RTI Project No. 0600002.000.005
December 2008

Northwest Site Area 2006-2007 Monitoring Report

General Electric/Global Nuclear Fuel Site
Wilmington, North Carolina

Prepared for:

General Electric Company/Global Nuclear Fuel
Wilmington, North Carolina

Prepared by:

RTI International
Environmental Sciences Unit

RTI Project No. 0600002.000.005
December 2008

Northwest Site Area 2006-2007 Monitoring Report

General Electric/Global Nuclear Fuel Site
Wilmington, North Carolina

Prepared for:

General Electric Company
c/o Global Nuclear Fuel
Post Office Box 780
Wilmington, North Carolina 28402

Contact:

T. Mark Leik, Manager
Site Environment, Health, and Safety
(910) 675-5721

Michael Goldstein, Manager
Environment, Health, and Safety; Transactions & Remediation
(502) 244-0970

Prepared by:

RTI International
Environmental Sciences Unit
Post Office Box 12194
Research Triangle Park, North Carolina 27709
(919) 485-2743

Reviewed by:

Andrew D. Stahl, P.G., C.P.G.
Project Hydrogeologist, Manager
Licensed NC Geologist No. 1650
AIPG Certified Professional Geologist No. 9070

W. Joseph Alexander, P.G.
Senior Project Director
Licensed NC Geologist No. 1314

Table of Contents

List of Acronyms iv
Executive Summary v
1.0 Introduction 1
2.0 Monitoring Activities Completed 3
3.0 Methodology 4
4.0 Results 6
4.1 Groundwater Flow 6
4.2 Data Validation 6
4.3 Extent of Organic Compounds and Inorganic Constituents 7
4.3.1 Trichloroethylene. 7
4.3.2 cis-1,2-Dichloroethylene. 8
4.3.3 Vinyl Chloride. 9
4.3.4 Other Organic Compounds. 9
4.3.5 Uranium. 9
4.3.6 Fluoride. 11
4.4 Natural Attenuation Parameters 11
4.4.1 Electron Receptors. 11
4.4.2 Geochemical Indicators. 12
4.4.3 Electron Donors. 12
4.4.4 Biodegradation Products. 12
5.0 Conclusions 14
6.0 References 16

List of Figures

Figure 1-1 Location of the GE/GNF Facility and the Northwest Site Area
Figure 1-2 Sampling Locations 2006 and 2007
Figure 4-1 Groundwater Elevation Contour Map — March 2007
Figure 4-2 Trichloroethylene (TCE) Distribution — May 2006
Figure 4-3 Trichloroethylene (TCE) Distribution — March 2007
Figure 4-4 cis-1,2-Dichloroethylene (cDCE) Distribution — May 2006
Figure 4-5 cis-1,2-Dichloroethylene (cDCE) Distribution — March 2007
Figure 4-6 Vinyl Chloride (VC) Distribution — May 2006
Figure 4-7 Vinyl Chloride (VC) Distribution — March 2007
Figure 4-8 Uranium Distribution — May 2006
Figure 4-9 Uranium Distribution — March 2007
Figure 4-10 Fluoride Distribution — May 2006
Figure 4-11 Fluoride Distribution — March 2007
Figure 4-12 Ferrous Iron Distribution — May 2006
Figure 4-13 Ferrous Iron Distribution — March 2007
Figure 4-14 Methane Distribution — May 2006
Figure 4-15 Methane Distribution — March 2007
Figure 4-16 Total Organic Carbon (TOC) Distribution — May 2006
Figure 4-17 Total Organic Carbon (TOC) Distribution — March 2007
Figure 4-18 Ethane and Ethene Distribution — May 2006
Figure 4-19 Ethane and Ethene Distribution — March 2007

List of Tables

Table 2-1 Number of Samples Collected in 2006 through 2007
Table 4-1 Measured Groundwater Elevations and Vertical Gradients
Table 4-2 Trend Analysis Results for Primary Organic Constituents
Table 4-3 Trend Analysis Results for Total Uranium
Table 4-4 Trend Analysis Results for Uranium-235
Table 4-5 Trend Analysis Results for Fluoride

List of Appendices

Appendix A Hydrographs

Appendix B Data Validation Memoranda

Appendix C Analytical Results
Table C-1. Explanation of Data Validation Qualifiers
Table C-2. Analytical Results — Primary Organic Constituents

Table C-3. Analytical Results — Other Organic Constituents Detected in 2006-2007
Table C-4. Analytical Results — Inorganic Constituents
Table C-5. 2006-2007 Biannual Field and Natural Attenuation Parameter Measurements
Table C-6. 2006-2007 Annual Field and Natural Attenuation Parameter Measurements

Appendix D Concentration Versus Time Graphs

List of Acronyms

CAP	Corrective Action Plan
cDCE	cis-1,2-dichloroethylene
CET	Chemical and Environmental Technology, Inc.
CSA	Comprehensive Site Assessment
DENR	North Carolina Department of Environment and Natural Resources
DO	dissolved oxygen
ENCO	Environmental Conservation Laboratories, Inc.
EPA	U.S. Environmental Protection Agency
FSP	Field Sampling Plan
GE/GNF	General Electric/Global Nuclear Fuel
GEH	GE-Hitachi Nuclear Energy Americas, LLC
µg/L	micrograms per liter
mg/L	milligrams per liter
mv	millivolt
NCAC	North Carolina Administrative Code
NC groundwater standards	North Carolina Class GA Groundwater Quality Standards (15A NCAC 2L .0202[g])
NRC	Nuclear Regulatory Commission
ORP	oxidation-reduction potential
PQL	practical quantitation limit
QAPP	Quality Assurance Project Plan
QC	quality control
RTI	RTI International[1]
SOP	standard operating procedure
TCE	trichloroethylene
TOC	total organic carbon
VC	vinyl chloride
VOC	volatile organic compound

[1] *RTI International is a trade name of Research Triangle Institute.*

Executive Summary

This *Northwest Site Area 2006-2007 Monitoring Report* summarizes the results of groundwater and surface-water monitoring activities completed by RTI International (RTI) during 2006 and 2007 in the northwest site area of the General Electric/Global Nuclear Fuel (GE/GNF) facility in Wilmington, North Carolina. The remote northwest site area is situated over 1 mile from the active part of the GE/GNF facility, the Northeast Cape Fear River, and the nearest developed property.

The primary objectives of the monitoring program are to evaluate the distribution and migration of organic compounds and inorganic constituents identified in groundwater and surface water at the northwest site area and to ensure the continued protection of human health and the environment. As described in the *Corrective Action Plan for the Northwest Site Area* (CAP) (RTI, 1999a), the remaining constituents in the area are predicted to attenuate via natural processes, and the concentrations are not predicted to pose significant risks to human health or the environment.

The monitoring results indicate that the relatively low-level concentrations in the northwest site area generally continue to be stable and/or attenuate through natural processes, which is consistent with results presented in the CAP. A summary of the results of the monitoring activities is as follows:

- With few exceptions summarized below, the concentrations and extent of trichloroethylene (TCE); cis-1,2-dichlorothylene (cDCE); vinyl chloride (VC); uranium; and fluoride have generally decreased or remained stable during the reporting period, relative to the initial assessment.
- Natural attenuation parameter measurements support the conclusion that the chlorinated organic compounds continue to biodegrade via reductive dehalogenation in the northwest site area.
- Groundwater flow conditions remained similar to patterns previously observed, whereby groundwater recharges the aquifer in the upland area in this northwest site area, flows to the north-northeast, and then discharges into the swampy area.
- Concentrations of TCE and cDCE in the swampy area remain below levels established in the CAP to be protective of ecological receptors.
- Concentrations of VC have fluctuated at some sampling locations. These observations are consistent with the understanding that VC is being produced

intermittently through cDCE biodegradation at varying rates. In addition, the VC appears to attenuate readily through biodegradation and/or volatilization. Measured VC concentrations do not pose an unacceptable risk to human health or the environment.

- Some on-site uranium concentration trends in groundwater continue to be stable or decreasing, and some show increasing trends for the most recent time frames statistically analyzed. Uranium concentrations have previously shown temporary spikes, and the trends apparent in the most recent data will continue to be monitored to assess whether the increases are temporary as have been observed in the past. Non-natural isotopic abundances of uranium-235 have not been measured in off-site monitoring locations.

- Overall, fluoride concentrations continue to be relatively low, and the concentration trends are generally stable or decreasing. Off-site fluoride concentrations remain below the NC groundwater standard of 2.0 milligrams per liter (15A NCAC 2L .0202[g]).

The monitoring program continues to satisfy the project objectives. The remaining constituents in the area are predicted to attenuate via natural processes, and the concentrations are not predicted to pose significant risks to human health or the environment. The current monitoring program is adequate and effective and will be continued through 2008 concurrent with an optimization review that GE is initiating to evaluate the efficiency and effectiveness of the groundwater monitoring program for compliance with remedial objectives.

1.0 Introduction

This *Northwest Site Area 2006-2007 Monitoring Report* summarizes the results of monitoring activities completed by RTI International (RTI) during 2006 and 2007 in the northwest site area of the General Electric/Global Nuclear Fuel (GE/GNF) facility in Wilmington, North Carolina. The GE/GNF facility encompasses more than 1,600 acres of land and is located on NC Highway 133 (also known as Castle Hayne Road and, previously, U.S. Highway 117), approximately 6 miles north of Wilmington and approximately 3 miles south of Castle Hayne, North Carolina. The facility extends westward from NC Highway 133 to the Northeast Cape Fear River in the southwest and to a swampy area in the northwest (Figure 1-1). There are currently two principal manufacturing activities conducted at the Wilmington site: production of nuclear fuel and components by GNF and production of aircraft engine parts by GE. This site is now the headquarters of the GE-Hitachi Nuclear Energy Americas, LLC (GEH) business.

This document describes the results of continued monitoring of groundwater and surface water in the northwest site area of the GE/GNF facility. RTI prepared the *Comprehensive Site Assessment for the Northwest Site Area* (CSA) and submitted it to the North Carolina Department of Environment and Natural Resources (DENR) on December 11, 1998 (RTI, 1998). The CSA presents detailed information regarding the site history, the geologic and hydrogeologic framework, chemical characteristics, previous sampling and analysis activities, extent of organic compounds and inorganic constituents, potential exposure pathways, and potential receptors. The *Corrective Action Plan for the Northwest Site Area* (CAP) (RTI,1999) documents continued assessment activities, as well as a monitored natural attenuation corrective action approach, which was approved by DENR on November 5, 1999. The groundwater and surface-water sampling and analysis activities implementing this corrective action were performed as specified in the CAP and modified as described in the *Northwest Site Area 2001 Annual Monitoring Report* (RTI, 2002). The former calcium-fluoride storage area was excavated in 1996 and backfilled in August and September 2000, and the U.S. Nuclear Regulatory Commission (NRC) amended the facility Materials License SNM-1097 in April of 2000 by granting unrestricted release of the previous northwest site area calcium-fluoride storage area (Leeds, 2000).

The primary objective of the monitoring program is to evaluate the distribution and migration of organic compounds and inorganic constituents identified in groundwater beneath the northwest site area. Storage of calcium fluoride in the former calcium-fluoride storage area (see former storage area and associated sampling locations in Figure 1-2) resulted in uranium and fluoride migrating to groundwater. Historical

disposal of material in the former lubricants area (Figure 1-2) resulted in trichloroethylene (TCE) and its degradation products, cis-1,2 dichloroethylene (cDCE) and vinyl chloride (VC), ultimately reaching groundwater. As described in the CSA and the CAP, these former sources have either been removed through excavation or have been depleted through dissolution into the surrounding groundwater; therefore, former source areas are no longer believed to have an effect on groundwater quality. In addition, the remaining organic compounds and inorganic constituents in groundwater are predicted to continue to attenuate via natural processes, and the concentrations are predicted to pose no significant risk to human health or the environment in the future. The monitoring program has been designed to verify the continued attenuation and migration patterns of the groundwater constituents and the absence of significant human-health and ecological risk.

2.0 Monitoring Activities Completed

Monitoring activities completed during the reporting period include groundwater-level measurements, groundwater sampling, swamp-water sampling[2], surface-water sampling, and field and laboratory analytical measurements. Four sampling events occurred during the 2006-2007 reporting period. Annual sampling occurred in May 2006 and March 2007, and biannual sampling occurred in September 2006 and October 2007. Figure 1-2 shows the former storage area and associated sampling locations. Table 2-1 lists the numbers of samples collected in 2006 and 2007 at each sampling location and the associated laboratory analytes and methods. In addition to the laboratory analyses listed in Table 2-1, the following parameters were measured in the field: pH, temperature, specific conductance, oxidation-reduction potential (ORP), dissolved oxygen (DO), and ferrous iron. Groundwater levels were measured during each sampling event. Additional groundwater-level measurement events were performed in March 2006, February 2007, and November 2007 as part of site-wide groundwater-level monitoring events.

Chemical and Environmental Technology, Inc. (CET) had been performing the organic analytical service for this project since 1999, and CET was acquired by Environmental Conservation Laboratories, Inc. (ENCO) in late 2005. The work performed by ENCO on this project is a continuation of the services previously provided by CET in that ENCO had not altered the staff or procedures previously used for this project. ENCO is certified by the Certification Section of the NC Division of Water Quality Chemistry Laboratory under 15A NCAC 2H .0800 for the utilized analytical methods. The other analytical laboratories performing services for this project remained unchanged (Oxford Laboratories, Inc., for inorganic analyses, and RTI's Environmental and Industrial Chemistry Department Laboratory for uranium analyses).

[2] A swamp-water sample refers to water collected in the swampy area from shallow monitoring points installed between 2 and 3 feet below the land surface. Refer to the CSA for a description of the swamp-water sampling devices.

3.0 Methodology

Sampling and analysis activities for the northwest site area were implemented during 2006 and 2007. The methodology for these activities is described in the following two documents: the *Groundwater and Surface-Water Field Sampling Plan* (FSP) (RTI, 1999b) and the *Quality Assurance Project Plan* (QAPP) (RTI, 1999c). The FSP and the QAPP were included in the CAP as Appendices H and I, respectively.

The FSP describes sampling locations, analytes, and quality control (QC) sampling procedures and includes standard operating procedures (SOPs), sampling forms, maps, and historical data tables that are specific to the sampling program described in this report. The FSP is used as the guide to implementing field activities for the monitoring program.

The QAPP documents the methods that established the technical accuracy and precision, statistical validity, and documentary evidence of data generated during the monitored natural attenuation corrective action. The QAPP is the QC document for activities relating to the collection and analysis of samples described in the FSP. The QAPP is used in conjunction with the FSP and helps ensure that the data obtained for this project are of sufficient quality to meet the project objectives. The QAPP contains information regarding field sampling, laboratory, and analytical procedures. Field and laboratory personnel are provided with instructions about activities to be performed before, during, and after field investigations. Specific protocols that pertain to various aspects of the field activities are described in the FSP.

The specific methodologies for the monitoring program described in this report are fully documented in the FSP and the QAPP, so they are not reproduced in this report. The monitoring program implemented during 2006 and 2007 follows these plans with the modifications presented in previous monitoring reports and approved by DENR.

As of the beginning of 2007, the analytical method utilized by ENCO for this project for volatile organic compounds (VOCs) has been changed from gas chromatography U.S. Environmental Protection Agency (EPA) Method 8021 to gas chromatography/mass spectrometry EPA Method 8260B. Prior to implementing this change, RTI International reviewed ENCO's method validation performance data to ensure that the method detection limits and practical quantitation limits (PQLs) were consistent with those previously applied to this project (e.g., the project requires the PQL to be no greater than 0.5 micrograms per liter [µg/L]), and that other project specific requirements would remain unchanged (e.g., spiking solutions for laboratory QC analyses are comprised of

previously established project-specific analytes). ENCO is certified by the Certification Section of the NC Division of Water Quality Chemistry Laboratory under 15A NCAC 2H .0800 for the new analytical method.

4.0 Results

This section presents the results of the field measurements and laboratory analyses performed during the reporting period.

4.1 Groundwater Flow

Comprehensive discussions of the groundwater flow patterns in the northwest site area are provided in the CSA and CAP. Groundwater elevations and vertical gradients measured during 2006 and 2007 (Table 4-1) are consistent with the conditions described in these earlier reports.

Appendix A presents a series of hydrographs (e.g., time versus water-elevation graphs) summarizing the historical groundwater-elevation data collected in the northwest site area. These hydrographs generally indicate that groundwater levels continued to fluctuate during 2006 within the typical range for the area and decreased during 2007.

Figure 4-1 shows groundwater-elevation conditions during May 2006. The general groundwater-flow patterns shown in this figure remain consistent with earlier results. Groundwater generally flows to the north-northeast from the former source areas and then discharges into the swampy area.

The vertical hydraulic gradients measured during the reporting period (Table 4-1) are similar to earlier results. Nearly all of the vertical gradients measured on the GE/GNF property in the northwest site area are downward, indicating that groundwater continues to recharge the aquifer in the upland area. In addition, the strong upward vertical gradient as measured between sampling points OSW-1A and SWS-8 indicates that groundwater continues to discharge upward into the swampy area.

4.2 Data Validation

As specified in the QAPP, each sampling event includes a validation of the analytical results. The data validation results for each sampling event are documented in data validation memoranda provided in Appendix B. Although data validation flags were applied to a small number of analytical results due to associated QC performance outside of the acceptance criteria specified in the QAPP, data were generally of good quality. Appendix C provides the analytical results along with relevant data validation flags. Table C-1 provides explanations for the data qualifier flags.

4.3 Extent of Organic Compounds and Inorganic Constituents

This section presents the analytical results of the monitoring activities performed in the northwest site area during the reporting period. Appendix C provides complete listings of analytical results for the VOCs of concern (TCE, cDCE, and VC) (Table C-2), other organic compounds detected (Table C-3), and inorganic constituents (fluoride and uranium) (Table C-4). Appendix C also presents the natural attenuation parameter measurements performed in 2006-2007 (Tables C-5 and C-6). RTI maintains the original laboratory reports and field sampling forms within project files.

Appendix D presents concentration versus time graphs for TCE, cDCE, VC, and fluoride at routine monitoring locations where concentrations have been above PQLs at some time during the sampling history. This appendix also presents uranium graphs for locations that have exhibited non-natural isotopic ratios. These figures provide a useful graphical summary of the concentration data over time. In addition, the figures allow for a qualitative evaluation of concentration trends. A quantitative evaluation of concentration trends was also performed using the Mann-Kendall statistical test for trend[3]. This evaluation method indicates whether any statistically significant increasing or decreasing concentration trends are apparent in the data. The Mann-Kendall analysis was performed for TCE, cDCE, VC, and fluoride at monitoring locations where the analyte was detected in 2006 or 2007 if more than one detection of the analyte is reported for the time period statistically analyzed. Total uranium and uranium-235 (^{235}U) trends were analyzed for monitoring locations that have exhibited non-natural isotopic ratios in 2006 or 2007 if more than one uranium detection is reported for the statistical time period or more than one non-natural ^{235}U isotopic abundance is calculated for the statistical time period, respectively. Tables 4-2 through 4-5 list the detailed statistical results. The results for specific analytes are discussed below.

4.3.1 Trichloroethylene

Figures 4-2 and 4-3 show the distribution of TCE measured in May 2006 and March 2007, respectively. Table C-2 in Appendix C presents the full TCE dataset for the routine monitoring locations. As indicated by these figures and table and by the time-concentration graphs in Appendix D (e.g., Figure D-6), the extent and concentrations of TCE have generally continued to decrease from the initial assessment through the 2006-2007 reporting period.

[3] The Mann-Kendall method is documented in *Statistical Methods for Environmental Pollution Monitoring* (Gilbert, 1987). For sample sizes greater than 40, the normal approximation described in Gilbert (1987) was used. For sample sizes less than or equal to 40, the Kendall's statistic lookup table was used as provided in *Nonparametric Statistical Methods* (Hollander and Wolfe, 1973).

TCE was detected during the reporting period only in monitoring well OCW-2C and at surface-water sampling location SW-14. The results of statistical trend analyses of TCE concentrations are shown in Table 4-2. A downward trend is identified for OCW-2C, and no statistically significant trend was calculated for SW-14, which supports the conclusion that TCE continues to attenuate in the groundwater system. For the annual 2007 monitoring event results displayed on Figure 4-3, TCE was not detected at concentrations exceeding the North Carolina Class GA Groundwater Quality Standard (15A NCAC 2L .0202[g], last amended December 7, 2006) (referred to as the NC groundwater standard) of 2.8 µg/L.

4.3.2 cis-1,2-Dichloroethylene

Figures 4-4 and 4-5 show the distribution of cDCE measured in May 2006 and March 2007, respectively. Table C-2 in Appendix C presents the full cDCE dataset for the routine monitoring locations. As indicated by these figures and table and by the time-concentration graphs in Appendix D (e.g., Figure D-4), the extent and concentrations of cDCE have generally continued to decrease from the initial assessment through this reporting period. For the annual 2007 monitoring event results displayed on Figure 4-5, cDCE was not detected at concentrations exceeding the NC groundwater standard of 70 µg/L.

Table 4-2 shows the results of statistical trend analyses of cDCE concentrations over time. All of the trend results for the more recent data sets analyzed, except for SW-14, are downward, supporting the conclusion that cDCE continues to attenuate. SW-14 is located in the swampy area. This increasing trend in the swampy area is consistent with modeling predictions presented in the CAP, which suggested that cDCE concentrations in the swampy area may continue to increase for approximately ten to fifteen years (from 1999) before decreasing over time. The trend analyses for cDCE in OSW-1A, also located in the swampy area, further support the modeling predictions. The OSW-1A trend for the full data set shows an increasing trend, but the analysis of the cDCE results generated since 2001 shows a decreasing trend. In addition, cDCE concentrations at SW-14 and OSW-1A remain well below the NC groundwater standard of 70 µg/L and the surface water benchmark of 590 µg/L presented in the CAP. The only monitoring location with a cDCE concentration exceeding the NC groundwater standard during the reporting period was on-site well OCW-2C. The statistical analysis for this location shows a decreasing trend, and the OCW-2C cDCE concentration fell below the NC groundwater standard for the first time in 2007.

4.3.3 Vinyl Chloride

Figures 4-6 and 4-7 show the distribution of VC measured in May 2006 and March 2007, respectively. Table C-2 in Appendix C presents the full VC dataset for the routine monitoring locations. These figures and table and the time-concentration graphs in Appendix D show that the extent of VC has remained relatively stable over time.

Because VC is a daughter product of the biodegradation of cDCE, it is possible for VC to be created throughout the area that contains elevated cDCE concentrations (e.g., CAF-17C, Figure D-4). Under appropriate conditions, VC will continue to degrade into non-toxic byproducts (e.g., carbon dioxide, ethene). Results presented in the CAP and in Section 4.4 suggest that conditions in the groundwater plume area are conducive to VC degradation (RTI, 1999a).

The results of statistical trend analyses of VC concentrations are shown in Table 4-2. All of the statistical trends for the most recent data sets analyzed either are decreasing (CAF-17C and OB-5) or not statistically significant (i.e., no trend; OCW-2C and SW-14), and these VC concentrations do not pose an unacceptable risk to human health or the environment. Overall, these observations are consistent with the understanding that VC is being produced intermittently through cDCE biodegradation at varying rates and that most of the produced VC is also further degrading into non-toxic byproducts.

4.3.4 Other Organic Compounds

Low concentrations of the following other VOCs were detected during the reporting period: toluene; 1,1-dichloroethane; 1,2-dichloroethane; trans-1,2-dichloroethylene; n-butylbenzene; and chloroform. Table C-3 in Appendix C presents these results. (During the reporting period, the results for all EPA Method 8021 [2006 analyses] and EPA Method 8260B [2007 analyses] VOCs not listed in Tables C-2 and C-3 were non-detect.) Concentrations of all of the detected VOCs shown on Table C-3 are below NC groundwater standards.

4.3.5 Uranium

As discussed in the CSA, isotopic abundance (i.e., the ratio of uranium isotope to total uranium concentrations) is used to differentiate between natural and non-natural uranium. In addition, the CSA discusses the uranium analytical protocol, whereby isotopic uranium concentrations (^{234}U, ^{235}U, and ^{238}U) are measured only for samples

with total uranium concentrations exceeding 0.002 milligrams per liter (mg/L)[4]. The natural abundance is a ratio of 0.0071 for ^{235}U and 0.00005 for ^{234}U. Table C-4 in Appendix C presents the full uranium dataset for the routine monitoring locations and includes the calculated ^{235}U abundance. ^{234}U was not detected during the reporting period except for one isolated detection at location CAF-7A.

Figures 4-8 and 4-9 show total uranium and ^{235}U concentrations measured in May 2006 and March 2007, respectively. In addition, these figures show the approximate area with calculated ^{235}U abundances above natural levels. Figures D-15 through D-25 in Appendix D present uranium time-versus-concentration graphs for routine-monitoring locations where non-natural uranium ratios have been calculated at some time during the sampling history. The calculated ^{235}U abundance exceeded natural levels during the reporting period in CAF-6A, CAF-6B, CAF-7A, CAF-10A, and CAF-12A. The overall distribution of uranium has not changed significantly from earlier results.

Tables 4-3 and 4-4 show the results of the statistical trend analyses of total uranium and ^{235}U, respectively. As shown on Figures 4-8 and 4-9, monitoring wells CAF-6A and CAF-6B are situated about 70 feet inside (south of) the GE property line and downgradient (north) of the former calcium fluoride storage area. The statistical analysis for the full dataset generated for these wells show decreasing trends for both total uranium and ^{235}U. Analysis of more recent subsets of the well CAF-6B data, however, reveals increasing uranium trends. Downgradient toward the property line, on-site well CAF-7A reveals similar statistical results as CAF-6B, although nearby on-site well CAF-12A reveals decreasing trends. About 225 feet west-southwest (side/up-gradient) of well CAF-6B, on-site well CAF-10A shows similar statistical results as wells CAF-6B and CAF-7A for total uranium, although analysis of the more recent subset of the CAF-10A ^{235}U data do not reveal a statistically significant trend. Uranium concentrations have previously shown temporary spikes (e.g., Appendix D Figures D-19 and D-21 through D-25), and the trends apparent in the most recent data will continue to be monitored to assess whether the increases are temporary as have been observed in the past.

[4] The isotopic uranium analysis PQL is 0.00015 mg/L. Therefore, with total uranium concentrations less than 0.002 mg/L, ^{235}U isotopic abundances less than 0.075 cannot be measured. Because 0.075 exceeds any ^{235}U abundances at the GE/GNF facility, uranium isotopic analyses are not performed at total uranium concentrations less than 0.002 mg/L, as documented in the CAP.

4.3.6 Fluoride

Figures 4-10 and 4-11 show the distribution of fluoride measured in May 2006 and March 2007, respectively. Table C-4 in Appendix C presents the full fluoride dataset for the routine monitoring locations. Figure D-26 in Appendix D presents fluoride time-versus-concentration graphs for routine-monitoring locations where fluoride has historically been detected. Table 4-5 shows the results of the statistical trend analysis of fluoride data for locations where fluoride has been detected during the reporting period. For the most recent datasets statistically analyzed, most of the calculated trends are downward, with only OCW-4B showing an increasing trend. However, the fluoride levels in OCW-4B remain below the NC groundwater standard of 2.0 mg/L. As shown on Figures 4-10 and 4-11, the extent of fluoride concentrations exceeding the NC groundwater standard remains inside the GE property line, and as listed in Table C-4 of Appendix C, the maximum concentration detected during the reporting period was only 2.75 µg/L (well CAF-7B). Overall, the fluoride monitoring results support the conclusion that fluoride concentrations continue to be relatively low, and the concentration trends are generally stable or decreasing in the northwest site area.

4.4 Natural Attenuation Parameters

The CAP provides a detailed discussion of the natural biodegradation processes that can degrade chlorinated compounds. In addition, the CAP presents results that indicate chlorinated-compound biodegradation is active in the northwest site area. This section presents similar results for monitoring activities performed during the reporting period to evaluate the natural biodegradation of chlorinated compounds in water media of the northwest site area. The field and natural attenuation parameter measurements used for this evaluation are shown in Appendix C, Tables C-5 and C-6.

4.4.1 Electron Receptors

In addition to chlorinated solvents, potential electron receptors in the northwest site area include DO, ferric iron, and carbon dioxide. As discussed in the CAP these electron receptors tend to be depleted in areas where chlorinated compounds biodegrade. The chlorinated compounds then act as electron receptors and degrade through the process of reductive dehalogenation. In cases where ferric iron is used as an electron receptor, the reduced iron species, ferrous iron, is produced. Similarly, where carbon dioxide is an electron receptor, methane is produced. Therefore, areas of increased ferrous iron and methane concentrations can indicate active reductive dehalogenation.

DO is low (less than 3 mg/L) at several locations, indicating that conditions tend to be supportive of reductive dehalogenation; however, the results vary significantly, both inside and outside the VOC groundwater plumes likely due to measurement variability. Figures 4-12 and 4-13 show May 2006 and March 2007 ferrous iron concentrations, respectively, and Figures 4-14 and 4-15 show May 2006 and March 2007 methane concentrations, respectively. They are elevated in the same general area as the chlorinated organic groundwater plumes (Figures 4-2 through 4-7). The iron and methane data suggest that the chlorinated organics in the northwest site area continues to attenuate through natural biodegradation.

4.4.2 Geochemical Indicators

A series of parameters were monitored as potential geochemical indicators of biodegradation, including ORP and pH. ORP is intermittently low (less than 100 millivolts [mV]) at several locations, indicating that the groundwater flow system tends toward reducing conditions and supportive of reductive dehalogenation; however, the results vary significantly inside and outside the VOC plumes and are likely due to measurement variability. Groundwater pH in the area is generally between 4 and 8, which is within the limits suitable for biological activity. Overall, the geochemical indicator data suggest that conditions are conducive for chlorinated organics to attenuate through natural biodegradation.

4.4.3 Electron Donors

Reductive dehalogenation relies on organic constituents to serve as electron donors. Total organic carbon (TOC) was measured at the northwest site area to evaluate whether sufficient organic compounds are present to support this biodegradation mechanism. Figures 4-16 and 4-17 show that May 2006 and March 2007 organic carbon concentrations, respectively, are elevated in the vicinity of the former lubricants area. TOC concentrations are also relatively greater in some of the swampy area, which is typical for organic-rich swamp soils. The elevated TOC concentrations appear to provide sufficient organic carbon to drive the reductive dehalogenation process.

4.4.4 Biodegradation Products

Biodegradation products of reductive dehalogenation include chloride, ethane, and ethene. The greatest chloride concentrations generally are in CAF-17C and OB-5 (the March 2007 values are anomalously low), which are locations that also have higher concentrations of chlorinated VOCs. Figures 4-18 and 4-19 show the May 2006 and March 2007 ethane and ethene results, as well as the approximate area where ethane

or ethene concentrations exceed 0.2 mg/L. The presence of ethane and ethene in the same area as the VOC groundwater plumes provide strong evidence that reductive dehalogenation is occurring.

5.0 Conclusions

The monitoring results generated during 2006 and 2007 are generally consistent with the understanding of the northwest site area described in the CSA and in the CAP; therefore, these data suggest that the concentrations are mostly stable and/or attenuate through natural processes. A summary of the conclusions based on these monitoring data includes the following:

- With few exceptions summarized below, the concentrations and extent of TCE, cDCE, VC, uranium, and fluoride have generally decreased or remained stable during the reporting period, relative to the initial assessment.
- Natural attenuation parameter measurements support the conclusion that the chlorinated organic compounds continue to biodegrade via reductive dehalogenation in the northwest site area.
- Groundwater flow conditions remained similar to patterns previously observed, whereby groundwater recharges the aquifer in the upland in this northwest site area, flows to the north-northeast, and then discharges into the swampy area.
- Concentrations of TCE and cDCE in the swampy area remain below levels established in the CAP to be protective of ecological receptors.
- Concentrations of VC have fluctuated at some sampling locations. These observations are consistent with the understanding that VC is being produced intermittently through cDCE biodegradation at rates that vary over space and time. The VC concentrations in these wells do not pose an unacceptable risk to human health or the environment.
- Of the five on-site locations where ^{235}U abundance was measured to exceed natural ratios in 2006 or 2007, some continue to show stable or decreasing total uranium and/or ^{235}U concentration trends in groundwater, and some show increasing trends for the most recent time frames statistically analyzed. Uranium concentrations have previously shown temporary spikes (e.g., Appendix D Figures D-19 and D-21 through D-25), and the trends apparent in the most recent data will continue to be monitored to assess whether the increases are temporary as have been observed in the past. Non-natural ^{235}U abundances have not been measured in off-site monitoring locations.

- Overall, the fluoride monitoring results support the conclusion that fluoride concentrations continue to be relatively low, and the concentration trends are generally stable or decreasing in the northwest site area. Calculated trends for the most recent datasets statistically analyzed are mostly downward. A recent increasing trend was calculated for well OCW-4B, but these concentrations are below the NC groundwater standard of 2.0 mg/L.

The monitoring program continues to satisfy the objectives listed in the EPA's directive on monitored natural attenuation (EPA, 1997). Consistent with these EPA guidelines, the monitoring results for the northwest site area accomplish or demonstrate the following:

- Natural attenuation is occurring.
- Transformation products (e.g., vinyl chloride) were identified and do not pose unacceptable risk to human health or the environment.
- Impacts to downgradient receptors (i.e., the swampy area) remain below concentrations presented in the CAP approved by DENR.
- No new chemical releases have been identified.
- No changes in environmental conditions have been identified that may reduce the efficacy of the natural-attenuation processes.
- Protection of human health and the environment has been achieved as specified in the CAP. Nevertheless, the monitoring program will continue until the ultimate cleanup objectives (applicable groundwater standards) are achieved through natural attenuation.

The monitoring program continues to satisfy the project objectives. The remaining organic compounds and inorganic constituents in the area are predicted to attenuate via natural processes, and the concentrations are not predicted to pose significant risks to human health or the environment. The current monitoring program is adequate and effective and will be continued through 2008 concurrent with an optimization review that GE is initiating to evaluate the efficiency and effectiveness of the groundwater monitoring program for compliance with remedial objectives.

6.0 References

Gilbert, R.O. 1987. *Statistical Methods for Environmental Pollution*. John Wiley & Sons. New York, NY.

Hollander, M., and D.A. Wolfe. 1973. *Nonparametric Statistical Methods*. John Wiley & Sons. New York, NY.

Leeds, E.J. 2000. Unrestricted Release of Northwest CaF2 Storage Area (TAC NO. L31269). Memorandum to C.M. Vaughan, Manager, Facility Licensing, Global Nuclear Fuels – Americas, L.L.C. April 10.

RTI (RTI International). 1998. *Comprehensive Site Assessment Report for the Northwest Site Area*. RTI Report 6448-018/003/01F. December 11, 1998.

RTI (RTI International). 1999a. *Corrective Action Plan for the Northwest Site Area*. RTI Report No.6448-018/004/01F. April 27, 1999.

RTI (RTI International). 1999b.*Groundwater and Surface-Water Field Sampling Plan*. RTI Report No. 6448-018/005/01F. March 31, 1999. (This document is included in the CAP as Appendix H.)

RTI (RTI International). 1999c.*Quality Assurance Project Plan*. RTI Report No. 6448-018/006/01F. March 31, 1999. (This document is included in the CAP as Appendix I.)

RTI (RTI International). 2001a. *Northwest Site Area Annual Monitoring Report – March 1999 through February 2000*. RTI Report No. 07810.000.007/001/01F. January 23, 2001.

RTI (RTI International). 2001b. *Northwest Site Area Annual Monitoring Report – March through December 2000*. RTI Report No. 07810.000.007/002/01F. June 26, 2001.

RTI (RTI International). 2002. *Northwest Site Area 2001 Annual Monitoring Report*. RTI Report No. 07810.000.007/003/01F. August 7, 2002.

RTI (RTI International). 2004. *Northwest Site Area 2002-2003 Monitoring Report*. RTI Report No. 07810.000.007/004/01F. January 29, 2004.

RTI (RTI International). 2006. *Northwest Site Area 2004-2005 Monitoring Report*. RTI Report No. 0209739.000.005/001/01F. April 25, 2006.

U.S. EPA (Environmental Protection Agency). 1999. *Use of Monitored Natural Attenuation at Superfund, RCRA Corrective Action, and Underground Storage Tank Sites*. Office of Solid Waste and Emergency Response Directive No. 9200.4-17. Washington, DC.

Figures

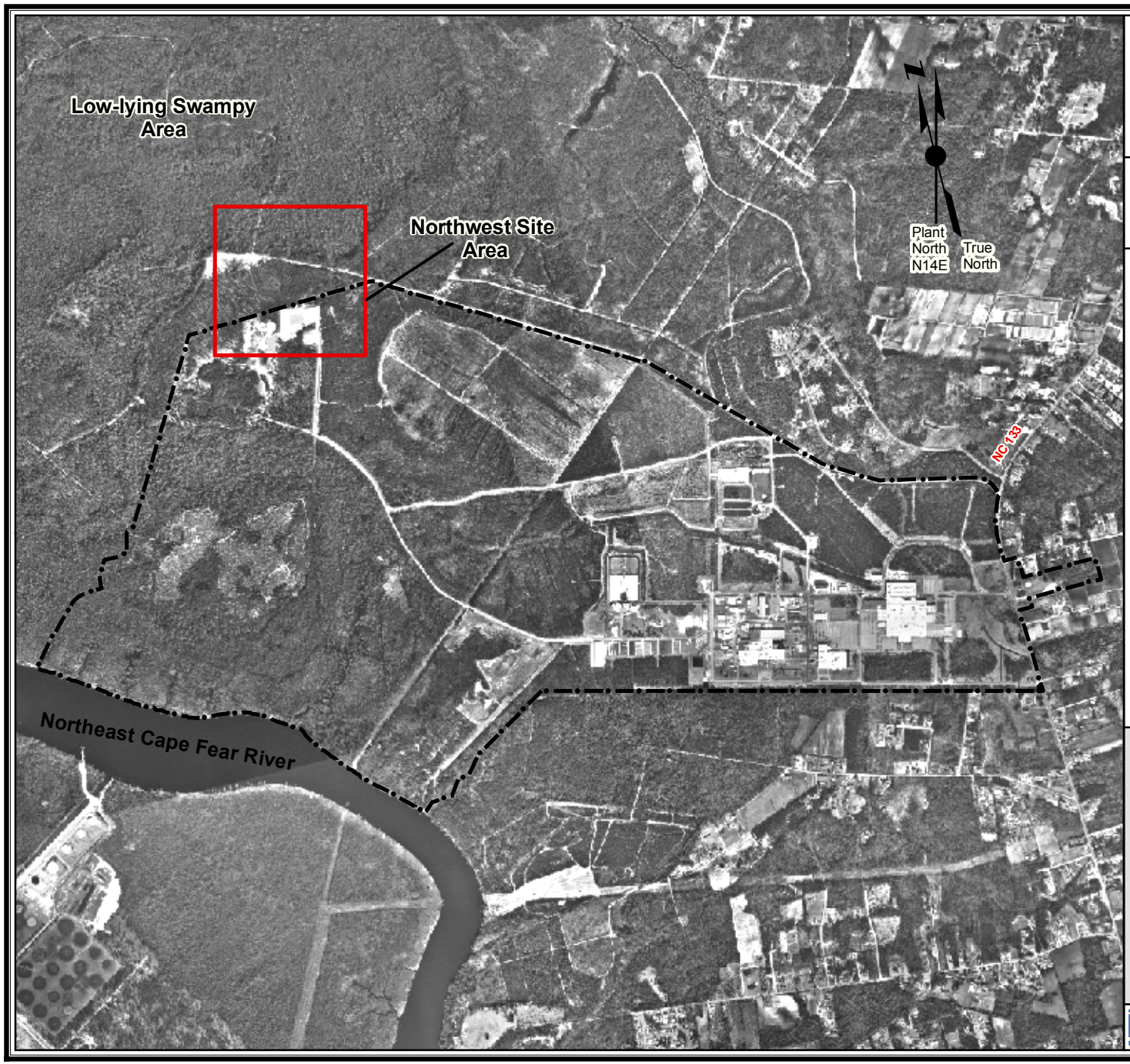


Figure 1-1
Location of the GE/GNF Facility and the Northwest Site Area

Explanation

Property boundary

Basemap: 1998 Aerial Photograph, New Hanover County Department of Information Technology

Feet
0 2,250 4,500

General Electric/Global Nuclear Fuel
Wilmington, North Carolina

RTI INTERNATIONAL

Date: 7/17/08

Map No: 9739005-1

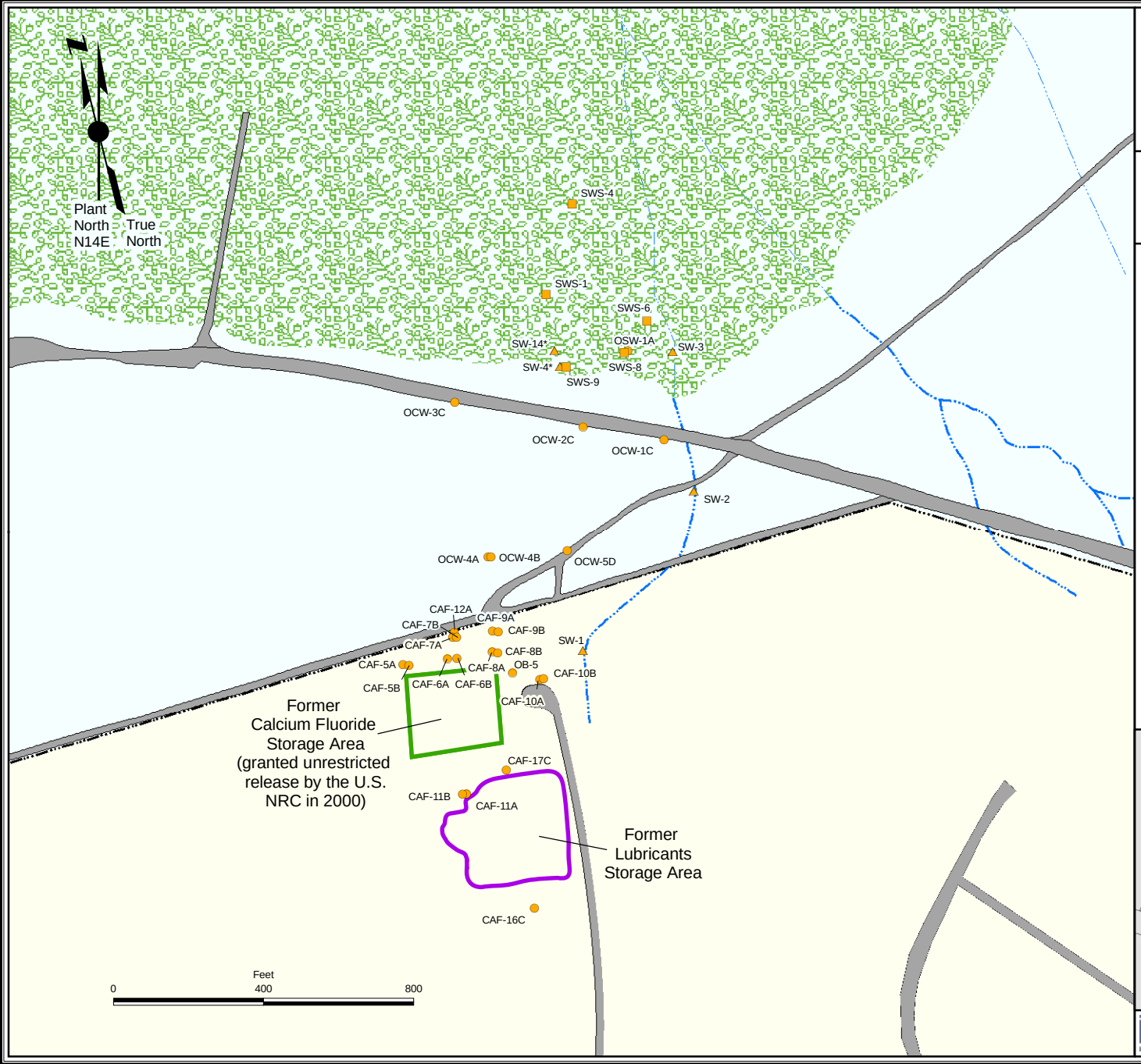


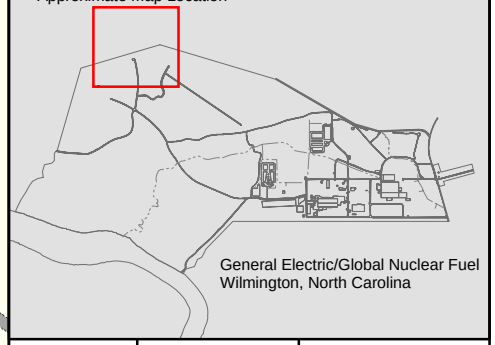
Figure 1-2
Sampling Locations 2006 and 2007

Explanation

- Surface-water sampling location
- Swamp pore-water sampling location
- Monitoring-well sampling location
- Surface water
- GE/GNF property boundary
- GE/GNF property
- Road or trail
- Off site
- Swampy area

* SW-14 is a replacement sampling location for SW-4 when SW-4 is dry. SW-1 and SW-4 were dry during the 2006 and 2007 sampling events.

Approximate Map Location



General Electric/Global Nuclear Fuel
Wilmington, North Carolina

RTI INTERNATIONAL

Date:	Map No:
7/24/08	9739005-22

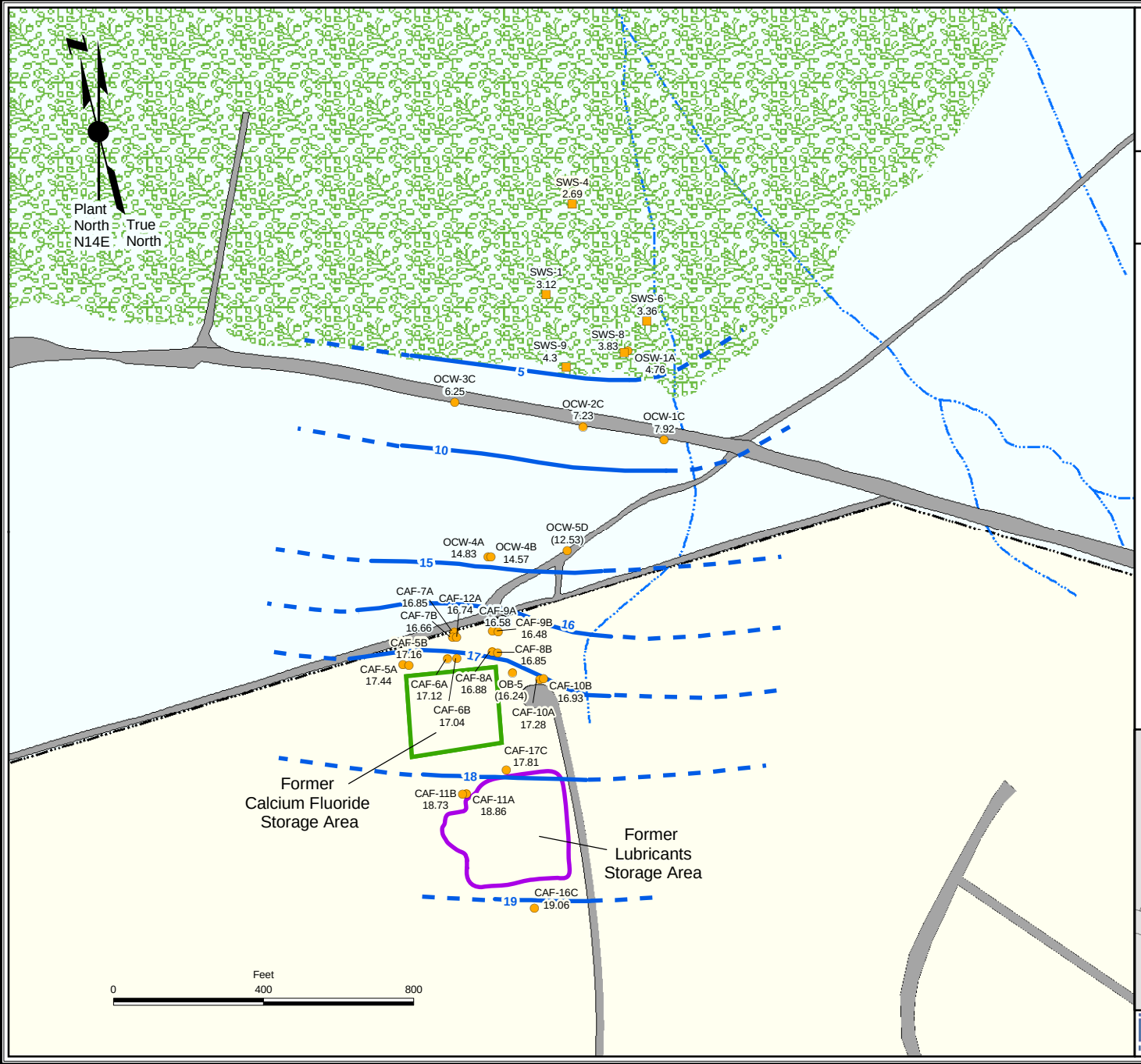


Figure 4-1
Groundwater Elevation Contour Map
March 2007

Explanation

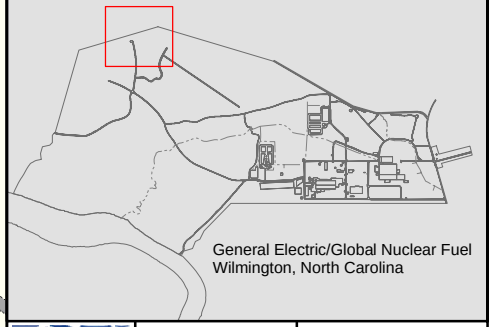
- Monitoring well*
- Swamp pore-water sampling location*
- Groundwater elevation contour**
- Surface water
- GE/GNF property boundary
- GE/GNF property
- Road or trail
- Off site
- Swampy area

*Monitoring well and swamp pore-water sampling location labels indicate well ID and groundwater elevation in feet above mean sea level (ft msl). Measurements in parentheses are from the deeper groundwater zone and were weighed less heavily for contouring the data. The elevations in SWS-8 and OSW-1A represent conditions at approximately 3 ft and 8 ft below the ground surface, respectively.

**Groundwater elevation contours are in ft msl. Contours are dashed where inferred.

Contour interval varies from 1 to 5 feet.

Approximate Map Location

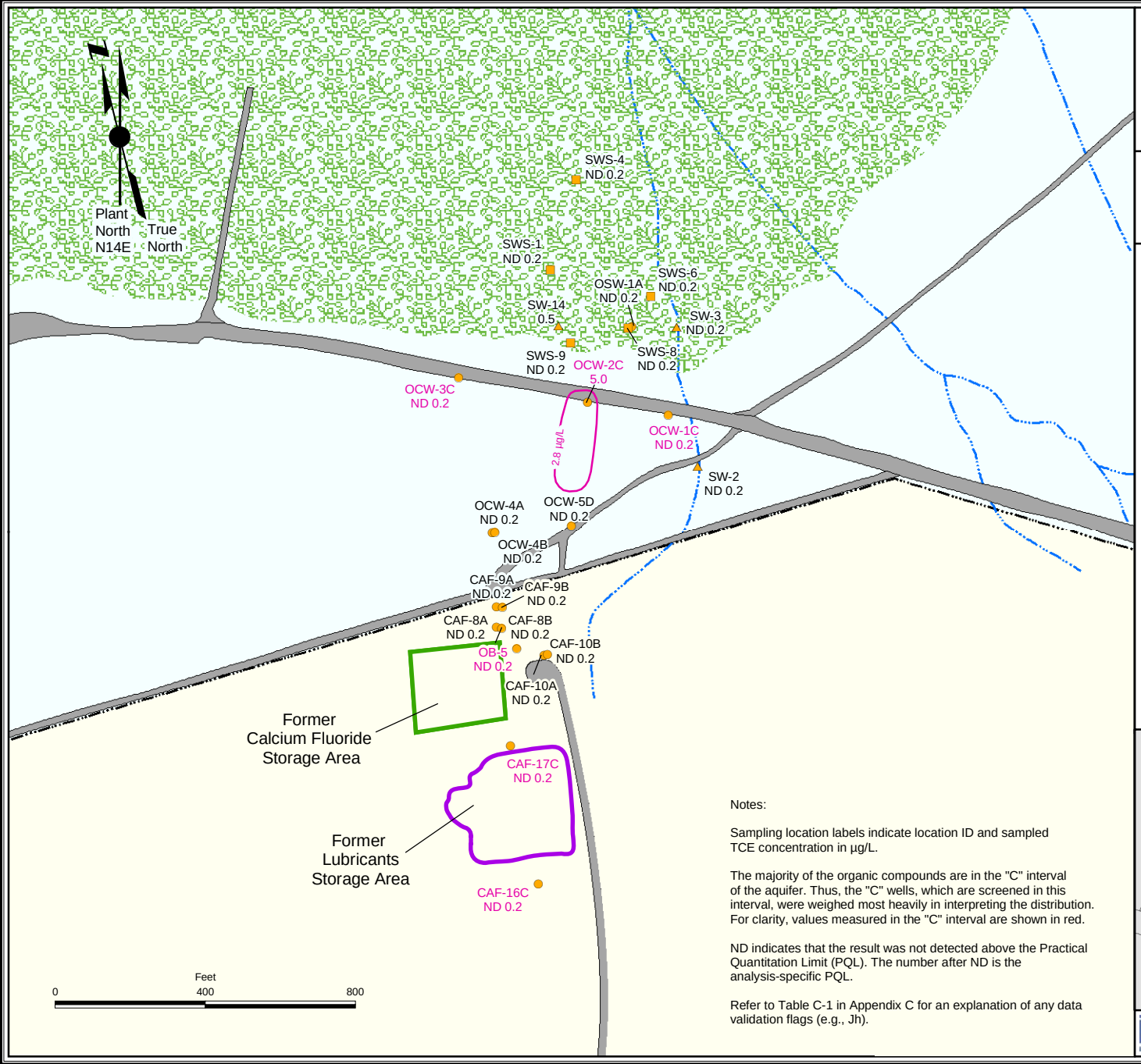


General Electric/Global Nuclear Fuel
Wilmington, North Carolina

RTI INTERNATIONAL

Date:	Map No:
7/24/08	9739005-23

Figure 4-2
Trichloroethylene (TCE) Distribution
May 2006



Explanation

- Monitoring-well sampling location
- Surface-water sampling location
- Swamp pore-water sampling location
- Approximate extent of TCE > 2.8 µg/L May 2006*
- Surface water
- GE/GNF property boundary
- GE/GNF property
- Road or trail
- Off site
- Swampy area

* Contour delineates area that exceeds the North Carolina groundwater standard of 2.8 µg/L (15A NCAC 02L .0202[g]).

Notes:

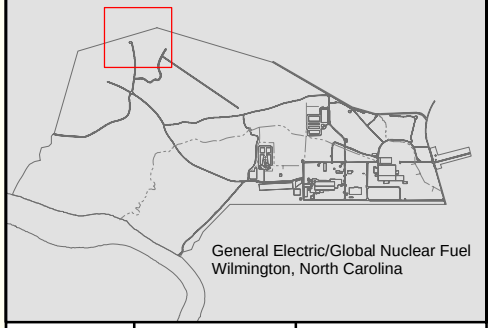
Sampling location labels indicate location ID and sampled TCE concentration in µg/L.

The majority of the organic compounds are in the "C" interval of the aquifer. Thus, the "C" wells, which are screened in this interval, were weighed most heavily in interpreting the distribution. For clarity, values measured in the "C" interval are shown in red.

ND indicates that the result was not detected above the Practical Quantitation Limit (PQL). The number after ND is the analysis-specific PQL.

Refer to Table C-1 in Appendix C for an explanation of any data validation flags (e.g., Jh).

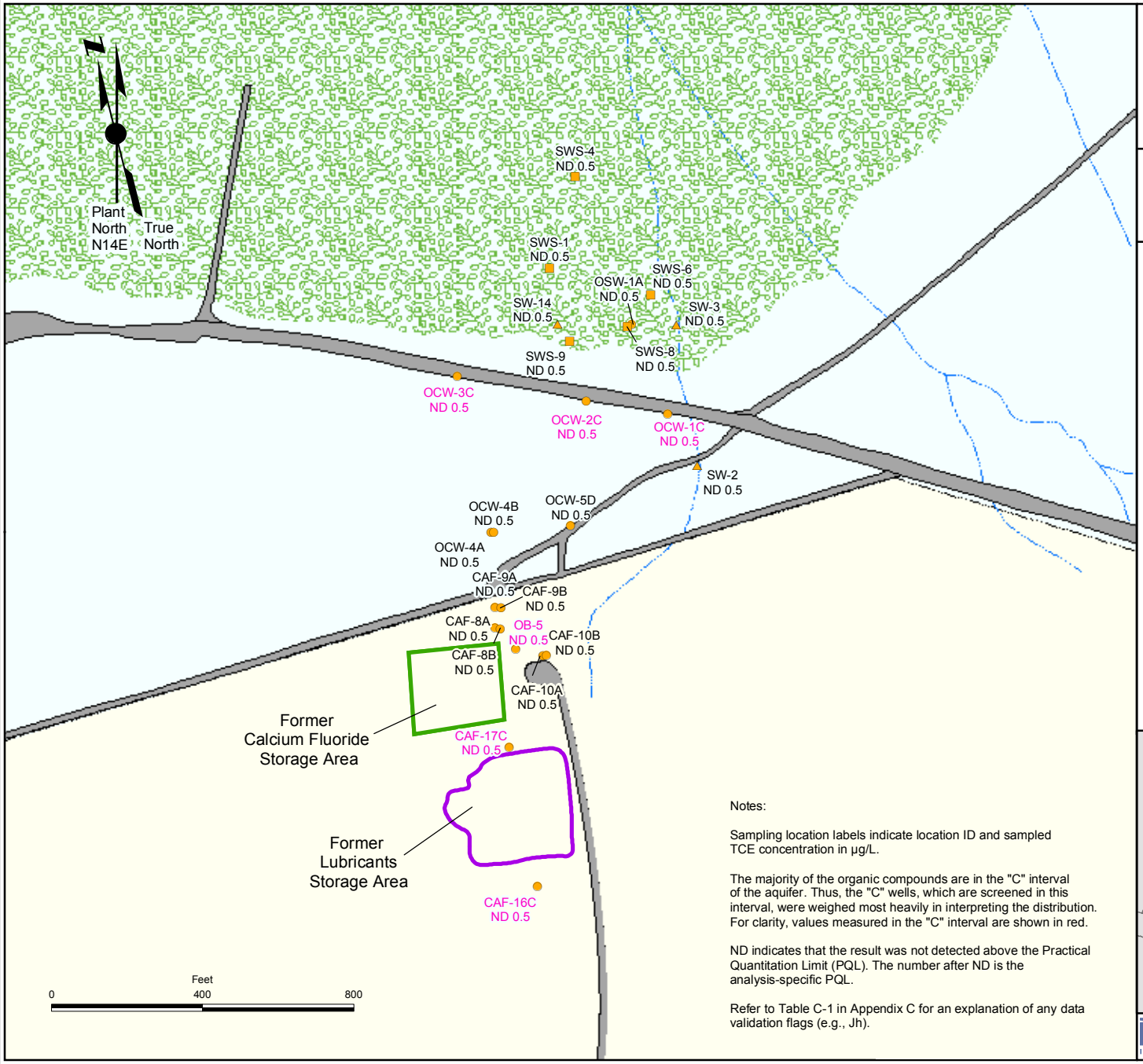
Approximate Map Location



RTI INTERNATIONAL

Date:	Map No:
7/24/08	9739005-13

Figure 4-3
Trichloroethylene (TCE) Distribution
March 2007



Notes:

Sampling location labels indicate location ID and sampled TCE concentration in µg/L.

The majority of the organic compounds are in the "C" interval of the aquifer. Thus, the "C" wells, which are screened in this interval, were weighed most heavily in interpreting the distribution. For clarity, values measured in the "C" interval are shown in red.

ND indicates that the result was not detected above the Practical Quantitation Limit (PQL). The number after ND is the analysis-specific PQL.

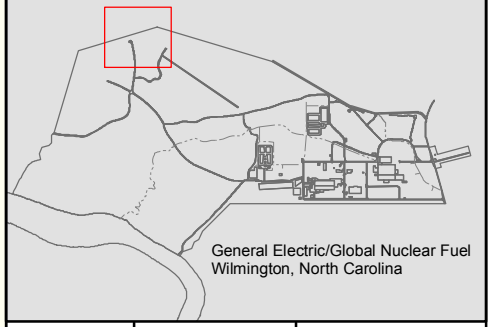
Refer to Table C-1 in Appendix C for an explanation of any data validation flags (e.g., Jh).

Explanation

- Monitoring-well sampling location
- Surface-water sampling location
- Swamp pore-water sampling location
- Surface water
- GE/GNF property boundary
- GE/GNF property
- Road or trail
- Off site
- Swampy area

TCE was not detected in March 2007 above the North Carolina groundwater standard of 2.8 µg/L (15A NCAC 02L .0202[g]).

Approximate Map Location

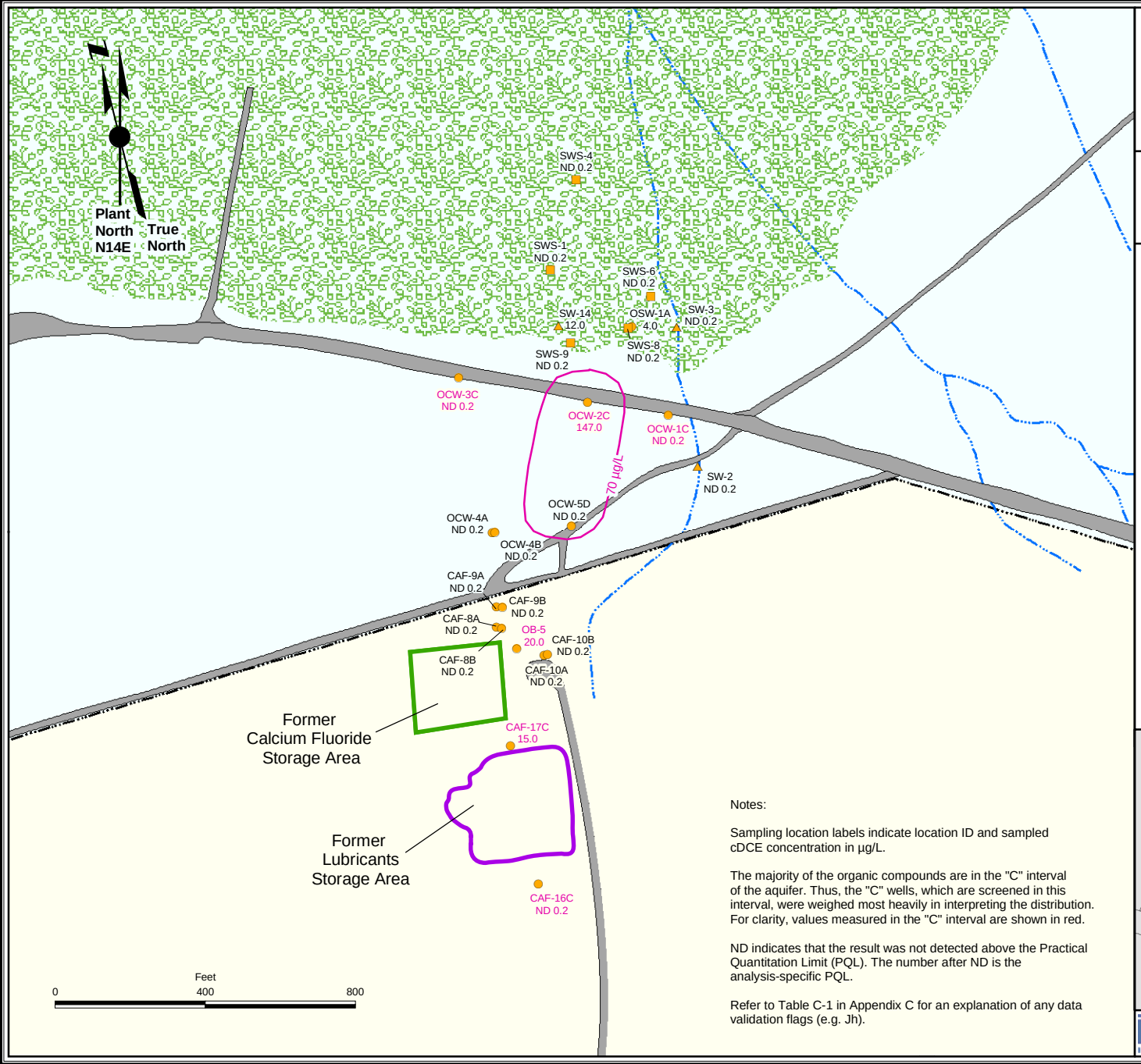


RTI INTERNATIONAL

Date: 7/17/08

Map No: 9739005-24

Figure 4-4
cis-1,2-Dichloroethylene (cDCE) Distribution
May 2006



Notes:

Sampling location labels indicate location ID and sampled cDCE concentration in µg/L.

The majority of the organic compounds are in the "C" interval of the aquifer. Thus, the "C" wells, which are screened in this interval, were weighed most heavily in interpreting the distribution. For clarity, values measured in the "C" interval are shown in red.

ND indicates that the result was not detected above the Practical Quantitation Limit (PQL). The number after ND is the analysis-specific PQL.

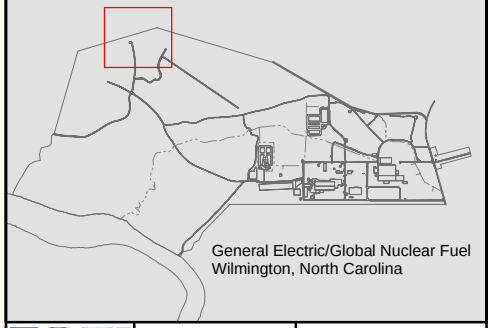
Refer to Table C-1 in Appendix C for an explanation of any data validation flags (e.g. Jh).

Explanation

- Monitoring-well sampling location
- Surface-water sampling location
- Swamp pore-water sampling location
- Approximate extent of cDCE > 70 µg/L May 2006*
- Surface water
- GE/GNF property boundary
- GE/GNF property
- Road or trail
- Off site
- Swampy area

* Contour delineates area that exceeds the North Carolina groundwater standard of 70 µg/L (15A NCAC 02L .0202[g]).

Approximate Map Location

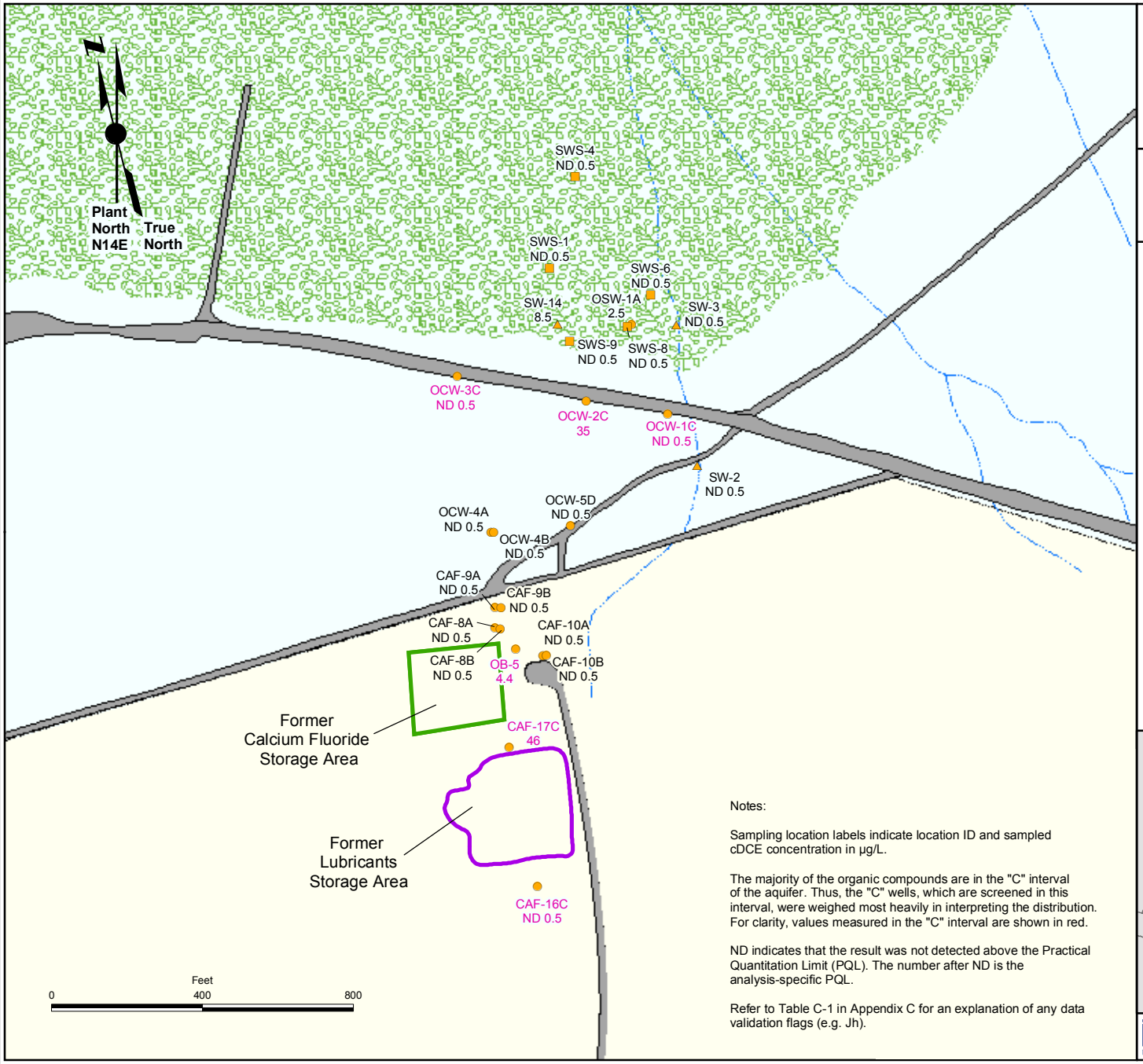


General Electric/Global Nuclear Fuel
Wilmington, North Carolina

RTI INTERNATIONAL

Date:	Map No:
7/24/08	9739005-14

Figure 4-5
cis-1,2-Dichloroethylene (cDCE) Distribution
March 2007



Notes:

Sampling location labels indicate location ID and sampled cDCE concentration in µg/L.

The majority of the organic compounds are in the "C" interval of the aquifer. Thus, the "C" wells, which are screened in this interval, were weighed most heavily in interpreting the distribution. For clarity, values measured in the "C" interval are shown in red.

ND indicates that the result was not detected above the Practical Quantitation Limit (PQL). The number after ND is the analysis-specific PQL.

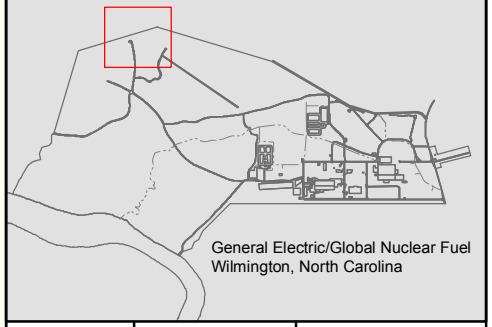
Refer to Table C-1 in Appendix C for an explanation of any data validation flags (e.g. Jh).

Explanation

- Monitoring-well sampling location
- Surface-water sampling location
- Swamp pore-water sampling location
- Surface water
- GE/GNF property boundary
- GE/GNF property
- Road or trail
- Off site
- Swampy area

cDCE was not detected in March 2007 above the North Carolina groundwater standard of 70 µg/L (15A NCAC 02L .0202[g]).

Approximate Map Location



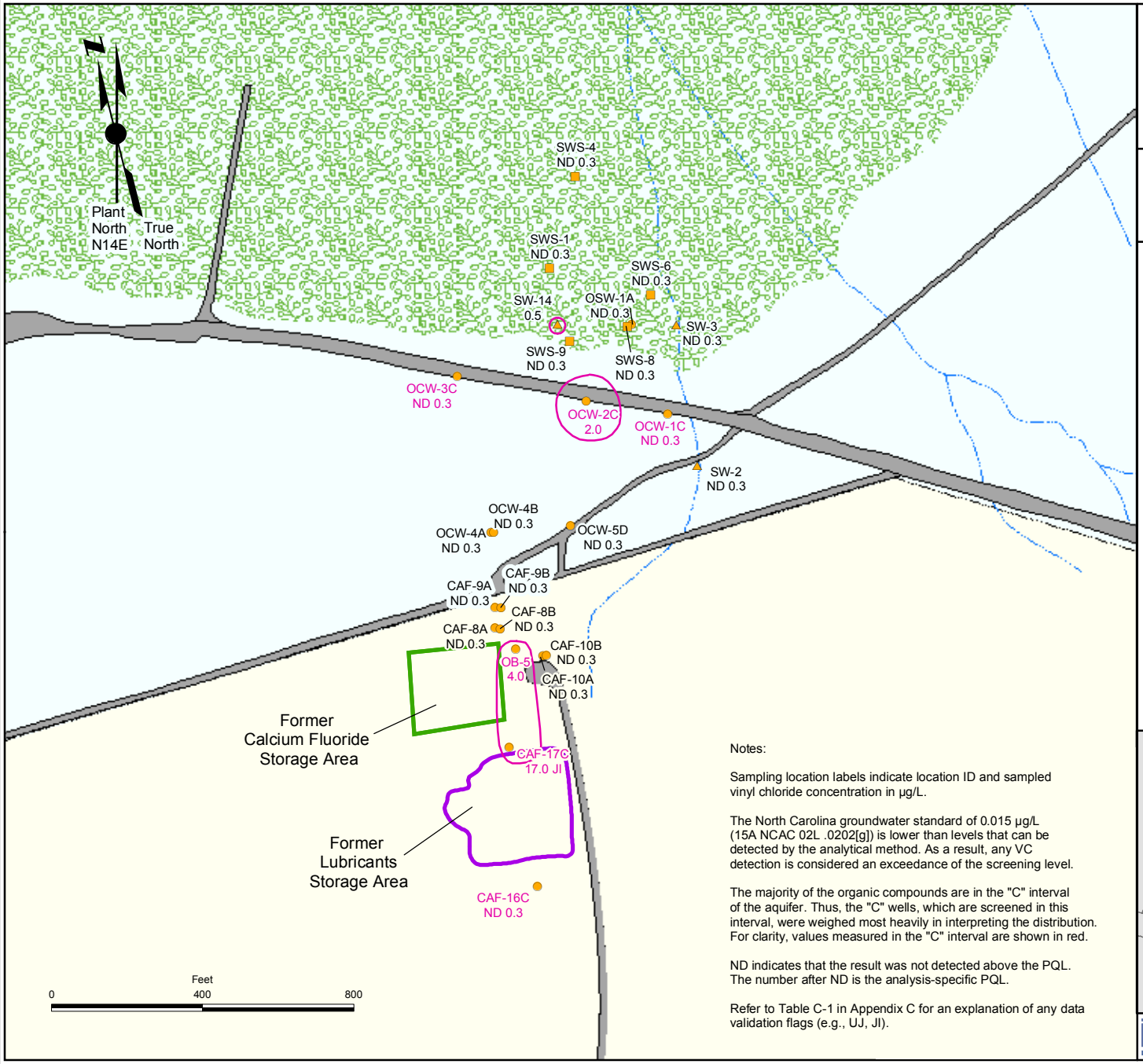
General Electric/Global Nuclear Fuel
Wilmington, North Carolina

RTI INTERNATIONAL

Date: 7/17/08

Map No: 9739005-25

Figure 4-6
Vinyl Chloride (VC) Distribution
May 2006



Explanation

- Monitoring-well sampling location
- Surface-water sampling location
- Swamp pore-water sampling location
- Approximate extent of detectable concentrations of VC
- Stream
- GE/GNF property boundary
- GE/GNF property
- Road or trail
- Off site
- Swampy area

Notes:

Sampling location labels indicate location ID and sampled vinyl chloride concentration in µg/L.

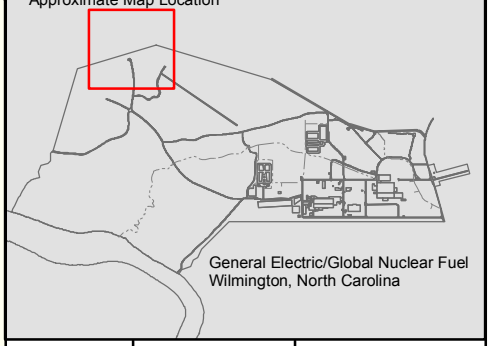
The North Carolina groundwater standard of 0.015 µg/L (15A NCAC 02L .0202[g]) is lower than levels that can be detected by the analytical method. As a result, any VC detection is considered an exceedance of the screening level.

The majority of the organic compounds are in the "C" interval of the aquifer. Thus, the "C" wells, which are screened in this interval, were weighed most heavily in interpreting the distribution. For clarity, values measured in the "C" interval are shown in red.

ND indicates that the result was not detected above the PQL. The number after ND is the analysis-specific PQL.

Refer to Table C-1 in Appendix C for an explanation of any data validation flags (e.g., UJ, JI).

Approximate Map Location

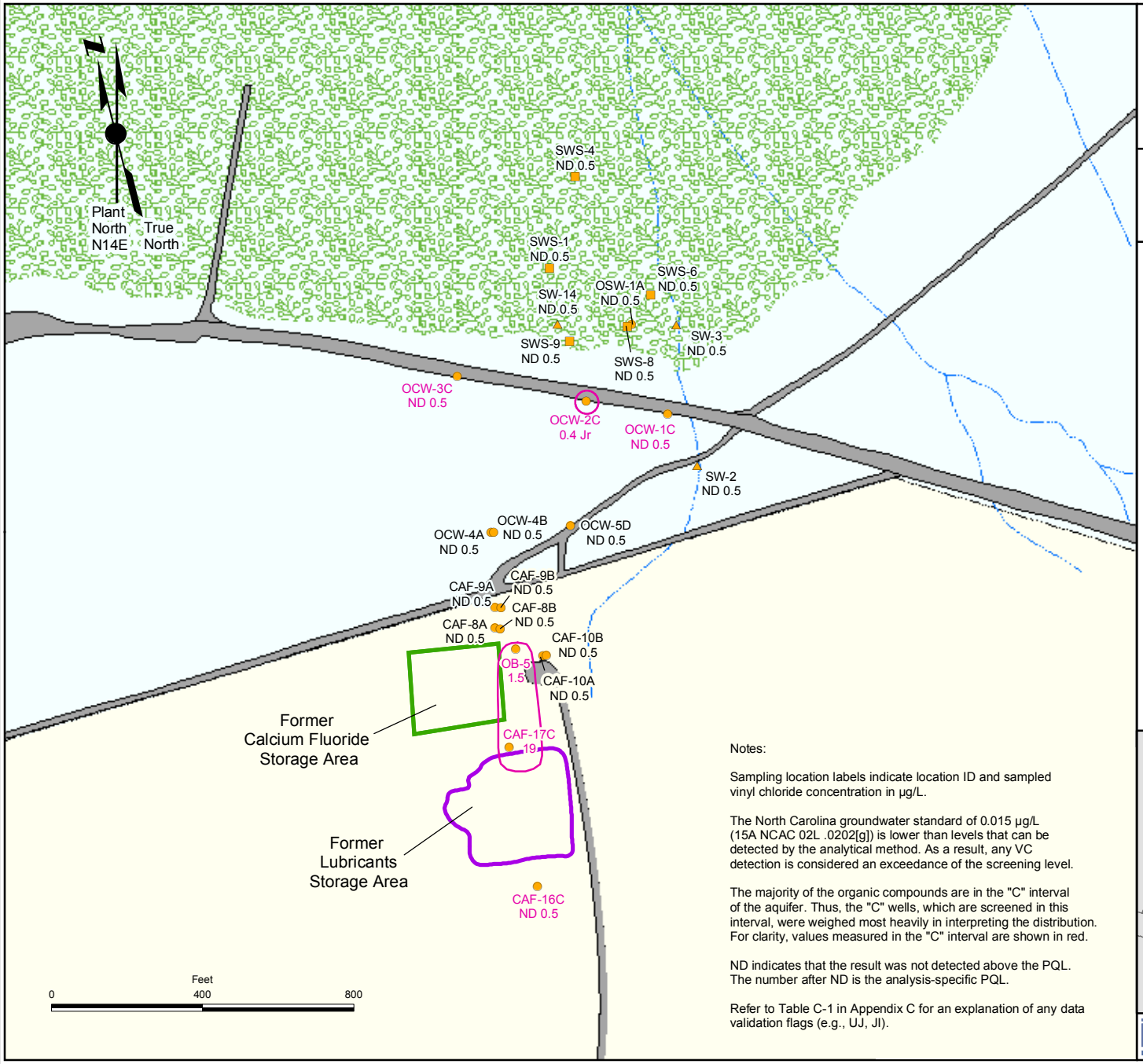


RTI INTERNATIONAL

Date: 7/17/08

Map No: 9739005-15

Figure 4-7
Vinyl Chloride (VC) Distribution
March 2007



Notes:

Sampling location labels indicate location ID and sampled vinyl chloride concentration in µg/L.

The North Carolina groundwater standard of 0.015 µg/L (15A NCAC 02L .0202[g]) is lower than levels that can be detected by the analytical method. As a result, any VC detection is considered an exceedance of the screening level.

The majority of the organic compounds are in the "C" interval of the aquifer. Thus, the "C" wells, which are screened in this interval, were weighed most heavily in interpreting the distribution. For clarity, values measured in the "C" interval are shown in red.

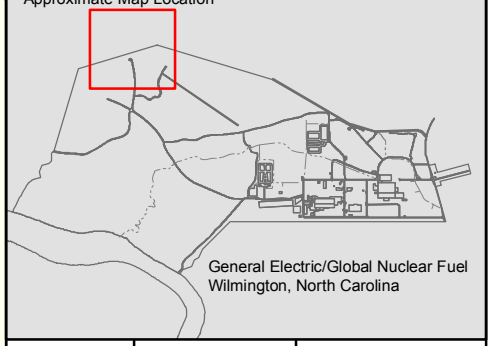
ND indicates that the result was not detected above the PQL. The number after ND is the analysis-specific PQL.

Refer to Table C-1 in Appendix C for an explanation of any data validation flags (e.g., UJ, JI).

Explanation

- Monitoring-well sampling location
- Surface-water sampling location
- Swamp pore-water sampling location
- Approximate extent of detectable concentrations of VC
- Stream
- GE/GNF property boundary
- GE/GNF property
- Road or trail
- Off site
- Swampy area

Approximate Map Location

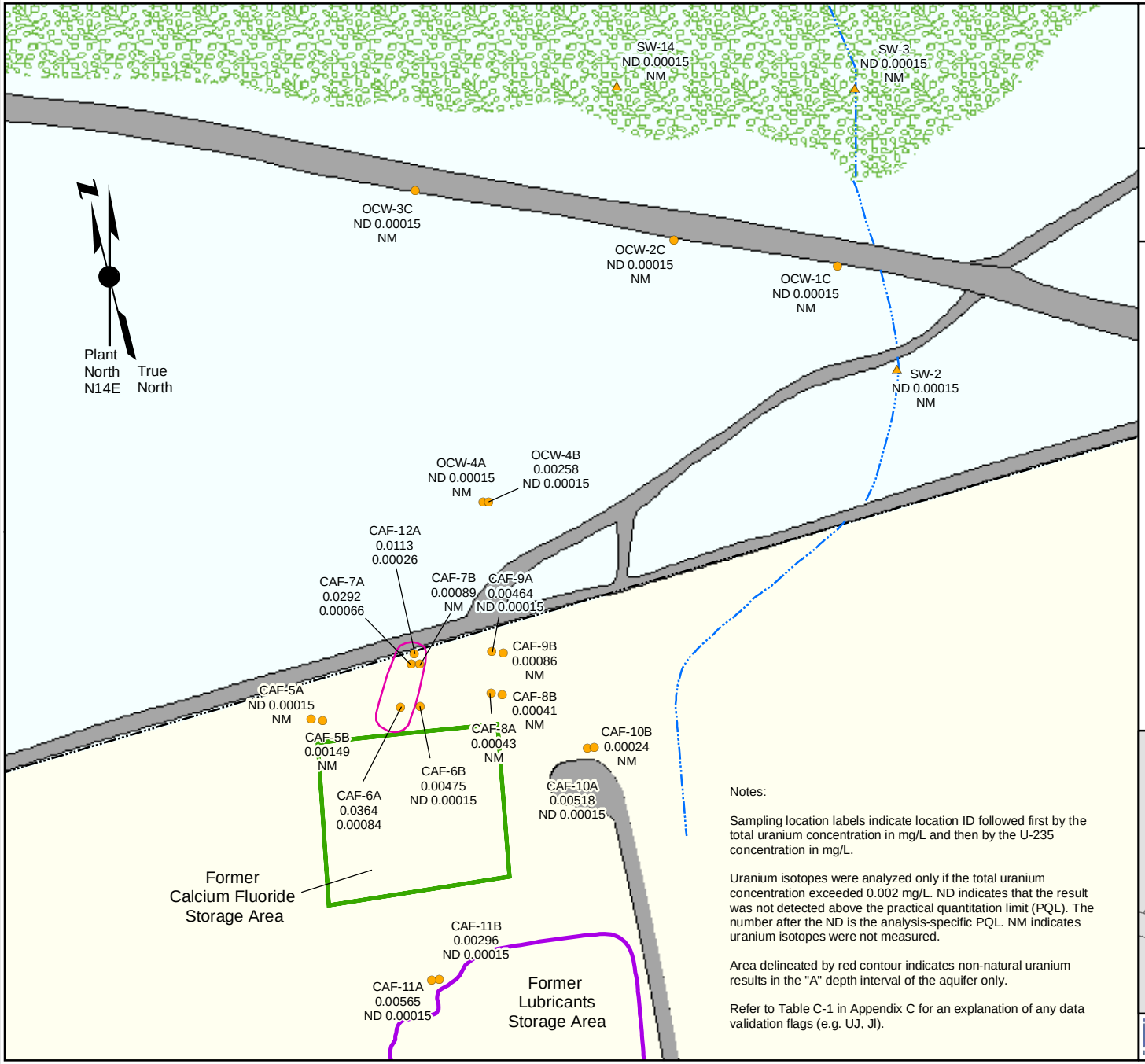


RTI INTERNATIONAL

Date: 7/17/08

Map No: 9739005-26

Figure 4-8
Uranium Distribution
May 2006



Notes:

Sampling location labels indicate location ID followed first by the total uranium concentration in mg/L and then by the U-235 concentration in mg/L.

Uranium isotopes were analyzed only if the total uranium concentration exceeded 0.002 mg/L. ND indicates that the result was not detected above the practical quantitation limit (PQL). The number after the ND is the analysis-specific PQL. NM indicates uranium isotopes were not measured.

Area delineated by red contour indicates non-natural uranium results in the "A" depth interval of the aquifer only.

Refer to Table C-1 in Appendix C for an explanation of any data validation flags (e.g. UJ, JI).

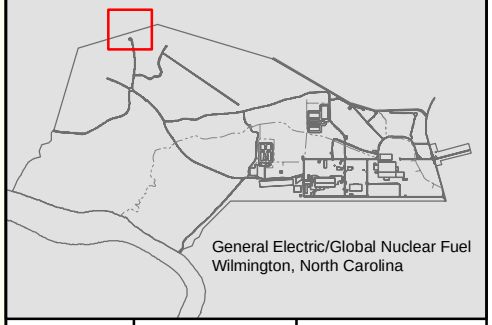
Explanation

CAF-11B Sampling location ID
0.00450 Total uranium concentration (mg/L)
0.00035 U-235 concentration (mg/L)

- Monitoring-well sampling location
- Surface-water sampling location
- Approximate area where measured U-235 abundance indicates non-natural uranium
- Surface water
- GE/GNF property boundary
- GE/GNF property
- Road or trail
- Off site
- Swampy area

Feet
0 200 400

Approximate Map Location



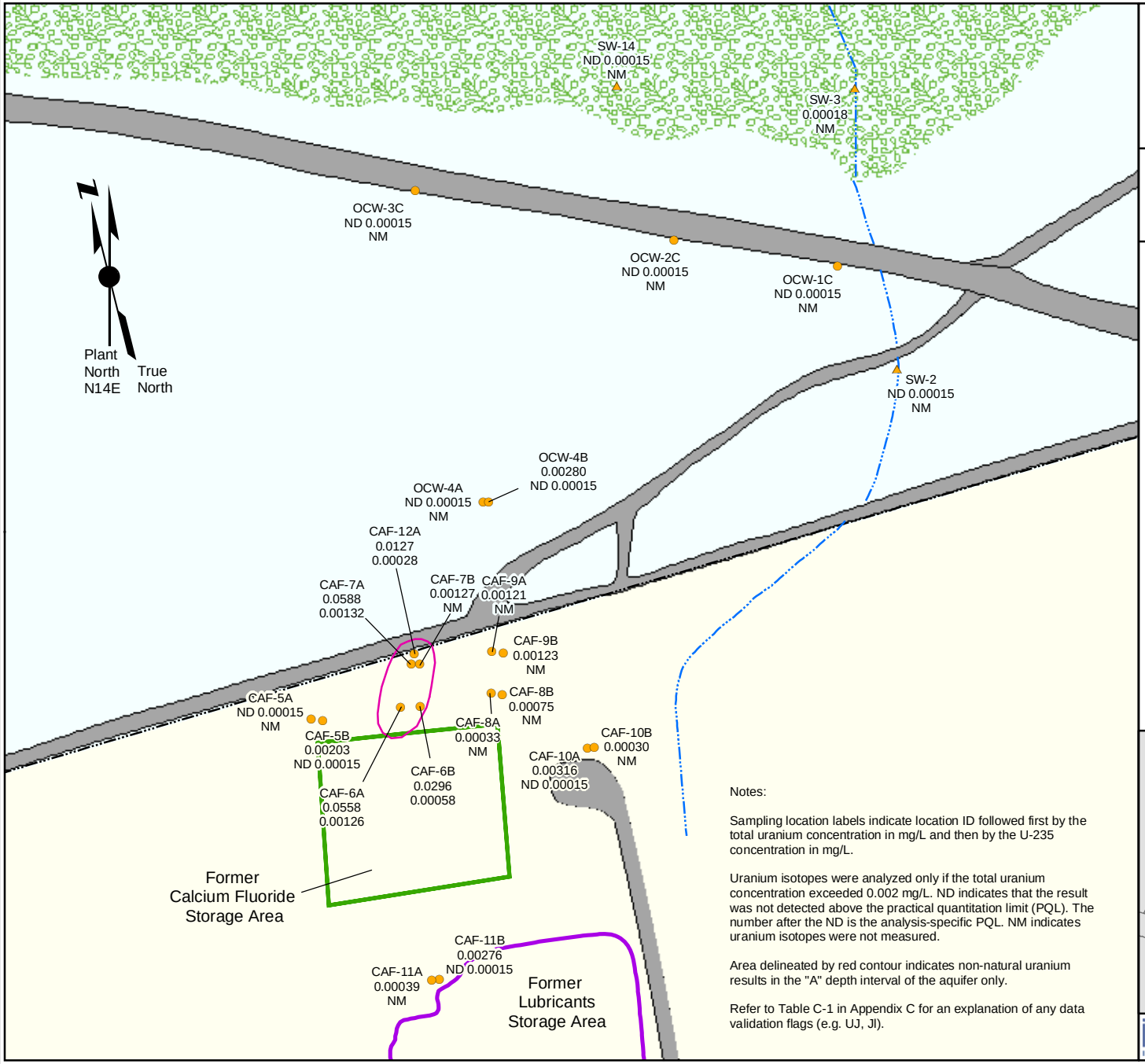
General Electric/Global Nuclear Fuel
Wilmington, North Carolina

RTI INTERNATIONAL

Date: 7/24/07

Map No: 9739005-16

Figure 4-9
Uranium Distribution
March 2007



Notes:

Sampling location labels indicate location ID followed first by the total uranium concentration in mg/L and then by the U-235 concentration in mg/L.

Uranium isotopes were analyzed only if the total uranium concentration exceeded 0.002 mg/L. ND indicates that the result was not detected above the practical quantitation limit (PQL). The number after the ND is the analysis-specific PQL. NM indicates uranium isotopes were not measured.

Area delineated by red contour indicates non-natural uranium results in the "A" depth interval of the aquifer only.

Refer to Table C-1 in Appendix C for an explanation of any data validation flags (e.g. UJ, JI).

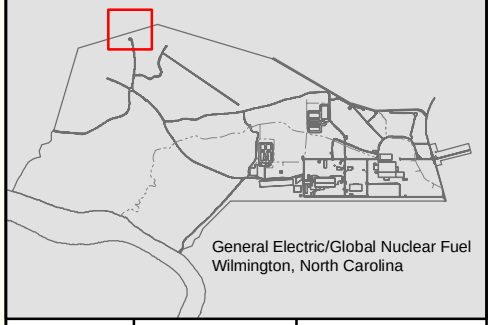
Explanation

CAF-11B Sampling location ID
0.00450 Total uranium concentration (mg/L)
0.00035 U-235 concentration (mg/L)

- Monitoring-well sampling location
- Surface-water sampling location
- Approximate area where measured U-235 abundance indicates non-natural uranium
- Surface water
- GE/GNF property boundary
- GE/GNF property
- Road or trail
- Off site
- Swampy area

Feet
0 200 400

Approximate Map Location

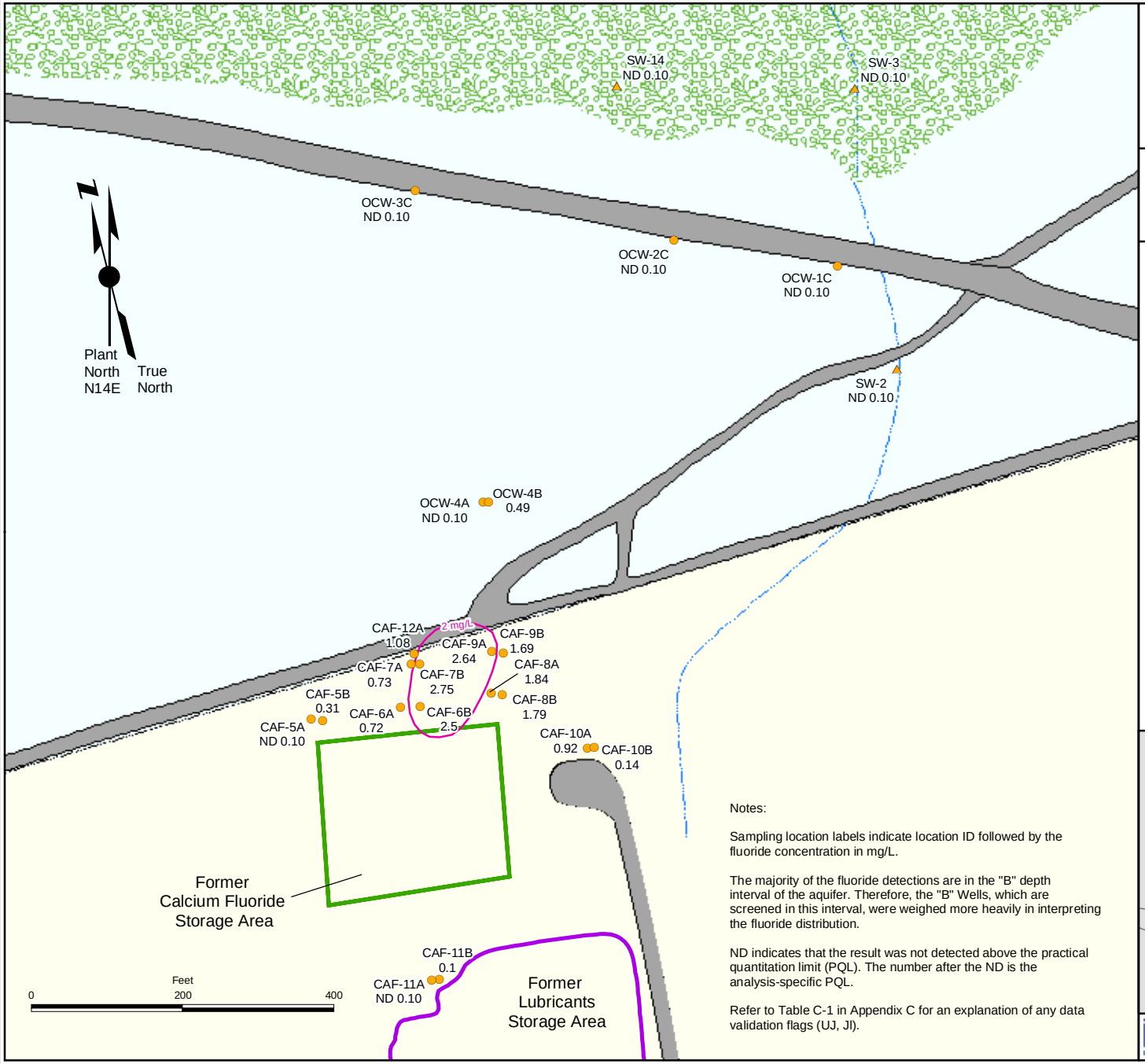


General Electric/Global Nuclear Fuel
Wilmington, North Carolina

RTI INTERNATIONAL

Date:	Map No:
7/24/08	9739005-27

Figure 4-10
Fluoride Distribution
May 2006



Notes:

Sampling location labels indicate location ID followed by the fluoride concentration in mg/L.

The majority of the fluoride detections are in the "B" depth interval of the aquifer. Therefore, the "B" Wells, which are screened in this interval, were weighed more heavily in interpreting the fluoride distribution.

ND indicates that the result was not detected above the practical quantitation limit (PQL). The number after the ND is the analysis-specific PQL.

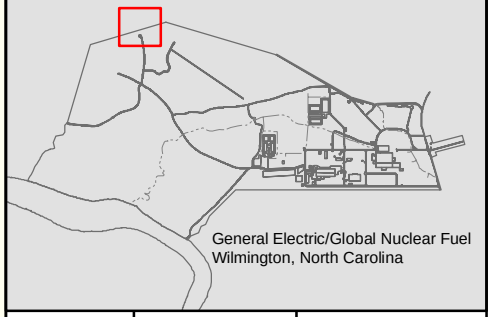
Refer to Table C-1 in Appendix C for an explanation of any data validation flags (UJ, JI).

Explanation

- Monitoring-well sampling location
- Surface-water sampling location
- Approximate extent fluoride > 2 mg/L*
- Surface water
- GE/GNF property boundary
- GE/GNF property
- Road or trail
- Off site
- Swampy area

*Contour delineates approximate area where concentrations exceed the North Carolina groundwater standard of 2 mg/L (15A NCAC 02L .0202[g]).

Approximate Map Location

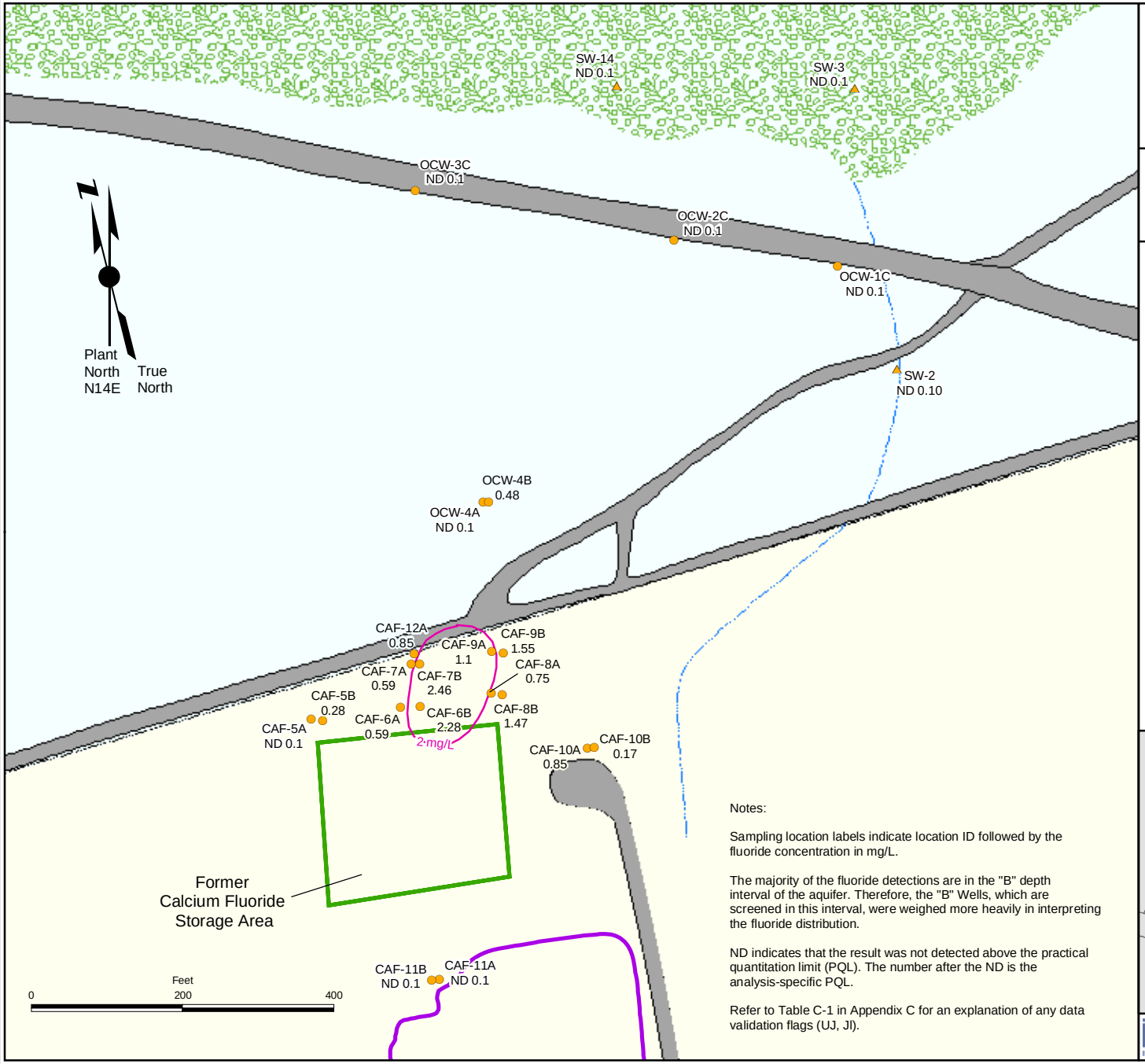


General Electric/Global Nuclear Fuel
Wilmington, North Carolina

RTI INTERNATIONAL

Date:	Map No:
7/24/08	9739005-17

Figure 4-11
Fluoride Distribution
March 2007



Notes:

Sampling location labels indicate location ID followed by the fluoride concentration in mg/L.

The majority of the fluoride detections are in the "B" depth interval of the aquifer. Therefore, the "B" Wells, which are screened in this interval, were weighed more heavily in interpreting the fluoride distribution.

ND indicates that the result was not detected above the practical quantitation limit (PQL). The number after the ND is the analysis-specific PQL.

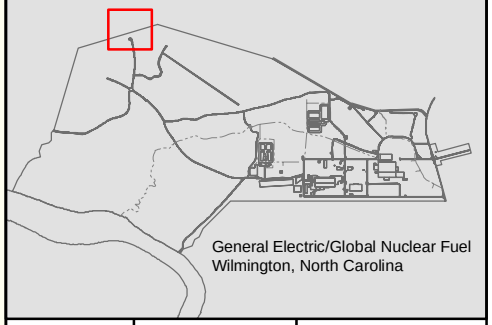
Refer to Table C-1 in Appendix C for an explanation of any data validation flags (UJ, JI).

Explanation

- Monitoring-well sampling location
- Surface-water sampling location
- Approximate extent fluoride > 2 mg/L*
- Surface water
- GE/GNF property boundary
- GE/GNF property
- Road or trail
- Off site
- Swampy area

*Contour delineates approximate area where concentrations exceed the North Carolina groundwater standard of 2 mg/L (15A NCAC 02L .0202[g]).

Approximate Map Location

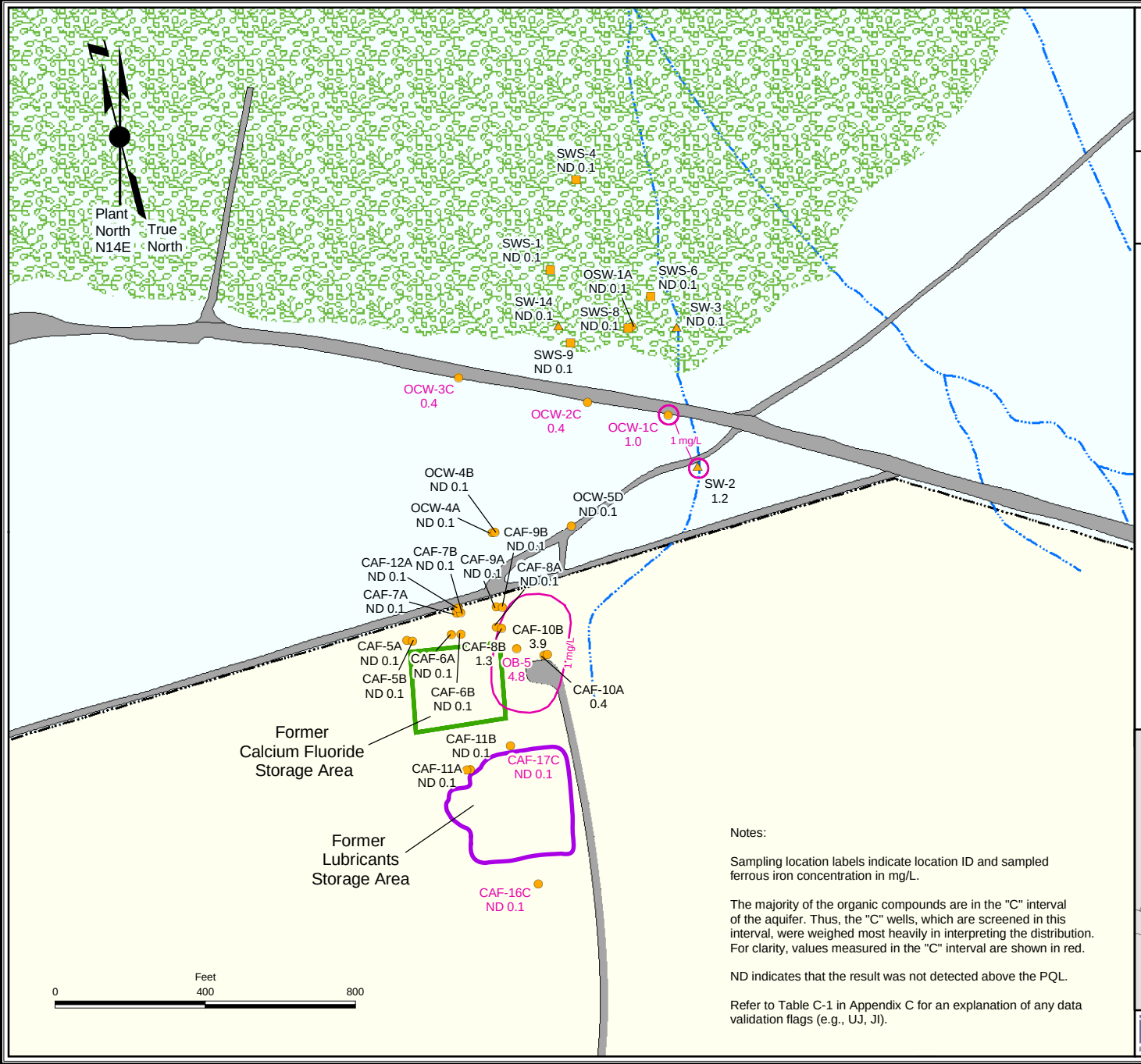


General Electric/Global Nuclear Fuel
Wilmington, North Carolina

RTI INTERNATIONAL

Date:	Map No:
7/24/08	9739005-28

Figure 4-12
Ferrous Iron Distribution
May 2006



Explanation

- Monitoring-well sampling location
- Surface-water sampling location
- Swamp pore-water sampling location
- Approximate extent ferrous iron > 1 mg/L*
- Surface water
- GE/GNF property boundary
- GE/GNF property
- Road or trail
- Off site
- Swampy area

* Contours delineate approximate area where ferrous iron concentrations exceed 1 mg/L.

Notes:

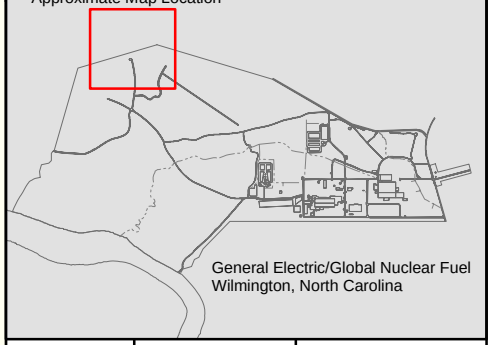
Sampling location labels indicate location ID and sampled ferrous iron concentration in mg/L.

The majority of the organic compounds are in the "C" interval of the aquifer. Thus, the "C" wells, which are screened in this interval, were weighed most heavily in interpreting the distribution. For clarity, values measured in the "C" interval are shown in red.

ND indicates that the result was not detected above the PQL.

Refer to Table C-1 in Appendix C for an explanation of any data validation flags (e.g., UJ, JI).

Approximate Map Location



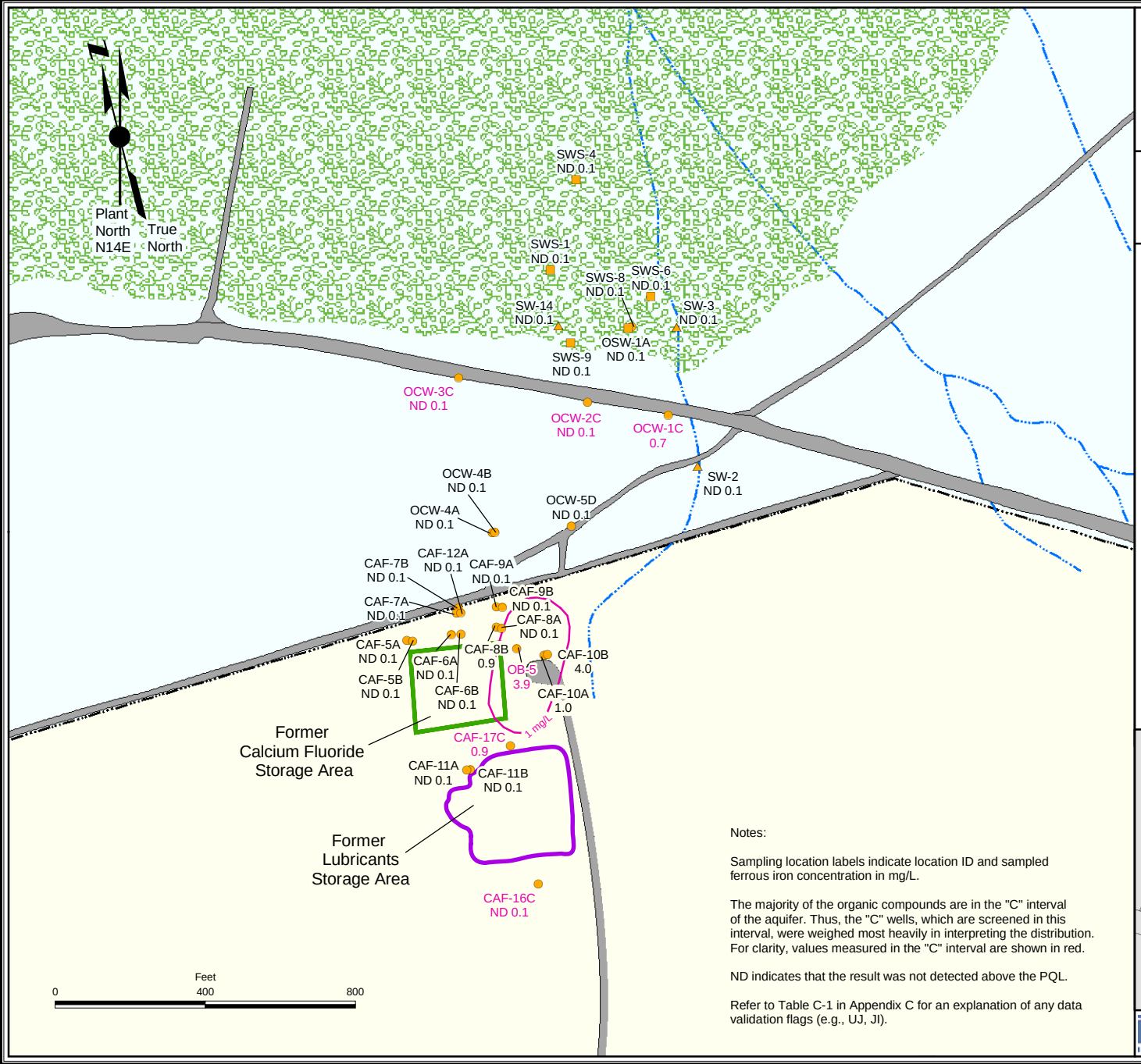
General Electric/Global Nuclear Fuel
Wilmington, North Carolina

RTI INTERNATIONAL

Date: 7/24/08

Map No: 9739005-18

Figure 4-13
Ferrous Iron Distribution
March 2007



Explanation

- Monitoring-well sampling location
- Surface-water sampling location
- Swamp pore-water sampling location
- Approximate extent ferrous iron > 1 mg/L*
- Surface water
- GE/GNF property boundary
- GE/GNF property
- Road or trail
- Off site
- Swampy area

* Contour delineates approximate area where ferrous iron concentrations exceed 1 mg/L.

Notes:

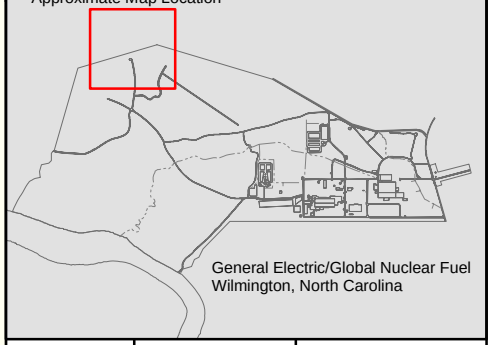
Sampling location labels indicate location ID and sampled ferrous iron concentration in mg/L.

The majority of the organic compounds are in the "C" interval of the aquifer. Thus, the "C" wells, which are screened in this interval, were weighed most heavily in interpreting the distribution. For clarity, values measured in the "C" interval are shown in red.

ND indicates that the result was not detected above the PQL.

Refer to Table C-1 in Appendix C for an explanation of any data validation flags (e.g., UJ, JI).

Approximate Map Location

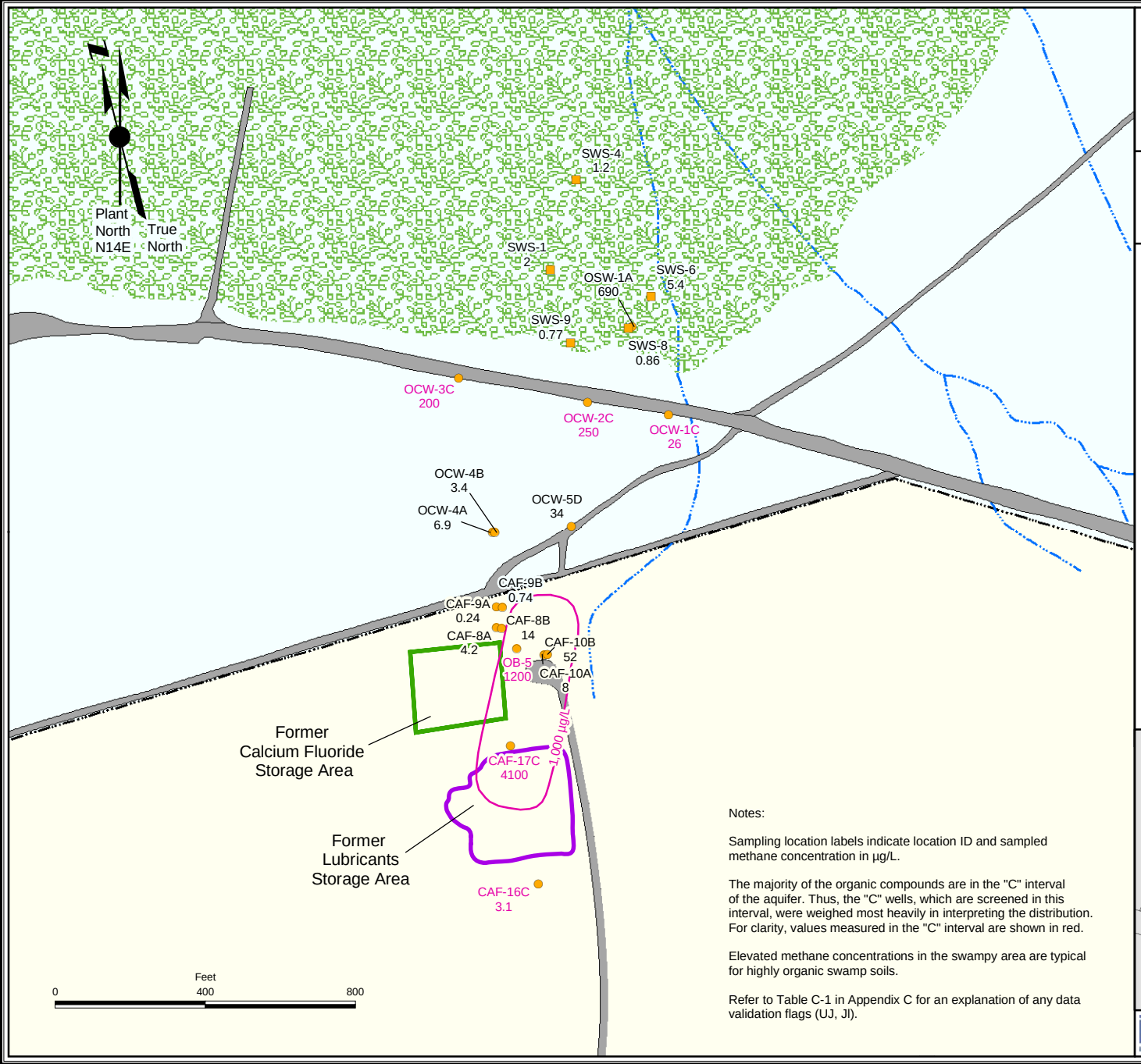


General Electric/Global Nuclear Fuel
Wilmington, North Carolina

RTI INTERNATIONAL

Date:	Map No:
7/24/08	9739005-29

Figure 4-14
Methane Distribution
May 2006



Notes:

Sampling location labels indicate location ID and sampled methane concentration in µg/L.

The majority of the organic compounds are in the "C" interval of the aquifer. Thus, the "C" wells, which are screened in this interval, were weighed most heavily in interpreting the distribution. For clarity, values measured in the "C" interval are shown in red.

Elevated methane concentrations in the swampy area are typical for highly organic swamp soils.

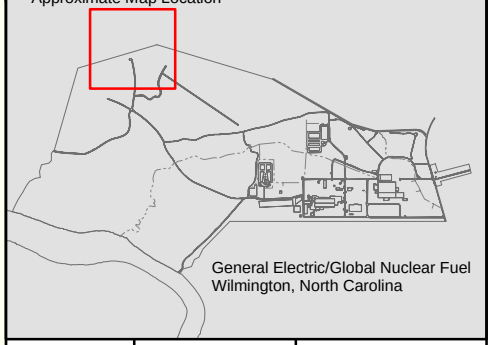
Refer to Table C-1 in Appendix C for an explanation of any data validation flags (UJ, JI).

Explanation

- Monitoring-well sampling location
- Swamp pore-water sampling location
- Approximate extent of methane > 1,000 µg/L*
- Surface water
- GE/GNF property boundary
- GE/GNF property
- Road or trail
- Off site
- Swampy area

* Contour delineates approximate area where methane concentrations exceed 1,000 µg/L.

Approximate Map Location

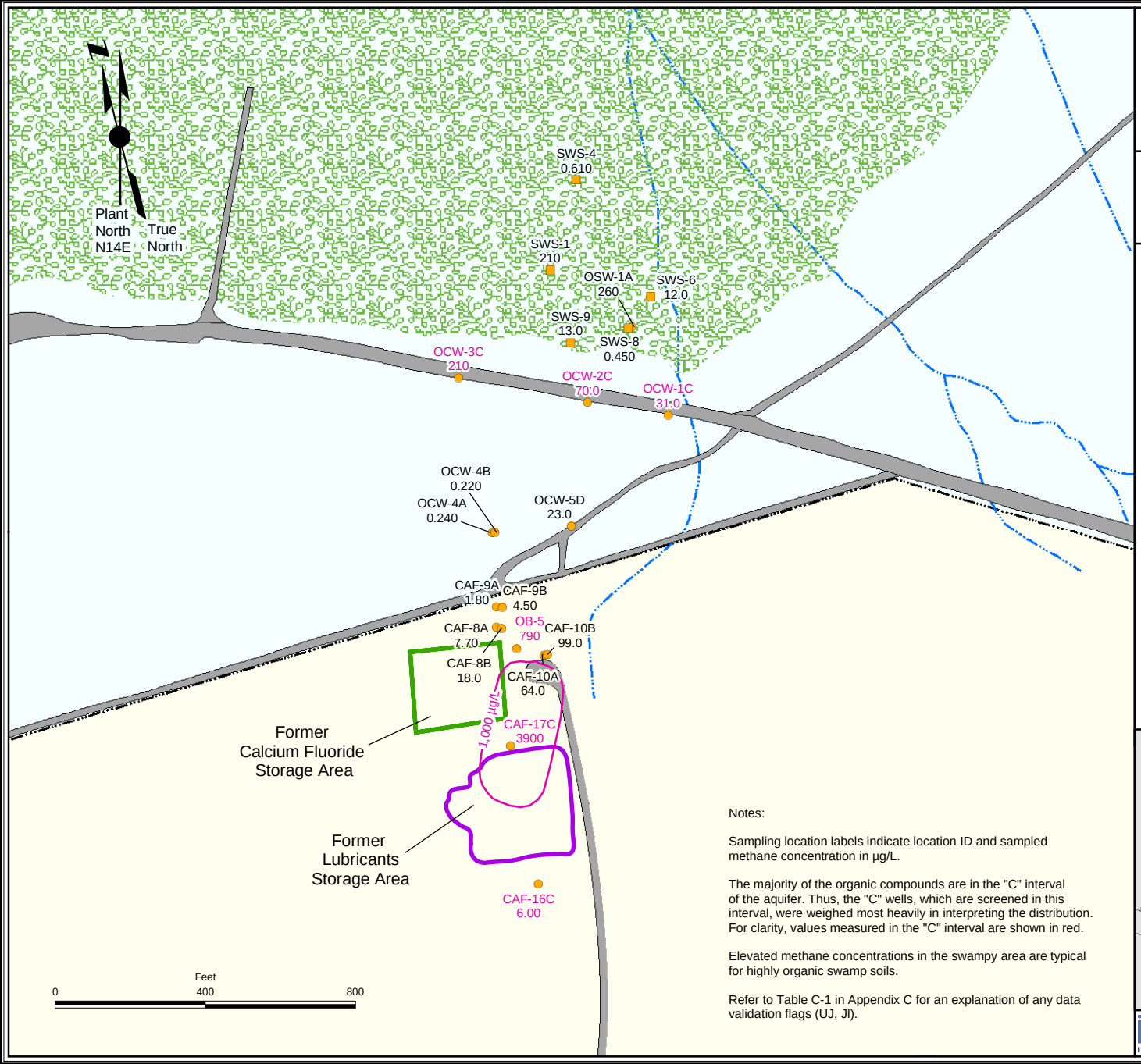


General Electric/Global Nuclear Fuel
Wilmington, North Carolina

RTI INTERNATIONAL

Date:	Map No:
7/24/08	9739005-19

Figure 4-15
Methane Distribution
March 2007



Notes:

Sampling location labels indicate location ID and sampled methane concentration in µg/L.

The majority of the organic compounds are in the "C" interval of the aquifer. Thus, the "C" wells, which are screened in this interval, were weighed most heavily in interpreting the distribution. For clarity, values measured in the "C" interval are shown in red.

Elevated methane concentrations in the swampy area are typical for highly organic swamp soils.

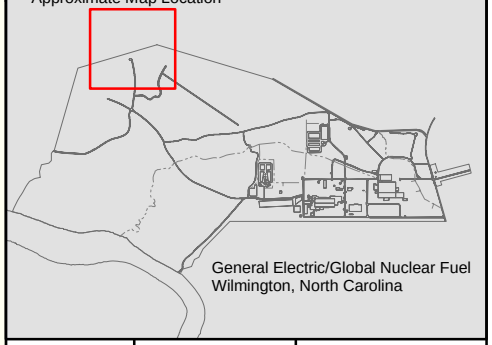
Refer to Table C-1 in Appendix C for an explanation of any data validation flags (UJ, JI).

Explanation

- Monitoring-well sampling location
- Swamp pore-water sampling location
- Approximate extent of methane > 1,000 µg/L*
- Surface water
- GE/GNF property boundary
- GE/GNF property
- Road or trail
- Off site
- Swampy area

* Contour delineates approximate area where methane concentrations exceed 1,000 µg/L.

Approximate Map Location

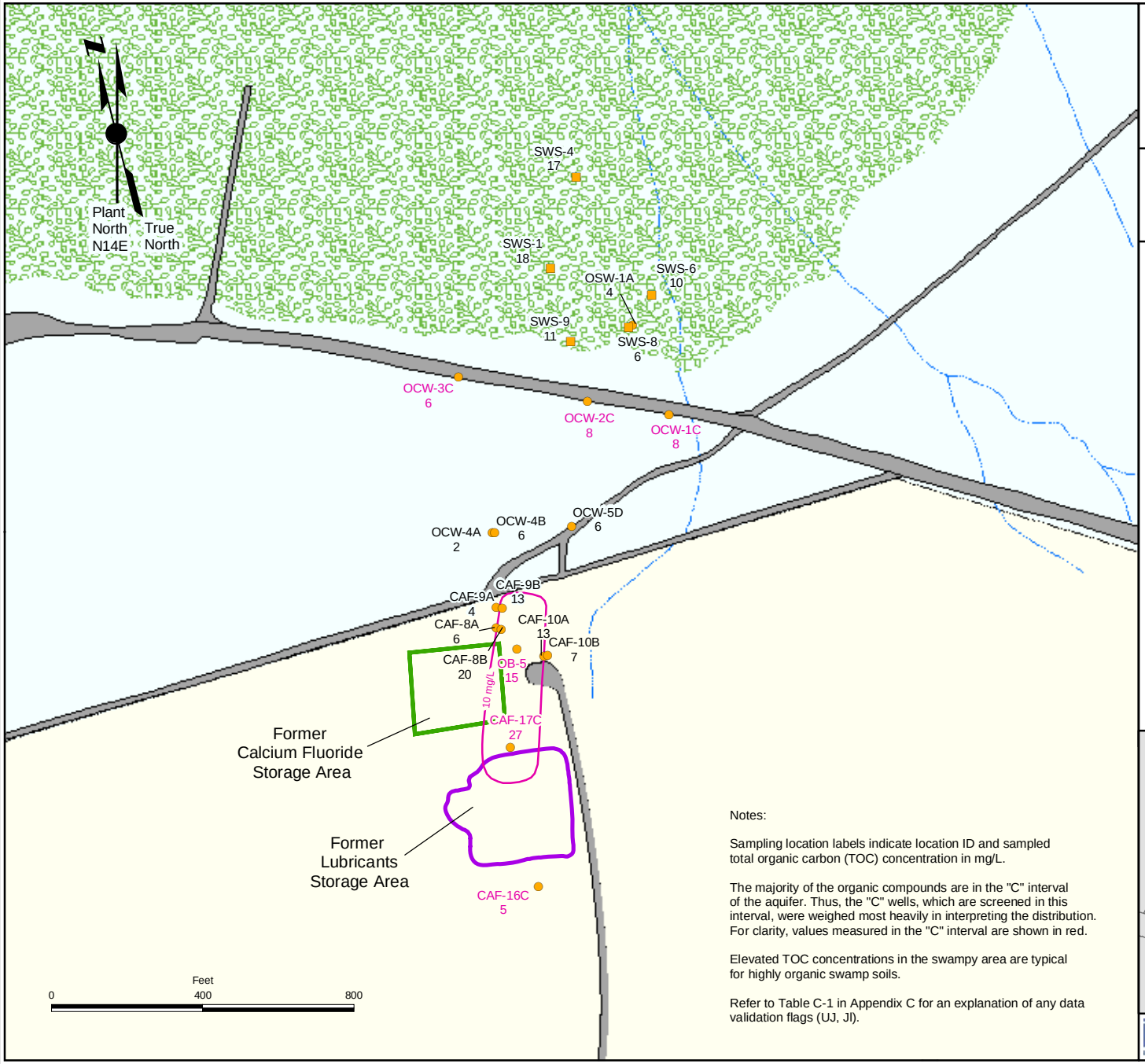


General Electric/Global Nuclear Fuel
Wilmington, North Carolina

RTI INTERNATIONAL

Date:	Map No:
7/24/08	9739005-30

Figure 4-16
Total Organic Carbon (TOC) Distribution
May 2006



Notes:

Sampling location labels indicate location ID and sampled total organic carbon (TOC) concentration in mg/L.

The majority of the organic compounds are in the "C" interval of the aquifer. Thus, the "C" wells, which are screened in this interval, were weighed most heavily in interpreting the distribution. For clarity, values measured in the "C" interval are shown in red.

Elevated TOC concentrations in the swampy area are typical for highly organic swamp soils.

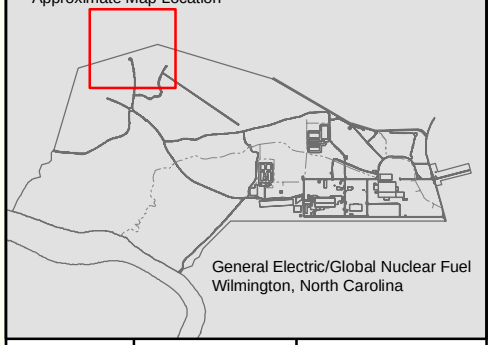
Refer to Table C-1 in Appendix C for an explanation of any data validation flags (UJ, JI).

Explanation

- Monitoring-well sampling location
- Swamp pore-water sampling location
- Approximate exent of TOC > 10 mg/L*
- Surface water
- GE/GNF property boundary
- GE/GNF property
- Road or trail
- Off site
- Swampy area

* Contour delineates approximate area where TOC concentrations exceed 10 mg/L.

Approximate Map Location

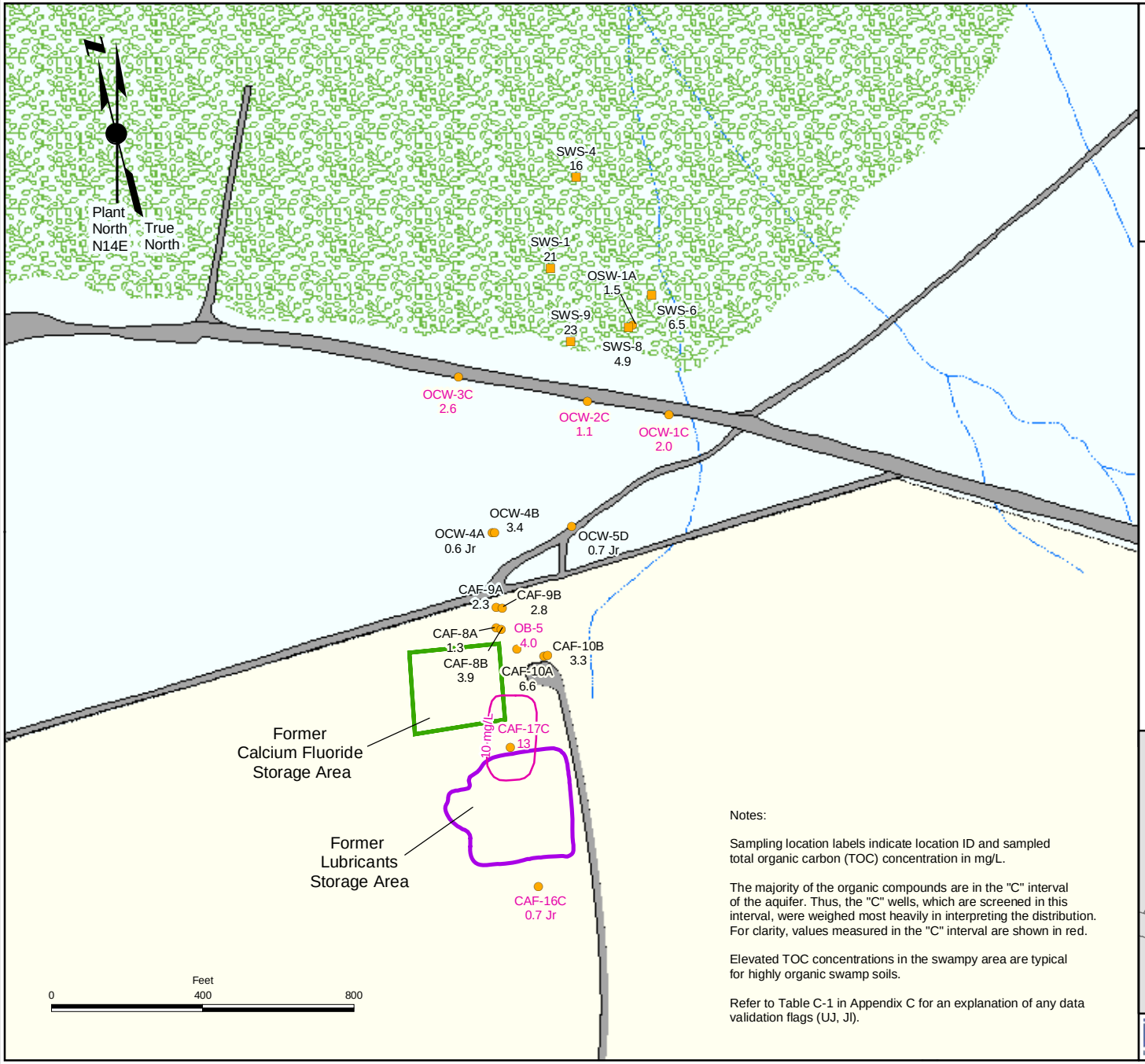


General Electric/Global Nuclear Fuel
Wilmington, North Carolina

RTI INTERNATIONAL

Date:	Map No:
7/24/08	9739005-20

Figure 4-17
Total Organic Carbon (TOC) Distribution
March 2007



Explanation

- Monitoring-well sampling location
- Swamp pore-water sampling location
- Approximate exent of TOC > 10 mg/L*
- Surface water
- GE/GNF property boundary
- GE/GNF property
- Road or trail
- Off site
- Swampy area

* Contour delineates approximate area where TOC concentrations exceed 10 mg/L.

Notes:

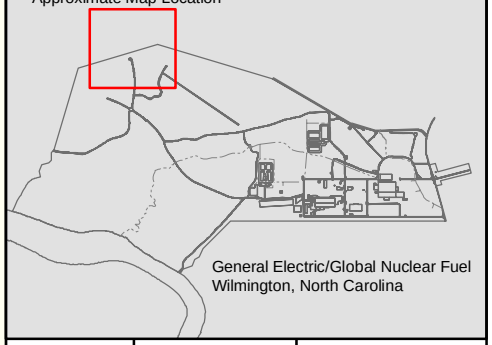
Sampling location labels indicate location ID and sampled total organic carbon (TOC) concentration in mg/L.

The majority of the organic compounds are in the "C" interval of the aquifer. Thus, the "C" wells, which are screened in this interval, were weighed most heavily in interpreting the distribution. For clarity, values measured in the "C" interval are shown in red.

Elevated TOC concentrations in the swampy area are typical for highly organic swamp soils.

Refer to Table C-1 in Appendix C for an explanation of any data validation flags (UJ, JI).

Approximate Map Location

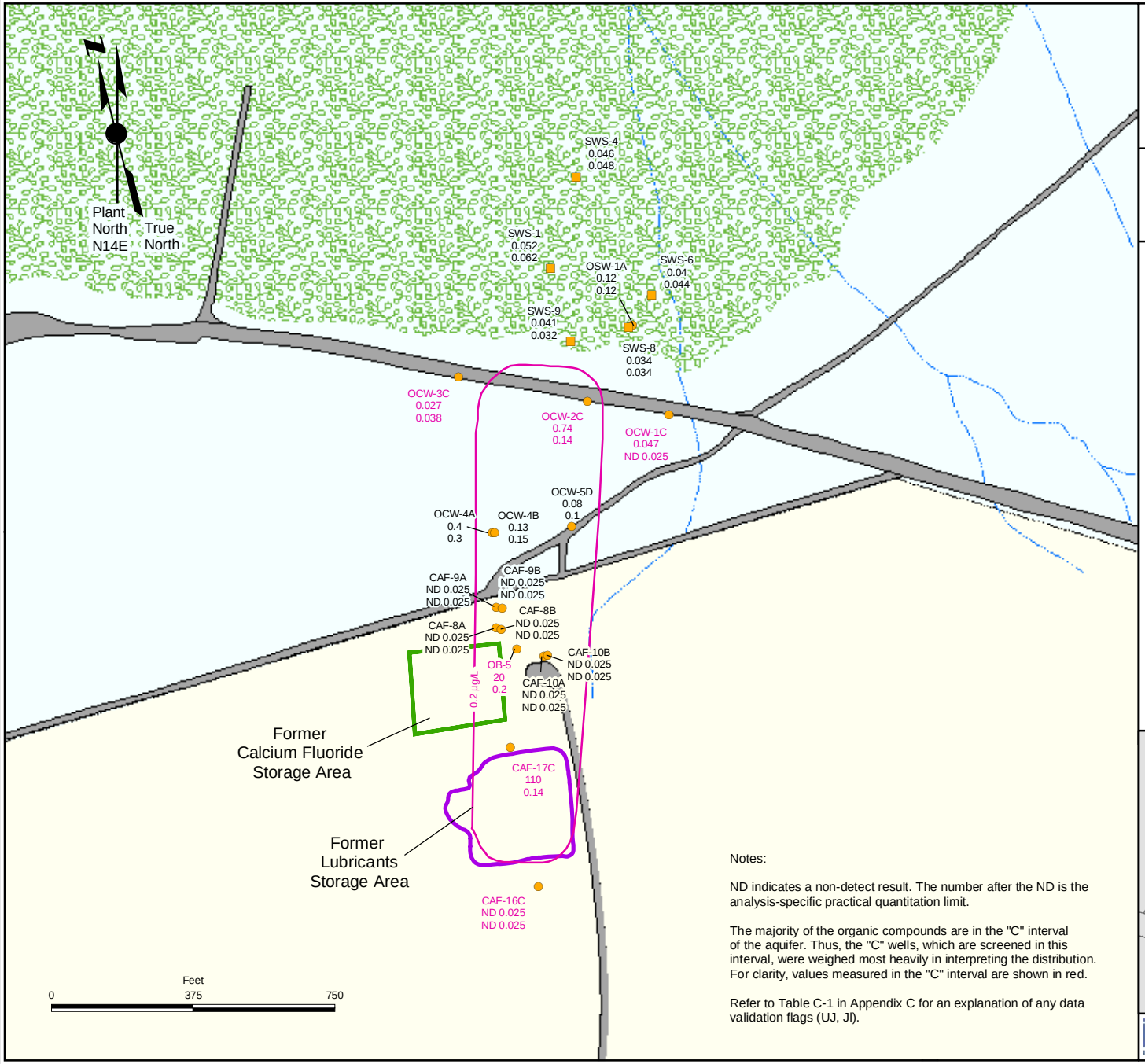


General Electric/Global Nuclear Fuel
Wilmington, North Carolina

RTI INTERNATIONAL

Date:	Map No:
7/24/08	9739005-31

Figure 4-18
Ethane and Ethene Distribution
May 2006



Notes:

ND indicates a non-detect result. The number after the ND is the analysis-specific practical quantitation limit.

The majority of the organic compounds are in the "C" interval of the aquifer. Thus, the "C" wells, which are screened in this interval, were weighed most heavily in interpreting the distribution. For clarity, values measured in the "C" interval are shown in red.

Refer to Table C-1 in Appendix C for an explanation of any data validation flags (UJ, JI).

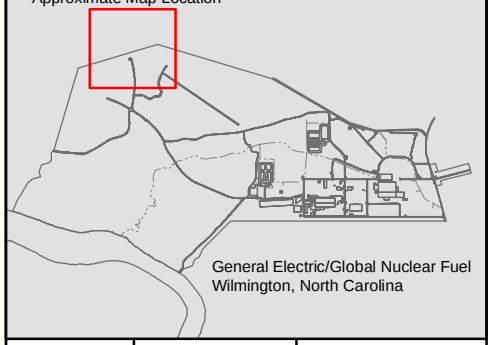
Explanation

OCW-1C — Sampling location ID
0.26 — Ethene concentration (µg/L)
0.1 — Ethane concentration (µg/L)

- Monitoring-well sampling location
- Swamp pore-water sampling location
- Approximate extent Ethane or Ethene*
- Surface water
- GE/GNF property boundary
- GE/GNF property
- Road or trail
- Off site
- Swampy area

* Contour delineates approximate area where concentrations exceed 0.2 µg/L.

Approximate Map Location

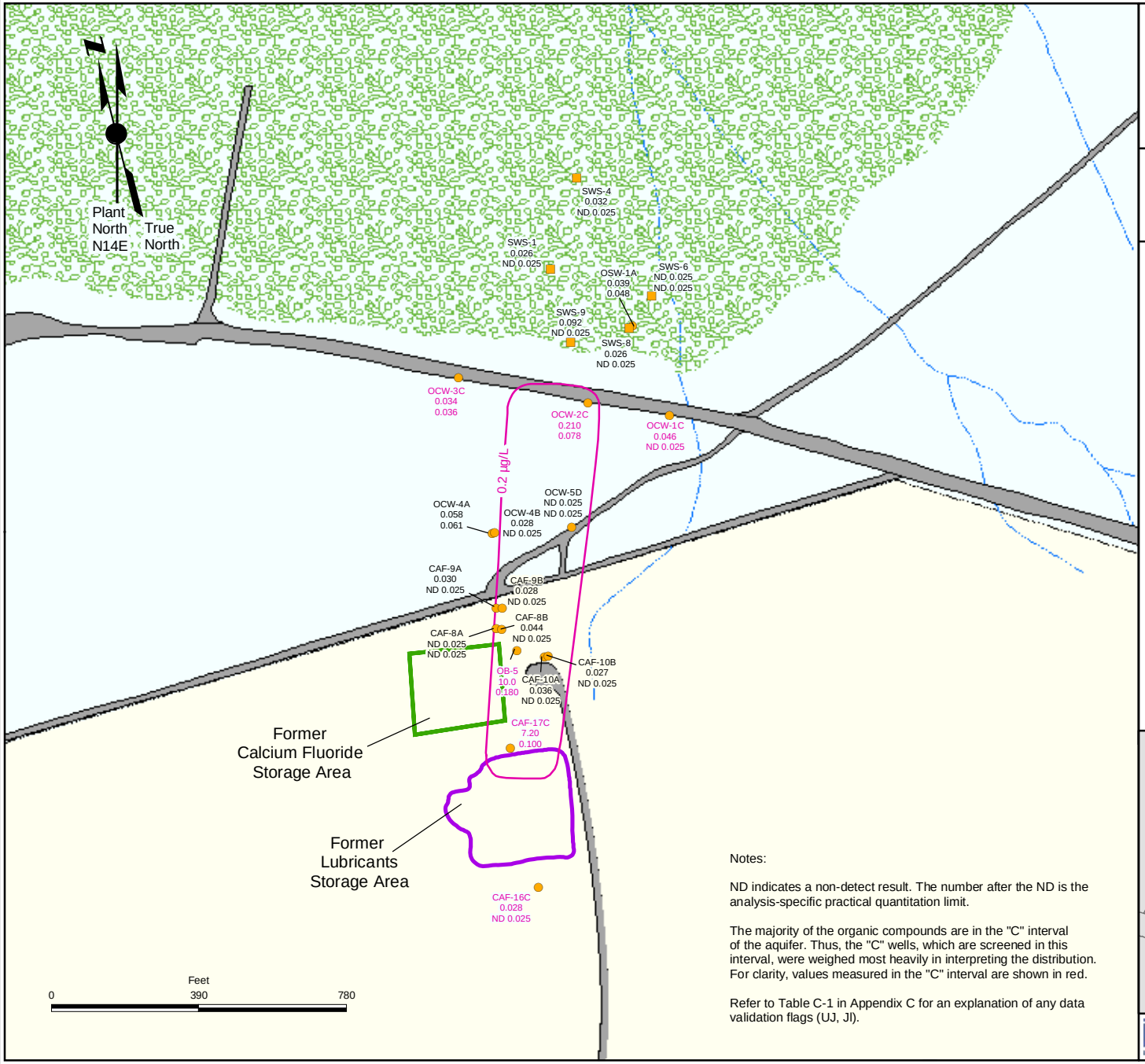


General Electric/Global Nuclear Fuel
Wilmington, North Carolina

RTI INTERNATIONAL

Date:	Map No:
7/24/08	9739005-21

Figure 4-19
Ethane and Ethene Distribution
March 2007



Notes:

ND indicates a non-detect result. The number after the ND is the analysis-specific practical quantitation limit.

The majority of the organic compounds are in the "C" interval of the aquifer. Thus, the "C" wells, which are screened in this interval, were weighed most heavily in interpreting the distribution. For clarity, values measured in the "C" interval are shown in red.

Refer to Table C-1 in Appendix C for an explanation of any data validation flags (UJ, JI).

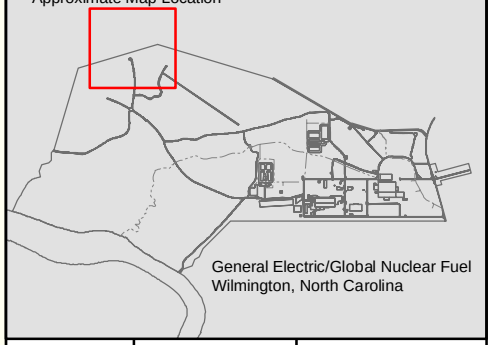
Explanation

OCW-17C — Sampling location ID
7.20 — Ethene concentration (µg/L)
0.100 — Ethane concentration (µg/L)

- Monitoring-well sampling location
- Swamp pore-water sampling location
- Approximate extent Ethane or Ethene*
- Surface water
- GE/GNF property boundary
- GE/GNF property
- Road or trail
- Off site
- Swampy area

* Contour delineates approximate area where concentrations exceed 0.2 µg/L.

Approximate Map Location



General Electric/Global Nuclear Fuel
Wilmington, North Carolina

RTI INTERNATIONAL

Date: 7/24/08

Map No: 9739005-32

Tables

Table 2-1. Number of Samples Collected in 2006 through 2007

Laboratory:	Environmental Conservation Laboratories, Inc.			Microseeps	RTI Center for Environmental Measurements	Oxford Laboratories
Analytes:	VOCs	Alkalinity/ Chloride/Sulfate	Total Organic Carbon	Methane, Ethane, Ethene	Total Uranium[a]	Fluoride
Method:	SW-846 8021B	SM 2320B/ SM 4500 Cl-C/ SM 4500-SO_4-C	SM 5310-C	AM 18.02 [b]	EPA 200.8	SM 4500-F^--C
Maximum Holding Time:	14 days	14 days/28 days/ 28 days	28 days	14 days	6 months	28 days
Container:	3 glass vials, 40 mL	1 polyethylene bottle, 1 L	2 amber glass vials, 40 mL	2 amber glass vials, 40 mL	1 polyethylene bottle, 60 mL	1 polyethylene bottle, 250 mL
Preservative:	chilled [c], HCl, pH < 2	chilled [c]	chilled [c], H_2SO_4, pH < 2	chilled [c]	HNO_3, pH < 2	chilled [c]
Onsite Wells						
CAF-5A	-	-	-	-	**4**	**4**
CAF-5B	-	-	-	-	**4**	**4**
CAF-6A	-	-	-	-	**4**	**4**
CAF-6B	-	-	-	-	**4**	**4**
CAF-7A	-	-	-	-	**4**	**4**
CAF-7B	-	-	-	-	**4**	**4**
CAF-8A	**2**	**2**	**2**	**2**	**4**	**4**
CAF-8B	**4**	**2**	**2**	**2**	**4**	**4**
CAF-9A	**2**	**2**	**2**	**2**	**3[d]**	**3[d]**
CAF-9B	**4**	**2**	**2**	**2**	**4**	**4**
CAF-10A	**2**	**2**	**2**	**2**	**4**	**4**
CAF-10B	**4**	**2**	**2**	**2**	**4**	**4**
CAF-11A	-	-	-	-	**2**	**2**
CAF-11B	-	-	-	-	**2**	**2**
CAF-12A	-	-	-	-	**4**	**4**
CAF-16C	**2**	**2**	**2**	**2**	-	-
CAF-17C	**4**	**2**	**2**	**2**	-	-
OB-5	**4**	**2**	**2**	**2**	-	-
Offsite Wells						
OCW-1C	**2**	**2**	**2**	**2**	**2**	**2**
OCW-2C	**4**	**2**	**2**	**2**	**2**	**2**
OCW-3C	**2**	**2**	**2**	**2**	**2**	**2**
OCW-4A	**2**	**2**	**2**	**2**	**4**	**4**
OCW-4B	**4**	**2**	**2**	**2**	**4**	**4**
OCW-5D	**4**	**2**	**2**	**2**	-	-
OSW-1A	**4**	**2**	**2**	**2**	-	-
Offsite Swamp Water Sampling Points						
SWS-1	**3[d]**	**2**	**2**	**2**	-	-
SWS-4	**2**	**2**	**2**	**2**	-	-
SWS-6	**3[d]**	**2**	**2**	**2**	-	-
SWS-8	**4**	**2**	**2**	**2**	-	-
SWS-9	**3[d]**	**2**	**2**	**2**	-	-
Onsite Surface Water Sampling Point						
SW-1	**0[d]**	-	-	-	**0[d]**	**0[d]**
Offsite Surface Water Sampling Points						
SW-2	**2**	-	-	-	**2**	**2**
SW-3	**2**	-	-	-	**2**	**2**
SW-4	**0[d]**	-	-	-	**0[d]**	**0[d]**
SW-14[e]	**4**	-	-	-	**2**	**2**

Notes

Numbers of samples displayed in this table do not include field duplicate samples (see Apendix B for discussions of duplicate sample results).

[a] Uranium isotopes are also measured by method EPA 200.8 if the total uranium concentration exceeds 0.002 mg/L.

[b] Microseeps internal method, see QAPP Section 7.2 (RTI, 1999c).

[c] Upon sample collection, samples will be maintained in a cooler with sufficient coolant to chill the samples to less than 6 °C until received by the analytical laboratory. While in the laboratory, samples will be stored and maintained between 0.1 and 4.4 °C.

[d] Collection of planned number of samples was not possible due to do dry conditions at the sampling location during one or more sampling event.

[e] Beginning in the second half of 2002, SW-14 was established as a backup sampling location for SW-4 when SW-4 is dry.

Table 4-1. Measured Groundwater Elevations and Vertical Gradients

		Groundwater Elevations and Gradients *							
Location	**Vertical Spacing Between Paired Screen Mid-Points (feet)**	**Mar-06**	**May-06**	**Sep-06**	**Feb-07**	**Mar-07**	**Oct-07**	**Nov-07**	**2006-2007 Average**
Paired Shallow and Deeper Monitoring Points									
CAF-5A	13.52	16.67	16.28	17.82	17.88	17.44	12.97	11.85	15.84
CAF-5B		16.59	16.05	17.50	17.57	17.16	12.73	11.65	15.61
Vertical Gradient		-0.006	-0.017	-0.024	-0.023	-0.021	-0.018	-0.015	**-0.018 down**
CAF-6A	13.39	16.63	15.96	17.72	17.57	17.12	12.93	11.83	15.68
CAF-6B		16.45	15.87	17.52	17.57	17.04	12.75	11.63	15.55
Vertical Gradient		-0.013	-0.007	-0.015	0.000	-0.006	-0.013	-0.015	**-0.01 down**
CAF-7A	10.95	16.36	15.68	17.25	17.36	16.85	12.39	11.41	15.33
CAF-7B		16.26	15.57	17.24	17.20	16.66	12.40	11.23	15.22
Vertical Gradient		-0.009	-0.010	-0.001	-0.015	-0.017	0.001	-0.016	**-0.01 down**
CAF-8A	10.73	16.31	15.66	17.41	17.28	16.88	12.42	11.42	15.34
CAF-8B		16.33	15.62	17.35	17.26	16.85	11.44	11.44	15.18
Vertical Gradient		0.002	-0.004	-0.006	-0.002	-0.003	-0.091	0.002	**-0.015 down**
CAF-9A	11.20	16.68	15.35	16.96	17.01	16.58	NM	NM	16.52
CAF-9B		16.02	15.3	16.49	16.9	16.48	12.28	11.21	14.95
Vertical Gradient		-0.059	-0.004	-0.042	-0.010	-0.009	NC	NC	**-0.025 down**
CAF-10A	9.36	16.76	16.14	17.6	17.76	17.28	11.72	NM	16.21
CAF-10B		16.48	15.82	17.25	17.33	16.93	12.31	11.06	15.31
Vertical Gradient		-0.030	-0.034	-0.037	-0.046	-0.037	0.063	NC	**-0.02 down**
CAF-11A	12.80	18.34	17.66	19.05	19.46	18.86	NM	12.5	17.65
CAF-11B		18.47	17.24	18.85	19.24	18.73	NM	12.47	17.50
Vertical Gradient		0.010	-0.033	-0.016	-0.017	-0.010	NC	-0.002	**-0.011 down**
OCW-4A	8.85	14.4	13.59	13.46	15.47	14.83	10.46	9.67	13.13
OCW-4B		14.21	13.35	13.17	15.13	14.57	10.38	9.52	12.90
Vertical Gradient		-0.021	-0.027	-0.033	-0.038	-0.029	-0.009	-0.017	**-0.025 down**
SWS-8	9.08	NM	3.68	4.01	NM	3.83	2.83	NM	3.59
OSW-1A		NM	4.50	4.76	NM	4.76	3.37	NM	4.35
Vertical Gradient		NC	0.090	0.083	NC	0.102	0.059	NC	**0.086 up**
Non-Paired Monitoring Points									
CAF-12A	NA	16.29	15.59	17.28	17.19	16.74	12.28	11.51	15.27
CAF-16C	NA	18.59	17.49	19.24	19.79	19.06	NM	12.33	17.75
CAF-17C	NA	17.29	16.43	18.63	18.47	17.81	12.75	11.82	16.17
OB-5	NA	15.76	15.11	14.76	16.75	16.24	11.55	10.91	14.44
OCW-1C	NA	7.82	7.36	8.08	8.29	7.92	NM	5.33	7.47
OCW-2C	NA	7.2	6.84	7.42	7.6	7.23	4.97	4.93	6.60
OCW-3C	NA	6.26	5.97	6.4	6.62	6.25	NM	4.38	5.98
OCW-5D	NA	12.27	11.63	11.44	12.99	12.53	8.92	8.31	11.16
SWS-1	NA	NM	3.03	3.09	NM	3.12	NM	NM	3.08
SWS-4	NA	NM	2.65	NM	NM	2.69	NM	NM	2.67
SWS-6	NA	NM	3.39	3.31	NM	3.36	NM	NM	3.35
SWS-9	NA	NM	4.16	4.35	NM	4.3	NM	NM	4.27

Notes:
The vertical gradients are calculated by dividing the difference between the water level elevations in the shallower and deeper monitoring points by the vertical spacing between the mid-points of the monitoring well screens. Downward gradients are negative.

* Units for groundwater elevations are feet above mean sea level. Vertical gradients are unitless.

NA indicates not applicable.

NM indicates not measured.

NC indicates not calculated.

Table 4-2. Trend Analysis Results for Primary Organic Constituents

Location ID	Corresponding Figure in Appendix D	Start Date	End Date	Mann Kendall S Statistic	Sample Count	Probability (of no trend)	Numerical Average (ug/L)	Standard Deviation (ug/L)	Coefficient of Variation	Trend
Trichloroethylene										
OCW-2C	D-6	1/1/1998	12/31/2007	-274	25	<0.001	17.4	2.49	0.1427	Decrease
SW-14	D-11	1/1/2002	12/31/2007	-4	11	0.410	0.6	0.08	0.1439	None
cis-1,2-Dichloroethylene										
CAF-17C	D-4	1/1/1998	12/31/2007	-277	26	<0.001	324.3	62.94	0.1941	Decrease
OB-5	D-5	1/1/1993	12/31/2007	-744	44	<0.001	200.2	27.91	0.1395	Decrease
OCW-2C	D-6	1/1/1998	12/31/2007	-200	25	<0.001	232.8	31.77	0.1364	Decrease
OSW-1A	D-9	1/1/1998	12/31/2007	169	27	<0.001	3.5	0.31	0.0880	Increase
		1/1/2001	*12/31/2007*	*-39*	*10*	*0.018*	*5.4*	*0.09*	*0.0157*	*Decrease*
SW-14	D-11	1/1/2002	12/31/2007	15	11	0.141	8.8	0.35	0.0398	Increase
SWS-9	D-14	1/1/1998	12/31/2007	-199	25	<0.001	77.6	15.49	0.1997	Decrease
Vinyl Chloride										
CAF-17C	D-4	1/1/1998	12/31/2007	-80	26	0.041	51.3	10.05	0.1957	Decrease
OB-5	D-5	1/1/1993	12/31/2007	34	44	0.369	5.3	0.79	0.1479	Inconclusive*
		1/1/2001	*12/31/2007*	*-41*	*14*	*0.013*	*5.9*	*1.55*	*0.2627*	*Decrease*
OCW-2C	D-6	1/1/1998	12/31/2007	48	25	0.138	1.4	1.28	0.9295	Inconclusive*
		1/1/2003	*12/13/2007*	*0*	*10*	*0.534*	*1.8*	*1.88*	*1.019*	*None*
SW-14	D-11	1/1/2002	12/31/2007	-4	11	0.410	0.4	0.08	0.2158	None

* A review of the data and performance of a sensitivity analysis suggests that the statistical analysis is inconclusive due to data quality limitations identified through the data validation process and/or other issues such as detection limits and varying laboratory practical quantitation limits.

Notes:

- Statistical trend analysis was performed using the Mann-Kendall test for trend. The Mann-Kendall method is documented in Statistical Methods for Environmental Pollution Monitoring (Gilbert, 1987). For sample sizes greater than 40, the normal approximation described in Gilbert (1987) was used. For sample sizes less than or equal to 40, the Kendall's statistic lookup table was used as provided in Nonparametric Statistical Methods (Hollander and Wolfe, 1973).
- Trends were calculated for the full dataset through 2007. More recent trends, calculated for partial datasets, are displayed in *italics*.
- Trend analyses were performed for each analyte detected in 2006 or 2007 at each sampling location if more than one detection of the analyte was reported for the statistical time period.

Table 4-3. Trend Analysis Results for Total Uranium

Location ID	Corresponding Figure in Appendix D	Start Date	End Date	Mann Kendall S Statistic	Sample Count	Probability (of no trend)	Numerical Average (ug/L)	Standard Deviation (ug/L)	Coefficient of Variation	Trend
CAF-5B	D-15	1/1/1995	12/31/2007	-551	42	<1.00E-03	6.53E-03	6.41E-04	0.098	Decrease
CAF-6A	D-16	1/1/1995	12/31/2007	-449	42	<1.00E-03	1.54E-01	1.98E-02	0.128	Decrease
CAF-6B	D-17	1/1/1995	12/31/2007	-427	42	<1.00E-03	1.40E-02	1.31E-02	0.935	Decrease
		1/1/2002	*12/31/2007*	*20*	*16*	*1.99E-01*	*1.02E-02*	*2.22E-02*	*2.175*	*Increase*
CAF-7A	D-18	1/1/1995	12/31/2007	13	41	4.46E-01	1.07E-01	2.14E-02	0.200	None
		1/1/2001	*12/31/2007*	*-29*	*18*	*1.47E-01*	*1.22E-01*	*2.87E-02*	*0.235*	*Decrease*
		1/1/2003	*12/31/2007*	*28*	*12*	*3.10E-02*	*5.28E-02*	*5.52E-02*	*1.045*	*Increase*
CAF-7B	D-19	1/1/1995	12/31/2007	-455	42	<1.00E-03	7.51E-03	1.00E-03	0.133	Decrease
CAF-10A	D-22	1/1/1995	12/31/2007	336	42	<1.00E-03	3.68E-03	6.69E-04	0.182	Increase
		1/1/2002	*12/31/2007*	*-28*	*16*	*1.14E-01*	*6.63E-03*	*3.48E-04*	*0.052*	*Decrease*
		1/1/2004	*12/31/2007*	*12*	*8*	*8.97E-02*	*4.37E-03*	*1.29E-03*	*0.296*	*Increase*
CAF-12A	D-24	1/1/1995	12/31/2007	-180	40	1.82E-02	4.91E-02	6.46E-03	0.132	Decrease

* A review of the data and performance of a sensitivity analysis suggests that the statistical analysis is inconclusive due to data quality limitations identified through the data validation process and/or other issues such as detection limits and varying laboratory practical quantitation limits.

Notes:

- Statistical trend analysis was performed using the Mann-Kendall test for trend. The Mann-Kendall method is documented in Statistical Methods for Environmental Pollution Monitoring (Gilbert, 1987). For sample sizes greater than 40, the normal approximation described in Gilbert (1987) was used. For sample sizes less than or equal to 40, the Kendall's statistic lookup table was used as provided in Nonparametric Statistical Methods (Hollander and Wolfe, 1973).
- Trends were calculated for the full dataset through 2007. More recent trends, calculated for partial datasets, are displayed in *italics* .
- Total uranium trend analyses were performed for each location with a calculated U-235 isotopic abundance exceeding natural levels in 2006 or 2007 if more than one non-natural U-235 istopic abundance was calculated for the statistical time period.

Table 4-4. Trend Analysis Results for Uranium-235

Location ID	Corresponding Figure in Appendix D	Start Date	End Date	Mann Kendall S Statistic	Sample Count	Probability (of no trend)	Numerical Average (ug/L)	Standard Deviation (ug/L)	Coefficient of Variation	Trend
CAF-6A	D-16	1/1/1995	12/31/2007	-818	51	<0.001	6.32E-03	8.03E-04	0.1270	Decrease
CAF-6B	D-17	1/1/1995	12/31/2007	-101	44	0.148	1.91E-04	2.65E-04	1.3873	Inconclusive*
		6/1/1996	*12/31/2007*	*-148*	*33*	*0.011*	*2.16E-04*	*3.02E-04*	*1.3946*	*Decrease*
		1/1/2002	*12/31/2007*	*15*	*9*	*0.074*	*3.39E-04*	*5.37E-04*	*1.5816*	*Increase*
CAF-7A	D-18	1/1/1995	12/31/2007	-188	51	0.064	3.33E-03	2.64E-04	0.0792	Decrease
		1/1/2001	*12/31/2007*	*-28*	*18*	*0.156*	*2.62E-03*	*6.12E-04*	*0.2334*	*Decrease*
		1/1/2003	*12/31/2007*	*27*	*12*	*0.037*	*1.19E-03*	*1.16E-03*	*0.9812*	*Increase*
CAF-10A	D-22	1/1/1995	12/31/2007	355	43	<0.001	8.15E-05	1.04E-05	0.1282	Inconclusive*
		6/1/1996	*12/31/2007*	*63*	*32*	*0.159*	*9.74E-05*	*9.29E-06*	*0.0953*	*Increase*
		1/1/2002	*12/31/2007*	*-8*	*15*	*0.367*	*1.26E-04*	*6.11E-06*	*0.0484*	*None*
CAF-12A	D-24	1/1/1995	12/31/2007	-404	50	<0.001	2.74E-03	3.63E-04	0.1321	Decrease

* A review of the data and performance of a sensitivity analysis suggests that the statistical analysis is inconclusive due to data quality limitations identified through the data validation process and/or other issues such as detection limits and varying laboratory practical quantitation limits.

Notes:

- Statistical trend analysis was performed using the Mann-Kendall test for trend. The Mann-Kendall method is documented in Statistical Methods for Environmental Pollution Monitoring (Gilbert, 1987). For sample sizes greater than 40, the normal approximation described in Gilbert (1987) was used. For sample sizes less than or equal to 40, the Kendall's statistic lookup table was used as provided in Nonparametric Statistical Methods (Hollander and Wolfe, 1973).
- Trends were calculated for the full dataset through 2007. More recent trends, calculated for partial datasets, are displayed in *italics*.
- U-235 trend analyses were performed for each location with a calculated U-235 isotopic abundance exceeding natural levels in 2006 or 2007 if more than one non-natural U-235 istopic abundance was calculated for the statistical time period.

Table 4-5. Trend Analysis for Fluoride

Location ID	Start Date	End Date	Mann Kendall S Statistic	Sample Count	Probability (of no trend)	Numerical Average (ug/L)	Standard Deviation (ug/L)	Coefficient of Variation	Trend
CAF-5B	1/1/1995	12/31/2007	496	52	<0.001	0.22	0.008	0.0365	Increase
	1/1/2000	*12/31/2007*	*-45*	*22*	*0.109*	*0.35*	*0.015*	*0.0437*	*Decrease*
CAF-6A	1/1/1995	12/31/2007	-635	52	<0.001	1.53	0.083	0.0543	Decrease
CAF-6B	1/1/1995	12/31/2007	-333	52	0.004	5.01	0.344	0.0687	Decrease
CAF-7A	1/1/1995	12/31/2007	-267	52	0.018	1.66	0.017	0.0102	Decrease
CAF-7B	1/1/1995	12/31/2007	-643	52	<0.001	6.22	0.543	0.0874	Decrease
CAF-8A	1/1/1995	12/31/2007	259	52	0.021	1.22	0.144	0.1186	Increase
	1/1/2001	*12/31/2007*	*-25*	*18*	*0.184*	*1.56*	*0.166*	*0.1069*	*Decrease*
CAF-8B	1/1/1995	12/31/2007	-535	52	<0.001	6.02	0.614	0.1020	Decrease
CAF-9A	1/1/1995	12/31/2007	-432	50	<0.001	3.34	0.316	0.0948	Decrease
CAF-9B	1/1/1995	12/31/2007	-785	52	<0.001	3.30	0.234	0.0710	Decrease
CAF-10A	1/1/1995	12/31/2007	-184	52	0.074	1.12	0.048	0.0428	Decrease
CAF-10B	1/1/1995	12/31/2007	371	52	0.001	0.10	0.007	0.0695	Increase
	1/1/2005	*12/31/2007*	*-6*	*6*	*0.182*	*0.13*	*0.031*	*0.2471*	*Decrease*
CAF-11B	1/1/1995	12/31/2007	-61	41	0.205	0.06	0.001	0.0215	Inconclusive*
CAF-12A	1/1/1995	12/31/2007	-549	50	<0.001	2.39	0.021	0.0089	Decrease
OCW-4A	1/1/1995	12/31/2007	92	28	0.036	0.12	0.044	0.3655	Inconclusive*
	1/1/2001	*12/31/2007*	*-23*	*18*	*0.205*	*0.16*	*0.045*	*0.2763*	*None*
OCW-4B	1/1/1995	12/31/2007	302	28	<0.001	0.30	0.047	0.1534	Increase

* A review of the data and performance of sensitivity analysis suggests that the statistical analysis is inconclusive due to data quality limitations identified through the data validation process and/or other issues such as detection limits and varying laboratory practical quantitation limits.

Notes:

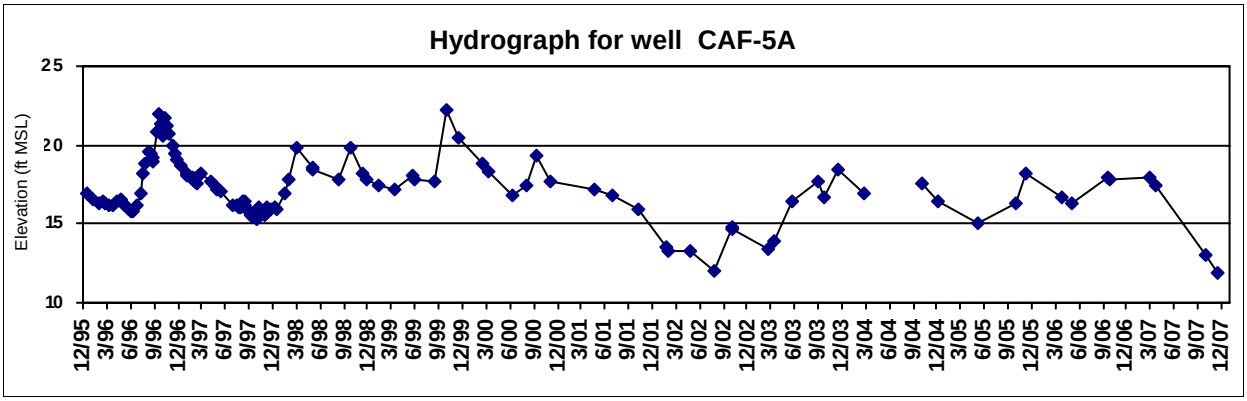
- Associated concentration graphs are displayed in Appendix D, Figure D-26.
- Statistical trend analysis was performed using the Mann-Kendall test for trend. The Mann-Kendall method is documented in Statistical Methods for Environmental Pollution Monitoring (Gilbert, 1987). For sample sizes greater than 40, the normal approximation described in Gilbert (1987) was used. For sample sizes less than or equal to 40, the Kendall's statistic lookup table was used as provided in Nonparametric Statistical Methods (Hollander and Wolfe, 1973).
- Trends were calculated for the full dataset through 2007. More recent trends, calculated for partial datasets, are displayed in *italics*.
- Trend analyses were performed for sampling locations where fluoride was detected in 2006 or 2007 if more than one detection was reported for the statistical time period.

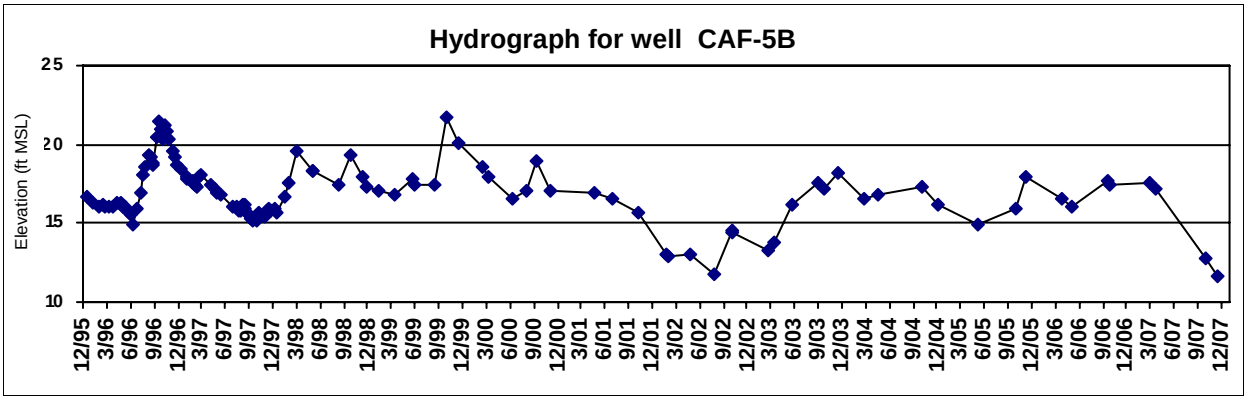
Appendix A

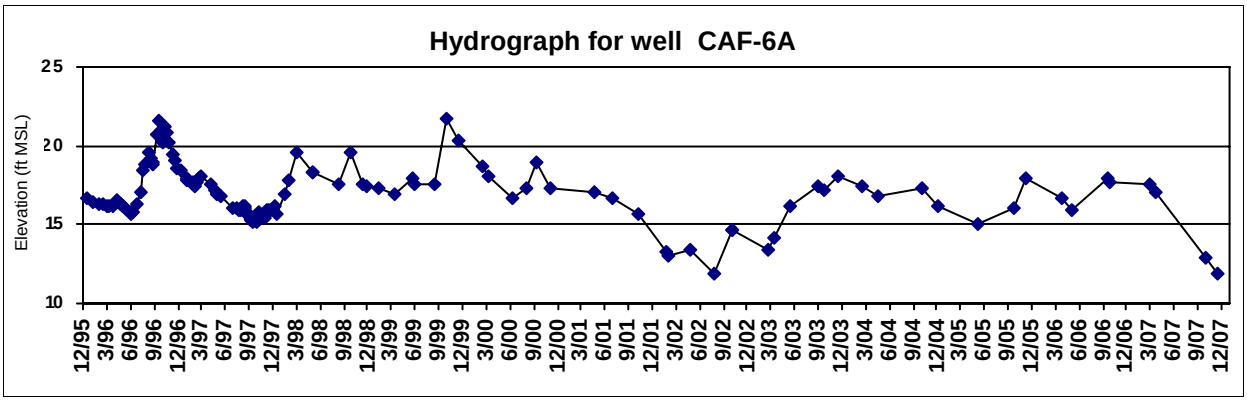
Hydrographs

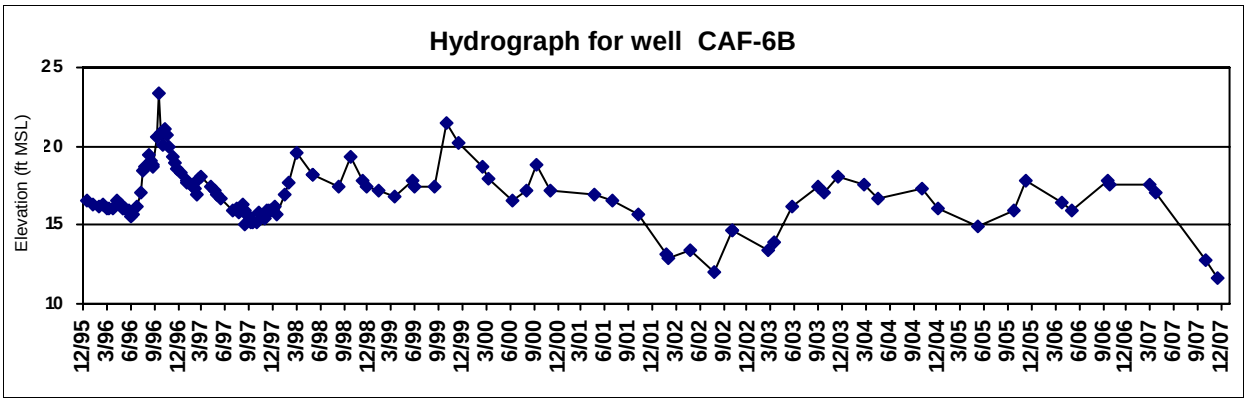
Appendix A-1. Hydrographs of Monitoring Wells in the Northwest Site Area with Groundwater Elevations between 10 and 25 ft MSL
Appendix A-2. Hydrographs of Monitoring Wells in the Northwest Site Area with Groundwater Elevations between 5 and 20 ft MSL
Appendix A-3. Hydrographs of Monitoring Wells in the Northwest Site Area with Groundwater Elevations between 0 and 15 ft MSL

Appendix A-1. Hydrographs of Monitoring Wells in the Northwest Site Area with Groundwater Elevations between 10 and 25 ft MSL*



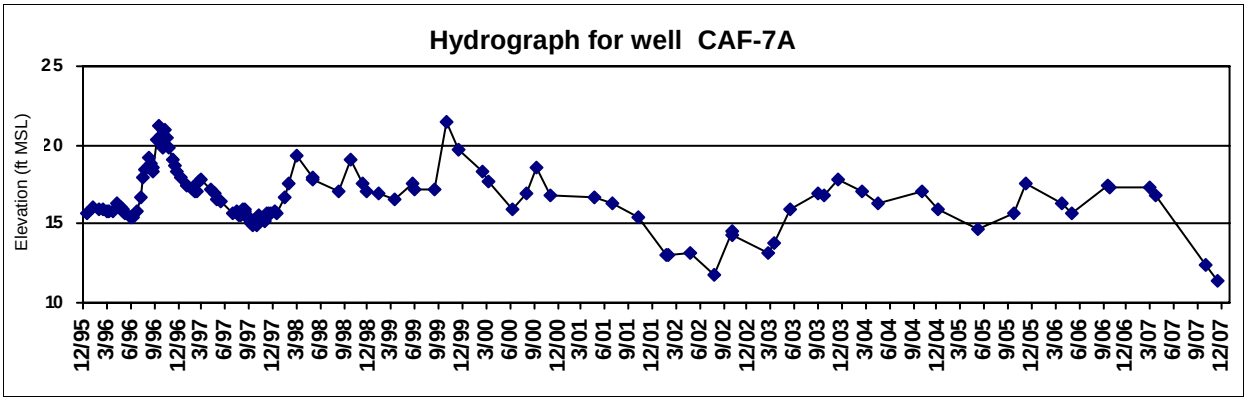


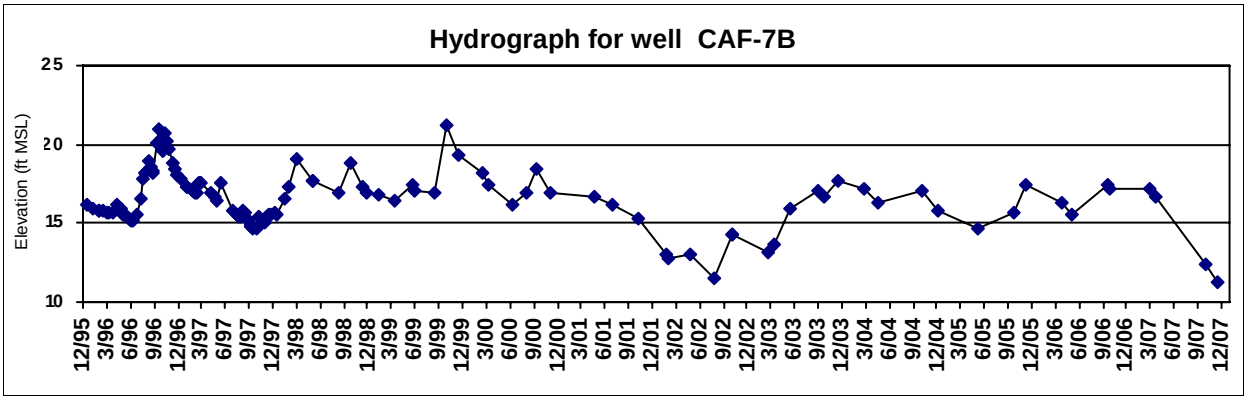


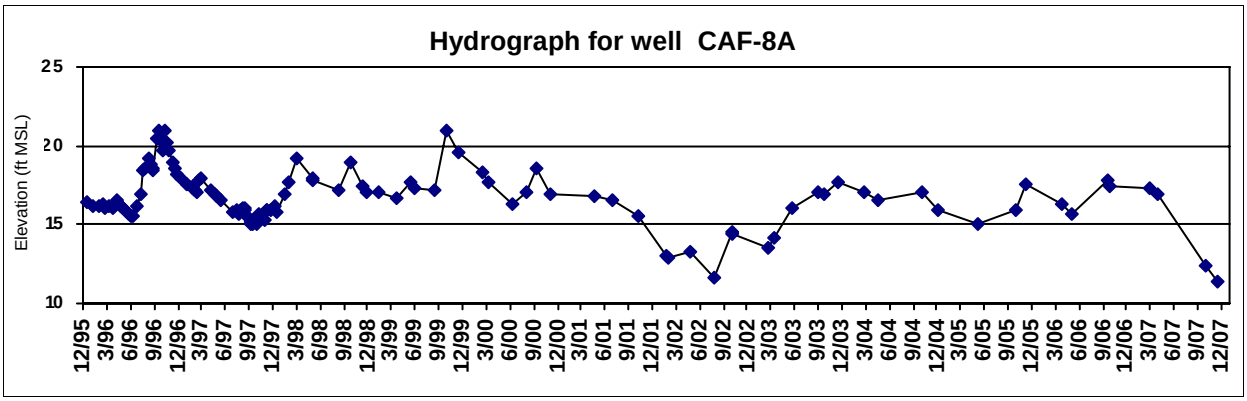


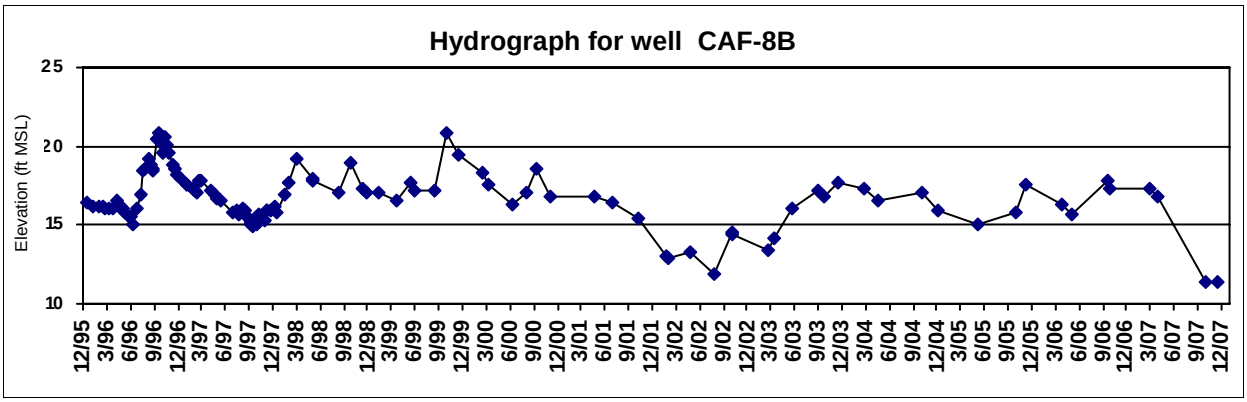
* feet above mean sea level

Appendix A-1. Hydrographs of Monitoring Wells in the Northwest Site Area with Groundwater Elevations between 10 and 25 ft MSL*



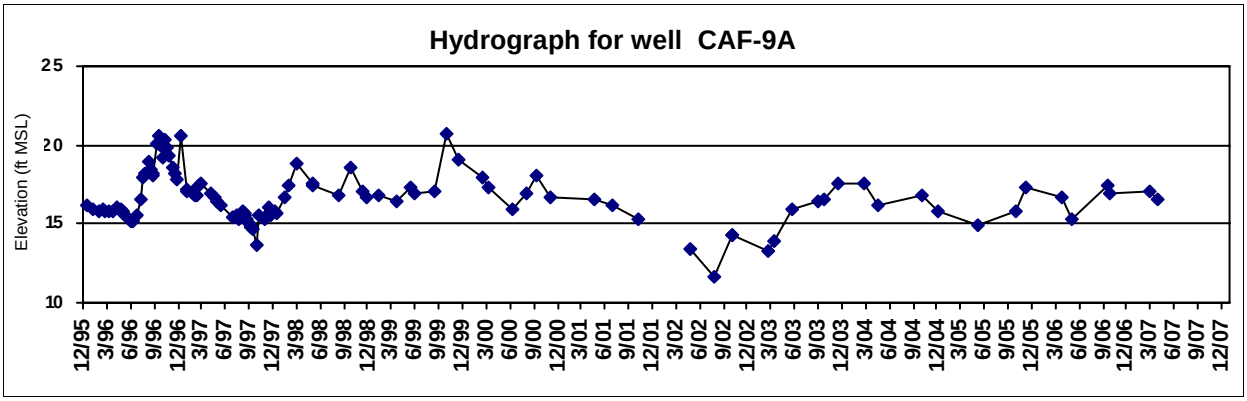


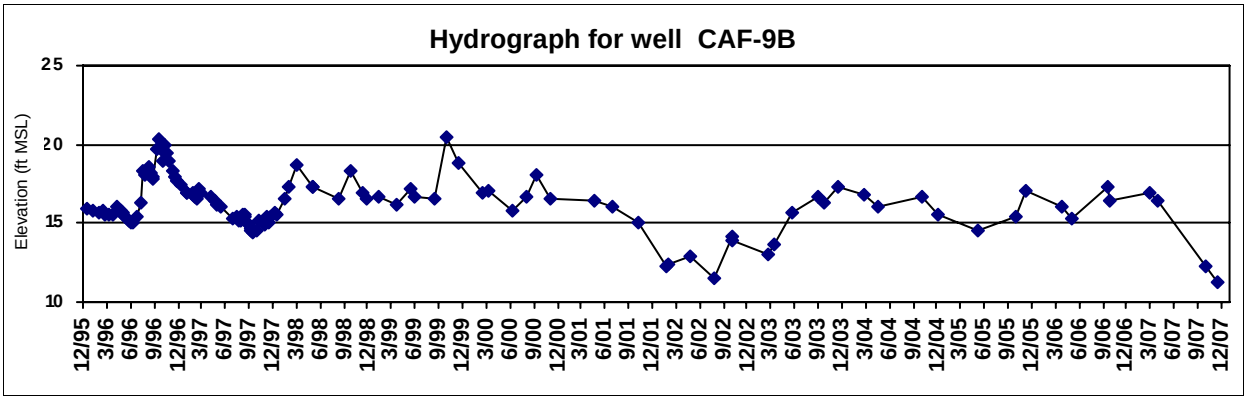


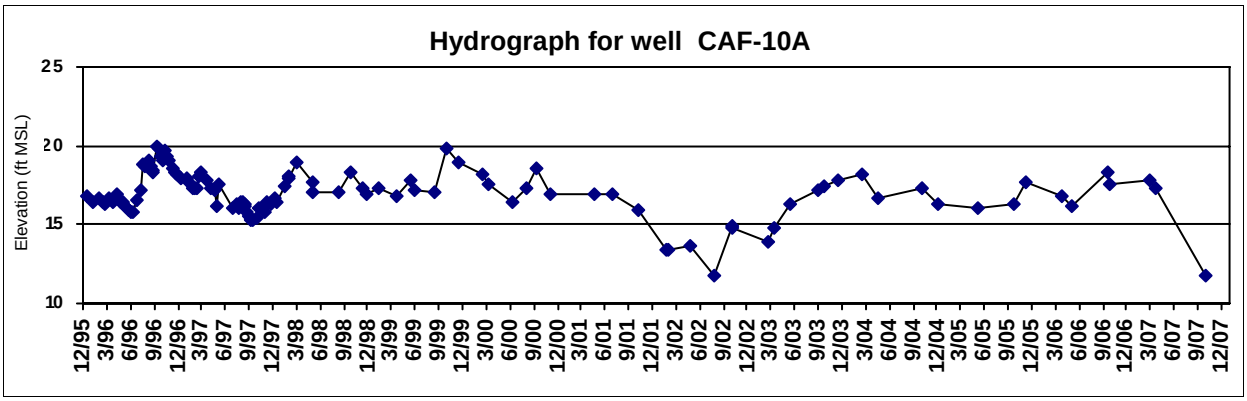


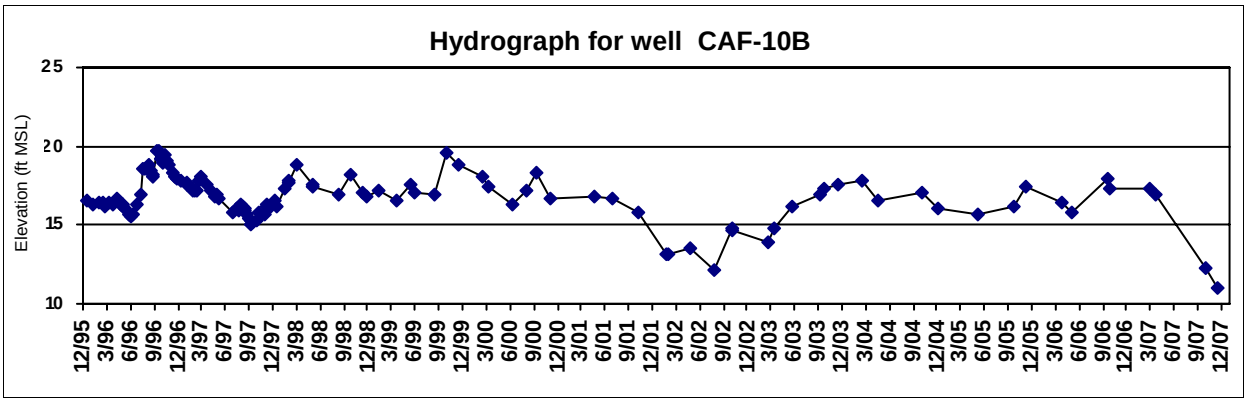
* feet above mean sea level

Appendix A-1. Hydrographs of Monitoring Wells in the Northwest Site Area with Groundwater Elevations between 10 and 25 ft MSL*



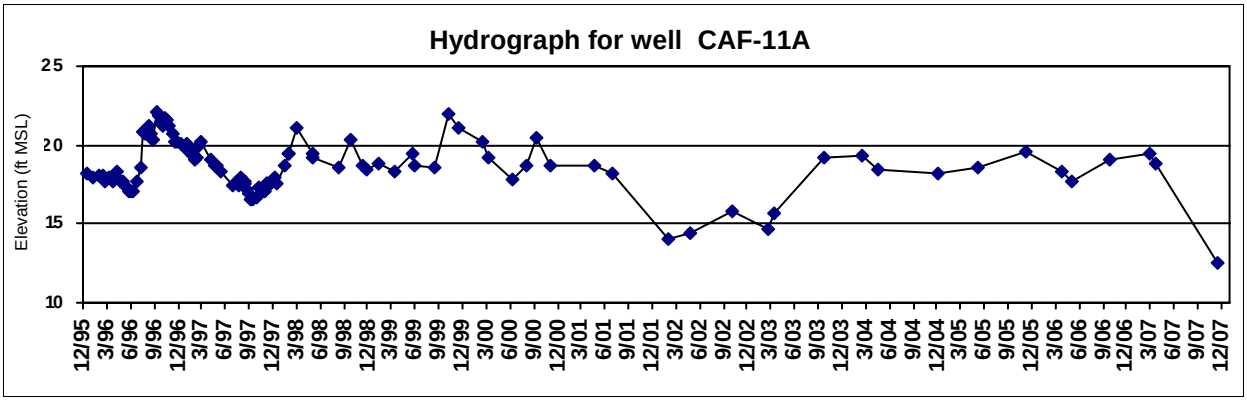


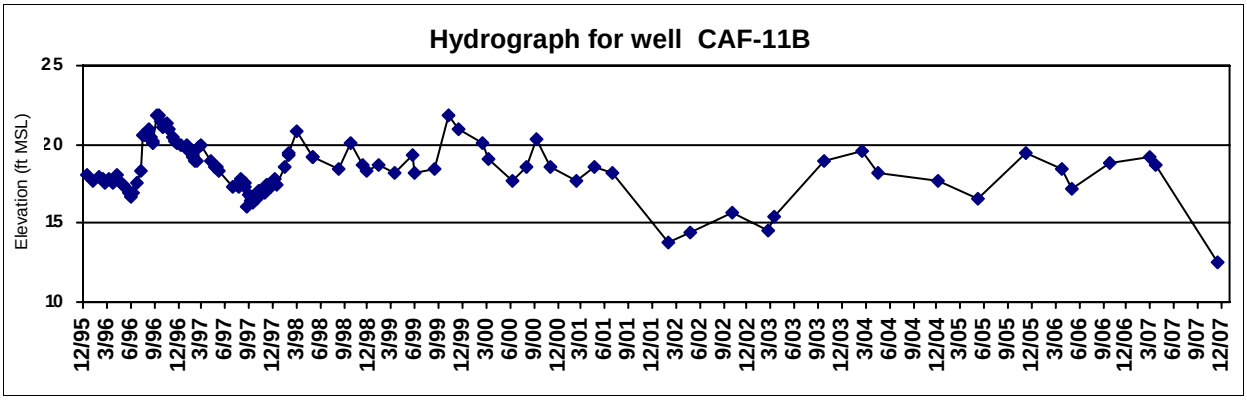


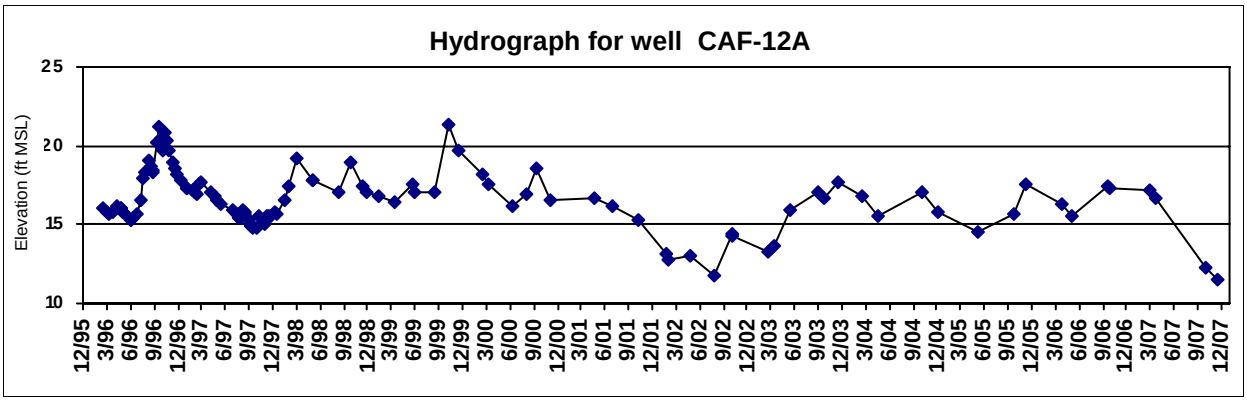


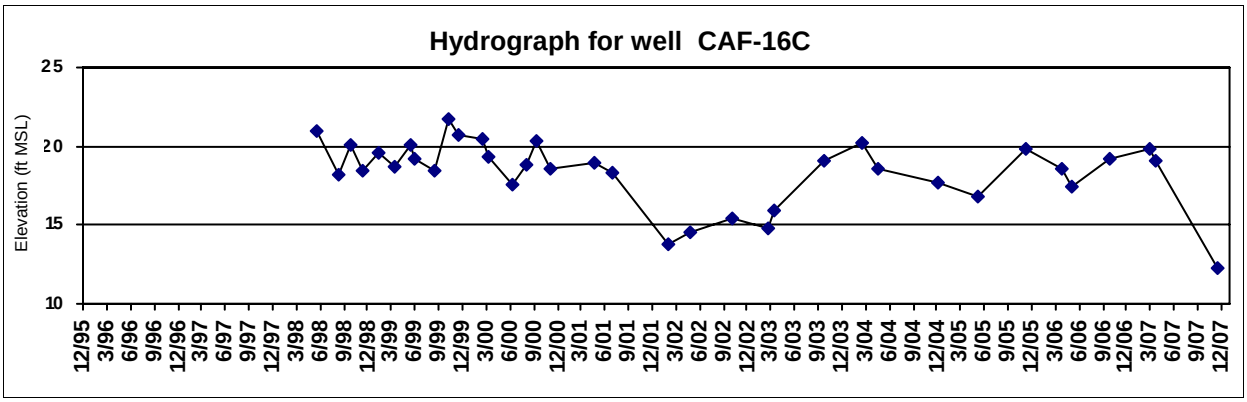
* feet above mean sea level

Appendix A-1. Hydrographs of Monitoring Wells in the Northwest Site Area with Groundwater Elevations between 10 and 25 ft MSL*



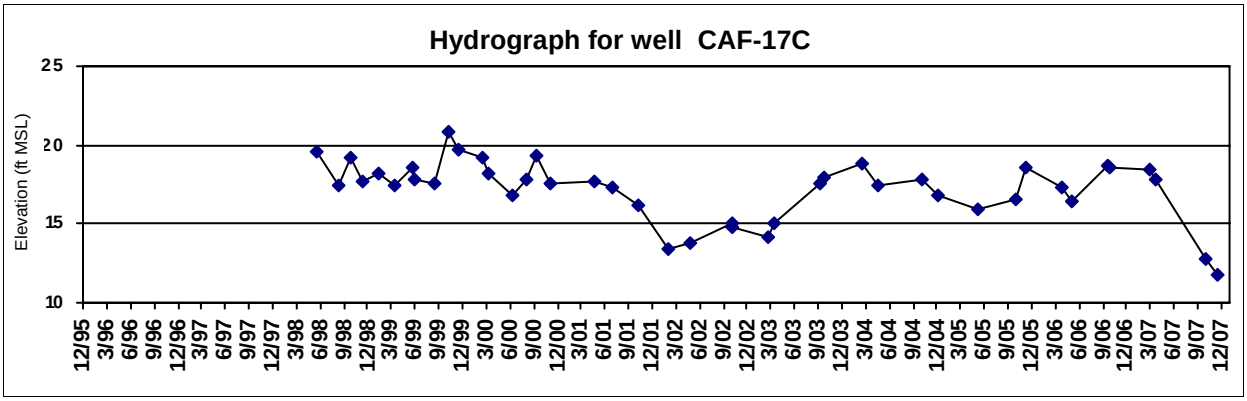


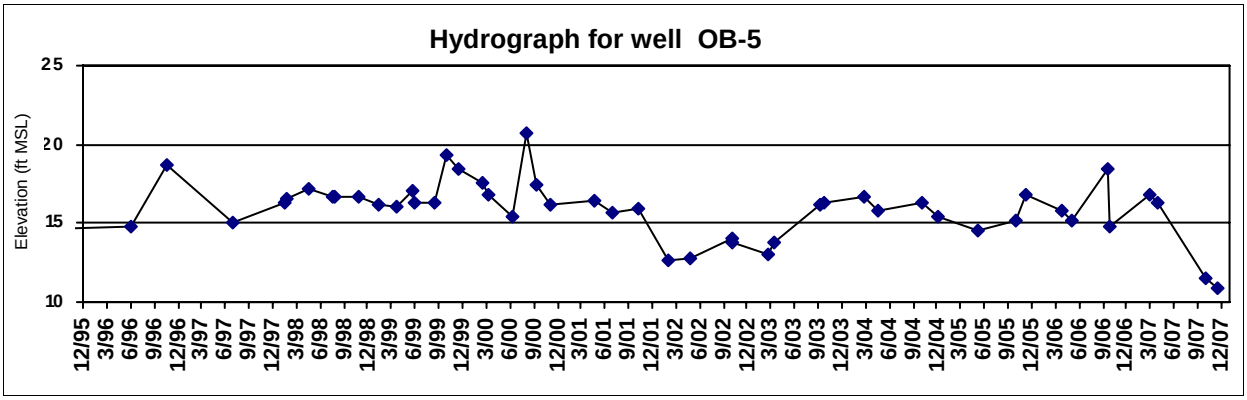




* feet above mean sea level

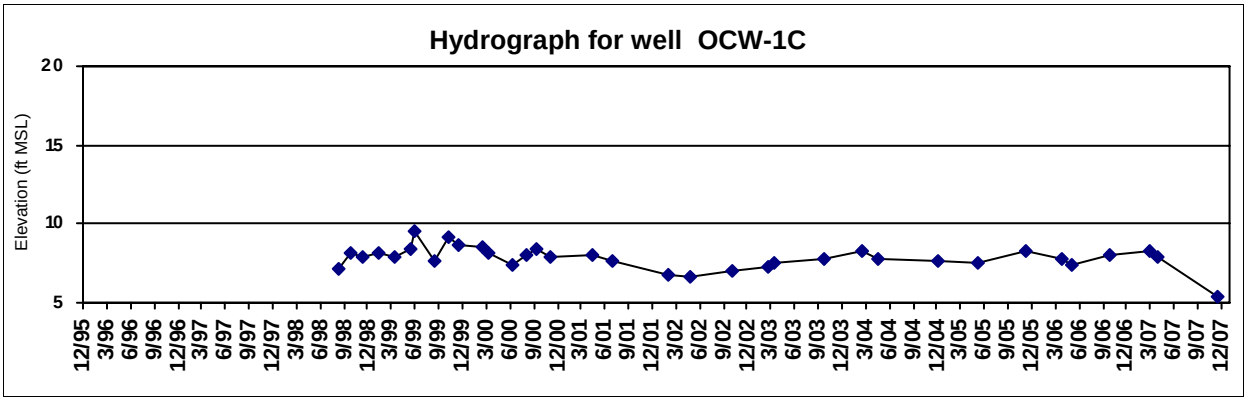
Appendix A-1. Hydrographs of Monitoring Wells in the Northwest Site Area with Groundwater Elevations between 10 and 25 ft MSL*

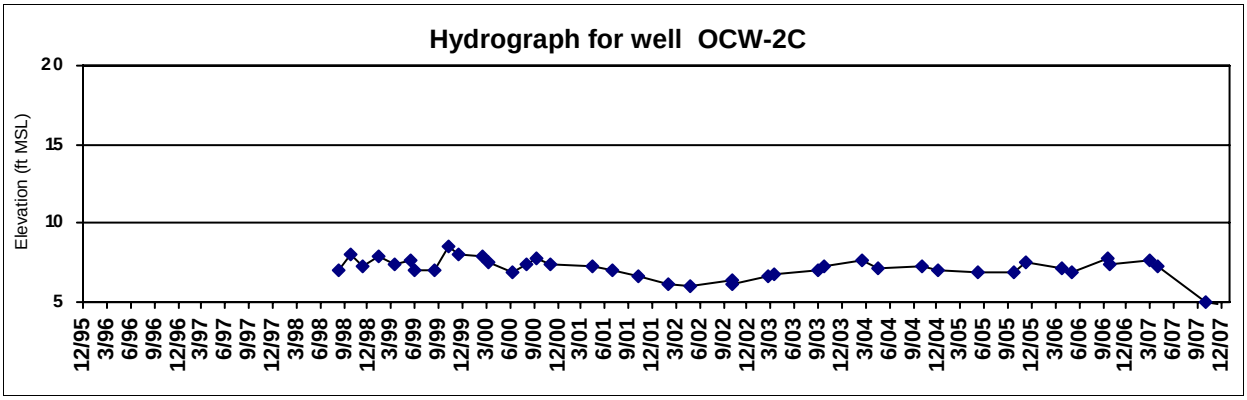


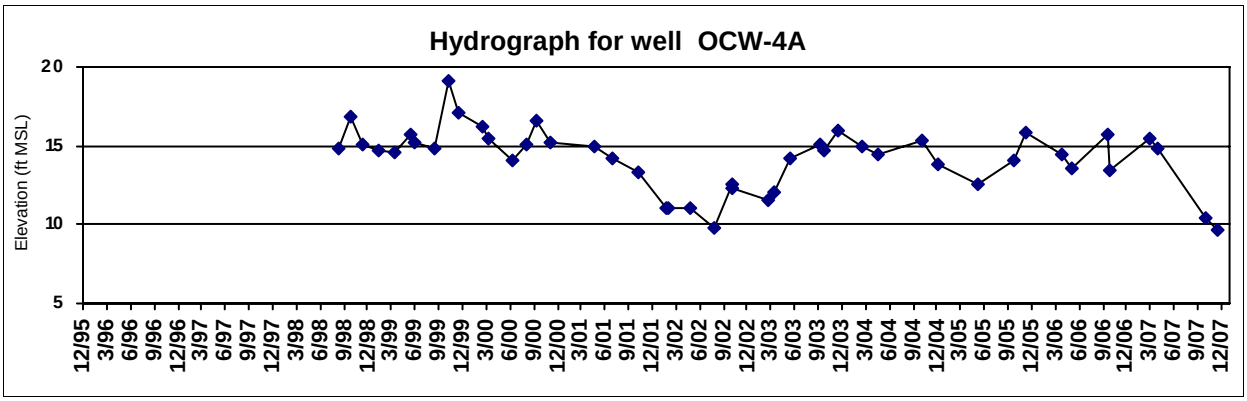


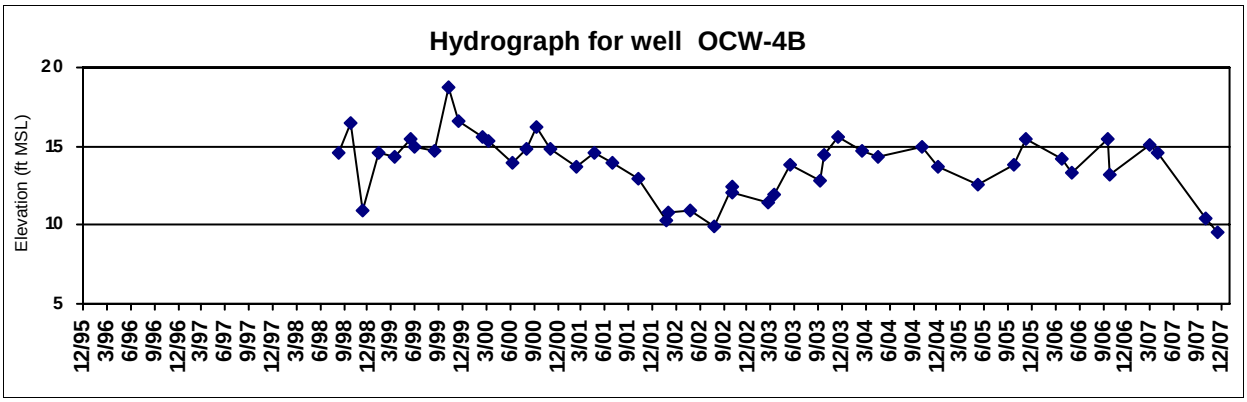
* feet above mean sea level

Appendix A-2. Hydrographs of Monitoring Wells in the Northwest Site Area with Groundwater Elevations between 5 and 20 ft MSL*



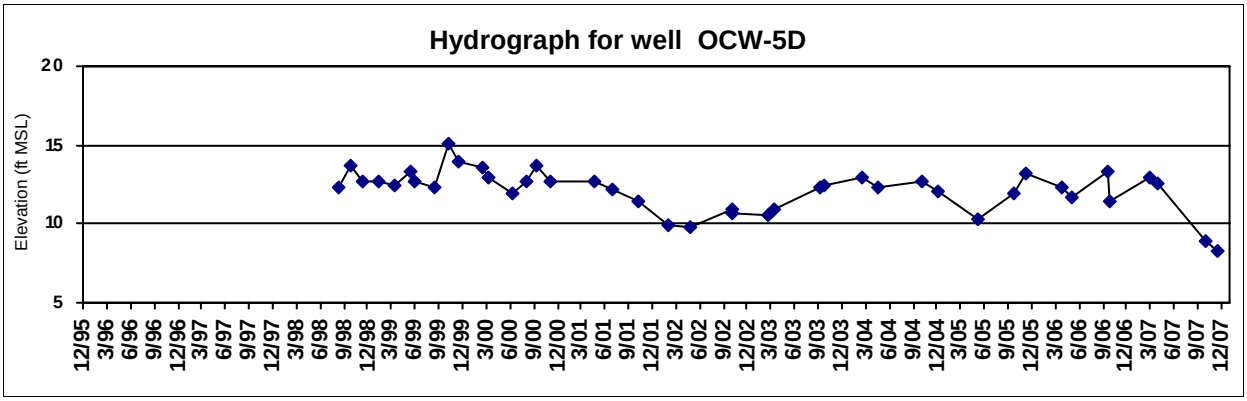






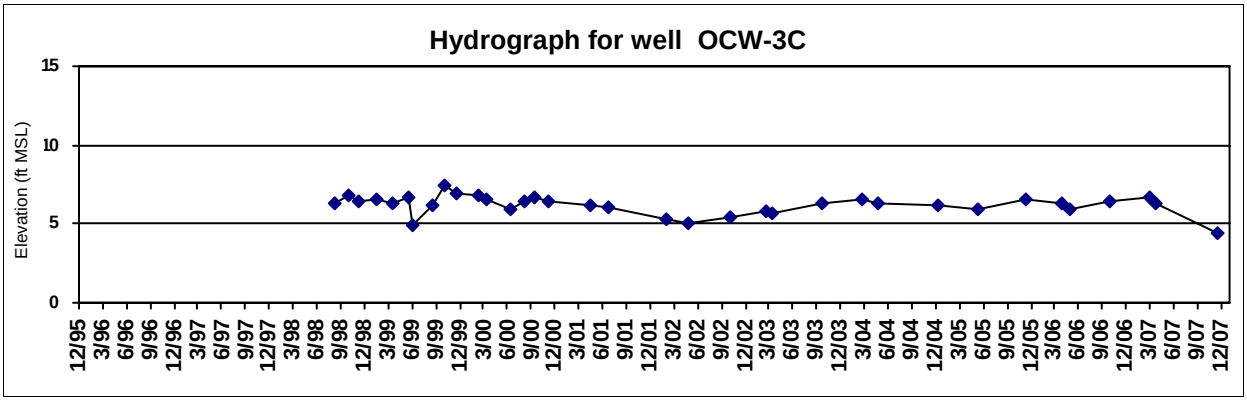
* feet above mean sea level

Appendix A-2. Hydrographs of Monitoring Wells in the Northwest Site Area with Groundwater Elevations between 5 and 20 ft MSL*



* feet above mean sea level

Appendix A-3. Hydrograph of Monitoring Well in the Northwest Site Area with Groundwater Elevations between 0 and 15 ft MSL*



* feet above mean sea level

Appendix B

Data Validation Memoranda

RTI INTERNATIONAL
3040 Cornwallis Road ▪ PO Box 12194 ▪ Research Triangle Park, NC 27709-2194 ▪ USA
Telephone 919 541-6000 ▪ Fax 919 541-5985 ▪ www.rti.org

Data Validation Memorandum

To: Andrew D. Stahl, P.G. July 11, 2006
Project Hydrogeologist, Manager

From: Andrea C. McWilliams
Quality Assurance Officer

Subject: Laboratory Data Validation, RTI Project 09739.000.005
Organics and Inorganics in Groundwater, May 2006 Sampling Event

This data validation memorandum has been prepared for samples collected on May 1-3, 2006, and analyzed by Oxford Laboratories, Inc.; RTI's Environmental and Industrial Chemistry Department Laboratory; and Environmental Conservation Laboratories, Inc. (ENCO). Chemical and Environmental Technology, Inc. (CET) had been performing the analytical service for this project since 1999, and CET was acquired by ENCO in late 2005. The work performed by ENCO on this project is a continuation of the services previously provided by CET in that ENCO has not altered the staff or procedures previously used for this project. ENCO is certified by the Certification Section of the NC Division of Water Quality Chemistry Laboratory under 15A NCAC 2H .0800 for the utilized analytical method.

The samples were collected during the 2006 annual sampling and analysis event designed to monitor the natural-attenuation processes occurring at the Northwest Site Area. For the analyses subject to data validation, the information on the chain-of-custody (COC) forms completed for this sampling event is summarized as follows:

Parameter/Method	Matrix	No. of Samples
Fluoride/SM 4500-F^--C	water	26
Uranium/EPA Method 200.8	water	26
Volatile Organic Compounds (VOCs)/EPA Method 8021	water	27

Validation and review of the referenced data packages were performed on the quality control (QC) data and other information presented in the laboratories' analytical reports. The validation was conducted in accordance with the procedures set forth in the project-specific Quality Assurance Project Plan (QAPP) [RTI Report No. 6448-018/006/01F]. The

QAPP prescribes use of RTI's *Standard Operating Procedures for the Validation of Inorganic and Organic Data* (SOPs), which were prepared with the guidance of the *National Functional Guidelines for Inorganic Data Review* (US EPA, 2004) and *National Functional Guidelines for Organic Data Review* (US EPA, 1999). Note that these SOPs do not require evaluation of initial and continuing calibrations or internal standard performance. Data-validation qualifiers referenced in this memorandum are defined as footnotes to the attached table.

1.0 Data Completeness

All analyses were performed as requested on the COC forms.

2.0 Preservation and Holding Time

The samples were preserved as required. All samples were analyzed within holding times, which are 28 days for fluoride, 180 days for uranium, and 14 days for VOCs.

3.0 Blanks

3.1 Method Blanks

Five method blanks were analyzed for fluoride, two were analyzed for uranium and VOCs. No target compounds were detected.

3.2 Trip Blanks.

One trip blank was included with this batch of samples for analysis of VOCs. No target compounds were detected.

3.3 Field Blanks

One field blank was included for fluoride, uranium, and VOC analyses. No target compounds were detected.

4.0 Surrogates

The surrogates employed for the VOC analyses were appropriate to the method. All surrogate recoveries were within the method acceptance ranges as summarized in the table below.

Surrogates	Aqueous QC Limits
2 bromo-1chloropropane	70-130%
fluorobenzene	80-120%

5.0 Laboratory Control Samples

Five laboratory control samples (LCSs) were analyzed for fluoride, two were analyzed for uranium and VOCs. All of these results were within the acceptance limits of 80-120 percent recovery (%R) for fluoride and uranium and the specified

limits for each VOC analyte, except as shown in the table below. Because 1,2-dichloropropane was not detected in any of the field samples, no sample results require qualification.

Analysis Date	Failed LCS Compound	LCS %R Acceptance Limits	Measured %R	Applicable Qualifiers		Samples Requiring Qualification
				Detect	Non-Detect	
5/8/06	1,2-dichloropropane	70-130	144	Jh	—	none
5/9/06	1,2-dichloropropane	70-130	133	Jh	—	none

6.0 Matrix Spikes

Five matrix spike (MS) analyses were performed for fluoride, and two were performed for uranium and VOCs. The MS results for fluoride and uranium were within the 80-120 %R acceptance criteria. For the VOCs, the two MS analyses were performed in duplicate (see section 7.0). The percent recoveries for these four MS analyses were within RTI's QC acceptance limits, except as shown in the table below. The flagged sample results are summarized in the attached table.

RTI COC No. of Spiked Sample	Failed MS Compound	%R Acceptance Limits	Measured %Rs	Applicable Qualifiers		Samples Requiring Qualification
				Detect	Non-Detect	
3529	vinyl chloride	70-130	38, 34	Jl	UJ	3529
3540	1,2-dichloropropane	70-130	141, 134	Jh	—	none

7.0 Matrix Spike Duplicates

Two MS duplicates (MSDs) were analyzed for VOCs. The relative percent difference (RPD) for all MS analytes were within acceptance criteria of ≤20 RPD.

8.0 Laboratory Duplicates

Five laboratory duplicate analyses were performed for fluoride and two were performed for uranium. All of the analyses met the QC acceptance criteria of ≤30 RPD.

9.0 Field Duplicates

Samples from monitoring well OCW-4B were submitted as blind field duplicates for fluoride and uranium analyses, and samples from SW-14 were submitted as blind field duplicates for VOC analysis. The QC acceptance criteria were met for all compounds in these sample sets.

10.0 Performance Evaluation Sample

High Purity Standards (HPS) provided the fluoride and uranium standard solutions used as performance evaluation (PE) samples. HPS Standard lots 612113 and 612114 (COC ID No 3551) were submitted as double-blind PE samples for fluoride and uranium analyses, respectively. The PE analyses met the performance criteria of 80-120% recovery, with recoveries of 100 and 100% for fluoride and uranium, respectively. Analytical Products Group (APG) standard solution lot 40808 (COC ID No. 3551) was used for the VOC PE analysis. The QC acceptance criteria specify that the measured concentrations should be within the range established by APG for each analyte through an inter-laboratory evaluation study. This criteria was met for all compounds in the PE sample, except as shown in the table below.

PE COC No.	Failed PE Compound	Acceptance Range (ug/L)	Measured (ug/L)	Qualifiers to be Applied		RTI COC Nos. of Qualified Samples
				Detect	Non-Detect	
3551	bromodichloromethane	43.1 - 78.9	87.0	Jh	—	none
	dichloromethane	15.0 - 33.2	51.0	Jh	—	none

11.0 Additional Data Qualifications

In the ENCO analytical report, the flag J was applied to an analytical result when the detected level was below the practical quantitation limit and, therefore, the concentration could only be estimated. This sample result is shown in the table below. The J flag applied to this result is appropriate, but will be retained in the RTI database as a Jr flag.

RTI COC No.	Compound	Qualifier to be Applied
3529	*trans*-1,2-dichloroethene	Jr
3531	1,1-dichloroethane	Jr
3545	vinyl chloride	Jr

Jr = The analyte was positively identified above the method detection limit, but the reported numerical value is approximate because the detected concentration is below the practical quantitation limit.

12.0 Overall Data Quality Assessment

These data are complete and useable as qualified for their intended purpose. In accordance with the data validation SOP, no samples were rejected. Minor qualifications were required as described in Section 6.0 and 11.0. These qualifications should be considered in evaluating and using the data.

Table of Qualified Sample Results

Sample COC No.	Sampling Location ID	Compound	Result (ug/L)		Qualifier	Reason
			Value	PQL		
3529	CAF-17C	vinyl chloride	17.0	0.5	Jl	MS/MSD %Rs outside of limits

PQL = Practical Quantitation Limit
Jl = The reported concentration is approximate and probably biased towards lower values than the actual concentration of the analyte in the sample.

RTI INTERNATIONAL
3040 Cornwallis Road ▪ PO Box 12194 ▪ Research Triangle Park, NC 27709-2194 ▪ USA
Telephone 919 541-6000 ▪ Fax 919 541-5985 ▪ www.rti.org

Data Validation Memorandum

To: Andrew D. Stahl, P.G. December 19, 2006
Project Hydrogeologist, Manager

From: Andrea C. McWilliams
Quality Assurance Officer

Subject: Laboratory Data Validation, RTI Project 09739.000.005
Organics and Inorganics in Groundwater, September 2006 Sampling Event

This data validation memorandum has been prepared for samples collected on September 18-19, 2006, and analyzed by Oxford Laboratories, Inc.; RTI's Environmental and Industrial Chemistry Department Laboratory; and Environmental Conservation Laboratories, Inc. (ENCO). The samples were collected during the 2006 biannual sampling and analysis event designed to monitor the natural-attenuation processes occurring at the Northwest Site Area. The information on the chain-of-custody (COC) forms completed for this sampling event is summarized as follows:

Parameter/Method	Matrix	No. of Samples
Fluoride/SM 4500-F^--C	water	18
Uranium/EPA Method 200.8	water	18
Volatile Organic Compounds (VOCs)/EPA Method 8021	water	19

Validation and review of the referenced data packages were performed on the quality control (QC) data and other information presented in the laboratories' analytical reports. The validation was conducted in accordance with the procedures set forth in the project-specific Quality Assurance Project Plan (QAPP) [RTI Report No. 6448-018/006/01F]. The QAPP prescribes use of RTI's *Standard Operating Procedures for the Validation of Inorganic and Organic Data* (SOPs), which were prepared with the guidance of the *National Functional Guidelines for Inorganic Data Review* (US EPA, 2004) and *National Functional Guidelines for Organic Data Review* (US EPA, 1999). Note that these SOPs do not require evaluation of initial and continuing calibrations or internal standard performance. Data-validation qualifiers referenced in this memorandum are defined as footnotes to the attached table.

1.0 Data Completeness

All analyses were performed as requested on the COC forms.

2.0 Preservation and Holding Time

The samples were preserved as required. All samples were analyzed within holding times, which are 28 days for fluoride, 180 days for uranium, and 14 days for VOCs, except as shown in the table below. The VOC samples were properly preserved and stored, but holding times were exceeded due to a sample delivery error whereby the samples were shipped to the laboratory the day technical holding times were to expire. The flagged sample results are summarized in the attached table.

Sample Date	Analysis Date	Compound	Holding Time Limit	Holding Time	Applicable Qualifiers		Samples Requiring Qualification
					Detect	Non-Detect	
9/18/06	10/4/06	VOCs	14 days	16 days	J	UJ	3561, 3563,3565, 3570, and 3572 - 3574,
9/19/06	10/4/06	VOCs	14 days	15 days	J	UJ	3568, 3569, 3575 - 3577, and 3578 - 3582

3.0 Blanks

3.1 Method Blanks

Four method blanks were analyzed for fluoride, two were analyzed for uranium, and one was analyzed for VOCs. No target compounds were detected.

3.2 Trip Blanks.

One trip blank was included with this batch of samples for analysis of VOCs. No target compounds were detected, except as shown in the table below. The field sample results within five times the concentration detected in the trip blank for m,p-xylenes and trichlorofluoromethane and ten times the concentration detected in the trip blank for toluene are considered non-detect results (validation flag “Ub”). The sample result requiring qualification is summarized in the attached table.

Compound	Trip Blank Concentration (ug/L)	COC No. of Samples Requiring Qualification
m,p-xylenes	0.7	none
toluene	1.0	3568
trichlorofluoromethane	1.3	none

3.3 Field Blanks

One field blank was included for fluoride, uranium, and VOC analyses. No target compounds were detected.

4.0 Surrogates

The surrogates employed for the VOC analyses were appropriate to the method. All surrogate recoveries were within the method acceptance ranges as summarized in the table below.

Surrogates	Aqueous QC Limits
2 bromo-1chloropropane	70-130%
fluorobenzene	80-120%

5.0 Laboratory Control Samples

Four laboratory control samples (LCSs) were analyzed for fluoride, two were analyzed for uranium, and one was analyzed for VOCs. All of these results were within the acceptance limits of 80-120 percent recovery (%R) for fluoride and uranium and the specified limits for each VOC analyte.

6.0 Matrix Spikes

Four matrix spike (MS) analyses were performed for fluoride and one was performed for uranium and VOCs. The MS results for fluoride and uranium were within the 80-120 %R acceptance criteria. For the VOCs, the one MS analysis was performed in duplicate (see section 7.0). The percent recoveries for these two MS analyses were within RTI's QC acceptance limits.

7.0 Matrix Spike Duplicates

One MS duplicate (MSD) was analyzed for VOCs. The relative percent difference (RPD) for all MS analytes were within acceptance criteria of $\leq$20 RPD.

8.0 Laboratory Duplicates

Three laboratory duplicate analyses were performed for fluoride and one was performed for uranium. All of the analyses met the QC acceptance criteria of $\leq$30 RPD.

9.0 Field Duplicates

Samples from monitoring well OCW-4B were submitted as blind field duplicates for fluoride, uranium analyses, and VOCs. A second blind duplicate for VOCs was sampled from SW-14. The QC acceptance criteria were met by all compounds in these sample sets.

10.0 Performance Evaluation Sample

High Purity Standards (HPS) provided the fluoride and uranium standard solutions used as performance evaluation (PE) samples. HPS Standard lots 626110 and 626101 (COC ID No 3584) were submitted as double-blind PE samples for fluoride and uranium analyses, respectively. The PE analyses met the performance criteria of 80-120% recovery, with recoveries of 99 and 102% for fluoride and uranium, respectively. Analytical Products Group (APG) standard solution lot 41045 (COC ID No. 3583) was used for the VOC PE analysis. The QC acceptance criteria specify that the measured concentrations should be within the range established by APG for each analyte through an inter-laboratory evaluation study. This criteria was met for all compounds in the PE sample, except as shown in the table below.

PE COC No.	Failed PE Compound	Acceptance Range (ug/L)	Measured (ug/L)	Qualifiers to be Applied		RTI COC Nos. of Qualified Samples
				Detect	Non-Detect	
3583	tetrachloroethene	47.1 - 91.0	40.5	Jl	UJ	3561, 3563, 3565, 3568 - 3570, and 3572 - 3582
	dichloromethane	33.2 - 72.3	78.8	Jh	—	none

11.0 Additional Data Qualifications

In the ENCO analytical report, the flag J was applied to an analytical result when the detected level was below the practical quantitation limit and, therefore, the concentration could only be estimated. This sample result is shown in the table below. The J flag applied to this result is appropriate, but will be retained in the RTI database as a Jr flag.

RTI COC No.	Compound	Qualifier to be Applied
3569	1,1-dichloroethane	Jr

Jr = The analyte was positively identified above the method detection limit, but the reported numerical value is approximate because the detected concentration is below the practical quantitation limit.

12.0 Overall Data Quality Assessment

These data are complete and useable as qualified for their intended purpose. In accordance with the data validation SOP, no samples were rejected. Minor qualifications were required as described in Section 2.0, 3.0, 10.0, and 11.0. These qualifications should be considered in evaluating and using the data.

Table of Qualified Sample Results

Sample COC No.	Sampling Location ID	Compound	Result (ug/L)		Qualifier	Reason
			Value	PQL		
3561	CAF-8B	59 VOC analytes	ND	0.5	UJ	Hold time outside limits, and PE outside limits for tetrachloroethene
3563	CAF-9B	59 VOC analytes	ND	0.5	UJ	Hold time outside limits, and PE outside limits for tetrachloroethene
3565	CAF-10B	59 VOC analytes	ND	0.5	UJ	Hold time outside limits, and PE outside limits for tetrachloroethene
3568	CAF-17C	53 VOC analytes	ND	0.5	UJ	Hold time outside limits, and PE outside limits for tetrachloroethene
		n-butylbenzene	0.7	0.5	J	Hold time outside of limits
		1,1-dichloroethane	2.0	0.5	J	Hold time outside of limits
		cis-1,2-dichloroethene	18.1	0.5	J	Hold time outside of limits
		trans-1,2-dichloroethene	0.6	0.5	J	Hold time outside of limits
		toluene	1.2	0.5	Ub	Analyte detected in trip blank
		vinyl chloride	8.7	0.5	J	Hold time outside of limits
3569	OB-5	57 VOC analytes	ND	0.5	UJ	Hold time outside limits, and PE outside limits for tetrachloroethene
		cis-1,2-dichloroethene	12.2	0.5	J	Hold time outside of limits
		vinyl chloride	2.9	0.5	J	Hold time outside of limits
3570	OCW-2C	54 VOC analytes	ND	0.5	UJ	Hold time outside limits, and PE outside limits for tetrachloroethene
		1,1-dichloroethane	1.1	0.5	J	Hold time outside of limits
		trans-1,2-dichloroethene	0.7	0.5	J	Hold time outside of limits
		cis-1,2-dichloroethene	70.7	5.0	J	Hold time outside of limits
		trichloroethene	4.5	0.5	J	Hold time outside of limits
		vinyl chloride	1.2	0.5	J	Hold time outside of limits
3572	OCW-4B	58 VOC analytes	ND	0.5	UJ	Hold time outside limits, and PE outside limits for tetrachloroethene
		chloroform	31.1	0.5	J	Hold time outside of limits

Sample COC No.	Sampling Location ID	Compound	Result (ug/L)		Qualifier	Reason
			Value	PQL		
3573	OCW-4B (dup)	58 VOC analytes	ND	0.5	UJ	Hold time outside limits, and PE outside limits for tetrachloroethene
		chloroform	31.1	0.5	J	Hold time outside of limits
3574	OCW-5D	59 VOC analytes	ND	0.5	UJ	Hold time outside limits, and PE outside limits for tetrachloroethene
3575	OSW-1A	58 VOC analytes	ND	0.5	UJ	Hold time outside limits, and PE outside limits for tetrachloroethene
		cis-1,2-dichloroethene	3.8	0.5	J	Hold time outside of limits
3576	SW-14	56 VOC analytes	ND	0.5	UJ	Hold time outside limits, and PE outside limits for tetrachloroethene
		cis-1,2-dichloroethene	10.2	0.5	J	Hold time outside of limits
		trichloroethene	1.1	0.5	J	Hold time outside of limits
		vinyl chloride	1.2	0.5	J	Hold time outside of limits
3577	FB @ SW-14	59 VOC analytes	ND	0.5	UJ	Hold time outside limits, and PE outside limits for tetrachloroethene
3578	SW-14 (dup)	56 VOC analytes	ND	0.5	UJ	Hold time outside limits, and PE outside limits for tetrachloroethene
		cis-1,2-dichloroethene	10.0	0.5	J	Hold time outside of limits
		trichloroethene	1.0	0.5	J	Hold time outside of limits
		vinyl chloride	1.1	0.5	J	Hold time outside of limits
3579	SWS-1	59 VOC analytes	ND	0.5	UJ	Hold time outside limits, and PE outside limits for tetrachloroethene
3580	SWS-6	59 VOC analytes	ND	0.5	UJ	Hold time outside limits, and PE outside limits for tetrachloroethene
3581	SWS-8	59 VOC analytes	ND	0.5	UJ	Hold time outside limits, and PE outside limits for tetrachloroethene
3582	SWS-9	58 VOC analytes	ND	0.5	UJ	Hold time outside limits, and PE outside limits for tetrachloroethene
		cis-1,2-dichloroethene	0.8	0.5	J	Hold time outside of limits

PQL = Practical Quantitation Limit
J =The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ = The analyte was not detected above the reported practical quantitation limit. However, the reported practical quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
Ub = The sample result is qualitatively suspect because the analyte was detected in a field and/or laboratory blank at similar levels.

RTI INTERNATIONAL
3040 Cornwallis Road ▪ PO Box 12194 ▪ Research Triangle Park, NC 27709-2194 ▪ USA
Telephone 919 541-6000 ▪ Fax 919 541-5985 ▪ www.rti.org

Data Validation Memorandum

To: Andrew D. Stahl, P.G. April 19, 2007
Project Hydrogeologist, Manager

From: Andrea C. McWilliams
Quality Assurance Officer

Subject: Laboratory Data Validation, RTI Project 09739.000.005
Organics and Inorganics in Groundwater, March 2007 Sampling Event

This data validation memorandum has been prepared for samples collected on March 26-28, 2007, and analyzed by Oxford Laboratories, Inc.; RTI's Environmental and Industrial Chemistry Department Laboratory; and Environmental Conservation Laboratories, Inc. (ENCO). The samples were collected during the 2007 annual sampling and analysis event designed to monitor the natural-attenuation processes occurring at the Northwest Site Area. For the analyses subject to data validation, the information on the chain-of-custody (COC) forms completed for this sampling event is summarized as follows:

Parameter/Method	Matrix	No. of Samples
Fluoride/SM 4500-F^--C	water	26
Uranium/EPA Method 200.8	water	26
Volatile Organic Compounds (VOCs)/EPA Method 8260B	water	27

As of the beginning of 2007, the analytical method utilized for this project for VOCs has been changed from gas chromatography EPA Method 8021 to gas chromatography/mass spectrometry EPA Method 8260B, as listed above. Prior to approving this change, RTI International reviewed ENCO's method validation performance data to ensure that the method detection limits (MDLs) and practical quantitation limits (PQLs) were consistent with those previously applied to this project (e.g., the project requires the PQL to be no greater than 0.5 ug/L), and that other project specific requirements would remain unchanged (e.g., spiking solutions for laboratory quality control [QC] analyses are comprised of previously established project-specific analytes). ENCO is certified by the Certification Section of the NC Division of Water Quality Chemistry Laboratory under 15A NCAC 2H .0800 for the utilized analytical method.

Validation and review of the referenced data packages were performed on the quality control (QC) data and other information presented in the laboratories' analytical reports. The validation was conducted in accordance with the procedures set forth in the project-specific Quality Assurance Project Plan (QAPP) [RTI Report No. 6448-018/006/01F]. The QAPP prescribes use of RTI's *Standard Operating Procedures for the Validation of Inorganic and Organic Data* (SOPs), which were prepared with the guidance of the *National Functional Guidelines for Inorganic Data Review* (US EPA, 2004) and *National Functional Guidelines for Organic Data Review* (US EPA, 1999). Note that these SOPs do not require evaluation of initial and continuing calibrations or internal standard performance. Data-validation qualifiers referenced in this memorandum are defined as footnotes to the attached table.

1.0 Data Completeness

All analyses were performed as requested on the COC forms.

2.0 Preservation and Holding Time

The samples were preserved as required. All samples were analyzed within holding times, which are 28 days for fluoride, 180 days for uranium, and 14 days for VOCs.

3.0 Blanks

3.1 Method Blanks

Five method blanks were analyzed for fluoride, and two were analyzed for uranium and VOCs. No target compounds were detected.

3.2 Trip Blanks.

One trip blank was included with this batch of samples for analysis of VOCs. No target compounds were detected.

3.3 Field Blanks

One field blank was included for fluoride, uranium, and VOC analyses. No target compounds were detected.

4.0 Surrogates

The surrogates employed for the VOC analyses were appropriate to the method. All surrogate recoveries were within the method acceptance ranges as summarized in the table below.

Surrogates	Aqueous QC Limits
4-bromofluorobenzene	70-130%
dibromofluoromethane	70-130%
toluene-d8	80-120%

5.0 Laboratory Control Samples

Five laboratory control samples (LCSs) were analyzed for fluoride, and two were analyzed for uranium and VOCs. All of these results were within the acceptance limits of 80-120 percent recovery (%R) for fluoride and uranium and the specified limits for each VOC analyte, except as shown in the table below. Sample results requiring qualification are summarized in the attached table.

Analytical Date	Failed LCS Compound	LCS %R Acceptance Limits	Measured %R	Applicable Qualifiers		RTI COC No. of Qualified Sample
				Detect	Non-Detect	
4/2/07	naphthalene	70-130	46	Jl	UJ	3593 -3598, 3602 - 3609, 3611, and 3618
4/3/07	naphthalene	70-130	42	Jl	UJ	3612 -3614, 3616, 3617, and 3619 -3623
	1,2-dichloroethane		132	Jh	—	none

6.0 Matrix Spikes

Five matrix spike (MS) analyses were performed for fluoride, and two were performed for uranium and VOCs. The MS results for fluoride and uranium were within the 80-120 %R acceptance criteria. For the VOCs, the two MS analyses were performed in duplicate (see section 7.0). The percent recoveries for these four MS analyses were within RTI's QC acceptance limits, except as shown in the table below. Sample results requiring qualification are summarized in the attached table.

Analytical Date	Spiked Sample	Failed MS Compound	MS %R Acceptance Limits	Measured %Rs	Applicable Qualifiers		RTI COC No. of Qualified Sample
					Detect	Non-Detect	
4/2/07	3618	naphthalene	70-130	41, 45	Jl	UJ	3593 -3598, 3602 -3609, 3611, and 3618
4/3/07	3623	naphthalene	70-130	38, 45	Jl	UJ	3612 -3614, 3616, 3617, and 3619 -3623
		1,2-dichloroethane		133	Jh	—	none

7.0 Matrix Spike Duplicates

Two MS duplicates (MSDs) were analyzed for VOCs. The relative percent difference (RPD) for all MS analytes were within acceptance criteria of ≤20 RPD.

8.0 Laboratory Duplicates

Four laboratory duplicate analyses were performed for fluoride, and two were performed for uranium. All of the analyses met the QC acceptance criteria of ≤30 RPD.

9.0 Field Duplicates

Samples from monitoring well CAF-7A were submitted as blind field duplicates for fluoride and uranium analyses. A blind duplicate for VOCs was sampled from OB-5. The QC acceptance criteria were met by all compounds in these sample sets, except as shown in the table below. Sample results requiring qualification are summarized in the attached table.

Analytical Date	Sample Location	Failed MS/MSD Compound	RPD Limit	RPD	Applicable Qualifiers		RTI COC No. of Qualified Sample
					Detect	Non-Detect	
4/2/07	OB-5	1,1-dichloropropene	50	67	J	UJ	3604 and 3605

10.0 Performance Evaluation Sample

High Purity Standards (HPS) provided the fluoride and uranium standard solutions used as performance evaluation (PE) samples. HPS Standard lots 0708506 and 0708512 (COC ID No 3625) were submitted as double-blind PE samples for fluoride and uranium analyses, respectively. The PE analyses met the performance criteria of 80-120% recovery, with recoveries of 96 and 108% for fluoride and uranium, respectively. Analytical Products Group (APG) standard solution lot 49700 (COC ID No. 3624) was used for the VOC PE analysis. The QC acceptance criteria specify that the measured concentrations should be within the range established by APG for each analyte through an inter-laboratory evaluation study. This criteria was met for all compounds in the PE sample.

11.0 Additional Data Qualifications

In the ENCO analytical report, the flag J was applied to an analytical result when the detected level was below the practical quantitation limit and, therefore, the concentration could only be estimated. This sample result is shown in the table below. The J flag applied to this result is appropriate, but will be retained in the RTI database as a Jr flag.

RTI COC No.	Compound	Qualifier to be Applied
3603	1,2-dichloroethane	Jr
	trans-1,2-dichloroethane	
3604	1,1-dichloroethane	
3605	1,1-dichloroethane	
3608	vinyl chloride	

Jr = The analyte was positively identified above the method detection limit, but the reported numerical value is approximate because the detected concentration is below the practical quantitation limit.

12.0 Overall Data Quality Assessment

These data are complete and useable as qualified for their intended purpose. In accordance with the data validation SOP, no samples were rejected. Minor qualifications were required as described in Section 5.0, 6.0, 9.0, and 11.0. These qualifications should be considered in evaluating and using the data.

Table of Qualified Sample Results

Sample COC No.	Sampling Location ID	Compound	Result (ug/L)		Qualifier	Reason
			Value	PQL		
3593	CAF-8A	naphthalene	ND	0.5	UJ	LCS and MS/MSDs %Rs outside limits
3594	CAF-8B	naphthalene	ND	0.5	UJ	LCS and MS/MSDs %Rs outside limits
3595	CAF-9A	naphthalene	ND	0.5	UJ	LCS and MS/MSDs %Rs outside limits
3596	CAF-9B	naphthalene	ND	0.5	UJ	LCS and MS/MSDs %Rs outside limits
3597	CAF-10A	naphthalene	ND	0.5	UJ	LCS and MS/MSDs %Rs outside limits
3598	CAF-10B	naphthalene	ND	0.5	UJ	LCS and MS/MSDs %Rs outside limits
3602	CAF-16C	naphthalene	ND	0.5	UJ	LCS and MS/MSDs %Rs outside limits
3603	CAF-17C	naphthalene	ND	0.5	UJ	LCS and MS/MSDs %Rs outside limits
3604	OB-5	naphthalene	ND	0.5	UJ	LCS and MS/MSDs %Rs outside limits
		1,1-dichloropropene	ND	0.5	UJ	Field duplicate RPD outside limits
3605	OB-5 (dup)	naphthalene	ND	0.5	UJ	LCS and MS/MSDs %Rs outside limits
		1,1-dichloropropene	1.0	0.5	J	Field duplicate RPD outside limits
3606	FB @ OB-5	naphthalene	ND	0.5	UJ	LCS and MS/MSDs %Rs outside limits
3607	OCW-1C	naphthalene	ND	0.5	UJ	LCS and MS/MSDs %Rs outside limits
3608	OCW-2C	naphthalene	ND	0.5	UJ	LCS and MS/MSDs %Rs outside limits
3609	OCW-3C	naphthalene	ND	0.5	UJ	LCS and MS/MSDs %Rs outside limits
3611	OCW-4A	naphthalene	ND	0.5	UJ	LCS and MS/MSDs %Rs outside limits
3612	OCW-4B	naphthalene	ND	0.5	UJ	LCS and MS/MSDs %Rs outside limits
3613	OCW-5D	naphthalene	ND	0.5	UJ	LCS and MS/MSDs %Rs outside limits
3614	OSW-1A	naphthalene	ND	0.5	UJ	LCS and MS/MSDs %Rs outside limits
3616	SW-2	naphthalene	ND	0.5	UJ	LCS and MS/MSDs %Rs outside limits
3617	SW-3	naphthalene	ND	0.5	UJ	LCS and MS/MSDs %Rs outside limits
3618	SW-14	naphthalene	ND	0.5	UJ	LCS and MS/MSDs %Rs outside limits
3619	SWS-1	naphthalene	ND	0.5	UJ	LCS and MS/MSDs %Rs outside limits
3620	SWS-4	naphthalene	ND	0.5	UJ	LCS and MS/MSDs %Rs outside limits
3621	SWS-6	naphthalene	ND	0.5	UJ	LCS and MS/MSDs %Rs outside limits

Sample COC No.	Sampling Location ID	Compound	Result (ug/L)		Qualifier	Reason
			Value	PQL		
3622	SWS-8	naphthalene	ND	0.5	UJ	LCS and MS/MSDs %Rs outside limits
3623	SWS-9	naphthalene	ND	0.5	UJ	LCS and MS/MSDs %Rs outside limits

PQL = Practical Quantitation Limit
FB = Field Duplicate
J =The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ = The analyte was not detected above the reported practical quantitation limit. However, the reported practical quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

RTI INTERNATIONAL
3040 Cornwallis Road ▪ PO Box 12194 ▪ Research Triangle Park, NC 27709-2194 ▪ USA
Telephone 919 541-6000 ▪ Fax 919 541-5985 ▪ www.rti.org

Data Validation Memorandum

To: Andrew D. Stahl, P.G. November 13, 2007
Project Hydrogeologist, Manager

From: Andrea C. McWilliams
Quality Assurance Officer

Subject: Laboratory Data Validation, RTI Project 0600002.000.005
Organics and Inorganics in Groundwater, October 2007 Sampling Event

This data validation memorandum has been prepared for samples collected on October 1-3, 2007, and analyzed by Oxford Laboratories, Inc.; RTI's Environmental and Industrial Chemistry Department Laboratory; and Environmental Conservation Laboratories, Inc. (ENCO). The samples were collected during the 2007 biannual sampling and analysis event designed to monitor the natural-attenuation processes occurring at the Northwest Site Area. The information on the chain-of-custody (COC) forms completed for this sampling event is summarized as follows:

Parameter/Method	Matrix	No. of Samples
Fluoride/SM 4500-F^--C	water	17
Uranium/EPA Method 200.8	water	17
Volatile Organic Compounds (VOCs)/EPA Method 8260B	water	14

Validation and review of the referenced data packages were performed on the quality control (QC) data and other information presented in the laboratories' analytical reports. The validation was conducted in accordance with the procedures set forth in the project-specific Quality Assurance Project Plan (QAPP) [RTI Report No. 6448-018/006/01F]. The QAPP prescribes use of RTI's *Standard Operating Procedures for the Validation of Inorganic and Organic Data* (SOPs), which were prepared with the guidance of the *National Functional Guidelines for Inorganic Data Review* (US EPA, 2004) and *National Functional Guidelines for Organic Data Review* (US EPA, 1999). Note that these SOPs do not require evaluation of initial and continuing calibrations or internal standard performance. Data-validation qualifiers referenced in this memorandum are defined as footnotes to the attached table.

1.0 Data Completeness

All analyses were performed as requested on the COC forms.

2.0 Preservation and Holding Time

The samples were preserved as required. All samples were analyzed within holding times, which are 28 days for fluoride, 180 days for uranium, and 14 days for VOCs.

3.0 Blanks

3.1 Method Blanks

Five method blanks were analyzed for fluoride, and two were analyzed for uranium and VOCs. No target compounds were detected.

3.2 Trip Blanks.

One trip blank was included with this batch of samples for analysis of VOCs. No target compounds were detected.

3.3 Field Blanks

One field blank was included for fluoride, uranium, and VOC analyses. No target compounds were detected.

4.0 Surrogates

The surrogates employed for the VOC analyses were appropriate to the method. All surrogate recoveries were within the method acceptance ranges as summarized in the table below.

Surrogates	Aqueous QC Limits
4-bromofluorobenzene	70-130%
dibromofluoromethane	70-130%
toluene-d8	80-120%

5.0 Laboratory Control Samples

Five laboratory control samples (LCSs) were analyzed for fluoride, and two were analyzed for uranium and VOCs. All of these results were within the acceptance limits of 80-120 percent recovery (%R) for fluoride and uranium and the specified limits for each VOC analyte.

6.0 Matrix Spikes

Five matrix spike (MS) analyses were performed for fluoride, one was performed for uranium, and two were performed for VOCs. The MS results for fluoride and uranium were within the 80-120 %R acceptance criteria. For the VOCs, the two MS analyses were performed in duplicate (see section 7.0). The percent

recoveries for these four MS analyses were within RTI's QC acceptance limits, except as shown in the table below. Since none of the analytes were detected in any of the field samples, no sample results require qualification.

Analytical Date	Spiked Sample	Failed MS Compound	MS %R Acceptance Limits	Measured %Rs	Applicable Qualifiers		RTI COC No. of Qualified Sample
					Detect	Non-Detect	
10/13/07	3644	vinyl chloride	70-130	168, 161	Jh	—	none
		cis-1,2-dichloroethane	70-130	180, 135	Jh	—	none
		naphthalene	70-130	144, 135	Jh	—	none

7.0 Matrix Spike Duplicates

Two MS duplicates (MSDs) were analyzed for VOCs. The relative percent difference (RPD) for all MS analytes were within acceptance criteria of ≤20 RPD.

8.0 Laboratory Duplicates

Five laboratory duplicate analyses were performed for fluoride, and one was performed for uranium. All of the analyses met the QC acceptance criteria of ≤30 RPD.

9.0 Field Duplicates

Samples from monitoring well CAF-6B were submitted as blind field duplicates for fluoride and uranium analyses. A blind duplicate for VOCs was sampled from CAF-17C. The QC acceptance criteria were met by all compounds in these sample sets.

10.0 Performance Evaluation Sample

High Purity Standards (HPS) provided the fluoride and uranium standard solutions used as performance evaluation (PE) samples. HPS Standard lots 0727016 and 0727404 (COC ID No 3656) were submitted as double-blind PE samples for fluoride and uranium analyses, respectively. The PE analyses met the performance criteria of 80-120% recovery, with recoveries of 107 and 97% for fluoride and uranium, respectively. Analytical Products Group (APG) standard solution lot 47838 (COC ID No. 3655) was used for the VOC PE analysis. The QC acceptance criteria specify that the measured concentrations should be within the range established by APG for each analyte through an inter-laboratory evaluation study. This criteria was met for all compounds in the PE sample, except as shown in the table below. Since dichloromethane was not detected in any of the field samples, no sample results require qualification.

PE COC No.	Failed PE Compound	Acceptance Range (ug/L)	Measured (ug/L)	Qualifiers to be Applied		RTI COC Nos. of Qualified Samples
				Detect	Non-Detect	
3655	dichloromethane	37.8 - 86	96	Jh	—	none

11.0 Additional Data Qualifications

In the ENCO analytical report, the flag J was applied to an analytical result when the detected level was below the practical quantitation limit and, therefore, the concentration could only be estimated. This sample result is shown in the table below. The J flag applied to this result is appropriate, but will be retained in the RTI database as a Jr flag.

RTI COC No.	Compound	Qualifier to be Applied
3641	toluene	Jr
	trans-1,2-dichloroethane	
3642	1,2-dichloroethene	
3643	1,1-dichloroethane	

Jr = The analyte was positively identified above the method detection limit, but the reported numerical value is approximate because the detected concentration is below the practical quantitation limit.

12.0 Overall Data Quality Assessment

These data are complete and useable as qualified for their intended purpose. In accordance with the data validation SOP, no samples were rejected. Minor qualifications were required as described in Section 11.0. These qualifications should be considered in evaluating and using the data.

Appendix C

Analytical Results

Table C-1. Explanation of Data Validation Qualifiers
Table C-2. Analytical Results — Primary Organic Constituents
Table C-3. Analytical Results — Other Organic Constituents Detected in 2006-2007
Table C-4. Analytical Results — Inorganic Constituents
Table C-5. 2006-2007 Biannual Field and Natural Attenuation Parameter Measurements
Table C-6. 2006-2007 Annual Field and Natural Attenuation Parameter Measurements

Table C-1. Explanation of Data Validation Qualifiers

Data Flag	Data Qualifier Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
Jh	The reported concentration is approximate and probably biased towards higher values than the actual concentration of the analyte in the sample.
Jl	The reported concentration is approximate and probably biased towards lower values than the actual concentration of the analyte in the sample.
Jr	The analyte was positively identified above the method detection limit, but the reported numerical value is approximate because the detected concentration is below the practical quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
U	The analyte was analyzed for, but was not detected above the reported practical quantitation limit.
Ub	The sample result is qualitatively suspect because the analyte was detected in a field and/or laboratory blank at similar levels.
UJ	The analyte was not detected above the practical quantitation limit. However, the reported practical quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

Table C-2. Analytical Results — Primary Organic Constituents.

Location		Date Sampled	Trichloroethylene (ug/L)	cis-1,2-Dichloroethylene (ug/L)	Vinyl Chloride (ug/L)
CAF-8A		2/25/1997	ND 0.50	ND 0.50	ND 0.50
		5/12/1997	ND 0.50	ND 0.50	ND 0.50
		8/10/1998	ND 0.50	ND 0.50	ND 0.50
		11/10/1998	ND 0.50	ND 0.50	ND 0.50
		3/19/1999	ND 0.5	ND 0.5	ND 0.5 UJ
		5/18/1999	ND 0.5	ND 0.5	ND 0.5
		8/16/1999	ND 0.5	ND 0.5	ND 0.5
		11/17/1999	ND 0.5	ND 0.5	ND 0.5
		2/14/2000	ND 0.5	ND 0.5	ND 0.5
		6/14/2000	ND 0.5	ND 0.5	ND 0.5
		8/2/2000	ND 0.5	ND 0.5	ND 0.5
		11/7/2000	ND 0.5	ND 0.5	ND 0.5
		4/19/2001	ND 0.5	ND 0.5	ND 0.5
		4/22/2002	ND 0.5	ND 0.5	ND 0.5 UJ
		2/19/2003	ND 0.5	ND 0.5	ND 0.5 UJ
		2/23/2004	ND 0.5	ND 0.5	ND 0.5
		5/11/2005	ND 0.5	ND 0.5	ND 0.5
	2006-2007	5/2/2006	ND 0.2	ND 0.2	ND 0.3
		3/28/2007	ND 0.5	ND 0.5	ND 0.5
CAF-8B		2/25/1997	**1.23**	**32.0**	ND 0.50
		5/12/1997	**0.53**	**14.8**	ND 0.50
		8/10/1998	ND 0.50	**0.32 Jr**	ND 0.50
		11/10/1998	**0.15 Jr**	ND 0.50	ND 0.50
		1/14/1999	ND 0.50	ND 0.50	ND 0.50
		3/19/1999	ND 0.5	ND 0.5	ND 0.5 UJ
		5/18/1999	ND 0.5	ND 0.5	ND 0.5
		8/16/1999	ND 0.5	ND 0.5	ND 0.5
		11/17/1999	ND 0.5	ND 0.5	ND 0.5
		2/14/2000	ND 0.5	ND 0.5	ND 0.5
		6/14/2000	ND 0.5	ND 0.5	ND 0.5
		8/2/2000	ND 0.5	ND 0.5	ND 0.5
		11/7/2000	ND 0.5	ND 0.5	ND 0.5
		4/19/2001	ND 0.5	ND 0.5	ND 0.5
		10/9/2001	ND 0.5	**0.5**	ND 0.5 UJ
		4/22/2002	ND 0.5	**0.4 Jr**	ND 0.5 UJ
		10/7/2002	ND 0.5	ND 0.5	ND 0.5 UJ
		2/19/2003	ND 0.5	ND 0.5	ND 0.5 UJ
		9/2/2003	ND 0.5	ND 0.5	ND 0.5
		2/23/2004	ND 0.5	ND 0.5	ND 0.5
		10/5/2004	ND 0.5	ND 0.5	ND 0.5
		5/11/2005	ND 0.5	ND 0.5	ND 0.5
		9/27/2005	ND 0.5	ND 0.5	ND 0.5
	2006-2007	5/2/2006	ND 0.2	ND 0.2	ND 0.3
		9/18/2006	ND 0.5 UJ	ND 0.5 UJ	ND 0.5 UJ
		3/28/2007	ND 0.5	ND 0.5	ND 0.5
		10/1/2007	ND 0.5	ND 0.5	ND 0.5
CAF-9A		2/25/1997	ND 0.50	**0.18 Jr**	ND 0.50
		5/12/1997	ND 0.50	**0.13 Jr**	ND 0.50
		8/10/1998	ND 0.50	ND 0.50	ND 0.50

Notes: ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).

Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-2. Analytical Results — Primary Organic Constituents.

Location		Date Sampled	Trichloroethylene (ug/L)	cis-1,2-Dichloroethylene (ug/L)	Vinyl Chloride (ug/L)
CAF-9A		11/10/1998	ND 0.50	ND 0.50	ND 0.50
		3/19/1999	ND 0.5	ND 0.5	ND 0.5 UJ
		5/18/1999	ND 0.5	ND 0.5	ND 0.5
		8/16/1999	ND 0.5	ND 0.5	ND 0.5
		11/17/1999	ND 0.5	ND 0.5	ND 0.5
		2/16/2000	ND 0.5	ND 0.5	ND 0.5
		6/14/2000	ND 0.5	ND 0.5	ND 0.5
		8/2/2000	ND 0.5	ND 0.5	ND 0.5
		11/7/2000	ND 0.5	ND 0.5	ND 0.5
		4/19/2001	ND 0.5	ND 0.5	ND 0.5
		4/22/2002	ND 0.5	ND 0.5	ND 0.5 UJ
		2/17/2003	ND 0.5	ND 0.5	ND 0.5 UJ
		2/23/2004	ND 0.5	ND 0.5	ND 0.5
		5/11/2005	ND 0.5	ND 0.5	ND 0.5
	2006-2007	5/2/2006	ND 0.2	ND 0.2	ND 0.3
		3/28/2007	ND 0.5	ND 0.5	ND 0.5
CAF-9B		2/25/1997	**0.84**	**16.0**	ND 0.50
		5/12/1997	**0.40 Jr**	**7.37**	ND 0.50
		8/11/1998	ND 0.50	**0.23 Jr**	ND 0.50
		11/10/1998	ND 0.50	ND 0.50	ND 0.50
		1/15/1999	ND 0.50	ND 0.50	ND 0.50
		3/19/1999	ND 0.5	ND 0.5	ND 0.5 UJ
		5/18/1999	ND 0.5	ND 0.5	ND 0.5
		8/16/1999	ND 0.5	ND 0.5	ND 0.5
		11/17/1999	ND 0.5	ND 0.5	ND 0.5
		2/15/2000	ND 0.5	ND 0.5	ND 0.5
		6/14/2000	ND 0.5	ND 0.5	ND 0.5
		8/2/2000	ND 0.5	ND 0.5	ND 0.5
		11/7/2000	ND 0.5	ND 0.5	ND 0.5
		4/19/2001	ND 0.5	ND 0.5	ND 0.5
		10/9/2001	ND 0.5	ND 0.5	ND 0.5 UJ
		4/22/2002	ND 0.5	ND 0.5	ND 0.5 UJ
		10/7/2002	ND 0.5	ND 0.5	ND 0.5 UJ
		2/17/2003	ND 0.5	ND 0.5	ND 0.5 UJ
		9/2/2003	ND 0.5	ND 0.5	ND 0.5
		2/23/2004	ND 0.5	ND 0.5	ND 0.5
		10/5/2004	ND 0.5	ND 0.5	ND 0.5
		5/11/2005	ND 0.5	ND 0.5	ND 0.5
		9/27/2005	ND 0.5	ND 0.5	ND 0.5
	2006-2007	5/2/2006	ND 0.2	ND 0.2	ND 0.3
		9/18/2006	ND 0.5 UJ	ND 0.5 UJ	ND 0.5 UJ
		3/28/2007	ND 0.5	ND 0.5	ND 0.5
		10/1/2007	ND 0.5	ND 0.5	ND 0.5
CAF-10A		2/24/1997	ND 0.50	ND 0.50	ND 0.50
		5/9/1997	ND 0.50	ND 0.50	ND 0.50
		8/10/1998	ND 0.50	ND 0.50	ND 0.50
		3/19/1999	ND 0.5	ND 0.5	ND 0.5 UJ
		5/18/1999	ND 0.5	ND 0.5	ND 0.5
		8/16/1999	ND 0.5	ND 0.5	ND 0.5

Notes: ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).

Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-2. Analytical Results — Primary Organic Constituents.

Location		Date Sampled	Trichloroethylene (ug/L)	cis-1,2-Dichloroethylene (ug/L)	Vinyl Chloride (ug/L)
CAF-10A		11/15/1999	ND 0.5	ND 0.5	ND 0.5
		2/14/2000	ND 0.5	ND 0.5	ND 0.5
		6/12/2000	ND 0.5	ND 0.5	ND 0.5
		7/31/2000	ND 0.5	ND 0.5	ND 0.5
		11/7/2000	ND 0.5	ND 0.5	ND 0.5
		4/19/2001	ND 0.5	ND 0.5	ND 0.5
		4/24/2002	ND 0.5	ND 0.5	ND 0.5 UJ
		2/19/2003	ND 0.5	ND 0.5	ND 0.5 UJ
		2/19/2004	ND 0.5	ND 0.5	ND 0.5
		5/9/2005	ND 0.5	ND 0.5	ND 0.5
	2006-2007	5/2/2006	ND 0.2	ND 0.2	ND 0.3
		3/26/2007	ND 0.5	ND 0.5	ND 0.5
CAF-10B		2/24/1997	ND 0.50	ND 0.50	ND 0.50
		5/9/1997	ND 0.50	ND 0.50	ND 0.50
		8/10/1998	ND 0.50	ND 0.50	ND 0.50
		3/19/1999	ND 0.5	ND 0.5	ND 0.5 UJ
		5/18/1999	ND 0.5	ND 0.5	ND 0.5
		8/16/1999	ND 0.5	ND 0.5	ND 0.5
		11/15/1999	ND 0.5	ND 0.5	ND 0.5
		2/14/2000	ND 0.5	ND 0.5	ND 0.5
		6/12/2000	ND 0.5	ND 0.5	ND 0.5
		7/31/2000	ND 0.5	ND 0.5	ND 0.5
		11/7/2000	ND 0.5	ND 0.5	ND 0.5
		4/19/2001	ND 0.5	ND 0.5	ND 0.5
		10/8/2001	ND 0.5	ND 0.5	ND 0.5 UJ
		4/24/2002	ND 0.5	ND 0.5	ND 0.5 UJ
		10/7/2002	ND 0.5	ND 0.5	ND 0.5 UJ
		2/19/2003	ND 0.5	ND 0.5	ND 0.5 UJ
		9/4/2003	ND 0.5	ND 0.5	ND 0.5
		2/20/2004	ND 0.5	ND 0.5	ND 0.5
		10/5/2004	ND 0.5	ND 0.5	ND 0.5
		5/9/2005	ND 0.5	ND 0.5	ND 0.5
		9/26/2005	ND 0.5	ND 0.5	ND 0.5
	2006-2007	5/2/2006	ND 0.2	ND 0.2	ND 0.3
		9/18/2006	ND 0.5 UJ	ND 0.5 UJ	ND 0.5 UJ
		3/26/2007	ND 0.5	ND 0.5	ND 0.5
		10/1/2007	ND 0.5	ND 0.5	ND 0.5
CAF-16C		5/19/1998	ND 0.50	ND 0.50	ND 0.50
		8/10/1998	ND 0.50	ND 0.50	ND 0.50
		11/10/1998	ND 0.50	ND 0.50	ND 0.50
		1/15/1999	ND 0.50	ND 0.50	ND 0.50
		3/17/1999	ND 0.5	ND 0.5	ND 0.5 UJ
		5/17/1999	ND 0.5	ND 0.5	ND 0.5
		8/16/1999	ND 0.5	ND 0.5	ND 0.5
		11/17/1999	ND 0.5	ND 0.5	ND 0.5
		2/16/2000	ND 0.5	ND 0.5	ND 0.5
		6/14/2000	ND 0.5	ND 0.5	ND 0.5
		7/31/2000	ND 0.5	ND 0.5	ND 0.5
		11/6/2000	ND 0.5	ND 0.5	ND 0.5

Notes: ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).

Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-2. Analytical Results — Primary Organic Constituents.

Location		Date Sampled	Trichloroethylene (ug/L)	cis-1,2-Dichloroethylene (ug/L)	Vinyl Chloride (ug/L)
CAF-16C		4/19/2001	ND 0.5	ND 0.5	ND 0.5
		4/23/2002	ND 0.5	ND 0.5	ND 0.5 UJ
		2/19/2003	ND 0.5	ND 0.5	ND 0.5 UJ
		2/20/2004	ND 0.5	ND 0.5	ND 0.5
		5/9/2005	ND 0.5	ND 0.5	ND 0.5
	2006-2007	5/2/2006	ND 0.2	ND 0.2	ND 0.3
		3/26/2007	ND 0.5	ND 0.5	ND 0.5
CAF-17C		5/19/1998	ND 0.50	**328**	**196**
		8/12/1998	ND 0.50	**1162**	**81.9**
		11/11/1998	**0.86**	**740**	**50.0**
		1/15/1999	**0.35 Jr**	**764**	ND 0.50
		3/18/1999	ND 5.0	**697**	**25.0 Jl**
		5/19/1999	ND 5.0	**719**	**33.8**
		8/17/1999	ND 5.0 UJ	**630**	**38.1**
		11/17/1999	ND 5.0	**399**	**27.8 Jl**
		2/16/2000	ND 5.0	**362**	**32.8**
		6/14/2000	ND 0.5	**313**	**44.3**
		7/31/2000	ND 5.0	**380**	**39.2**
		11/7/2000	ND 5.0	**341**	**54.0**
		4/19/2001	ND 5.0	**311**	**53.6**
		10/9/2001	ND 5.0	**221**	**79.3 Jl**
		4/23/2002	ND 5.0	**197**	**85.2 Jl**
		10/8/2002	ND 0.5	**227**	**148 Jl**
		2/19/2003	ND 2.5	**218**	**115 Jl**
		9/4/2003	ND 5.0	**111**	**74.4 Jl**
		2/20/2004	ND 0.5	**107**	**38.0 Jl**
		10/5/2004	ND 0.5	**40.5**	**20.0**
		5/9/2005	ND 0.5	**52.4**	**33.5**
		9/27/2005	ND 0.5	**30.2**	**20.1**
	2006-2007	5/2/2006	ND 0.2	**15**	**17 Jl**
		9/19/2006	ND 0.5 UJ	**18.1 J**	**8.7 J**
		3/26/2007	ND 0.5	**46**	**19**
		10/1/2007	ND 0.5	**3.4**	ND 0.5
OB-5		2/11/1993	ND 0.50	**415**	ND 0.50
		3/11/1993	ND 20	**700**	ND 20
		4/20/1993	ND 25	**586**	ND 25
		12/16/1993	ND 5.0	**761**	ND 5.0
		1/27/1994	ND 1.0	**734**	ND 1.0
		6/30/1994	ND 25	**465**	ND 25
		2/2/1995	ND 25	**485**	ND 25
		7/27/1995	ND 25	**499**	ND 25
		1/19/1996	ND 25	**368**	ND 25
		8/6/1996	ND 1.0	**285**	ND 1.0
		10/29/1996	ND 50	**210**	ND 50
		1/17/1997	ND 100	**197**	**7.83 Jr**
		3/5/1997	ND 0.50	**185**	**7.95**
		4/22/1997	ND 25	**242**	ND 25
		7/23/1997	ND 0.50	**155**	ND 0.50
		10/28/1997	ND 0.50	**216**	**7.01**

Notes: ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).

Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-2. Analytical Results — Primary Organic Constituents.

Location		Date Sampled	Trichloroethylene (ug/L)	cis-1,2-Dichloroethylene (ug/L)	Vinyl Chloride (ug/L)
OB-5		1/22/1998	ND 0.50	**187**	ND 0.50
		4/21/1998	ND 0.50 UJ	**149**	ND 0.50
		7/22/1998	ND 0.50	**108**	ND 0.50
		7/24/1998	ND 0.50	**138**	**7.25**
		10/27/1998	ND 0.50	**97.5**	ND 0.50
		1/13/1999	ND 0.50	**138**	ND 0.50
		3/19/1999	ND 0.5	**97.6**	**4.9 Jl**
		5/19/1999	ND 0.5	**89.4**	**6.4**
		8/16/1999	ND 0.5	**73.9**	**5.4**
		11/15/1999	ND 0.5	**67.0**	**1.2 Jl**
		2/14/2000	ND 0.5	**77.7**	**1.2**
		6/14/2000	ND 0.5	**72.9**	**1.3**
		7/31/2000	ND 0.5	**88.7**	**1.2**
		11/7/2000	ND 0.5	**87.4**	**1.5**
		4/18/2001	ND 0.5	**76.0**	**1.5**
		10/9/2001	ND 0.5	**99.0**	**3.6 Jl**
		4/22/2002	ND 0.5	**81.9**	**6.4 Jl**
		10/7/2002	ND 0.5	**106**	**15.6 Jl**
		2/18/2003	ND 0.5	**149**	**22.0 Jl**
		9/4/2003	ND 0.5	**95.9**	**6.4**
		2/23/2004	ND 0.5	**81.5**	**6.2 Jl**
		10/6/2004	ND 0.5	**35.7**	**4.5**
		5/9/2005	ND 0.5	**32.6**	**4.7**
		9/28/2005	ND 0.5	**23.0**	**3.4**
	2006-2007	5/2/2006	ND 0.2	**20**	**4**
		9/19/2006	ND 0.5 UJ	**12.2 J**	**2.9 J**
		3/27/2007	ND 0.5	**4.4**	**1.5**
		10/3/2007	ND 0.5	**15**	ND 0.5
OCW-1C		8/10/1998	ND 0.50	ND 0.50	ND 0.50
		11/11/1998	ND 0.50	ND 0.50	ND 0.50
		1/13/1999	ND 0.50	ND 0.50	ND 0.50
		3/18/1999	ND 0.5	ND 0.5	ND 0.5 UJ
		5/17/1999	ND 0.5	ND 0.5	ND 0.5
		8/16/1999	ND 0.5	ND 0.5	ND 0.5
		11/16/1999	ND 0.5	ND 0.5	ND 0.5
		2/13/2000	ND 0.5	ND 0.5	ND 0.5
		6/12/2000	ND 0.5	ND 0.5	ND 0.5
		8/1/2000	ND 0.5	ND 0.5	ND 0.5
		11/6/2000	ND 0.5	ND 0.5	ND 0.5
		4/17/2001	ND 0.5	ND 0.5	ND 0.5
		4/24/2002	ND 0.5	ND 0.5	ND 0.5 UJ
		2/19/2003	ND 0.5	ND 0.5	ND 0.5 UJ
		2/20/2004	ND 0.5	ND 0.5	ND 0.5
		5/10/2005	ND 0.5	ND 0.5	ND 0.5
	2006-2007	5/1/2006	ND 0.2	ND 0.2	ND 0.3
		3/27/2007	ND 0.5	ND 0.5	ND 0.5
OCW-2C		8/11/1998	**41.9**	**686**	ND 0.50
		11/11/1998	**42.3**	**348**	**1.26**
		1/12/1999	**61.1**	**510**	ND 0.50

Notes: ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).

Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-2. Analytical Results — Primary Organic Constituents.

Location		Date Sampled	Trichloroethylene (ug/L)	cis-1,2-Dichloroethylene (ug/L)	Vinyl Chloride (ug/L)
OCW-2C		3/18/1999	**36.4**	**306**	ND 5.0 UJ
		5/17/1999	**39.6**	**292**	**0.9**
		8/17/1999	**32.7 Jh**	**238**	ND 5.0
		11/16/1999	**21.7**	**191**	**0.5 Jl**
		2/13/2000	**16.0**	**254**	**1.3**
		6/12/2000	**16.0**	**334**	**2.2**
		8/1/2000	**14.7**	**234**	**0.7**
		11/6/2000	**13.0**	**243**	**0.5 J**
		4/17/2001	**12.2**	**196**	**0.9**
		10/10/2001	**15.6**	**169**	**0.9 Jl**
		4/24/2002	**8.7**	**281**	ND 5.0
		10/8/2002	**11.3**	**229**	**1.7 Jl**
		2/19/2003	**8.1 Jh**	**369**	**3.0 Jl**
		9/3/2003	**7.6**	**87.1**	ND 0.5
		2/20/2004	**6.7**	**218**	**1.7 Jl**
		10/4/2004	**6.3**	**134**	**1.3**
		5/10/2005	**5.2**	**126**	**1.0**
		9/26/2005	**4.5**	**49.4**	ND 0.5
	2006-2007	5/1/2006	**5**	**147**	**2**
		9/18/2006	**4.5 J**	**70.7 J**	**1.2 J**
		3/27/2007	ND 0.5	**35**	**0.4 Jr**
		10/2/2007	**5.0**	**74**	**7.8**
OCW-3C		8/10/1998	ND 0.50	ND 0.50	ND 0.50
		11/11/1998	ND 0.50	ND 0.50	ND 0.50
		1/13/1999	ND 0.50	ND 0.50	ND 0.50
		3/18/1999	ND 0.5	ND 0.5	ND 0.5 UJ
		5/17/1999	ND 0.5	ND 0.5	ND 0.5
		8/17/1999	ND 0.5	ND 0.5	ND 0.5
		11/16/1999	ND 0.5	ND 0.5	ND 0.5
		2/13/2000	ND 0.5	ND 0.5	ND 0.5
		6/12/2000	ND 0.5	ND 0.5	ND 0.5
		8/1/2000	ND 0.5	ND 0.5	ND 0.5
		11/6/2000	ND 0.5	ND 0.5	ND 0.5
		4/18/2001	ND 0.5	ND 0.5	ND 0.5
		4/24/2002	ND 0.5	ND 0.5	ND 0.5
		2/19/2003	ND 0.5	ND 0.5	ND 0.5 UJ
		2/20/2004	ND 0.5	ND 0.5	ND 0.5
		5/10/2005	ND 0.5	ND 0.5	ND 0.5
	2006-2007	5/1/2006	ND 0.2	ND 0.2	ND 0.3
		3/27/2007	ND 0.5	ND 0.5	ND 0.5
OCW-4A		8/12/1998	ND 0.50	ND 0.50	ND 0.50
		1/12/1999	ND 0.50	ND 0.50	ND 0.50
		3/18/1999	ND 0.5	ND 0.5	ND 0.5 UJ
		5/17/1999	ND 0.5	ND 0.5	ND 0.5
		8/17/1999	ND 0.5	ND 0.5	ND 0.5
		11/17/1999	ND 0.5	ND 0.5	ND 0.5
		2/13/2000	ND 0.5	ND 0.5	ND 0.5
		6/12/2000	ND 0.5	ND 0.5	ND 0.5
		8/1/2000	ND 0.5	ND 0.5	ND 0.5

Notes: ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).

Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-2. Analytical Results — Primary Organic Constituents.

Location		Date Sampled	Trichloroethylene (ug/L)	cis-1,2-Dichloroethylene (ug/L)	Vinyl Chloride (ug/L)
OCW-4A		11/6/2000	ND 0.5	ND 0.5	ND 0.5
		4/18/2001	ND 0.5	ND 0.5	ND 0.5
		4/24/2002	ND 0.5	ND 0.5	ND 0.5
		2/19/2003	ND 0.5	ND 0.5	ND 0.5 UJ
		2/20/2004	ND 0.5	ND 0.5	ND 0.5
		5/10/2005	ND 0.5	ND 0.5	ND 0.5
	2006-2007	5/1/2006	ND 0.2	ND 0.2	ND 0.3
		3/28/2007	ND 0.5	ND 0.5	ND 0.5
OCW-4B		8/11/1998	**0.38 Jr**	**1.28**	ND 0.50
		1/12/1999	**0.30 Jr**	**0.82**	ND 0.50
		3/18/1999	ND 0.5	**0.4 Jr**	ND 0.5 UJ
		5/17/1999	ND 0.5	**0.5**	ND 0.5
		8/17/1999	ND 0.5	**0.4 Jr**	ND 0.5
		11/17/1999	ND 0.5	**0.5**	ND 0.5 UJ
		2/13/2000	ND 0.5	ND 0.5	ND 0.5
		6/12/2000	ND 0.5	ND 0.5	ND 0.5
		8/1/2000	ND 0.5	ND 0.5	ND 0.5
		11/6/2000	ND 0.5	ND 0.5	ND 0.5
		4/18/2001	ND 0.5	ND 0.5	ND 0.5
		10/10/2001	ND 0.5	ND 0.5	ND 0.5 UJ
		4/24/2002	ND 0.5	ND 0.5	ND 0.5
		10/8/2002	ND 0.5	ND 0.5	ND 0.5 UJ
		2/19/2003	ND 0.5	ND 0.5	ND 0.5 UJ
		9/4/2003	ND 0.5	ND 0.5	ND 0.5
		2/20/2004	ND 0.5	ND 0.5	ND 0.5
		10/5/2004	ND 0.5	ND 0.5	ND 0.5
		5/10/2005	ND 0.5	ND 0.5	ND 0.5
		9/26/2005	ND 0.5	ND 0.5	ND 0.5
	2006-2007	5/1/2006	ND 0.2	ND 0.2	ND 0.3
		9/18/2006	ND 0.5 UJ	ND 0.5 UJ	ND 0.5 UJ
		3/28/2007	ND 0.5	ND 0.5	ND 0.5
		10/2/2007	ND 0.5	ND 0.5	ND 0.5
OCW-5D		6/18/1998	ND 0.50	**1.19**	ND 0.50
		8/11/1998	ND 0.50	**0.80**	ND 0.50
		11/10/1998	ND 0.50	**0.26 Jr**	ND 0.50
		1/12/1999	ND 0.50	**0.21 Jr**	ND 0.50
		3/18/1999	ND 0.5	ND 0.5	ND 0.5 UJ
		5/17/1999	ND 0.5	ND 0.5	ND 0.5
		8/16/1999	ND 0.5	ND 0.5	ND 0.5
		11/17/1999	ND 0.5 UJ	ND 0.5 UJ	ND 0.5 UJ
		2/13/2000	ND 0.5	ND 0.5	ND 0.5
		6/12/2000	ND 0.5	ND 0.5	ND 0.5
		8/1/2000	ND 0.5	ND 0.5	ND 0.5
		11/6/2000	ND 0.5	ND 0.5	ND 0.5
		4/18/2001	ND 0.5	ND 0.5	ND 0.5
		10/10/2001	ND 0.5	ND 0.5	ND 0.5 UJ
		4/24/2002	ND 0.5	ND 0.5	ND 0.5
		10/8/2002	ND 0.5	ND 0.5	ND 0.5 UJ
		2/19/2003	ND 0.5	ND 0.5	ND 0.5 UJ

Notes: ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).

Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-2. Analytical Results — Primary Organic Constituents.

Location		Date Sampled	Trichloroethylene (ug/L)	cis-1,2-Dichloroethylene (ug/L)	Vinyl Chloride (ug/L)
OCW-5D		9/4/2003	ND 0.5	ND 0.5	ND 0.5
		2/20/2004	ND 0.5	ND 0.5	ND 0.5
		10/5/2004	ND 0.5	ND 0.5	ND 0.5
		5/10/2005	ND 0.5	ND 0.5	ND 0.5
		9/26/2005	ND 0.5	ND 0.5	ND 0.5
	2006-2007	5/1/2006	ND 0.2	ND 0.2	ND 0.3
		9/18/2006	ND 0.5 UJ	ND 0.5 UJ	ND 0.5 UJ
		3/28/2007	ND 0.5	ND 0.5	ND 0.5
		10/2/2007	ND 0.5	ND 0.5	ND 0.5
OSW-1A		7/14/1998	ND 0.50	ND 0.50	ND 0.50
		7/15/1998	ND 0.50	**0.99**	ND 0.50
		8/11/1998	ND 0.50	**0.85**	ND 0.50
		11/11/1998	ND 0.50	**1.32**	ND 0.50
		1/11/1999	ND 0.50	**1.46**	ND 0.50
		3/18/1999	ND 0.5 UJ	**1.1**	ND 0.5 UJ
		5/17/1999	ND 0.5	**1.0**	ND 0.5
		8/17/1999	ND 0.5 UJ	**1.5**	ND 0.5
		11/16/1999	ND 0.5	**1.5**	ND 0.5 UJ
		2/15/2000	ND 0.5	**0.9**	ND 0.5 UJ
		6/13/2000	ND 0.5	**1.2**	ND 0.5
		8/1/2000	ND 0.5	**2.5**	ND 0.5
		11/6/2000	ND 0.5	**4.2**	ND 0.5
		4/17/2001	ND 0.5	**5.3**	ND 0.5
		10/8/2001	ND 0.5	**10.6**	ND 0.5 UJ
		4/23/2002	ND 0.5	**8.5**	ND 0.5 UJ
		10/8/2002	ND 0.5	**9.3**	ND 0.5 UJ
		2/18/2003	ND 0.5	**9.4**	ND 0.5 UJ
		9/3/2003	ND 0.5	**5.4**	ND 0.5
		2/20/2004	ND 0.5	**2.8**	ND 0.5
		10/4/2004	ND 0.5	**2.2**	ND 0.5
		5/10/2005	ND 0.5	**2.1**	ND 0.5
		9/30/2005	ND 0.5	**4.9**	ND 0.5
	2006-2007	5/3/2006	ND 0.2	**4**	ND 0.3
		9/19/2006	ND 0.5 UJ	**3.8 J**	ND 0.5 UJ
		3/27/2007	ND 0.5	**2.5**	ND 0.5
		10/2/2007	ND 0.5	**5.1**	ND 0.5
SW-1		2/13/2000	ND 0.5	ND 0.5	ND 0.5
		4/17/2001	ND 0.5	ND 0.5	ND 0.5
		2/19/2004	ND 0.5	ND 0.5	ND 0.5
SW-2		2/15/2000	ND 0.5	ND 0.5	ND 0.5
		4/17/2001	ND 0.5	ND 0.5	ND 0.5
		4/23/2002	ND 0.5	ND 0.5	ND 0.5
		2/18/2003	ND 0.5	ND 0.5	ND 0.5 UJ
		2/19/2004	ND 0.5	ND 0.5	ND 0.5
		5/9/2005	ND 0.5	ND 0.5	ND 0.5
	2006-2007	5/1/2006	ND 0.2	ND 0.2	ND 0.3
		3/27/2007	ND 0.5	ND 0.5	ND 0.5
SW-3		2/13/2000	ND 0.5	ND 0.5	ND 0.5

Notes: ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).

Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-2. Analytical Results — Primary Organic Constituents.

Location		Date Sampled	Trichloroethylene (ug/L)	cis-1,2-Dichloroethylene (ug/L)	Vinyl Chloride (ug/L)
SW-3		4/17/2001	ND 0.5	ND 0.5	ND 0.5
		2/18/2003	ND 0.5	ND 0.5	ND 0.5 UJ
		2/19/2004	ND 0.5	ND 0.5	ND 0.5
		5/10/2005	ND 0.5	ND 0.5	ND 0.5
	2006-2007	5/3/2006	ND 0.2	ND 0.2	ND 0.3
		3/27/2007	ND 0.5	ND 0.5	ND 0.5
SW-4		3/18/1999	**1.9**	**22.9**	ND 0.5 UJ
		5/18/1999	**1.9**	**55.9**	ND 0.5
		8/17/1999	**0.8**	**34.3**	ND 0.5
		11/16/1999	**6.0**	**65.2**	ND 0.5
		2/13/2000	**6.1**	**67.9**	ND 0.5
		8/1/2000	**3.3**	**32.1**	ND 0.5
		11/6/2000	ND 0.5	**34.9**	ND 0.5
		4/17/2001	**0.4 Jr**	**17.8**	ND 0.5
		10/8/2001	ND 0.5	**28.2**	**0.8**
SW-14		10/8/2002	**0.7**	**4.5**	ND 0.5 UJ
		2/18/2003	**0.9 Jh**	**5.5**	ND 0.5 UJ
		9/3/2003	**0.6**	**7.2**	ND 0.5
		2/19/2004	ND 0.5	**11.8**	ND 0.5 UJ
		10/4/2004	**0.5**	**10.3**	**0.8**
		5/10/2005	**0.4 Jr**	**7.9**	ND 0.5
		9/30/2005	**0.6**	**10.8**	ND 0.5
	2006-2007	5/3/2006	**0.5**	**12**	**0.5**
		9/19/2006	**1.1 J**	**10.2 J**	**1.2 J**
		3/27/2007	ND 0.5	**8.5**	ND 0.5
		10/2/2007	**0.8**	**7.6**	ND 0.5
SWS-1		8/19/1997	ND 0.50	**1.10**	ND 0.50
		11/11/1998	ND 0.50	ND 0.50	ND 0.50
		1/11/1999	ND 0.50	**0.65**	ND 0.50
		3/18/1999	ND 0.5	ND 0.5	ND 0.5 UJ
		5/18/1999	ND 0.5	ND 0.5	ND 0.5
		8/17/1999	ND 0.5	**0.4 Jr**	ND 0.5
		11/16/1999	ND 0.5	**0.6**	ND 0.5
		2/15/2000	ND 0.5 UJ	**0.3 Jr**	ND 0.5 UJ
		6/13/2000	ND 0.5	ND 0.5	ND 0.5
		8/1/2000	ND 0.5	**1.1**	ND 0.5
		11/6/2000	ND 0.5	ND 0.5	ND 0.5
		4/18/2001	ND 0.5	ND 0.5	ND 0.5
		10/8/2001	ND 0.5	ND 0.5	ND 0.5
		4/24/2002	ND 0.5	ND 0.5	ND 0.5
		10/8/2002	ND 0.5	ND 0.5	ND 0.5 UJ
		2/18/2003	ND 0.5	ND 0.5	ND 0.5 UJ
		9/3/2003	ND 0.5	ND 0.5	ND 0.5
		2/19/2004	ND 0.5	ND 0.5	ND 0.5
		5/10/2005	ND 0.5	ND 0.5	ND 0.5
		9/30/2005	ND 0.5	ND 0.5	ND 0.5
	2006-2007	5/3/2006	ND 0.2	ND 0.2	ND 0.3
		9/19/2006	ND 0.5 UJ	ND 0.5 UJ	ND 0.5 UJ
		3/27/2007	ND 0.5	ND 0.5	ND 0.5

Notes: ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).

Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-2. Analytical Results — Primary Organic Constituents.

Location		Date Sampled	Trichloroethylene (ug/L)	cis-1,2-Dichloroethylene (ug/L)	Vinyl Chloride (ug/L)
SWS-4		8/19/1997	ND 0.50	ND 0.50	ND 0.50
		1/11/1999	ND 0.50	ND 0.50	ND 0.50
		3/18/1999	ND 0.5	ND 0.5	ND 0.5 UJ
		5/18/1999	ND 0.5	ND 0.5	ND 0.5
		8/17/1999	ND 0.5	ND 0.5	ND 0.5
		11/16/1999	ND 0.5	ND 0.5	ND 0.5
		2/15/2000	ND 0.5	ND 0.5	ND 0.5
		6/13/2000	ND 0.5	ND 0.5	ND 0.5
		8/1/2000	ND 0.5	ND 0.5	ND 0.5
		11/6/2000	ND 0.5	ND 0.5	ND 0.5
		4/18/2001	ND 0.5	ND 0.5	ND 0.5
		4/24/2002	ND 0.5	ND 0.5	ND 0.5
		2/18/2003	ND 0.5	ND 0.5	ND 0.5 UJ
		2/19/2004	ND 0.5	ND 0.5	ND 0.5
		5/10/2005	ND 0.5	ND 0.5	ND 0.5
	2006-2007	5/3/2006	ND 0.2	ND 0.2	ND 0.3
		3/27/2007	ND 0.5	ND 0.5	ND 0.5
SWS-6		8/20/1997	ND 0.50	ND 0.50	ND 0.50
		11/11/1998	ND 0.50	ND 0.50	ND 0.50
		1/11/1999	ND 0.50	ND 0.50	ND 0.50
		3/18/1999	ND 0.5	ND 0.5	ND 0.5 UJ
		5/18/1999	ND 0.5	ND 0.5	ND 0.5
		8/17/1999	ND 0.5	ND 0.5	ND 0.5
		11/16/1999	ND 0.5	ND 0.5	ND 0.5
		2/15/2000	ND 0.5	ND 0.5	ND 0.5
		6/13/2000	ND 0.5	ND 0.5	ND 0.5
		8/1/2000	ND 0.5	ND 0.5	ND 0.5
		11/6/2000	ND 0.5	ND 0.5	ND 0.5
		4/18/2001	ND 0.5	ND 0.5	ND 0.5
		10/8/2001	ND 0.5	ND 0.5	ND 0.5
		4/23/2002	ND 0.5	ND 0.5	ND 0.5
		10/8/2002	ND 0.5	ND 0.5	ND 0.5 UJ
		2/18/2003	ND 0.5	ND 0.5	ND 0.5 UJ
		9/3/2003	ND 0.5	ND 0.5	ND 0.5
		2/20/2004	ND 0.5	ND 0.5	ND 0.5 UJ
		10/4/2004	ND 0.5	ND 0.5	ND 0.5
		5/10/2005	ND 0.5	ND 0.5	ND 0.5
		9/30/2005	ND 0.5	ND 0.5	ND 0.5
	2006-2007	5/3/2006	ND 0.2	ND 0.2	ND 0.3
		9/19/2006	ND 0.5 UJ	ND 0.5 UJ	ND 0.5 UJ
		3/27/2007	ND 0.5	ND 0.5	ND 0.5
SWS-8		7/14/1998	ND 0.50	**0.15 Jr**	ND 0.50
		8/11/1998	ND 0.50	ND 0.50	ND 0.50
		11/11/1998	ND 0.50	ND 0.50	ND 0.50
		1/11/1999	ND 0.50	**0.12 Jr**	ND 0.50
		3/18/1999	ND 0.5	ND 0.5	ND 0.5 UJ
		5/18/1999	ND 0.5	ND 0.5	ND 0.5
		8/17/1999	ND 0.5	ND 0.5	ND 0.5
		11/16/1999	ND 0.5	ND 0.5	ND 0.5

Notes: ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).

Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-2. Analytical Results — Primary Organic Constituents.

Location		Date Sampled	Trichloroethylene (ug/L)	cis-1,2-Dichloroethylene (ug/L)	Vinyl Chloride (ug/L)
SWS-8		2/15/2000	ND 0.5	ND 0.5	ND 0.5
		6/13/2000	ND 0.5	ND 0.5	ND 0.5
		8/1/2000	ND 0.5	ND 0.5	ND 0.5
		11/6/2000	ND 0.5	ND 0.5	ND 0.5
		4/17/2001	ND 0.5	ND 0.5	ND 0.5
		10/8/2001	ND 0.5	ND 0.5	ND 0.5 UJ
		4/23/2002	ND 0.5	ND 0.5	ND 0.5
		10/8/2002	ND 0.5	ND 0.5	ND 0.5 UJ
		2/18/2003	ND 0.5	ND 0.5	ND 0.5 UJ
		9/3/2003	ND 0.5 UJ	ND 0.5	ND 0.5 UJ
		2/20/2004	ND 0.5	ND 0.5	ND 0.5 UJ
		10/4/2004	ND 0.5	ND 0.5	ND 0.5
		5/10/2005	ND 0.5	ND 0.5	ND 0.5
		9/30/2005	ND 0.5	ND 0.5	ND 0.5
	2006-2007	5/3/2006	ND 0.2	ND 0.2	ND 0.3
		9/19/2006	ND 0.5 UJ	ND 0.5 UJ	ND 0.5 UJ
		3/27/2007	ND 0.5	ND 0.5	ND 0.5
		10/2/2007	ND 0.5	ND 0.5	ND 0.5
SWS-9		8/12/1998	**30.4**	**562**	ND 0.50
		11/11/1998	ND 0.50	**8.47**	ND 0.50
		1/11/1999	**0.34 Jr**	**440**	ND 0.50
		1/29/1999	ND 0.50	**251**	ND 0.50
		3/18/1999	ND 0.5	**272**	**0.5 Jl**
		5/18/1999	ND 0.5	**56.2**	ND 0.5
		8/17/1999	ND 0.5	**13.9**	ND 0.5
		11/16/1999	ND 0.5	**8.0**	ND 0.5 UJ
		2/13/2000	ND 0.5	**127**	ND 0.5
		6/13/2000	ND 0.5	**18.0**	ND 0.5 UJ
		8/1/2000	ND 0.5	**104**	ND 0.5
		11/6/2000	ND 0.5	**15.8**	ND 0.5
		4/17/2001	ND 0.5	**1.5**	ND 0.5
		10/8/2001	ND 0.5	**0.7**	ND 0.5
		4/23/2002	ND 0.5	**0.9**	ND 0.5
		10/8/2002	ND 0.5	**1.8**	ND 0.5 UJ
		2/18/2003	ND 0.5	**56.3**	ND 0.5 UJ
		9/3/2003	ND 0.5	ND 0.5	ND 0.5
		2/19/2004	ND 0.5	ND 0.5	ND 0.5 UJ
		10/4/2004	ND 0.5	ND 0.5	ND 0.5
		5/10/2005	ND 0.5	ND 0.5	ND 0.5
		9/30/2005	ND 0.5	ND 0.5	ND 0.5
	2006-2007	5/3/2006	ND 0.2	ND 0.2	ND 0.3
		9/19/2006	ND 0.5 UJ	**0.8 J**	ND 0.5 UJ
		3/27/2007	ND 0.5	ND 0.5	ND 0.5

Notes: ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).

Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-3. Analytical Results -- Other Organic Constituents Detected in 2006-2007.

Location	Date Sampled	Constituent	Concentration (ug/L)
CAF-17C	5/2/2006	trans-1,2-Dichloroethylene	0.3 Jr
	5/2/2006	Toluene	0.8
	5/2/2006	1,1-Dichloroethane	4
	9/19/2006	1,1-Dichloroethane	2.0 J
	9/19/2006	n-Butylbenzene	0.7 J
	9/19/2006	trans-1,2-Dichloroethylene	0.6 J
	3/26/2007	trans-1,2-Dichloroethylene	0.5 Jr
	3/26/2007	1,2-Dichloroethane	0.4 Jr
	3/26/2007	Toluene	1.0
	3/26/2007	1,1-Dichloroethane	3.2
	10/1/2007	1,1-Dichloroethane	1.1
	10/1/2007	trans-1,2-Dichloroethylene	0.3 Jr
	10/1/2007	Toluene	0.4 Jr
OB-5	5/2/2006	1,1-Dichloroethane	0.3 Jr
	9/19/2006	1,1-Dichloroethane	0.5 Jr
	3/27/2007	1,1-Dichloroethane	0.4 Jr
	10/3/2007	1,1-Dichloroethane	0.3 Jr
OCW-2C	5/1/2006	1,1-Dichloroethane	1
	9/18/2006	trans-1,2-Dichloroethylene	0.7 J
	9/18/2006	1,1-Dichloroethane	ND 0.5 UJ
	3/27/2007	trans-1,2-Dichloroethylene	0.5
	3/27/2007	1,1-Dichloroethane	0.8
	10/2/2007	1,1-Dichloroethane	1.2
	10/2/2007	trans-1,2-Dichloroethylene	0.5
OCW-4A	5/1/2006	Chloroform	4
	3/28/2007	Chloroform	4.8
OCW-4B	5/1/2006	Chloroform	2
	9/18/2006	Chloroform	3.1 J
	3/28/2007	Chloroform	3.7
	10/2/2007	Chloroform	3.8
SW-14	3/27/2007	n-Butylbenzene	0.5 Jr

Notes: This table presents all results above detection limits for organic constituents other than trichloroethylene; cis-1,2-dichloroethylene; and vinyl chloride during the 2002-2003 monitoring period.

Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-4. Analytical Results -- Inorganic Constituents

Location	Date Sampled	Fluoride (mg/L)	Total Uranium (mg/L)	Uranium 234 (mg/L)	Uranium 235 (mg/L)	Uranium 238 (mg/L)	Uranium 235 Isotopic Abundance*
CAF-5A	12/18/1995	ND 1.0	ND 0.02	NM	NM	NM	NM
	1/9/1996	ND 0.10	ND 0.001	NM	NM	NM	NM
	2/1/1996	ND 0.10	NM	ND 0.000000021	ND 0.00003	ND 0.00039	NM
	2/16/1996	ND 0.10	NM	ND 0.000000010	ND 0.00001	**0.00036**	NM
	2/26/1996	**0.16**	NM	**0.00000001**	ND 0.00001	**0.0001**	NM
	3/12/1996	ND 0.10	NM	**0.000000005**	ND 0.00001	**0.0001**	NM
	3/28/1996	ND 0.10	NM	**0.000000006**	**0.00002**	**0.0002**	NM
	4/8/1996	**0.12**	NM	ND 0.00000001	ND 0.00003	ND 0.0001	NM
	4/22/1996	**0.20**	NM	ND 0.000000006	ND 0.00002	**0.0002**	NM
	4/30/1996	ND 0.10	NM	**0.000000010**	ND 0.00002	**0.0002**	NM
	5/6/1996	ND 0.10	NM	ND 0.000000008	ND 0.00002	ND 0.0001	NM
	5/13/1996	ND 0.10	NM	ND 0.000000008	ND 0.00001	**0.0001**	NM
	5/28/1996	ND 0.10	ND 0.00015	ND 0.00015	ND 0.00015	ND 0.00015	NM
	6/10/1996	ND 0.10	**0.00020**	ND 0.00015	ND 0.00015	**0.00020**	NM
	6/24/1996	ND 0.10	**0.00020**	ND 0.00015	ND 0.00015	**0.00020**	NM
	7/8/1996	**0.03**	**0.00019**	ND 0.00015	ND 0.00015	**0.00017**	NM
	10/24/1996	**0.10**	**0.00048**	ND 0.00005	ND 0.00015	**0.00048**	NM
	1/6/1997	**0.07**	ND 0.00015	ND 0.00005	ND 0.00015	ND 0.00015	NM
	2/25/1997	**0.12**	ND 0.00015	ND 0.00005	ND 0.00015	ND 0.00015	NM
	5/12/1997	ND 0.02	**0.0073**	ND 0.00005	ND 0.00015	**0.0072**	NM
	8/11/1997	ND 0.02	**0.00025**	ND 0.00005	ND 0.00015	**0.00020**	NM
	11/10/1997	ND 0.02	ND 0.00015	ND 0.00015	ND 0.00015	ND 0.00015	NM
	2/2/1998	ND 0.02	ND 0.00015	ND 0.00015	ND 0.00015	ND 0.00015	NM
	5/4/1998	**0.03**	ND 0.00015	ND 0.00015	ND 0.00015	ND 0.00015	NM
	8/10/1998	**0.10**	ND 0.00015	ND 0.00015	ND 0.00015	ND 0.00015	NM
	11/9/1998	**0.02 J**	ND 0.00015	NM	NM	NM	NM
	1/14/1999	NM	NM	ND 0.00000003	ND 0.00005	ND 0.00060	NM
	3/17/1999	**0.12**	ND 0.00015	NM	NM	NM	NM
	5/19/1999	**0.10**	ND 0.00015	NM	NM	NM	NM
	8/18/1999	ND 0.10	ND 0.00015	NM	NM	NM	NM
	11/18/1999	ND 0.10	ND 0.00015	NM	NM	NM	NM
	2/16/2000	**0.10**	ND 0.00015	NM	NM	NM	NM
	6/13/2000	ND 0.10	ND 0.00015	NM	NM	NM	NM
	8/2/2000	ND 0.10	ND 0.00015	NM	NM	NM	NM
	11/7/2000	ND 0.10	ND 0.00015 UJ	NM	NM	NM	NM
	4/20/2001	ND 0.10	ND 0.00015	NM	NM	NM	NM
	10/10/2001	ND 0.10	ND 0.00015	NM	NM	NM	NM
	1/22/2002	ND 0.10	**0.00022**	NM	NM	NM	NM
	4/22/2002	ND 0.10	**0.00017**	NM	NM	NM	NM
	7/24/2002	ND 0.10	**0.00422**	ND 0.00015	ND 0.00015	**0.00418**	NM
	10/8/2002	ND 0.10	**0.00024**	NM	NM	NM	NM

Notes: NC = not calculated; NM = not measured
ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).
* Uranium 235 isotopic abundance is calculated by dividing the U 235 concentration by the total uranium concentration.
Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-4. Analytical Results -- Inorganic Constituents

Location		Date Sampled	Fluoride (mg/L)	Total Uranium (mg/L)	Uranium 234 (mg/L)	Uranium 235 (mg/L)	Uranium 238 (mg/L)	Uranium 235 Isotopic Abundance*
CAF-5A		2/19/2003	ND 0.10	**0.00028**	NM	NM	NM	NM
		5/20/2003	ND 0.10	**0.00025**	NM	NM	NM	NM
		9/2/2003	ND 0.10	ND 0.00015	NM	NM	NM	NM
		11/17/2003	ND 0.10	ND 0.00015	NM	NM	NM	NM
		2/24/2004	ND 0.10	ND 0.00015	NM	NM	NM	NM
		10/6/2004	ND 0.10	ND 0.00015	NM	NM	NM	NM
		5/11/2005	ND 0.10	**0.00038**	NM	NM	NM	NM
		9/27/2005	ND 0.10	ND 0.00015	NM	NM	NM	NM
	2006-07	5/1/2006	ND 0.10	ND 0.00015	NM	NM	NM	NM
		9/18/2006	ND 0.10	ND 0.00015	NM	NM	NM	NM
		3/26/2007	ND 0.10	ND 0.00015	NM	NM	NM	NM
		10/1/2007	ND 0.10	**0.00096**	NM	NM	NM	NM
CAF-5B		12/18/1995	ND 1.0	ND 0.02	NM	NM	NM	NM
		1/9/1996	ND 0.10	**0.014**	NM	NM	NM	NM
		2/1/1996	ND 0.10	NM	**0.00000131**	**0.00017**	**0.0127**	NM
		2/16/1996	**1.08**	NM	**0.000000704**	**0.00012**	**0.00731**	NM
		2/26/1996	**0.11**	NM	**0.000000553**	**0.000084**	**0.00503**	NM
		3/12/1996	ND 0.10	NM	**0.000000374**	**0.000070**	**0.00368**	NM
		3/28/1996	ND 0.10	NM	**0.00000143**	**0.00022**	**0.0139**	NM
		4/9/1996	ND 0.10	NM	**0.000000474**	**0.000056**	**0.00383**	NM
		4/22/1996	ND 0.10	NM	**0.000000443**	**0.000093**	**0.00371**	NM
		4/30/1996	ND 0.10	NM	**0.000000437**	**0.000061**	**0.00401**	NM
		5/6/1996	ND 0.10	NM	**0.000000759**	**0.00011**	**0.00668**	NM
		5/13/1996	ND 0.10	NM	**0.000000403**	**0.000075**	**0.00362**	NM
		5/29/1996	ND 0.10	**0.012**	ND 0.00015	ND 0.00015	**0.012**	NM
		6/10/1996	ND 0.10	**0.011**	ND 0.00015	**0.00020**	**0.011**	**0.019**
		6/24/1996	ND 0.10	**0.011**	ND 0.00005	ND 0.00015	**0.011**	NM
		7/8/1996	ND 0.10	**0.015**	ND 0.00005	**0.00023**	**0.014**	**0.016**
		10/25/1996	ND 0.10	**0.0084**	ND 0.00005	ND 0.00015	**0.0083**	NM
		1/7/1997	ND 0.01	**0.012**	ND 0.00005	**0.00016**	**0.011**	**0.014**
		2/26/1997	ND 0.02	**0.0081**	ND 0.00005	ND 0.00015	**0.0080**	NM
		5/12/1997	ND 0.02	ND 0.00015	ND 0.00005	ND 0.00015	ND 0.00015	NM
		8/11/1997	ND 0.02	**0.0078**	ND 0.00005	ND 0.00015	**0.0076**	NM
		11/11/1997	**0.02**	**0.0059**	ND 0.00015	ND 0.00015	**0.0059**	NM
		2/2/1998	ND 0.02	**0.0069**	ND 0.00015	ND 0.00015	**0.0067**	NM
		5/5/1998	**0.04**	**0.0086**	ND 0.00015	ND 0.00015	**0.0086**	NM
		8/12/1998	**0.11**	**0.011**	ND 0.00015	**0.00031**	**0.011**	**0.027**
		11/9/1998	**0.10 J**	**0.012**	ND 0.00015	**0.00018**	**0.011**	**0.016**
		1/14/1999	NM	NM	**0.000002**	**0.00024**	**0.013**	NM
		3/17/1999	**0.23**	**0.011**	ND 0.00015	**0.00015**	**0.011**	**0.014**
		5/19/1999	**0.26**	**0.0096**	ND 0.00015	ND 0.00015	**0.0095**	NM

Notes: NC = not calculated; NM = not measured
ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).
* Uranium 235 isotopic abundance is calculated by dividing the U 235 concentration by the total uranium concentration.
Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-4. Analytical Results -- Inorganic Constituents

Location		Date Sampled	Fluoride (mg/L)	Total Uranium (mg/L)	Uranium 234 (mg/L)	Uranium 235 (mg/L)	Uranium 238 (mg/L)	Uranium 235 Isotopic Abundance*
CAF-5B		8/18/1999	**0.27**	**0.0065**	ND 0.00015	ND 0.00015	**0.0064**	NM
		11/18/1999	**0.31**	**0.00721**	ND 0.00015	ND 0.00015	**0.00712**	NM
		2/16/2000	**0.29**	**0.00846**	ND 0.00015	ND 0.00015	**0.00831**	NM
		6/13/2000	**0.39**	**0.00768**	ND 0.00015	ND 0.00015	**0.00756**	NM
		8/2/2000	**0.35**	**0.00499**	ND 0.00015	ND 0.00015	**0.00497**	NM
		11/7/2000	**0.57**	**0.00776 Jl**	ND 0.00015	ND 0.00015	**0.00764**	NM
		4/20/2001	**0.40**	**0.00606**	ND 0.00015	ND 0.00015	**0.00597**	NM
		10/10/2001	**0.39**	**0.00564**	ND 0.00015	ND 0.00015	**0.00557**	NM
		1/21/2002	**0.40**	**0.00625**	ND 0.00015	ND 0.00015	**0.00625**	NM
		4/22/2002	**0.40**	**0.00645**	ND 0.00015	ND 0.00015	**0.00635**	NM
		7/24/2002	**0.34**	**0.00523**	ND 0.00015	ND 0.00015	**0.00514**	NM
		10/8/2002	**0.35**	**0.00449**	ND 0.00015	ND 0.00015	**0.00443**	NM
		2/19/2003	**0.26**	**0.00306**	ND 0.00015	ND 0.00015	**0.00300**	NM
		5/20/2003	**0.26**	**0.00207**	ND 0.00015	ND 0.00015	**0.00203**	NM
		9/2/2003	**0.28**	**0.00170**	NM	NM	NM	NM
		11/17/2003	**0.34**	**0.00147**	NM	NM	NM	NM
		2/24/2004	**0.31**	**0.00158**	NM	NM	NM	NM
		10/6/2004	**0.41**	**0.00210**	ND 0.00015	ND 0.00015	**0.00206**	NM
		5/11/2005	**0.42**	**0.00284**	ND 0.00015	ND 0.00015	**0.00278**	NM
		9/27/2005	**0.41**	**0.00220**	ND 0.00015	ND 0.00015	**0.00220**	NM
	2006-07	5/1/2006	**0.31**	**0.00149**	NM	NM	NM	NM
		9/18/2006	**0.31**	**0.00186**	NM	NM	NM	NM
		3/26/2007	**0.28**	**0.00203**	ND 0.00015	ND 0.00015	**0.00200**	NM
		10/1/2007	**0.28**	**0.00238**	ND 0.00015	ND 0.00015	**0.00235**	NM
CAF-6A		12/18/1995	ND 1.0	**2.40**	NM	NM	NM	NM
		1/9/1996	**2.23**	**0.499**	NM	NM	NM	NM
		2/2/1996	**3.84**	NM	**0.000087176**	**0.01070**	**0.46749**	NM
		2/15/1996	**4.74**	NM	**0.000170780**	**0.02129**	**0.89518**	NM
		2/27/1996	**4.51**	NM	**0.000173231**	**0.02136**	**0.92566**	NM
		3/12/1996	**4.55**	NM	**0.000386853**	**0.04578**	**2.0719**	NM
		3/28/1996	**2.52**	NM	**0.000275615**	**0.03044**	**1.4879**	NM
		4/9/1996	**1.47**	NM	**0.000291958**	**0.03482**	**1.5719**	NM
		4/22/1996	**1.26**	NM	**0.000166757**	**0.02051**	**0.87808**	NM
		5/1/1996	**1.54**	NM	**0.000184239**	**0.02280**	**0.96892**	NM
		5/6/1996	**1.39**	NM	**0.00015260**	**0.01943**	**0.79787**	NM
		5/13/1996	**1.46**	NM	**0.00010827**	**0.01314**	**0.56865**	NM
		5/30/1996	**1.70**	**0.393**	ND 0.00015	**0.0099**	**0.383**	**0.025**
		6/11/1996	**1.61**	**0.329**	ND 0.00015	**0.0081**	**0.321**	**0.025**
		6/25/1996	**1.37**	**0.270**	**0.00010**	**0.0068**	**0.264**	**0.025**
		7/9/1996	**0.94**	**0.154**	ND 0.00005	**0.0037**	**0.150**	**0.024**
		10/25/1996	**1.90**	**0.016**	ND 0.00005	**0.00034**	**0.016**	**0.021**

Notes: NC = not calculated; NM = not measured
ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).
* Uranium 235 isotopic abundance is calculated by dividing the U 235 concentration by the total uranium concentration.
Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-4. Analytical Results -- Inorganic Constituents

Location		Date Sampled	Fluoride (mg/L)	Total Uranium (mg/L)	Uranium 234 (mg/L)	Uranium 235 (mg/L)	Uranium 238 (mg/L)	Uranium 235 Isotopic Abundance*
CAF-6A		1/7/1997	**1.33**	**0.136**	ND 0.00005	**0.0032**	**0.133**	**0.023**
		2/26/1997	**1.82**	**0.059**	ND 0.00005	**0.0013**	**0.058**	**0.022**
		5/12/1997	**2.40**	**0.147**	ND 0.00005	**0.0031**	**0.144**	**0.021**
		8/11/1997	**3.52**	**0.504**	**0.00010**	**0.0093**	**0.495**	**0.018**
		11/11/1997	**2.49**	**0.149**	ND 0.00015	**0.0030**	**0.146**	**0.020**
		2/2/1998	**1.31**	**0.042**	ND 0.00015	**0.0010**	**0.041**	**0.024**
		5/5/1998	**0.50**	**0.029**	ND 0.00015	**0.00071**	**0.029**	**0.024**
		8/11/1998	**1.17**	**0.038**	ND 0.00015	**0.0012**	**0.037**	**0.031**
		11/10/1998	**1.44**	**0.081**	ND 0.00015	**0.0017**	**0.079**	**0.021**
		1/12/1999	NM	NM	**0.00002**	**0.0022**	**0.0988**	NM
		3/17/1999	**1.95**	**0.080**	ND 0.00015	**0.0017**	**0.078**	**0.021**
		5/19/1999	**1.34**	**0.070**	ND 0.00015	**0.0013**	**0.069**	**0.019**
		8/16/1999	**1.20**	**0.053**	ND 0.00015	**0.0011**	**0.052**	**0.021**
		11/15/1999	**0.70**	**0.01420**	ND 0.00015	**0.00020**	**0.01400**	**0.014**
		2/16/2000	**1.30**	**0.0552**	ND 0.00015	**0.00133**	**0.0539**	**0.024**
		6/13/2000	**1.56**	**0.0574**	ND 0.00015	**0.00135**	**0.0560**	**0.024**
		8/2/2000	**1.20**	**0.0426**	ND 0.00015	**0.00095**	**0.0416**	**0.022**
		11/7/2000	**0.96**	**0.0899 Jl**	ND 0.00015	**0.00209**	**0.0878**	**0.023 Jh**
		4/19/2001	**1.38**	**0.243**	ND 0.00015	**0.00535**	**0.238**	**0.022**
		10/9/2001	**1.49**	**0.0842**	ND 0.00015	**0.00192**	**0.0823**	**0.023**
		1/21/2002	**1.36**	**0.0596**	**0.00015**	**0.00069**	**0.0588**	**0.012**
		4/22/2002	**0.96**	**0.0268**	ND 0.00015	**0.00062**	**0.0262**	**0.023**
		7/24/2002	**0.55**	**0.0172**	ND 0.00015	**0.00040**	**0.0168**	**0.023**
		10/7/2002	**1.24**	**0.0226**	ND 0.00015	**0.00051**	**0.0221**	**0.023**
		2/17/2003	**1.11**	**0.0224**	ND 0.00015	**0.00056**	**0.0218**	**0.025**
		5/19/2003	**0.65**	**0.0150**	ND 0.00015	**0.00035**	**0.0146**	**0.023**
		9/2/2003	**0.24**	**0.00714**	ND 0.00015	**0.00017**	**0.00698**	**0.024**
		11/17/2003	**0.21**	**0.0157**	ND 0.00015	**0.00037**	**0.0153**	**0.024**
		2/19/2004	**0.29**	**0.0387**	ND 0.00015	**0.00092**	**0.0378**	**0.024**
		10/5/2004	**0.81**	**0.0133**	ND 0.00015	**0.00032**	**0.0130**	**0.024**
		5/9/2005	**1.51**	**0.0448**	ND 0.00015	**0.00103**	**0.0438**	**0.023**
		9/26/2005	**1.14**	**0.0218**	ND 0.00015	**0.00050**	**0.0213**	**0.023**
	2006-07	5/1/2006	**0.72**	**0.0364**	ND 0.00015	**0.00084**	**0.0356**	**0.023**
		9/18/2006	**0.60**	**0.0123**	ND 0.00015	**0.00030**	**0.0119**	**0.024**
		3/26/2007	**0.59**	**0.0558**	ND 0.00015	**0.00126**	**0.0545**	**0.023**
		10/1/2007	**0.93**	**0.0261**	ND 0.00015	**0.00059**	**0.0255**	**0.023**
CAF-6B		12/18/1995	**4.78**	ND 0.02	NM	NM	NM	NM
		1/9/1996	**5.48**	**0.028**	NM	NM	NM	NM
		2/2/1996	**4.24**	NM	**0.000000840**	**0.000084**	**0.0106**	NM
		2/15/1996	**4.37**	NM	**0.000000686**	**0.00011**	**0.00844**	NM
		2/27/1996	**4.70**	NM	**0.000000565**	**0.00011**	**0.00659**	NM

Notes: NC = not calculated; NM = not measured
ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).
* Uranium 235 isotopic abundance is calculated by dividing the U 235 concentration by the total uranium concentration.
Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-4. Analytical Results -- Inorganic Constituents

Location	Date Sampled	Fluoride (mg/L)	Total Uranium (mg/L)	Uranium 234 (mg/L)	Uranium 235 (mg/L)	Uranium 238 (mg/L)	Uranium 235 Isotopic Abundance*
CAF-6B	3/12/1996	**5.93**	NM	**0.000000498**	**0.000079**	**0.00557**	NM
	3/27/1996	**4.71**	NM	**0.000001987**	**0.00024**	**0.0215**	NM
	4/9/1996	**4.35**	NM	**0.000000892**	**0.00013**	**0.00964**	NM
	4/22/1996	**4.71**	NM	**0.000000477**	**0.000070**	**0.00536**	NM
	5/1/1996	**4.57**	NM	**0.000000464**	**0.00004**	**0.00551**	NM
	5/6/1996	**4.92**	NM	**0.00000139**	**0.00025**	**0.0157**	NM
	5/13/1996	**4.95**	NM	**0.000001731**	ND 0.00019	**0.0169**	NM
	5/29/1996	**6.27**	**0.020**	ND 0.00015	ND 0.00015	**0.020**	NM
	6/10/1996	**6.32**	**0.018**	ND 0.00015	**0.0003**	**0.018**	**0.017**
	6/24/1996	**6.41**	**0.019**	ND 0.00005	**0.00032**	**0.019**	**0.017**
	7/8/1996	**6.50**	**0.020**	ND 0.00005	**0.00025**	**0.020**	**0.013**
	10/25/1996	**6.96**	**0.018**	ND 0.00005	**0.00019**	**0.018**	**0.011**
	1/7/1997	**5.89**	**0.017**	ND 0.00005	**0.00020**	**0.017**	**0.012**
	2/25/1997	**6.37**	**0.013**	ND 0.00005	ND 0.00015	**0.013**	NM
	5/12/1997	**6.00**	**0.016**	ND 0.00005	ND 0.00015	**0.016**	NM
	8/11/1997	**6.86**	**0.017**	ND 0.00005	**0.00015**	**0.017**	**0.0089**
	11/11/1997	**6.81**	**0.025**	ND 0.00015	**0.00019**	**0.025**	**0.0077**
	2/2/1998	**6.95**	**0.017**	ND 0.00015	**0.00024**	**0.017**	**0.014**
	5/5/1998	**7.63**	**0.017**	ND 0.00015	**0.00020**	**0.017**	**0.012**
	8/11/1998	**8.03**	**0.022**	ND 0.00015	**0.00034**	**0.022**	**0.015**
	11/10/1998	**7.44**	**0.022**	ND 0.00015	**0.00027**	**0.022**	**0.012**
	1/12/1999	NM	NM	**0.000001**	**0.00020**	**0.01**	NM
	3/17/1999	**7.75**	**0.015**	ND 0.00015	ND 0.00015	**0.014**	NM
	5/19/1999	**8.55**	**0.015**	ND 0.00015	ND 0.00015	**0.015**	NM
	8/18/1999	**7.90**	**0.011**	ND 0.00015	ND 0.00015	**0.011**	NM
	11/17/1999	**7.30**	**0.02160**	ND 0.00015	**0.00017**	**0.02140**	**0.0076**
	2/14/2000	**6.60**	**0.0143**	ND 0.00015	**0.00020**	**0.0140**	**0.014**
	6/13/2000	**6.48**	**0.0106**	ND 0.00015	ND 0.00015	**0.0105**	NM
	8/2/2000	**6.65**	**0.00910**	ND 0.00015	ND 0.00015	**0.00905**	NM
	11/7/2000	**6.20**	**0.0148 Jl**	ND 0.00015	**0.00018**	**0.0146**	**0.012 Jh**
	4/20/2001	**5.45**	**0.0101**	ND 0.00015	ND 0.00015	**0.00997**	NM
	10/10/2001	**4.20**	**0.00583**	ND 0.00015	ND 0.00015	**0.00577**	NM
	1/21/2002	**3.55**	**0.00420**	ND 0.00015	ND 0.00015	**0.00420**	NM
	4/22/2002	**2.96**	**0.00430**	ND 0.00015	ND 0.00015	**0.00425**	NM
	7/24/2002	**2.43**	**0.00256**	ND 0.00015	ND 0.00015	**0.00252**	NM
	10/7/2002	**2.75**	**0.00181**	NM	NM	NM	NM
	2/17/2003	**2.83**	**0.00261**	ND 0.00015	ND 0.00015	**0.00255**	NM
	5/20/2003	**2.63**	**0.00163**	NM	NM	NM	NM
	9/2/2003	**2.49**	**0.00142**	NM	NM	NM	NM
	11/17/2003	**2.67**	**0.00125**	NM	NM	NM	NM
	2/24/2004	**2.16**	**0.00153**	NM	NM	NM	NM

Notes: NC = not calculated; NM = not measured
ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).
* Uranium 235 isotopic abundance is calculated by dividing the U 235 concentration by the total uranium concentration.
Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-4. Analytical Results -- Inorganic Constituents

Location		Date Sampled	Fluoride (mg/L)	Total Uranium (mg/L)	Uranium 234 (mg/L)	Uranium 235 (mg/L)	Uranium 238 (mg/L)	Uranium 235 Isotopic Abundance*
CAF-6B		10/5/2004	**2.24**	**0.00153**	NM	NM	NM	NM
		5/9/2005	**2.29**	**0.00163**	NM	NM	NM	NM
		9/26/2005	**2.44**	**0.00210**	ND 0.00015	ND 0.00015	**0.00207**	NM
	2006-07	5/1/2006	**2.50**	**0.00475**	ND 0.00015	ND 0.00015	**0.00428**	NM
		9/18/2006	**2.57**	**0.00341**	ND 0.00015	ND 0.00015	**0.00333**	NM
		3/26/2007	**2.28**	**0.0296**	ND 0.00015	**0.00058**	**0.0290**	**0.020**
		10/1/2007	**2.53**	**0.0990**	ND 0.00015	**0.00195**	**0.0970**	**0.020**
CAF-7A		12/18/1995	ND 1.0	ND 0.02	NM	NM	NM	NM
		1/9/1996	**1.03**	**0.013**	NM	NM	NM	NM
		2/2/1996	**0.98**	NM	**0.000003346**	**0.00042**	**0.0177**	NM
		2/15/1996	ND 0.10	NM	**0.000003013**	**0.00040**	**0.0161**	NM
		2/27/1996	**0.97**	NM	**0.000003494**	**0.00043**	**0.0181**	NM
		3/12/1996	**1.03**	NM	**0.000034172**	**0.00347**	**0.1834**	NM
		3/28/1996	**1.22**	NM	**0.000064032**	**0.006715**	**0.34198**	NM
		4/9/1996	**1.38**	NM	**0.000092013**	**0.009916**	**0.48386**	NM
		4/22/1996	**3.43**	NM	**0.000095974**	**0.01218**	**0.51719**	NM
		5/1/1996	**4.04**	NM	**0.000091152**	**0.01196**	**0.48219**	NM
		5/6/1996	**3.76**	NM	**0.000088055**	**0.01111**	**0.47084**	NM
		5/13/1996	**4.18**	NM	**0.00010899**	**0.01339**	**0.57533**	NM
		5/30/1996	**3.88**	**0.480**	ND 0.00015	**0.012**	**0.468**	**0.025**
		6/11/1996	**3.88**	**0.672**	**0.00020**	**0.017**	**0.655**	**0.025**
		6/25/1996	**6.10**	**0.219**	**0.00006**	**0.0053**	**0.213**	**0.024**
		7/9/1996	**3.99**	**0.419**	**0.00009**	**0.0098**	**0.409**	**0.023**
		10/25/1996	**0.70**	**0.0071**	ND 0.00005	**0.00015**	**0.0070**	**0.021**
		1/6/1997	**0.95**	**0.036**	ND 0.00005	**0.00086**	**0.036**	**0.024**
		2/26/1997	**1.01**	**0.045**	ND 0.00005	**0.00098**	**0.044**	**0.022**
		5/12/1997	**1.02**	**0.033**	ND 0.00005	**0.00065**	**0.032**	**0.020**
		8/11/1997	**2.14**	**0.023**	ND 0.00005	**0.00039**	**0.023**	**0.017**
		11/11/1997	**2.40**	**0.025**	ND 0.00015	**0.00045**	**0.025**	**0.018**
		2/2/1998	**2.26**	**0.038**	ND 0.00015	**0.00090**	**0.037**	**0.024**
		5/5/1998	**1.66**	**0.011**	ND 0.00015	**0.00022**	**0.011**	**0.021**
		8/12/1998	**1.00**	**0.012**	ND 0.00015	**0.00031**	**0.011**	**0.026**
		11/9/1998	**0.98 J**	**0.017**	ND 0.00015	**0.00039**	**0.017**	**0.023**
		1/14/1999	NM	NM	**0.000006**	**0.00051**	**0.0329**	NM
		3/17/1999	**1.95**	**0.031**	ND 0.00015	**0.00067**	**0.031**	**0.021**
		5/19/1999	**1.56**	**0.020**	ND 0.00015	**0.00038**	**0.020**	**0.019**
		8/16/1999	**1.30**	NM	ND 0.00015	**0.00063**	**0.029**	NM
		11/15/1999	**0.64**	**0.00948**	ND 0.00015	ND 0.00015	**0.00933**	NM
		2/16/2000	**0.87**	**0.0187**	ND 0.00015	**0.00045**	**0.0182**	**0.024**
		6/14/2000	**1.22**	**0.0191**	ND 0.00015	**0.00045**	**0.0187**	**0.024**
		8/2/2000	**1.09**	**0.0138**	ND 0.00015	**0.00027**	**0.0135**	**0.019**

Notes: NC = not calculated; NM = not measured
ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).
* Uranium 235 isotopic abundance is calculated by dividing the U 235 concentration by the total uranium concentration.
Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-4. Analytical Results -- Inorganic Constituents

Location		Date Sampled	Fluoride (mg/L)	Total Uranium (mg/L)	Uranium 234 (mg/L)	Uranium 235 (mg/L)	Uranium 238 (mg/L)	Uranium 235 Isotopic Abundance*
CAF-7A		11/7/2000	**1.18**	**0.0162 Jl**	ND 0.00015	**0.00037**	**0.0158**	**0.023 Jh**
		4/19/2001	**0.80**	**0.395**	ND 0.00015	**0.00880**	**0.386**	**0.022**
		10/9/2001	**1.10**	**0.411**	ND 0.00015	**0.00912**	**0.402**	**0.022**
		1/22/2002	**2.22**	**0.234**	ND 0.00015	**0.00267**	**0.231**	**0.011**
		4/22/2002	**3.32**	**0.157**	ND 0.00015	**0.00362**	**0.153**	**0.023**
		7/24/2002	**3.78**	**0.357**	ND 0.00015	**0.00845**	**0.349**	**0.024**
		10/8/2002	**1.14**	**0.0137**	ND 0.00015	**0.00031**	**0.0134**	**0.023**
		2/17/2003	**1.50**	**0.0139**	ND 0.00015	**0.00034**	**0.0135**	**0.024**
		5/19/2003	**0.69**	**0.0130**	ND 0.00015	**0.00029**	**0.0127**	**0.022**
		9/2/2003	**0.35**	**0.00699**	ND 0.00015	**0.00016**	**0.00682**	**0.023**
		11/17/2003	**0.31**	**0.0260**	ND 0.00015	**0.00061**	**0.0254**	**0.023**
		2/19/2004	**0.46**	**0.0642**	ND 0.00015	**0.00151**	**0.0627**	**0.024**
		10/5/2004	**0.36**	**0.0704**	ND 0.00015	**0.00166**	**0.0687**	**0.024**
		5/9/2005	**1.33**	**0.0581**	ND 0.00015	**0.00132**	**0.0568**	**0.023**
		9/26/2005	**0.91**	**0.0289**	ND 0.00015	**0.00065**	**0.0282**	**0.022**
	2006-07	5/1/2006	**0.73**	**0.0292**	ND 0.00015	**0.00066**	**0.0285**	**0.023**
		9/18/2006	**0.51**	**0.0202**	ND 0.00015	**0.00050**	**0.0196**	**0.025**
		3/26/2007	**0.59**	**0.0588**	ND 0.00015	**0.00132**	**0.0575**	**0.022**
		10/1/2007	**1.78**	**0.244**	**0.00029**	**0.00522**	**0.239**	**0.021**
CAF-7B		12/18/1995	**8.16**	ND 0.02	NM	NM	NM	NM
		1/9/1996	**7.80**	**0.009**	NM	NM	NM	NM
		2/2/1996	**7.63**	NM	**0.000000553**	**0.000084**	**0.00751**	NM
		2/15/1996	**6.60**	NM	**0.000000547**	**0.000075**	**0.00683**	NM
		2/27/1996	**8.16**	NM	**0.000000565**	**0.000098**	**0.00766**	NM
		3/12/1996	**6.40**	NM	**0.000000841**	**0.000061**	**0.0113**	NM
		3/28/1996	**7.98**	NM	**0.000000579**	**0.00004**	**0.00754**	NM
		4/9/1996	**4.98**	NM	**0.000000489**	**0.000047**	**0.00650**	NM
		4/22/1996	**7.88**	NM	**0.000000503**	**0.000061**	**0.00608**	NM
		4/30/1996	**7.54**	NM	**0.000000424**	**0.000051**	**0.00590**	NM
		5/6/1996	**7.66**	NM	**0.000000476**	**0.000065**	**0.00551**	NM
		5/13/1996	**7.00**	NM	**0.000000460**	**0.000089**	**0.00614**	NM
		5/29/1996	**7.69**	**0.0068**	ND 0.00015	ND 0.00015	**0.0070**	NM
		6/10/1996	**7.57**	**0.0064**	ND 0.00015	ND 0.00015	**0.0063**	NM
		6/25/1996	**8.00**	**0.0049**	ND 0.00005	ND 0.00015	**0.0048**	NM
		7/8/1996	**8.19**	**0.0051**	ND 0.00005	ND 0.00015	**0.0051**	NM
		10/24/1996	**8.61**	**0.0050**	ND 0.00005	ND 0.00015	**0.0049**	NM
		1/6/1997	**8.19**	**0.0078**	ND 0.00005	ND 0.00015	**0.0077**	NM
		2/25/1997	**8.65**	**0.0069**	ND 0.00005	ND 0.00015	**0.0069**	NM
		5/12/1997	**8.07**	**0.0074**	ND 0.00005	ND 0.00015	**0.0074**	NM
		8/11/1997	**8.60**	**0.0093**	ND 0.00005	ND 0.00015	**0.0092**	NM
		11/11/1997	**8.15**	**0.0056**	ND 0.00015	ND 0.00015	**0.0056**	NM

Notes: NC = not calculated; NM = not measured
ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).
* Uranium 235 isotopic abundance is calculated by dividing the U 235 concentration by the total uranium concentration.
Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-4. Analytical Results -- Inorganic Constituents

Location		Date Sampled	Fluoride (mg/L)	Total Uranium (mg/L)	Uranium 234 (mg/L)	Uranium 235 (mg/L)	Uranium 238 (mg/L)	Uranium 235 Isotopic Abundance*
CAF-7B		2/2/1998	**8.76**	**0.0052**	ND 0.00015	ND 0.00015	**0.0051**	NM
		5/5/1998	**8.45**	**0.0057**	ND 0.00015	ND 0.00015	**0.0057**	NM
		8/12/1998	**8.63**	**0.0050**	ND 0.00015	ND 0.00015	**0.0049**	NM
		11/9/1998	**8.05 J**	**0.0060**	ND 0.00015	ND 0.00015	**0.0058**	NM
		1/14/1999	NM	NM	**0.0000004**	ND 0.00014	**0.00599**	NM
		3/17/1999	**8.00**	**0.0055**	ND 0.00015	ND 0.00015	**0.0055**	NM
		5/19/1999	**8.27**	**0.0052**	ND 0.00015	ND 0.00015	**0.0051**	NM
		8/18/1999	**8.30**	**0.0044**	ND 0.00015	ND 0.00015	**0.0043**	NM
		11/18/1999	**8.05**	**0.00458**	ND 0.00015	ND 0.00015	**0.00453**	NM
		2/15/2000	**7.40**	**0.00514**	ND 0.00015	ND 0.00015	**0.00506**	NM
		6/14/2000	**6.55**	**0.00361**	ND 0.00015	ND 0.00015	**0.00357**	NM
		8/2/2000	**6.25**	**0.00175**	NM	NM	NM	NM
		11/6/2000	**6.55**	**0.00395 Jl**	ND 0.00015	ND 0.00015	**0.00391**	NM
		4/20/2001	**5.70**	**0.00741**	ND 0.00015	ND 0.00015	**0.00728**	NM
		10/10/2001	**4.00**	**0.0717**	ND 0.00015	**0.00154**	**0.0702**	**0.021**
		1/21/2002	**3.45**	**0.0368**	ND 0.00015	**0.00041**	**0.0364**	**0.011**
		4/22/2002	**3.67**	**0.0227**	ND 0.00015	**0.00049**	**0.0222**	**0.022**
		7/24/2002	**3.20**	**0.00886**	ND 0.00015	**0.00018**	**0.00867**	**0.020**
		10/7/2002	**3.47**	**0.00483**	ND 0.00015	ND 0.00015	**0.00473**	NM
		2/17/2003	**3.40**	**0.00285**	ND 0.00015	ND 0.00015	**0.00277**	NM
		5/19/2003	**3.63**	**0.00346**	ND 0.00015	ND 0.00015	**0.00339**	NM
		9/2/2003	**3.78**	**0.00254**	ND 0.00015	ND 0.00015	**0.00250**	NM
		11/17/2003	**4.13**	**0.00175**	NM	NM	NM	NM
		2/24/2004	**3.35**	**0.00196**	NM	NM	NM	NM
		10/5/2004	**3.09**	**0.00236**	ND 0.00015	ND 0.00015	**0.00231**	NM
		5/9/2005	**2.67**	**0.00159**	NM	NM	NM	NM
		9/26/2005	**2.70**	**0.00202**	ND 0.00015	ND 0.00015	**0.00198**	NM
	2006-07	5/2/2006	**2.75**	**0.00089**	NM	NM	NM	NM
		9/18/2006	**2.68**	**0.00139**	NM	NM	NM	NM
		3/26/2007	**2.46**	**0.00127**	NM	NM	NM	NM
		10/1/2007	**2.30**	**0.00102**	NM	NM	NM	NM
CAF-8A		12/19/1995	**1.09**	ND 0.02	NM	NM	NM	NM
		1/9/1996	**1.03**	ND 0.001	NM	NM	NM	NM
		2/1/1996	**0.95**	NM	**0.00000011**	ND 0.00003	**0.00087**	NM
		2/15/1996	**0.91**	NM	**0.000000083**	ND 0.00002	**0.00075**	NM
		2/26/1996	**1.15**	NM	**0.00000011**	ND 0.00002	**0.00069**	NM
		3/12/1996	**1.08**	NM	**0.000000094**	**0.00002**	**0.0010**	NM
		3/27/1996	**1.37**	NM	**0.000000073**	**0.00002**	**0.00072**	NM
		4/9/1996	**0.54**	NM	**0.000000066**	ND 0.00003	**0.00048**	NM
		4/22/1996	**0.76**	NM	**0.000000073**	ND 0.00003	**0.00072**	NM
		4/30/1996	**0.71**	NM	**0.000000081**	ND 0.00004	**0.00063**	NM

Notes: NC = not calculated; NM = not measured
ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).
* Uranium 235 isotopic abundance is calculated by dividing the U 235 concentration by the total uranium concentration.
Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-4. Analytical Results -- Inorganic Constituents

Location		Date Sampled	Fluoride (mg/L)	Total Uranium (mg/L)	Uranium 234 (mg/L)	Uranium 235 (mg/L)	Uranium 238 (mg/L)	Uranium 235 Isotopic Abundance*
CAF-8A		5/6/1996	**0.86**	NM	**0.000000055**	**0.00002**	**0.00045**	NM
		5/13/1996	**0.85**	NM	**0.000000068**	ND 0.00002	**0.00048**	NM
		5/28/1996	**1.44**	**0.00049**	ND 0.00015	ND 0.00015	**0.00050**	NM
		6/10/1996	**1.65**	**0.00080**	ND 0.00015	ND 0.00015	**0.00070**	NM
		6/24/1996	**1.14**	**0.00063**	ND 0.00005	ND 0.00015	**0.00060**	NM
		7/8/1996	**0.40**	**0.00039**	ND 0.00005	ND 0.00015	**0.00038**	NM
		10/24/1996	**0.29**	**0.00034**	ND 0.00005	ND 0.00015	**0.00035**	NM
		1/6/1997	**0.50**	**0.00046**	ND 0.00005	ND 0.00015	**0.00046**	NM
		2/25/1997	**0.28**	**0.00034**	ND 0.00005	ND 0.00015	**0.00034**	NM
		5/12/1997	**0.92**	**0.00055**	ND 0.00005	ND 0.00015	**0.00055**	NM
		8/11/1997	**1.64**	**0.00082**	ND 0.00005	ND 0.00015	**0.00077**	NM
		11/10/1997	**1.33**	**0.00058**	ND 0.00015	ND 0.00015	**0.00058**	NM
		2/2/1998	**0.37**	**0.00030**	ND 0.00015	ND 0.00015	**0.00024**	NM
		5/4/1998	**0.30**	**0.00022**	ND 0.00015	ND 0.00015	**0.00022**	NM
		8/10/1998	**0.90**	**0.00053**	ND 0.00015	ND 0.00015	**0.00053**	NM
		11/10/1998	**1.00**	**0.00042**	NM	NM	NM	NM
		1/14/1999	NM	NM	**0.00000006**	ND 0.00005	**0.00081**	NM
		3/19/1999	**1.68**	**0.00062**	NM	NM	NM	NM
		5/18/1999	**1.14**	**0.00049**	NM	NM	NM	NM
		8/16/1999	**1.35**	**0.00078**	NM	NM	NM	NM
		11/17/1999	**1.03**	**0.00032**	NM	NM	NM	NM
		2/14/2000	**0.97**	ND 0.00015	NM	NM	NM	NM
		6/14/2000	**2.50**	**0.00043**	NM	NM	NM	NM
		8/2/2000	**1.65**	ND 0.00015	NM	NM	NM	NM
		11/7/2000	**1.58**	**0.00052 Jl**	NM	NM	NM	NM
		4/19/2001	**1.10**	**0.00178**	NM	NM	NM	NM
		10/9/2001	**1.66**	**0.00120**	NM	NM	NM	NM
		1/22/2002	**1.94**	**0.00065**	NM	NM	NM	NM
		4/22/2002	**3.02**	**0.00053**	NM	NM	NM	NM
		7/25/2002	**3.49**	**0.00074**	NM	NM	NM	NM
		10/7/2002	**2.65**	**0.00026**	NM	NM	NM	NM
		2/19/2003	**2.17**	**0.00038**	NM	NM	NM	NM
		5/20/2003	**1.28**	**0.00043**	NM	NM	NM	NM
		9/2/2003	**0.45**	**0.00027**	NM	NM	NM	NM
		11/18/2003	**0.38**	ND 0.00015	NM	NM	NM	NM
		2/23/2004	**0.44**	**0.00053**	NM	NM	NM	NM
		10/5/2004	**0.62**	**0.00028**	NM	NM	NM	NM
		5/11/2005	**1.90**	**0.00043**	NM	NM	NM	NM
		9/27/2005	**1.57**	**0.00043**	NM	NM	NM	NM
	2006-07	5/2/2006	**1.84**	**0.00043**	NM	NM	NM	NM
		9/18/2006	**0.47**	**0.00018**	NM	NM	NM	NM

Notes: NC = not calculated; NM = not measured
ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).
* Uranium 235 isotopic abundance is calculated by dividing the U 235 concentration by the total uranium concentration.
Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-4. Analytical Results -- Inorganic Constituents

Location		Date Sampled	Fluoride (mg/L)	Total Uranium (mg/L)	Uranium 234 (mg/L)	Uranium 235 (mg/L)	Uranium 238 (mg/L)	Uranium 235 Isotopic Abundance*
CAF-8A	*2006-07*	3/28/2007	**0.75**	**0.00033**	NM	NM	NM	NM
		10/1/2007	**2.26**	**0.00446**	ND 0.00015	ND 0.00015	**0.00438**	NM
CAF-8B		12/19/1995	**6.39**	ND 0.02	NM	NM	NM	NM
		1/9/1996	**6.75**	**0.003**	NM	NM	NM	NM
		2/1/1996	**1.19**	NM	**0.000000272**	ND 0.000056	**0.00308**	NM
		2/15/1996	**6.79**	NM	**0.000000252**	**0.00004**	**0.0026**	NM
		2/26/1996	**0.11**	NM	**0.000000201**	**0.00004**	**0.0019**	NM
		3/12/1996	**7.60**	NM	ND 0.000000010	ND 0.00003	ND 0.0002	NM
		3/27/1996	**7.23**	NM	**0.000000330**	**0.000056**	**0.00344**	NM
		4/8/1996	**6.39**	NM	**0.000000189**	ND 0.00003	**0.0020**	NM
		4/22/1996	**6.89**	NM	**0.000000267**	ND 0.00003	**0.00305**	NM
		4/30/1996	**7.64**	NM	**0.000000228**	**0.00002**	**0.0027**	NM
		5/6/1996	**7.72**	NM	**0.000000230**	**0.00003**	**0.0030**	NM
		5/13/1996	**6.83**	NM	**0.000000272**	**0.000047**	**0.0030**	NM
		5/29/1996	**6.82**	**0.0026**	ND 0.00015	ND 0.00015	**0.0026**	NM
		6/10/1996	**7.10**	**0.0028**	ND 0.00015	ND 0.00015	**0.0027**	NM
		6/25/1996	**6.98**	**0.0024**	ND 0.00005	ND 0.00015	**0.0023**	NM
		7/8/1996	**7.00**	**0.0021**	ND 0.00005	ND 0.00015	**0.0021**	NM
		10/24/1996	**8.34**	**0.0017**	ND 0.00005	ND 0.00015	**0.0016**	NM
		1/6/1997	**10.50**	**0.0020**	ND 0.00005	ND 0.00015	**0.0020**	NM
		2/25/1997	**11.10**	**0.0025**	ND 0.00005	ND 0.00015	**0.0025**	NM
		5/12/1997	**10.20**	**0.0026**	ND 0.00005	ND 0.00015	**0.0026**	NM
		8/11/1997	**11.90**	**0.0059**	**0.00006**	**0.00019**	**0.0056**	**0.032**
		11/10/1997	**12.00**	**0.0029**	ND 0.00015	ND 0.00015	**0.0029**	NM
		2/2/1998	**12.60**	**0.0028**	ND 0.00015	ND 0.00015	**0.0027**	NM
		5/4/1998	**10.00**	**0.0021**	ND 0.00015	ND 0.00015	**0.0021**	NM
		8/10/1998	**10.10**	**0.0016**	ND 0.00015	ND 0.00015	**0.0016**	NM
		11/10/1998	**10.20**	**0.0019**	NM	NM	NM	NM
		1/14/1999	NM	NM	**0.0000002**	**0.00011**	**0.0013**	NM
		3/19/1999	**8.85**	**0.0018**	NM	NM	NM	NM
		5/18/1999	**8.70**	**0.0020**	NM	NM	NM	NM
		8/16/1999	**8.65**	**0.0019**	NM	NM	NM	NM
		11/17/1999	**8.25**	**0.00375**	ND 0.00015	ND 0.00015	**0.00369**	NM
		2/14/2000	**7.30**	**0.00252**	ND 0.00015	ND 0.00015	**0.00246**	NM
		6/14/2000	**6.30**	**0.00175**	NM	NM	NM	NM
		8/2/2000	**5.95**	ND 0.00015	NM	NM	NM	NM
		11/7/2000	**5.70**	**0.00230 Jl**	ND 0.00015	ND 0.00015	**0.00227**	NM
		4/19/2001	**5.00**	**0.00204**	ND 0.00015	ND 0.00015	**0.00201**	NM
		10/9/2001	**3.98**	**0.00135**	NM	NM	NM	NM
		1/22/2002	**3.52**	**0.00050**	NM	NM	NM	NM
		4/22/2002	**3.31**	**0.00070**	NM	NM	NM	NM

Notes: NC = not calculated; NM = not measured
ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).
* Uranium 235 isotopic abundance is calculated by dividing the U 235 concentration by the total uranium concentration.
Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-4. Analytical Results -- Inorganic Constituents

Location		Date Sampled	Fluoride (mg/L)	Total Uranium (mg/L)	Uranium 234 (mg/L)	Uranium 235 (mg/L)	Uranium 238 (mg/L)	Uranium 235 Isotopic Abundance*
CAF-8B		7/25/2002	**2.99**	**0.00051**	NM	NM	NM	NM
		10/7/2002	**2.99**	**0.00041**	NM	NM	NM	NM
		2/19/2003	**2.96**	**0.00049**	NM	NM	NM	NM
		5/20/2003	**2.79**	**0.00052**	NM	NM	NM	NM
		9/2/2003	**2.69**	**0.00084**	NM	NM	NM	NM
		11/18/2003	**2.29**	ND 0.00015	NM	NM	NM	NM
		2/23/2004	**2.01**	**0.00027**	NM	NM	NM	NM
		10/5/2004	**1.73**	**0.00036**	NM	NM	NM	NM
		5/11/2005	**2.16**	**0.00025**	NM	NM	NM	NM
		9/27/2005	**1.91**	**0.00030**	NM	NM	NM	NM
	2006-07	5/2/2006	**1.79**	**0.00041**	NM	NM	NM	NM
		9/18/2006	**1.54**	**0.00048**	NM	NM	NM	NM
		3/28/2007	**1.47**	**0.00075**	NM	NM	NM	NM
		10/1/2007	**1.59**	**0.00071**	NM	NM	NM	NM
CAF-9A		12/19/1995	**2.97**	ND 0.02	NM	NM	NM	NM
		1/9/1996	**3.22**	**0.006**	NM	NM	NM	NM
		2/2/1996	**4.20**	NM	**0.000000610**	**0.000065**	**0.00614**	NM
		2/15/1996	**3.40**	NM	**0.000000328**	**0.000061**	**0.00320**	NM
		2/26/1996	**3.44**	NM	**0.000000319**	**0.000056**	**0.00371**	NM
		3/12/1996	**3.94**	NM	**0.000000239**	**0.000047**	**0.0022**	NM
		3/27/1996	**3.92**	NM	**0.000000286**	**0.00003**	**0.0029**	NM
		4/9/1996	**2.93**	NM	**0.000000188**	**0.00003**	**0.0026**	NM
		4/22/1996	**3.22**	NM	**0.000000280**	**0.00003**	**0.0026**	NM
		4/30/1996	**3.37**	NM	**0.000000220**	ND 0.00003	**0.0019**	NM
		5/6/1996	**3.62**	NM	**0.000000184**	**0.00004**	**0.0015**	NM
		5/13/1996	**3.73**	NM	**0.000000199**	**0.00003**	**0.0018**	NM
		5/28/1996	**4.08**	**0.0046**	ND 0.00015	ND 0.00015	**0.0045**	NM
		6/10/1996	**4.40**	**0.0050**	ND 0.00015	ND 0.00015	**0.0049**	NM
		6/24/1996	**3.80**	**0.0050**	ND 0.00005	ND 0.00015	**0.0049**	NM
		7/8/1996	**2.75**	**0.0036**	ND 0.00005	ND 0.00015	**0.0035**	NM
		10/24/1996	**1.06**	**0.00059**	ND 0.00005	ND 0.00015	**0.00058**	NM
		1/6/1997	**1.57**	**0.0012**	ND 0.00005	ND 0.00015	**0.0012**	NM
		2/25/1997	**1.53**	**0.0018**	ND 0.00005	ND 0.00015	**0.0018**	NM
		5/12/1997	**2.36**	**0.0033**	ND 0.00005	ND 0.00015	**0.0033**	NM
		8/11/1997	**3.40**	**0.0049**	ND 0.00005	ND 0.00015	**0.0048**	NM
		11/11/1997	**4.25**	**0.0041**	ND 0.00015	ND 0.00015	**0.0041**	NM
		2/2/1998	**2.35**	**0.0021**	ND 0.00015	ND 0.00015	**0.0020**	NM
		5/4/1998	**2.29**	**0.0013**	ND 0.00015	ND 0.00015	**0.0013**	NM
		8/10/1998	**2.43**	**0.00084**	ND 0.00015	ND 0.00015	**0.00084**	NM
		11/10/1998	**1.63**	**0.00086**	NM	NM	NM	NM
		1/15/1999	NM	NM	**0.0000003**	ND 0.00009	**0.0036**	NM

Notes: NC = not calculated; NM = not measured
ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).
* Uranium 235 isotopic abundance is calculated by dividing the U 235 concentration by the total uranium concentration.
Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-4. Analytical Results -- Inorganic Constituents

Location		Date Sampled	Fluoride (mg/L)	Total Uranium (mg/L)	Uranium 234 (mg/L)	Uranium 235 (mg/L)	Uranium 238 (mg/L)	Uranium 235 Isotopic Abundance*
CAF-9A		3/19/1999	**2.29**	**0.0028**	ND 0.00015	ND 0.00015	**0.0028**	NM
		5/18/1999	**1.53**	**0.0021**	ND 0.00015	ND 0.00015	**0.0021**	NM
		8/16/1999	**1.75**	**0.0011**	NM	NM	NM	NM
		11/17/1999	**0.79**	**0.00034**	NM	NM	NM	NM
		2/16/2000	**1.29**	**0.00016**	NM	NM	NM	NM
		6/14/2000	**2.63**	**0.00169**	NM	NM	NM	NM
		8/2/2000	**1.89**	ND 0.00015	NM	NM	NM	NM
		11/7/2000	**1.69**	**0.00066 Jl**	NM	NM	NM	NM
		4/19/2001	**2.32**	**0.00117**	NM	NM	NM	NM
		10/9/2001	**2.74**	**0.00151**	NM	NM	NM	NM
		4/22/2002	**4.78**	**0.00314**	ND 0.00015	ND 0.00015	**0.00310**	NM
		7/24/2002	**41.7**	**0.201**	ND 0.00015	**0.00246**	**0.199**	**0.012**
		10/7/2002	**3.32**	**0.00814**	ND 0.00015	ND 0.00015	**0.00804**	NM
		2/17/2003	**2.68**	**0.00024**	NM	NM	NM	NM
		5/20/2003	**2.04**	**0.00236**	ND 0.00015	ND 0.00015	**0.00232**	NM
		9/2/2003	**0.80**	**0.00116**	NM	NM	NM	NM
		11/17/2003	**0.83**	**0.00126**	NM	NM	NM	NM
		2/23/2004	**1.22**	**0.00256**	ND 0.00015	ND 0.00015	**0.00252**	NM
		10/5/2004	**0.83**	**0.00110**	NM	NM	NM	NM
		5/11/2005	**2.12**	**0.00267**	ND 0.00015	ND 0.00015	**0.00262**	NM
		9/27/2005	**2.49**	**0.00207**	ND 0.00015	ND 0.00015	**0.00204**	NM
	2006-07	5/2/2006	**2.64**	**0.00464**	ND 0.00015	ND 0.00015	**0.00457**	NM
		9/18/2006	**1.43**	**0.00198**	NM	NM	NM	NM
		3/28/2007	**1.10**	**0.00121**	NM	NM	NM	NM
CAF-9B		12/19/1995	**4.04**	ND 0.02	NM	NM	NM	NM
		1/9/1996	**4.35**	**0.008**	NM	NM	NM	NM
		2/2/1996	**4.39**	NM	**0.000000602**	**0.000079**	**0.00772**	NM
		2/15/1996	**3.86**	NM	**0.000000320**	**0.00004**	**0.00395**	NM
		2/26/1996	**3.80**	NM	**0.000000293**	**0.00003**	**0.00353**	NM
		3/12/1996	**4.02**	NM	**0.000000264**	**0.000056**	**0.00344**	NM
		3/27/1996	**4.30**	NM	**0.000000594**	**0.00010**	**0.00707**	NM
		4/9/1996	**3.63**	NM	**0.000000324**	**0.00004**	**0.00407**	NM
		4/22/1996	**3.79**	NM	**0.000000340**	ND 0.000047	**0.00404**	NM
		4/30/1996	**4.16**	NM	**0.000000286**	**0.00004**	**0.00341**	NM
		5/6/1996	**4.30**	NM	**0.000000265**	**0.000070**	**0.00335**	NM
		5/13/1996	**4.17**	NM	**0.000000337**	**0.000047**	**0.00428**	NM
		5/29/1996	**4.87**	**0.0060**	ND 0.00015	ND 0.00015	**0.0059**	NM
		6/10/1996	**4.90**	**0.0063**	ND 0.00015	ND 0.00015	**0.0062**	NM
		6/25/1996	**4.82**	**0.0052**	ND 0.00005	ND 0.00015	**0.0051**	NM
		7/8/1996	**4.69**	**0.0053**	ND 0.00005	ND 0.00015	**0.0053**	NM
		10/25/1996	**3.96**	**0.0034**	ND 0.00005	ND 0.00015	**0.0034**	NM

Notes: NC = not calculated; NM = not measured
ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).
* Uranium 235 isotopic abundance is calculated by dividing the U 235 concentration by the total uranium concentration.
Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-4. Analytical Results -- Inorganic Constituents

Location		Date Sampled	Fluoride (mg/L)	Total Uranium (mg/L)	Uranium 234 (mg/L)	Uranium 235 (mg/L)	Uranium 238 (mg/L)	Uranium 235 Isotopic Abundance*
CAF-9B		1/6/1997	**3.50**	**0.0030**	ND 0.00005	ND 0.00015	**0.0030**	NM
		2/25/1997	**3.94**	**0.0030**	ND 0.00005	ND 0.00015	**0.0030**	NM
		5/12/1997	**3.39**	**0.0032**	ND 0.00005	ND 0.00015	**0.0032**	NM
		8/11/1997	**4.32**	**0.0038**	ND 0.00005	ND 0.00015	**0.0037**	NM
		11/11/1997	**3.76**	**0.0045**	ND 0.00015	ND 0.00015	**0.0045**	NM
		2/2/1998	**4.55**	**0.0041**	ND 0.00015	ND 0.00015	**0.0040**	NM
		5/4/1998	**4.09**	**0.0036**	ND 0.00015	ND 0.00015	**0.0036**	NM
		8/11/1998	**3.97**	**0.0031**	ND 0.00015	ND 0.00015	**0.0031**	NM
		11/10/1998	**3.68**	**0.0035**	ND 0.00015	ND 0.00015	**0.0035**	NM
		1/15/1999	NM	NM	**0.0000002**	ND 0.00005	**0.0036**	NM
		3/19/1999	**3.48**	**0.0035**	ND 0.00015	ND 0.00015	**0.0035**	NM
		5/18/1999	**3.75**	**0.0038**	ND 0.00015	ND 0.00015	**0.0038**	NM
		8/16/1999	**3.85**	**0.0061**	ND 0.00015	ND 0.00015	**0.0059**	NM
		11/17/1999	**4.41**	**0.00387**	ND 0.00015	ND 0.00015	**0.00383**	NM
		2/15/2000	**3.48**	**0.00234**	ND 0.00015	ND 0.00015	**0.00229**	NM
		6/14/2000	**3.65**	**0.00213**	ND 0.00015	ND 0.00015	**0.00211**	NM
		8/2/2000	**3.83**	ND 0.00015	NM	NM	NM	NM
		11/7/2000	**4.16**	**0.00317 Jl**	ND 0.00015	ND 0.00015	**0.00314**	NM
		4/19/2001	**3.28**	**0.00232**	ND 0.00015	ND 0.00015	**0.00229**	NM
		10/9/2001	**2.73**	**0.00184**	NM	NM	NM	NM
		1/22/2002	**2.43**	**0.00120**	NM	NM	NM	NM
		4/22/2002	**1.97**	**0.00113**	NM	NM	NM	NM
		7/24/2002	**1.65**	**0.00215**	ND 0.00015	ND 0.00015	**0.00213**	NM
		10/7/2002	**0.99**	**0.00155**	NM	NM	NM	NM
		2/17/2003	**1.64**	**0.00137**	NM	NM	NM	NM
		5/20/2003	**1.58**	**0.00126**	NM	NM	NM	NM
		9/2/2003	**1.63**	**0.00108**	NM	NM	NM	NM
		11/17/2003	**1.77**	**0.00102**	NM	NM	NM	NM
		2/23/2004	**2.00**	**0.00193**	NM	NM	NM	NM
		10/5/2004	**1.88**	**0.00091**	NM	NM	NM	NM
		5/11/2005	**1.76**	**0.00071**	NM	NM	NM	NM
		9/27/2005	**1.75**	**0.00092**	NM	NM	NM	NM
	2006-07	5/2/2006	**1.69**	**0.00086**	NM	NM	NM	NM
		9/18/2006	**1.72**	**0.00148**	NM	NM	NM	NM
		3/28/2007	**1.55**	**0.00123**	NM	NM	NM	NM
		10/1/2007	**1.61**	**0.00201**	ND 0.00015	ND 0.00015	**0.00198**	NM
CAF-10A		12/19/1995	ND 1.0	ND 0.02	NM	NM	NM	NM
		1/10/1996	**0.76**	**0.006**	NM	NM	NM	NM
		2/1/1996	**0.73**	NM	**0.000000197**	**0.000051**	**0.0021**	NM
		2/14/1996	**0.90**	NM	**0.000000364**	**0.000075**	**0.00563**	NM
		2/26/1996	**1.05**	NM	**0.000000285**	**0.00004**	**0.00338**	NM

Notes: NC = not calculated; NM = not measured
ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).
* Uranium 235 isotopic abundance is calculated by dividing the U 235 concentration by the total uranium concentration.
Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-4. Analytical Results -- Inorganic Constituents

Location	Date Sampled	Fluoride (mg/L)	Total Uranium (mg/L)	Uranium 234 (mg/L)	Uranium 235 (mg/L)	Uranium 238 (mg/L)	Uranium 235 Isotopic Abundance*
CAF-10A	3/12/1996	**1.03**	NM	**0.00000015**	**0.00003**	**0.0013**	NM
	3/27/1996	**1.33**	NM	**0.000000163**	**0.00003**	**0.0015**	NM
	4/8/1996	**0.96**	NM	**0.00000011**	ND 0.00002	**0.0011**	NM
	4/22/1996	**1.16**	NM	**0.00000011**	**0.00002**	**0.0010**	NM
	4/30/1996	**1.07**	NM	**0.000000087**	ND 0.00001	**0.00060**	NM
	5/6/1996	**1.17**	NM	**0.000000071**	ND 0.00003	**0.00090**	NM
	5/13/1996	**1.15**	NM	**0.000000071**	**0.00003**	**0.00081**	NM
	5/28/1996	**1.41**	**0.00058**	ND 0.00015	ND 0.00015	**0.00060**	NM
	6/10/1996	**1.43**	**0.00070**	ND 0.00015	ND 0.00015	**0.00070**	NM
	6/24/1996	**1.04**	**0.00061**	ND 0.00005	ND 0.00015	**0.00060**	NM
	7/8/1996	**0.90**	**0.0013**	ND 0.00005	ND 0.00015	**0.0012**	NM
	10/23/1996	**0.90**	**0.00093**	ND 0.00005	ND 0.00015	**0.00092**	NM
	1/6/1997	**1.12**	**0.0015**	ND 0.00005	ND 0.00015	**0.0014**	NM
	2/24/1997	**1.29**	**0.0010**	ND 0.00005	ND 0.00015	**0.0010**	NM
	5/9/1997	**2.23**	**0.0010**	ND 0.00005	ND 0.00015	**0.0010**	NM
	8/11/1997	**2.27**	**0.00049**	**0.00005**	ND 0.00015	**0.00037**	NM
	11/10/1997	**2.15**	**0.00031**	ND 0.00015	ND 0.00015	**0.00031**	NM
	2/2/1998	**1.90**	**0.0014**	ND 0.00015	ND 0.00015	**0.0013**	NM
	5/4/1998	**2.25**	**0.0011**	ND 0.00015	ND 0.00015	**0.0011**	NM
	8/10/1998	**1.52**	**0.00047**	ND 0.00015	ND 0.00015	**0.00047**	NM
	11/9/1998	**1.42 J**	**0.0014**	NM	NM	NM	NM
	1/14/1999	NM	NM	**0.0000002**	ND 0.00005	**0.00096**	NM
	3/19/1999	**1.17**	**0.0019**	NM	NM	NM	NM
	5/18/1999	**0.96**	**0.0022**	ND 0.00015	ND 0.00015	**0.0022**	NM
	8/16/1999	**1.15**	**0.0023**	ND 0.00015	ND 0.00015	**0.0022**	NM
	11/15/1999	**0.69**	**0.00227**	ND 0.00015	ND 0.00015	**0.00221**	NM
	2/14/2000	**0.68**	**0.00146**	NM	NM	NM	NM
	6/12/2000	**0.96**	**0.00027**	NM	NM	NM	NM
	7/31/2000	**0.66**	ND 0.00015	NM	NM	NM	NM
	11/7/2000	**0.98**	**0.00103 Jl**	NM	NM	NM	NM
	4/19/2001	**1.13**	**0.00681**	ND 0.00015	ND 0.00015	**0.00668**	NM
	10/9/2001	**1.22**	**0.00156**	NM	NM	NM	NM
	1/22/2002	**1.24**	**0.00475**	ND 0.00015	ND 0.00015	**0.00475**	NM
	4/24/2002	**0.90**	**0.0109**	ND 0.00015	**0.00021**	**0.0107**	**0.019**
	7/25/2002	**1.02**	**0.00641**	ND 0.00015	ND 0.00015	**0.00628**	NM
	10/7/2002	**1.08**	**0.00404**	ND 0.00015	ND 0.00015	**0.00397**	NM
	2/19/2003	**0.79**	**0.0145**	ND 0.00015	**0.00031**	**0.0142**	**0.021**
	5/19/2003	**0.81**	**0.0204**	ND 0.00015	**0.00040**	**0.0200**	**0.020**
	9/2/2003	**0.85**	**0.00550**	ND 0.00015	ND 0.00015	**0.00540**	NM
	11/17/2003	**0.70**	**0.00464**	ND 0.00015	ND 0.00015	**0.00453**	NM
	2/19/2004	**0.78**	**0.00336**	ND 0.00015	ND 0.00015	**0.00329**	NM

Notes: NC = not calculated; NM = not measured
ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).
* Uranium 235 isotopic abundance is calculated by dividing the U 235 concentration by the total uranium concentration.
Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-4. Analytical Results -- Inorganic Constituents

Location		Date Sampled	Fluoride (mg/L)	Total Uranium (mg/L)	Uranium 234 (mg/L)	Uranium 235 (mg/L)	Uranium 238 (mg/L)	Uranium 235 Isotopic Abundance*
CAF-10A		10/5/2004	**0.80**	**0.00400**	ND 0.00015	ND 0.00015	**0.00392**	NM
		5/9/2005	**0.86**	**0.00177**	NM	NM	NM	NM
		9/26/2005	**0.94**	**0.00346**	ND 0.00015	ND 0.00015	**0.00340**	NM
	2006-07	5/2/2006	**0.92**	**0.00518**	ND 0.00015	ND 0.00015	**0.00509**	NM
		9/18/2006	**0.77**	**0.00598**	ND 0.00015	ND 0.00015	**0.00583**	NM
		3/26/2007	**0.85**	**0.00316**	ND 0.00015	ND 0.00015	**0.00310**	NM
		10/1/2007	**1.46**	**0.00802**	ND 0.00015	**0.00015**	**0.00786**	**0.019**
CAF-10B		12/19/1995	ND 1.0	ND 0.02	NM	NM	NM	NM
		1/10/1996	ND 0.10	ND 0.001	NM	NM	NM	NM
		2/1/1996	ND 0.10	NM	ND 0.00000001	ND 0.00004	**0.0003**	NM
		2/14/1996	ND 0.10	NM	**0.000000016**	ND 0.00002	ND 0.00009	NM
		2/26/1996	**0.16**	NM	ND 0.000000008	ND 0.00002	**0.0002**	NM
		3/12/1996	ND 0.10	NM	**0.000000010**	ND 0.00002	ND 0.0001	NM
		3/27/1996	ND 0.10	NM	**0.00000001**	ND 0.00003	ND 0.0002	NM
		4/8/1996	**0.11**	NM	**0.00000001**	ND 0.00003	**0.0001**	NM
		4/22/1996	**0.11**	NM	ND 0.000000008	ND 0.00002	**0.0002**	NM
		4/30/1996	ND 0.10	NM	ND 0.000000008	ND 0.00002	ND 0.0002	NM
		5/6/1996	ND 0.10	NM	**0.000000010**	ND 0.00002	**0.0002**	NM
		5/13/1996	ND 0.10	NM	**0.00000001**	ND 0.00001	**0.0001**	NM
		5/28/1996	ND 0.10	**0.00023**	ND 0.00015	ND 0.00015	**0.00020**	NM
		6/10/1996	ND 0.10	**0.00050**	ND 0.00015	ND 0.00015	**0.00050**	NM
		6/24/1996	ND 0.10	**0.00031**	ND 0.00015	ND 0.00015	**0.00031**	NM
		7/8/1996	ND 0.10	**0.00016**	ND 0.00015	ND 0.00015	**0.00015**	NM
		10/23/1996	**0.05**	**0.00045**	ND 0.00005	ND 0.00015	**0.00045**	NM
		1/6/1997	ND 0.01	**0.00019**	ND 0.00005	ND 0.00015	**0.00019**	NM
		2/24/1997	**0.08**	**0.00017**	ND 0.00005	ND 0.00015	**0.00017**	NM
		5/9/1997	ND 0.02	**0.00033**	ND 0.00005	ND 0.00015	**0.00033**	NM
		8/11/1997	**0.04**	**0.00025**	ND 0.00005	ND 0.00015	**0.00022**	NM
		11/10/1997	ND 0.02	ND 0.00015	ND 0.00015	ND 0.00015	ND 0.00015	NM
		2/2/1998	ND 0.02	**0.00021**	ND 0.00015	ND 0.00015	**0.00017**	NM
		5/4/1998	**0.03**	**0.00038**	ND 0.00015	ND 0.00015	**0.00038**	NM
		8/10/1998	**0.06**	**0.00057**	ND 0.00015	ND 0.00015	**0.00057**	NM
		11/9/1998	**0.03 J**	**0.00071**	NM	NM	NM	NM
		1/14/1999	NM	NM	ND 0.00000003	ND 0.00009	ND 0.00030	NM
		3/19/1999	**0.18**	**0.00052**	NM	NM	NM	NM
		5/18/1999	**0.21**	**0.00051**	NM	NM	NM	NM
		8/16/1999	**0.12**	**0.00051**	NM	NM	NM	NM
		11/15/1999	**0.15**	**0.00097**	NM	NM	NM	NM
		2/14/2000	ND 0.10	**0.00037**	NM	NM	NM	NM
		6/12/2000	ND 0.10	ND 0.00015	NM	NM	NM	NM
		7/31/2000	**0.10**	ND 0.00015	NM	NM	NM	NM

Notes: NC = not calculated; NM = not measured
ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).
* Uranium 235 isotopic abundance is calculated by dividing the U 235 concentration by the total uranium concentration.
Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-4. Analytical Results -- Inorganic Constituents

Location		Date Sampled	Fluoride (mg/L)	Total Uranium (mg/L)	Uranium 234 (mg/L)	Uranium 235 (mg/L)	Uranium 238 (mg/L)	Uranium 235 Isotopic Abundance*
CAF-10B		11/7/2000	**0.10**	ND 0.00015 UJ	NM	NM	NM	NM
		4/19/2001	**0.11**	ND 0.00015	NM	NM	NM	NM
		10/8/2001	**0.14**	**0.00033**	NM	NM	NM	NM
		1/22/2002	**0.13**	**0.00022**	NM	NM	NM	NM
		4/24/2002	**0.20**	**0.00045**	NM	NM	NM	NM
		7/25/2002	**0.12**	**0.00063**	NM	NM	NM	NM
		10/7/2002	**0.28**	**0.00068**	NM	NM	NM	NM
		2/19/2003	**0.14**	**0.00072**	NM	NM	NM	NM
		5/20/2003	**0.11**	**0.00071**	NM	NM	NM	NM
		9/4/2003	**0.11**	**0.00069**	NM	NM	NM	NM
		11/18/2003	**0.14**	ND 0.00015	NM	NM	NM	NM
		2/20/2004	ND 0.10	**0.00047**	NM	NM	NM	NM
		10/5/2004	**0.16**	**0.00038**	NM	NM	NM	NM
		5/9/2005	**0.15**	**0.00031**	NM	NM	NM	NM
		9/26/2005	**0.14**	**0.00033**	NM	NM	NM	NM
	2006-07	5/2/2006	**0.14**	**0.00024**	NM	NM	NM	NM
		9/18/2006	**0.11**	**0.00022**	NM	NM	NM	NM
		3/26/2007	**0.17**	**0.00030**	NM	NM	NM	NM
		10/1/2007	ND 0.10	**0.00025**	NM	NM	NM	NM
CAF-11A		12/19/1995	ND 1.0	ND 0.02	NM	NM	NM	NM
		1/10/1996	ND 0.10	**0.001**	NM	NM	NM	NM
		2/1/1996	ND 0.10	NM	**0.000000016**	ND 0.00002	**0.0001**	NM
		2/14/1996	ND 0.10	NM	**0.000000016**	ND 0.000009	**0.0002**	NM
		2/26/1996	**0.11**	NM	**0.000000006**	ND 0.00002	ND 0.0001	NM
		3/12/1996	ND 0.10	NM	ND 0.000000005	ND 0.00001	ND 0.00009	NM
		3/27/1996	ND 0.10	NM	ND 0.000000008	ND 0.00002	ND 0.0001	NM
		4/8/1996	ND 0.10	NM	**0.000000008**	ND 0.00002	**0.0001**	NM
		4/22/1996	ND 0.10	NM	**0.00000001**	ND 0.00002	ND 0.0001	NM
		4/30/1996	ND 0.10	NM	**0.000000010**	ND 0.00002	**0.0002**	NM
		5/6/1996	ND 0.10	NM	ND 0.000000008	ND 0.00002	ND 0.0001	NM
		5/13/1996	ND 0.10	NM	ND 0.000000008	ND 0.00002	ND 0.0001	NM
		5/28/1996	ND 0.10	**0.00040**	ND 0.00015	ND 0.00015	**0.00040**	NM
		6/10/1996	ND 0.10	ND 0.00015	ND 0.00015	ND 0.00015	ND 0.00015	NM
		6/24/1996	ND 0.10	**0.00098**	ND 0.00015	ND 0.00015	**0.00098**	NM
		7/8/1996	ND 0.10	ND 0.00015	ND 0.00015	ND 0.00015	ND 0.00015	NM
		10/23/1996	ND 0.10	**0.0015**	ND 0.00005	ND 0.00015	**0.0014**	NM
		1/6/1997	ND 0.01	ND 0.00015	ND 0.00005	ND 0.00015	ND 0.00015	NM
		2/25/1997	**0.09**	ND 0.00015	ND 0.00005	ND 0.00015	ND 0.00015	NM
		5/12/1997	ND 0.02	**0.00015**	ND 0.00005	ND 0.00015	ND 0.00015	NM
		8/11/1997	ND 0.02	**0.00029**	ND 0.00005	ND 0.00015	**0.00026**	NM
		11/10/1997	ND 0.02	ND 0.00015	ND 0.00015	ND 0.00015	ND 0.00015	NM

Notes: NC = not calculated; NM = not measured
ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).
* Uranium 235 isotopic abundance is calculated by dividing the U 235 concentration by the total uranium concentration.
Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-4. Analytical Results -- Inorganic Constituents

Location		Date Sampled	Fluoride (mg/L)	Total Uranium (mg/L)	Uranium 234 (mg/L)	Uranium 235 (mg/L)	Uranium 238 (mg/L)	Uranium 235 Isotopic Abundance*
CAF-11A		2/2/1998	ND 0.02	**0.00019**	ND 0.00015	ND 0.00015	**0.00015**	NM
		5/4/1998	ND 0.02	**0.0036**	ND 0.00015	ND 0.00015	**0.0036**	NM
		8/11/1998	**0.03**	ND 0.00015	ND 0.00015	ND 0.00015	ND 0.00015	NM
		11/10/1998	**0.06**	ND 0.00015	NM	NM	NM	NM
		1/14/1999	NM	NM	ND 0.00000006	ND 0.00009	ND 0.00090	NM
		3/17/1999	ND 0.10	ND 0.00015	NM	NM	NM	NM
		5/19/1999	ND 0.10	**0.00021**	NM	NM	NM	NM
		8/18/1999	ND 0.10	ND 0.00015	NM	NM	NM	NM
		11/15/1999	ND 0.10	ND 0.00015	NM	NM	NM	NM
		2/16/2000	ND 0.10	ND 0.00015	NM	NM	NM	NM
		6/13/2000	ND 0.10	ND 0.00015	NM	NM	NM	NM
		8/1/2000	ND 0.10	ND 0.00015	NM	NM	NM	NM
		11/7/2000	ND 0.10	**0.0109 Jl**	ND 0.00015	ND 0.00015	**0.0108**	NM
		4/20/2001	ND 0.10	ND 0.00015	NM	NM	NM	NM
		4/24/2002	ND 0.10	**0.00022**	NM	NM	NM	NM
		2/19/2003	ND 0.10	**0.00020**	NM	NM	NM	NM
		2/20/2004	ND 0.10	**0.00119**	NM	NM	NM	NM
		5/9/2005	**0.13**	**0.00057**	NM	NM	NM	NM
	2006-07	5/2/2006	ND 0.10	**0.00565**	ND 0.00015	ND 0.00015	**0.00560**	NM
		3/26/2007	ND 0.10	**0.00039**	NM	NM	NM	NM
CAF-11B		12/19/1995	ND 1.0	ND 0.02	NM	NM	NM	NM
		1/10/1996	ND 0.10	ND 0.001	NM	NM	NM	NM
		2/1/1996	ND 0.10	NM	**0.00000001**	ND 0.00002	**0.00030**	NM
		2/14/1996	ND 0.10	NM	**0.000000099**	ND 0.00002	**0.0016**	NM
		2/26/1996	**0.13**	NM	**0.00000011**	ND 0.00002	**0.0017**	NM
		3/12/1996	ND 0.10	NM	**0.000000052**	ND 0.00002	**0.00060**	NM
		3/27/1996	ND 0.10	NM	**0.000000060**	ND 0.00004	**0.00093**	NM
		4/8/1996	ND 0.10	NM	**0.000000028**	ND 0.00003	**0.00045**	NM
		4/22/1996	ND 0.10	NM	**0.000000060**	ND 0.00002	**0.00075**	NM
		4/30/1996	**0.12**	NM	**0.000000021**	ND 0.00002	**0.00033**	NM
		5/6/1996	ND 0.10	NM	**0.000000026**	ND 0.00002	**0.0002**	NM
		5/13/1996	ND 0.10	NM	**0.000000047**	ND 0.00002	**0.00045**	NM
		5/28/1996	ND 0.10	**0.00055**	ND 0.00015	ND 0.00015	**0.00050**	NM
		6/10/1996	ND 0.10	**0.00070**	ND 0.00015	ND 0.00015	**0.00070**	NM
		6/24/1996	ND 0.10	**0.00081**	ND 0.00005	ND 0.00015	**0.00079**	NM
		7/8/1996	ND 0.10	**0.00052**	ND 0.00005	ND 0.00015	**0.00050**	NM
		10/23/1996	ND 0.10	**0.0014**	ND 0.00005	ND 0.00015	**0.0014**	NM
		1/6/1997	ND 0.01	**0.00075**	ND 0.00005	ND 0.00015	**0.00075**	NM
		2/25/1997	**0.06**	**0.0011**	ND 0.00005	ND 0.00015	**0.0011**	NM
		5/9/1997	ND 0.02	**0.0018**	ND 0.00005	ND 0.00015	**0.0018**	NM
		8/11/1997	ND 0.02	**0.0041**	**0.00006**	ND 0.00015	**0.0039**	NM

Notes: NC = not calculated; NM = not measured
ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).
* Uranium 235 isotopic abundance is calculated by dividing the U 235 concentration by the total uranium concentration.
Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-4. Analytical Results -- Inorganic Constituents

Location		Date Sampled	Fluoride (mg/L)	Total Uranium (mg/L)	Uranium 234 (mg/L)	Uranium 235 (mg/L)	Uranium 238 (mg/L)	Uranium 235 Isotopic Abundance*
CAF-11B		11/10/1997	ND 0.02	**0.0010**	ND 0.00015	ND 0.00015	**0.0010**	NM
		2/2/1998	ND 0.02	**0.0028**	ND 0.00015	ND 0.00015	**0.0027**	NM
		5/4/1998	ND 0.02	**0.0036**	ND 0.00015	ND 0.00015	**0.0036**	NM
		8/11/1998	ND 0.02	**0.0025**	ND 0.00015	ND 0.00015	**0.0025**	NM
		11/10/1998	ND 0.02	**0.0023**	ND 0.00015	ND 0.00015	**0.0024**	NM
		1/14/1999	NM	NM	ND 0.00000003	ND 0.00005	ND 0.00060	NM
		3/17/1999	ND 0.10	**0.0028**	ND 0.00015	ND 0.00015	**0.0028**	NM
		5/19/1999	ND 0.10	**0.0027**	ND 0.00015	ND 0.00015	**0.0026**	NM
		8/18/1999	ND 0.10	**0.0027**	ND 0.00015	ND 0.00015	**0.0026**	NM
		11/15/1999	ND 0.10	**0.00336**	ND 0.00015	ND 0.00015	**0.00332**	NM
		2/16/2000	ND 0.10	**0.00241**	ND 0.00015	ND 0.00015	**0.00237**	NM
		6/13/2000	ND 0.10	**0.00119**	NM	NM	NM	NM
		8/1/2000	ND 0.10	ND 0.00015	NM	NM	NM	NM
		11/7/2000	ND 0.10	**0.0209 Jl**	ND 0.00015	**0.00048**	**0.0204**	**0.023 Jh**
		2/15/2001	NM	**0.00248**	ND 0.00015	ND 0.00015	**0.00246**	NM
		4/20/2001	ND 0.10	**0.00207**	ND 0.00015	ND 0.00015	**0.00205**	NM
		4/24/2002	ND 0.10	**0.00209**	ND 0.00015	ND 0.00015	**0.00207**	NM
		2/19/2003	ND 0.10	**0.00326**	ND 0.00015	ND 0.00015	**0.00322**	NM
		2/20/2004	ND 0.10	**0.00450**	ND 0.00015	ND 0.00015	**0.00446**	NM
		5/9/2005	ND 0.10	**0.00421**	ND 0.00015	ND 0.00015	**0.00415**	NM
	2006-07	5/2/2006	**0.10**	**0.00296**	ND 0.00015	ND 0.00015	**0.00293**	NM
		3/26/2007	ND 0.10	**0.00276**	ND 0.00015	ND 0.00015	**0.00273**	NM
CAF-12A		2/15/1996	**2.62**	NM	**0.00000125**	**0.00010**	**0.00704**	NM
		2/27/1996	**3.37**	NM	**0.000002935**	**0.00037**	**0.0149**	NM
		3/13/1996	**0.69**	NM	**0.000004262**	**0.00044**	**0.0213**	NM
		3/28/1996	**2.53**	NM	**0.000196350**	**0.02263**	**1.0514**	NM
		4/9/1996	**0.73**	NM	**0.000054448**	**0.006159**	**0.2912**	NM
		4/22/1996	**2.29**	NM	**0.000081099**	**0.01040**	**0.43189**	NM
		4/23/1996	**4.82**	NM	**0.00013367**	**0.01575**	**0.71078**	NM
		5/1/1996	**5.95**	NM	**0.00011971**	**0.01493**	**0.63198**	NM
		5/6/1996	**7.91**	NM	**0.000080091**	**0.01007**	**0.43254**	NM
		5/13/1996	**6.33**	NM	**0.000067769**	**0.008645**	**0.35524**	NM
		5/30/1996	**3.00**	**0.196**	ND 0.00015	**0.0048**	**0.191**	**0.025**
		6/10/1996	**5.40**	**0.203**	ND 0.00015	**0.0049**	**0.197**	**0.024**
		6/25/1996	**6.33**	**0.098**	ND 0.00005	**0.0023**	**0.095**	**0.024**
		7/9/1996	**3.54**	**0.039**	ND 0.00005	**0.00093**	**0.038**	**0.024**
		10/25/1996	**1.90**	**0.0088**	ND 0.00005	**0.00018**	**0.0086**	**0.021**
		1/7/1997	**2.25**	**0.0088**	ND 0.00005	**0.00020**	**0.0086**	**0.022**
		2/25/1997	**2.24**	**0.024**	ND 0.00005	**0.00050**	**0.023**	**0.021**
		5/12/1997	**1.69**	**0.014**	ND 0.00005	**0.00022**	**0.014**	**0.016**
		8/11/1997	**2.77**	**0.018**	ND 0.00005	**0.00036**	**0.018**	**0.020**

Notes: NC = not calculated; NM = not measured
ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).
* Uranium 235 isotopic abundance is calculated by dividing the U 235 concentration by the total uranium concentration.
Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-4. Analytical Results -- Inorganic Constituents

Location		Date Sampled	Fluoride (mg/L)	Total Uranium (mg/L)	Uranium 234 (mg/L)	Uranium 235 (mg/L)	Uranium 238 (mg/L)	Uranium 235 Isotopic Abundance*
CAF-12A		11/11/1997	**2.97**	**0.024**	ND 0.00015	**0.00042**	**0.024**	**0.018**
		2/2/1998	**2.62**	**0.016**	ND 0.00015	**0.00040**	**0.016**	**0.025**
		5/5/1998	**2.73**	**0.0071**	ND 0.00015	ND 0.00015	**0.0071**	NM
		8/12/1998	**2.54**	**0.0079**	ND 0.00015	**0.00022**	**0.0077**	**0.028**
		11/10/1998	**1.74**	**0.0079**	ND 0.00015	**0.00019**	**0.0076**	**0.024**
		1/14/1999	NM	NM	**0.0000034**	**0.00033**	**0.0174**	NM
		3/18/1999	**2.12**	**0.016**	ND 0.00015	**0.00033**	**0.015**	**0.021**
		5/19/1999	**2.11**	**0.011**	ND 0.00015	**0.00020**	**0.010**	**0.019**
		8/18/1999	**2.19**	**0.016**	ND 0.00015	**0.00034**	**0.015**	**0.022**
		11/15/1999	**1.21**	**0.00752**	ND 0.00015	ND 0.00015	**0.00740**	NM
		2/15/2000	**1.46**	**0.00678**	ND 0.00015	**0.00018**	**0.00660**	**0.026**
		6/14/2000	**2.04**	**0.0133**	ND 0.00015	**0.00031**	**0.0130**	**0.023**
		8/2/2000	**1.61**	**0.00826**	ND 0.00015	ND 0.00015	**0.00812**	NM
		11/7/2000	**1.90**	ND 0.00015 UJ	NM	NM	NM	NM
		4/20/2001	**1.22**	**0.120**	ND 0.00015	**0.00275**	**0.117**	**0.023**
		10/9/2001	**1.35**	**0.183**	ND 0.00015	**0.00413**	**0.179**	**0.023**
		1/21/2002	**2.23**	**0.0403**	ND 0.00015	**0.00047**	**0.0398**	**0.012**
		4/22/2002	**2.51**	**0.0114**	ND 0.00015	**0.00026**	**0.0111**	**0.023**
		7/24/2002	**2.88**	**0.700**	**0.00017**	**0.019**	**0.681**	**0.027**
		10/8/2002	**1.82**	**0.0138**	ND 0.00015	**0.00030**	**0.0135**	**0.022**
		2/17/2003	**2.28**	**0.00779**	ND 0.00015	**0.00018**	**0.00760**	**0.023**
		5/19/2003	**0.77**	**0.00660**	ND 0.00015	ND 0.00015	**0.00645**	NM
		9/2/2003	**0.85**	**0.00387**	ND 0.00015	ND 0.00015	**0.00378**	NM
		11/17/2003	**0.58**	**0.00656**	ND 0.00015	**0.00015**	**0.00639**	**0.023**
		2/19/2004	**0.84**	**0.0105**	ND 0.00015	**0.00024**	**0.0102**	**0.023**
		10/5/2004	**0.70**	**0.0303**	ND 0.00015	**0.00070**	**0.0296**	**0.023**
		5/9/2005	**1.48**	**0.0262**	ND 0.00015	**0.00061**	**0.0256**	**0.023**
		9/26/2005	**1.35**	**0.0124**	ND 0.00015	**0.00028**	**0.0121**	**0.023**
	2006-07	5/1/2006	**1.08**	**0.0113**	ND 0.00015	**0.00026**	**0.0111**	**0.023**
		9/18/2006	**0.92**	**0.00858**	ND 0.00015	**0.00021**	**0.00835**	**0.024**
		3/26/2007	**0.85**	**0.0127**	ND 0.00015	**0.00028**	**0.0125**	**0.022**
		10/1/2007	**2.24**	**0.00819**	ND 0.00015	**0.00018**	**0.00800**	**0.022**
OCW-1C		8/10/1998	**0.07**	**0.0021**	ND 0.00015	ND 0.00015	**0.0021**	NM
		11/11/1998	**0.06**	**0.00028**	NM	NM	NM	NM
		2/13/2000	ND 0.10	ND 0.00015	NM	NM	NM	NM
		4/17/2001	ND 0.10	ND 0.00015	NM	NM	NM	NM
		4/24/2002	ND 0.10	**0.00019**	NM	NM	NM	NM
		2/19/2003	ND 0.10	ND 0.00015	NM	NM	NM	NM
		2/20/2004	ND 0.10	ND 0.00015	NM	NM	NM	NM
		5/10/2005	ND 0.10	ND 0.00015	NM	NM	NM	NM
	2006-07	5/1/2006	ND 0.10	ND 0.00015	NM	NM	NM	NM

Notes: NC = not calculated; NM = not measured
ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).
* Uranium 235 isotopic abundance is calculated by dividing the U 235 concentration by the total uranium concentration.
Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-4. Analytical Results -- Inorganic Constituents

Location		Date Sampled	Fluoride (mg/L)	Total Uranium (mg/L)	Uranium 234 (mg/L)	Uranium 235 (mg/L)	Uranium 238 (mg/L)	Uranium 235 Isotopic Abundance*
OCW-1C	*2006-07*	3/27/2007	ND 0.10	ND 0.00015	NM	NM	NM	NM
OCW-2C		8/11/1998	**0.09**	**0.0036**	ND 0.00015	ND 0.00015	**0.0035**	NM
		11/11/1998	**0.05**	**0.00090**	NM	NM	NM	NM
		2/13/2000	ND 0.10	ND 0.00015	NM	NM	NM	NM
		4/17/2001	ND 0.10	ND 0.00015	NM	NM	NM	NM
		4/24/2002	ND 0.10	**0.00017**	NM	NM	NM	NM
		2/19/2003	ND 0.10	ND 0.00015	NM	NM	NM	NM
		2/20/2004	ND 0.10	**0.00029**	NM	NM	NM	NM
		5/10/2005	ND 0.10	ND 0.00015	NM	NM	NM	NM
	2006-07	5/1/2006	ND 0.10	ND 0.00015	NM	NM	NM	NM
		3/27/2007	ND 0.10	ND 0.00015	NM	NM	NM	NM
OCW-3C		8/10/1998	**0.05**	**0.0016**	NM	NM	NM	NM
		11/11/1998	**0.02**	**0.00032**	NM	NM	NM	NM
		2/13/2000	ND 0.10	ND 0.00015	NM	NM	NM	NM
		4/18/2001	ND 0.10	ND 0.00015	NM	NM	NM	NM
		4/24/2002	ND 0.10	**0.00017**	NM	NM	NM	NM
		2/19/2003	ND 0.10	ND 0.00015	NM	NM	NM	NM
		2/20/2004	ND 0.10	ND 0.00015	NM	NM	NM	NM
		5/10/2005	ND 0.10	**0.00019**	NM	NM	NM	NM
	2006-07	5/1/2006	ND 0.10	ND 0.00015	NM	NM	NM	NM
		3/27/2007	ND 0.10	ND 0.00015	NM	NM	NM	NM
OCW-4A		8/12/1998	**0.03**	**0.0010**	NM	NM	NM	NM
		11/10/1998	ND 0.02	**0.00025**	NM	NM	NM	NM
		3/18/1999	ND 0.10	ND 0.00015	NM	NM	NM	NM
		5/17/1999	ND 0.10	**0.00022**	NM	NM	NM	NM
		8/17/1999	ND 0.10	ND 0.00015	NM	NM	NM	NM
		11/17/1999	ND 0.10	ND 0.00015	NM	NM	NM	NM
		2/13/2000	ND 0.10	ND 0.00015	NM	NM	NM	NM
		6/12/2000	ND 0.10	**0.00087**	NM	NM	NM	NM
		8/1/2000	ND 0.10	ND 0.00015	NM	NM	NM	NM
		11/6/2000	ND 0.10	**0.00215 Jl**	ND 0.00015	ND 0.00015	**0.00214**	NM
		4/18/2001	ND 0.10	ND 0.00015	NM	NM	NM	NM
		10/10/2001	**0.15**	**0.00028**	NM	NM	NM	NM
		1/21/2002	**0.24**	**0.00022**	NM	NM	NM	NM
		4/24/2002	**0.29**	**0.00067**	NM	NM	NM	NM
		7/25/2002	**0.47**	**0.00070**	NM	NM	NM	NM
		10/8/2002	**0.32**	**0.00022**	NM	NM	NM	NM
		2/19/2003	**0.32**	**0.00053**	NM	NM	NM	NM
		5/19/2003	ND 0.10	**0.00018**	NM	NM	NM	NM
		9/4/2003	ND 0.10	ND 0.00015	NM	NM	NM	NM
		11/17/2003	ND 0.10	ND 0.00015	NM	NM	NM	NM

Notes: NC = not calculated; NM = not measured
ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).
* Uranium 235 isotopic abundance is calculated by dividing the U 235 concentration by the total uranium concentration.
Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-4. Analytical Results -- Inorganic Constituents

Location		Date Sampled	Fluoride (mg/L)	Total Uranium (mg/L)	Uranium 234 (mg/L)	Uranium 235 (mg/L)	Uranium 238 (mg/L)	Uranium 235 Isotopic Abundance*
OCW-4A		2/20/2004	ND 0.10	ND 0.00015	NM	NM	NM	NM
		10/4/2004	ND 0.10	ND 0.00015	NM	NM	NM	NM
		5/10/2005	**0.26**	**0.00019**	NM	NM	NM	NM
		9/26/2005	ND 0.10	ND 0.00015	NM	NM	NM	NM
	2006-07	5/1/2006	ND 0.10	ND 0.00015	NM	NM	NM	NM
		9/18/2006	ND 0.10	ND 0.00015	NM	NM	NM	NM
		3/28/2007	ND 0.10	ND 0.00015	NM	NM	NM	NM
		10/2/2007	**0.35**	ND 0.00015	NM	NM	NM	NM
OCW-4B		8/11/1998	**0.03**	**0.0013**	NM	NM	NM	NM
		11/10/1998	**0.03**	**0.0011**	NM	NM	NM	NM
		3/18/1999	**0.13**	**0.0030**	ND 0.00015	ND 0.00015	**0.0030**	NM
		5/17/1999	**0.13**	**0.0022**	ND 0.00015	ND 0.00015	**0.0022**	NM
		8/17/1999	**0.15**	**0.0024**	ND 0.00015	ND 0.00015	**0.0023**	NM
		11/17/1999	**0.16**	**0.00234**	ND 0.00015	ND 0.00015	**0.00231**	NM
		2/13/2000	**0.13**	**0.00161**	NM	NM	NM	NM
		6/12/2000	**0.13**	**0.00181**	NM	NM	NM	NM
		8/1/2000	**0.14**	ND 0.00015	NM	NM	NM	NM
		11/6/2000	**0.18**	**0.439 Jl**	ND 0.00015	**0.0139**	**0.425**	**0.032 Jh**
		2/15/2001	NM	**0.00423**	ND 0.00015	ND 0.00015	**0.00420**	NM
		4/18/2001	**0.20**	**0.00226**	ND 0.00015	ND 0.00015	**0.00224**	NM
		10/10/2001	**0.25**	**0.00229**	ND 0.00015	ND 0.00015	**0.00227**	NM
		1/21/2002	**0.26**	**0.00248**	ND 0.00015	ND 0.00015	**0.00248**	NM
		4/24/2002	**0.90**	**0.00340**	ND 0.00015	ND 0.00015	**0.00338**	NM
		7/25/2002	**0.29**	**0.00367**	ND 0.00015	ND 0.00015	**0.00364**	NM
		10/8/2002	**0.26**	**0.00238**	ND 0.00015	ND 0.00015	**0.00236**	NM
		2/19/2003	**0.34**	**0.00244**	ND 0.00015	ND 0.00015	**0.00240**	NM
		5/19/2003	**0.35**	**0.00249**	ND 0.00015	ND 0.00015	**0.00246**	NM
		9/4/2003	**0.44**	**0.00312**	ND 0.00015	ND 0.00015	**0.00309**	NM
		11/17/2003	**0.32**	**0.00295**	ND 0.00015	ND 0.00015	**0.00290**	NM
		2/20/2004	**0.31**	**0.00334**	ND 0.00015	ND 0.00015	**0.00331**	NM
		10/5/2004	**0.41**	**0.00336**	ND 0.00015	ND 0.00015	**0.00333**	NM
		5/10/2005	**0.45**	**0.00521**	ND 0.00015	ND 0.00015	**0.00514**	NM
		9/26/2005	**0.52**	**0.00296**	ND 0.00015	ND 0.00015	**0.00294**	NM
	2006-07	5/1/2006	**0.49**	**0.00258**	ND 0.00015	ND 0.00015	**0.00255**	NM
		9/18/2006	**0.47**	**0.00252**	ND 0.00015	ND 0.00015	**0.00247**	NM
		3/28/2007	**0.48**	**0.00280**	ND 0.00015	ND 0.00015	**0.00277**	NM
		10/2/2007	**0.55**	**0.00238**	ND 0.00015	ND 0.00015	**0.00237**	NM
SW-1		2/13/2000	ND 0.10	ND 0.00015	NM	NM	NM	NM
		4/17/2001	ND 0.10	**0.00145**	NM	NM	NM	NM
		2/19/2004	ND 0.10	**0.00019**	NM	NM	NM	NM

Notes: NC = not calculated; NM = not measured
ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).
* Uranium 235 isotopic abundance is calculated by dividing the U 235 concentration by the total uranium concentration.
Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-4. Analytical Results -- Inorganic Constituents

Location		Date Sampled	Fluoride (mg/L)	Total Uranium (mg/L)	Uranium 234 (mg/L)	Uranium 235 (mg/L)	Uranium 238 (mg/L)	Uranium 235 Isotopic Abundance*
SW-2		2/15/2000	ND 0.10	ND 0.00015	NM	NM	NM	NM
		4/17/2001	ND 0.10	ND 0.00015	NM	NM	NM	NM
		4/23/2002	ND 0.10	**0.00042**	NM	NM	NM	NM
		2/18/2003	ND 0.10	ND 0.00015	NM	NM	NM	NM
		2/19/2004	ND 0.10	ND 0.00015	NM	NM	NM	NM
		5/9/2005	ND 0.10	ND 0.00015	NM	NM	NM	NM
	2006-07	5/1/2006	ND 0.10	ND 0.00015	NM	NM	NM	NM
		3/27/2007	ND 0.10	ND 0.00015	NM	NM	NM	NM
SW-3		2/13/2000	ND 0.10	ND 0.00015	NM	NM	NM	NM
		4/17/2001	ND 0.10	ND 0.00015	NM	NM	NM	NM
		2/18/2003	ND 0.10	ND 0.00015	NM	NM	NM	NM
		2/19/2004	ND 0.10	ND 0.00015	NM	NM	NM	NM
		5/10/2005	ND 0.10	ND 0.00015	NM	NM	NM	NM
	2006-07	5/3/2006	ND 0.10	ND 0.00015	NM	NM	NM	NM
		3/27/2007	ND 0.10	**0.00018**	NM	NM	NM	NM
SW-4		2/13/2000	ND 0.10	**0.0621**	ND 0.00015	**0.00052**	**0.0616**	**0.0084**
		4/17/2001	ND 0.10	**0.0342**	ND 0.00015	**0.00028**	**0.0339**	**0.0081**
SW-14		2/18/2003	ND 0.10	ND 0.00015	NM	NM	NM	NM
		2/19/2004	ND 0.10	ND 0.00015	NM	NM	NM	NM
		5/10/2005	ND 0.10	ND 0.00015	NM	NM	NM	NM
	2006-07	5/3/2006	ND 0.10	ND 0.00015	NM	NM	NM	NM
		3/27/2007	ND 0.10	ND 0.00015	NM	NM	NM	NM

Notes: NC = not calculated; NM = not measured
ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).
* Uranium 235 isotopic abundance is calculated by dividing the U 235 concentration by the total uranium concentration.
Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-5. 2006-2007 Biannual Field and Natural Attenuation Parameter Measurements.

Location	Date Sampled	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Ferrous Iron (mg/L)	pH (S.U.)	Specific Conductance (uS/cm)	Temperature (deg F)
CAF-5A	5/1/2006	5.5	29	ND 0.1	5.8	33	65.9
	9/18/2006	7.2	207	ND 0.1	5.9	25	75.2
	3/26/2007	15.7	200	ND 0.1	5.8	37	63.5
	10/1/2007	5.4	243	ND 0.1	5.0	39	77.0
CAF-5B	5/1/2006	2.3	90	ND 0.1	6.1	101	66.9
	9/18/2006	4.0	165	ND 0.1	6.0	109	69.8
	3/26/2007	6.3	185	ND 0.1	6.0	94	65.9
	10/1/2007	3.5	187	ND 0.1	6.2	70	71.6
CAF-6A	5/1/2006	5.7	62	ND 0.1	6.1	67	68.1
	9/18/2006	6.3	165	ND 0.1	6.0	42	77.0
	3/26/2007	8.4	193	ND 0.1	6.0	91	62.8
	10/1/2007	6.1	215	ND 0.1	6.4	174	73.4
CAF-6B	5/1/2006	4.3	244	ND 0.1	6.1	286	63.2
	9/18/2006	1.5	242	ND 0.1	5.9	263	73.4
	3/26/2007	4.2	180	ND 0.1	5.9	296	64.7
	10/1/2007	7.4	105	1.5	6.0	278	71.6
CAF-7A	5/1/2006	1.9	61	ND 0.1	5.9	69	65.4
	9/18/2006	6.8	169	ND 0.1	5.8	78	73.4
	3/26/2007	5.9	221	ND 0.1	6.0	92	62.5
	10/1/2007	5.8	144	ND 0.1	6.3	173	73.4
CAF-7B	5/2/2006	1.7	184	ND 0.1	6.0	209	65.9
	9/18/2006	3.6	178	ND 0.1	6.0	249	69.8
	3/26/2007	3.8	205	ND 0.1	6.0	223	64.9
	10/1/2007	3.7	180	ND 0.1	6.4	157	69.8
CAF-8A	5/2/2006	4.8	92	ND 0.1	6.8	107	64.5
	9/18/2006	6.8	136	ND 0.1	6.0	123	75.2
	3/26/2007	8.7	163	ND 0.1	6.2	78	63.9
	10/1/2007	6.4	170	ND 0.1	6.6	123	78.8
CAF-8B	5/2/2006	1.6	202	1.3	6.1	232	64.7
	9/18/2006	3.4	149	1.0	5.9	290	71.6
	3/28/2007	2.7	6	0.9	6.0	280	66.3
	10/1/2007	1.4	76	2.0	6.2	243	71.6
CAF-9A	5/2/2006	3.1	86	NM	7.0	102	62.4
	9/18/2006	4.9	152	ND 0.1	6.4	58	75.2
	3/28/2007	4.2	194	ND 0.1	6.0	83	63.0
CAF-9B	5/2/2006	2.0	111	NM	6.3	131	63.0
	9/18/2006	2.9	144	ND 0.1	6.0	200	71.6
	3/28/2007	1.1	204	ND 0.1	5.8	105	64.4
	10/1/2007	5.9	173	ND 0.1	5.9	104	71.6
CAF-10A	5/2/2006	1.7	217	0.4	6.4	250	64.4

Notes: NM = not measured
ND = not detected

Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-5. 2006-2007 Biannual Field and Natural Attenuation Parameter Measurements.

Location	Date Sampled	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Ferrous Iron (mg/L)	pH (S.U.)	Specific Conductance (uS/cm)	Temperature (deg F)
CAF-10A	9/18/2006	1.5	-130	3.3	6.1	256	71.6
	3/26/2007	3.5	138	1.0	6.3	227	62.0
	10/1/2007	4.6	163	ND 0.1	6.5	237	84.2
CAF-10B	5/2/2006	1.3	81	3.9	5.7	94	63.8
	9/18/2006	1.4	131	3.4	5.5	81	73.4
	3/26/2007	2.5	-96	4.0	5.5	84	63.4
	10/1/2007	2.0	54	5.2	5.5	69	71.6
CAF-11A	5/2/2006	3.8	68	ND 0.1	6.6	81	62.2
	3/26/2007	7.3	202	ND 0.1	6.2	1130	57.9
CAF-11B	5/2/2006	2.8	55	ND 0.1	5.0	64	63.0
	3/26/2007	7.5	248	ND 0.1	5.1	450	63.4
CAF-12A	5/1/2006	2.1	122	ND 0.1	6.6	136	64.4
	9/18/2006	3.7	186	ND 0.1	5.9	85	73.4
	3/26/2007	8.6	215	ND 0.1	6.8	138	63.0
	10/1/2007	3.6	164	ND 0.1	6.2	158	73.4
CAF-16C	5/2/2006	4.7	246	ND 0.1	7.3	287	63.6
	3/26/2007	10.8	158	ND 0.1	7.2	273	64.9
CAF-17C	5/2/2006	3.9	487	ND 0.1	7.0	566	63.8
	9/19/2006	3.4	468	ND 0.1	6.3	608	67.3
	3/26/2007	7.5	56	0.9	6.5	436	64.2
	10/1/2007	3.1	-118	3.1	6.3	262	64.4
OB-5	5/2/2006	0.6	337	4.8	6.6	354	70.5
	9/19/2006	2.1	-22	2.0	6.3	357	71.6
	3/27/2007	6.1	-94	3.9	6.6	390	67.2
	10/3/2007	5.1	-115	4.6	6.7	305	69.8
OCW-1C	5/1/2006	7.4	251	1.0	7.1	295	62.7
	3/27/2007	5.7	-54	0.7	7.3	310	65.6
OCW-2C	5/1/2006	1.9	140	0.4	6.5	164	62.6
	9/18/2006	3.0	136	ND 0.1	5.7	166	66.2
	3/27/2007	3.4	139	ND 0.1	6.8	157	64.3
	10/2/2007	1.6	30	0.6	6.7	238	66.2
OCW-3C	5/1/2006	4.8	169	0.4	7.1	367	62.6
	3/27/2007	8.6	88	ND 0.1	7.6	330	63.8
OCW-4A	5/1/2006	5.0	48	ND 0.1	5.1	57	62.2
	9/18/2006	6.8	211	ND 0.1	4.8	46	69.8
	3/28/2007	8.8	255	ND 0.1	5.1	42	62.5
	10/2/2007	5.4	243	ND 0.1	5.5	55	69.8
OCW-4B	5/1/2006	6.0	81	ND 0.1	7.2	95	69.1
	9/18/2006	4.8	186	ND 0.1	5.7	80	68.0

Notes: NM = not measured
ND = not detected

Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-5. 2006-2007 Biannual Field and Natural Attenuation Parameter Measurements.

Location	Date Sampled	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Ferrous Iron (mg/L)	pH (S.U.)	Specific Conductance (uS/cm)	Temperature (deg F)
OCW-4B	3/28/2007	5.5	168	ND 0.1	7.1	84	63.5
	10/2/2007	5.8	184	ND 0.1	6.0	85	69.8
OCW-5D	5/1/2006	6.0	266	ND 0.1	8.3	311	63.4
	9/18/2006	6.6	260	ND 0.1	6.7	302	71.6
	3/28/2007	9.0	136	ND 0.1	8.0	321	62.8
	10/2/2007	2.7	14	0.6	7.6	254	73.4
OSW-1A	5/3/2006	2.4	282	ND 0.1	7.2	341	62.6
	9/18/2006	6.0	190	ND 0.1	6.5	343	68.0
	3/27/2007	7.4	153	ND 0.1	6.6	347	60.8
	10/2/2007	2.0	123	3.4	7.5	313	68.0
SW-2	5/1/2006	1.6	98	1.2	6.5	121	58.9
	3/27/2007	5.8	69	ND 0.1	6.9	103	70.7
SW-3	5/3/2006	2.9	148	ND 0.1	6.3	149	62.6
	3/27/2007	4.1	128	ND 0.1	6.6	96	65.3
SW-14	5/3/2006	1.1	55	ND 0.1	5.4	89	59.0
	9/19/2006	3.5	178	0.9	5.7	76	69.8
	3/27/2007	4.2	186	ND 0.1	6.1	77	60.8
	10/2/2007	3.4	155	ND 0.1	5.7	90	69.8
SWS-1	5/3/2006	6.5	43	ND 0.1	5.7	77	60.8
	9/19/2006	4.7	182	0.4	5.9	63	69.8
	3/27/2007	9.3	150	ND 0.1	6.1	64	59.0
SWS-4	5/3/2006	5.3	42	ND 0.1	5.9	79	60.8
	3/27/2007	9.4	164	ND 0.1	6.5	69	59.0
SWS-6	5/3/2006	5.3	122	ND 0.1	6.6	174	62.6
	9/19/2006	6.3	77	ND 0.1	6.8	81	68.0
	3/27/2007	10.4	133	ND 0.1	6.7	157	59.0
SWS-8	5/3/2006	5.6	59	ND 0.1	5.9	87	60.8
	9/19/2006	5.8	86	ND 0.1	6.7	138	69.8
	3/27/2007	10.7	136	ND 0.1	7.0	63	60.8
	10/2/2007	6.0	51	ND 0.1	7.3	133	71.6
SWS-9	5/3/2006	5.8	71	ND 0.1	5.6	114	60.8
	9/19/2006	3.0	128	ND 0.1	6.0	65	69.8
	3/27/2007	5.9	153	ND 0.1	6.8	169	59.0

Notes: NM = not measured
ND = not detected

Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-6. 2006-2007 Annual Field and Natural Attenuation Parameter Measurements.

Location	Date Sampled	Alkalinity (mg/L)	Chloride (mg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Sulfate (mg/L)	TOC (mg/L)
CAF-10A	5/2/2006	105	4.1	ND 0.025	ND 0.025	8.00	ND 5	13
	3/26/2007	100	2.9	ND 0.025	0.036	64.0	4.1	6.6
CAF-10B	5/2/2006	32	3.1	ND 0.025	ND 0.025	52.0	22	7
	3/26/2007	4.5	2.6	ND 0.025	0.027	99.0	12	3.3
CAF-16C	5/2/2006	131	6.9	ND 0.025	ND 0.025	3.10	ND 5	5
	3/26/2007	140	5.2	ND 0.025	0.028	6.00	2.2	0.7 Jr
CAF-17C	5/2/2006	329	12.6	0.140	110	4100	ND 5	27
	3/26/2007	220	0.6 Jr	0.100	7.20	3900	ND 2.0	13
CAF-8A	5/2/2006	46	3.6	ND 0.025	ND 0.025	4.20	ND 5	6
	3/28/2007	34	2.9	ND 0.025	ND 0.025	7.70	2.3	1.3
CAF-8B	5/2/2006	123	2.3	ND 0.025	ND 0.025	14.0	ND 5	20
	3/28/2007	130	3.5	ND 0.025	0.044	18.0	5.4	3.9
CAF-9A	5/2/2006	34	4.6	ND 0.025	ND 0.025	0.240	ND 5	4
	3/28/2007	17	2.9	ND 0.025	0.030	1.80	2.9	2.3
CAF-9B	5/2/2006	50	3.1	ND 0.025	ND 0.025	0.740	ND 5	13
	3/28/2007	42	2.7	ND 0.025	0.028	4.50	3.2	2.8
OB-5	5/2/2006	177	11.8	0.200	20.0	1200	6	15
	3/27/2007	170	0.6 Jr	0.180	10.0	790	ND 2.0	4.0
OCW-1C	5/1/2006	165	7.6	ND 0.025	0.047	26.0	ND 5	8
	3/27/2007	130	5.2	ND 0.025	0.046	31.0	1.3 Jr	2.0
OCW-2C	5/1/2006	95	8.2	0.140	0.740	250	15	8
	3/27/2007	69	5.7	0.078	0.210	70.0	11	1.1
OCW-3C	5/1/2006	161	6.4	0.038	0.027	200	13	6
	3/27/2007	150	4.6	0.036	0.034	210	9.6	2.6
OCW-4A	5/1/2006	ND 10	7.9	0.300	0.400	6.90	7	2
	3/28/2007	2.0	4.0	0.061	0.058	0.240	4.4	0.6 Jr
OCW-4B	5/1/2006	24	7.9	0.150	0.130	3.40	ND 5	6
	3/28/2007	21	5.3	ND 0.025	0.028	0.220	5.4	3.4
OCW-5D	5/1/2006	154	7.6	0.100	0.080	34.0	1 Jr	6
	3/28/2007	170	5.4	ND 0.025	ND 0.025	23.0	2.2	0.7 Jr
OSW-1A	5/3/2006	177	8.9	0.120	0.120	690	1 Jr	4
	3/27/2007	170	5.4	0.048	0.039	260	3.1	1.5

Notes: NM = not measured
ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).

Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Table C-6. 2006-2007 Annual Field and Natural Attenuation Parameter Measurements.

Location	Date Sampled	Alkalinity (mg/L)	Chloride (mg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Sulfate (mg/L)	TOC (mg/L)
SWS-1	5/3/2006	ND 10	8.7	0.062	0.052	2.00	1 Jr	18
	3/27/2007	5.5	5.6	ND 0.025	0.026	210	5.1	21
SWS-4	5/3/2006	ND 10	5.6	0.048	0.046	1.20	1 Jr	17
	3/27/2007	4.5	4.7	ND 0.025	0.032	0.610	4.8	16
SWS-6	5/3/2006	63	7.1	0.044	0.040	5.40	1 Jr	10
	3/27/2007	60	6.0	ND 0.025	ND 0.025	12.0	3.5	6.5
SWS-8	5/3/2006	23	5.6	0.034	0.034	0.860	1 Jr	6
	3/27/2007	5.0	3.3	ND 0.025	0.026	0.450	3.8	4.9
SWS-9	5/3/2006	22	8.2	0.032	0.041	0.770	9	11
	3/27/2007	64	6.4	ND 0.025	0.092	13.0	6.6	23

Notes: NM = not measured
ND 0.5 = Not detected. The number printed after the "ND" is the analysis-specific practical quantitation limit (PQL).

Refer to Table C-1 for an explanation of data qualifier flags (J, Jh, Jl, Jr, UJ, Ub).

Appendix D
Concentration Versus Time Graphs

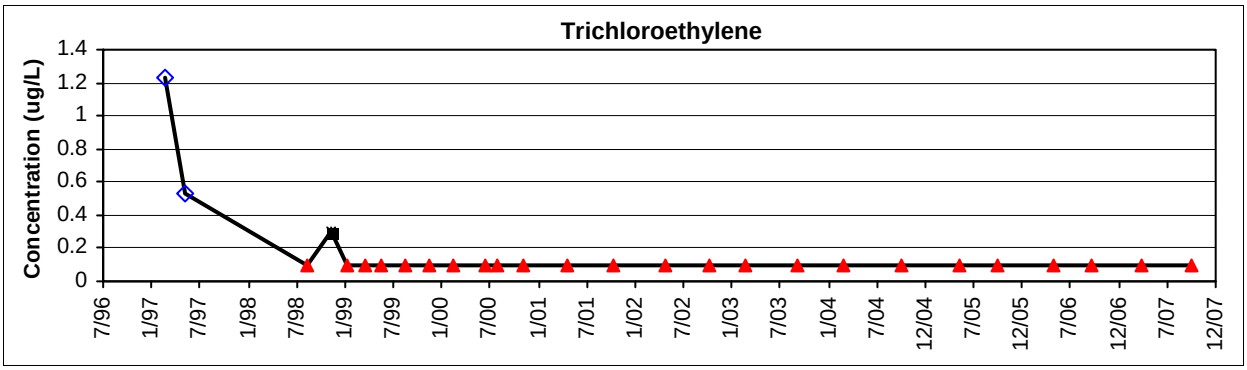
Notes for data presented in Appendix D:

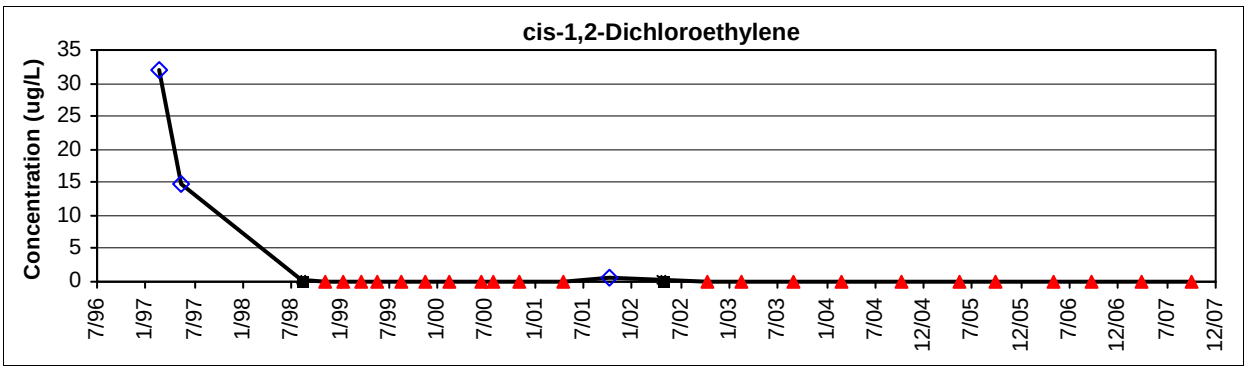
- Refer to Table C-1 in Appendix C for explanation of data-validation qualifiers (J, Jh, Jr, UJ, Ub).
- Non-detect results for organic compounds are plotted as 0.1 µg/L (a typical method detection limit [MDL] for the utilized analytical procedure), and non-detect results for inorganic constituents are plotted at one-half the applicable practical quantitation limit (PQL). Some sample analyses may have elevated MDLs and PQLs due to analytical dilution or data-quality limitations.
- See Appendix C for the analysis-specific PQLs and data-validation qualifiers applied to individual analytical results.
- Detections of organic compounds at concentrations below the PQL ("Jr" values) could not be accurately and precisely quantified, and, therefore, the reported concentration is considered an estimate. Jr values for samples that did not require analytical dilutions are plotted as 0.3 µg/L which is the midpoint between the typical MDL of 0.1 µg/L and the PQL of 0.5 µg/L.

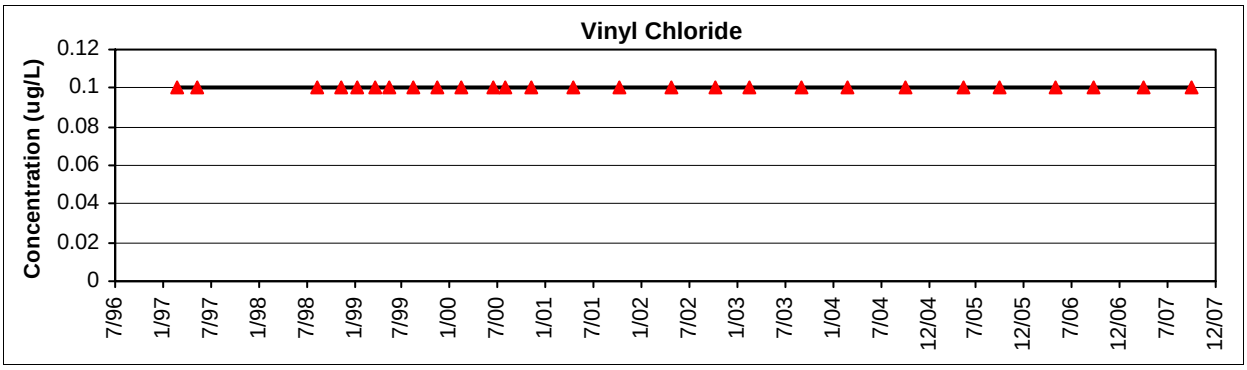
Appendix D Figure	Monitoring Location	Analytes Graphed
D-1	CAF-8B	TCE, cDCE, VC
D-2	CAF-9A	TCE, cDCE, VC
D-3	CAF-9B	TCE, cDCE, VC
D-4	CAF-17C	TCE, cDCE, VC
D-5	OB-5	TCE, cDCE, VC
D-6	OCW-2C	TCE, cDCE, VC
D-7	OCW-4B	TCE, cDCE, VC
D-8	OCW-5D	TCE, cDCE, VC
D-9	OSW-1A	TCE, cDCE, VC
D-10	SW-4	TCE, cDCE, VC
D-11	SW-14	TCE, cDCE, VC
D-12	SWS-1	TCE, cDCE, VC
D-13	SWS-8	TCE, cDCE, VC
D-14	SWS-9	TCE, cDCE, VC

Appendix D Figure	Monitoring Location	Analytes Graphed
D-15	CAF-5B	U, ^{234}U, ^{235}U, ^{238}U
D-16	CAF-6A	U, ^{234}U, ^{235}U, ^{238}U
D-17	CAF-6B	U, ^{234}U, ^{235}U, ^{238}U
D-18	CAF-7A	U, ^{234}U, ^{235}U, ^{238}U
D-19	CAF-7B	U, ^{234}U, ^{235}U, ^{238}U
D-20	CAF-8B	U, ^{234}U, ^{235}U, ^{238}U
D-21	CAF-9A	U, ^{234}U, ^{235}U, ^{238}U
D-22	CAF-10A	U, ^{234}U, ^{235}U, ^{238}U
D-23	CAF-11B	U, ^{234}U, ^{235}U, ^{238}U
D-24	CAF-12A	U, ^{234}U, ^{235}U, ^{238}U
D-25	OCW-4B	U, ^{234}U, ^{235}U, ^{238}U
D-26	All routine groundwater monitoring locations	Fluoride

Figure D-1. Organics Concentration versus Time Graphs in CAF-8B







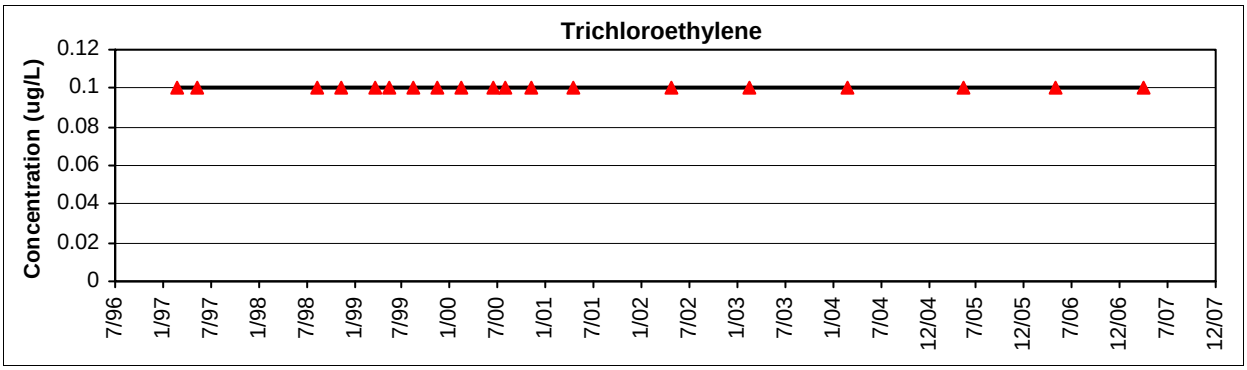
◇ Measured result -- reported concentrations

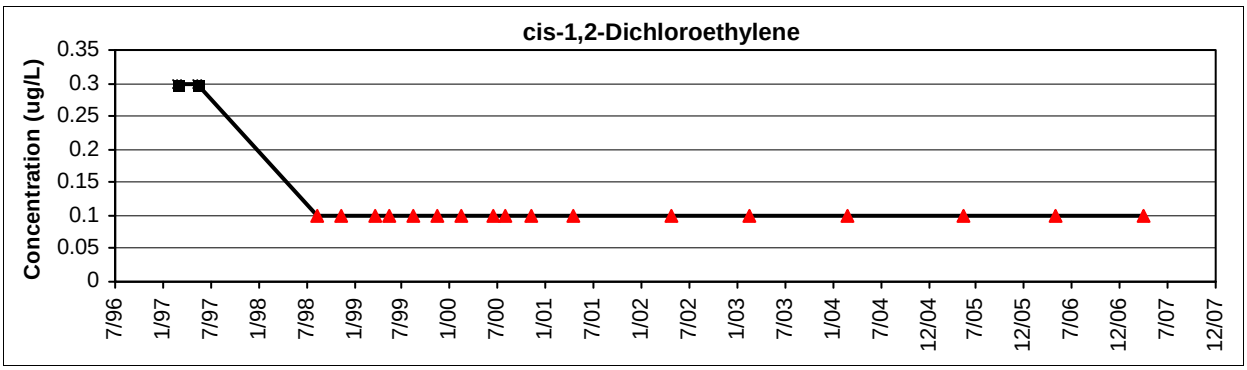
● Estimated concentration (J, Jh, or Jl)

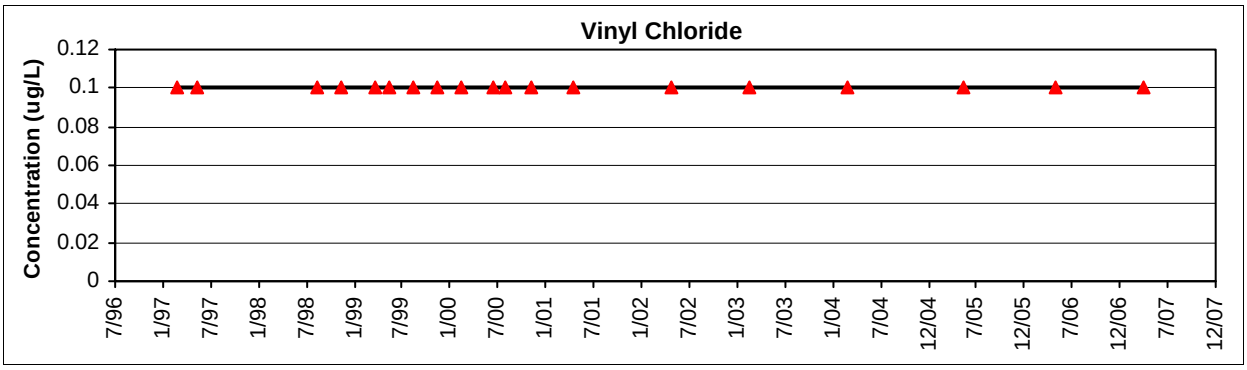
■ Estimated concentration below the PQL (Jr value)

▲ Non-detect result (U, Ub, UJ)

Figure D-2. Organics Concentration versus Time Graphs in CAF-9A







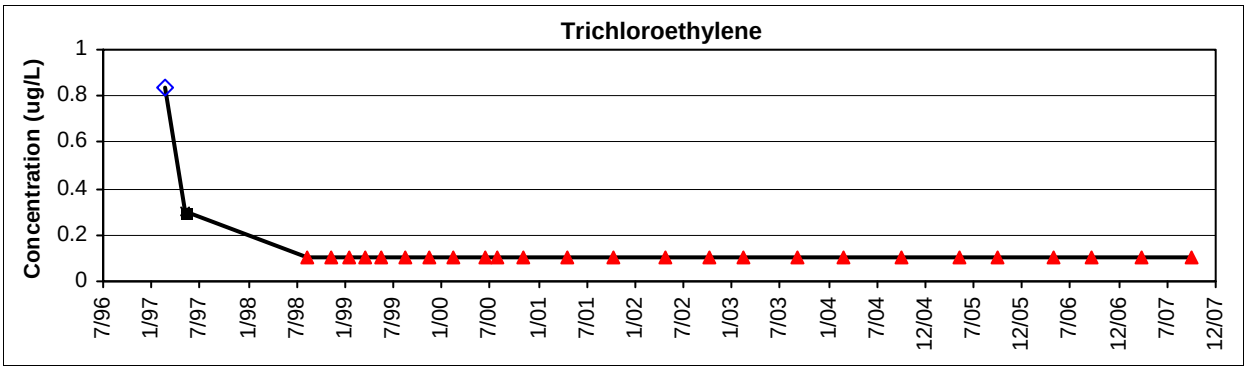
◇ Measured result -- reported concentrations

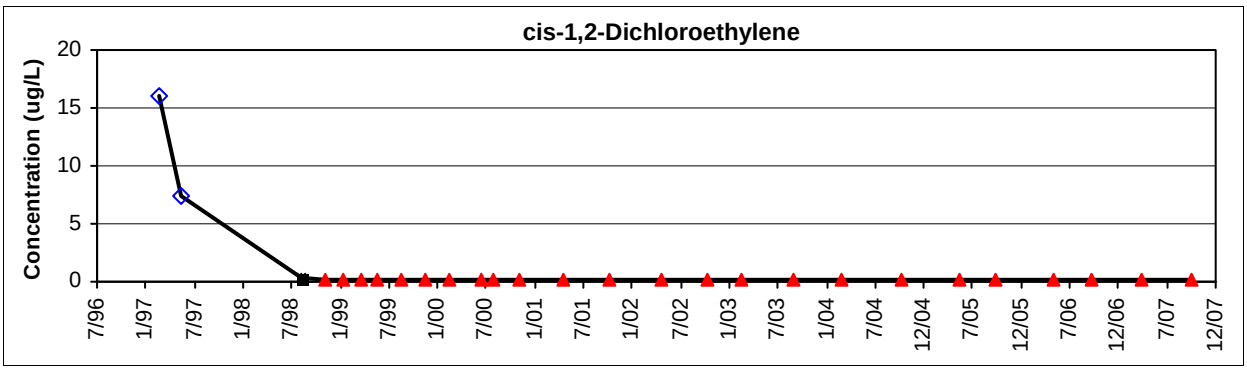
● Estimated concentration (J, Jh, or Jl)

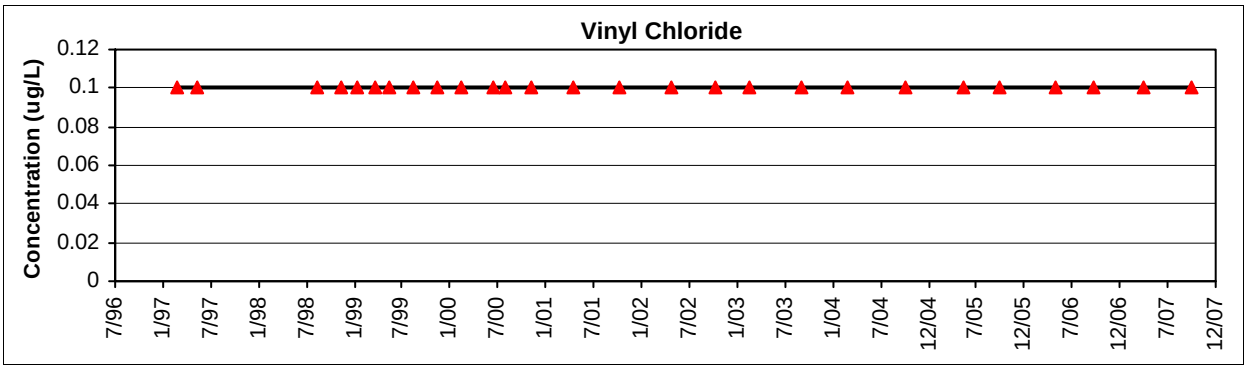
■ Estimated concentration below the PQL (Jr value)

▲ Non-detect result (U, Ub, UJ)

Figure D-3. Organics Concentration versus Time Graphs in CAF-9B







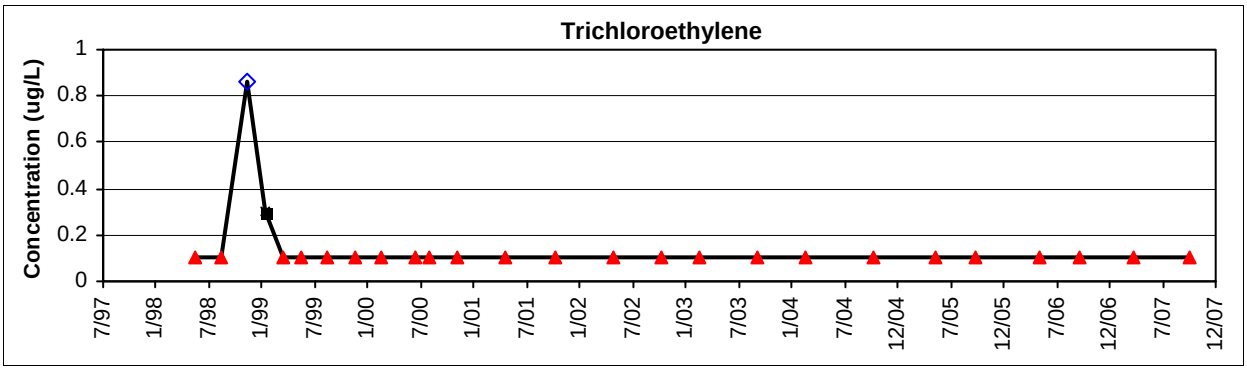
◇ Measured result -- reported concentrations

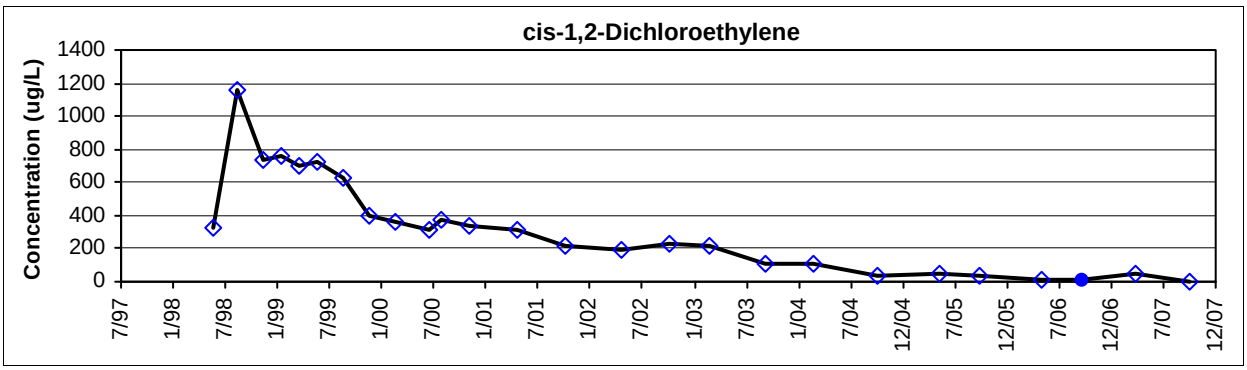
● Estimated concentration (J, Jh, or Jl)

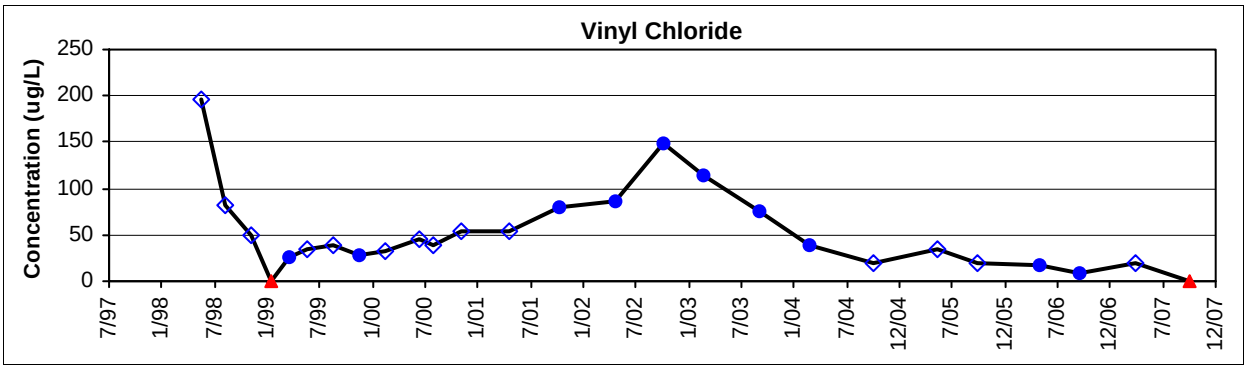
■ Estimated concentration below the PQL (Jr value)

▲ Non-detect result (U, Ub, UJ)

Figure D-4. Organics Concentration versus Time Graphs in CAF-17C







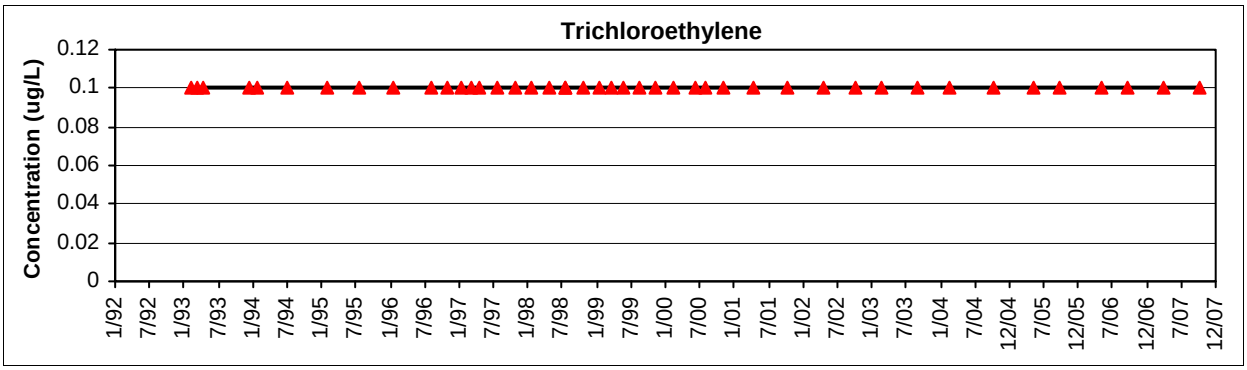
◇ Measured result -- reported concentrations

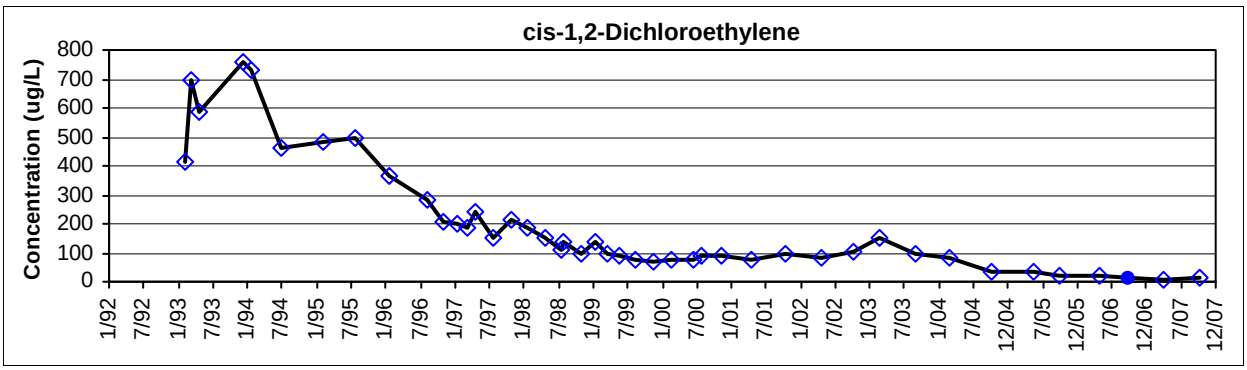
● Estimated concentration (J, Jh, or Jl)

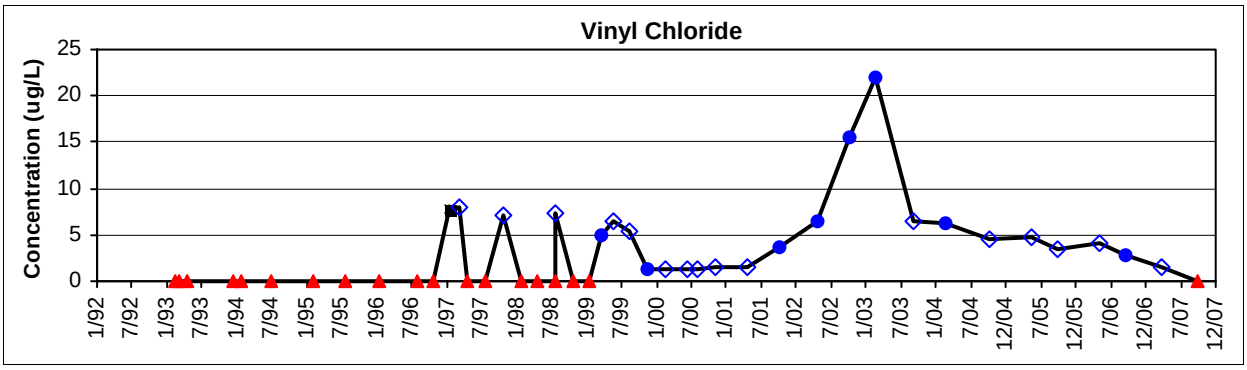
■ Estimated concentration below the PQL (Jr value)

▲ Non-detect result (U, Ub, UJ)

Figure D-5. Organics Concentration versus Time Graphs in OB-5







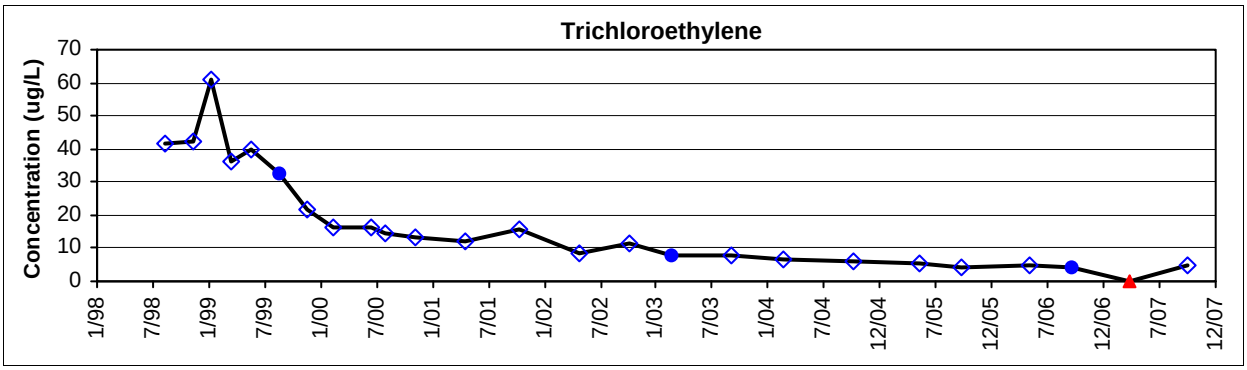
◇ Measured result -- reported concentrations

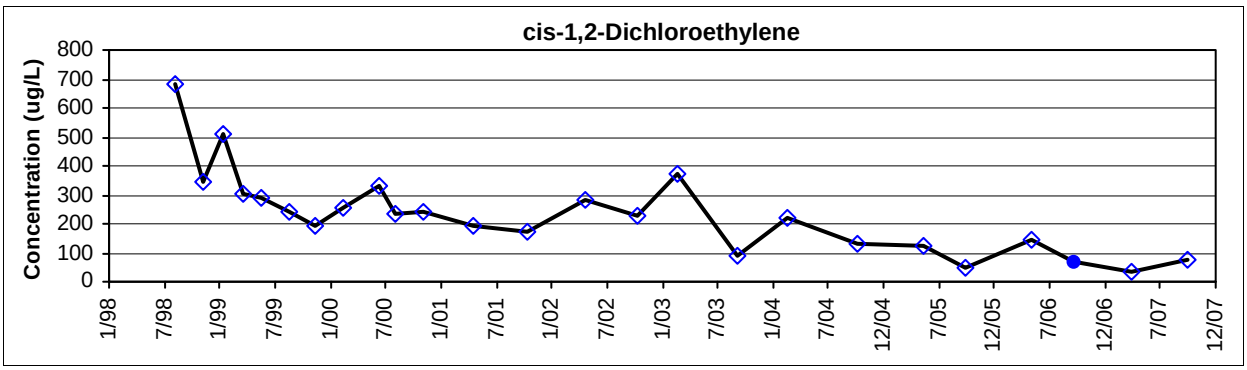
● Estimated concentration (J, Jh, or Jl)

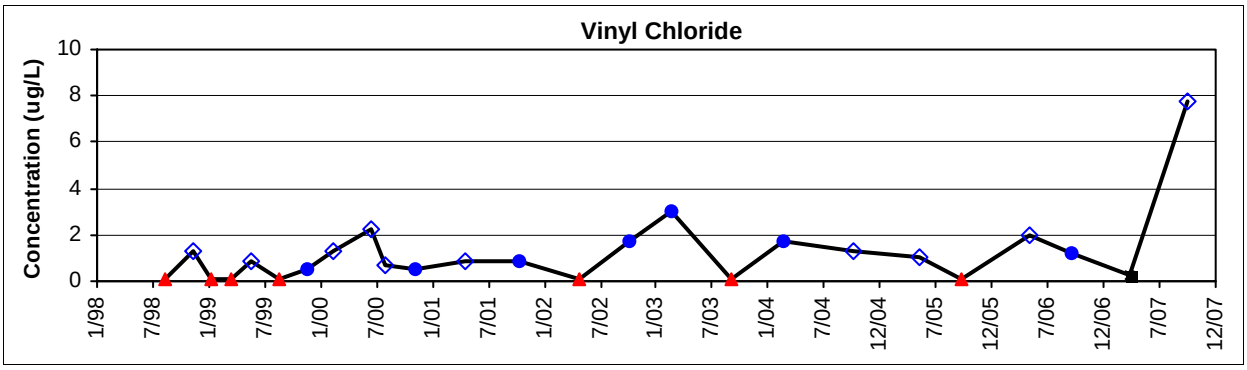
■ Estimated concentration below the PQL (Jr value)

▲ Non-detect result (U, Ub, UJ)

Figure D-6. Organics Concentration versus Time Graphs in OCW-2C

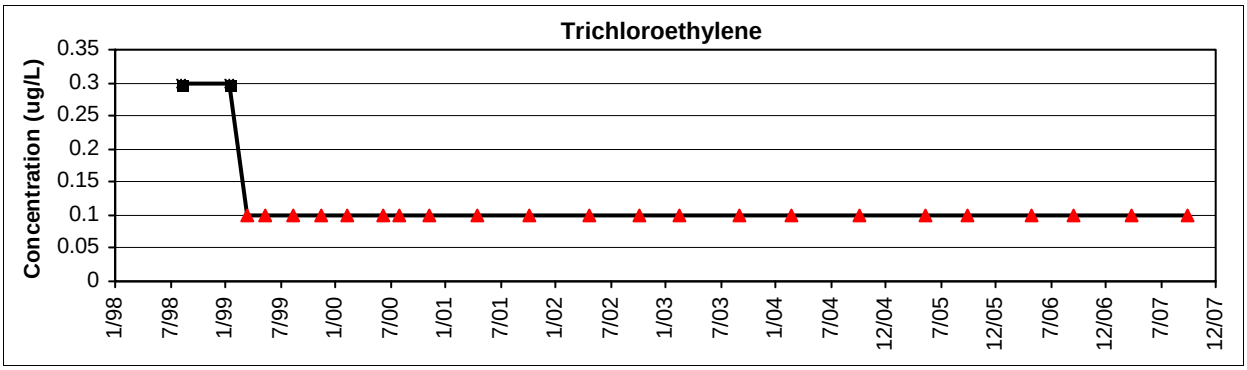


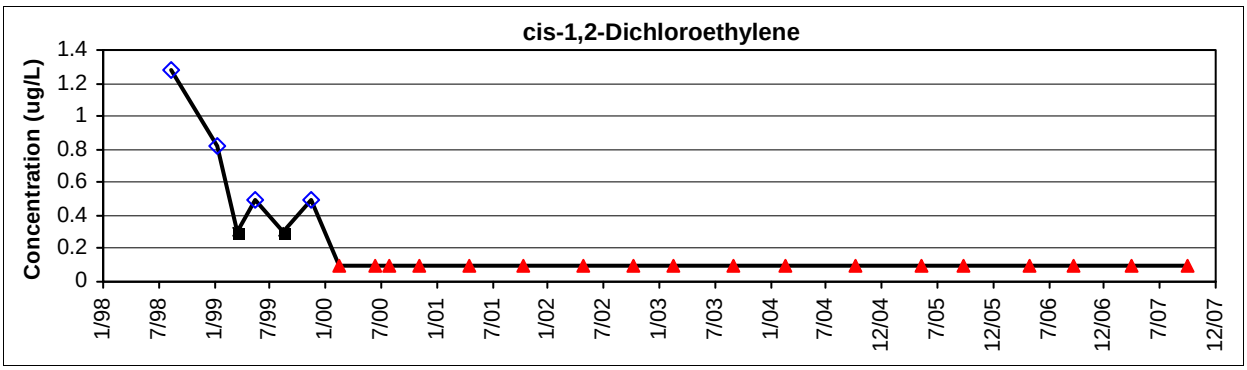


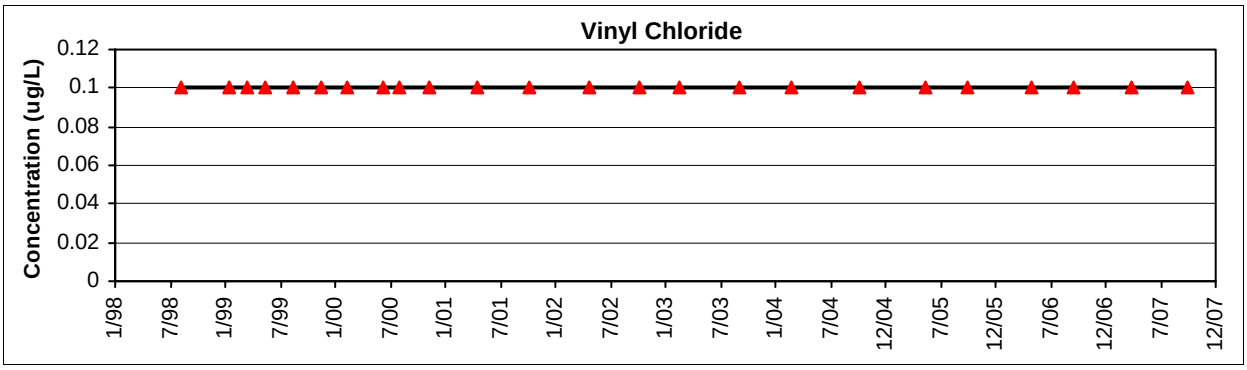


- ◇ Measured result -- reported concentrations
- ● Estimated concentration (J, Jh, or Jl)
- ■ Estimated concentration below the PQL (Jr value)
- ▲ Non-detect result (U, Ub, UJ)

Figure D-7. Organics Concentration versus Time Graphs in OCW-4B







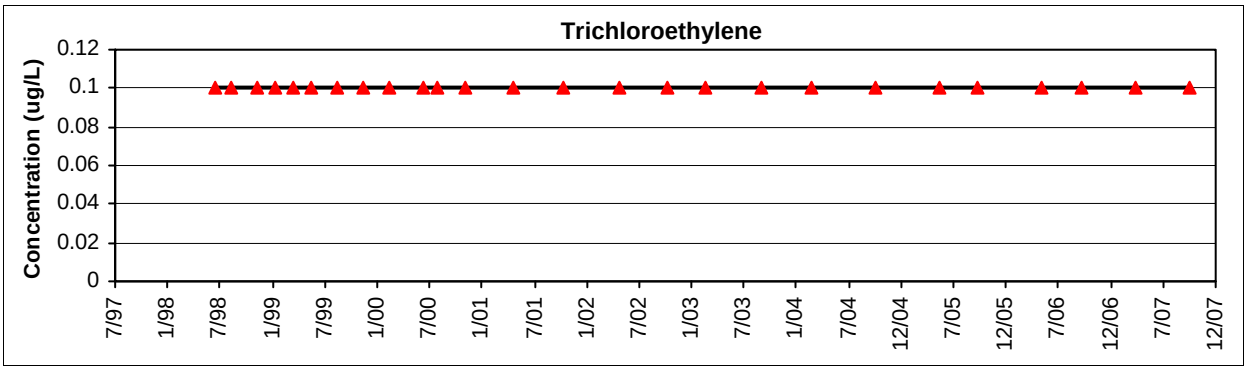
◇ Measured result -- reported concentrations

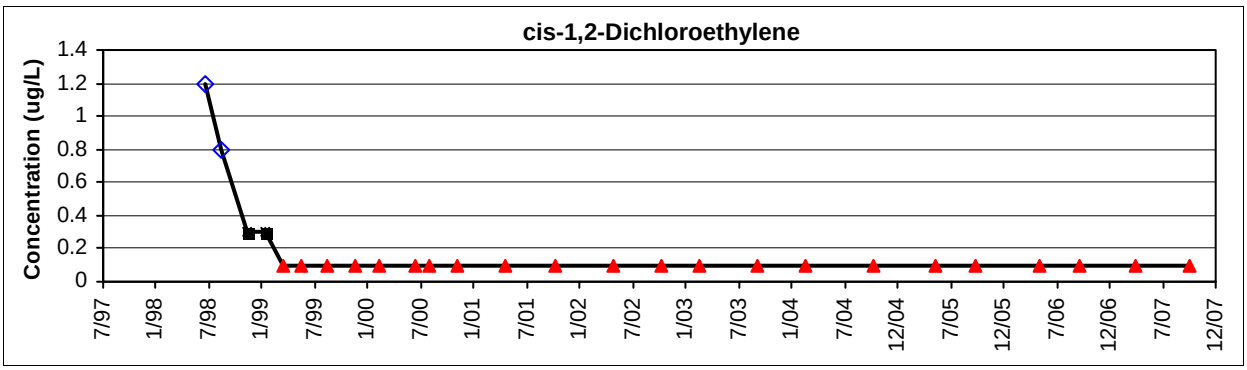
● Estimated concentration (J, Jh, or Jl)

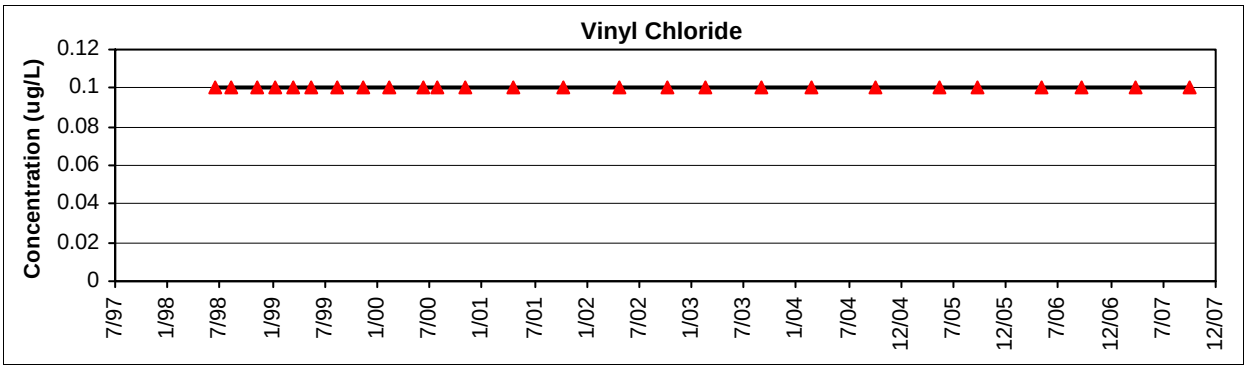
■ Estimated concentration below the PQL (Jr value)

▲ Non-detect result (U, Ub, UJ)

Figure D-8. Organics Concentration versus Time Graphs in OCW-5D

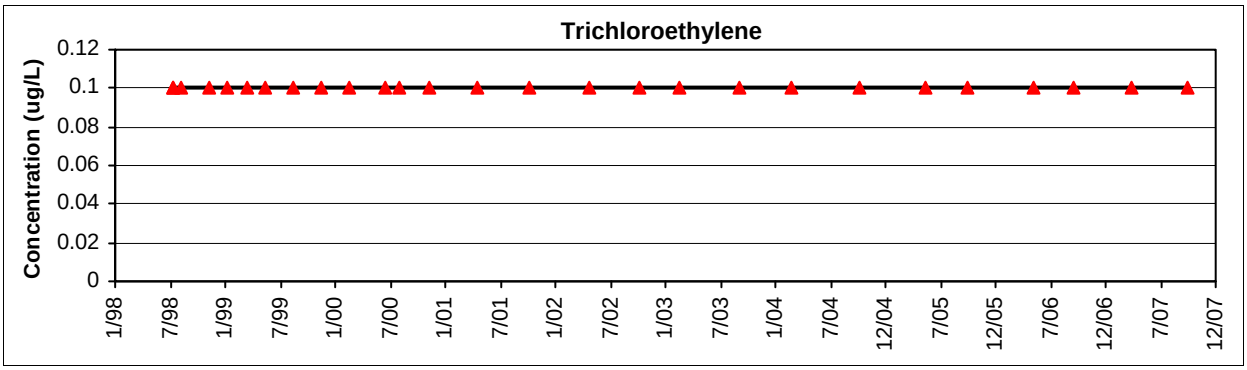


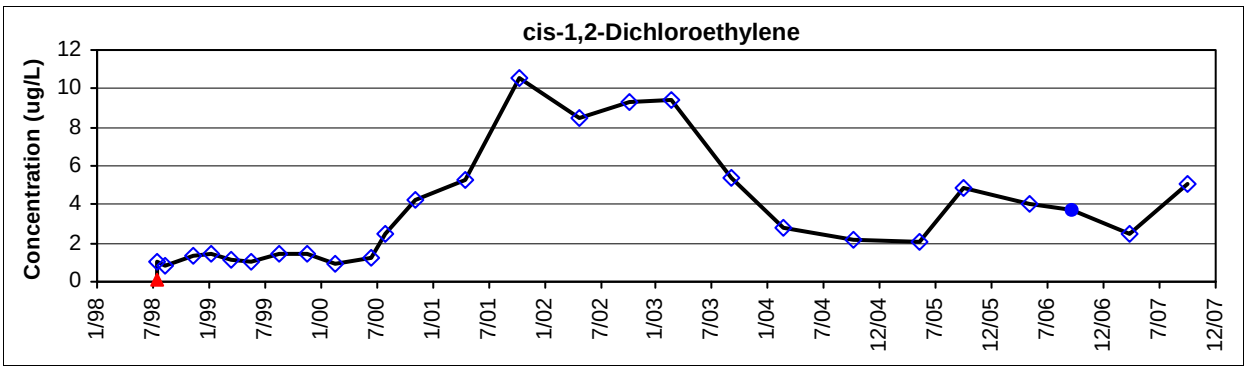


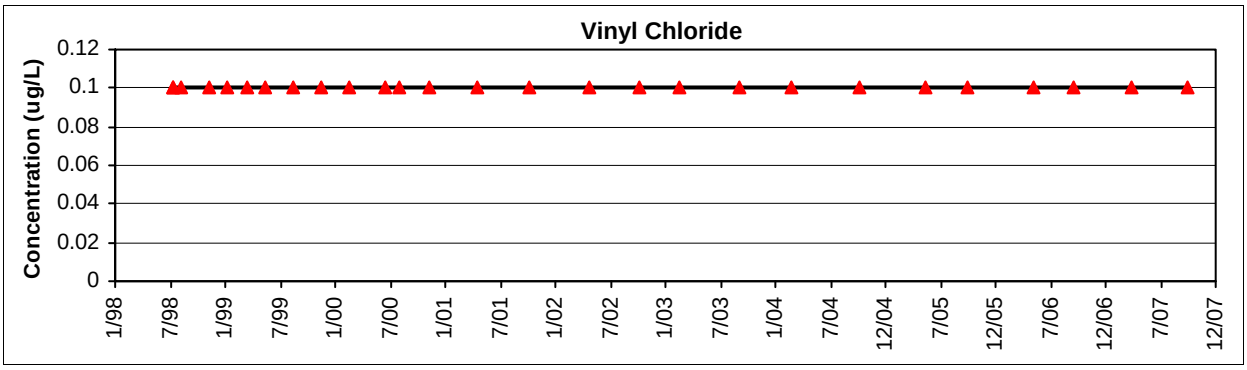


- ◇ Measured result -- reported concentrations
- ● Estimated concentration (J, Jh, or Jl)
- ■ Estimated concentration below the PQL (Jr value)
- ▲ Non-detect result (U, Ub, UJ)

Figure D-9. Organics Concentration versus Time Graphs in OSW-1A







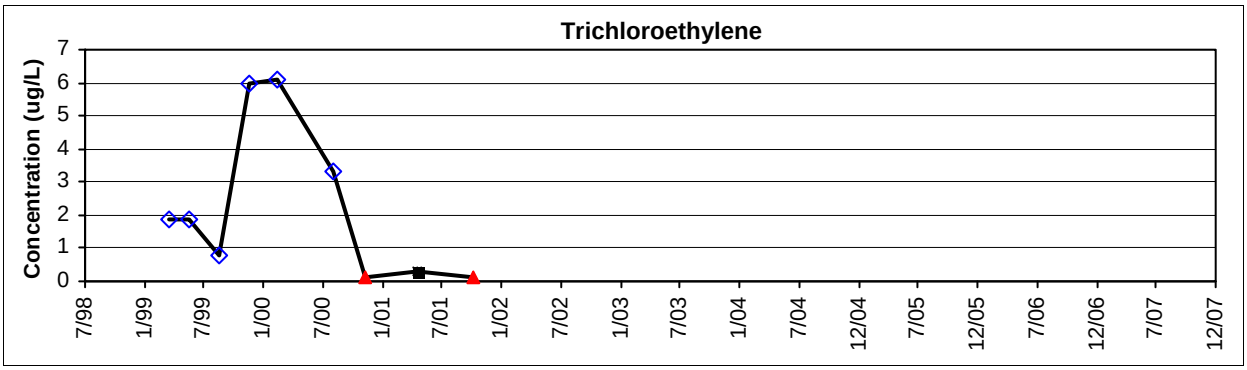
◇ Measured result -- reported concentrations

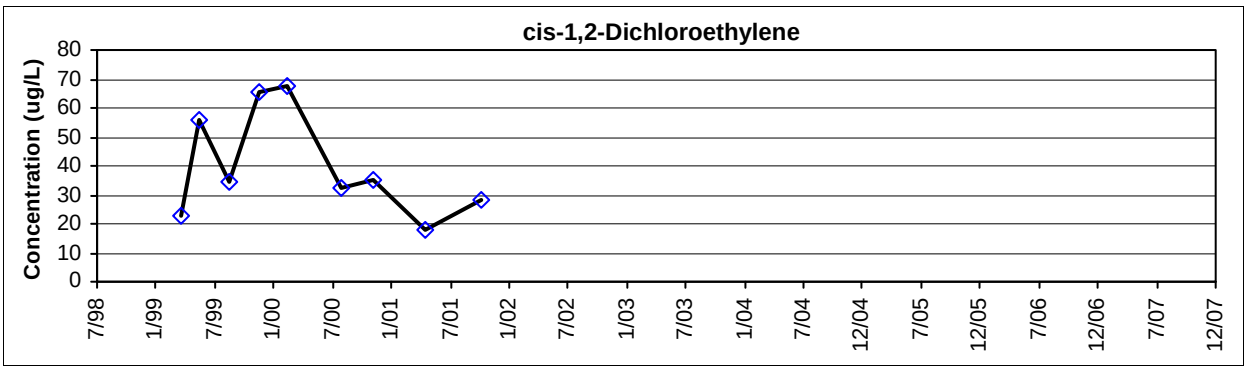
● Estimated concentration (J, Jh, or Jl)

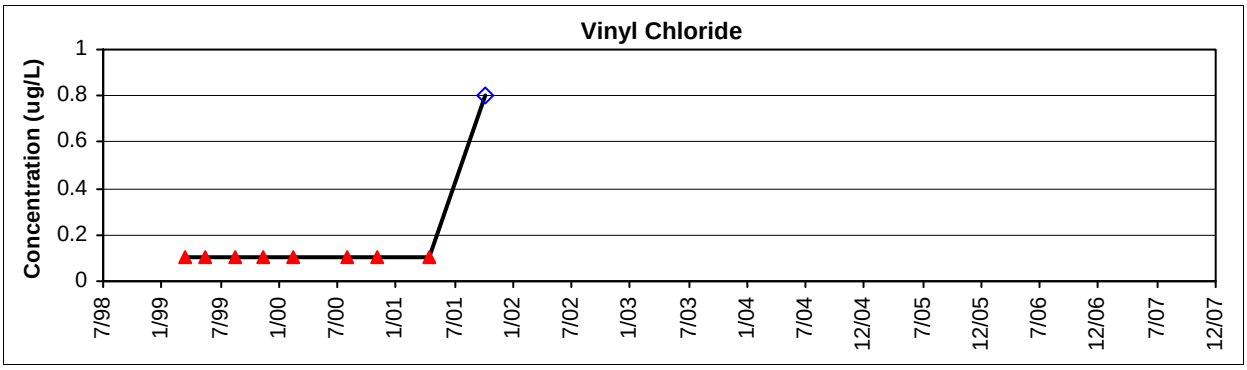
■ Estimated concentration below the PQL (Jr value)

▲ Non-detect result (U, Ub, UJ)

Figure D-10. Organics Concentration versus Time Graphs in SW-4







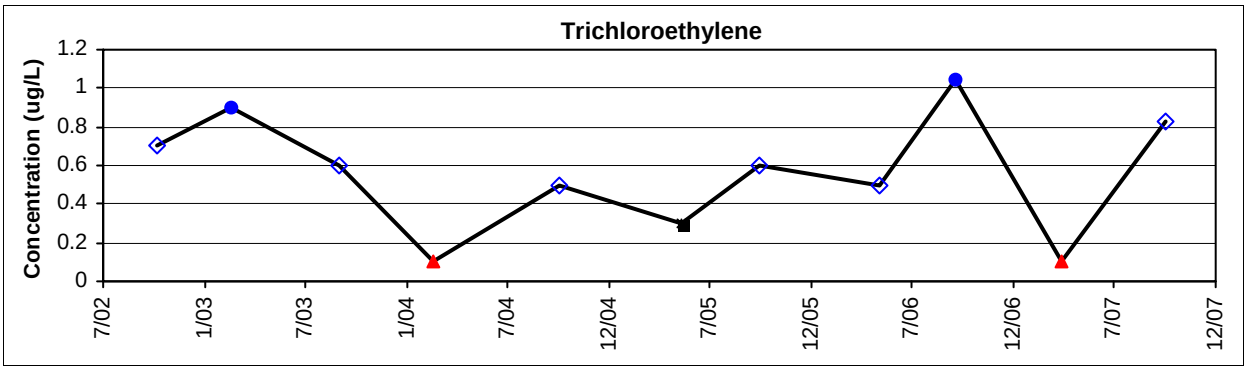
◇ Measured result -- reported concentrations

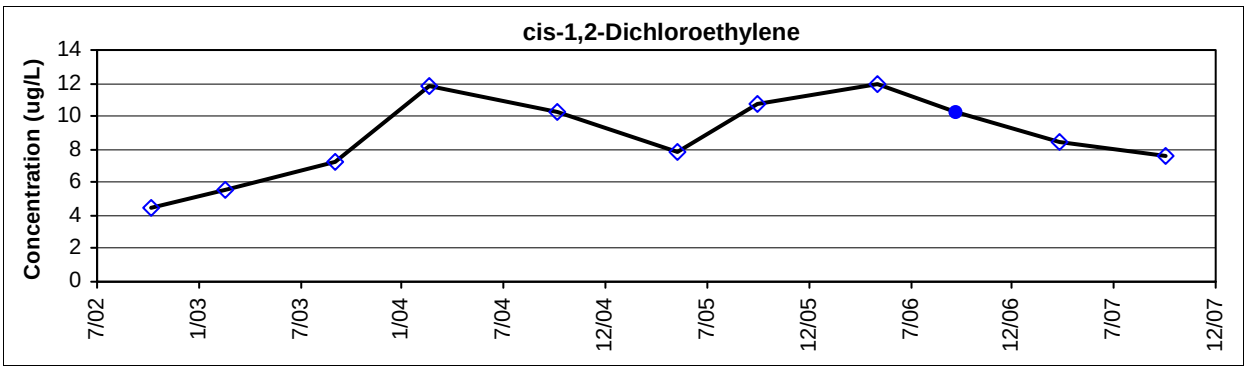
● Estimated concentration (J, Jh, or Jl)

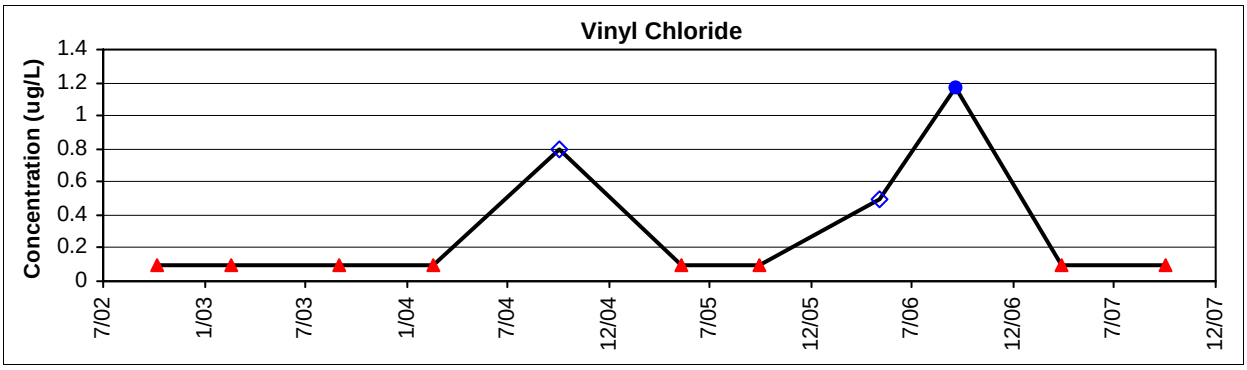
■ Estimated concentration below the PQL (Jr value)

▲ Non-detect result (U, Ub, UJ)

Figure D-11. Organics Concentration versus Time Graphs in SW-14







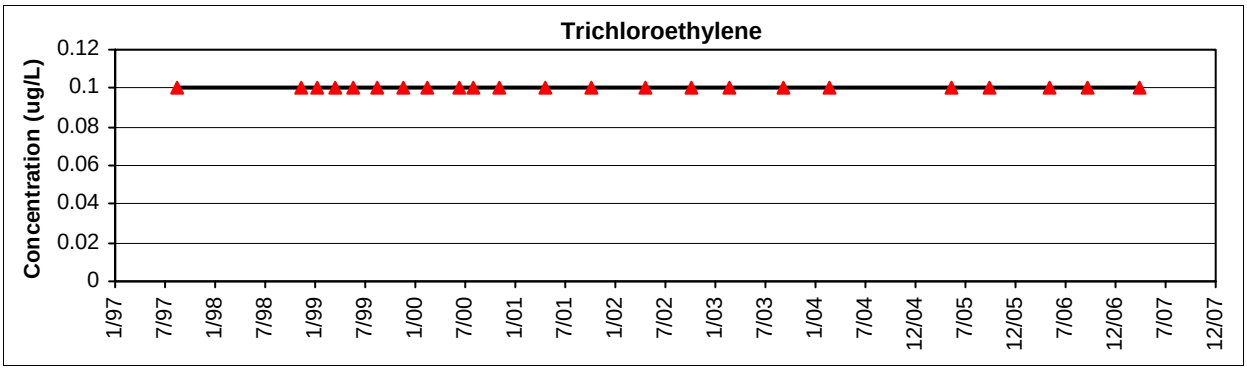
◇ Measured result -- reported concentrations

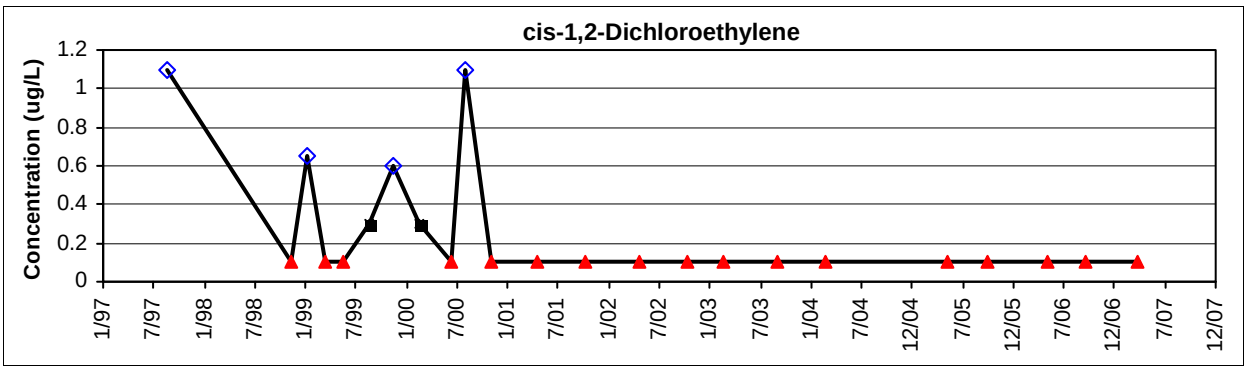
● Estimated concentration (J, Jh, or Jl)

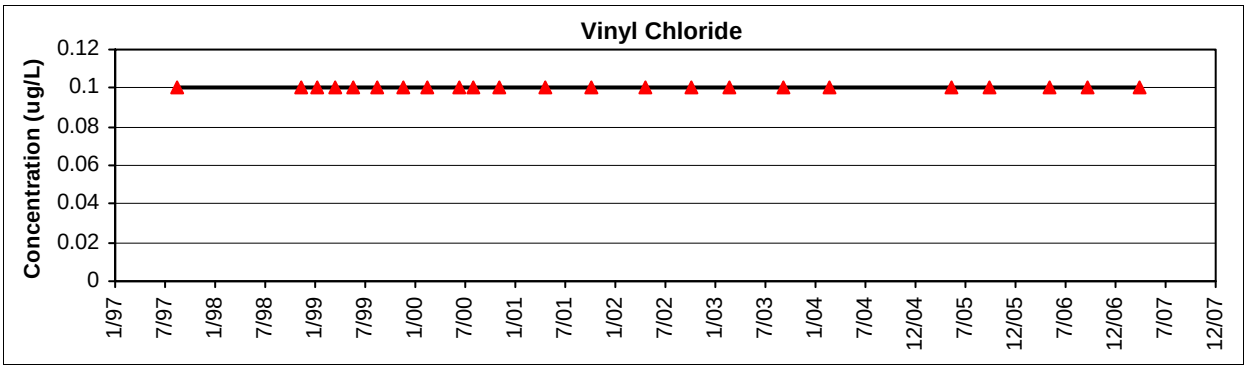
■ Estimated concentration below the PQL (Jr value)

▲ Non-detect result (U, Ub, UJ)

Figure D-12. Organics Concentration versus Time Graphs in SWS-1







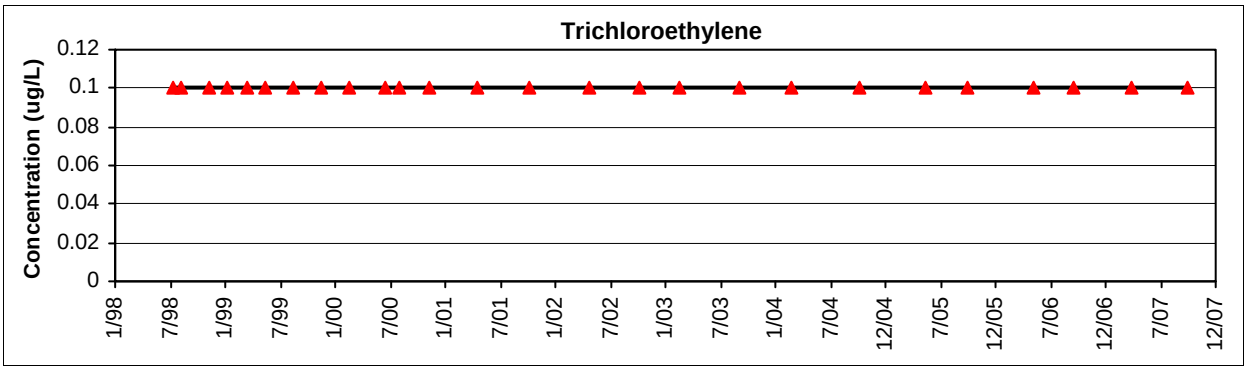
◇ Measured result -- reported concentrations

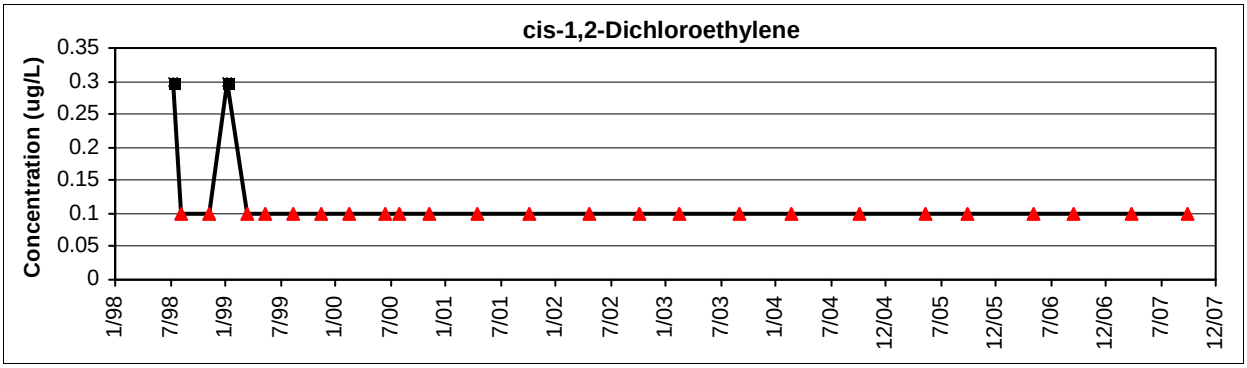
● Estimated concentration (J, Jh, or Jl)

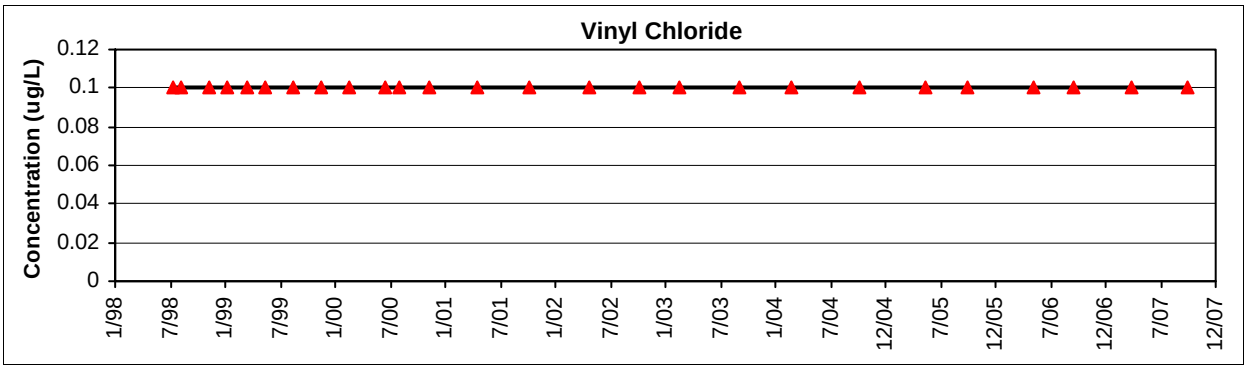
■ Estimated concentration below the PQL (Jr value)

▲ Non-detect result (U, Ub, UJ)

Figure D-13. Organics Concentration versus Time Graphs in SWS-8







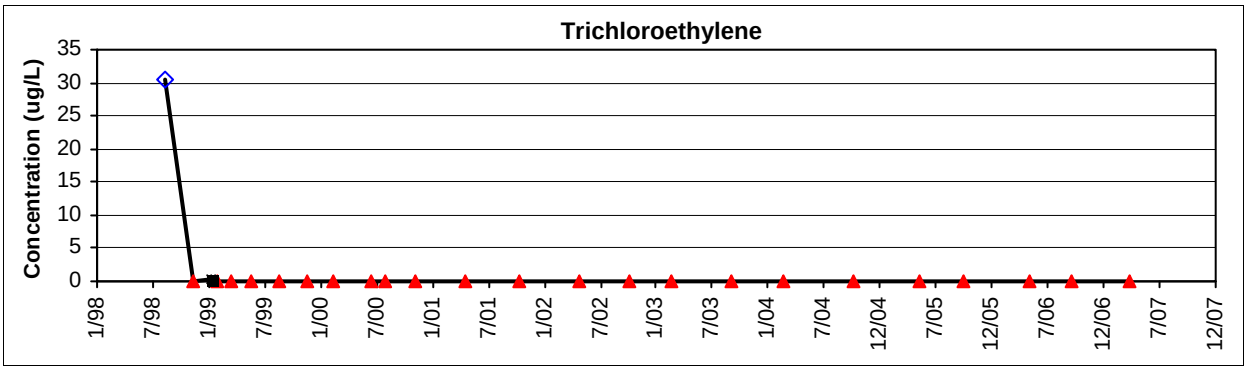
◇ Measured result -- reported concentrations

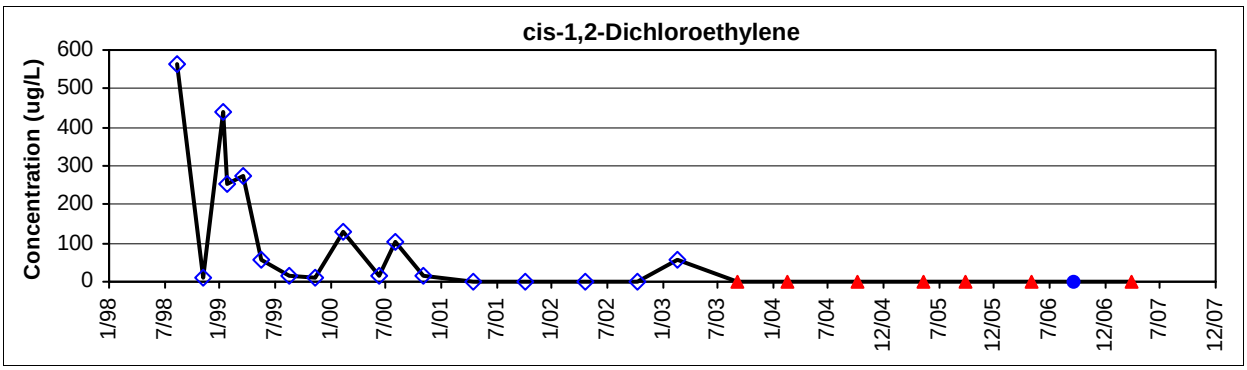
● Estimated concentration (J, Jh, or Jl)

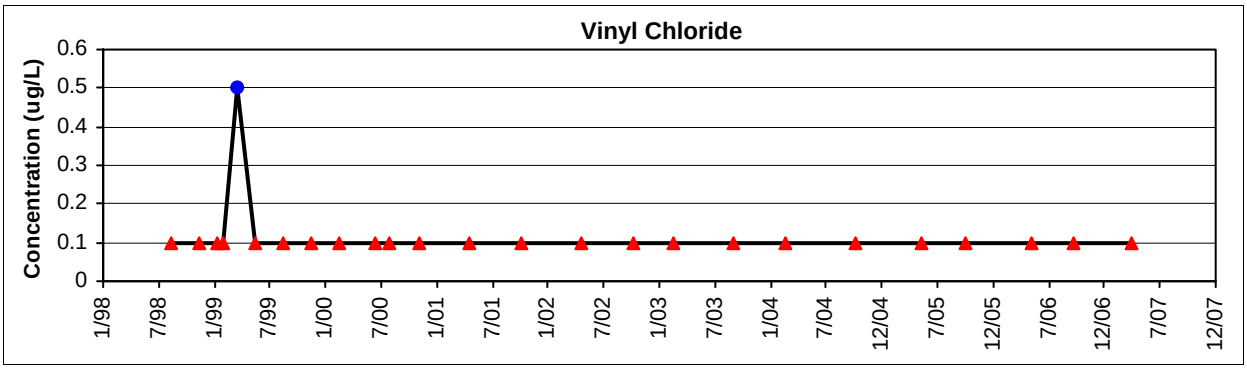
■ Estimated concentration below the PQL (Jr value)

▲ Non-detect result (U, Ub, UJ)

Figure D-14. Organics Concentration versus Time Graphs in SWS-9







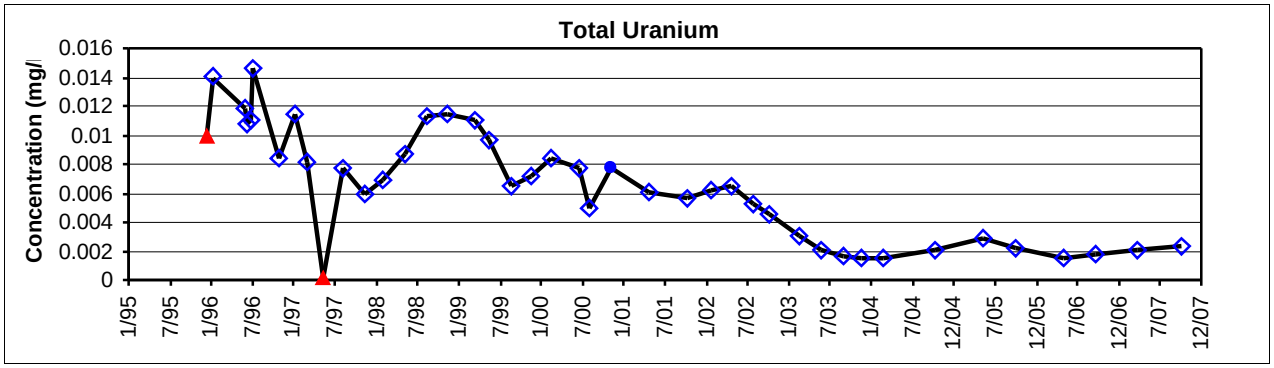
◇ Measured result -- reported concentrations

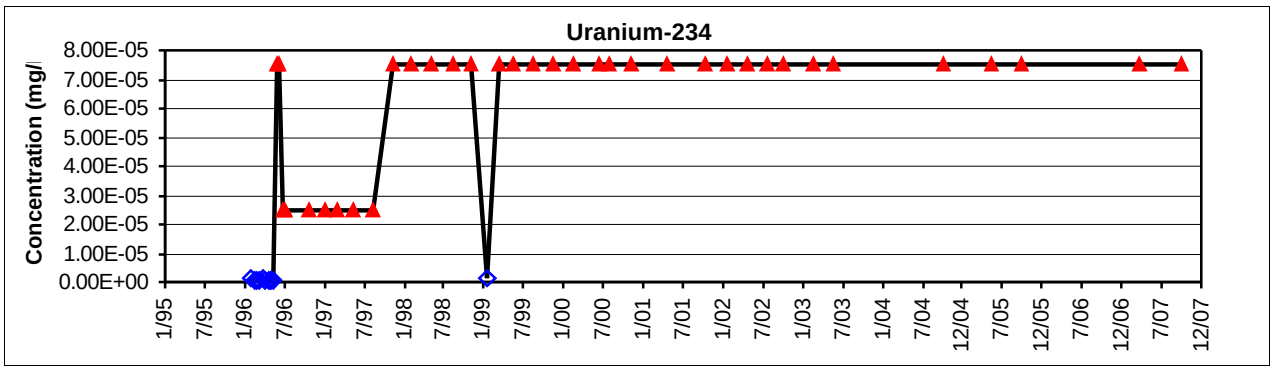
● Estimated concentration (J, Jh, or Jl)

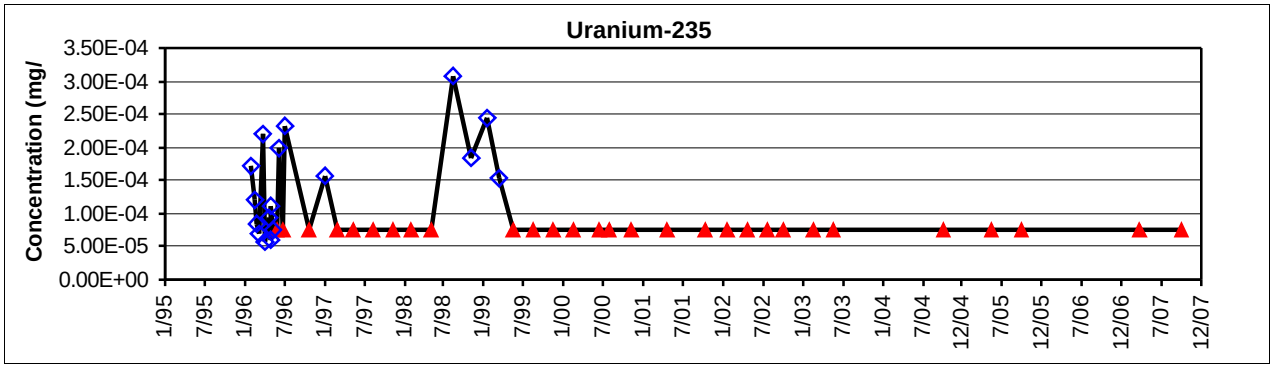
■ Estimated concentration below the PQL (Jr value)

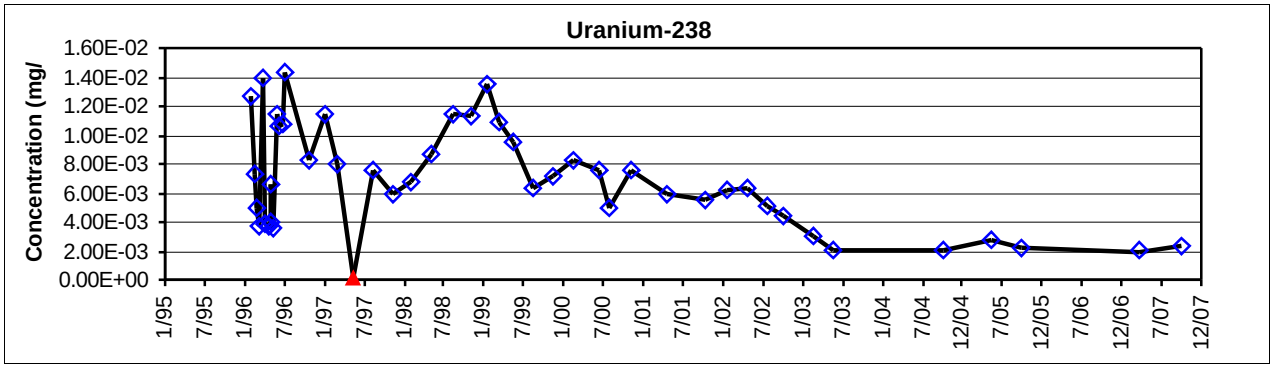
▲ Non-detect result (U, Ub, UJ)

Figure D-15. Uranium Concentration versus Time Graphs in CAF-5B









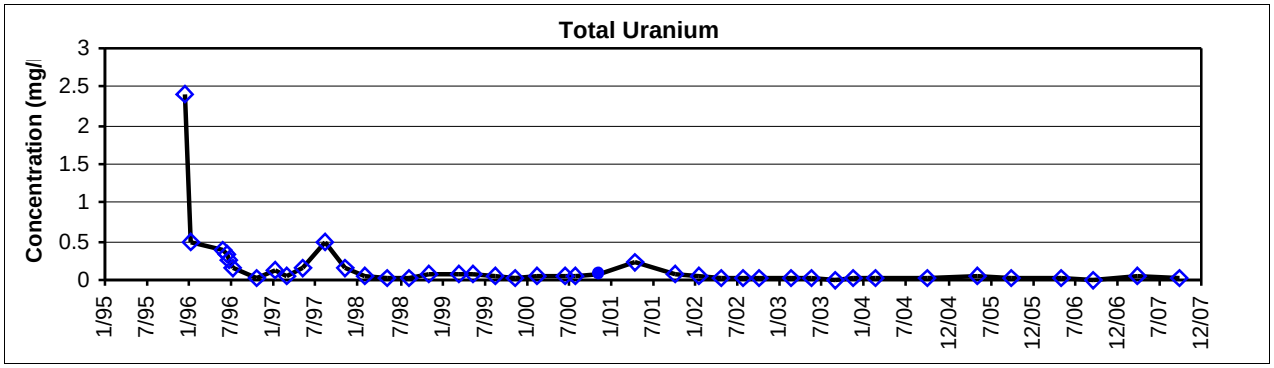
◇ Measured result -- reported concentrations

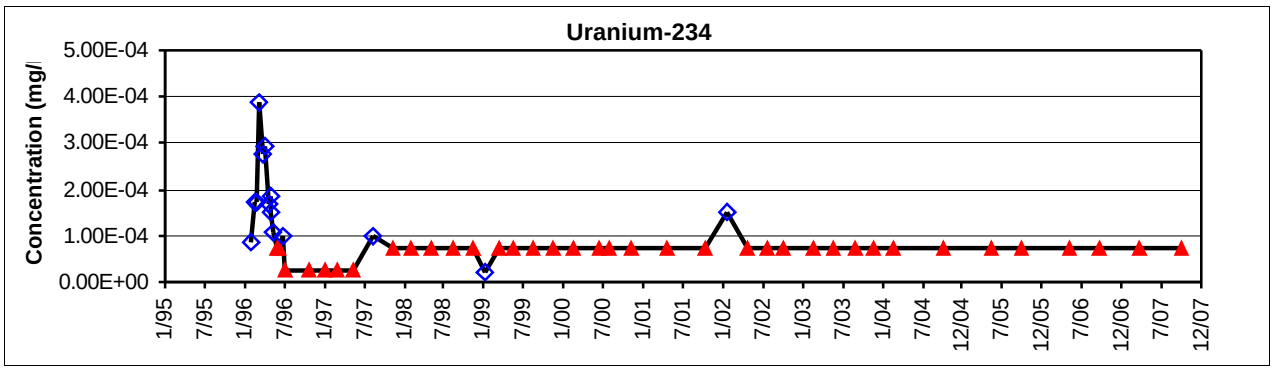
● Estimated concentration (J, Jh, or Jl)

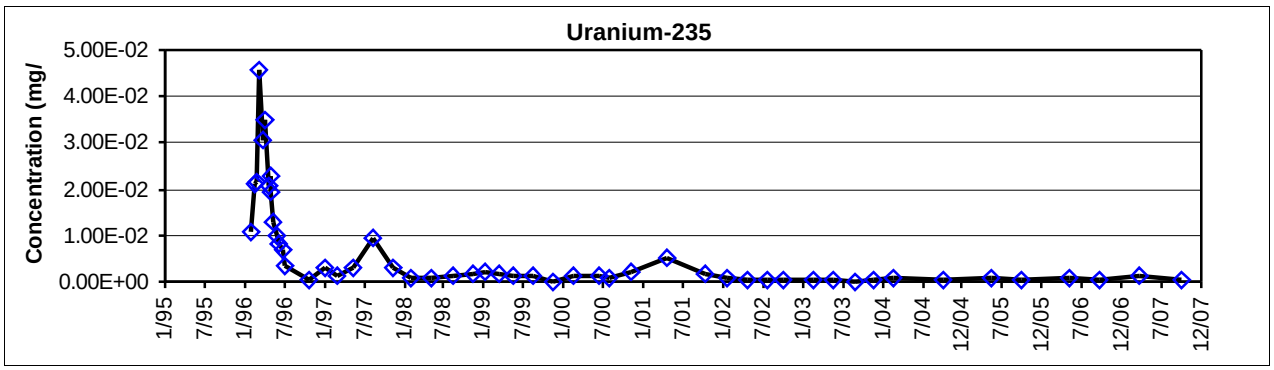
■ Estimated concentration below the PQL (Jr value)

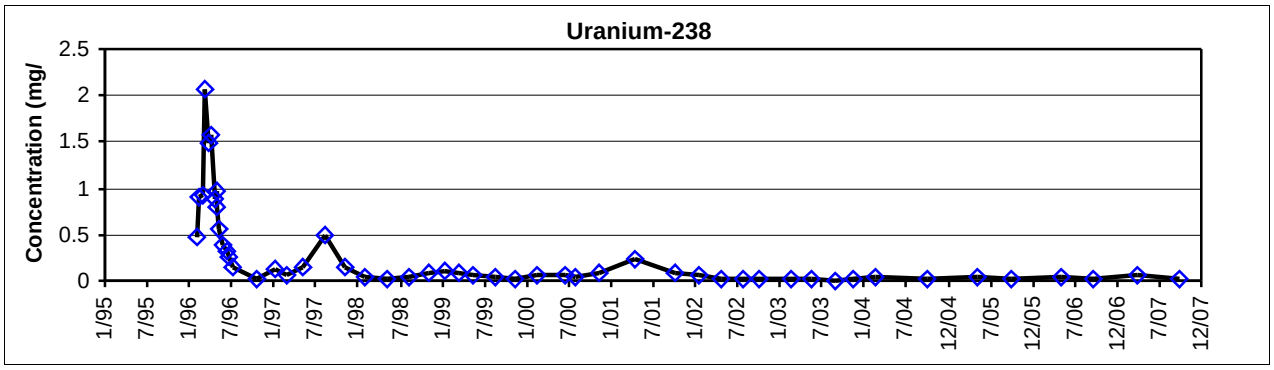
▲ Non-detect result (U, Ub, UJ)

Figure D-16. Uranium Concentration versus Time Graphs in CAF-6A



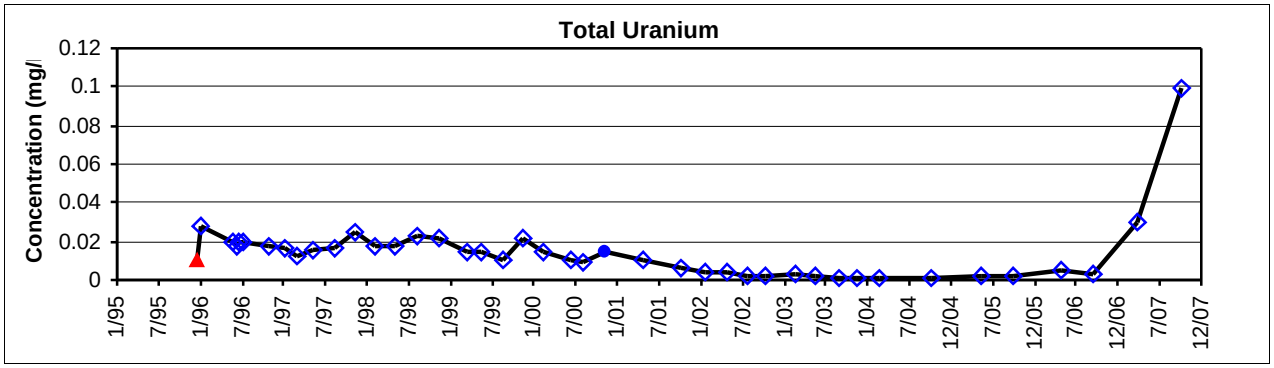


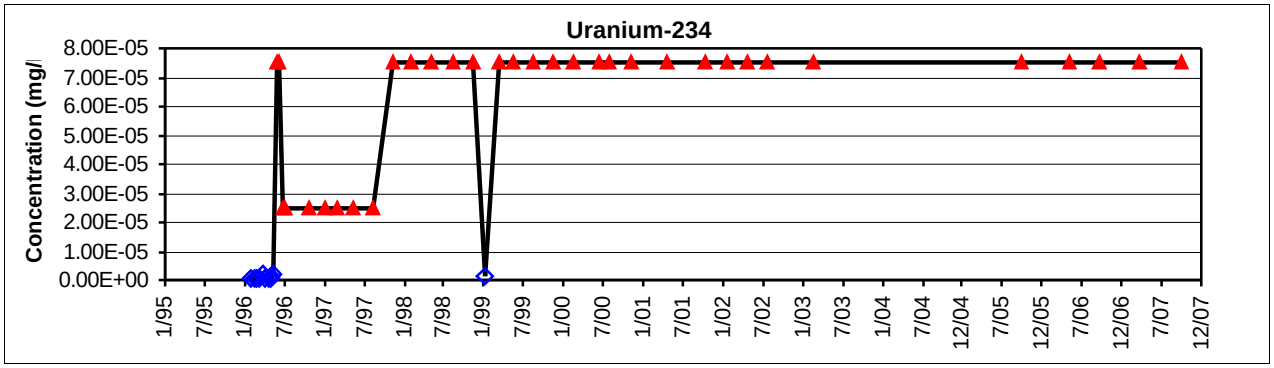


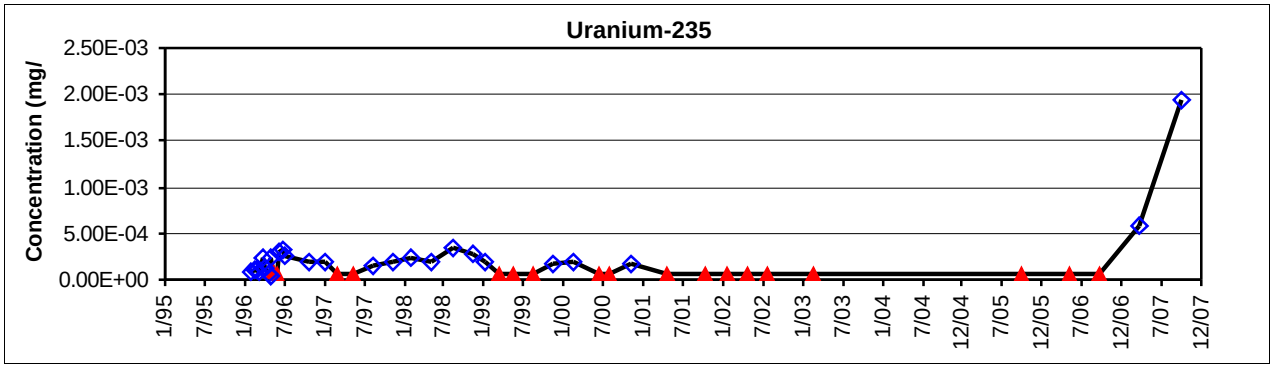


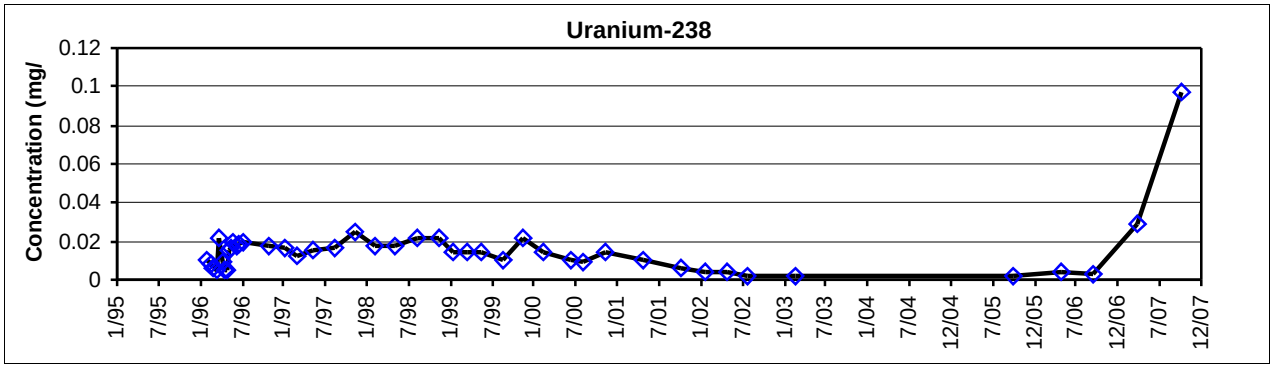
- ◇ Measured result -- reported concentrations
- ● Estimated concentration (J, Jh, or Jl)
- ■ Estimated concentration below the PQL (Jr value)
- ▲ Non-detect result (U, Ub, UJ)

Figure D-17. Uranium Concentration versus Time Graphs in CAF-6B









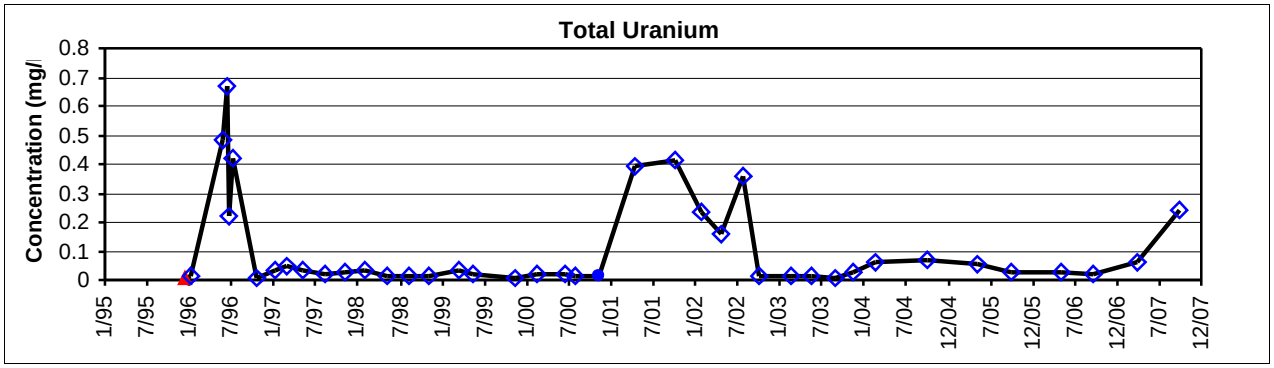
◇ Measured result -- reported concentrations

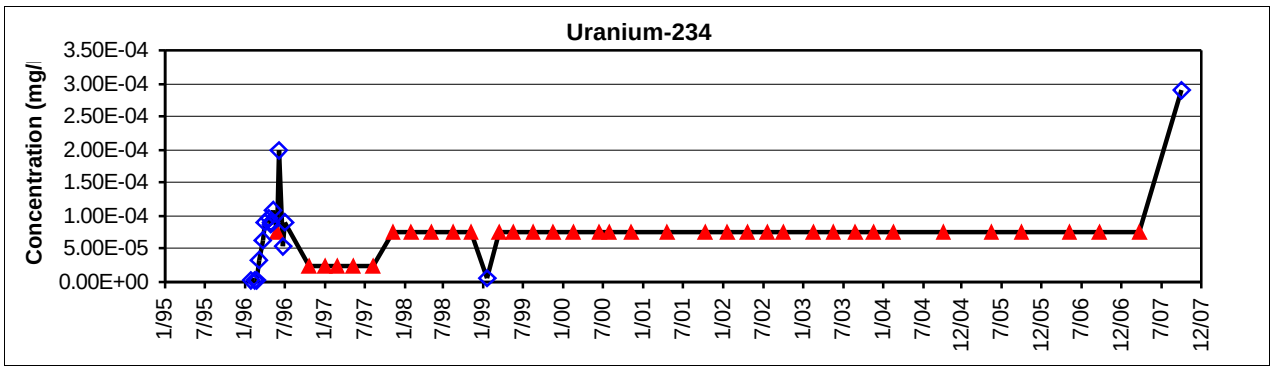
● Estimated concentration (J, Jh, or Jl)

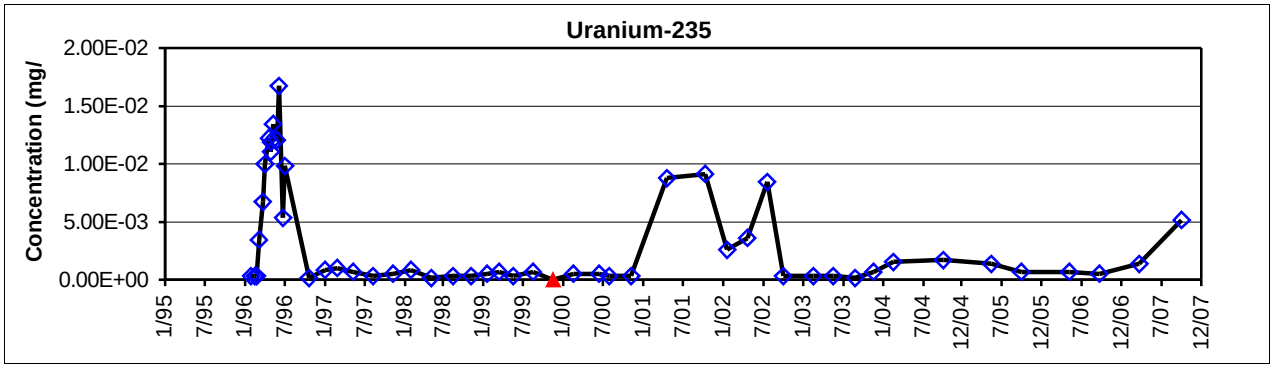
■ Estimated concentration below the PQL (Jr value)

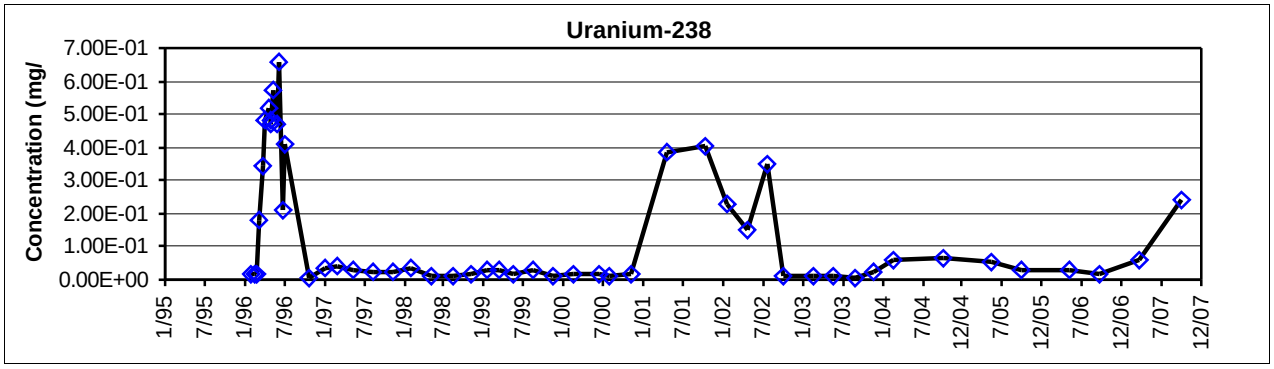
▲ Non-detect result (U, Ub, UJ)

Figure D-18. Uranium Concentration versus Time Graphs in CAF-7A



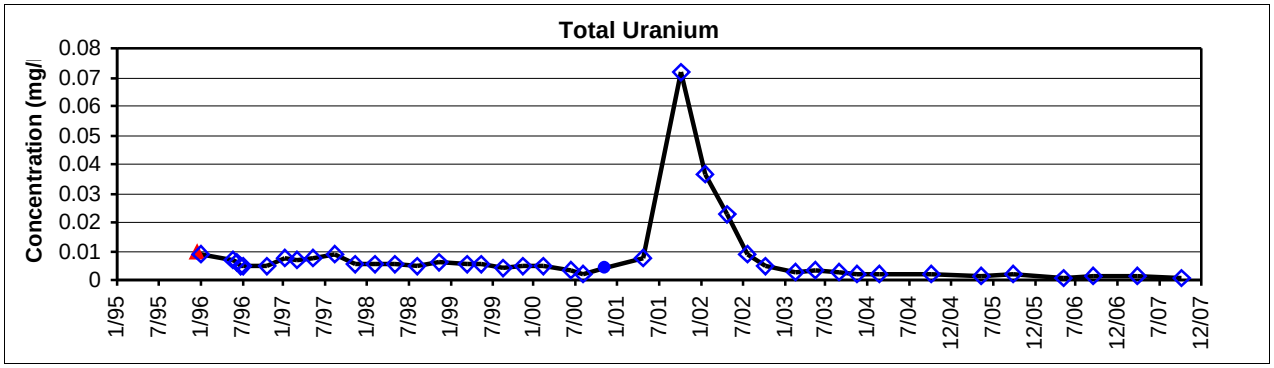


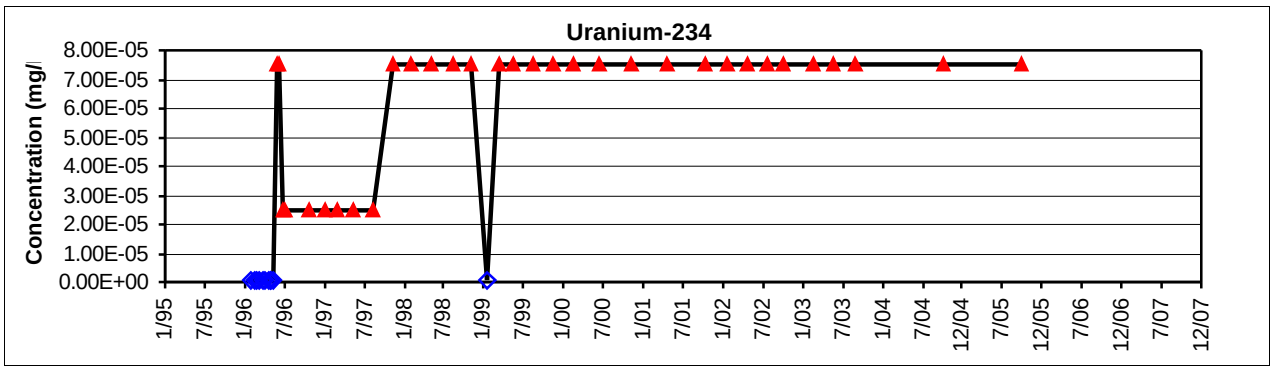


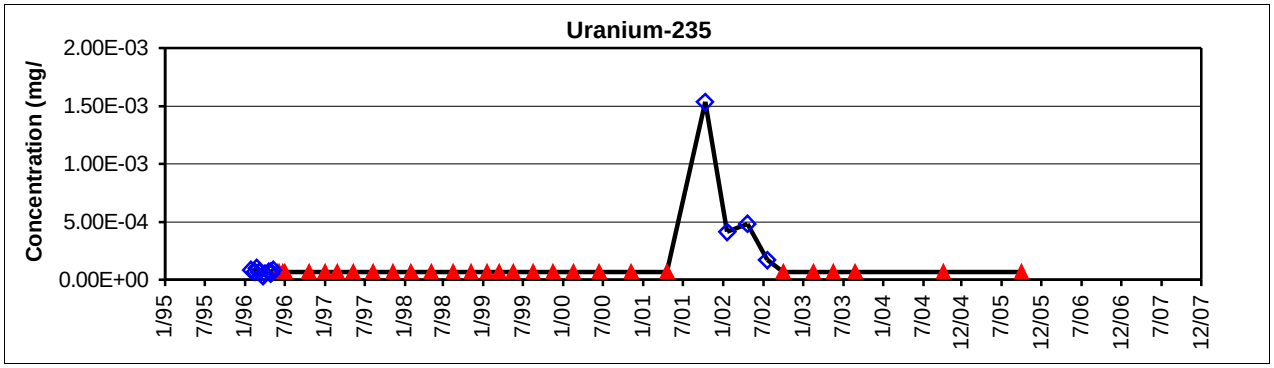


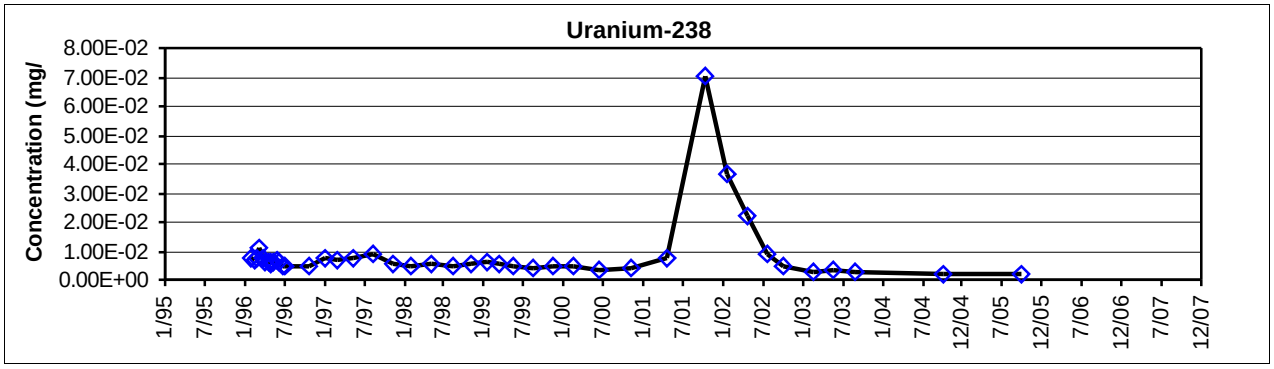
- ◇ Measured result -- reported concentrations
- ● Estimated concentration (J, Jh, or Jl)
- ■ Estimated concentration below the PQL (Jr value)
- ▲ Non-detect result (U, Ub, UJ)

Figure D-19. Uranium Concentration versus Time Graphs in CAF-7B



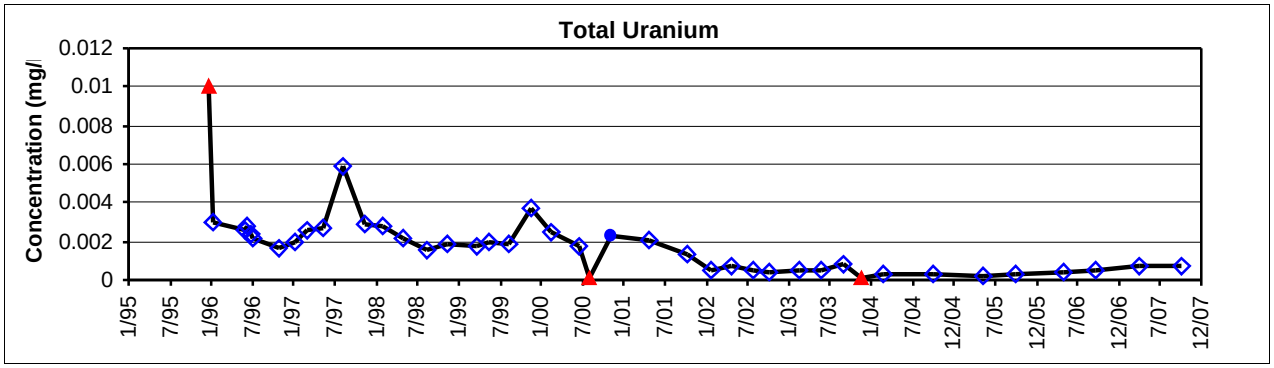


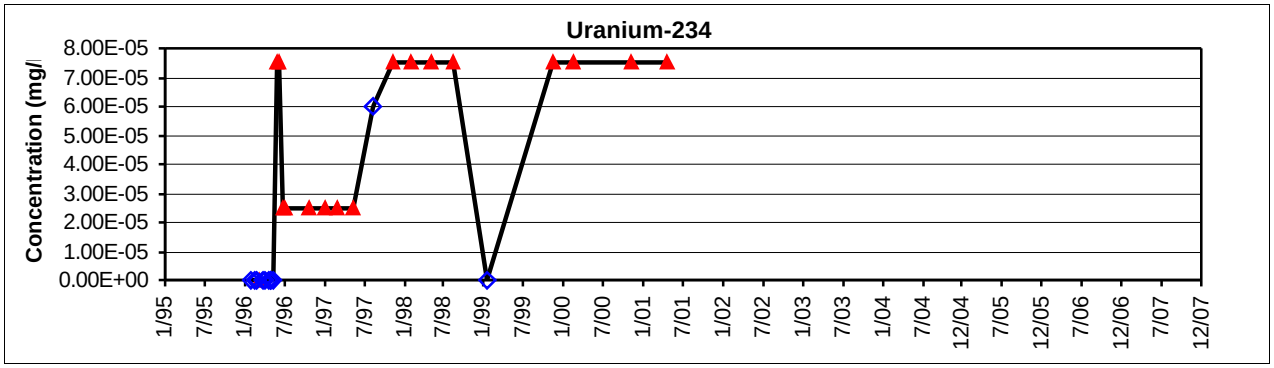


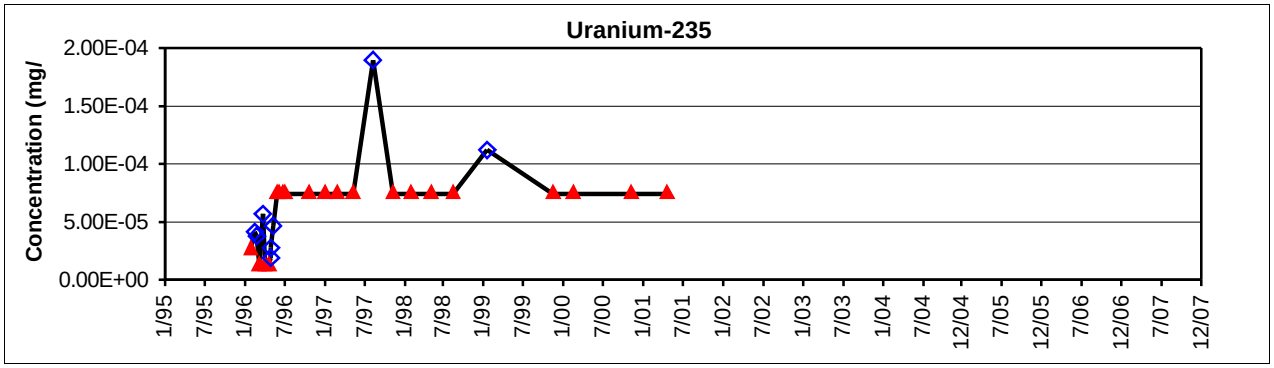


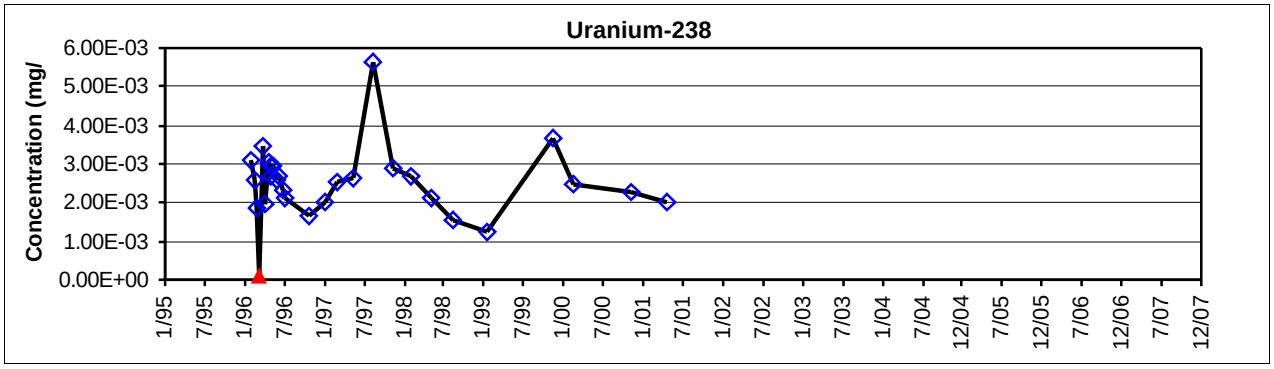
- ◇ Measured result -- reported concentrations
- ● Estimated concentration (J, Jh, or Jl)
- ■ Estimated concentration below the PQL (Jr value)
- ▲ Non-detect result (U, Ub, UJ)

Figure D-20. Uranium Concentration versus Time Graphs in CAF-8B



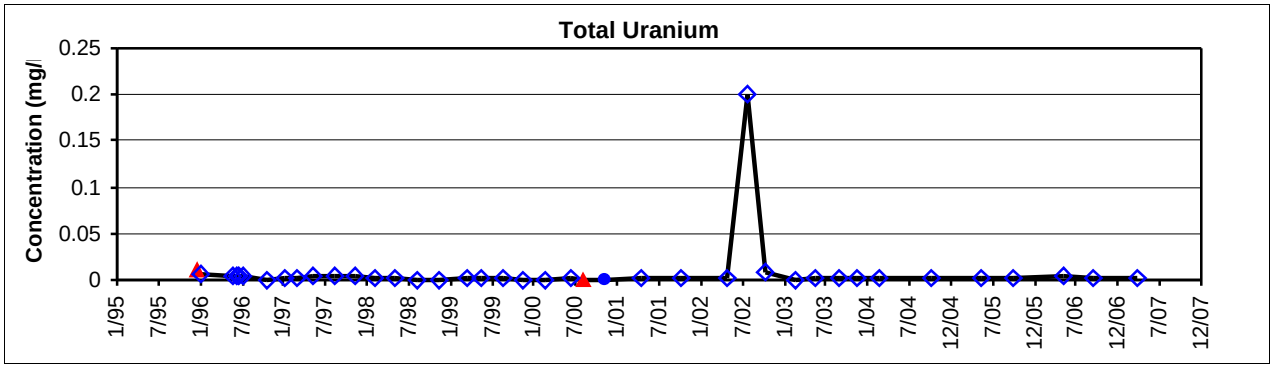


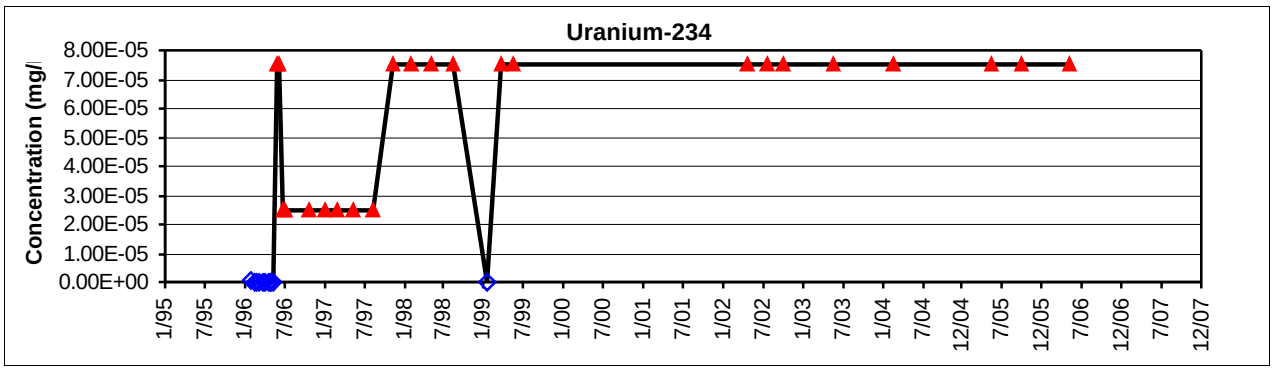


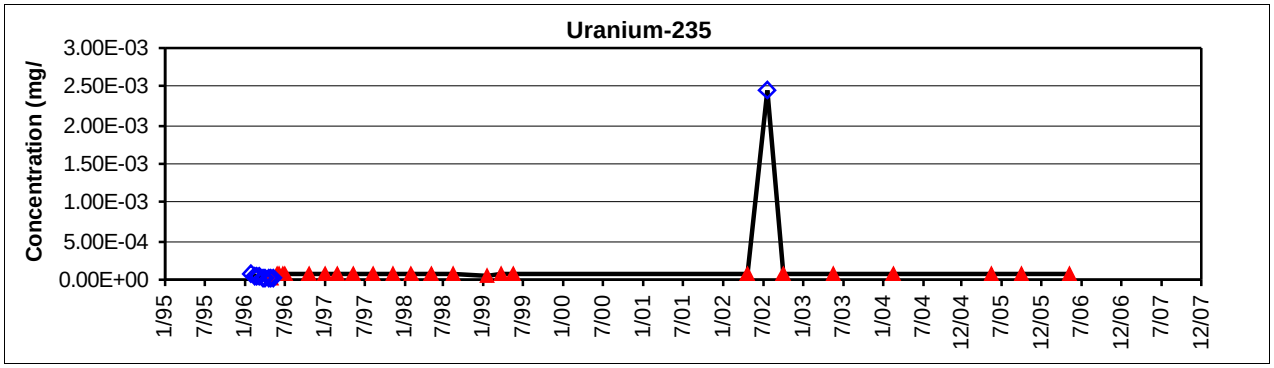


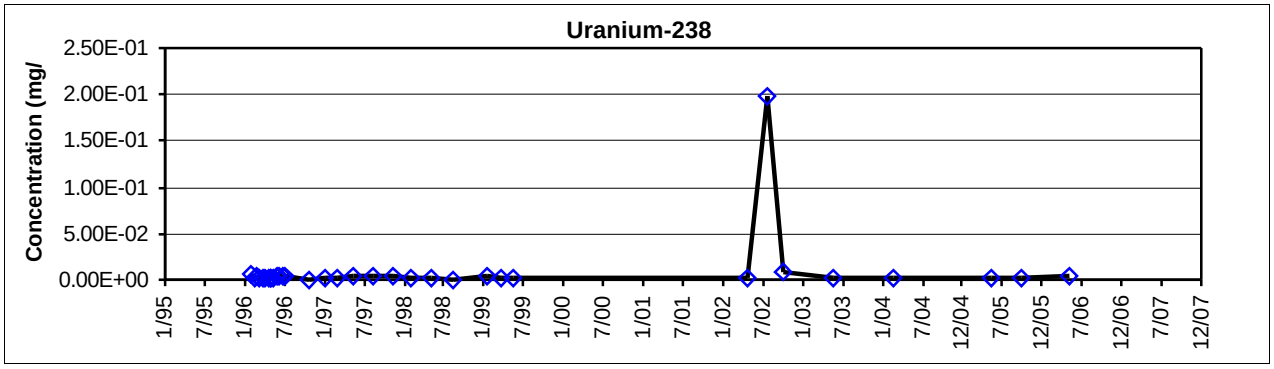
- ◇ Measured result -- reported concentrations
- ● Estimated concentration (J, Jh, or Jl)
- ■ Estimated concentration below the PQL (Jr value)
- ▲ Non-detect result (U, Ub, UJ)

Figure D-21. Uranium Concentration versus Time Graphs in CAF-9A









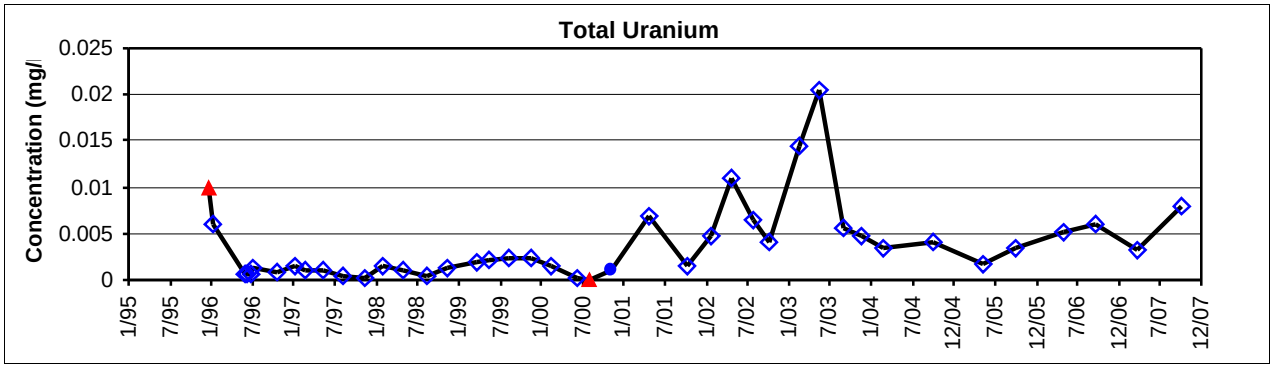
◇ Measured result -- reported concentrations

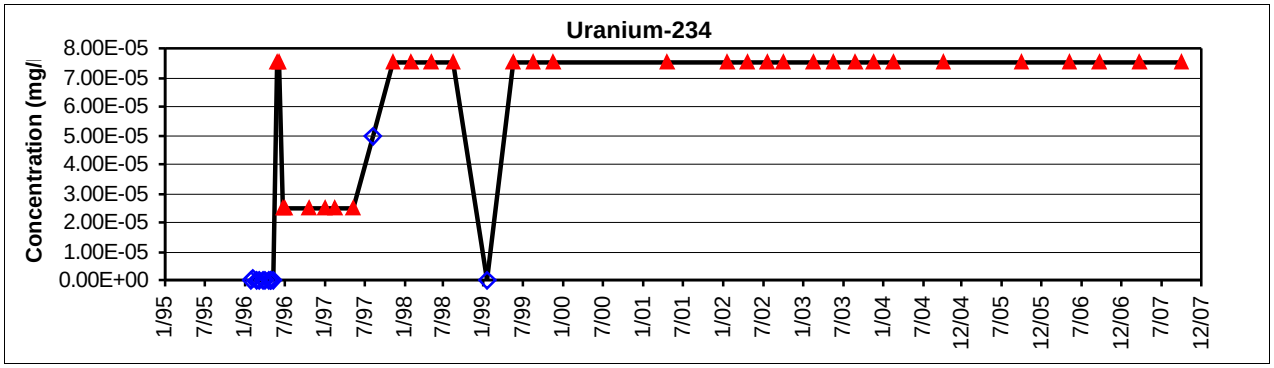
● Estimated concentration (J, Jh, or Jl)

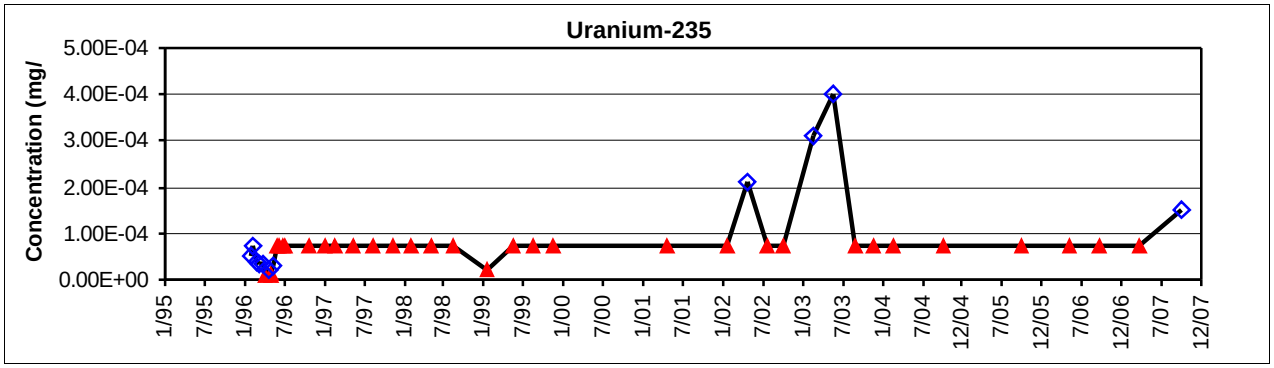
■ Estimated concentration below the PQL (Jr value)

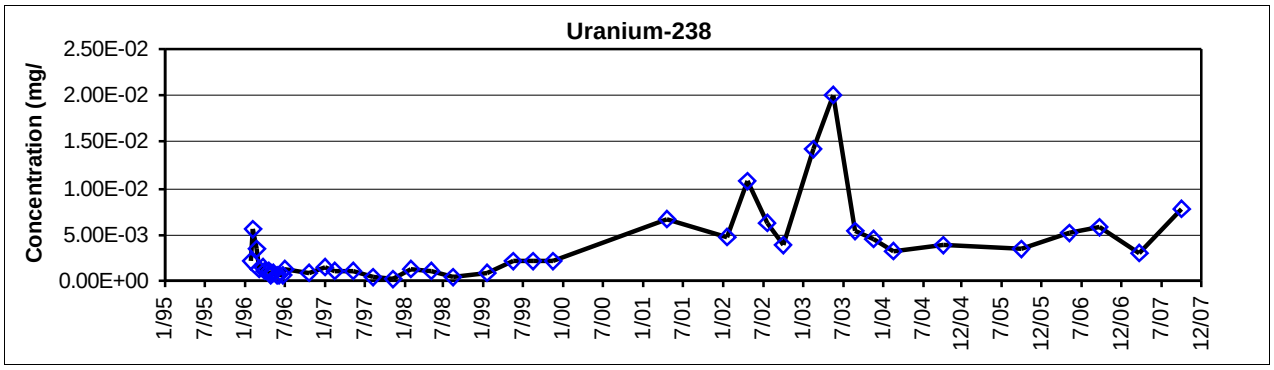
▲ Non-detect result (U, Ub, UJ)

Figure D-22. Uranium Concentration versus Time Graphs in CAF-10A









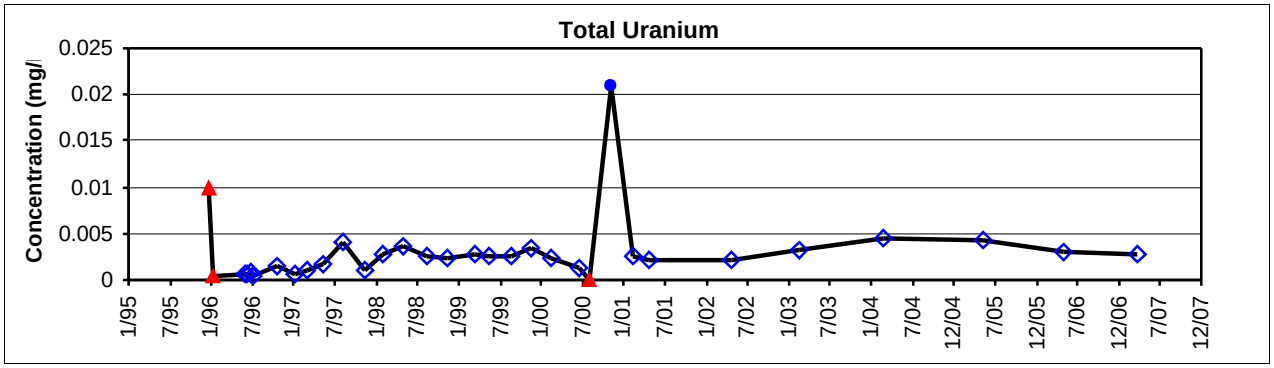
◇ Measured result -- reported concentrations

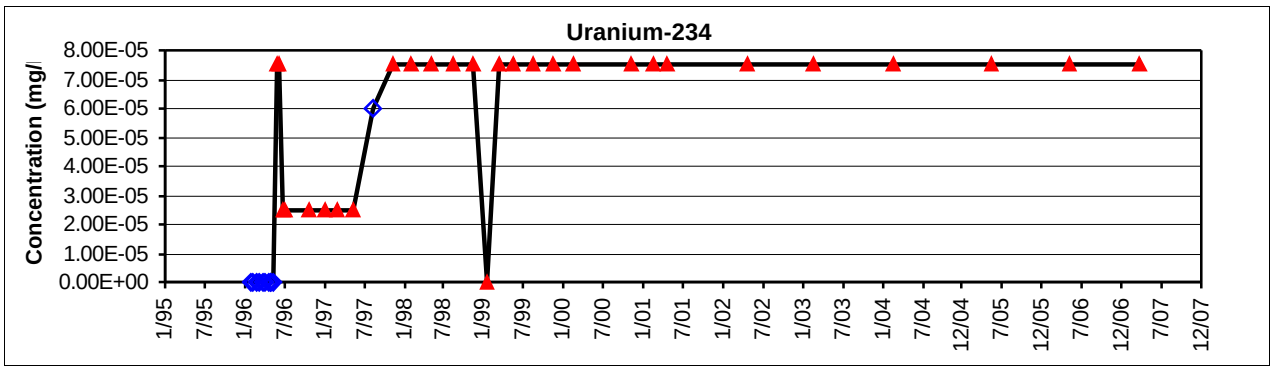
● Estimated concentration (J, Jh, or Jl)

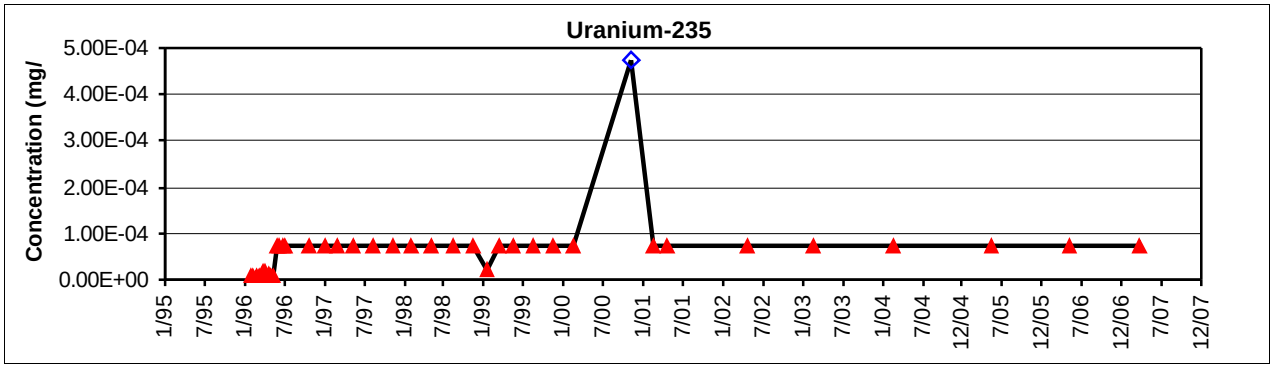
■ Estimated concentration below the PQL (Jr value)

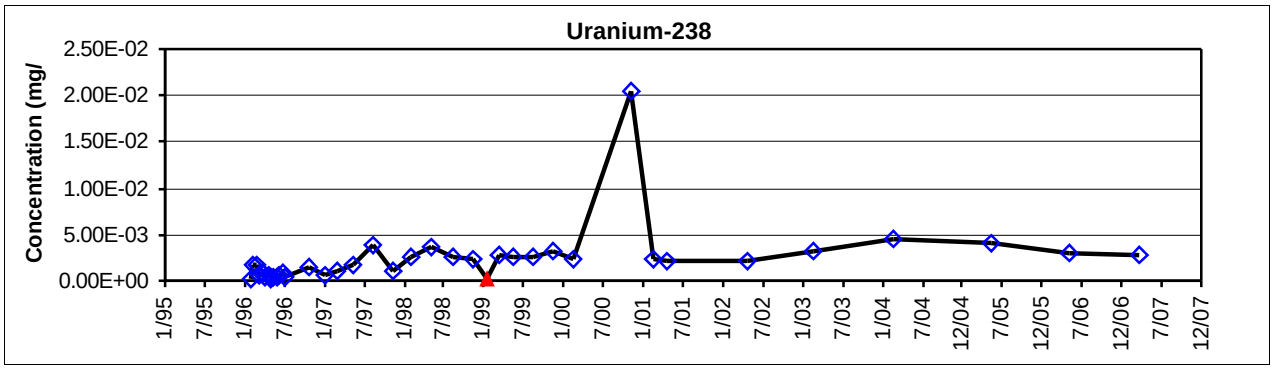
▲ Non-detect result (U, Ub, UJ)

Figure D-23. Uranium Concentration versus Time Graphs in CAF-11B



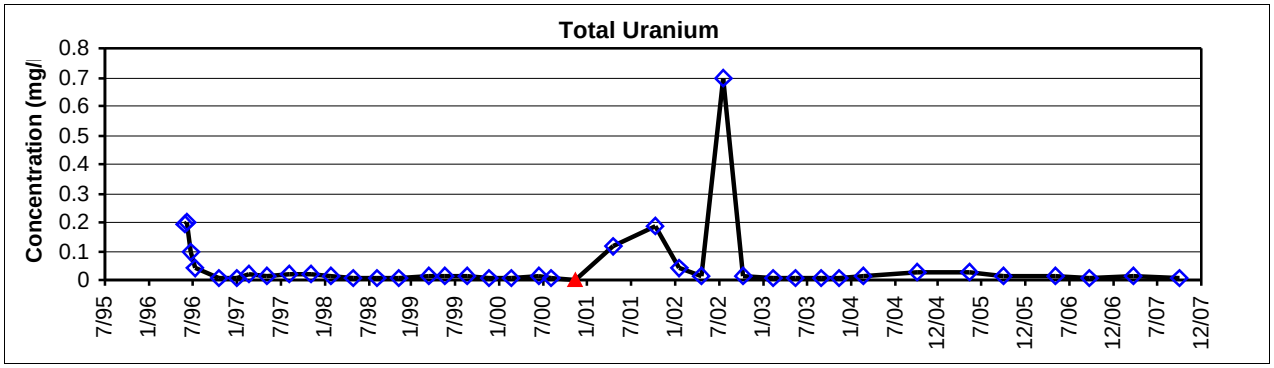


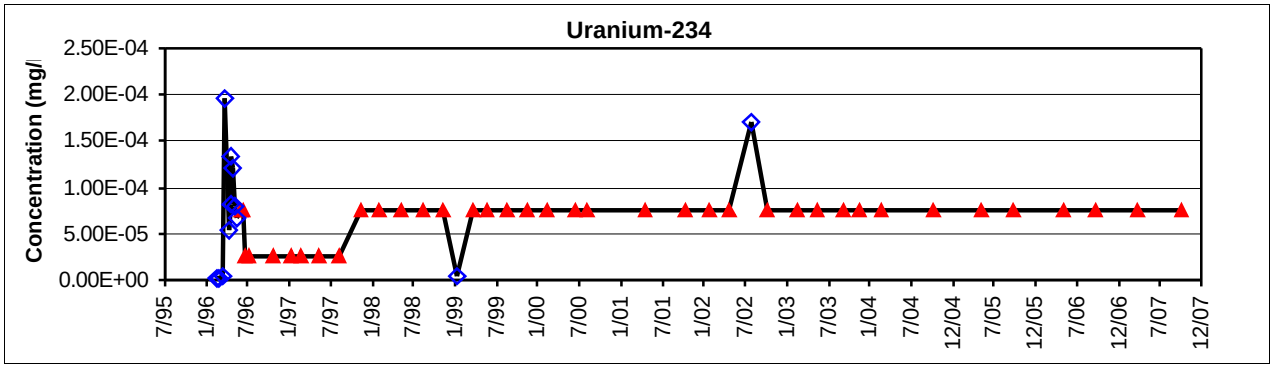


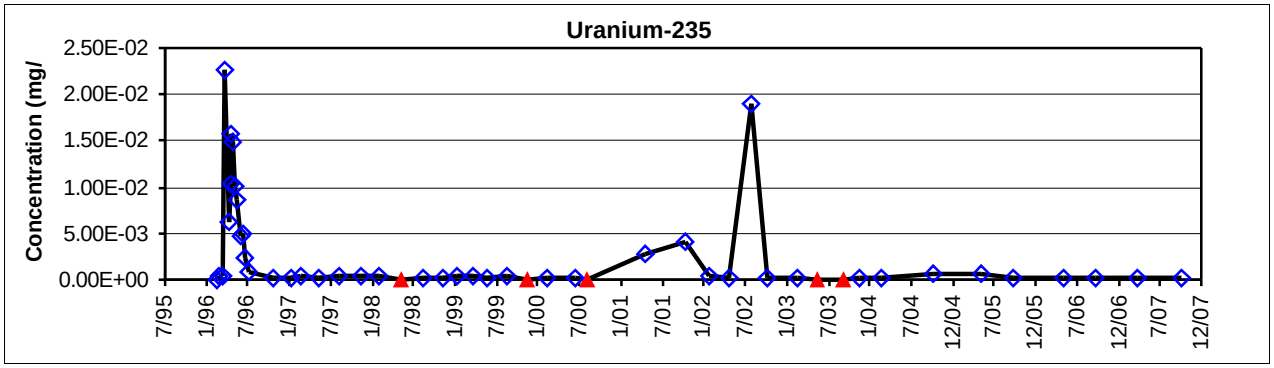


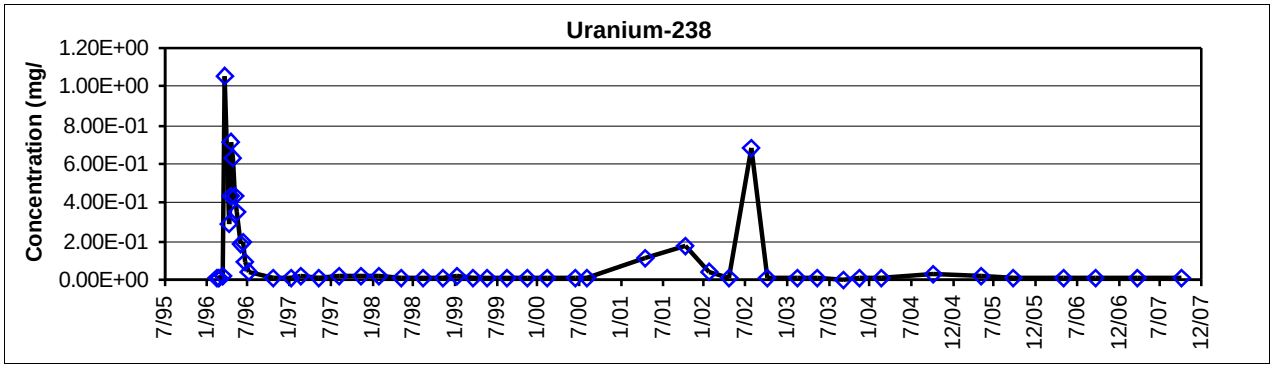
- ◇ Measured result -- reported concentrations
- ● Estimated concentration (J, Jh, or Jl)
- ■ Estimated concentration below the PQL (Jr value)
- ▲ Non-detect result (U, Ub, UJ)

Figure D-24. Uranium Concentration versus Time Graphs in CAF-12A



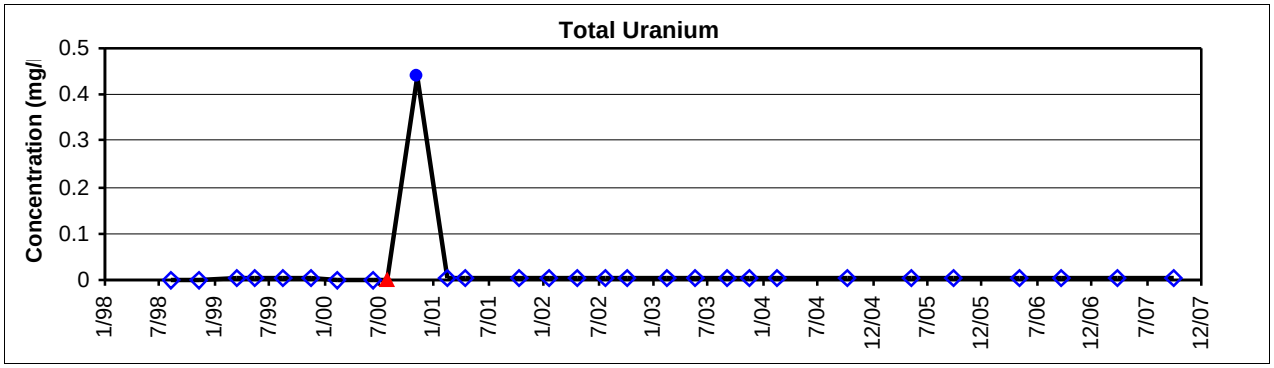


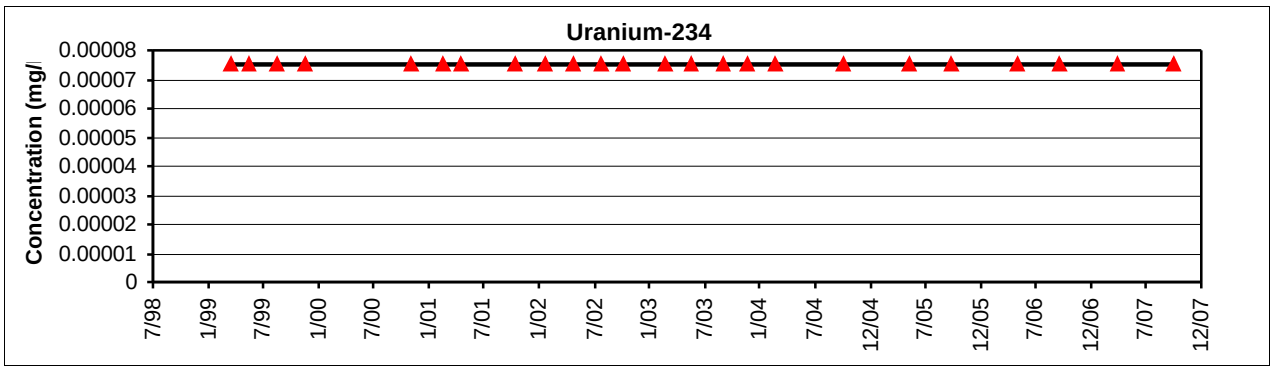


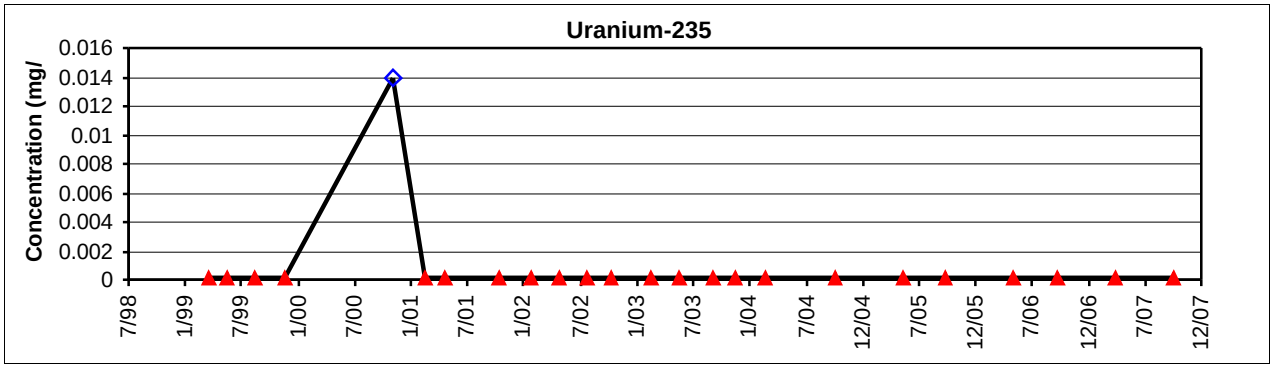


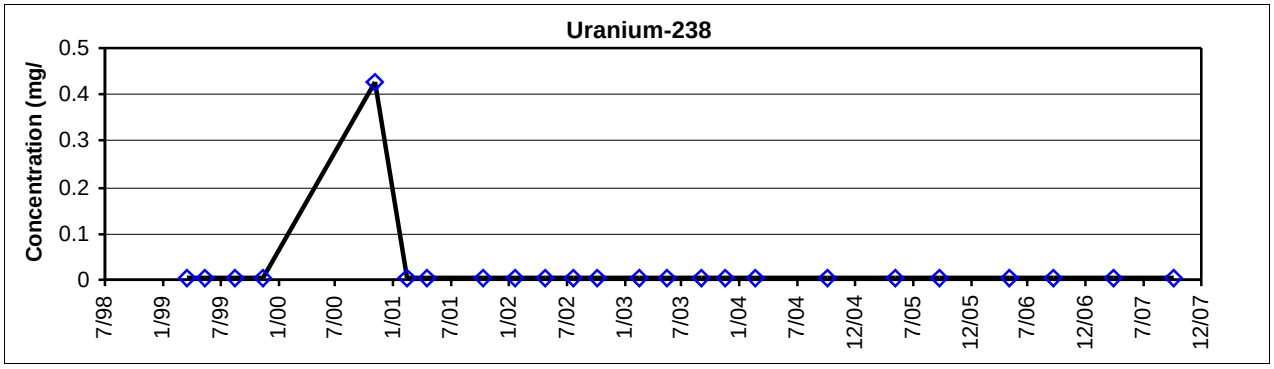
- ◇ Measured result -- reported concentrations
- ● Estimated concentration (J, Jh, or Jl)
- ■ Estimated concentration below the PQL (Jr value)
- ▲ Non-detect result (U, Ub, UJ)

Figure D-25. Uranium Concentration versus Time Graphs in OCW-4B









◇ Measured result -- reported concentrations

● Estimated concentration (J, Jh, or Jl)

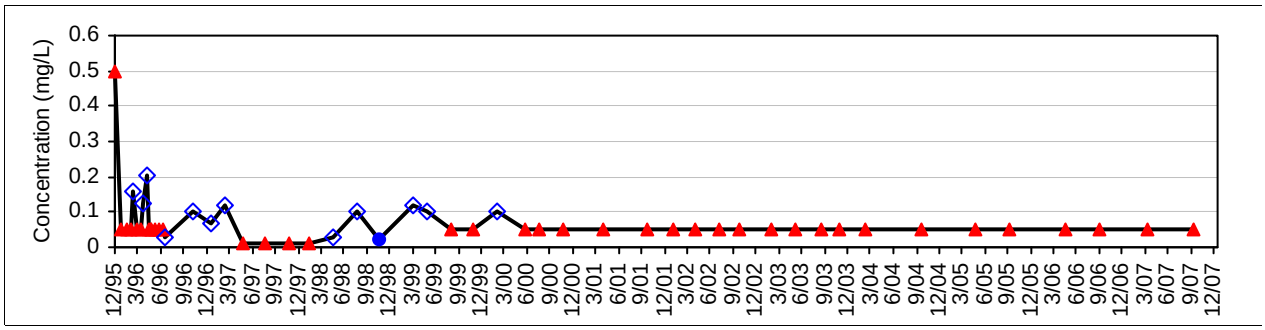
■ Estimated concentration below the PQL (Jr value)

▲ Non-detect result (U, Ub, UJ)

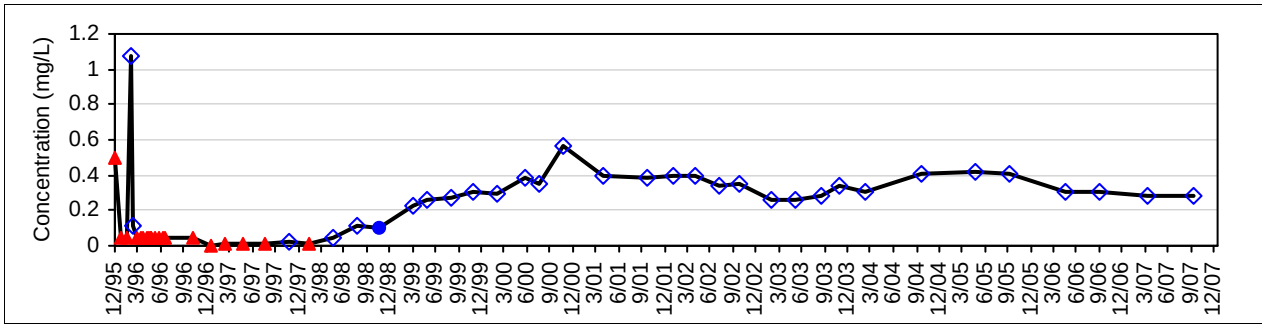
Figure D-26 Fluoride Concentration versus Time Graphs

(Page 1 of 5)

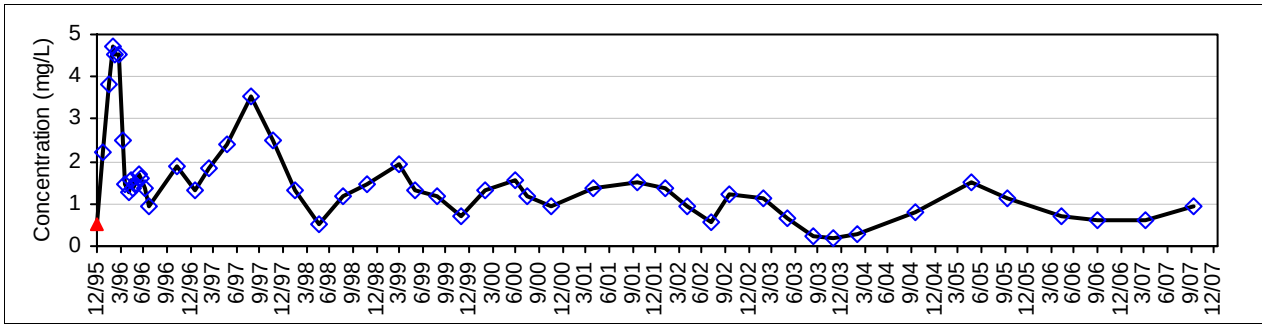
Historical Concentrations in CAF-5A



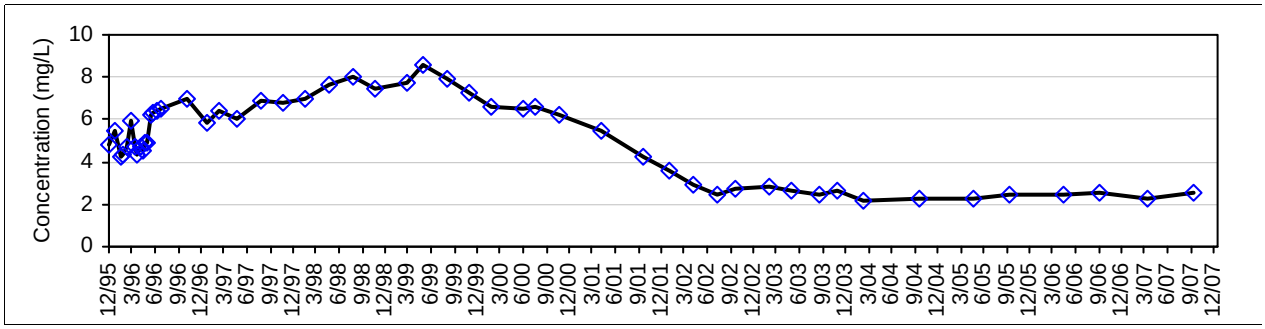
Historical Concentrations in CAF-5B



Historical Concentrations in CAF-6A



Historical Concentrations in CAF-6B



◇ Measured result -- reported concentrations

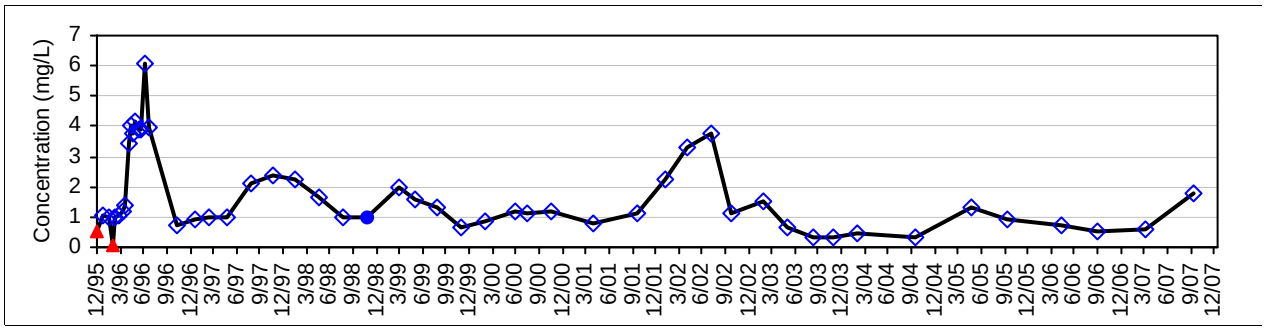
● Estimated concentration (J, Jh, or Jl)

▲ Non-detect result (U, Ub, UJ)

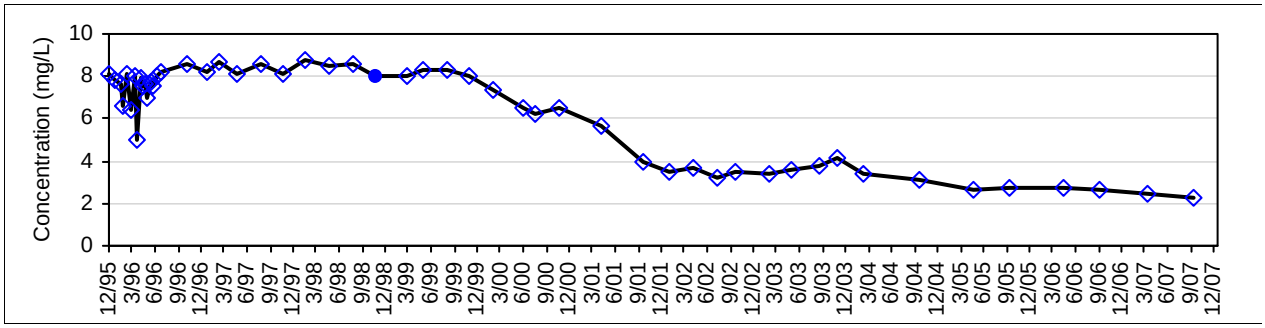
Figure D-26 Fluoride Concentration versus Time Graphs

(Page 2 of 5)

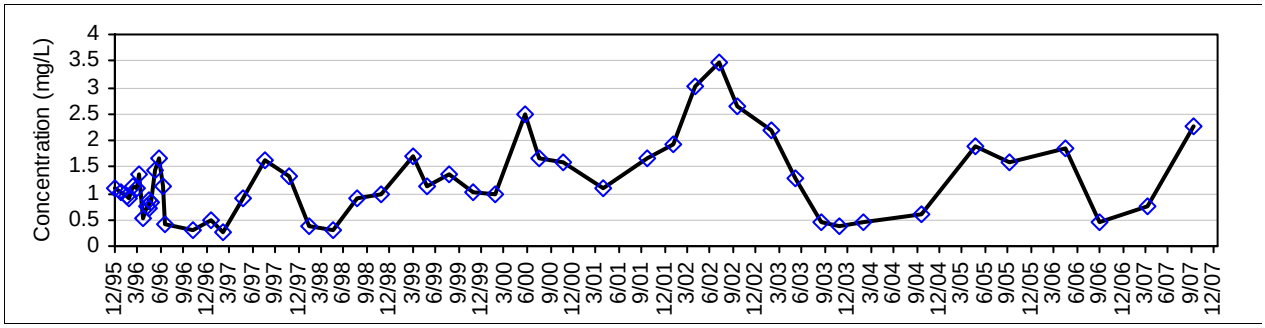
Historical Concentrations in CAF-7A



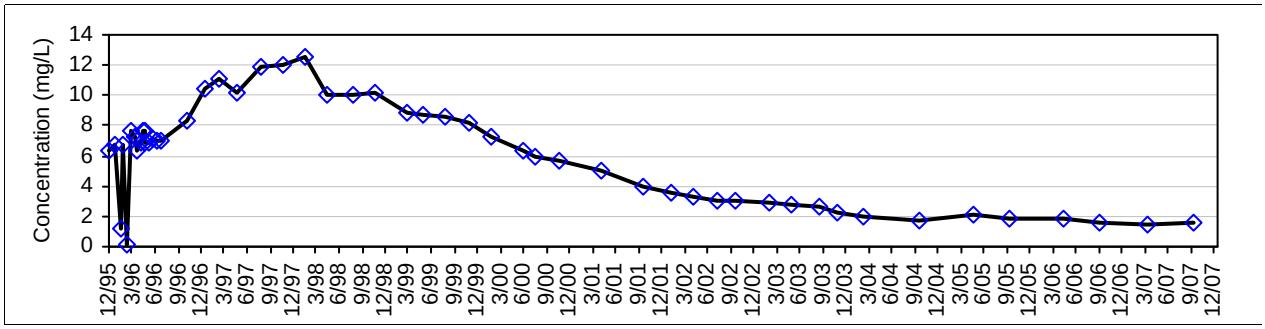
Historical Concentrations in CAF-7B



Historical Concentrations in CAF-8A



Historical Concentrations in CAF-8B



◇ Measured result -- reported concentrations

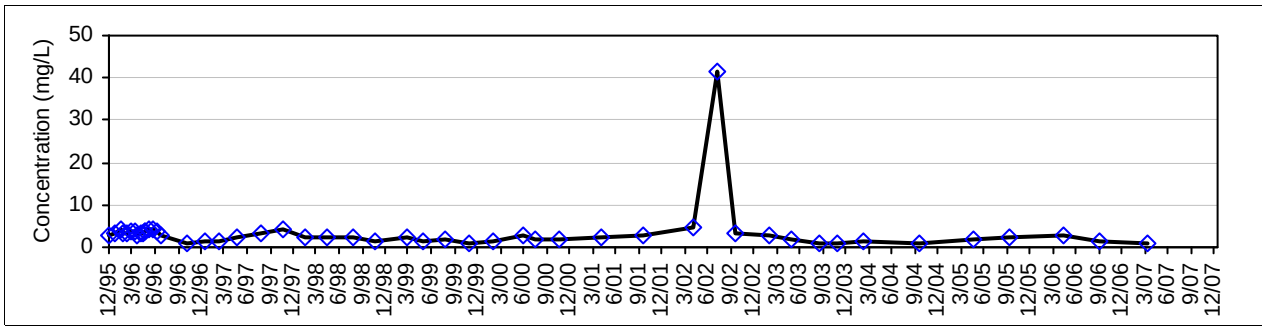
● Estimated concentration (J, Jh, or Jl)

▲ Non-detect result (U, Ub, UJ)

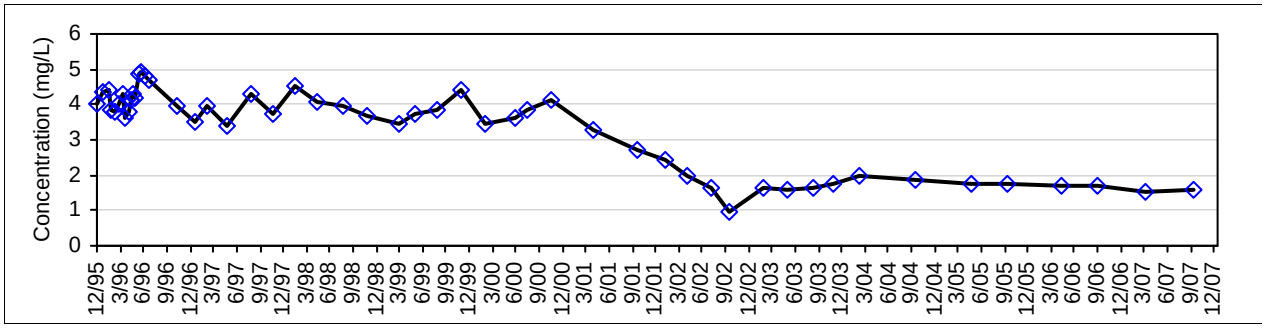
Figure D-26 Fluoride Concentration versus Time Graphs

(Page 3 of 5)

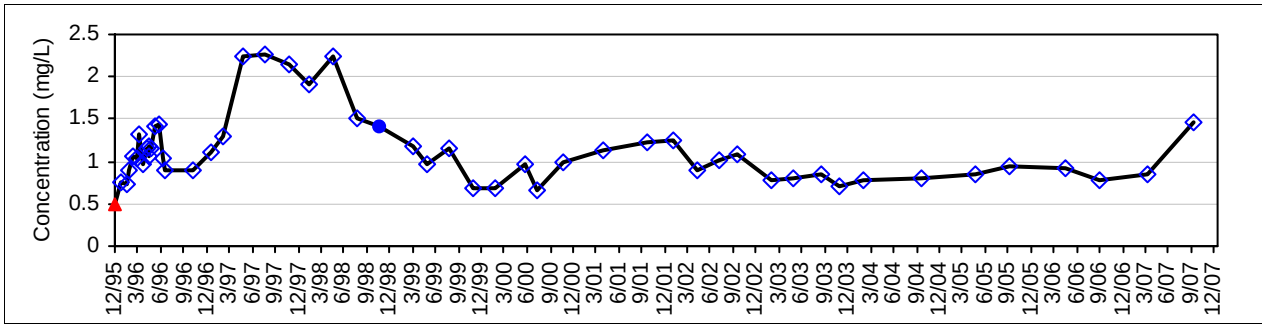
Historical Concentrations in CAF-9A



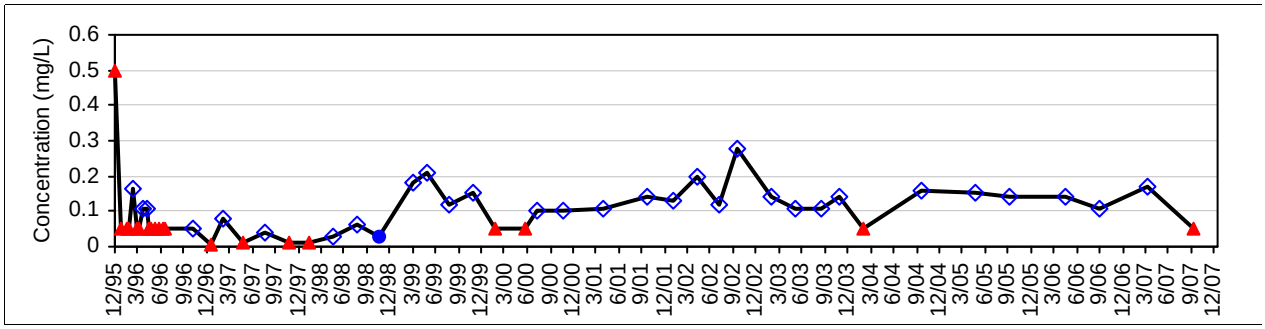
Historical Concentrations in CAF-9B



Historical Concentrations in CAF-10A



Historical Concentrations in CAF-10B



◇ Measured result -- reported concentrations

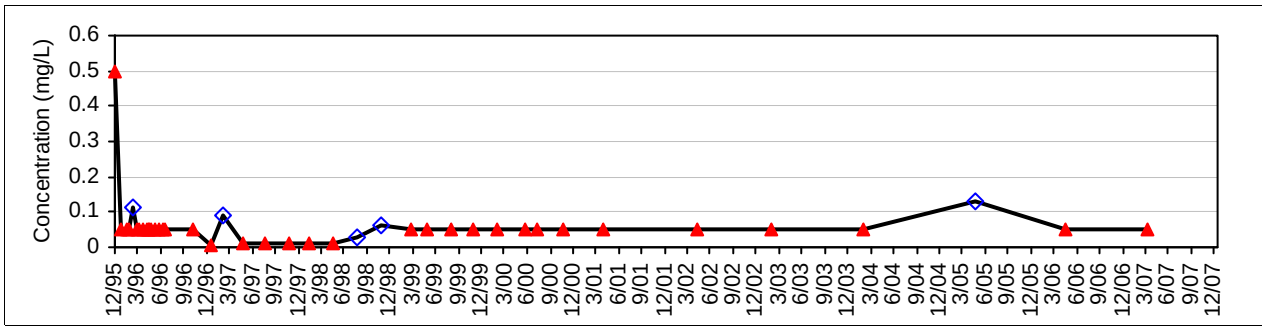
● Estimated concentration (J, Jh, or Jl)

▲ Non-detect result (U, Ub, UJ)

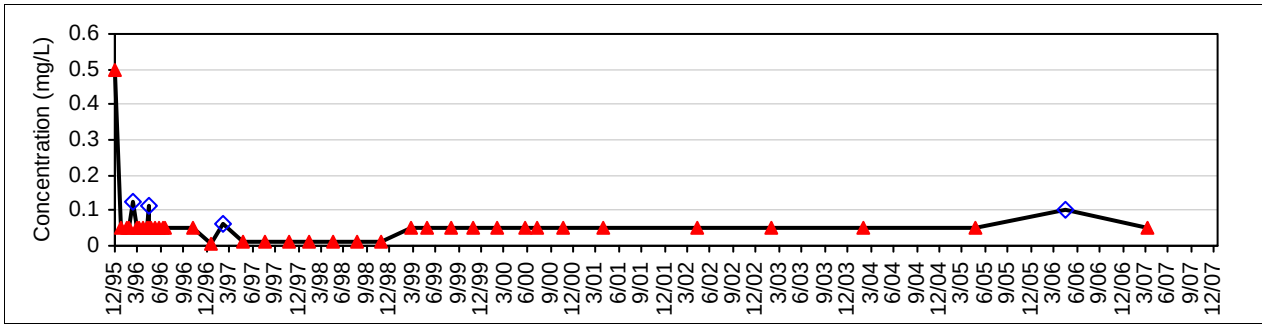
Figure D-26 Fluoride Concentration versus Time Graphs

(Page 4 of 5)

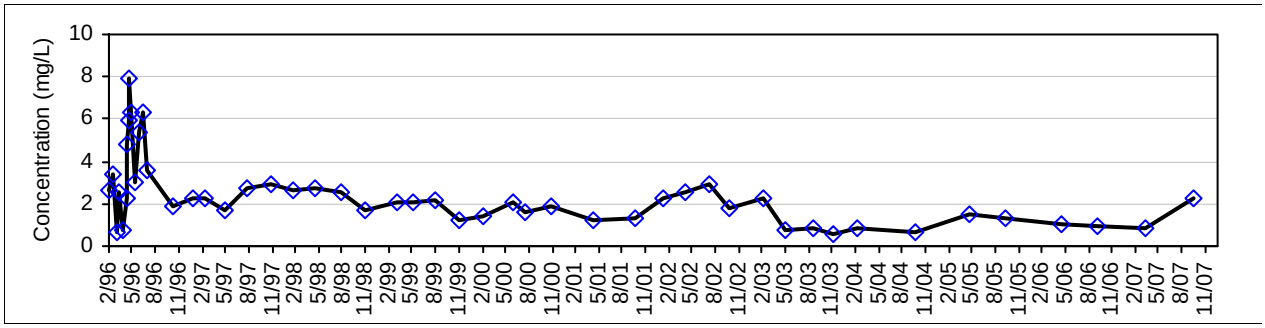
Historical Concentrations in CAF-11A



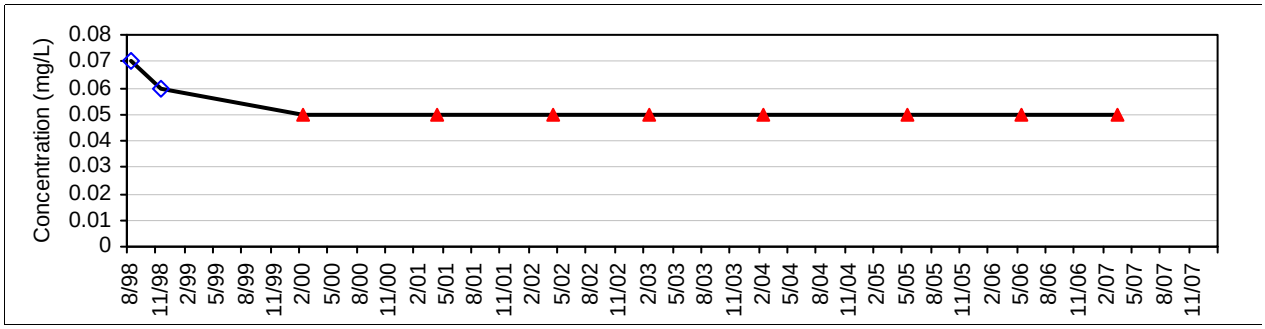
Historical Concentrations in CAF-11B



Historical Concentrations in CAF-12A



Historical Concentrations in OCW-1C



◇ Measured result -- reported concentrations

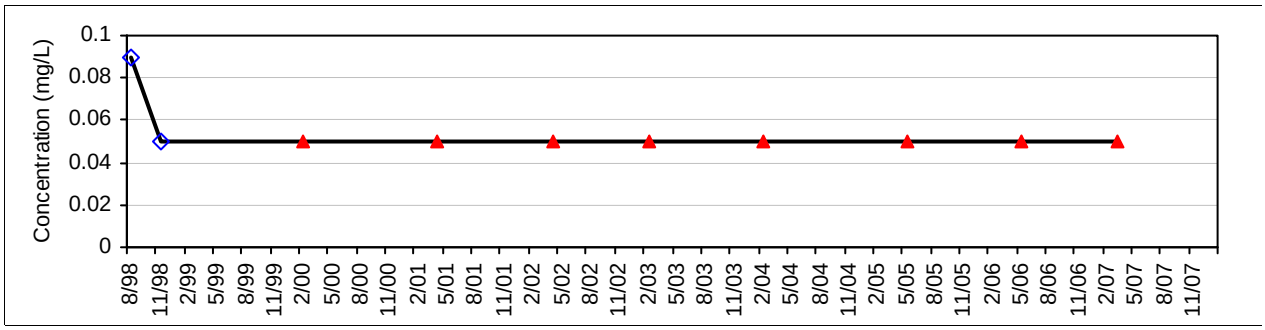
● Estimated concentration (J, Jh, or Jl)

▲ Non-detect result (U, Ub, UJ)

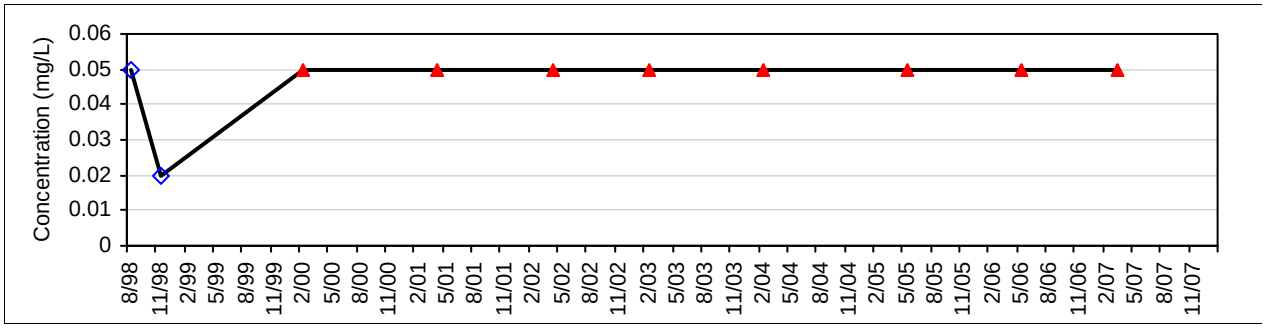
Figure D-26 Fluoride Concentration versus Time Graphs

(Page 5 of 5)

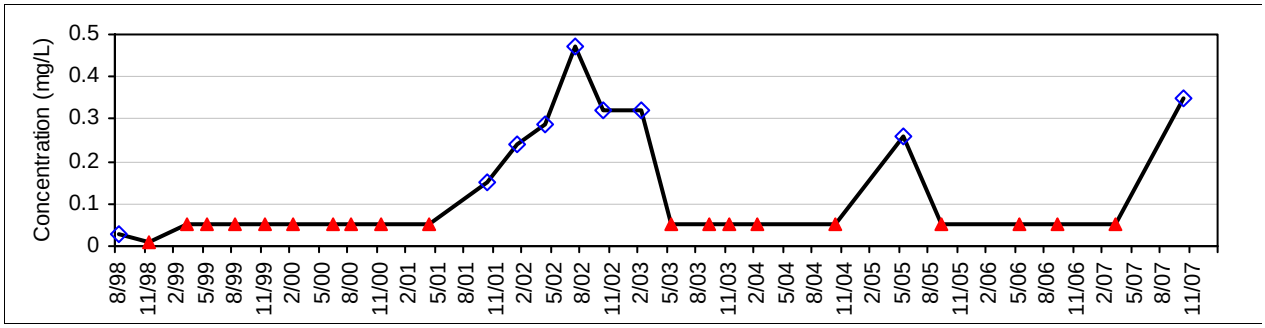
Historical Concentrations in OCW-2C



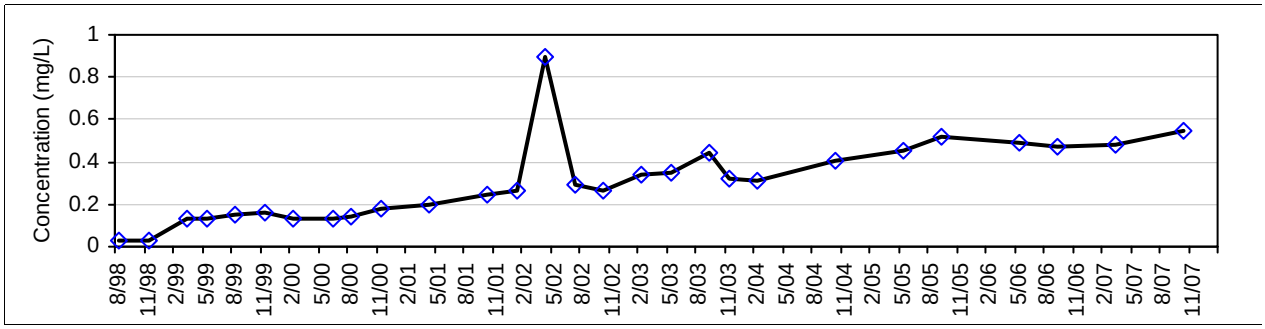
Historical Concentrations in OCW-3C



Historical Concentrations in OCW-4A



Historical Concentrations in OCW-4B



◇ Measured result -- reported concentrations

● Estimated concentration (J, Jh, or Jl)

▲ Non-detect result (U, Ub, UJ)