	0001	UG/L		29.0		29.0	I
FLUORIDE	03/11/94	0001	MG/L		0.17		0.17	I
IRON, SOLUBLE	03/11/94	0001	UG/L		317.		317.	I
IRON, TOTAL	03/11/94	0001	UG/L		2250.		2250.	I
MAGNESIUM, SOLUBLE	03/11/94	0001	UG/L		42900.		42900.	I
MAGNESIUM, TOTAL	03/11/94	0001	UG/L		42000.		42000.	I
MANGANESE, SOLUBLE	03/11/94	0001	UG/L	B	14.2		14.2	I
MANGANESE, TOTAL	03/11/94	0001	UG/L		35.2		35.2	I
NICKEL, SOLUBLE	03/11/94	0001	UG/L		79.7		79.7	I
NICKEL, TOTAL	03/11/94	0001	UG/L		155.		155.	I
NITRATE NITRITE	03/11/94	0001	MG/L		2.6		2.6	I
POTASSIUM, SOLUBLE	03/11/94	0001	UG/L	B	3130.		3130.	I
POTASSIUM, TOTAL	03/11/94	0001	UG/L	B	3040.		3040.	I
SODIUM, SOLUBLE	03/11/94	0001	UG/L		97600.	J	97600.	I
SODIUM, TOTAL	03/11/94	0001	UG/L		93900.	J	93900.	I
SULFATE	03/11/94	0001	MG/L		95.1		95.1	I
TETRACHLOROETHENE	03/11/94	0001	UG/L		16.		16.	I
TETRACHLOROMETHANE (CCL4)	03/11/94	0001	UG/L		1.6		1.6	I
THORIUM-228	03/11/94	0001	PCI/L		0.060		0.060	I
THORIUM-230	03/11/94	0001	PCI/L		0.090		0.090	I
TOTAL DISSOLVED SOLIDS	03/11/94	0001	MG/L		853.		853.	I
TOTAL ORGANIC CARBON	03/11/94	0001	MG/L		0.97		0.97	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: 0397
NORTH COORDINATE: 596702.12 FT
EAST COORDINATE: 1495024.40 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: TILL (TI)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
TRICHLOROETHENE	03/11/94	0001	UG/L		9.5	J	9.5	I
TRITIUM	03/11/94	0001	PCI/L		5390.		5390.	I
URANIUM-234	03/11/94	0001	PCI/L		0.459		0.459	I
URANIUM-235	03/11/94	0001	PCI/L		0.027		0.027	I
URANIUM-238	03/11/94	0001	PCI/L		0.374		0.374	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: P015 PIEZOMETER
NORTH COORDINATE: 596352.10 FT
EAST COORDINATE: 1495271.70 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SILTY GRAVEL OR SILTY GRAVELLY SAND (GM)
HYDRAULIC FLOW RELATIONSHIP: UP GRADIENT (U)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHA	03/25/94	0001	UG/L	J	2.	J	2.	I
	03/25/94	0001	UG/L		2.6		2.6	I
1,2-CIS-DICHLOROETHENE	03/25/94	0001	UG/L		140.		REJECT	I
	03/25/94	0001	UG/L		120.		120.	D1
1,2-TRANS-DICHLOROETHENE	03/25/94	0001	UG/L		2.4		2.4	I
CHLOROETHENE (VINYL CHLORIDE)	03/25/94	0001	UG/L		17.		17.	I
TETRACHLOROETHENE	03/25/94	0001	UG/L		5.3		5.3	I
TRICHLOROETHENE	03/25/94	0001	UG/L		28.		28.	I
TRICHLOROFLUOROMETHANE	03/25/94	0001	UG/L	J	0.7	J	0.7	I
	03/25/94	0001	UG/L		6.2		6.2	I
TRICHLOROMETHANE (CHLOROFORM)	03/25/94	0001	UG/L		2.7		2.7	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: P027 PIEZOMETER
NORTH COORDINATE: 596249.25 FT
EAST COORDINATE: 1495078.43 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
1,1,1-TRICHLOROETHANE	03/21/94	0001	UG/L		0.30	J	0.30	I
1,2-CIS-DICHLOROETHENE	03/21/94	0001	UG/L		2.0		2.0	I
ALUMINUM, TOTAL	03/21/94	0001	UG/L		34200.		34200.	I
ANTIMONY, SOLUBLE	03/21/94	0001	UG/L	B	1.0		1.0	I
ANTIMONY, TOTAL	03/21/94	0001	UG/L	B	1.2		1.2	I
ARSENIC, TOTAL	03/21/94	0001	UG/L	B	7.6	J	7.6	I
BARIUM, SOLUBLE	03/21/94	0001	UG/L	B	104.		104.	I
BARIUM, TOTAL	03/21/94	0001	UG/L		232.		232.	I
BERYLLIUM, TOTAL	03/21/94	0001	UG/L		2.0		2.0	I
BISMUTH, TOTAL	03/21/94	0001	UG/L	B	33.2		33.2	I
CALCIUM, SOLUBLE	03/21/94	0001	UG/L		147000.		147000.	I
CALCIUM, TOTAL	03/21/94	0001	UG/L		392000.	J	392000.	I
CHLORIDE	03/21/94	0001	MG/L		289.		289.	I
CHROMIUM, TOTAL	03/21/94	0001	UG/L		39.2		39.2	I
COBALT, TOTAL	03/21/94	0001	UG/L	B	33.1		33.1	I
COPPER, TOTAL	03/21/94	0001	UG/L		100.		100.	I
FLUORIDE	03/21/94	0001	MG/L		0.17		0.17	I
IRON, TOTAL	03/21/94	0001	UG/L		69400.		69400.	I
LEAD, TOTAL	03/21/94	0001	UG/L	B	29.0		29.0	I
LITHIUM, SOLUBLE	03/21/94	0001	UG/L	B	12.0		12.0	I
LITHIUM, TOTAL	03/21/94	0001	UG/L	B	72.2		72.2	I
MAGNESIUM, SOLUBLE	03/21/94	0001	UG/L		40800.		40800.	I
MAGNESIUM, TOTAL	03/21/94	0001	UG/L		102000.		102000.	I
MANGANESE, TOTAL	03/21/94	0001	UG/L		1470.	J	1470.	I
NICKEL, TOTAL	03/21/94	0001	UG/L		64.9		64.9	I
NITRATE NITRITE	03/21/94	0001	MG/L		2.8		2.8	I
POTASSIUM, SOLUBLE	03/21/94	0001	UG/L	B	3090.		3090.	I
POTASSIUM, TOTAL	03/21/94	0001	UG/L		13100.		13100.	I
RADIUM-226	03/21/94	0001	PCI/L		0.91		0.91	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

GROUNDWATER QUALITY DATA BY LOCATION
SITE: SWP99 GROUNDWATER SWEEPS
LOCATION: P027 PIEZOMETER
NORTH COORDINATE: 596249.25 FT
EAST COORDINATE: 1495078.43 FT
03/08/94 TO 04/14/94
REPORT DATE: 04/03/95

FORMATION OF COMPLETION: SAND OR GRAVELLY SAND, POORLY GRADED (SP)
HYDRAULIC FLOW RELATIONSHIP: ON SITE (O)

PARAMETER NAME	LOG DATE	SAMPLE ID	UNITS OF MEASURE	PVI	LAB VALUE	PVI	VALIDATED VALUE	RUN TYPE
SILVER, TOTAL	03/21/94	0001	UG/L	B	3.0	J	3.0	I
SODIUM, SOLUBLE	03/21/94	0001	UG/L		175000.		175000.	I
SODIUM, TOTAL	03/21/94	0001	UG/L		143000.		143000.	I
SULFATE	03/21/94	0001	MG/L		103.		103.	I
TETRACHLOROETHENE	03/21/94	0001	UG/L		2.7		2.7	I
THORIUM-228	03/21/94	0001	PCI/L		0.342		0.342	I
THORIUM-230	03/21/94	0001	PCI/L		0.212	J	0.212	I
THORIUM-232	03/21/94	0001	PCI/L		0.167	J	0.167	I
TOTAL DISSOLVED SOLIDS	03/21/94	0001	MG/L		1060.		1060.	I
TOTAL KJELDAHL NITROGEN	03/21/94	0001	MG/L		1.4		1.4	I
TOTAL ORGANIC CARBON	03/21/94	0001	MG/L		3.7		3.7	I
TOTAL PHOSPHATE	03/21/94	0001	MG/L		1.6		1.6	I
TOTAL SUSPENDED SOLIDS	03/21/94	0001	MG/L		971.		971.	I
TRICHLOROETHENE	03/21/94	0001	UG/L		5.4		5.4	I
TRITIUM	03/21/94	0001	PCI/L		2860.		2860.	I
URANIUM-234	03/21/94	0001	PCI/L		0.635		0.635	I
URANIUM-235	03/21/94	0001	PCI/L		0.038		0.038	I
URANIUM-238	03/21/94	0001	PCI/L		0.653		0.653	I
VANADIUM, TOTAL	03/21/94	0001	UG/L		57.4		57.4	I
ZINC, SOLUBLE	03/21/94	0001	UG/L	B	1.8	J	1.8	I
ZINC, TOTAL	03/21/94	0001	UG/L		242.		242.	I

PARAMETER VALUE INDICATOR (PVI): U - LESS THAN DETECTION LIMIT

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